

Appendix D

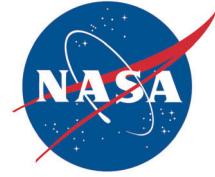
Conceptual Site Model Report

Phase II and III SWMU Assessment and Confirmatory Sampling Report
Center-Wide PFAS PRL 237
Revision: 0
May 2022

This page intentionally left blank.

National Aeronautics and Space Administration

John F. Kennedy Space Center
Kennedy Space Center, FL 32899



February 4, 2022

Reply to Attn of: SI-E2

Mr. Bruce Moore, P.G.
Florida Department of Environmental Protection
Bob Martinez Center
Mail Station 4535
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Conceptual Site Model Report, Center-wide Per- and Polyfluoroalkyl Substances
Potential Release Location 237, Kennedy Space Center, Florida

Dear Mr. Moore,

Please find enclosed the Conceptual Site Model (CSM) Report for the Center-wide Per- and Polyfluoroalkyl Substances (PFAS) Potential Release Location 237 at John F. Kennedy Space Center (KSC), Florida. An update to KSC's existing CSM was performed through evaluations of regional, intermediate, and local subsurface stratigraphy; a hydrogeological investigation; a stormwater investigation; and a forensic investigation. This information will allow KSC to better understand and predict fate and transport of PFAS compounds in groundwater and surface water. The CSM was presented to the KSC Remediation Team on June 22, 2021 (Minute 2106-M04).

If you have any questions regarding this submittal, please contact me at (321) 867-2056.

Sincerely,

ANNE CHREST Digitally signed by ANNE
CHREST
Date: 2022.02.14 08:45:43 -05'00'

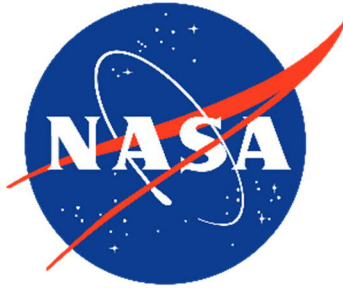
Anne Chrest
Remediation Program Technical Lead
Environmental Assurance Branch

Enclosure:

Conceptual Site Model (CSM) Report for the Center-wide Per- and Polyfluoroalkyl Substances (PFAS) Potential Release Location 237 at John F. Kennedy Space Center (KSC), Florida

**CONCEPTUAL SITE MODEL REPORT
CENTER-WIDE PER- AND POLYFLUOROALKYL SUBSTANCES
POTENTIAL RELEASE LOCATION 237
KENNEDY SPACE CENTER, FLORIDA**

Prepared for:



**Environmental Assurance Branch
National Aeronautics and Space Administration
Kennedy Space Center, Florida 32899**

**A-E Contract 80KSC019D0010
Task Order 80KSC019F0289**

**November 2021
Revision 0**

**Prepared by:
AECOM Technical Services, Inc.
150 North Orange Avenue, Suite 200
Orlando, Florida 32801
407-843-6552**

This page intentionally left blank.

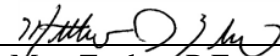
**CONCEPTUAL SITE MODEL REPORT
CENTER-WIDE PER- AND POLYFLUOROALKYL SUBSTANCES
POTENTIAL RELEASE LOCATION 237
KENNEDY SPACE CENTER, FLORIDA**

**November 2021
Revision 0**

**Prepared for:
Environmental Assurance Branch
National Aeronautics and Space Administration
Kennedy Space Center, Florida 32899
A-E Contract 80KSC019D0010
Task Order 80KSC019F0289**

**Prepared by:
AECOM Technical Services, Inc.
150 North Orange Avenue, Suite 200
Orlando, Florida 32801
407-843-6552**

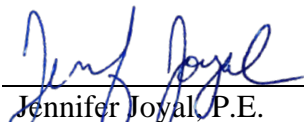
Author Signature:


Matt Zenker, P.E.
Task Order Manager

12/14/2021

Date

Review Signature:


Jennifer Joyal, P.E.
Program Manager

12/14/2021

Date

This page intentionally left blank.

TABLE OF CONTENTS

TABLES iii

FIGURES iii

APPENDICES v

ABBREVIATIONS, ACRONYMS, AND SYMBOLS vii

EXECUTIVE SUMMARY 1

1. INTRODUCTION 1

 1.1 Overview 1

 1.2 Report Objective and tasks..... 1

 1.3 Report Organization..... 1

2. SEQUENCE STRATIGRAPHIC ANALYSIS 3

 2.1 Geological Background..... 3

 2.2 Summary of Previous Work..... 3

 2.2.1 Stratigraphic Framework 4

 2.2.2 Regional Cross Sections 4

 2.3 Plume-Scale Cross Sections 5

 2.3.1 Well Installation..... 5

 2.3.2 Gamma Logging 6

 2.4 Key Observations 6

 2.4.1 Shuttle Landing Facility 6

 2.4.2 Launch Complex 39A 7

 2.4.3 Vehicle Assembly Building 7

 2.4.4 Industrial Area 7

3. GROUNDWATER FLOW PATTERNS 9

 3.1 Merritt Island Surficial Aquifer System 9

 3.2 Methodology 10

 3.2.1 Manual Gauging..... 10

 3.2.2 Transducer Deployment 11

 3.3 Results..... 11

 3.3.1 Potentiometric Surface Maps..... 12

 3.3.2 Transducer Readings 12

4. STORMWATER ANALYSIS 15

 4.1 Data Collection 15

 4.1.1 Existing Stormwater Model..... 15

 4.1.2 Stormwater Basin Inventory 15

 4.1.3 Basin Definition 16

 4.1.4 Additional Data Collection 16

 4.2 Model Development 16

4.3	Results.....	18
5.	FORENSIC DATA ANALYSIS.....	19
5.1	Goals.....	19
5.2	Methodology.....	19
5.2.1	Overview.....	19
5.2.2	Data Preprocessing.....	20
5.2.3	Pattern Recognition.....	20
5.3	Results.....	20
5.3.1	Groundwater.....	20
5.3.2	Surface Water.....	22
6.	SUMMARY AND KEY OBSERVATIONS.....	25
6.1	High-Resolution Cross Sections and Potentiometric Surface Maps.....	25
6.2	Stormwater Modeling Results.....	25
6.3	Chemical Forensic Analysis.....	25
7.	REFERENCES.....	27

TABLES

Table 2-1	Monitoring Well Construction Details
Table 3-1	Groundwater Elevation Gauging Results
Table 4-1	Stormwater Model Pollutant Loading Predictions
Table 4-2	Stormwater Outfall Seasonal Monitoring Results

FIGURES

Figure 1-1	Kennedy Space Center Location Map
Figure 2-1	Distribution of Lithology Based on Gamma Response
Figure 2-2	Example of Identified Depositional Facies
Figure 2-3	Regional Subsurface Geology Cross Section Transects
Figure 2-4	Regional Subsurface Geology Cross Section A-A'
Figure 2-5	Regional Subsurface Geology Cross Section B-B'
Figure 2-6	Regional Subsurface Geology Cross Section C-C'
Figure 2-7	Fence Diagram of Sections A-A', B-B', and C-C'
Figure 2-8	Plume-Scale Subsurface Geology Cross Section Transects
Figure 2-9	Wells Selected for Gamma Logging
Figure 2-10A	Plume-Scale Subsurface Geology Cross Section A-A'
Figure 2-10B	Plume-Scale Subsurface Geology Cross Section B-B'
Figure 2-10C	Plume-Scale Subsurface Geology Cross Section C-C'
Figure 2-10D	Plume-Scale Subsurface Geology Cross Section D-D'
Figure 2-10E	Plume-Scale Subsurface Geology Cross Section E-E'
Figure 2-10F	Plume-Scale Subsurface Geology Cross Section F-F'
Figure 2-10G	Plume-Scale Subsurface Geology Cross Section G-G'
Figure 2-10H	Plume-Scale Subsurface Geology Cross Section H-H'
Figure 3-1	Monitoring Wells Utilized for Synoptic Gauging
Figure 3-2	Variable Density Flow
Figure 3-3	Submarine Groundwater Discharge
Figure 3-4	Groundwater Potentiometric Surface – October 2020 Event
Figure 3-5	Groundwater Potentiometric Surface – February 2021 Event

Conceptual Site Model Report
Center-Wide PFAS PRL 237
Revision: 0
November 2021

- Figure 3-6 CCF-IW0004 Transducer Data
- Figure 3-7 CCF-IW0039 Transducer Data
- Figure 3-8 CCF-MW0012D Transducer Data
- Figure 3-9 CHP-MW0014 Transducer Data
- Figure 3-10 CRHE-MW0047 Transducer Data
- Figure 3-11 CRHE-IW0014D Transducer Data
- Figure 3-12 FCDC-MW0001 Transducer Data
- Figure 3-13 FDSA-MW0021S2 Transducer Data
- Figure 3-14 FDSA-MW0036 Transducer Data
- Figure 3-15 FDTL-IW0041 Transducer Data
- Figure 3-16 HMF-NLP-IW001D2 Transducer Data
- Figure 3-17 LETF-MW0005 Transducer Data
- Figure 3-18 POL-MW0009D Transducer Data
- Figure 3-19 WILC-MW0087 Transducer Data
- Figure 4-1 Regional Stormwater Systems
- Figure 4-2 Permit Basins - Post 2011
- Figure 4-3 SLF Outfall Transducer Data
- Figure 4-4 VAB Outfall Transducer Data
- Figure 4-5 Industrial Area Outfall Transducer Data
- Figure 4-6 Stormwater Model Calibration
- Figure 4-7 Stormwater Sampling and Model Discharge Locations
- Figure 4-8 ICPR Basins
- Figure 4-9 Measured PFAS Concentrations in Stormwater – Wet vs. Dry Conditions
- Figure 5-1 Forensic Profile of Groundwater Cluster G1
- Figure 5-2 Forensic Profile of Groundwater Cluster G2
- Figure 5-3 Forensic Profile of Groundwater Cluster G3
- Figure 5-4 Forensic Profile of Groundwater Cluster G4
- Figure 5-5 Forensic Profile of Groundwater Cluster G5
- Figure 5-6 Forensic Profile of Groundwater Cluster G6
- Figure 5-7 PFOS and PFHxS Correlation in Legacy AFFF Group

- Figure 5-8 PFHxS and PFHxA Correlation in Six-Carbon AFFF Group
- Figure 5-9 Forensic Profile of Surface Water Cluster S1
- Figure 5-10 Forensic Profile of Surface Water Cluster S2
- Figure 5-11 Forensic Profile of Surface Water Cluster S3
- Figure 5-12 Forensic Profile of Surface Water Cluster S4

APPENDICES

- Appendix A Field Notes
- Appendix B Survey Information
- Appendix C Gamma Logs and Well Construction Records
- Appendix D Stormwater Modeling Files
- Appendix E Submarine Groundwater Discharge Calculation
- Appendix F June 2021 KSCRT Meeting Minutes

Conceptual Site Model Report
Center-Wide PFAS PRL 237
Revision: 0
November 2021

This page intentionally left blank.

ABBREVIATIONS, ACRONYMS, AND SYMBOLS

AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
amsl	above mean sea level
bls	below land surface
DTW	depth to water
FDEP	Florida Department of Environmental Protection
FS	flooding surface
GIS	geographic information system
IA	Industrial Area
ILR	isometric log ratio
ITRC	Interstate Technology Regulatory Council
ICPR	Interconnected Pond Routing
KARS	Kennedy Athletic Recreation and Social
KSC	Kennedy Space Center
KSCRT	Kennedy Space Center Remediation Team
LC	Launch Complex
MICCSC	Merritt Island-Cape Canaveral Sedimentary Complex
$\mu\text{S}/\text{cm}$	microsiemens per centimeter
NASA	National Aeronautics and Space Administration
ng/L	nanograms per liter
NEXRAD	Next Generation Weather Radar
PCA	principal component analysis
PFAS	per- and polyfluoroalkyl substances
PFCA	perfluoroalkylcarboxylic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFOA	perfluorooctanoic acid

Conceptual Site Model Report
Center-Wide PFAS PRL 237
Revision: 0
November 2021

PFOS	perfluorooctanesulfonic acid
PFSA	perfluoroalkyl sulfonate
PRISM	PRedictive Integrated Stratigraphic Modeling
PRL	Potential Release Location
RIS	Remediation Information System
SAP	Sampling and Analysis Plan
SAS	surficial aquifer system
SB	sequence boundary
SGD	submarine groundwater discharge
SJRWMD	St. Johns River Water Management District
SLF	Shuttle Landing Facility
SWMM	Storm Water Management Model
SWMU	Solid Waste Management Unit
TS	transgressive surface
VAB	Vehicle Assembly Building
VDF	variable density flow
WWTP	Wastewater Treatment Plant

EXECUTIVE SUMMARY

The National Aeronautics and Space Administration (NASA) is investigating the occurrence of per- and polyfluoroalkyl substances (PFAS) Center-wide at Kennedy Space Center (KSC), Merritt Island, Florida (**Figure 1-1**) as Potential Release Location 237. AECOM Technical Services, Inc. (AECOM) conducted investigation activities in 2020 and 2021 to develop a better understanding of the fate and transport of PFAS in groundwater and surface water at KSC center-wide using PRedictive Integrated Stratigraphic Modeling (PRISM). PRISM uses best practices from the fields of geology, hydrology, and chemistry to acquire a holistic understanding of the subsurface and more accurately predict contaminant migration pathways. Based on the potential magnitude (frequency and areal distribution) of PFAS impacts at KSC, the analyses described herein were designed to provide tools to address the unique behavior of PFAS chemicals.

The activities included four primary tasks: a sequence stratigraphic analysis, groundwater and surface water gauging and sampling, a stormwater pollutant modeling analysis, and a chemical forensic analysis.

The sequence stratigraphic analysis included the following:

- Development of three regional geologic cross sections using publicly available geophysical data combined with sequence stratigraphic techniques and an analysis of regional geology.
- Development of eight plume-scale cross sections that are focused on known PFAS release locations. These cross sections include three in the Industrial Area (IA), two near the Vehicle Assembly Building (VAB), two near the Shuttle Landing Facility (SLF), and one near Launch Complex 39A.
- Installation of 13 new monitoring wells to support the development of the plume-scale cross sections. Gamma logging was performed on these newly installed wells and 22 existing wells.

The regional and plume-scale cross sections can be utilized to guide subsequent PFAS investigation activities and assist in the interpretation of environmental monitoring data.

The groundwater and surface water gauging and sampling included the following:

- Manual gauging of 105 existing groundwater monitoring wells during two synoptic events; one performed in a dry season (February 2021) and one performed in a wet season (October 2020).
- Installation of 15 datalogging multiparameter transducers within 12 groundwater monitoring wells and 3 surface water locations. Each transducer measured/logged water level, salinity/conductivity, and temperature on 15-minute intervals for 3 months. The transducers were deployed during a transition period between the wet and dry seasons.

These data were utilized to develop a high-resolution groundwater potentiometric surface map of KSC. In combination with the geologic cross sections, these potentiometric surface maps can be utilized to evaluate hydrogeologic connectivity between multiple source zones.

The stormwater pollutant modeling analysis included the following:

- Collection of site-specific and regional stormwater information related to KSC.
- Development and calibration of a stormwater pollutant model using publicly available and site-specific data. This model identified the locations with high PFAS surface water discharge.
- Sampling of 28 existing stormwater outfalls in wet and dry conditions for PFAS and compounds indicative of municipal wastewater.

Stormwater modeling activities shows that the highest surface water loading of perfluorooctane sulfonate (PFOS) discharges occurs to either Banana Creek or the Banana River, and the highest discharge basins are associated with the SLF and the Industrial Area.

The chemical forensic analysis included the following:

- Statistical analysis of groundwater and surface water monitoring data to categorize common PFAS ‘signatures’ in these media.
- Develop an understanding of areas containing PFAS signatures indicative of aqueous film forming foam and/or municipal wastewater or other consumer sources.

The chemical forensic analysis identified several PFAS detection patterns in groundwater and surface water.

The analyses presented herein yielded several site-specific observations related to PFAS fate and transport that are important for consideration of future investigation activities. Key observations include the following:

- The combination of the measured groundwater variable density flow and the estuarine clay layer at the bottom of the surficial aquifer system (SAS) suggest that the predominant groundwater discharge locations will be along narrow widths perpendicular to the shorelines of the Indian River, Banana River and Banana Creek.
- Estimates of terrestrial submarine groundwater discharge and stormwater modeling results show that greater than 96% of the mass flux to outlying surface water bodies is attributed to surface water flow.
- Interbedded silt layers within the SAS further suggest that localized groundwater discharge locations may occur at interior surface water features (e.g., stormwater ditches, ponds).
- Paired wet and dry weather sampling data demonstrate that groundwater discharge is a predominant contributor to surface water PFAS concentrations.
- The vertical conductivity gradient, as observed from the transducer study, shows that higher salinity water is present at the deeper intervals within the SAS. The solubility of PFAS is

negatively correlated to conductivity. Therefore, it is possible that decreasing aqueous concentrations of PFAS, and increasing solid phase concentrations, are present within these deeper zones of the SAS.

This page intentionally left blank.

1. INTRODUCTION

1.1 OVERVIEW

The National Aeronautics and Space Administration (NASA) is investigating the occurrence of per- and polyfluoroalkyl substances (PFAS) Center-wide at Kennedy Space Center (KSC), Merritt Island, Florida (**Figure 1-1**) as Potential Release Location 237. AECOM Technical Services, Inc. (AECOM) conducted investigation activities in 2020 and 2021 to develop a better understanding of the fate and transport of PFAS in groundwater and surface water at KSC center-wide using PRedictive Integrated Stratigraphic Modeling (PRISM). PRISM uses best practices from the fields of geology, hydrology, and chemistry to acquire a holistic understanding of the subsurface and more accurately predict contaminant migration pathways. Based on the potential magnitude (frequency and areal distribution) of PFAS impacts at KSC, the analyses described herein were designed to provide tools to address the unique behavior of PFAS chemicals.

1.2 REPORT OBJECTIVE AND TASKS

The primary objective of the PRISM activities described herein is to adapt the conceptual site model for KSC to develop a more comprehensive understanding of PFAS fate and transport in groundwater and surface water. This report details four main tasks, which are briefly described below:

- A sequence stratigraphic analysis was completed to develop both regional and plume-scale cross sections. These cross sections were interpreted based on high-resolution geophysical data and understanding of depositional processes involved in forming the geology beneath KSC.
- Center-wide groundwater potentiometric surface maps were developed using surface water gauging data. Potentiometric surface maps of KSC during dry and wet-season conditions were created to illustrate groundwater flow patterns and allow for the interpretation of groundwater interaction with surface water.
- A stormwater model was developed using existing models and upgraded with recent topography, rainfall and surface water elevation data. Surface water sampling data were also incorporated into this model to yield predictions of PFAS mass flux in stormwater.
- Statistical analysis of groundwater and surface water data to determine whether the distribution of PFAS compounds can yield information regarding its primary source.

1.3 REPORT ORGANIZATION

This report is organized as follows:

Chapter 1: Introduction. Describes the purpose of the project, establishes the report objectives and strategies, and presents this outline of report organization.

Chapter 2: Sequence Stratigraphic Analysis. Describes the sequence stratigraphy analysis, including a summary of the previously developed regional-scale stratigraphic cross sections and currently developed plume-scale stratigraphic cross sections.

Chapter 3: Groundwater Flow Patterns. Provides information regarding methods utilized to develop an understanding of Center-wide groundwater flow patterns.

Chapter 4: Stormwater Analysis. Describes data collection and modeling analysis used to estimate PFAS mass flux in stormwater and estimate contribution of groundwater discharge to surface water.

Chapter 5: Forensic Data Analysis. Presents the methodology and results of an advanced mathematical analysis of PFAS data.

Chapter 6: Summary and Key Observations. Summarizes work performed and key observations related to PFAS fate and transport derived from this scope of work.

Chapter 7: References. Provides a list of the references used to develop this document.

Appendix A: Field Notes.

Appendix B: Survey Information.

Appendix C: Well Gamma Logs and Well Construction Records.

Appendix D: Stormwater Modeling Files.

Appendix E: Submarine Groundwater Discharge Calculation.

Appendix F: June 2021 KSCRT Meeting Minutes.

2. SEQUENCE STRATIGRAPHIC ANALYSIS

The sequence stratigraphic investigation was conducted to develop a high-resolution, geology-focused understanding of subsurface groundwater flow paths at the site. The outcomes of this analysis resulted in the following:

- A high-resolution three-dimensional geologic framework that defines subsurface heterogeneity and potential geologic constraints to groundwater flow on regional (miles) and local (thousands of feet) scales.
- Enhanced understanding of vertical geologic heterogeneity, and thus vertical groundwater transport pathways, obtained by mapping small and large scale groundwater flow barriers.
- A preliminary understanding of geologic continuity between distinct PFAS source zones, which can be utilized to guide future sampling efforts.

2.1 GEOLOGICAL BACKGROUND

The surface of peninsular Florida is dominated by landforms of marine origin and coastal features that have been sculpted by geomorphic processes during their intermittent subaerial exposure during the late Cenozoic (Schmidt 1997). The geologic evolution of the KSC region was affected by several processes, including global sea level changes (eustasy), sediment supply (both from landward uplands and alongshore sources), and subsidence/karstification (Adams 2018; Burdette et al. 2010; Rink and Forrest 2005). The present-day Merritt Island-Cape Canaveral Sedimentary Complex (MICCSC), which includes KSC, evolved during the Pleistocene to Holocene (recent) time, as a result of delta progradation towards the Atlantic Ocean via the ancestral St. Johns River, which was later subjected to intense wave reworking. Studies indicate that between 130,000 to 80,000 years ago, the ancestral St. Johns River emptied its sedimentary load along the central Florida coast, building a prominent fluvial delta that eventually became Merritt Island (Adams 2018). Sometime prior to the mid-Holocene, karst-driven isostatic uplift within the central Florida peninsula created a drainage reversal, halting sediment delivery to the delta. This allowed ocean waves to erode the outer delta and transport sediment southward (via longshore drift), thus building the Cape Canaveral promontory and the eventual modern configuration of the MICCSC.

2.2 SUMMARY OF PREVIOUS WORK

As part of the Work Plan (AECOM 2020), three regional (several miles) geologic cross sections were created using sequence stratigraphic methodology. These regional cross sections were created to develop a broad understanding of the geologic layers beneath KSC and surrounding areas. The following sections summarize the sequence stratigraphic analysis conducted as part of the Work Plan.

2.2.1 Stratigraphic Framework

The regional stratigraphic context was established using data from hydrogeological, geological, and geophysical sources obtained through coordination with the NASA Remediation Project Manager, and searches of KSC databases and public data repositories, as described below. A previous sequence stratigraphic analysis of Cape Canaveral provided the general geomorphological, stratigraphic, and hydrogeological framework for the MICCSC (AECOM 2015). Several documents such as *Geology, Geohydrology and Soils of KSC: A Review* (NASA 1990), the *Environmental Setting Reference Manual* (NASA 2003), and *Environmental Resources Document* (NASA 2010) were also reviewed to develop an understanding of the geology specific to KSC. Focused, site-specific data from historical investigations such as boring logs, grain size data, water levels, plume maps of dissolved organic compounds, aerial photographs, and high-resolution data (e.g., Hydraulic Profiling Tool) from various areas within KSC were obtained from the Remediation Information System (RIS) database and reviewed. Gamma log data for KSC were obtained from the Hydrogeologic Information System database provided by the St. Johns River Water Management District (SJRWMD 2020); this data provided a continuous vertical measurement of clay and sand content in siliciclastic and carbonate depositional environments (**Figure 2-1**) and was primarily used for lithofacies construction.

Figure 2-2 illustrates how the sequence stratigraphic framework of KSC was developed. The top of a regional limestone strata (Ocala Limestone) was initially identified as a distinct increase (positive kick) of the gamma value, shown in light blue and interpreted as a transgressive surface (TS). This regional marker differentiates the limestone (low gamma response) units below from shallow marine mud (high gamma response) above.

Secondly, a major regional erosive surface below the low-gamma sandstone units, following the shallow marine strata, is identified as a Sequence Boundary (SB) and is denoted by a red sinusoid. A significant Flooding Surface (FS), demarcated by a sharp positive kick in gamma, subdivides the overlying sandy units into two parasequences (building blocks of sequences). This marker parasequence boundary is shown by a dotted blue line on **Figure 2-2**.

Finally, the solid dark blue line (significant positive kick) represents the maximum landward movement of the sea, known as the maximum flooding surface below which lies another sandy package that extends to land surface.

2.2.2 Regional Cross Sections

Three regional stratigraphic cross sections were developed for the lines depicted on **Figure 2-3** for KSC using the data indicated in **Section 2.1**. Cross section A-A' represents a section parallel to the paleo-shoreline, whereas cross sections B-B' and C-C' are perpendicular to the paleo-shoreline. The three cross sections (**Figure 2-4** to **Figure 2-6**) and their fence diagram (**Figure 2-7**) reveal the regional subsurface stratigraphy from the Eocene to the Holocene in the KSC

region. Eocene and Oligocene carbonates (Ocala Limestone) comprise a Paleogene erosional surface that has undergone significant dissolution (Scott 1997).

The unconformably-overlying Hawthorn group is a siliciclastic cover in north and central Florida. This group was deposited as sediments shed from the southern Appalachians encroached onto the carbonate platform from the north during the Miocene (Scott 1988). Lithologically, the Hawthorn Group is primarily composed of shallow marine phosphatic clay and marl, with local siltstones and very fine sandstone. The Hawthorn group is overlain by wave dominated, siliciclastic delta deposits and their associated muddy prodelta developed during the Miocene to Pliocene epochs.

A conspicuous sea-level rise during the Pleistocene resulted in the drowning of the deltaic system and the development of a muddy estuarine environment with sporadic tidal channel sediments of very fine sand. Finally, with the reversal of the sea-level in the Holocene, a depositional highstand ensued, resulting in progradation of wave-reworked beach ridges composed of coarse sand and gravelly sand deposits. Note that although these ridges are predominantly sandy, there are local muddy interlaminae due to ponding in the swales or depressions between individual beach ridges, as well as between beach-ridge sets.

2.3 PLUME-SCALE CROSS SECTIONS

A total of 8 plume-scale cross section locations were selected based on the regional understanding from previous stratigraphic work (regional cross sections in Phase-I) to better evaluate subsurface stratigraphy in areas with known PFAS impacts (**Figure 2-8**). The new cross sections were developed to:

- Improve understanding of plume-scale heterogeneity and
- Assess the potential effects of stratigraphy on subsurface PFAS occurrence and migration, which can be utilized in subsequent investigations.

The plume-scale cross sections spatially cover zones containing known PFAS impacts, including the Industrial Area (IA), Vehicle Assembly Building (VAB), Shuttle Landing Facility (SLF) area and the Launch Complex (LC) 39A and 39B areas.

2.3.1 Well Installation

A total of 13 new monitoring wells were installed by AECOM throughout KSC to provide additional stratigraphic data in areas without existing monitoring wells. New monitoring wells were installed to a depth sufficient to penetrate the Pleistocene estuarine clay layer (approximately 50 feet below land surface [bls]). New monitoring wells were installed and developed in accordance with the Sampling and Analysis Plan (SAP) (NASA 2017) and Florida Department of Environmental Protection (FDEP) standard operating procedures (FDEP 2018). Field notes related to well installation are included in **Appendix A**.

All subsurface disturbance locations were cleared of potential underground utilities by KSC utility locators prior to commencement of fieldwork. During installation, each monitoring well was logged by a geologist for soil type in accordance with the SAP (NASA 2017). In addition, borehole information was converted into vertical grain-size logs, to visualize both grainsize and texture by utilizing a scheme of color-coded boxes of corresponding width. Following installation, new monitoring wells were subjected to downhole geophysical logging (gamma logging) in accordance with the SAP (NASA 2017). New monitoring wells were also surveyed for location and elevation (**Appendix B**).

2.3.2 Gamma Logging

Gamma logging was performed on 22 existing and 13 installed monitoring wells (**Table 2-1** and **Figure 2-9**). Existing wells and locations for new wells were selected to provide stratigraphic data in high-interest areas (e.g., known or suspected PFAS source locations) or in areas devoid of existing wells (new well construction). Accessibility and other logistical constraints such as proximity to overhead/underground utilities were also considered during selection. Existing wells were selected to provide vertical coverage to the Pleistocene estuarine clay layer at around 40 to 50 feet bls, when possible. Gamma logs and well construction records are included in **Appendix C**.

2.4 KEY OBSERVATIONS

The following sections summarize the main stratigraphic observations for the individual cross sections. In general, the observations discuss the relative prevalence of high mass flux/low storage (e.g., sand) and low mass flux/high storage (e.g., silt, clay, mud) hydrostratigraphic units. These observations, combined with review and analysis of the plume-scale cross sections, will be utilized to guide PFAS investigation activities during subsequent phases and eventually begin development of conceptual remedial approaches and/or expectations.

2.4.1 Shuttle Landing Facility

The northwest-southeast oriented section A-A' (**Figure 2-10A**) shows sandy beach-ridges and accompanying muddy swales from the surface down to a depth of approximately 40 feet bls. The succession shows low heterogeneity, and a regional confining clay layer of estuarine deposits occurs at 40 feet bls that dips towards the south. The thickness of the confining clay layer ranges from 10 to 20 feet.

The north-south oriented section B-B' (**Figure 2-10B**), parallel to the SLF runway, shows similar sandy beach ridges and accompanying muddy swales from surface to approximately 40 feet bls. The swales thicken towards the south, causing increased local heterogeneity.

2.4.2 Launch Complex 39A

The east-west oriented section C-C' (**Figure 2-10C**) shows sandy beach ridges and muddy swales dipping toward the east along the regional stratigraphic dip. The swales indicate local potential mass storage zones (e.g. PFAS-MW0010). The confining clay of estuarine clay is encountered at a range of 45 to 50 feet bls. The confining clay is about 10 feet thick on average, but shows the presence of silty tidal bar deposits towards the east.

2.4.3 Vehicle Assembly Building

The north-south oriented section D-D' (**Figure 2-10D**) shows a thick package of stacked sand beach ridges with occasional muddy swales along the regional strike. The estuarine confining clay unit is present at a depth of 50 to 60 feet bls. The thickness of the confining clay varies from 8 to 12 feet.

The east-west oriented section E-E' (**Figure 2-10E**) shows a sand dominated package of beach ridges with minor muddy swales that is present at approximately 50 feet bls. The confining unit of estuarine clay beneath it is present only in the western portion of the section. The eastern portion at this depositional level consists of prodelta mud, rather than estuarine clay.

2.4.4 Industrial Area

The northeast to southwest oriented section F-F' (**Figure 2-10F**) represents a 40 to 45 feet thick stack of beach ridges with a predominance of muddy swales toward the northeast. These thick muddy intervals are potential mass storage zones within the beach ridges. The confining clay layer estuarine origin at about 40 feet bls is about 10 feet thick.

The northeast to southwest section G-G' (**Figure 2-10G**) is parallel to section F-F' and shows similar features of sandy beach ridge deposits. Thick muddy swale deposits are encountered at boreholes PFAS-MW0002, PFAS- MW0003 and GSRY-MW0058. The estuarine confining clay below the beach ridges was present at 40 feet bls. The confining clay layer is about 10 feet thick.

This northwest to southeast section H-H' (**Figure 2-10H**) runs perpendicular to sections F-F' and G-G'. The section shows stacked sandy beach ridges and their associated muddy swales from surface to about 40 feet bls. The underlying estuarine clay unit is only present towards the northwest. The strata towards the southeast at the same level consist of prodelta mud and associated deltaic deposits.

Conceptual Site Model Report
Center-Wide PFAS PRL 237
Revision: 0
November 2021

This page intentionally left blank.

3. GROUNDWATER FLOW PATTERNS

The groundwater flow pattern assessment was conducted to develop high-resolution, Center-wide potentiometric surface maps of the upper surficial aquifer system (SAS) underlying KSC. These potentiometric surface maps were used to provide information regarding groundwater and dissolved solute movement over a large area and infer its interaction with surface water bodies. The SAS is the focus of the gauging activities as PFAS impacts occur predominantly within this system (Geosyntec 2019). Groundwater gauging data collected during dry (October 2020) and wet (February 2021) conditions were utilized to generate these maps (**Figure 3-1**). Additional information such as topographic maps, location of surface water bodies and mapped waterways, and geology were utilized during map preparation.

3.1 MERRITT ISLAND SURFICIAL AQUIFER SYSTEM

The SAS of KSC is the uppermost hydrologic unit and consists of unconsolidated sand, shelly sand, silt, clay and calcareous clay as noted in **Chapter 2**. The bottom of the SAS is interpreted to be the top of the laterally continuous estuarine clay (**Chapter 2**). The thickness of the SAS varies, and is approximately 50 feet in the north and thickens to the south to a maximum observed thickness of approximately 70 feet near the IA.

Groundwater flow patterns within the SAS are typical of an island aquifer system that is surrounded by high salinity water (USGS 2000). These patterns are termed ‘variable density flow’ (VDF), and an idealized representation is illustrated on **Figure 3-2**. Localized high groundwater elevations develop in more permeable sediments that are also at a relatively high elevation. Both natural and man-made topographic highs can exhibit elevated groundwater levels. Groundwater flows from these higher elevations in a sub-radial fashion and discharges to intermediate streams and/or stormwater channels, eventually discharging to one of the larger surface water bodies surrounding Merritt Island (Schmalzer and Hinkle 1990). Clark (1987) reports that 12.5% of annual average rainfall discharges to surface water features (11% via baseflow and 1.5% via direct runoff). The majority (87%) of the annual rainfall is lost to evapotranspiration and only 0.5% KSC reaches the groundwater reservoir (Clark 1987).

Due to density differences between fresh water (i.e., infiltrating precipitation) and surrounding brackish water, strong downward vertical gradients develop beneath the high elevation regions of KSC. Fresh water is present at shallow depths, while the heavier brackish water is present at lower depths. The relative depth of the fresh-brackish water interface changes depending on the season. The interface occurs deeper during the rainy season and shallower during the dry season (USGS 2000).

After its initial downward migration, fresh groundwater eventually migrates upward as it moves laterally from high recharge areas, finally discharging into surrounding waters along the land-water interface. The groundwater discharge via this mechanism is termed freshwater submarine

groundwater discharge (SGD). Studies by Martin et al. (2007) estimated that the freshwater SGD for Merritt Island ranged from 0.02 to 0.09 cubic meters per day per meter of shoreline. **Figure 3-3** contains both generalized and site-specific conceptualizations of freshwater SGD at KSC.

3.2 METHODOLOGY

The initial step in developing the potentiometric surface maps was to select an appropriate number of spatially distinct monitoring wells. The KSC RIS database, containing more than 8,000 entries for KSC wells, was reviewed to determine an appropriate number of representative monitoring wells to utilize in this analysis. This selection process included various types of wells including Geoprobe, temporary, drinking water, air-sparge/extraction and standard monitoring wells. Well selection was focused on identifying monitoring wells that were still active, within the shallow aquifer, and with well screens preferably no greater than 5 feet long and no deeper than 40 feet bls – at or above the local confining unit. Additionally, a well that had been surveyed and recently gauged (within the last 5 years) implied that it still existed. From the database, 43 solid waste management units (SWMUs) were identified with one or more monitoring wells that met these criteria. One or two monitoring wells were selected from each SWMU to limit bias towards SWMUs with many monitoring wells.

From this selection criteria, the wells were plotted on a quadrangle map to illustrate their spatial distribution. The distribution figure allowed selection of wells that would provide the widest areal coverage. One final consideration for monitoring well selection was whether the selected location had an adjacent deeper well with well screens preferably no longer than 5-feet and within the 40 to 60 feet bls range. Collecting gauging data from deeper well locations allowed for an understanding of vertical gradient which was utilized to better develop the surficial aquifer groundwater potentiometric surface. Where practicable, shallow and deep well pairs with the greatest difference between screen intervals were selected.

From these selected locations, a subset of representative locations were chosen to be outfitted with groundwater transducers to record long term variations in the groundwater elevation as well as groundwater temperature, specific conductivity and actual conductivity. Seven transducers were installed in shallow wells, five were installed in intermediate zone wells and three were installed in deep wells. Three surface water outfalls were also outfitted with transducers to provide data for the stormwater modeling analysis (**Chapter 4**). Transducers were deployed between the transition of the wet and dry periods to observe seasonal changes.

3.2.1 Manual Gauging

Based on the selection rationale described in **Section 3.2**, a total of 111 wells were chosen for the two manual gauging events. The location of these wells is illustrated on **Figure 3-1** and listed in tabular format in **Table 3-1**. There were 101 wells gauged during the October 6, 2020 event and 107 wells gauged during the February 1, 2021 event. Some wells were not gauged during an event due to logistical issues, as noted in **Table 3-1**.

Each gauging event was completed within an 8-hour working period, using four sampling teams consisting of two people each. Before deployment to their target sampling area, each team measured the depth to water (DTW) on the same monitoring well to ensure consistency between level gauges. During gauging activities, the target well was opened and the DTW was measured, to the nearest 0.01 foot with a level gauge, from a known measuring point on the well casing. The DTW measurement was subtracted from the surveyed value for the known measuring point to determine the groundwater elevation measurement for the specific well. The calculated values for the shallow aquifer locations were then used to construct the October 2020 and February 2021 potentiometric surface maps. Field notes related to manual gauging activities are included in **Appendix A**.

3.2.2 Transducer Deployment

Fifteen monitoring well locations and three stormwater outfall locations were outfitted with non-vented pressure transducers (Aqua TROLL 200, In-Situ Inc.) to record transient changes in water level. Prior to the transducer installations, the depth to water from known elevation measuring points at each location were gauged using a water level meter, to allow for conversion to actual elevation. The transducers were tethered and placed at specific depths below the water surface and activated, recording readings on a fifteen-minute interval. The transducers also recorded water temperature (degrees Celsius), specific conductivity (microsiemens per centimeter [$\mu\text{S}/\text{cm}$]), and actual conductivity ($\mu\text{S}/\text{cm}$) during their deployment. Atmospheric pressure readings were recorded by three barometric transducers (BaroTROLL, In-Situ Inc.) deployed above ground during the same time interval. The barometric transducers were installed at the Component Cleaning Facility, Kennedy Athletic Recreation and Social (KARS) Park I and KARS Park II. Three outfalls and two monitoring wells had transducers emplaced on September 16, 2020 while transducers were installed in the remaining thirteen monitoring wells on September 17, 2020. Water elevations were determined by calculating the change in pressure as recorded by the transducer deployed at the specific location with corrections made for changes in barometric pressure as recorded by one of the two barometric transducers that were deployed. All transducers were removed on February 1, 2021 except for the SLF outfall location which was not removed until February 3, 2021.

3.3 RESULTS

Groundwater elevation data are tabulated in **Table 3-1** and displayed as potentiometric surface maps on **Figure 3-4** and **Figure 3-5**. Graphs illustrating the transducer data at each monitoring well are presented on **Figure 3-6** through **Figure 3-19**.

All submersible transducers operated normally during their deployment except for one location (monitoring well HMFN-MW0016) where the transducer was lost and no usable data were collected. The tether at one location (CHP-MW0014) was compromised on December 21, 2020 between 0900 and 0915 hours, which resulted in the transducer sinking to the bottom of the well. The transducer continued to collect data during the remainder of the deployment, however, and

all data were usable. The groundwater elevation correction factor needed to be modified for data collected following the tether compromise, but no other changes were required.

3.3.1 Potentiometric Surface Maps

Groundwater potentiometric surface maps illustrates that the highest groundwater elevations are observed north of the IA, extending in a north-northeasterly direction; under the LC39 Area extending in a north south direction and aligned with the Kennedy North Parkway and in an east-northeast to west-southwest direction somewhat aligned with the Crawlerway orientation; and east of the SLF oriented in a northwest-southeast direction. Though there may not be gauging points to confirm all of the “mounding” effects, it is interpreted that groundwater highs exist beneath the Schwartz Road Landfill, under the SLF landing strip, at each of the LC Pads, and other natural or artificially elevated areas.

Local groundwater divides are present and are typically oriented along the center of the groundwater high. Adjacent to the SLF, the groundwater divide is oriented northwest to southeast while a more south-southwest orientation is observed for the divide south of the LC39 Area and leading into the Industrial Area. Within the LC39 Area, the groundwater divide is oriented in a north-south direction nearly directly above the Kennedy Parkway North but there is also an east-northeast divide oriented above the Crawlerway causeway.

Seasonal groundwater elevation fluctuations (between October 2020 and February 2021) were noted and, of the wells gauged, a water level change of between approximately 1.5 and 2 feet was observed between events. In October, the maximum groundwater elevation for the shallow wells gauged was recorded at 5.87 feet above mean sea level (amsl), while in February the maximum was only 3.93 feet amsl. The October groundwater high values, in some areas, are very close to the ground surface elevations. Areas where the groundwater elevations are at or very near to the ground surface elevations would likely be identified as wetlands. The minimum groundwater elevation gauged in the shallow wells in October was -1.80 feet amsl while in February the minimum had dropped to -3.25 feet amsl.

3.3.2 Transducer Readings

The transducers recorded several observations that are consistent with the nature of VDF, ongoing remedial activities and the overall potentiometric surface patterns measured during manual gauging. Key observations derived from the transducer data include the following:

- Groundwater levels continually decreased during the observation period, consistent with the manual gauging data and potentiometric surface maps. Groundwater elevations typically responded to precipitation events in both shallow and deep well locations.
- Paired shallow and deep transducers demonstrated strong downward vertical gradients (approximately 0.1 feet/foot) throughout the observation period. These were observed at the Former Drum Storage Area (FDSA-MW0021S2/FDSA-MW0036), the Contractors Road

Heavy Equipment Area (CRHE-MW0047/CRHE-IW0014D) and within the IA (CHP-MW0014/POL-MW0009D).

- Tidal fluctuations did not significantly affect groundwater elevations (greater than 0.25 feet) during the observation period. Conductivity measurements in some wells, however, either responded to daily tidal fluctuations (CRHE-MW0047) or precipitation events (FDTL-IW0004I, WILC-MW0087).
- Remedial activities were observed to affect several transducers. Active air sparging at the Component Cleaning Facility resulted in pronounced variability in both shallow and deep wells (CCF-IW004, CCF-IW0039, CCF-MW0012D).
- Intrusion of salt water (increasing conductivity) was observed during decreasing water elevations at location FDTL-IW0004I, consistent with the known mechanism of VDF.
- The transducer deployed within CHP-MW0014 fell to the bottom of the well during its deployment. Interestingly, the conductivity readings of this transducer increased significantly following this incident. This observation also suggests that a conductivity gradient exists between shallow and deep groundwater, which further corroborates the presence of VDF conditions.
- Sporadic variations in conductivity were observed two several wells (FDSA-MW0036, LETF-MW0006), which may be attributed to equipment malfunction.

Conceptual Site Model Report
Center-Wide PFAS PRL 237
Revision: 0
November 2021

This page intentionally left blank.

4. STORMWATER ANALYSIS

AECOM developed a stormwater pollutant loading model utilizing an existing stormwater flow model, permits, stormwater facility data derived from NASA's Geographic Information System (GIS) utility maps, available reports on the Indian and Banana River basins, and surface water sampling data. The stormwater pollutant loading model was developed to:

- Estimate the mass of perfluorooctane sulfonate (PFOS) discharging from KSC outfalls. PFOS was modeled as it is the only PFAS compound present above an FDEP screening level (FDEP 2020);
- Evaluate which stormwater basins and outfalls experience the most significant PFOS mass loading;
- Develop an understanding of Center-wide stormwater flow patterns, which can be utilized to track high mass discharge locations back to potential source areas.

Land basins were delineated in the model and associated with stormwater outfalls with PFOS sample concentrations to better understand the PFOS loading in specific basins. This methodology identified the basins that are contributing to higher than acceptable levels of PFOS through specific outfalls at KSC.

4.1 DATA COLLECTION

4.1.1 Existing Stormwater Model

An existing stormwater model, developed as described in the KSC Stormwater Improvements report (Jones Edmunds & Associates, Inc. 2011), was utilized as the initial basis of modeling activities. The existing stormwater model was based on permitted structures active prior to 2011 and was created using the Interconnected Channel and Pond Routing Model (ICPR) Version 3 (Streamline Technologies, Inc., Winter Springs, Florida).

4.1.2 Stormwater Basin Inventory

AECOM updated the stormwater basin inventory contained within the existing stormwater flow model (Jones Edmunds & Associates, Inc. 2011) to incorporate basins added since 2011. In addition to basins within the existing model (Jones Edmunds & Associates, Inc. 2011), the updated inventory included permits identified in the SJRWMD Regulatory Permit Database (SJRWMD 2021), and aerial photographs. All KSC permits dated after 2011 for KSC were evaluated to learn if whether they contained information on stormwater structure additions in the system. Those that had structures related to the functionality of the stormwater conveyance system were incorporated into the new model. This evaluation is discussed further in **Section 4.2.**

4.1.3 Basin Definition

The KSC area was divided into specific areas, or basins, to analyze the stormwater flow more closely with pollutant concentrations. Initial delineations were created for those areas that have outfalls that discharge offsite: VAB South, SLF, Sub-Basin 11, and Region 1 (also referred to as the IA) (**Figure 4-1**).

4.1.4 Additional Data Collection

PFOS concentration samples were collected at 27 outfalls across the KSC stormwater system. These samples were collected during wet and dry seasons (September/October 2020 and January 2021, respectively).

Further information, to better understand PFOS loading, was gathered from the following reports:

- *Nutrient and Dissolved Oxygen Total Maximum Daily Loads (TMDLs) for the Indian River Lagoon and Banana River Lagoon* (Gao 2009)
- *Basin Management Action Plan (BMAP) for the Implementation of Total Maximum Daily Loads for Nutrients Adopted by the Florida Department of Environmental Protection in the Indian River Lagoon Basin North Indian River Lagoon* (North Indian River Lagoon Stakeholders 2013)
- *Basin Management Action Plan (BMAP) for the Implementation of Total Maximum Daily Loads for Nutrients Adopted by the Florida Department of Environmental Protection in the Indian River Lagoon Basin Banana River Lagoon* (Banana River Lagoon Stakeholders 2013)

4.2 MODEL DEVELOPMENT

The following steps were performed to create a current stormwater pollutant transport model.

The 2011 model (Jones Edmunds & Associates, Inc. 2011) was in Version 3 of ICPR. Version 3 is no longer supported by Streamline Technologies. Due to this, the original ICPR Version 3 model was converted to ICPR Version 4. Once the ICPR Version 4 model was able to be manipulated, it was converted into XPSWMM (Innovyze, Newbury, United Kingdom). The conversion to XPSWMM was required because ICPR lacks the capability of modeling pollutants, which XPSWMM can perform.

Once the model conversion from ICPR Version 4 to XPSWMM was complete, the applicable permits that were issued after 2011 needed to be evaluated and added to the model. Permits that were issued after 2011 did not always meet the criteria necessary to be included within the model. Permits that noted changes to the functionality of the stormwater conveyance system were incorporated into the model, specifically permits with the information such as percent impervious assumptions, assumed curve number for pervious areas, time of concentration and basin flow patterns.

Permits that were classified as internal updates to a master permit, a permit extension, a permit that did not modify surface water system, a permit transfer, or where there was no offsite discharge or environmental project permit (mitigation, or water quality) were not included.

Land basins were delineated within the XPSWMM model interface and GIS to better understand the PFOS loading in specific basins, and separate basins were delineated to reflect the relevant permits after 2011. The finalized basins utilized are illustrated on **Figure 4-2**. Those denoted by the red outline are the basins associated with the added permits. Basins added to the stormwater model are summarized in **Appendix D**

Calibration of the model was performed by comparing the XPSWMM results to the transducer data. Three transducers were installed on structures to measure the water elevations within a time span ranging from September 15, 2020 to September 23, 2020. Water elevation, conductivity, temperature, and rainfall data for each surface water transducer are presented on **Figure 4-3** through **Figure 4-5**. The transducer deployment locations are illustrated on **Figure 3-1**.

XPSWMM was calibrated to transducer data using a rain event that occurred from September 15 to 23, 2020, which resulted in 3.61-inches of rainfall based on Next Generation Weather Radar (NEXRAD) data (National Oceanic and Atmospheric Administration 2021). Graphs were created for each transducer based on time and elevation. The node in the model that was closest to the transducer was added to the graph as a comparison to analyze how closely the model and the transducer data coordinated with each other.

The XPSWMM model was calibrated to represent what was being recorded by the transducers in the field. The variables that were updated within the model to accomplish this task included the time of concentration, initial stage elevations, starting tailwater elevations, pervious curve number and percent impervious. Transducer data and model predictions are illustrated on **Figure 4-6**.

Using the model and GIS, 23 discharge points were identified. These discharge points were connected to the waterbodies known as Banana Creek, Banana River Lagoon, and the Indian River Lagoon. Each outfall was assigned a PFOS sample concentration, which were then associated with each node within the model. These concentrations were then applied upstream of the discharge site for the purpose of analysis. Buildup/wash off and land use information was also added to the model to better understand pollutant movement. **Figure 4-7** illustrates the discharge points and surface water sample locations. Surface water samples were collected as part of the center-wide assessment and will be described in a future report.

The XPSWMM model allowed a pollutant to be included in the model with the units of milligrams per liter. The sample pollutant data collected was in micrograms per liter. Due the values being too small for XPSWMM to recognize, the PFOS sample concentrations were entered into the model as milligrams per liter (1 microgram per liter was entered as 1 milligram per liter). Once the model was run, the final results were converted to appropriate units to accurately reflect actual units.

4.3 RESULTS

The XPSWMM model was utilized to simulate the PFOS discharge in surface water during a 7-day storm event. A 7-day event is a standard simulation in this software package, and is similar in duration to the 9-day rain event (September 15 to 23, 2020) utilized in the calibration process. The predicted PFOS loading results are presented in **Table 4-1**. The PFOS load was calculated using the closest measured PFOS surface water concentration times the average model-predicted stormwater discharge rate during the modeled storm event. **Table 4-1** is listed in order of highest to lowest PFOS loading. **Figure 4-8** illustrates a color-coded map of the predicted PFOS discharge between stormwater basins. Model output data is included in **Appendix D** (electronic copies only).

The surface water outfall sampling results are presented in **Table 4-2**. A comparison between dry and wet weather for seven PFAS constituent concentrations was performed using this data, and is illustrated on **Figure 4-9**. This comparison demonstrates that 61% of the sample results were higher during dry season conditions. This observation suggests that groundwater baseflow into these outfalls is a significant contributor to PFAS loading at outfalls.

5. FORENSIC DATA ANALYSIS

PFAS are a class of several thousand chemicals that are present in a variety of industrial and consumer use products (Interstate Technology Regulatory Council [ITRC] 2018). Different varieties of specific PFAS compounds are utilized in industrial/consumer products, depending on its original intended use. As common environmental analyses typically include the identification of more than a dozen unique PFAS compounds, the observed levels of these compounds can provide information regarding the source material. Source identification of PFAS is an important concept in environmental analysis, as the presence of anthropogenic sources can confound efforts at environmental investigation. Due to the dozens of unique PFAS that can be present in one sample, analysis and interpretation of these source patterns requires a combination of statistical data science and analytical chemistry techniques.

5.1 GOALS

The goal of applying forensic data analysis to the NASA PFAS data was to isolate and identify common PFAS mixture signatures in surface water and groundwater data. Once these signatures are developed, they can be utilized to better analyze PFAS sources, transport pathways and attenuation mechanisms. This forensic evaluation also serves as a roadmap to perform these analyses on future PFAS sample results at KSC.

5.2 METHODOLOGY

5.2.1 Overview

The statistical analyses were performed using R and python packages utilizing a combination of principal component analysis (PCA) and hierarchical clustering to form an unsupervised pattern recognition process. These methods can be used to categorize large, complex datasets into groups that exhibit similar chemical attributes (e.g., presence of specific compound, relative ratio of compounds, etc.). PCA has been utilized to identify environmental contamination sources (Johnson et al. 2002) and PCA combined with hierarchical clustering has been utilized to identify PFAS source patterns (Zhang et al. 2016). The output of PCA/hierarchical clustering is a labeled dataset, where each sample is classified as part of a group (cluster) of similar PFAS mixture signatures. The distinct signature represented by each cluster can then be used as a forensic ‘fingerprint’. Based on the known composition of sources of PFAS, these fingerprints can be utilized to identify and differentiate these sources. Source identification can be further developed by the analysis of additional ‘indicator compounds’; chemicals that are uniquely observed in specific sources. Sucralose was utilized as an indicator compound in surface water samples in this work to indicate the presence of sanitary wastewater. This compound is an artificial sweetener that can be utilized as a tracer for both large-scale wastewater treatment plant effluent (Cantwell et al. 2019) and septic systems (Spoelstra et al. 2020).

5.2.2 Data Preprocessing

Existing (Geosyntec 2018) and recently acquired (AECOM 2021) surface water and groundwater PFAS data were analyzed during the analyses described herein. Prior to subjecting data to PCA and hierarchical clustering, various forms of data preprocessing such as autoscaling, logarithmic transformation, block scaling, sum of squares normalization, quartile normalization, and compositional log ratios were explored. Ultimately, the most applicable pattern recognition results were obtained by transforming the PFAS concentration data into compositional ratios representing each analyte's contribution to the total for each sample, and then transforming that data into isometric log ratios (ILR) (Brereton 2009; Miller et al. 2018; Varmuza and Filzmoser 2009).

5.2.3 Pattern Recognition

Several pattern recognition methods were applied and assessed for their performance including self-organizing maps, k-means clustering, and various forms of hierarchical clustering. Hierarchical clustering was selected based on the average silhouette scores and overall agreement with principal component visualizations (Brereton 2009; Miller et al. 2018; Varmuza and Filzmoser 2009). The groundwater and surface water datasets were analyzed separately using the same methodology of hierarchical clustering via Euclidean distance measurements and Ward's linkage method. To estimate the best number of clusters (k) for each dataset, the Elbow Method with Inertia was used in conjunction with average silhouette scores and determined the optimal k value to be 6 for groundwater and 4 for surface water (Patel 2019). Therefore, six representative clusters of the groundwater compositional ILR data were created, and four representative clusters of the surface water compositional ILR data were created. Characteristics of the groundwater and surface water clusters are discussed in **Sections 5.3.1** and **5.3.2**, respectively.

5.3 RESULTS

5.3.1 Groundwater

Six PFAS mixture signatures were identified in the groundwater data. The results of the groundwater analysis are depicted graphically on **Figure 5-1** to **Figure 5-6**. Each figure shows the collective chemical profile and geographical distribution of the samples classified within each cluster. The profiles include descriptive information about the associated samples, such as the number of samples in each cluster, the location of each sample on a map, and aggregated point data on hexagonal grids, known as hexbins, showing (1) the areas of the site that contained the most samples of that cluster classification and (2) the areas of the site that contained the highest total PFAS concentrations associated with each cluster. The PFAS chemical mixture pattern identified by each cluster is represented on pie charts in the profiles showing the average relative composition for each analyte and the relative composition of all perfluorocarboxylates (PFCAs) and perfluoroalkyl sulfonates (PFASAs). As a whole, the chemical and geographical

information in the profiles provide the essential diagnostic data needed to form high-level forensic determinations.

The dominant PFAS signatures (5 of 6) at KSC are associated with aqueous film forming foam (AFFF) as the source material. PFAS signatures indicative of AFFF typically have a high percentage of PFOS, perfluorohexane sulfonate (PFHxS), perfluorohexanoic acid (PFHxA) and perfluorooctanoic acid (PFOA), which matches the most observed four-compound PFAS mixture at AFFF-impacted sites reported by East et al. (2020). These five signatures had the highest magnitude of total PFAS concentrations and included the greatest number of samples. The suspected AFFF signatures were represented by clusters G1, G2, G3, G4, and G6.

Among the group of suspected AFFF signatures, there is a high-level distinction between groups of AFFF mixtures dominated by PFOS and PFHxS, versus mixtures dominated by PFHxS with relatively higher contributions of PFCAs such as PFHxA. This distinction is likely based on differences in AFFF formulations used at KSC over time. Legacy formulations, most widely used from the 1970s until the early 2000s, were based on long-chain PFAS molecules such as PFOS and PFHxS (Annunziato et al. 2020). More recent formulations manufactured with telomerization are based on six-carbon fluorotelomer moieties with a higher-degree of variation in molecular structure and functional groups which degrade into PFHxS, PFHxA, perfluoroheptanoic acid (PFHpA) and additional compounds that were not analyzed as part of this study such as 6:2 fluorotelomer sulfonate (Bridger et al. 2021; Kibbey et al. 2020).

Clusters G4 and G6 displayed signatures that were, on average, dominated by PFOS, with PFHxS as the second highest constituent. These mixture compositions were made up of a majority PFSAs, with varying levels of PFOA but only low levels of other PFCAs such as PFHxA and PFHpA. This is consistent with the most observed AFFF PFAS mixtures, as described by East et al. (2020). Specifically, the common characteristics in the signatures of these two clusters, such as the correlation of PFOS to PFHxS (**Figure 5-7**), are most representative of legacy AFFF signatures at KSC (Annunziato et al. 2020). Within these two clusters, the highest total PFAS concentrations were observed in hexbins that contained the Hydrocarbon Burn Facility, Fire Station 1, Fire Station 2, Former Fire Station 2, and Fire Station 3. Clusters G1, G2, and G3 displayed signatures that consisted, on average, of the highest combined PFHxS and PFHxA fractions out of all six PFAS signatures identified in the groundwater data. Differences between the three signatures appear to be mostly due to varying contributions of PFCAs and diminishing levels of PFOS, possibly indicating comingling with a non-AFFF source of PFCAs or the presence of a different AFFF formulation contributing oxidizable precursors. The G2 signature, with the lowest abundance of PFOS at 7% and highest PFHxA at 30% seems to be the most indicative of modern fluorotelomer-based AFFF (Bridger et al. 2021). In general, this signature has the highest average PFHxA fraction out of the six signatures identified at the site and showed a strong correlation between PFHxA concentrations and PFHxS concentrations, demonstrating that the two six-carbon PFAS compounds likely

originated from the same source (**Figure 5-8**). These three clusters exhibited the highest total PFAS concentrations in hexbins near the Hydrocarbon Burn Facility, Fire Station 2, Fire Station 3, the northern end of the runway, and the Former Residuals Application Area.

Unlike the collection of suspected AFFF signatures, cluster G5 formed a signature that was roughly an even split between PFCAs and PFASs. The average mixture was made up of mostly PFOS (39%) and PFOA (29%) with minor constituents of PFHxS (12%) and PFHxA (10%). This mixture of PFAS is more consistent with what is observed in wastewater treatment plant (WWTP) effluent (Weston & Sampson 2020) and landfill leachate (Gallen et al. 2017) than any AFFF formulations that have been analyzed or any studies of AFFF-impacted media. This supports the notion that sewage and landfill material at KSC contains PFAS, also implying that impacts from septic systems could show signatures that fall within this group. With only 17 samples, it is uncertain if characteristics of this signature are inclusive of all non-AFFF impacts at KSC, especially as WWTP PFAS profiles seem to be site specific and vary based on chemical conditions. The highest total PFAS concentrations in cluster G5 were observed in hexbins that contained the Ransom Road Landfill, Former Sewage Treatment Plant 4, Fire Station 3, Former Fire Station 2, Former Sewage Treatment Plant 7, and the Schwartz Road Landfill.

5.3.2 Surface Water

Four signatures were observed in surface water samples. These results are depicted graphically on **Figure 5-9** to **Figure 5-12**. The surface water signatures are presented using visualizations of the same type and layout as the groundwater data for each surface water cluster's unique profile. Of the four surface water PFAS signatures identified, the most prevalent was cluster S1, which contains the largest share of samples and the highest total PFAS magnitude. The S1 signature was similar to the legacy AFFF groundwater signatures, with a PFOS-dominant composition and a PFHxS component that was approximately 50% that of the PFOS fraction.

Cluster S2 had a unique signature at the site, made up of 85% PFCAs and only two samples. The samples were located immediately adjacent to another in the pond in KARS Park II. Both samples had nearly identical signatures and similar total PFAS concentrations (226 nanograms per liter [ng/L] and 338 ng/L). The associated source for this signature is unknown, but appears to be localized to the KARS Park II area. There are many potential sources that could be associated with this composition, including fluorinated coatings on consumer products that may have been used or disposed of in the area. Similar PFHxA, PFHpA, PFOA signatures have also been observed in wastewater and landfill leachate.

Clusters S3 and S4 exhibited signatures similar to S1, but with lower total PFAS concentrations and higher contributions from PFCAs. The signature of cluster S4 showed the most similarity to S1, and most likely represents the diluted form of a similar AFFF source that possibly mixed with a source of PFCAs such as sanitary wastewater. Similarly, the signature of S3 shows even higher levels of PFCAs but similar overall concentration magnitude. The samples with the S3

signature are located primarily in the Banana River and Indian River, with the highest concentrations in the Banana River, while the other two signatures are contained within Merritt Island.

Alternative explanations for the relative prevalence of PFCAs could be attributed to PFAS attenuation mechanisms. High molecular weight PFAS constituents (precursors) can be transformed into lower molecular weight PFCAs via oxidative processes. Also, PFASs preferentially sorb to solids compared to PFCAs. Therefore, a combination of these PFAS fate and transport mechanisms may be captured in the progression from signature S1, to S4, to S3.

This page intentionally left blank.

6. SUMMARY AND KEY OBSERVATIONS

The presence of PFAS in the environment poses significant challenges for practitioners seeking to monitor and address the health and ecological risks associated with these chemicals. These chemicals are highly recalcitrant, water soluble, and ubiquitous in many industrial and consumer products (ITRC 2018). Based on these characteristics, environmental impacts attributed to PFAS can often span a significant area, ranging from dozens to hundreds of square miles (Krueger 2018). Based on the potential magnitude (frequency and areal distribution) of PFAS impacts at KSC, the analyses described herein were designed to provide tools to address this unique behavior of PFAS chemicals.

6.1 HIGH-RESOLUTION CROSS SECTIONS AND POTENTIOMETRIC SURFACE MAPS

The regional and plume-scale cross sections can be utilized to guide subsequent PFAS investigation activities and assist in the interpretation of environmental monitoring data. Specifically, the high-resolution cross sections can be utilized as a basis to develop the subsurface flow architecture for groundwater fate and transport models. In combination with the center-wide potentiometric surface maps, these cross sections can also be utilized to evaluate hydrogeologic connectivity between multiple source zones.

6.2 STORMWATER MODELING RESULTS

Stormwater modeling activities shows that the highest surface water loading of PFOS discharges occurs to either Banana Creek or the Banana River, and the highest discharge basins are associated with the SLF and the IA. Stormwater drainage basins with relatively higher PFOS surface water discharges were identified, which can allow for the prioritization of future investigation and remedial activities.

6.3 CHEMICAL FORENSIC ANALYSIS

The chemical forensic analysis identified several PFAS detection patterns in groundwater and surface water. These results can be utilized to discern between AFFF and consumer-related sources of PFAS. Future monitoring data can also be analyzed to observe these patterns.

In addition, the analyses presented herein yielded several site-specific observations related to PFAS fate and transport that are important for consideration of future investigation activities. Key observations include the following:

- The combination of the measured groundwater VDF and the estuarine clay layer at the bottom of the SAS suggest that the predominant groundwater discharge locations will be along narrow widths perpendicular to the shorelines of the Indian River, Banana River and Banana Creek. Estimates of terrestrial submarine groundwater discharge and stormwater modeling results show that greater than 96% of the PFOS mass flux to outlying surface water

bodies is attributed to surface water flow. An example calculation is presented in **Appendix E**.

- Interbedded silt layers within the SAS further suggest that localized groundwater discharge locations may occur at interior surface water features (e.g., stormwater ditches, ponds). Paired wet and dry weather sampling data (**Chapter 4**) demonstrate that groundwater discharge is a predominant contributor to surface water PFAS concentrations.
- The vertical conductivity gradient, as observed from the transducer study, shows that higher salinity water is present at the deeper intervals within the SAS. The solubility of PFAS is negatively correlated to conductivity (Jeon et al. 2011). Therefore, it is possible that decreasing aqueous concentrations of PFAS, and increasing solid phase concentrations, are present within these deeper zones of the SAS.

The data and findings provided in this report were presented to the Kennedy Space Center Remediation Team (KSCRT) on June 22, 2021. KSCRT meeting minutes are provided in **Appendix F**.

7. REFERENCES

- Adams, P.N. 2018. “Geomorphic origin of Merritt Island-Cape Canaveral, Florida, USA: A paleodelta of the reversed St. Johns River?” *Geomorphology*, 306: 102-107.
- AECOM. 2015. *Stratigraphy and Groundwater Movement at Cape Canaveral, Cape Canaveral Air Force Station, Florida*. December 2015.
- AECOM. 2020. *Predictive Integrated Stratigraphic Modeling (PRISM®) Work Plan. Center Wide Per- And Polyfluoroalkyl Substances (PFAS) Potential Release Location (PRL) 237. Kennedy Space Center, Florida*. April 2020.
- Annunziato, K. M., J. Doherty, J. Lee, J.M. Clark, W. Liang, C.W. Clark, M. Nguyen, M.A. Roy, and A.R. Timme-Laragy. 2020. “Chemical Characterization of a Legacy Aqueous Film-Forming Foam Sample and Developmental Toxicity in Zebrafish (*Danio rerio*).” *Environmental Health Perspectives* 128(September 2020) 1-13.
- Banana River Lagoon Stakeholders. 2013. *Basin Management Action Plan for the Implementation of Total Maximum Daily Loads for Nutrients Adopted by the Florida Department of Environmental Protection in the Indian River Lagoon Basin Banana River Lagoon*. January 2013.
- Brereton, Richard G. 2009. *Chemometrics for Pattern Recognition*. John Wiley and Sons, Ltd.
- Bridger J. Ruyle, Colin P. Thackray, James P. McCord, Mark J. Strynar, Kevin A. Mauge-Lewis, Suzanne E. Fenton, and Elsie M. Sunderland. 2021. “Reconstructing the Composition of Per- and Polyfluoroalkyl Substances in Contemporary Aqueous Film-Forming Foams.” *Environmental Science and Technology Letters* 8(2021) 59-65.
- Burdette, K.E., W.J. Rink, D.J. Mallinson, P.R. Parham, and E.G. Reinhardt. 2010. “Geologic Investigation and Optical Dating of the Merritt Island Sand Ridge Sequence, Eastern Florida, USA.” *Southeastern Geology*, 47(4): 175-190.
- Cantwell, M.G., D.R. Katz, J. Sullivan, and A. Kuhn. 2019. “Evaluation of the artificial sweetener sucralose as a sanitary wastewater tracer in Narragansett Bay, Rhode Island, USA.” *Marine Pollution Bulletin* 146: 711-717.
- East, A., R.H. Anderson, and C.J. Salice. 2020. “Per- and Polyfluoroalkyl Substances (PFAS) in Surface Water Near US Air Force Bases: Prioritizing Individual Chemicals and Mixtures for Toxicity Testing and Risk Assessment.” *Environmental Toxicology and Chemistry* 40:3

Conceptual Site Model Report
Center-Wide PFAS PRL 237
Revision: 0
November 2021

Edward E. Clark Engineers-Scientists, Inc. 1987. *KSC Subsurface Hydrology and Groundwater Survey*. Volume IV. The Area Groundwater Survey Program. For: Eng. Dev. Directorate (NASA).

FDEP. 2018. DEP Standard Operating Procedures. Florida Department of Environmental Protection. 17 July 2018, <https://floridadep.gov/dear/quality-assurance/content/dep-sops>.

FDEP. 2020. *White Paper. Development of Surface Water Screening Levels for PFOA and PFOS Based on the Protection of Human Health Using Probabilistic Risk Assessment*. April 2020. https://floridadep.gov/sites/default/files/PFOA_PFOS_Human_Health_Surface_Water_Prob_Risk_Assessment.pdf

Gallen, C., D. Drage, G. Eaglesham, S. Grant, M. Bowman, and J.F. Mueller. 2017. “Australia-side assessment of perfluoroalkyl substances (PFASs) in landfill leachates.” *Journal of Hazardous Materials* 5(331): 132-141.

Gao, X. 2009. *TMDL Report Nutrient and Dissolved Oxygen TMDLs for the Indian River Lagoon and Banana River Lagoon*. March 18, 2009.

Geosyntec. 2019. *Phase I Solid Waste Management Unit Assessment and Confirmatory Sampling Report. Center-Wide Per- and Polyfluoroalkyl Substances (PFAS) Potential Release Location 237, John F. Kennedy Space Center, Florida*. September 2019.

ITRC. 2018. PFAS Fact Sheets PFAS-1. Washington, D. C. www.itrcweb.org.

Jeon, J., K. Kannan, B.J. Lim, K.G. An, and S.D. Kim. 2011. “Effects of salinity and organic matter on the partitioning of perfluoroalkyl acid (PFAs) to clay particles” *Journal of Environmental Monitoring* 13:1803.

Johnson, G. W., R. Ehrlich, W. Full, and S. Ramos. 2002. *Principal components analysis and 270 receptor models in environmental forensics*. Academic Press, San Diego, CA: 2002.

Jones Edmunds & Associates, Inc. 2011. *KSC Stormwater Improvements*. September 2011.

Kibbey, T., R. Jabrzemski, and D. O’Carroll. 2020. *Machine Learning Pattern Recognition for Forensic Analysis of Detected Per- and Polyfluoroalkyl Substances in Environmental Samples*. SERDP Project ER20-1205. Final Report. October 2020.

Krueger, G.L. 2018. *Minnesota Pollution Control Agency (MPCA) PFAS Response and 3M Natural Resource Damage Settlement*. Wisconsin DNR Brownfields Study Group – September 28, 2018.

- Martin, J.B., J.E. Cable, C. Smith, M. Roy, and J. Cherrier. 2007. "Magnitudes of submarine groundwater discharge from marine and terrestrial sources: Indian River Lagoon, Florida." *Water Resources Research* 43:W05440.
- Miller, J. N., J. C. Miller, and R. D. Miller. 2018. *Statistics and Chemometrics for Analytical Chemistry (Seventh)*. Pearson Education Limited.
- NASA. 1990. *Geology, Geohydrology and Soils of KSC: A Review*. August 1990.
- NASA. 2003. *Environmental Setting Reference Manual KSC, Florida*. May 2003.
- NASA. 2010. *Environmental Resources Document*. March 2010.
- NASA. 2017. *SAP for the RCRA Corrective Action Program at the KSC, Florida*. Prepared by Geosyntec Consultants, Boca Raton, Florida, Revision 5. August 2017.
- National Oceanic and Atmospheric Administration. 2021. Next Generation Weather Radar. <https://www.ncei.noaa.gov/products/radar/next-generation-weather-radar>
- North Indian River Lagoon Stakeholders. 2013. *Basin Management Action Plan for the Implementation of Total Maximum Daily Loads for Nutrients Adopted by the Florida Department of Environmental Protection in the Indian River Lagoon Basin North Indian River Lagoon*. January 2013.
- Patel, Ankur A. 2019. *Hands-On Unsupervised Learning Using Python*. O'Reilly Media Inc.
- Rink, W.J. and B. Forrest. 2005. "Dating Evidence for the Accretion History of Beach Ridges on Cape Canaveral and Merritt Island, Florida, USA." *Journal of Coastal Research*. 21 (5 (215)): 1000-1008.
- Schmalzer, P.A. and G.R. Hinkle. 1990. *Geology, Geohydrology and Soils of Kennedy Space Center: A Review*. August 1990.
- Schmidt, W. 1997. "Geomorphology and Physiography of Florida," in *The Geology of Florida*. University Press of Florida, Gainesville, FL. 327 pp.
- Scott, T.M. 1988. "The lithostratigraphy of the Hawthorn Group (Miocene) of Florida: Tallahassee," *Florida Geological Survey Bulletin* 59, 148 pp.
- Scott, T.M. 1997. "Miocene to Holocene history of Florida." *The Geology of Florida*. University Press of Florida, Gainesville, FL. 327 pp.
- Spoelstra, J., S.L. Schiff, and S.J. Brown. 2020. "Septic systems contribute artificial sweeteners to streams through groundwater." *Journal of Hydrology X*. Volume 7, 100050.

Conceptual Site Model Report
Center-Wide PFAS PRL 237
Revision: 0
November 2021

SJRWMD. 2020. Hydrogeologic Information System. St. Johns River Water Management District. <http://webapub.sjrwm.com/webdataexplorer/>.

SJRWMD. 2021. Regulatory Permit Search. St. Johns River Water Management District. <http://webapub.sjrwm.com/agws10/sjrwmpermit/>

USGS. 2000. "Is Seawater Intrusion Affecting Ground Water on Lopez Island, Washington?" USGS Fact Sheet 057-00.

Varmuza, K. and P. Filzmoser. 2009. *Introduction to Multivariate Statistical Analysis in Chemometrics*. CRC Press.

Weston & Sampson. 2020. *Poly- and Perfluoroalkyl Substances at Wastewater Treatment Facilities and Landfill Leachate*. 2019 Summary Report.

Zhang, Xianming, Rainer Lohmann, Clifton Dassuncao, Xindi C. Hu, Andrea K. Weber, Chad D. Vecitis, and Elsie M. Sunderland. 2016. "Source Attribution of Poly- and Perfluoroalkyl Substances (PFASs) in Surface Waters from Rhode Island and the New York Metropolitan Area." *Environmental Science & Technology Letters* 3 (9) (September 13): 316–321.

TABLES

This page intentionally left blank.

**Table 2-1
Monitoring Well Construction Details
Center-Wide PFAS Investigation, PRL 237**

Well ID	Well Installation Date	Borehole Diameter (in)	Borehole Depth (ft)	Well Diameter (in)	Manhole Diameter (in)	TOC Elevation (ft NAVD88)	Ground Elevation (ft)	Top of Screen (ft bls)	Bottom of Screen (ft bls)	Well Depth (ft)	Easting (m)	Northing (m)
PFAS-MW0001	9/25/2020	2	50	2	8	4.98	5.34	36	46	46	231811.0861	464389.1311
PFAS-MW0002	10/19/2020	2	50	2	8	4.2	4.29	38	48	48	232416.0776	462749.5279
PFAS-MW0003	9/30/2020	2	50	2	8	9.46	9.74	38	48	48	233280.719	462903.5913
PFAS-MW0004	9/23/2020	2	50	2	8	7.09	7.30	40	50	50	234338.3491	463895.0975
PFAS-MW0005	9/29/2020	2	40	2	8	4.72	4.97	10	20	30	233616.59	468656.625
PFAS-MW0006	10/1/2020	2	50	2	8	4.95	5.09	38	48	48	234689.6621	471359.6796
PFAS-MW0007	10/1/2020	2	50	2	8	2.99	3.18	37	47	47	236564.4009	472034.5818
PFAS-MW0008	9/25/2020	2	50	2	8	4.38	4.51	36	46	46	229730.9849	475727.8755
PFAS-MW0009	9/28/2020	2	50	2	8	6.17	6.38	40	50	50	231358.392	474330.918
PFAS-MW0010	9/24/2020	2	50	2	8	4.08	4.25	38	48	48	237113.8519	473647.813
PFAS-MW0011	9/24/2020	2	50	2	8	4.84	4.90	38	48	48	237673.0746	474043.924
PFAS-MW0012	9/30/2020	2	40	2	8	4.09	4.34	25	35	35	234640.8529	463222.7875
PFAS-MW0013	9/29/2020	2	50	2	8	3.21	3.40	37	47	47	231427.729	472627.099

Notes:

1. ft bls indicates "feet below land surface"
2. TOC indicates "top of casing"
3. NAVD88 indicates North American Vertical Datum of 1988
4. PFAS indicates Per- and Polyfluoralkyl Substances
5. PRL indicates Potential Release Location
6. m indicates metres

**Table 3-1
Groundwater Elevation Gauging Results
Center-wide PFAS Investigation, PRL 237**

SHALLOW WELL ID:	39A-MW0011		39A-MW0043		C5ES-MW0012I		C5ES-MW0017S		CCF-IW0062	
Area	Launch Complex 39A		Launch Complex 39A		C-5 Electrical Substation		C-5 Electrical Substation		Component Cleaning Facility	
Screened Interval (ft bls):	5 to 15		20 to 30		20 to 25		7 to 12		15 to 25	
TOC Elevation (ft NAVD88):	NA		4.23		3.32		4.50		8.77	
Date:	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
10/6/2020	2.81		2.62	1.61	0.57	2.75	2.3	2.20	5.61	3.16
2/1/2021	3.81		3.98	0.25	2.15	1.17	3.34	1.16	7.38	1.39

SHALLOW WELL ID:	CGO-MW0006		CGO-MW0023		CRCA-MW0005A		CRHE-MW0047		DAST-MW0003	
Area	Citgo Service Station		Citgo Service Station		Components Refurbishment and Chemical Analysis		Contractor's Road Heavy Equipment Area		Digital Air Surveillance Radar Tower	
Screened Interval (ft bls):	22.5 to 27.5		22.5 to 27.5		5 to 10		21 to 25		5.5 to 15.5	
TOC Elevation (ft NAVD88):	8.7		6.75		6.55		4.09		12.45	
Date:	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
10/6/2020	3.87	4.83	1.75	5.00	2.21	4.34	1.93	2.16	7.61	4.84
2/1/2021	5.68	3.02	3.76	2.99	5.03	1.52	3.77	0.32	abandoned	

SHALLOW WELL ID:	EHF-MW0001		EHF-MW0005		FCDC-MW0001		FCDC-MW0002		FDSA-MW0014S2	
Area	Environmental Health Facility		Environmental Health Facility		False Cape Data Collection Annex		False Cape Data Collection Annex		Former Drum Storage Area	
Screened Interval (ft bls):	2 to 12		15 to 25		7 to 17		6 to 16		2 to 12	
TOC Elevation (ft NAVD88):	8.77		5.31		12.17		11.55		2.85	
Date:	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
10/6/2020	3.79	4.98	CNL	CNL	7.35	4.82	6.75	4.8	2.07	0.78
2/1/2021	4.58	4.19	1.57	3.74	9.00	3.17	8.34	3.21	3.15	-0.3

**Table 3-1
Groundwater Elevation Gauging Results
Center-wide PFAS Investigation, PRL 237**

SHALLOW WELL ID:	FDSA-MW0015S2		FDSA-MW0021S2		FDTL-IW0004I		FDTL-IW0011I		FS6-MW0001	
Area	Former Drum Storage Area		Former Drum Storage Area		Former Development and Testing Lab		Former Development and Testing Lab		Fire Station #6	
Screened Interval (ft bls):	1 to 11		8 to 18		15 to 25		10 to 20		25 to 35	
TOC Elevation (ft NAVD88):	2.88		6.79		4.72		4.13		1.12	
Date:	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
10/6/2020	2.05	0.83	5.21	1.58	4.46	0.26	Covered in Brush		Under Water	
2/1/2021	3.32	-0.44	6.61	0.18	5.84	-1.12	5.33	-1.2	Under Water	

Table 4-1
Stormwater Model Pollutant Loading Predictions
Center-Wide PFAS Investigation, PRL 237

Basin Number	Drainage Area (acres)	PFOS (ng/L)	Peak Runoff (cfs)	PFOS Load (grams)
N-0001A	3439.55	49.7	729.03	23.24
890	535.54	176	79.84	11.44
470	983.12	82.6	133.14	9.37
410	936.92	82.6	31.87	8.71
490	870.19	82.6	49.46	8.16
480	853.18	82.6	136.71	8.13
870	102.6	18.1	14.91	4.84
850	282.37	130	35.81	4.22
910	25.86	18.1	6.46	4.09
260	384.59	81	43.78	4.07
A-010	19	176	10.25	2.68
2380	68.55	82.6	14.41	2.6
A-008	21.16	176	13.53	2.44
60	185.38	79.7	23.24	2.22
A-005	14.12	176	6.67	1.69
210	84.95	81	7.74	1.54
2370	271.77	7.4	47.77	1.49
A-015	39.5	7.4	13.72	1.43
A-013	8.04	7.4	3.95	1.39
810	781.07	13.1	44.5	1.19
2002	107.2	16	26.18	1.1

Table 4-2
Stormwater Outfall Seasonal Monitoring Results
Center-Wide PFAS Investigation, PRL 237

Location ID	Sample Date	Perfluoro- butanesulfonic Acid (PFBS)	Perfluoro- hexanesulfonic Acid (PFHXS)	Perfluoro- octanesulfonic Acid (PFOS)	Perfluoro- hexanoic Acid (PFHXA)	Perfluoro- heptanoic Acid (PFHPA)	Perfluoro- octanoic Acid (PFOA)	Perfluoro- nonanoic Acid (PFNA)	Perfluoro- decanoic Acid (PFDA)	Perfluoro- undecanoi c Acid (PFUNA)	Perfluoro- dodecanoic Acid (PFDOA)	Perfluoro- tridecanoic Acid (PFTRIA)	Perfluoro- tetradeca noic Acid (PFTEA)	MeFOSA A	EtFOSAA
PFAS-SW0077	10/1/2020	11.5	43.8	49.7	13.1	5.5	3.3 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0078	9/23/2020	8.9	27.1	42.6	12.5	7.8	8.2	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.5 U	4.5 U
PFAS-SW0079	9/25/2020	10.7	15.7	79.7	5.2	3.5 I	5.4	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0080	9/23/2020	2.9 I	10.3	34.2	5.1	4.1	4.9	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0081	9/24/2020	8.2	32.4	81.0	11.2	7.4	8.8	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0082	9/25/2020	3.7 I	7.6	20.2	6.3	3.2 I	4.2	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0083	10/1/2020	3.5 I	2.1 U	4.1 I	2.5 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0084	9/30/2020	15.4	112	178	34.6	18.7	14.8	2.2 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0085	9/30/2020	6.2	20.9	15.2	5.2	3.0 I	7.8	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0086	9/30/2020	16.9	23.8	65.7	7.4	9.6	19.3	4.6	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0087	9/30/2020	4.6	6.4	19.5	2.1 I	2.7 I	4.2	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0088	9/29/2020	7.1	15.4	47.4	7.6	5.8	7.0	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0089	9/29/2020	1.9 I	2.2 I	10.6	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0090	9/23/2020	7.2	17.4	20.5	6.4	3.6 I	3.6 I	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0091	9/23/2020	4.6	14.4	25.4	6.8	4.8	5.2	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0092	9/23/2020	8.4	30.4	102	10.4	6.7	9.0	2.0 I	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0093	9/24/2020	7.3	33.7	87.0	11.3	7.5	8.5	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0094	9/29/2020	3.6 I	2.4 I	8.7	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U
PFAS-SW0095	9/29/2020	6.3	20.3	82.6	6.5	4.5	7.0	2.0 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0096	9/29/2020	2.3 U	3.1 I	7.4	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.5 U	4.5 U
PFAS-SW0097	9/30/2020	15.7	21.3	16.0	7.1	3.9 I	6.0	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0098	10/1/2020	2.1 U	2.2 I	4.3	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0099	9/21/2020	2.9 I	5.8	13.1	5.7	3.7 I	3.8 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0100	9/21/2020	6.9	8.3	18.1	7.8	4.6	5.1	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0101	9/21/2020	2.9 I	2.1 U	8.9	2.1 U	4.8	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0102	9/21/2020	2.1 U	2.1 U	4.3	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0103	9/21/2020	9.9	10.9	11.0	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0104	9/21/2020	2.2 I	29.3	42.1	2.5 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0077	1/28/2021	10.3	50.9	59.2	13.8	5.9	3.9 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0078	1/27/2021	7.8	29.8	33.1	11.5	8.0	9.1	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	10 U	4.2 U	4.2 U
PFAS-SW0079	1/28/2021	10.1	92.0	361	12.8	4.9	11.1	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0080	1/28/2021	2.3 I	12.1	22.4	4.4	3.9 I	3.7 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0081	1/28/2021	13.6	76.1	98.0	20.3	12.2	10.8	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0082	1/28/2021	4.5	20.0	38.0	8.2	5.2	6.7	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0083	1/26/2021	3.1 I	2.9 I	2.8 I	3.8 I	2.5 I	2.6 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0084	1/27/2021	15.0	125	155	43.4	22.9	19.2	2.4 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0085	1/25/2021	6.2	22.3	12.2	6.7	3.5 I	8.8	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.5 U	4.5 U
PFAS-SW0086	1/25/2021	4.8	23.1	19.1	8.0	10.1	18.8	2.9 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0087	1/25/2021	3.8 I	17.8	110	4.2	3.0 I	9.1	2.8 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0088	1/25/2021	5.4	19.6	34.9	8.7	6.9	7.0	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0089	1/25/2021	2.8 U	2.8 U	6.3	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	5.6 U	5.6 U
PFAS-SW0090	1/28/2021	5.2	11.4	27.5	4.3	2.8 I	3.3 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0091	1/28/2021	5.4	13.3	22.5	4.3	3.0 I	4.2	2.1 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U

**Table 4-2
Stormwater Outfall Seasonal Monitoring Results
Center-Wide PFAS Investigation, PRL 237**

Location ID	Sample Date	Perfluoro- butanesulfonic Acid (PFBS)	Perfluoro- hexanesulfonic Acid (PFHXS)	Perfluoro- octanesulfonic Acid (PFOS)	Perfluoro- hexanoic Acid (PFHXA)	Perfluoro- heptanoic Acid (PFHPA)	Perfluoro- octanoic Acid (PFOA)	Perfluoro- nonanoic Acid (PFNA)	Perfluoro- decanoic Acid (PFDA)	Perfluoro- undecanoi c Acid (PFUNA)	Perfluoro- dodecanoi c Acid (PFDOA)	Perfluoro- tridecanoi c Acid (PFTRIA)	Perfluoro- tetradeca noic Acid (PFTEA)	MeFOSA A	EtFOSAA
PFAS-SW0092	1/28/2021	5.8	29.4	28.4	10.6	8.5	7.9	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0093	1/28/2021	15.3	128	307	33.4	18.1	19.4	2.9 I	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	4.2 U
PFAS-SW0094	1/26/2021	2.6 I	5.1	6.1	4.9	4.5	3.4 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0095	1/26/2021	2.0 I	13.4	65.1	4.2	3.1 I	5.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0096	1/26/2021	4.1	24.0	64.5	3.8 I	2.2 I	3.1 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0097	1/27/2021	5.2	23.4	87.5	8.2	7.1	10.4	2.2 I	2.1 U	2.1 U	2.1 U	2.1 U	10 U	4.2 U	4.2 U
PFAS-SW0098	1/26/2021	4.2	2.6 I	3.6 I	2.2 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0099	1/25/2021	3.3 I	10.6	18.2	9.7	6.6	6.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0100	1/25/2021	4.3	10.5	18.9	10.6	7.4	7.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0101	1/26/2021	4.2	2.6 I	3.3 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0102	1/25/2021	2.6 I	12.5	12.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U
PFAS-SW0103	1/25/2021	10.7	12.7	8.9	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.5 U	4.5 U

Notes:

Bolded results indicate the presence of an analyte at the specified concentration

Results are presented in nanogram per liter (ng/L)

I = analytical result was greater than or equal to the method detection limit, but less than the practical quantitation limit

MDL = Method Detection Limit

PFAS = per- and polyfluoroalkyl substances

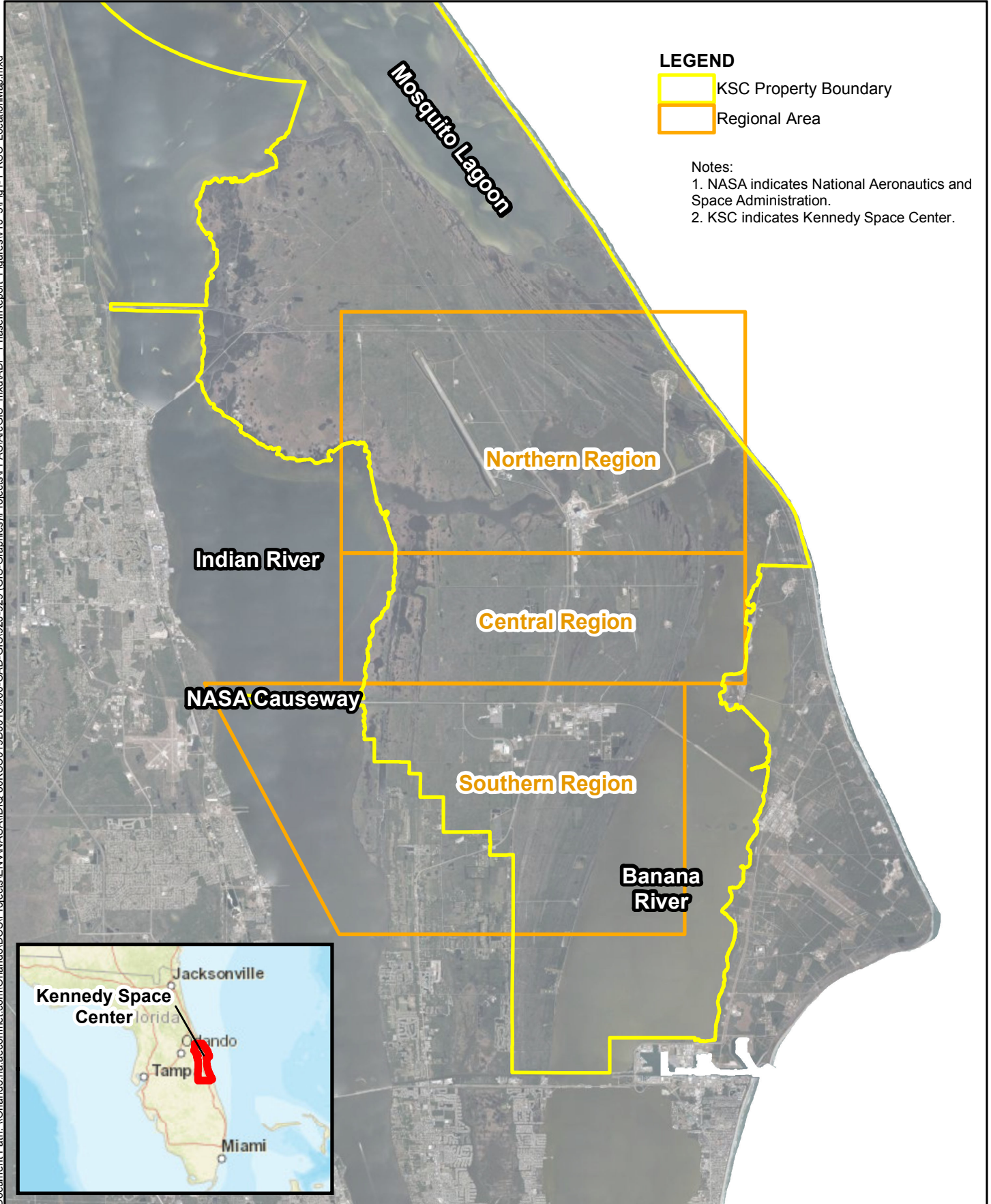
SW = surface water

U = Result was below the laboratory MDL



FIGURES

This page intentionally left blank.

Document Path: \\Orlando.na.aecom.net\com\Orlando\DCS\Projects\ENV\NASA\ID\Q_80KSC019D0010\900-CAD-GIS\920-929 (GIS-Graphics)\Projects\PFAS\ArcGIS_mxd\ADP_Phase\Report_Figures\10_5\Fig1-1_KSC_LocationMap.mxd

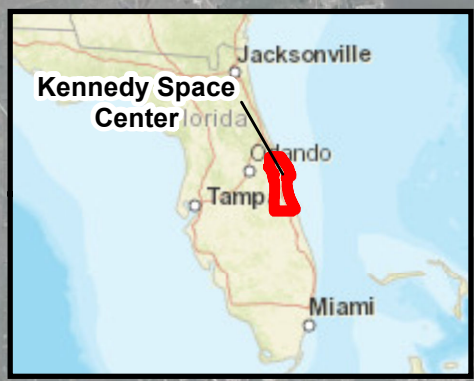



LEGEND

-  KSC Property Boundary
-  Regional Area

Notes:

1. NASA indicates National Aeronautics and Space Administration.
2. KSC indicates Kennedy Space Center.



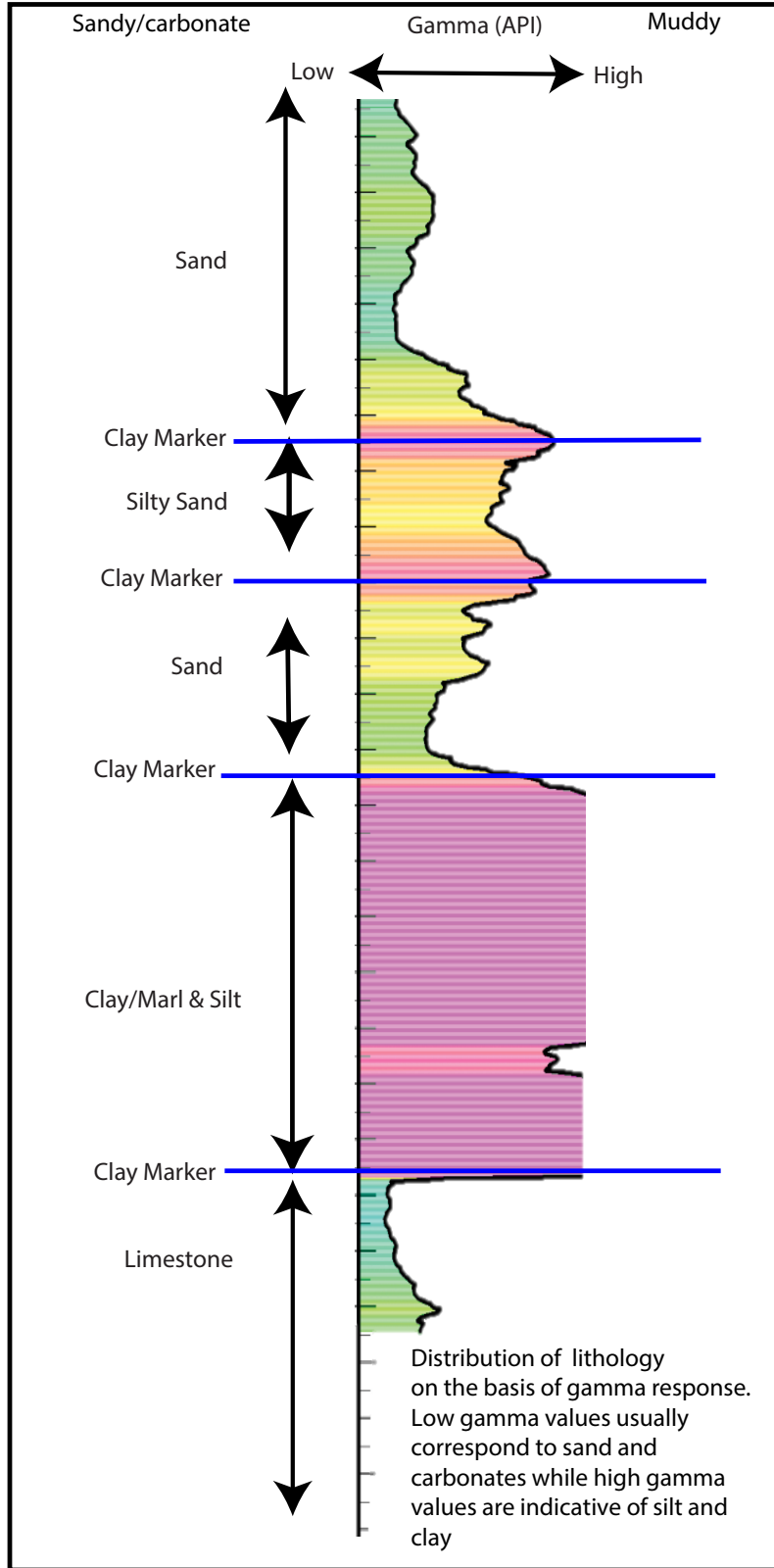
AECOM 0 6,000 12,000 Feet 

Source: Orthoimagery from Brevard County, 2018.

**JOHN F. KENNEDY SPACE CENTER
MERRITT ISLAND, FLORIDA**

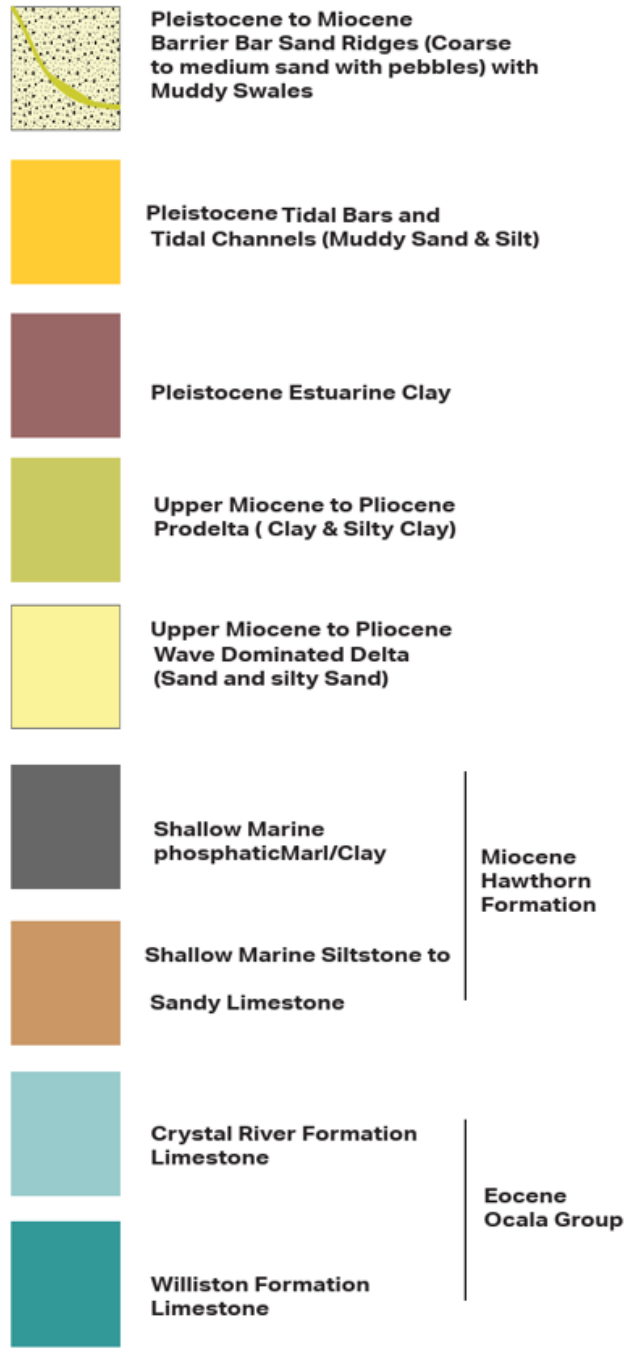
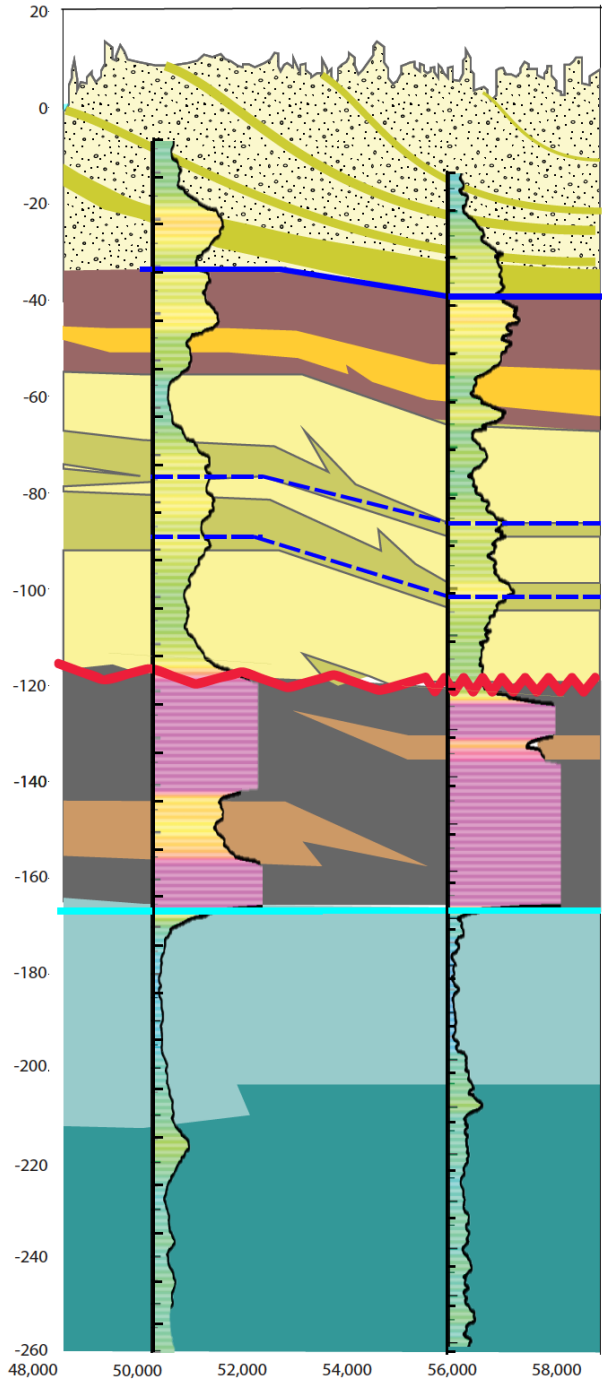
DATE: 10/7/2021 | DRWN: TH

**FIGURE 1-1
KSC LOCATION MAP**



CCAFS Industrial Area

BR0537 BR0532
 48,000 50,000 52,000 54,000 56,000 58,000



Document Path: \\Orlando-na.aecomnet.com\Orlando\DCS\Projects\ENV\NAS\A\IDIG_80KSC019D0010900-CAD-GIS\920-929 (GIS-Graphics)\Projects\PFAS\Figures\PDF\ADP_PhaseII\Report_20210216\PRISM\Fig2-2_Example of Identified Depositional Facies.pdf



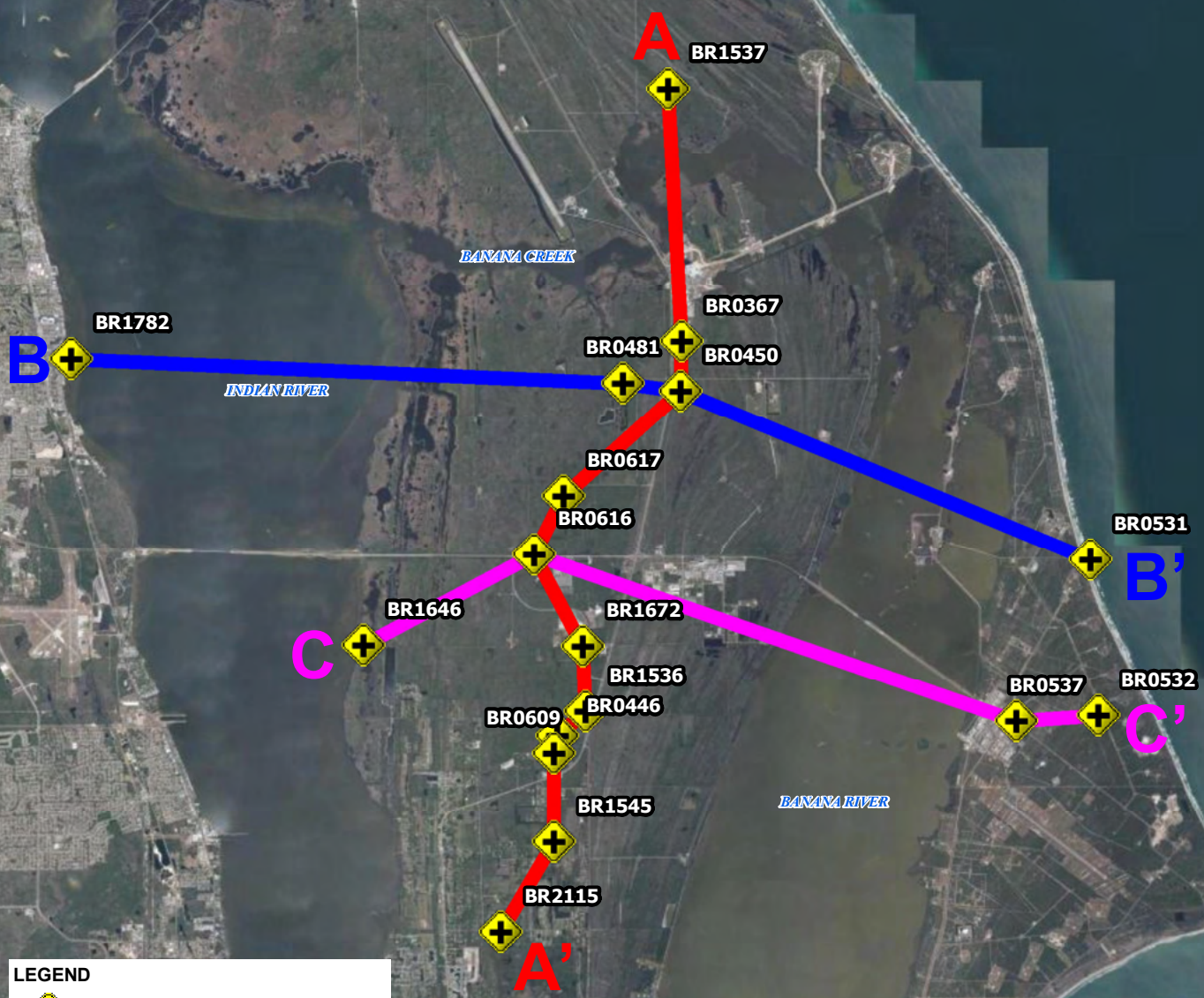
Notes:
 -Gamma logs derived from Cape Canaveral Air Force Station Industrial Area
 -ft amsl - feet above mean sea level
 -BR0537 - gamma log identifier

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-2
 EXAMPLE OF IDENTIFIED
 DEPOSITIONAL FACIES

DATE: 6/16/2021 DRWN: SD

Document Path: \\Orlando.na.aecomnet.com\Orlando\DCS\Projects\ENV\NASA\ID\Q_80KSC019D001010900-CAD-GIS\920-929 (GIS-Graphics)\Projects\PFAS\ArcGIS_mxd\ADP_Phase\Report_Figures\10_5\PRISM_Report_Figures\Fig2-3_Regional_Subsurface_Geology_Cross_Section_Transects_V2.mxd



LEGEND

- Existing Gamma Log Well Location
- Section A-A'
- Section B-B'
- Section C-C'

Notes:
 -Existing gamma log data were obtained from St. Johns River Water Management District online database (<http://webapub.sjrwmd.com/webdataexplorer/>)
 -bls - below land surface

AECOM 0 5,000 10,000 Feet

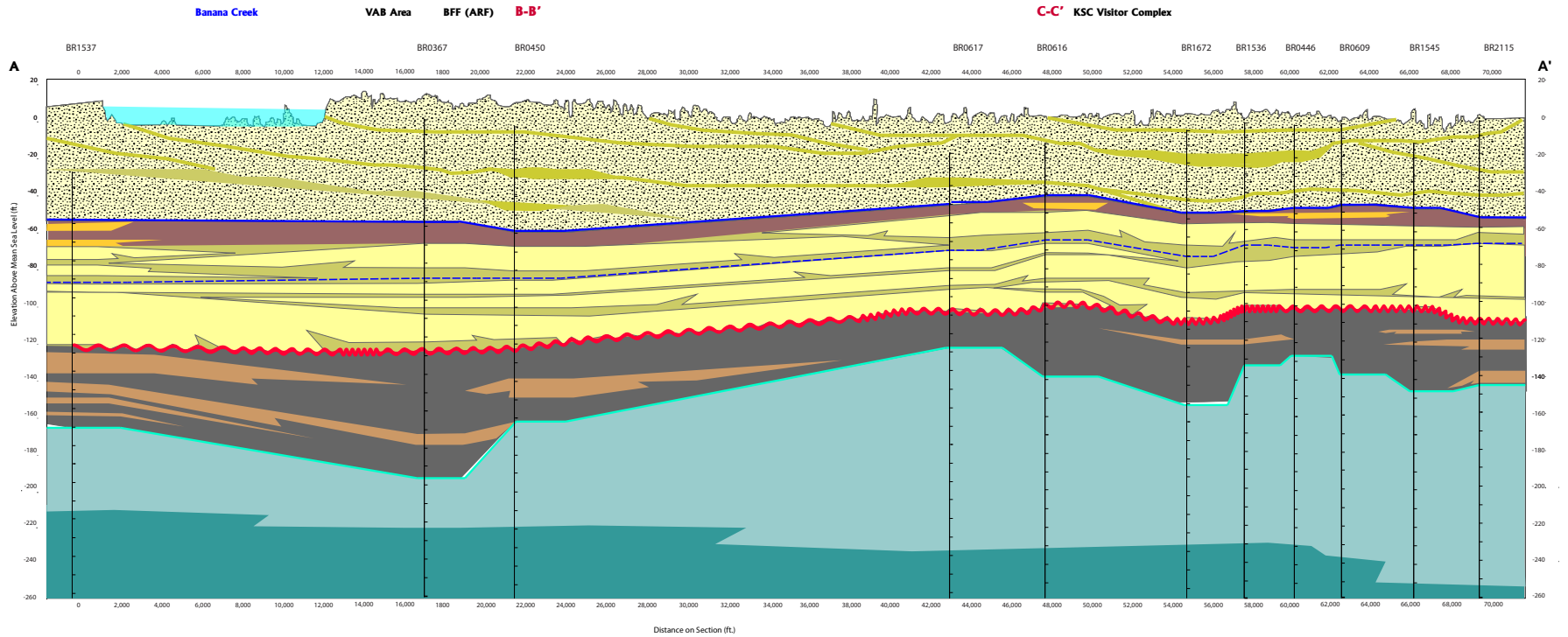
Source
 Orthoimagery from Brevard County, 2018.

JOHN F. KENNEDY SPACE CENTER
 MERRITT ISLAND, FLORIDA

DATE: 6/16/2021 DRWN: SD

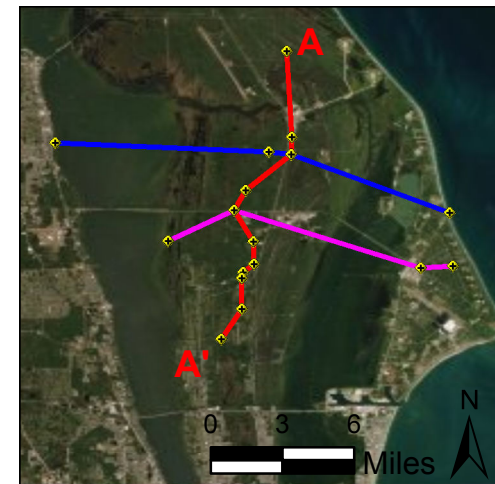
FIGURE 2-3
 REGIONAL SUBSURFACE GEOLOGY
 CROSS SECTION TRANSECTS

Document Path: \\Orlando.na.aecomnet.com\Orlando\DCS\Projects\EN\NASA\ID\Q 80\KSC019D000 10\900-CAD-GIS\920-929 (GIS-Graphics)\Projects\FAS\Figures(PDF)\ADP_PhaseIIReport_20210215\PRISM Fig2-4_Regional_Subsurface_Geology_Cross_Section_A-A.pdf



Pleistocene-Holocene		Miocene-Pliocene		Miocene		Eocene	
	Beach ridges		Delta Sand		Shallow marine marl		Crystal River Formation
	Estuarine clay		Prodelta clay		Shallow marine silt & sand		Hawthorn Group
	Tidal silty deposits						
							Ocala Group limestone

Sequence Stratigraphic Markers	
	Maximum Flooding Surface
	Parasequence Boundary
	Sequence boundary



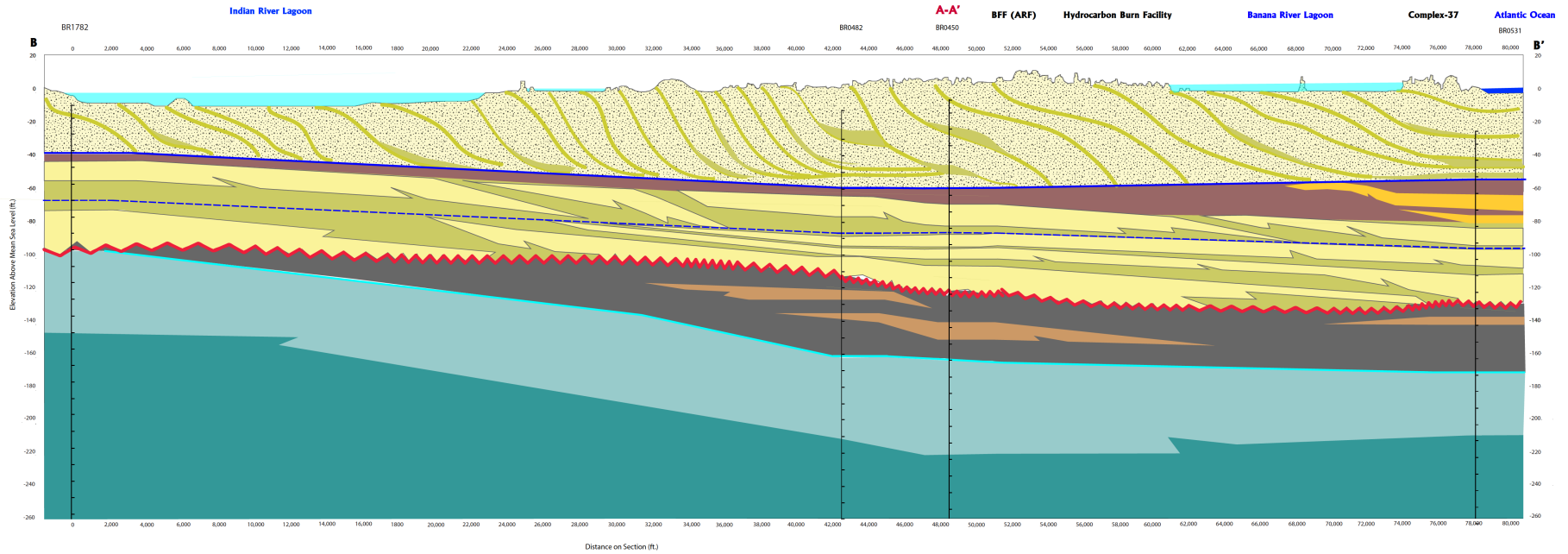
Notes:
-BR1537 - gamma log identifier
-ft. - feet

JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

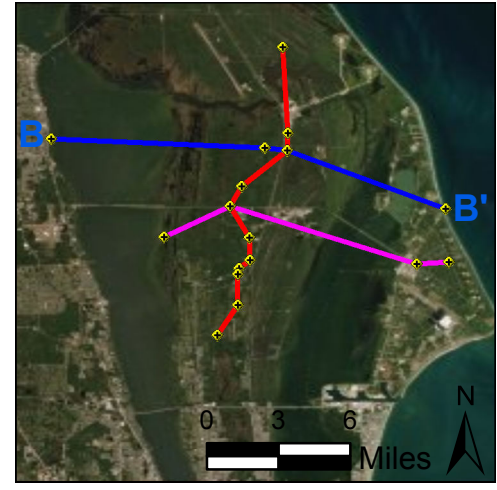
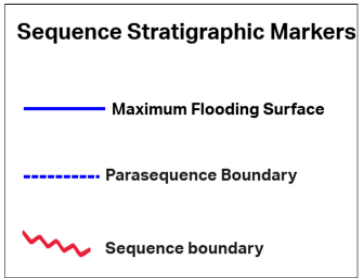
FIGURE 2-4
REGIONAL SUBSURFACE
GEOLOGY
CROSS SECTION A-A'

DATE: 6/16/2021

DRWN: SD



Pleistocene-Holocene		Miocene-Pliocene		Miocene		Eocene	
	Beach ridges		Delta Sand		Shallow marine marl		Ocala Group limestone
	Estuarine clay		Prodelta clay		Shallow marine silt & sand		
	Tidal silty deposits						

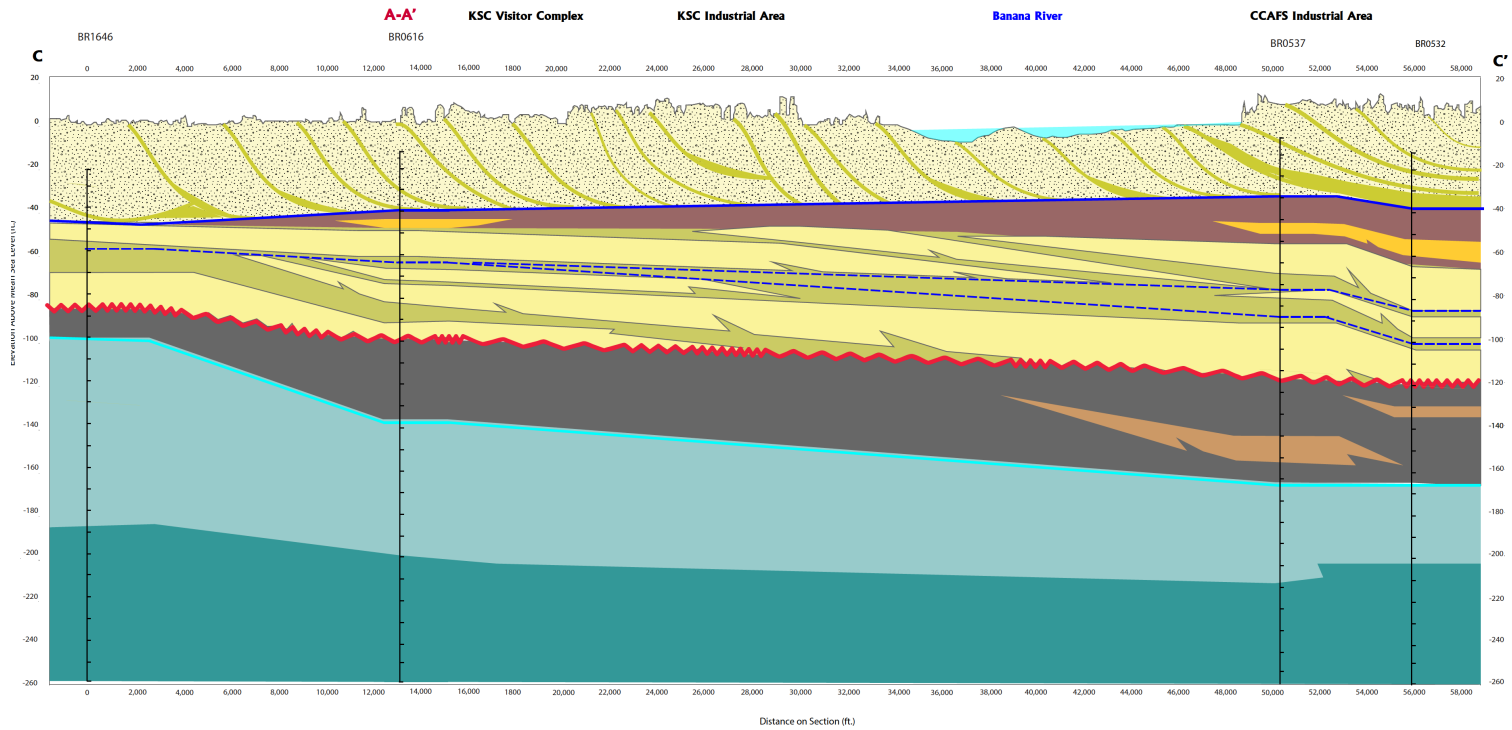


Notes:
 -BR1537 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-5
 REGIONAL SUBSURFACE
 GEOLOGY
 CROSS SECTION B-B'

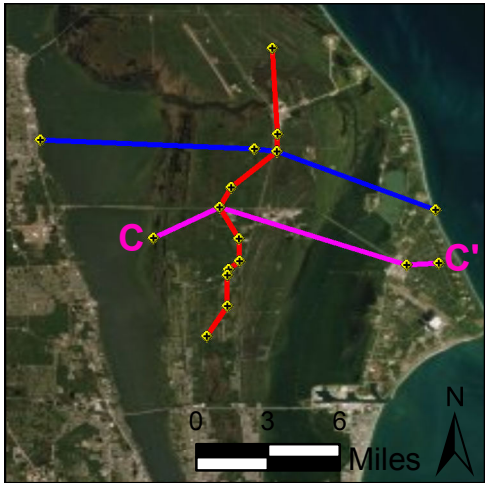
DATE: 6/16/2021 | DRWN: SD



Pleistocene-Holocene		Miocene-Pliocene		Miocene		Eocene	
	Beach ridges		Delta Sand		Shallow marine marl		Crystal River Formation
	Estuarine clay		Prodelta clay		Shallow marine silt & sand		Williston Formation
	Tidal silty deposits						
				Hawthorn Group		Ocala Group limestone	

Sequence Stratigraphic Markers

- Maximum Flooding Surface
- Parasequence Boundary
- Sequence boundary



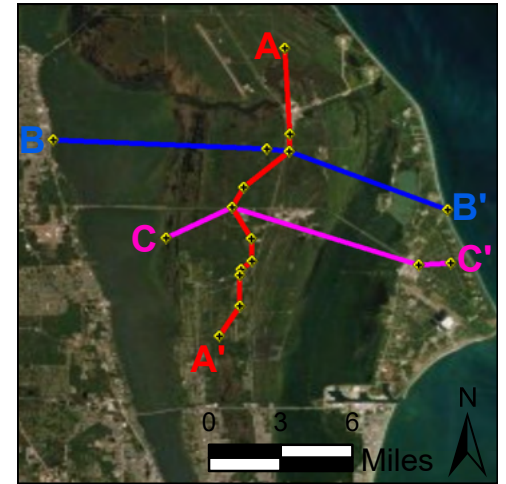
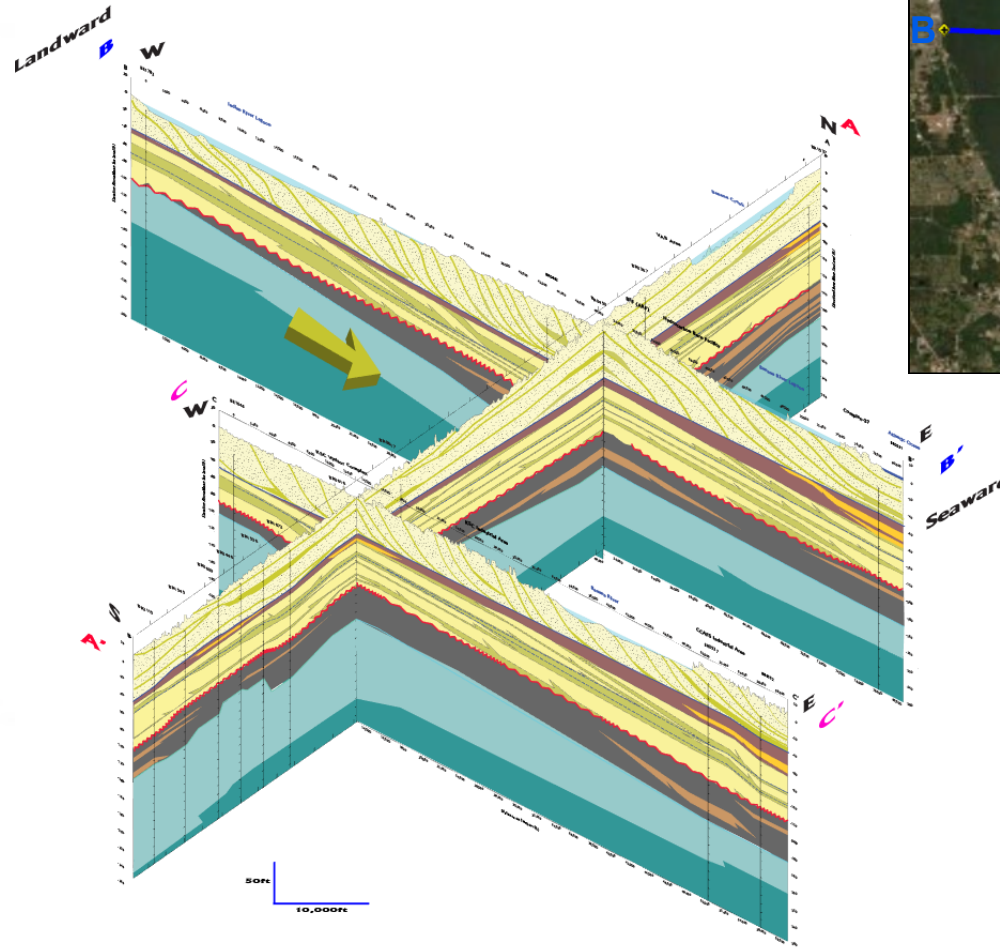
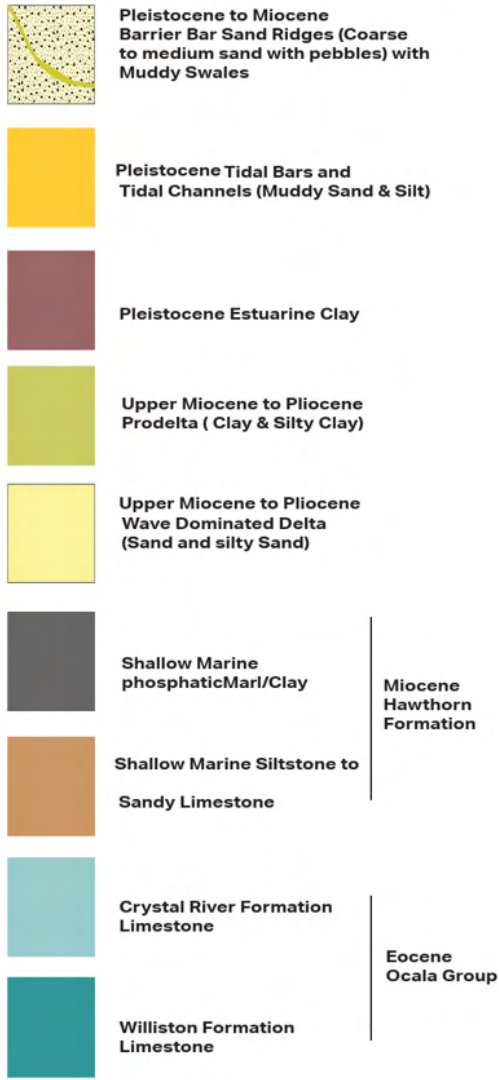
Notes:
 -BR1537 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-6
 REGIONAL SUBSURFACE
 GEOLOGY
 CROSS SECTION C-C'

DATE: 6/16/2021

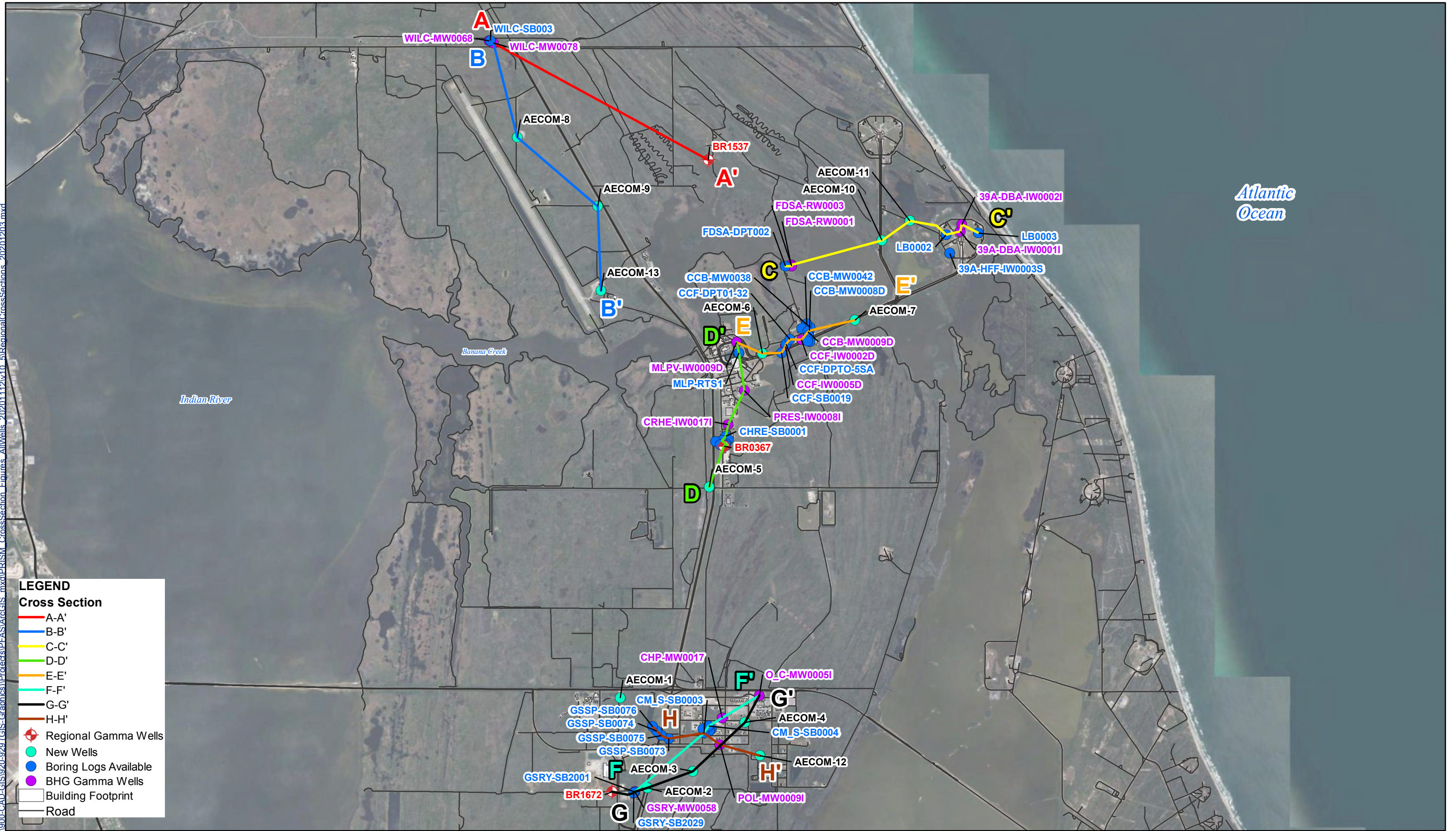
DRWN: SD



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

DATE: 6/16/2021 DRWN: SD

FIGURE 2-7
FENCE DIAGRAM OF
SECTIONS
A-A', B-B', AND C-C'



LEGEND

Cross Section

- A-A'
- B-B'
- C-C'
- D-D'
- E-E'
- F-F'
- G-G'
- H-H'

- Regional Gamma Wells
- New Wells
- Boring Logs Available
- BHG Gamma Wells
- Building Footprint
- Road

0 4,000 8,000 Feet

Source
Orthoimagery from Brevard County, 2018.

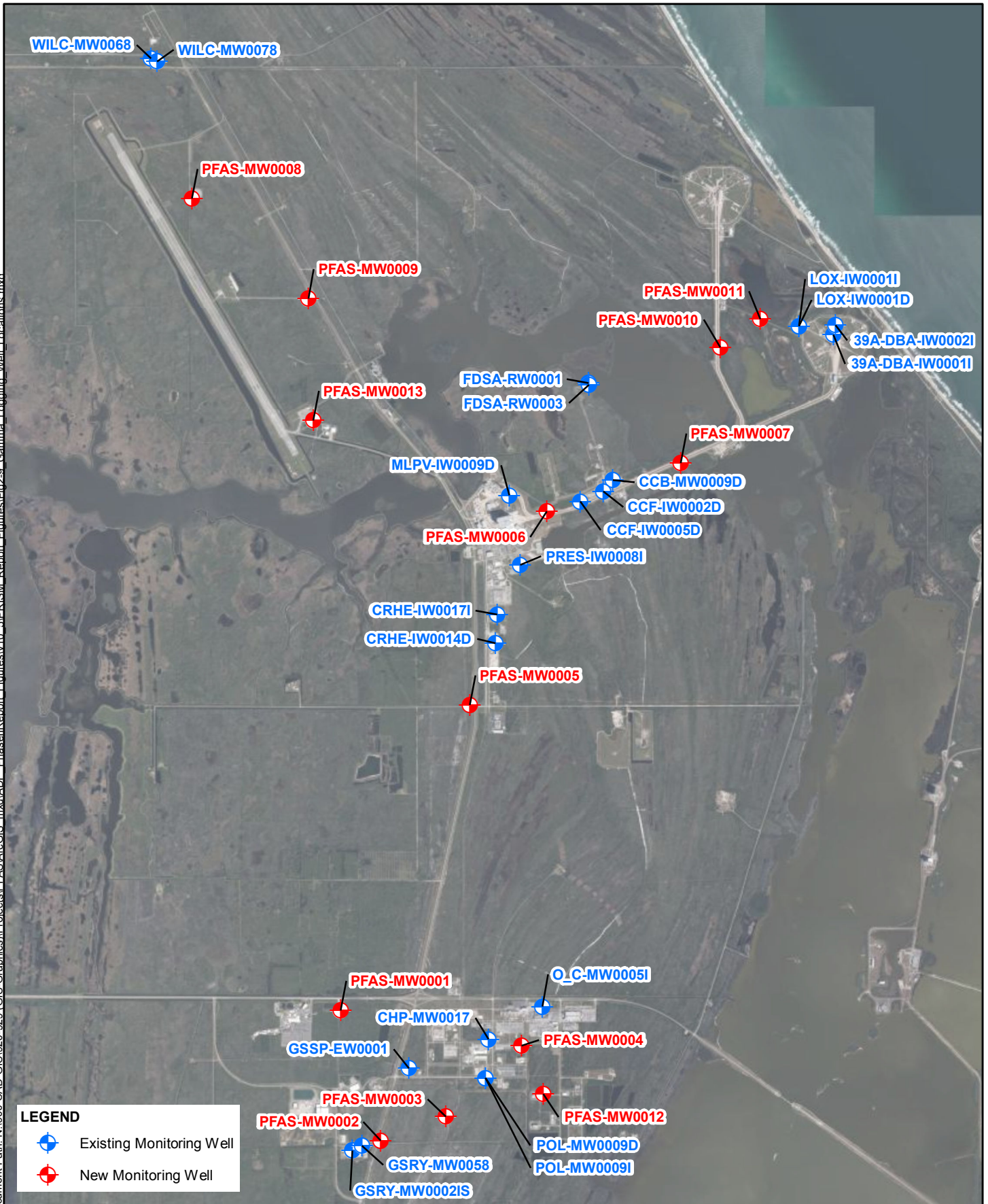
JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

DATE: 6/17/2021 DRWN: SD

FIGURE 2-8
PLUME-SCALE SUBSURFACE GEOLOGY
CROSS SECTION TRANSECTS



Document Path: N:\900-CAD-GIS\920-929 (GIS-Graphics)\Projects\PFAS\ArcGIS_mxd\ADP_PhaseII\Report_Figures\Fig2-9_Gamma_Logging_Well_Locations.mxd



LEGEND

- Existing Monitoring Well
- New Monitoring Well

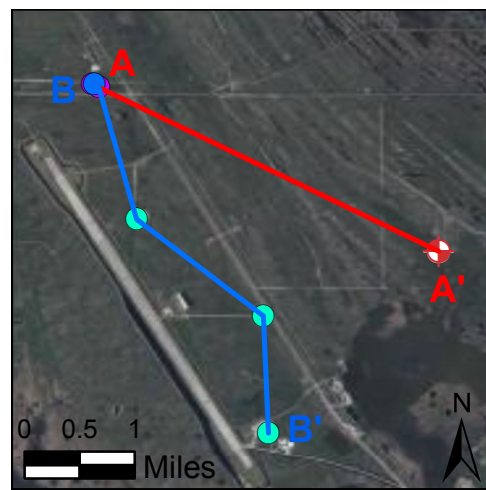
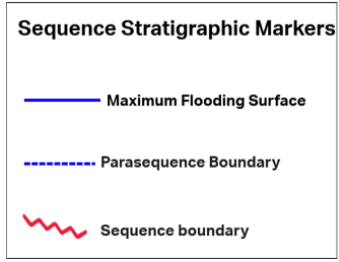
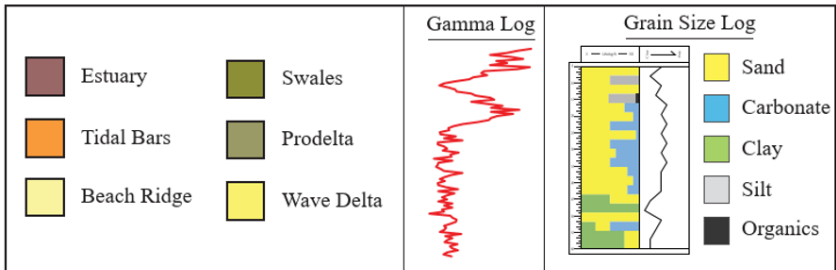
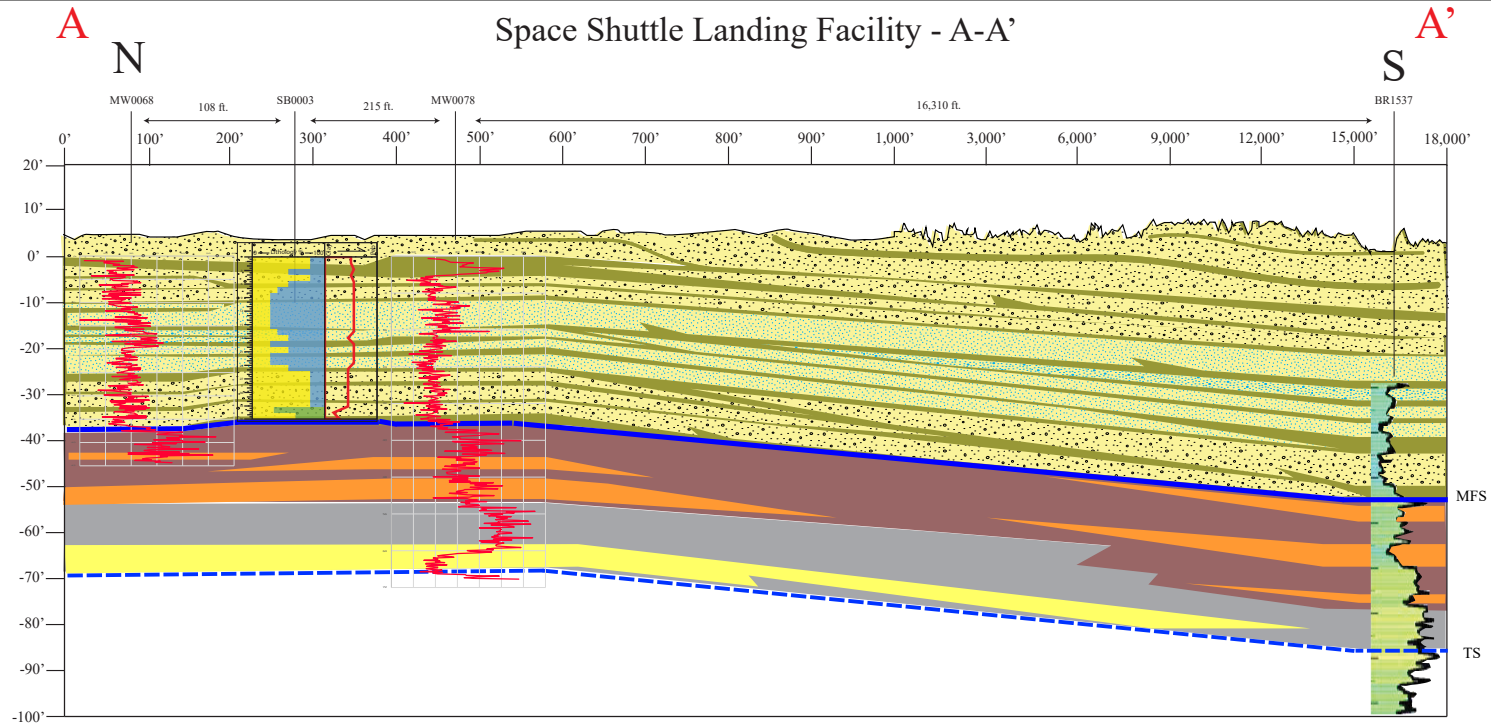
AECOM 0 2,500 5,000 Feet

Source
Orthoimagery from Brevard County, 2018.

JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

DATE: 6/17/2021 DRWN: SD

FIGURE 2-9
WELLS SELECTED FOR
GAMMA LOGGING



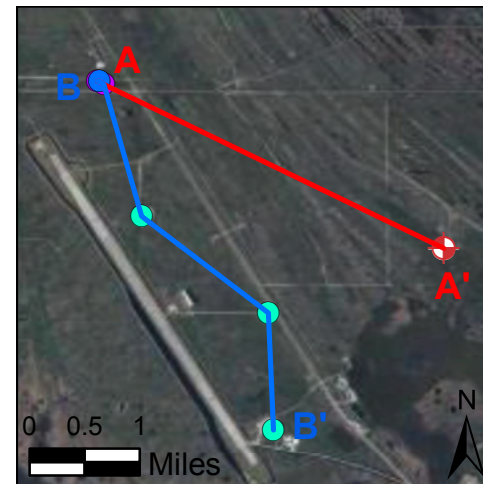
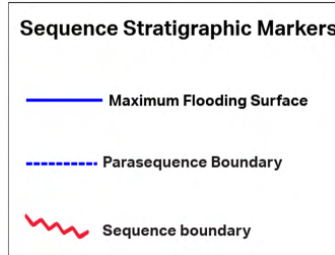
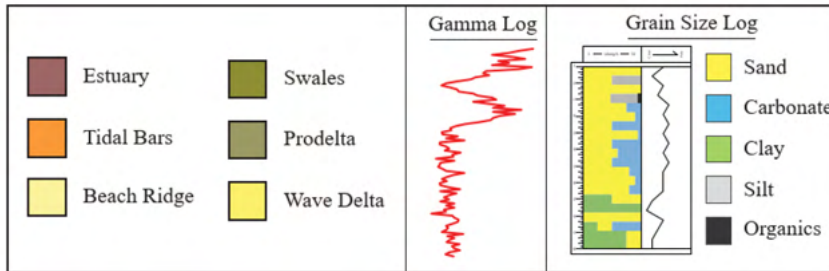
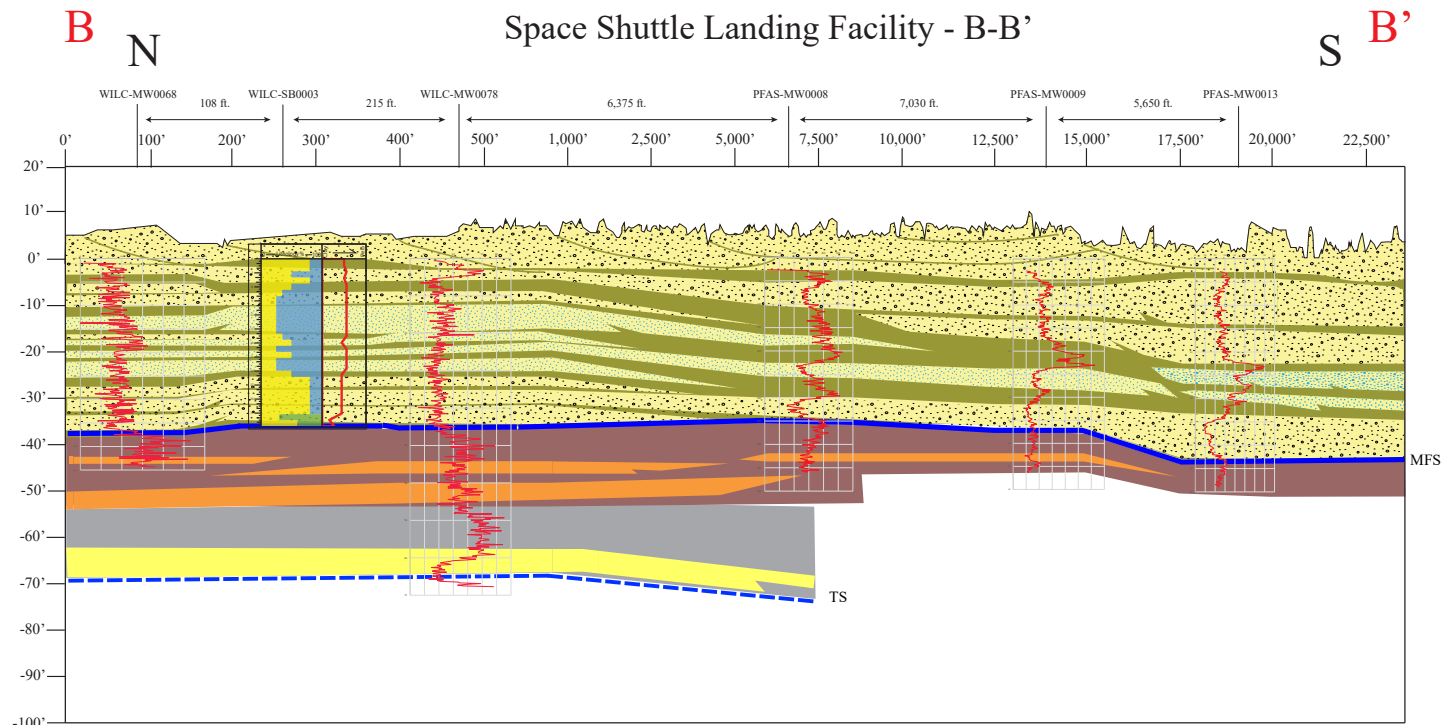
AECOM

Notes:
 -BR1537 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10A
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION A-A'

DATE: 6/18/2021 DRWN: SD

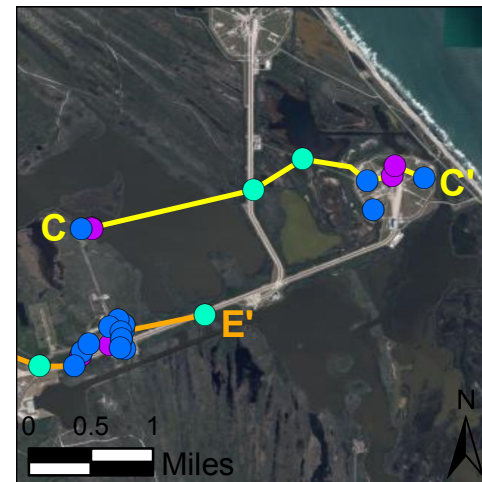
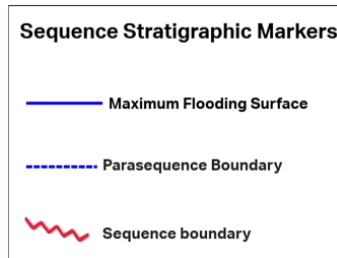
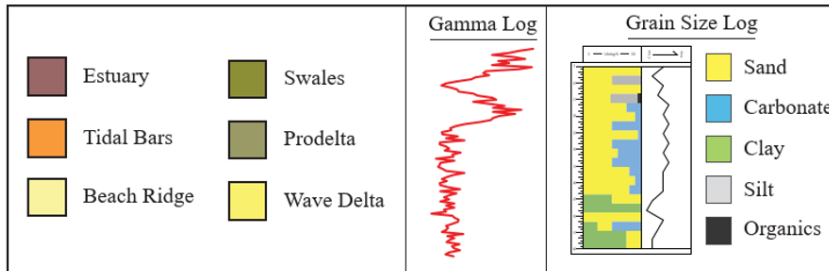
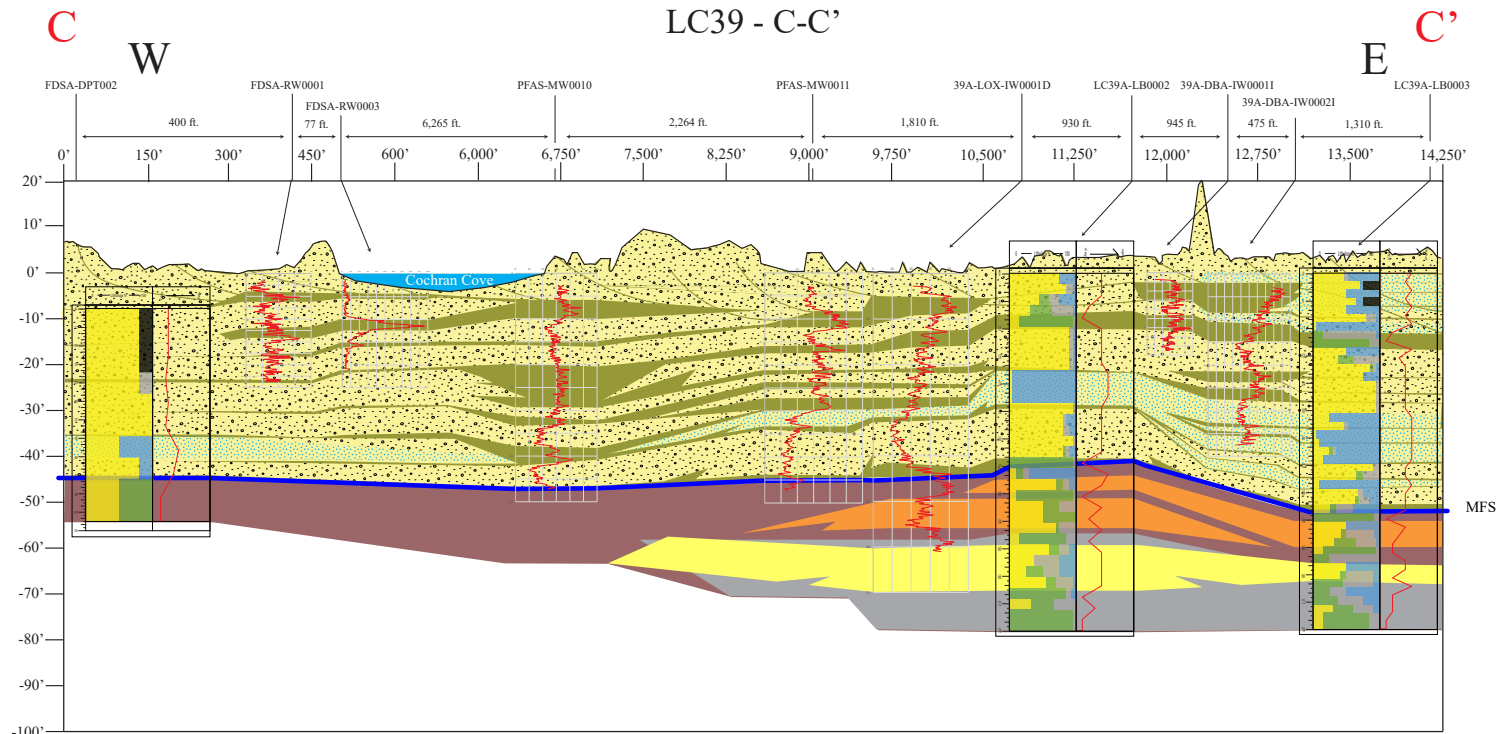


Notes:
 -WILCMW0068 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10B
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION B-B'

DATE: 6/18/2021 DRWN: SD



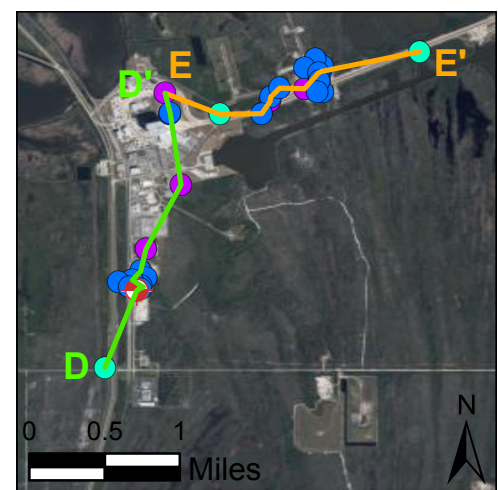
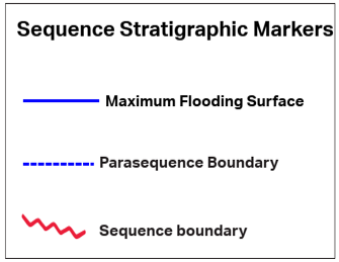
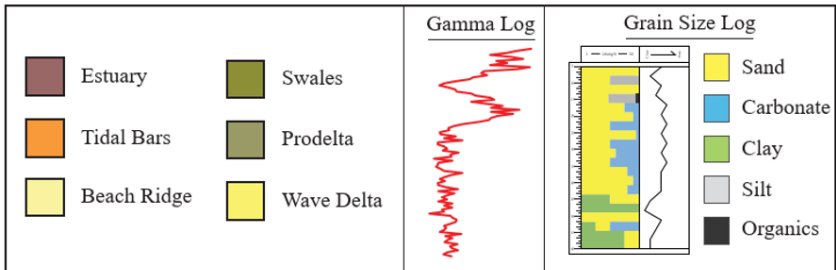
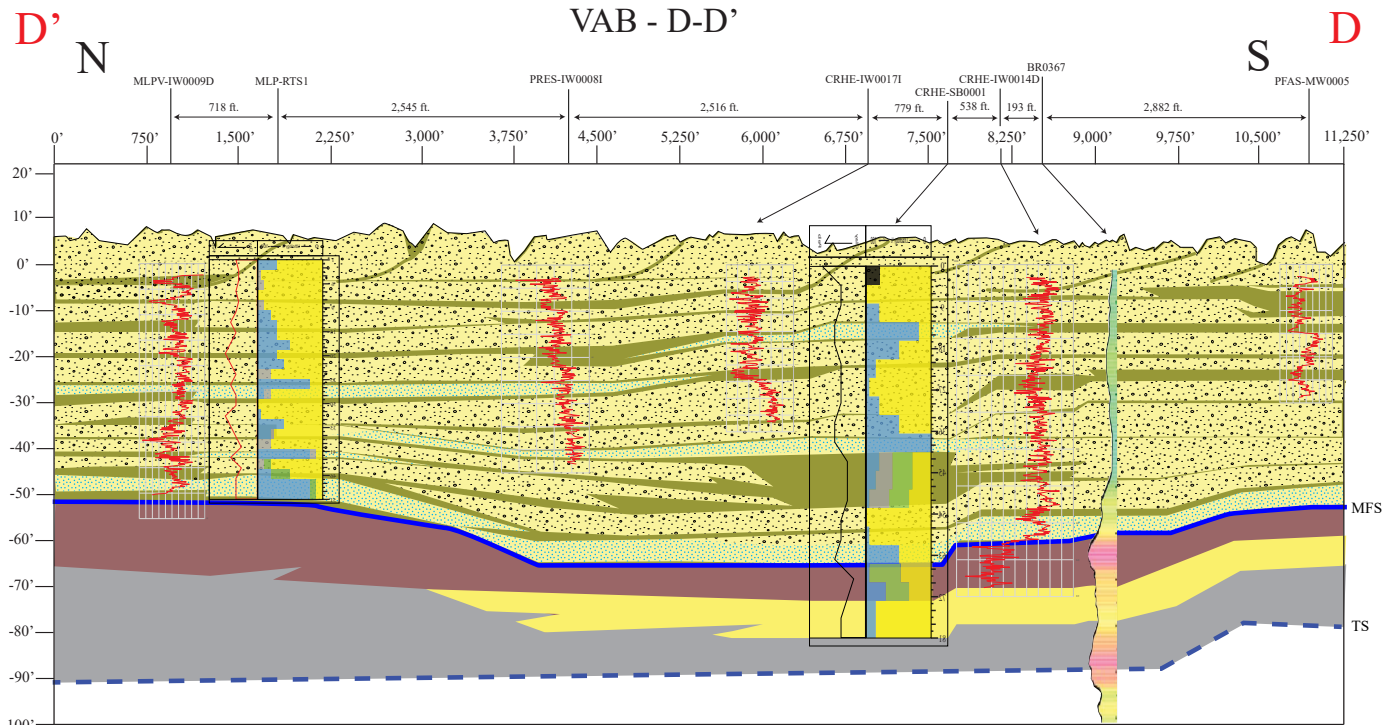
Notes:
 -PFAS-MW0010 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10C
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION C-C'

DATE: 6/18/2021

DRWN: SD

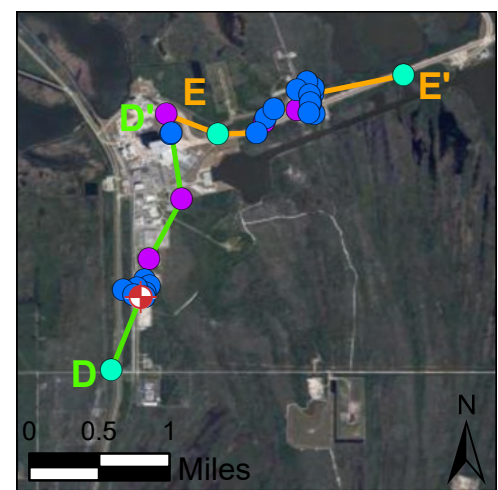
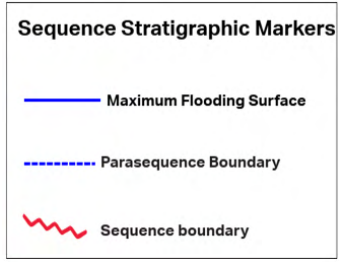
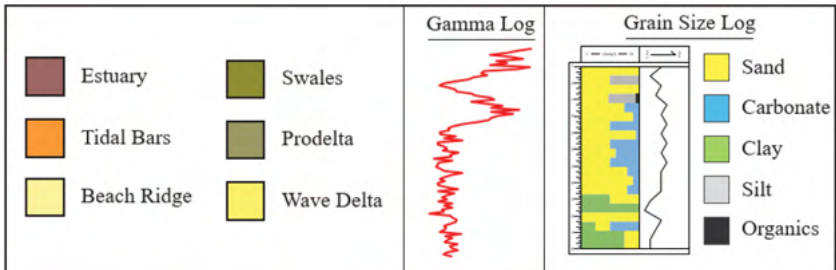
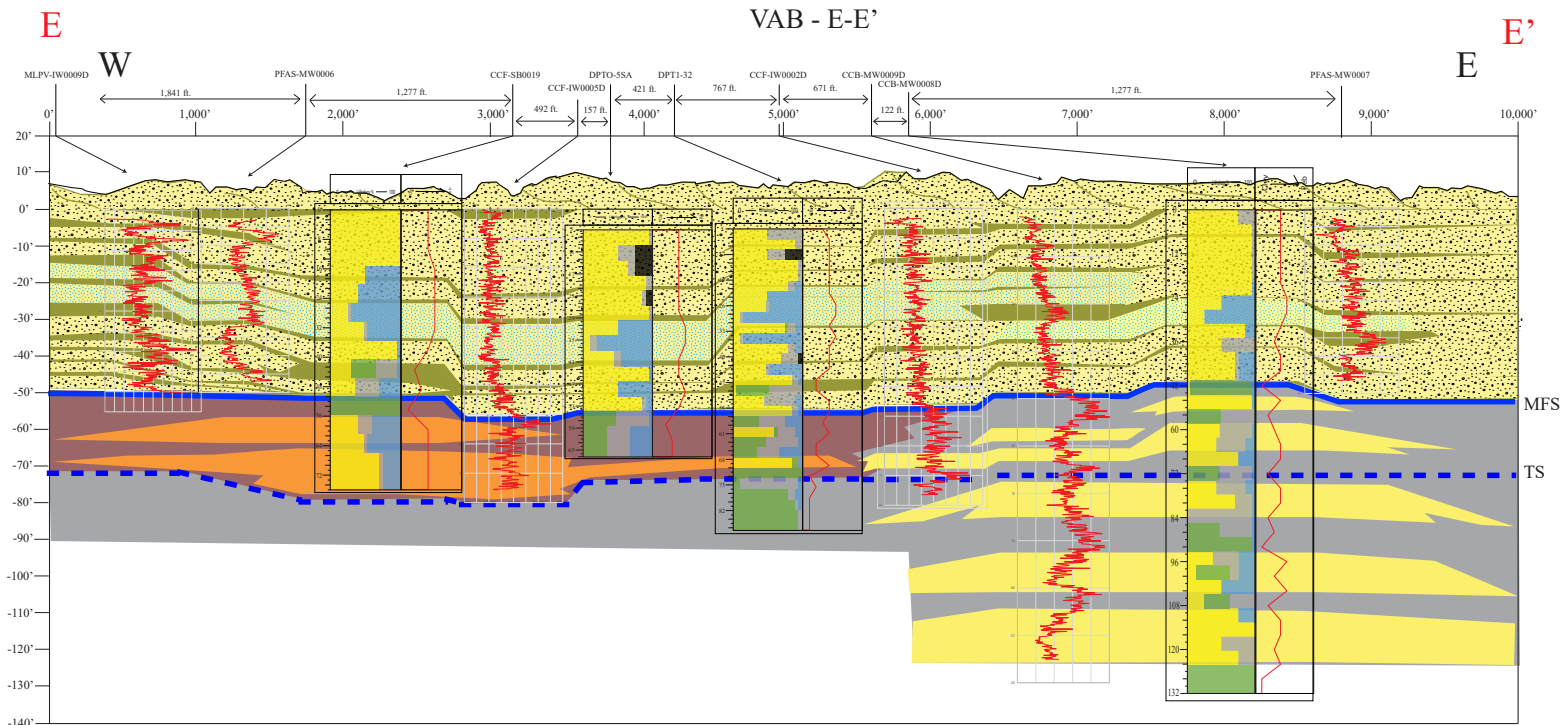


AECOM Notes:
 -PFAS-MW0005 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10D
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION D-D'

DATE: 6/18/2021 DRWN: SD

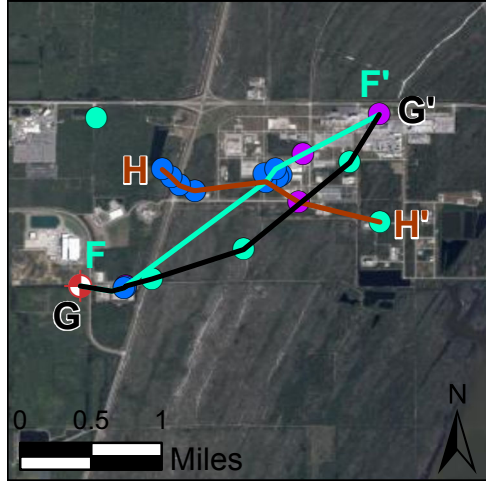
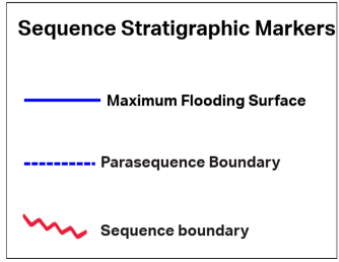
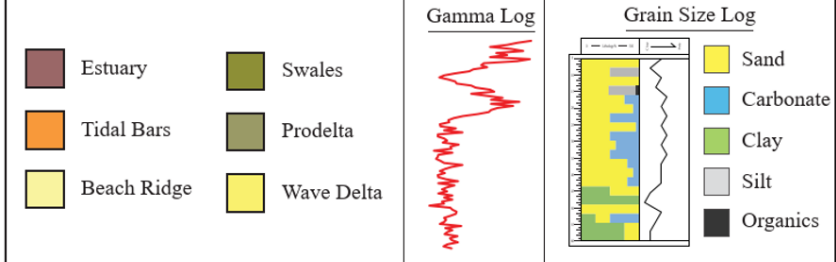
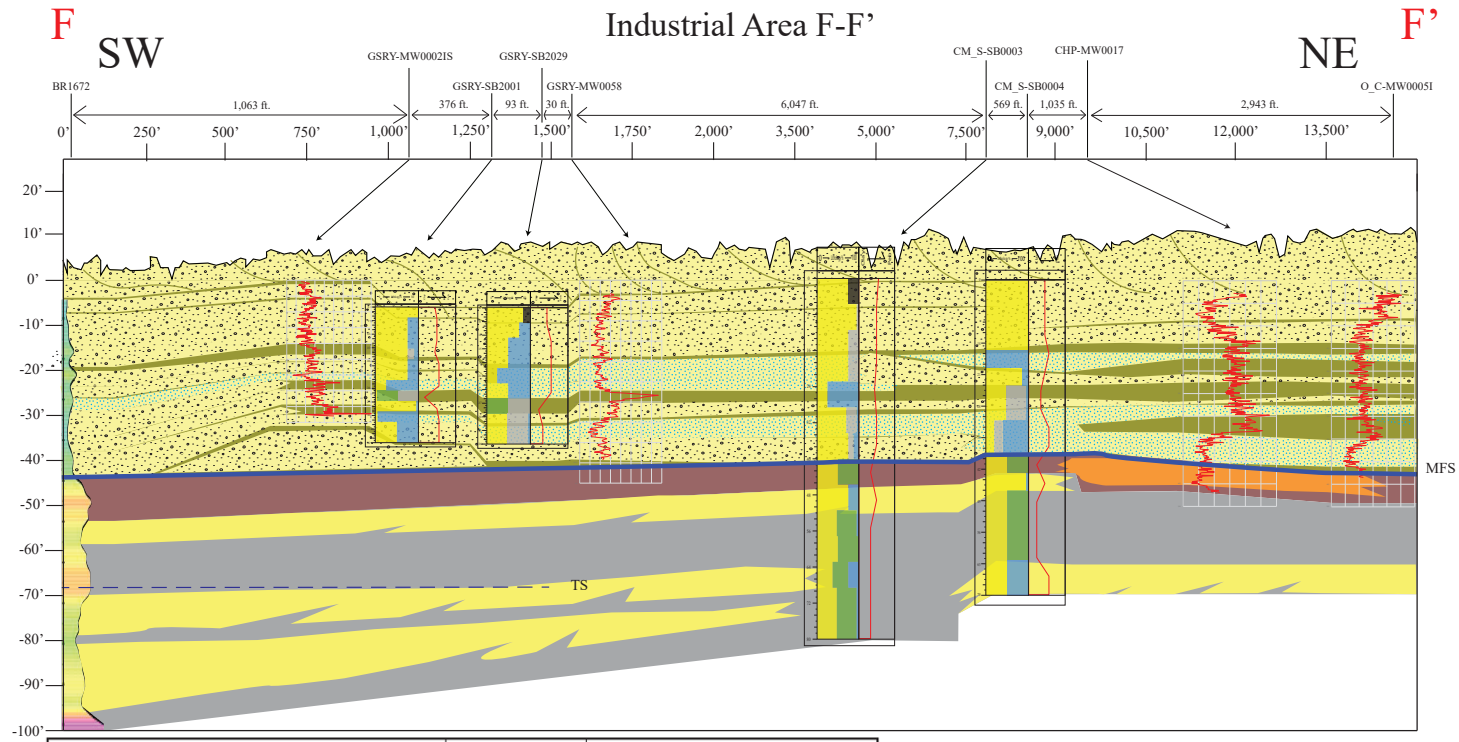


Notes:
 -PFAS-MW0006 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10E
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION E-E'

DATE: 6/18/2021 DRWN: SD

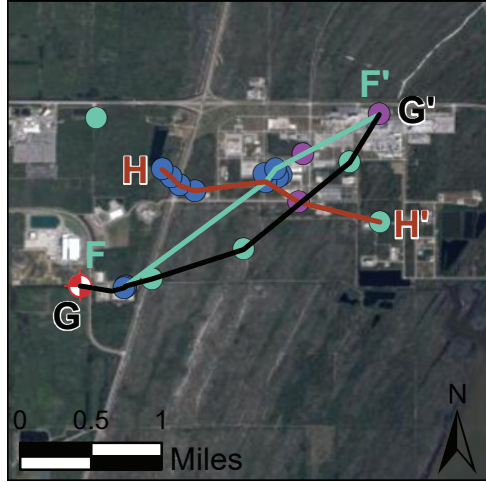
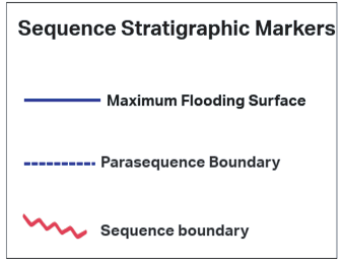
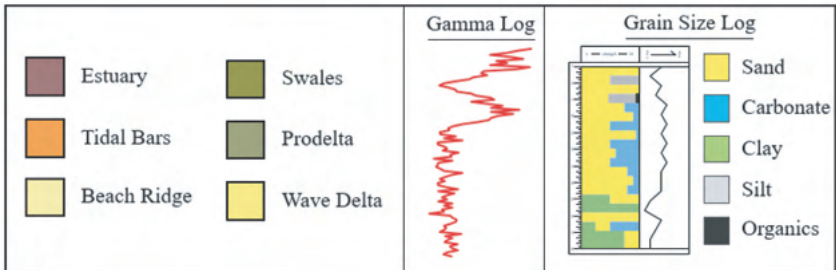
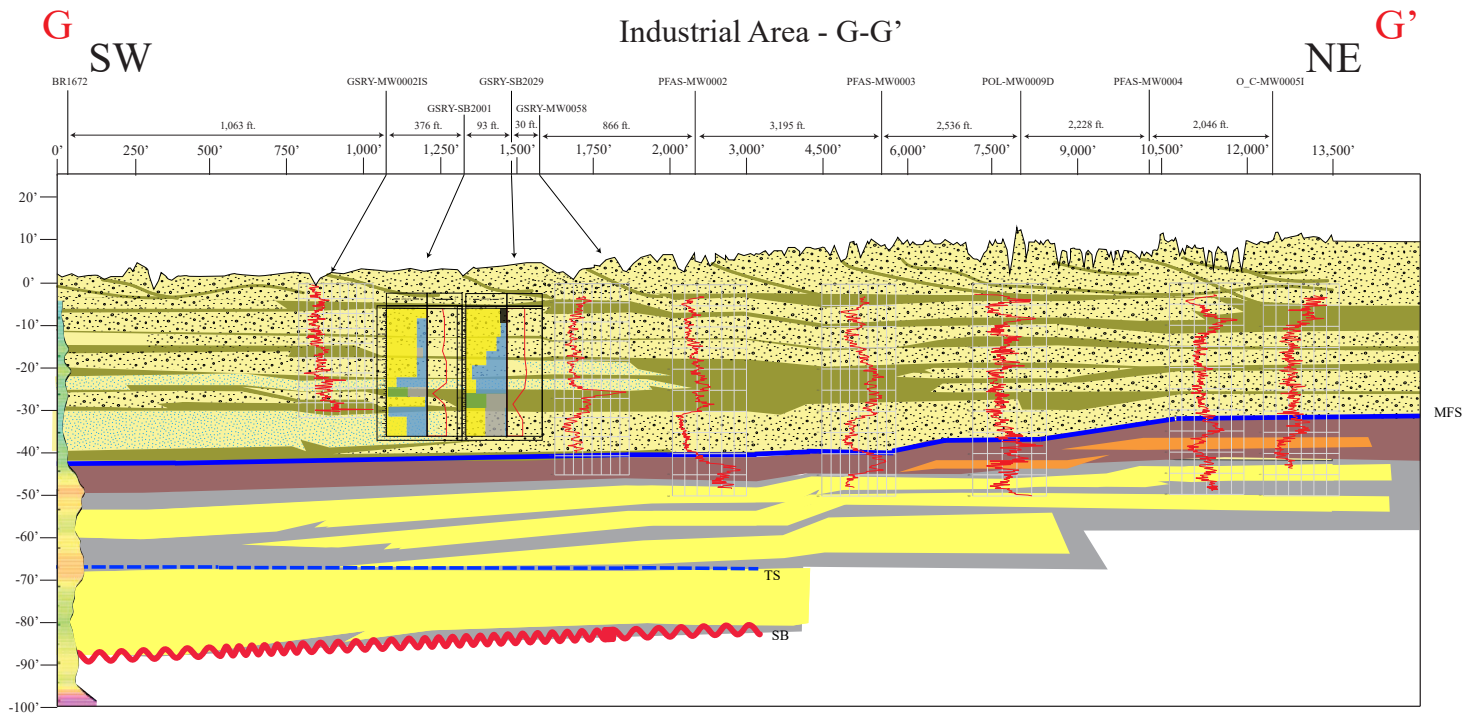


Notes:
 -GSRY-MW0058 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10F
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION F-F'

DATE: 6/18/2021 DRWN: SD



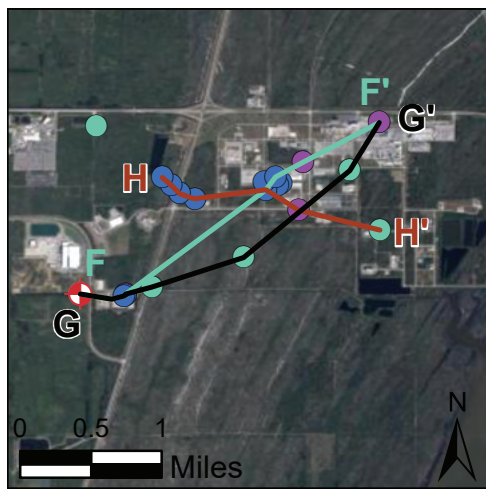
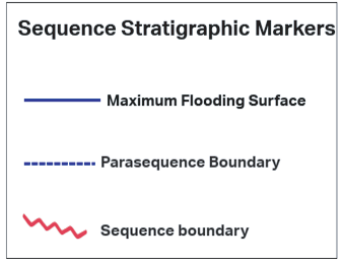
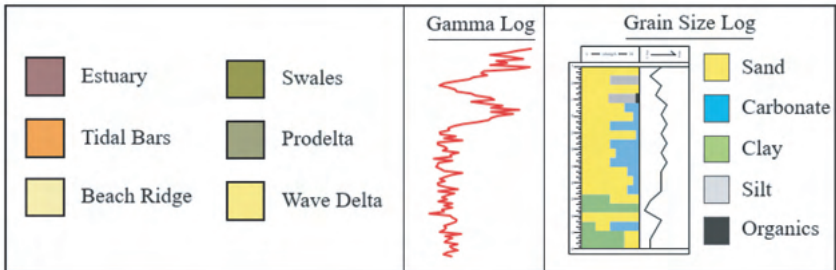
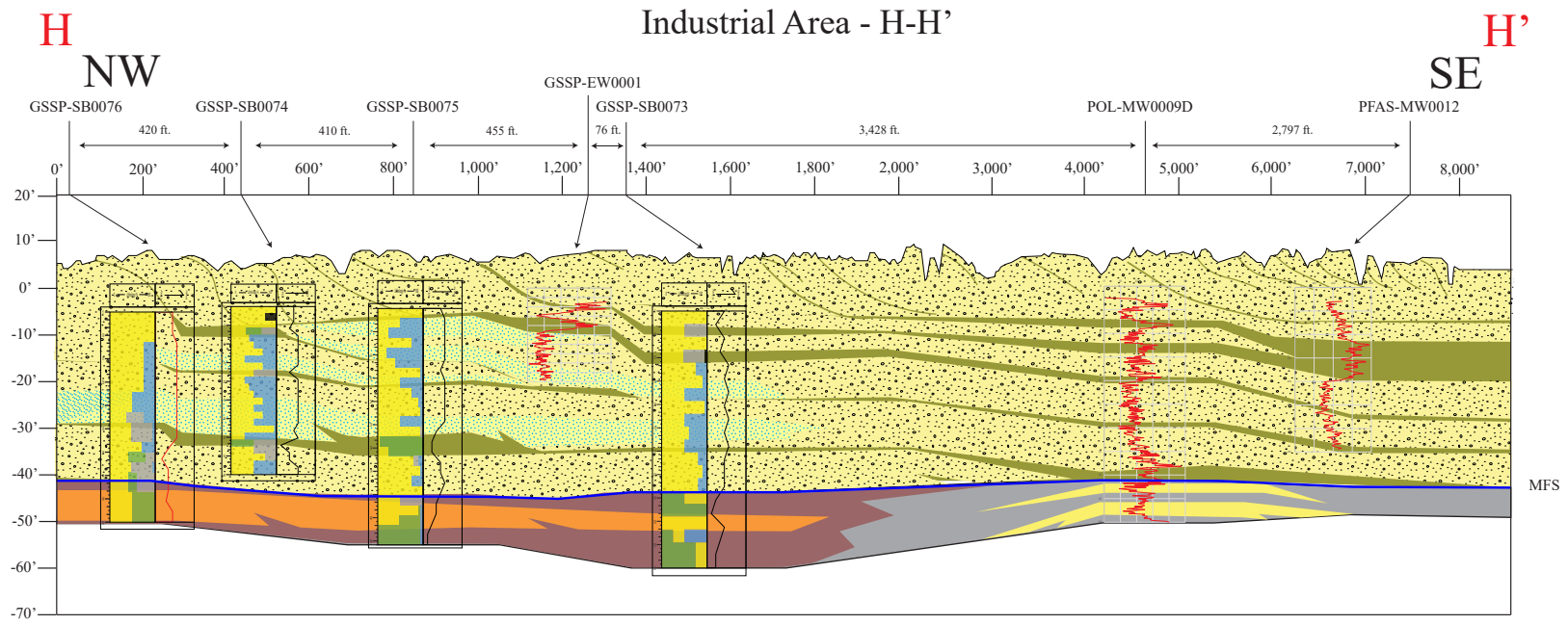
Notes:
 -GSRY-MW0058 - gamma log identifier
 -ft. - feet

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10G
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION G-G'

DATE: 6/18/2021 DRWN: SD

Document Path: \\Orlando.na.aecomnet.com\Orlando\DCS\Projects\EN\NASA\ID\Q 80KSC019D00 10\900-CAD-GIS\920-929 (GIS-Graphics)\Projects\PFAS\Figures(PDF)\ADP_PhaseIIReport_20210215\PRISM1
 Fig2-10H_Plume-Scale_Subsurface_Geology_Cross_Section_H-H'.pdf



AECOM




Notes:
 -PFAS-MW0012 - gamma log identifier
 -ft. - feet

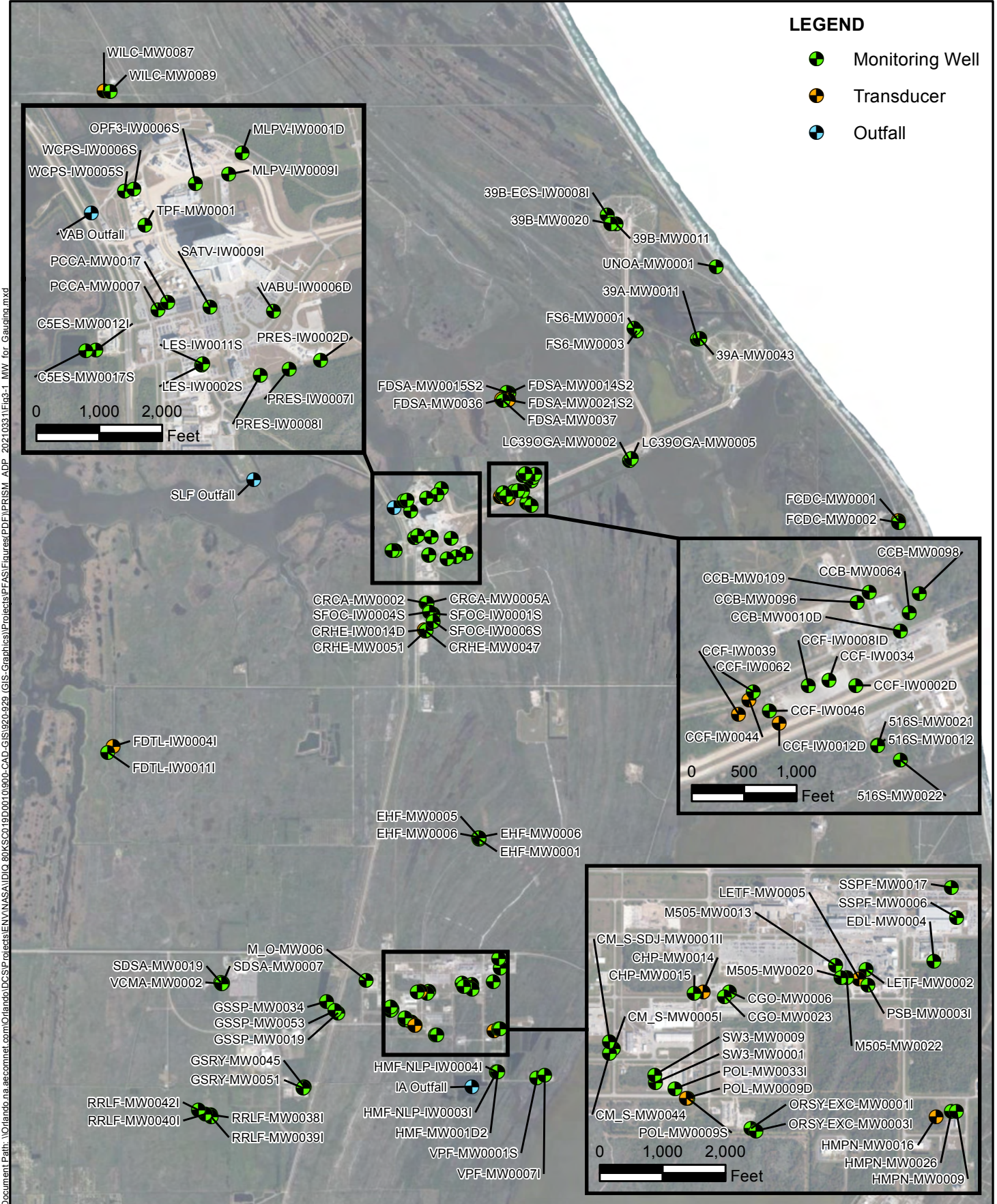
JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 2-10H
 PLUME-SCALE SUBSURFACE
 GEOLOGY
 CROSS SECTION H-H'

DATE: 6/18/2021 DRWN: SD

LEGEND

-  Monitoring Well
-  Transducer
-  Outfall



Document Path: \\Orlando.na.aec.com\et\com\Orlando\DCS\Projects\EN\NAS\AIDIO_80\KSC019D00101900-CAD-CI\SI\920-929 (GIS-Graphics)\Protects\PFAS\Figures\PDF\PRISM_ADP_20210331\Fig-1_MW_for_Gauging.mxd

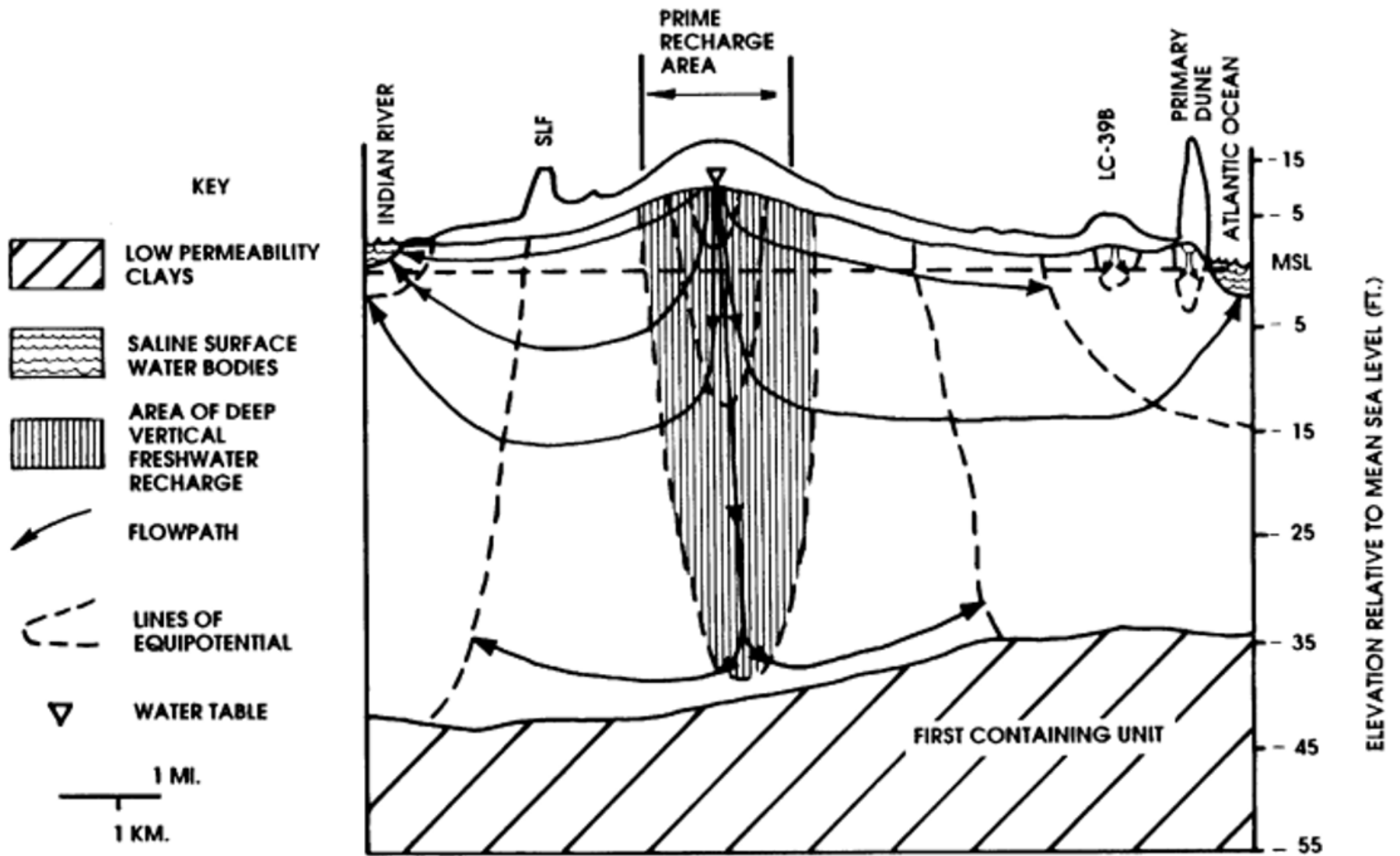
AECOM 0 2,500 5,000 Feet

Source
Orthoimagery from Brevard County, 2018.

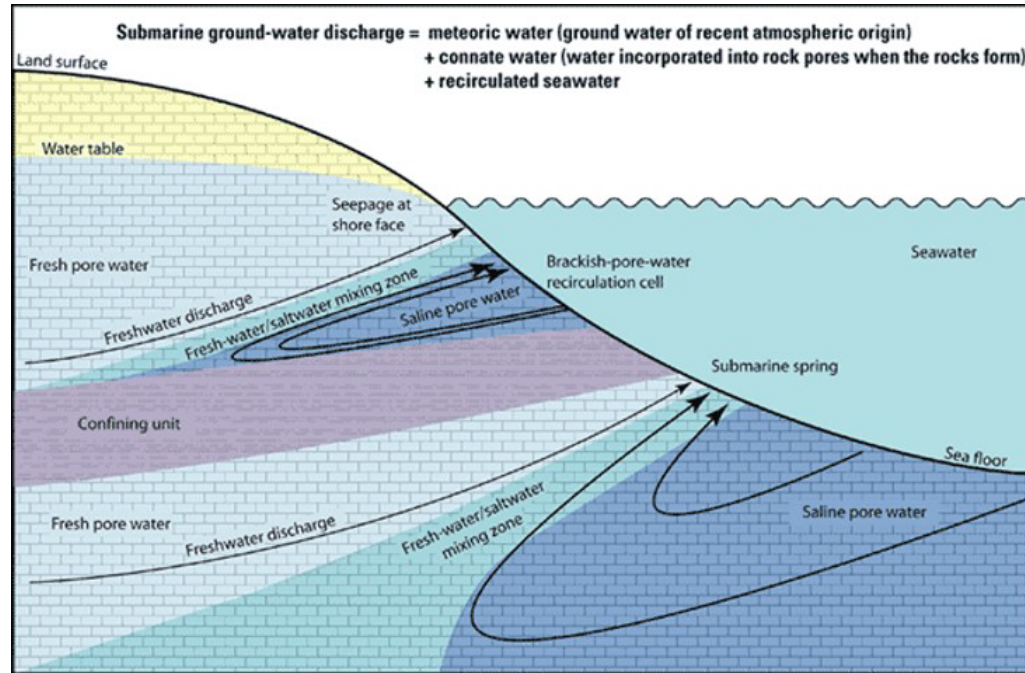
**JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA**

DATE: 10/12/2021 | DRWN: TH

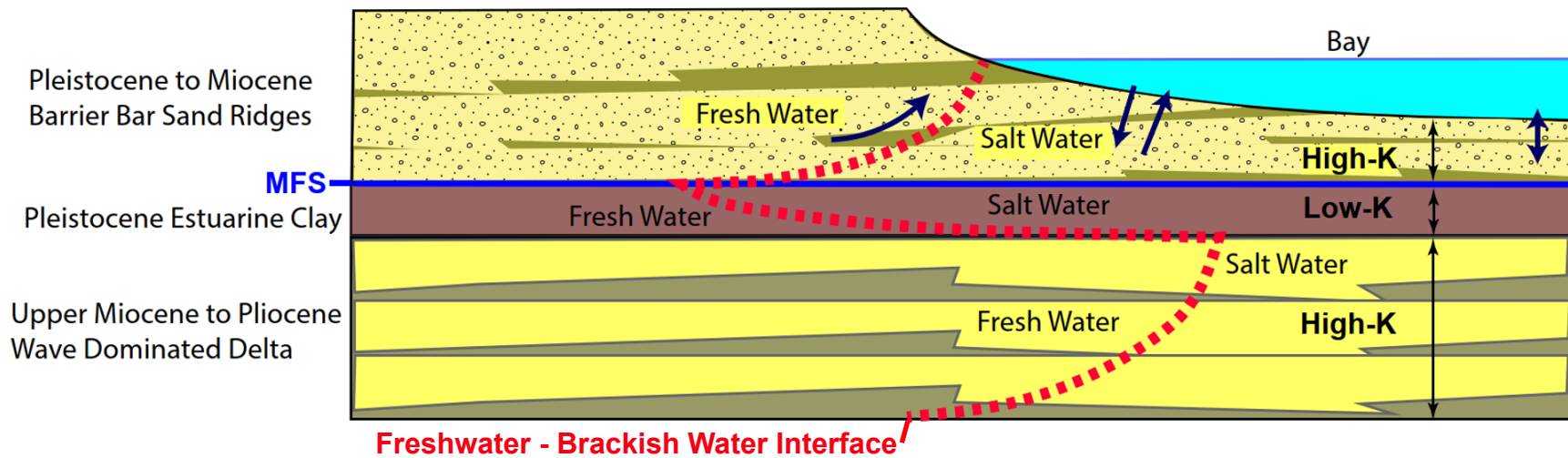
**FIGURE 3-1
MONITORING WELLS UTILIZED
FOR SYNOPTIC GAUGING**



Schmalzer and Hinkle, 1990



(USGS, 2019)



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\SPFAS_8p15x11_landscape.mxd

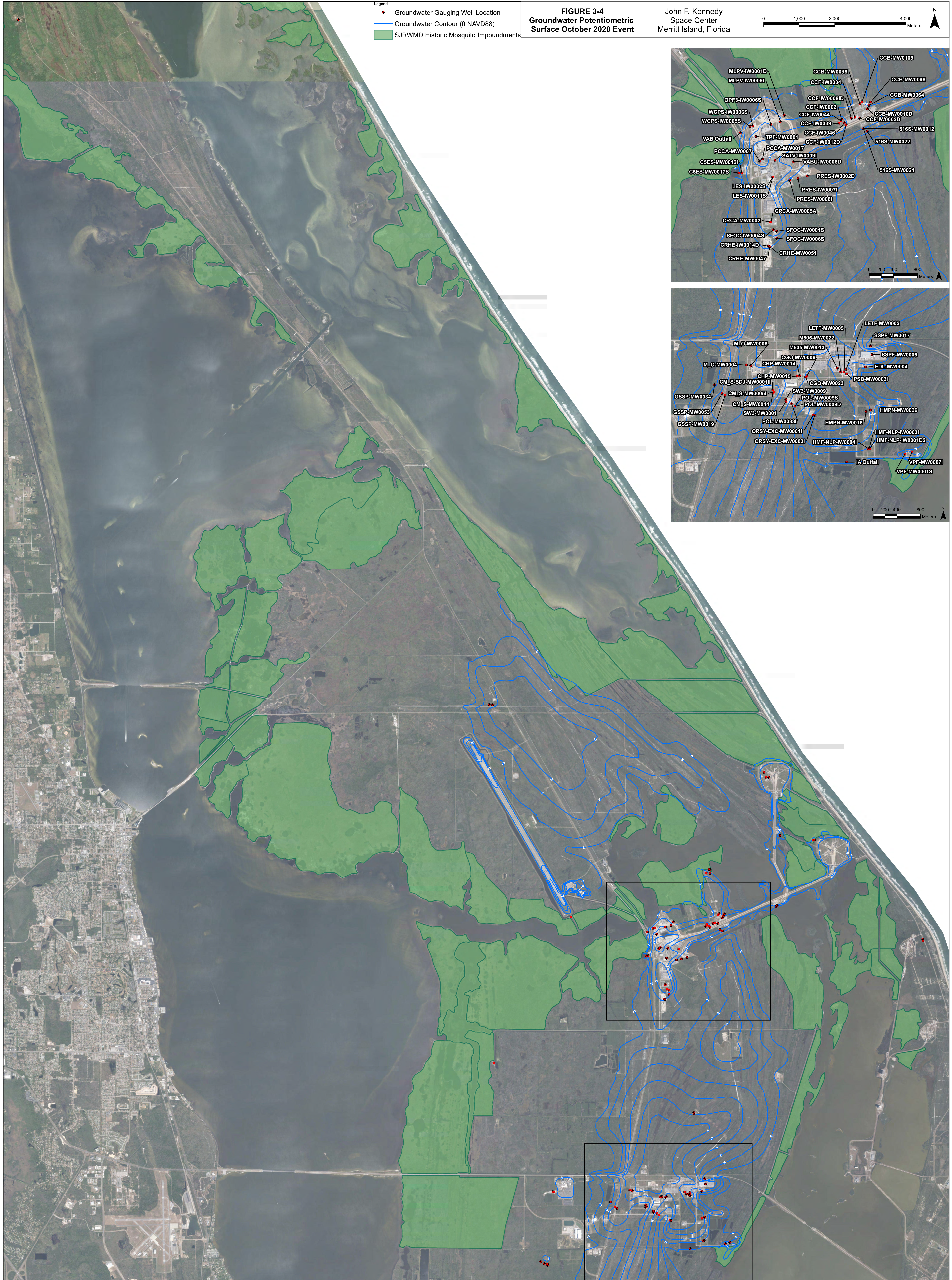


Notes:
MFS - Maximum Flooding Surface

JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 3-3
SUBMARINE GROUNDWATER
DISCHARGE

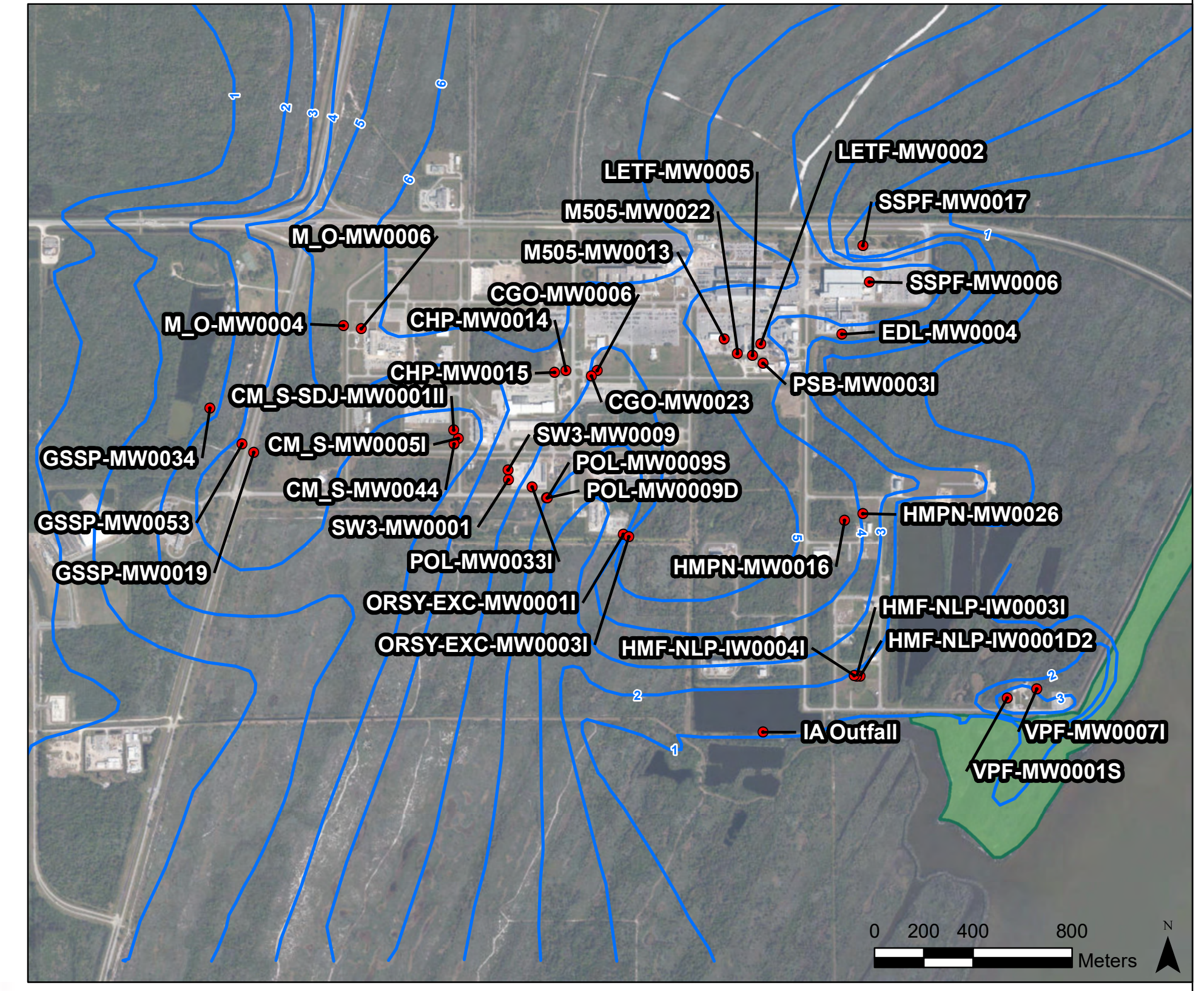
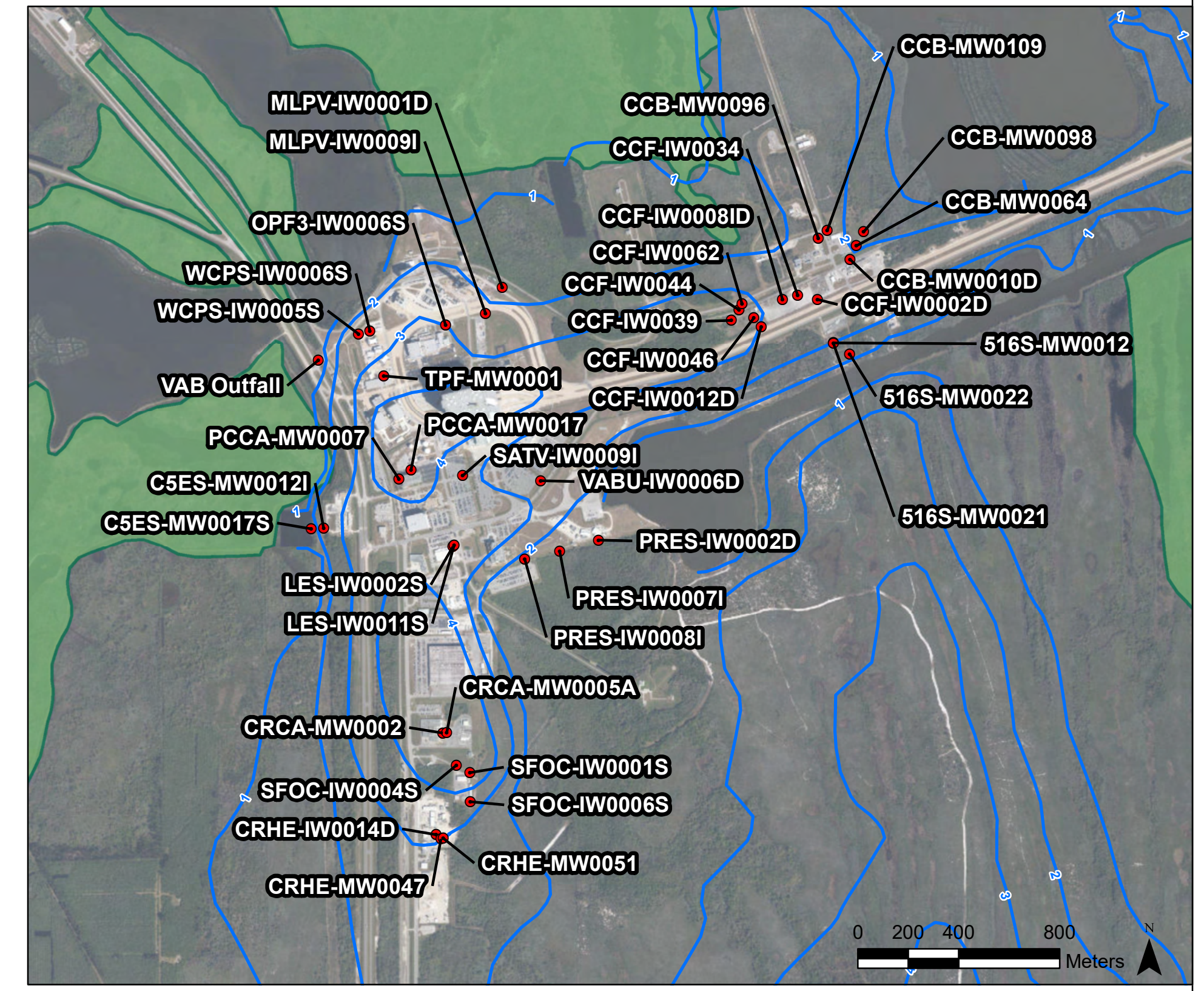
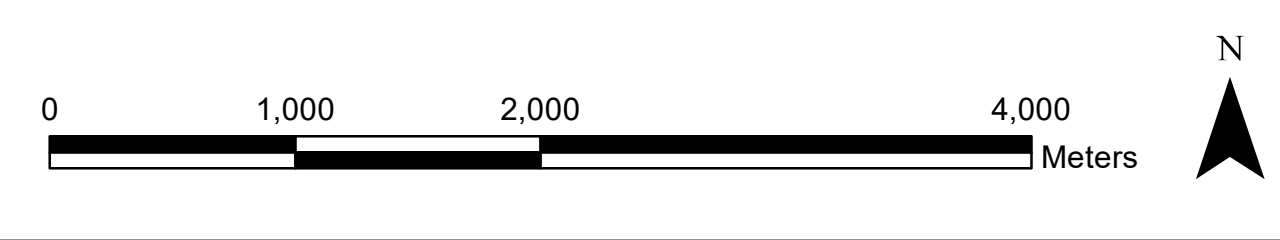
DATE: 10/20/2021 DRWN: SD

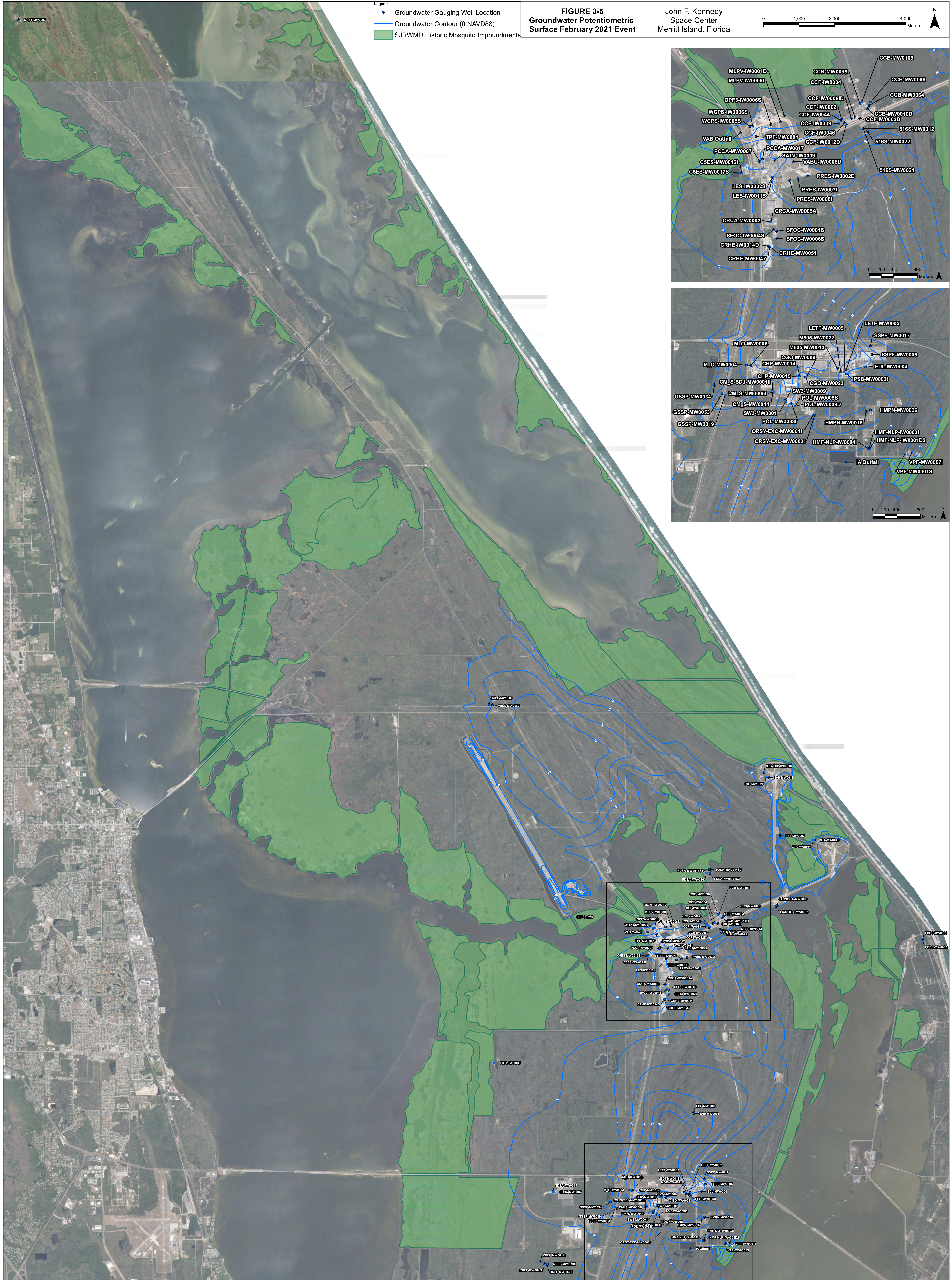


- Legend**
- Groundwater Gauging Well Location
 - Groundwater Contour (ft NAVD88)
 - SJRWMD Historic Mosquito Impoundments

FIGURE 3-4
Groundwater Potentiometric
Surface October 2020 Event

John F. Kennedy
 Space Center
 Merritt Island, Florida

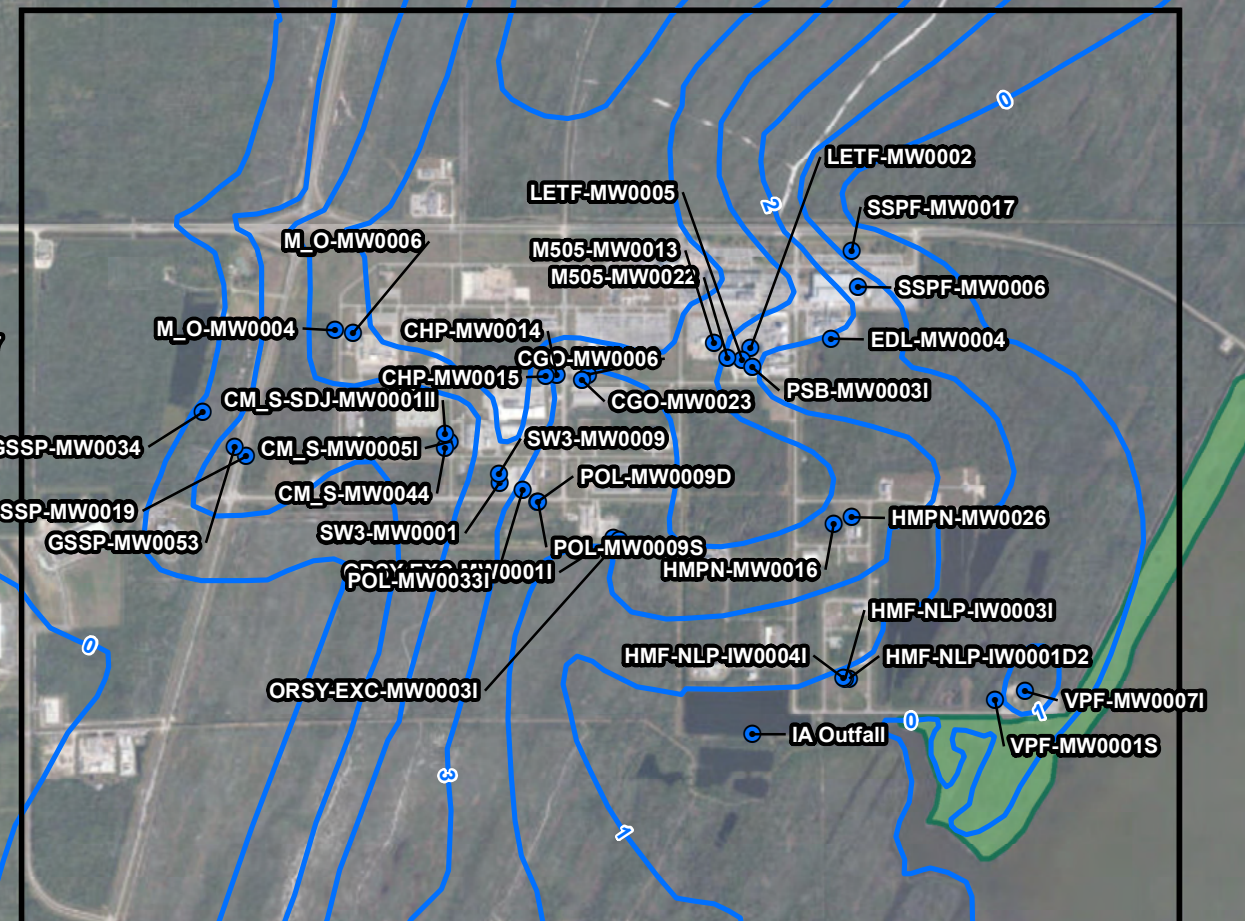
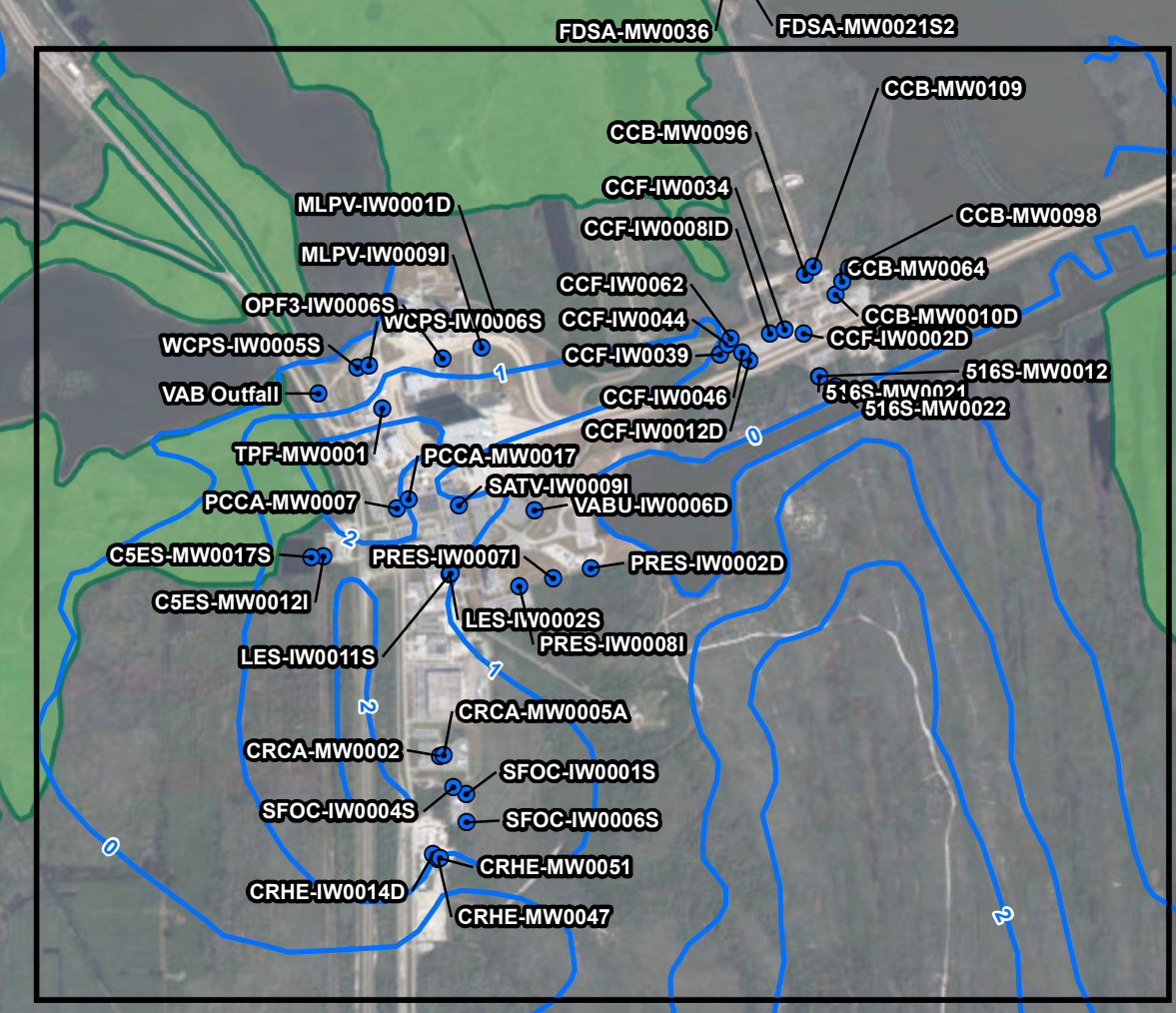
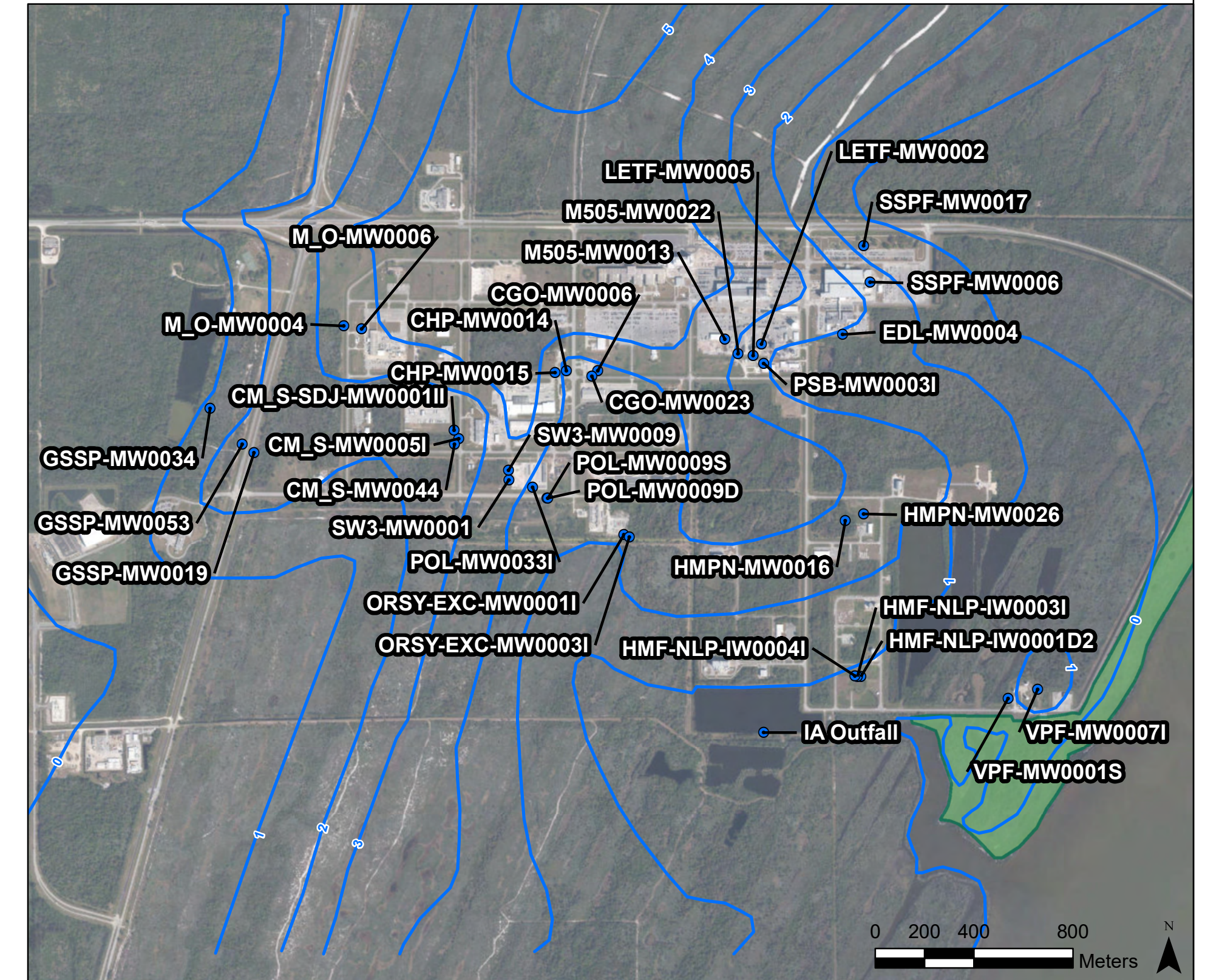
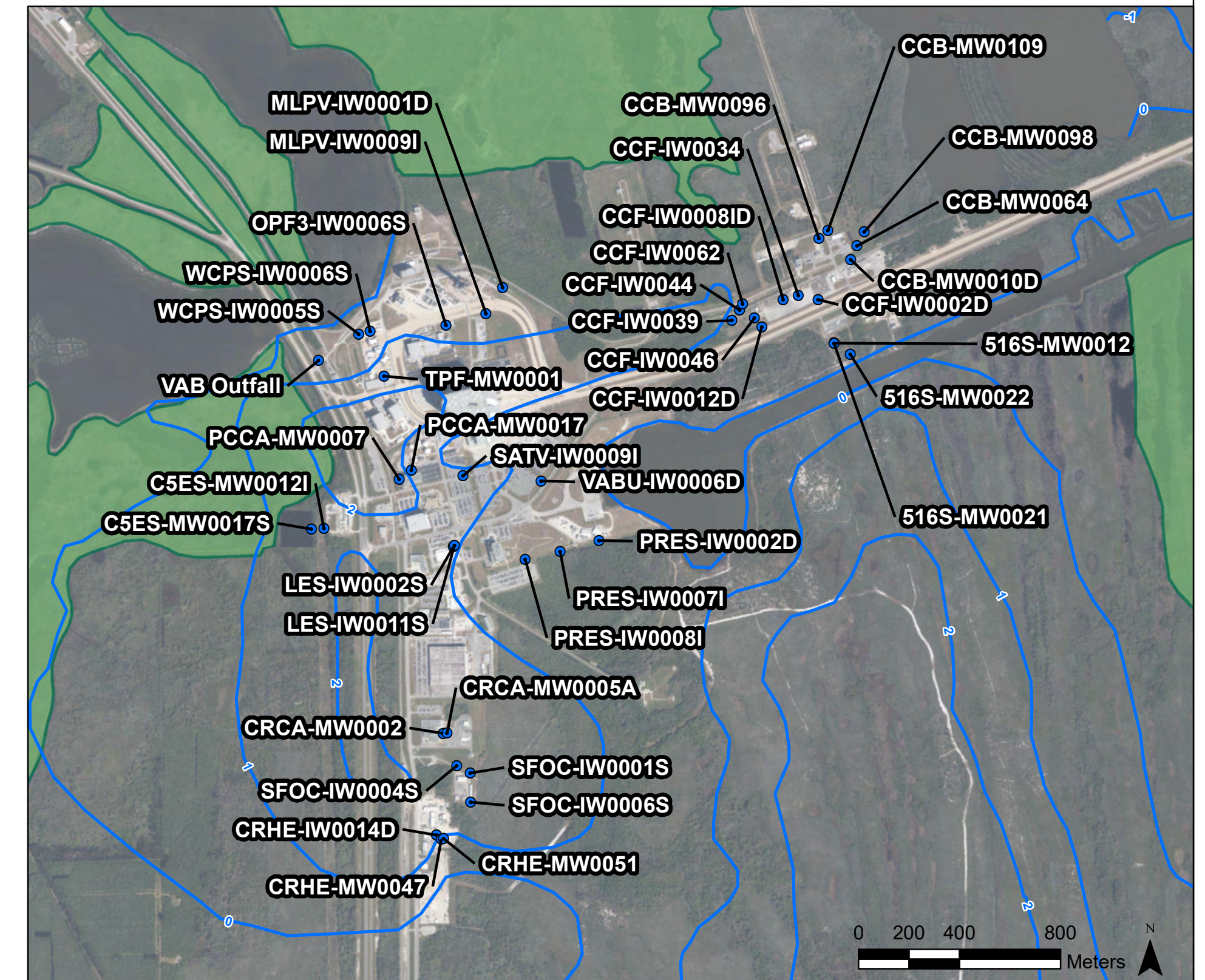
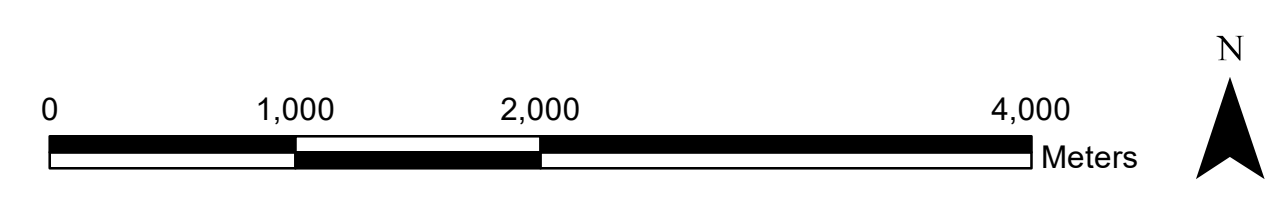


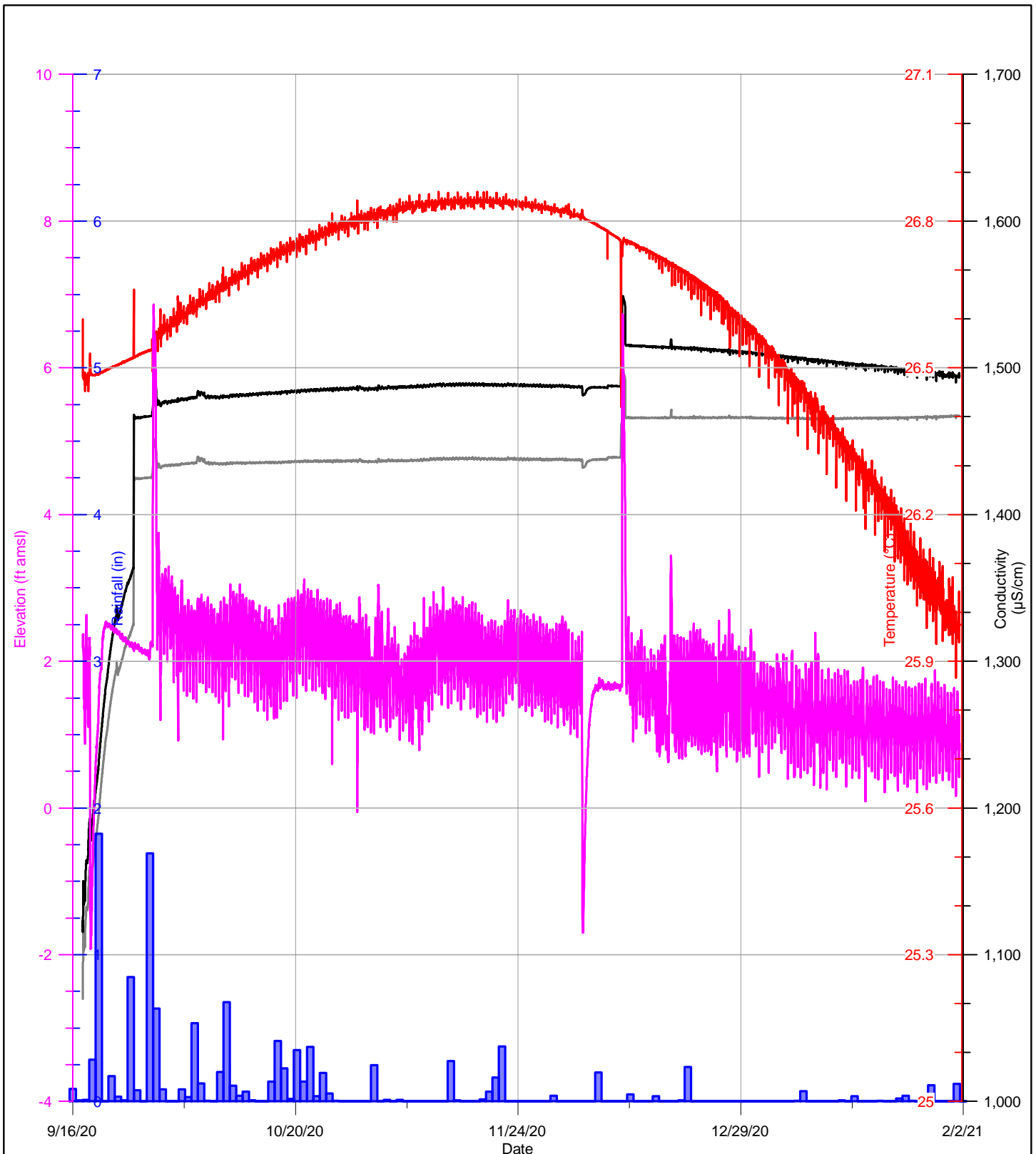


- Legend**
- Groundwater Gauging Well Location
 - Groundwater Contour (ft NAVD88)
 - SJRWMD Historic Mosquito Impoundments

FIGURE 3-5
Groundwater Potentiometric
Surface February 2021 Event

John F. Kennedy
 Space Center
 Merritt Island, Florida





Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

CCF-IW0004 Transducer Data

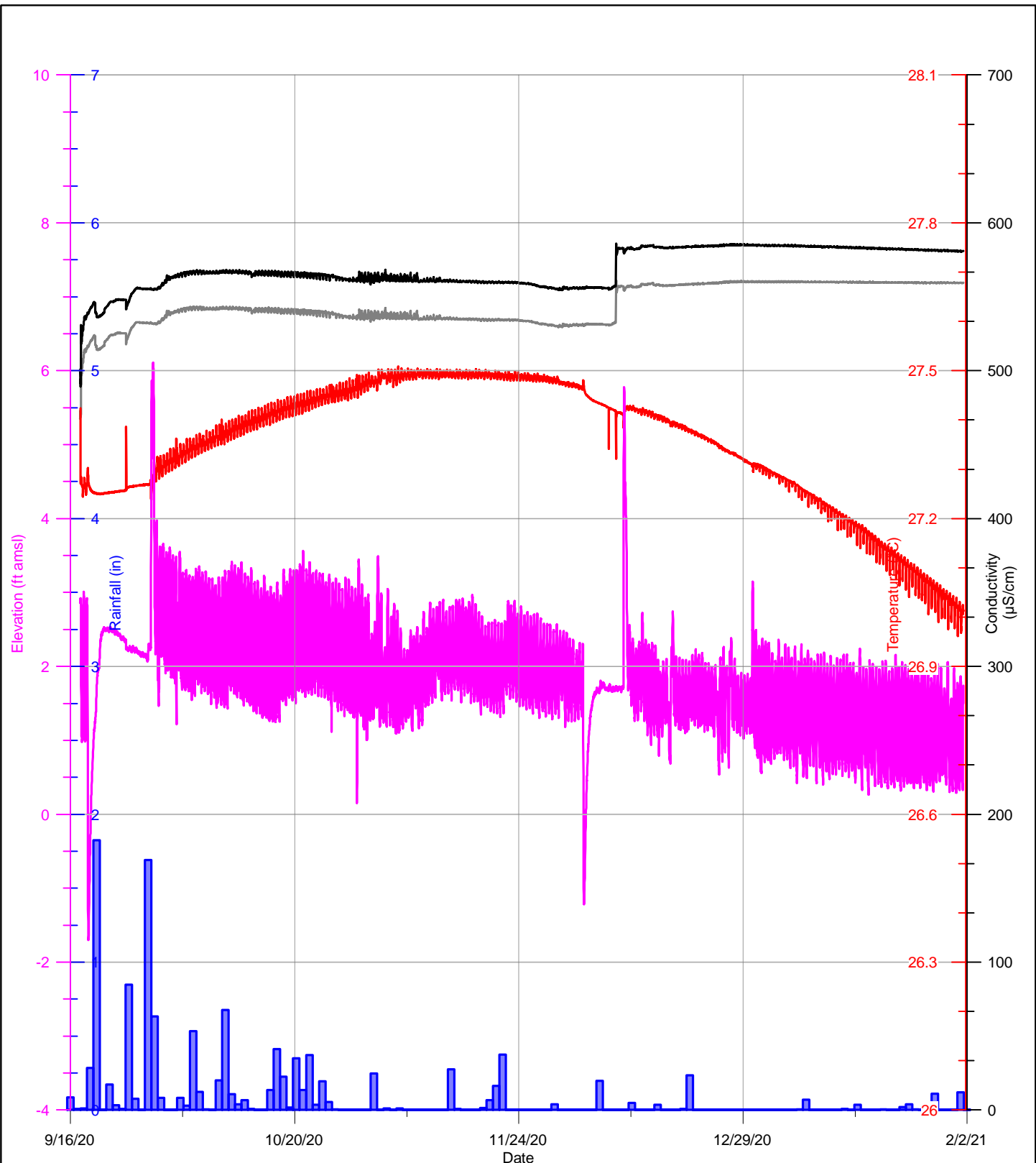
Elevation	Specific Conductivity
Temperature	Rainfall
Actual Conductivity	

AECOM

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-6
 CCF-IW0004
 TRANSDUCER DATA

DATE: 6/8/2021	DRWN: KMR	CHK: MJZ
----------------	-----------	----------

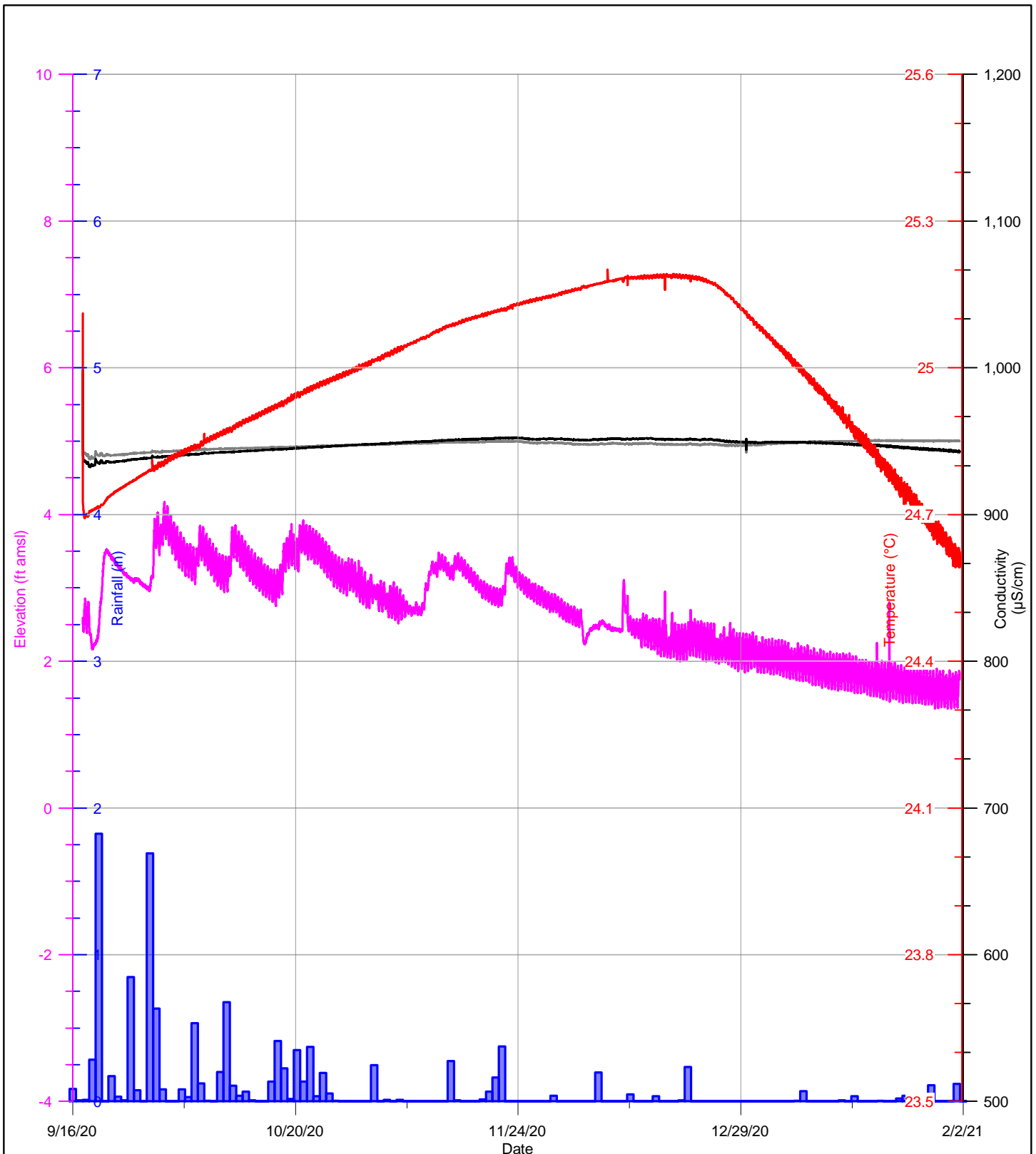


Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

CCF-IW0039 Transducer Data

- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- █ Rainfall



Definitions:

ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:

1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

CCF-MW0012D Transducer Data

- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- █ Rainfall

AECOM

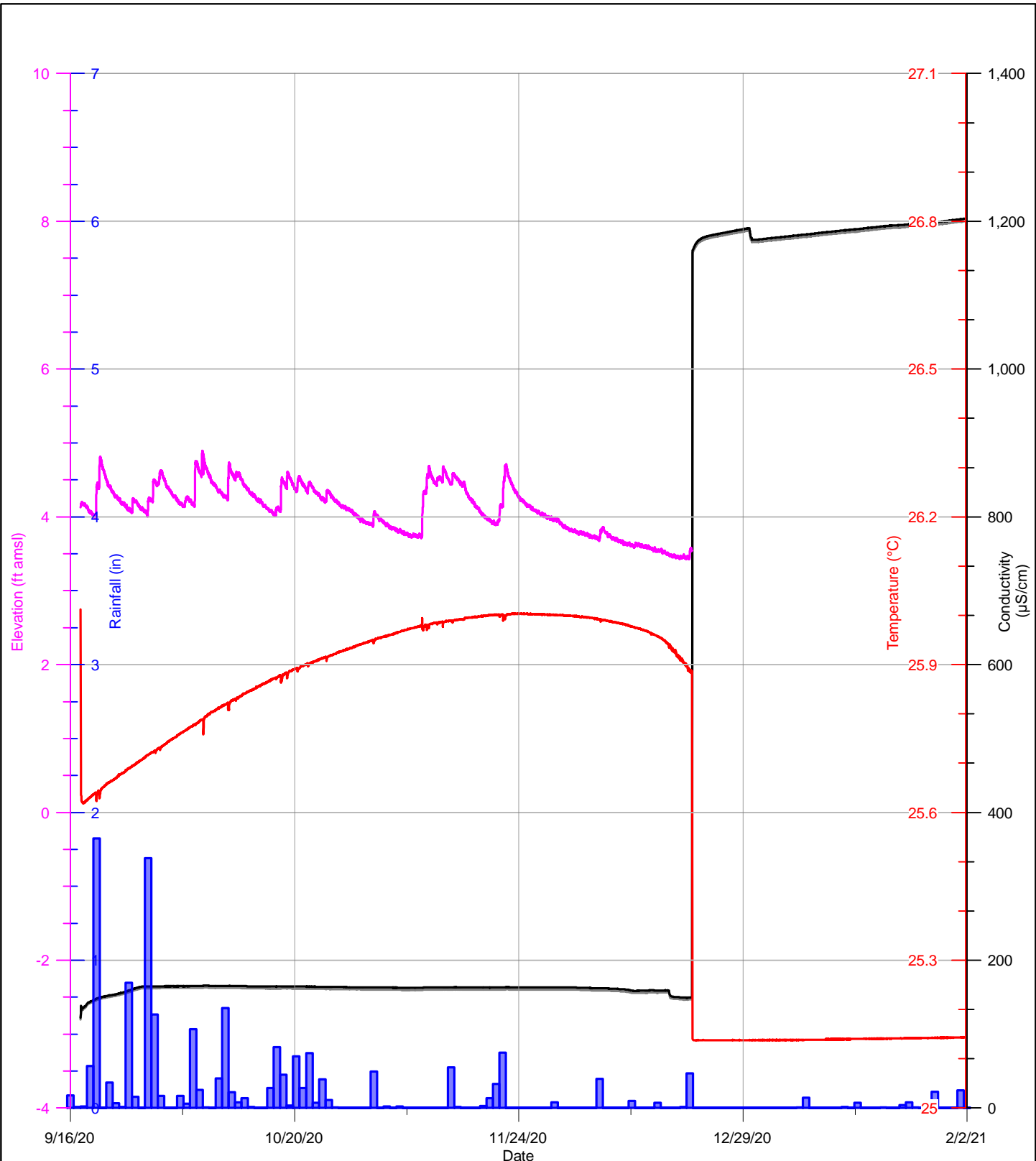
JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-8
 CCF-MW0012D
 TRANSDUCER DATA

DATE: 6/8/2021

DRWN: KMR

CHK: MJZ



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

CHP-MW0014 Transducer Data

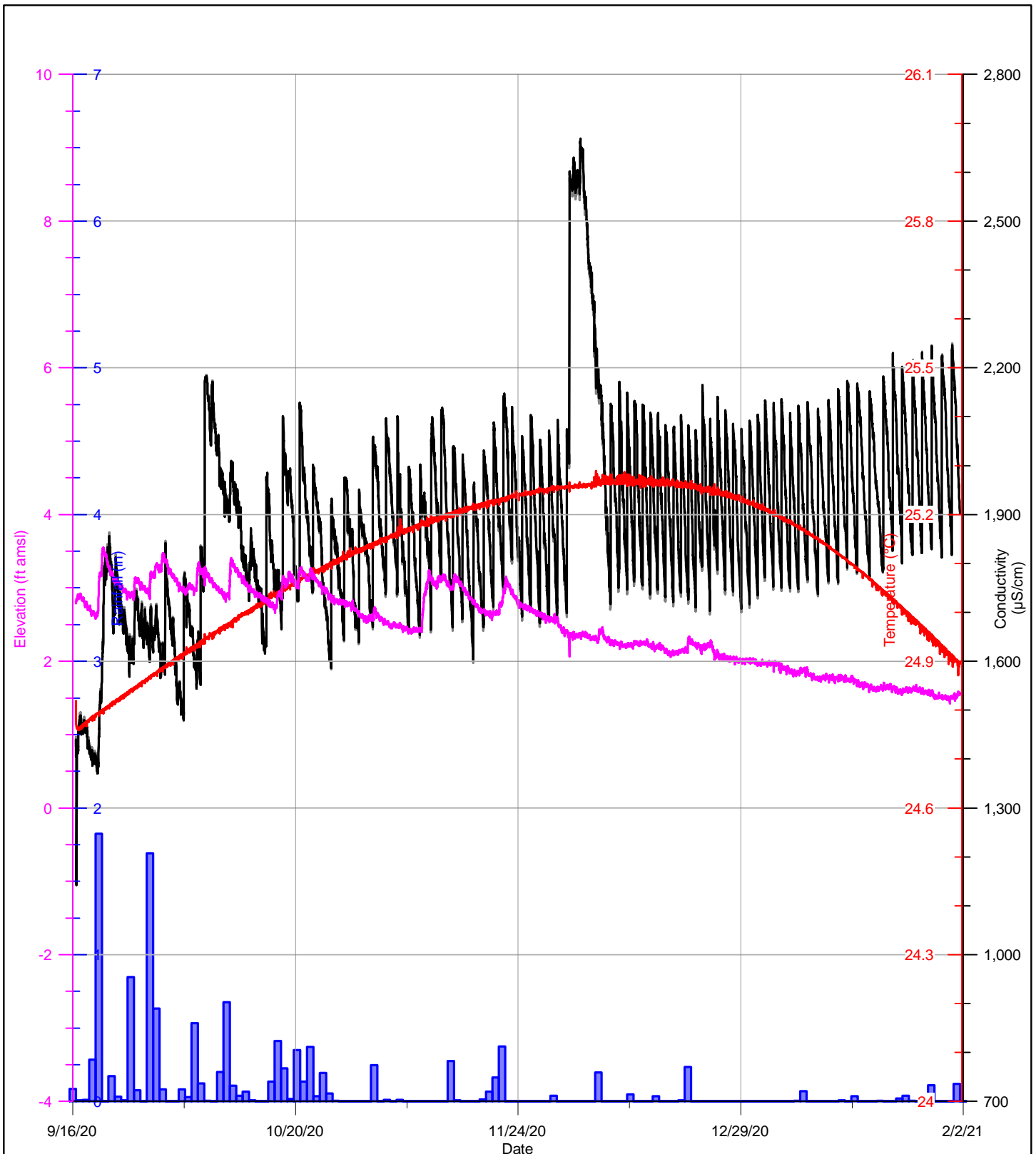
- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- Rainfall



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-9
 CHP-MW0014
 TRANSDUCER DATA

DATE: 6/8/2021 | DRWN: KMR | CHK: MJZ



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

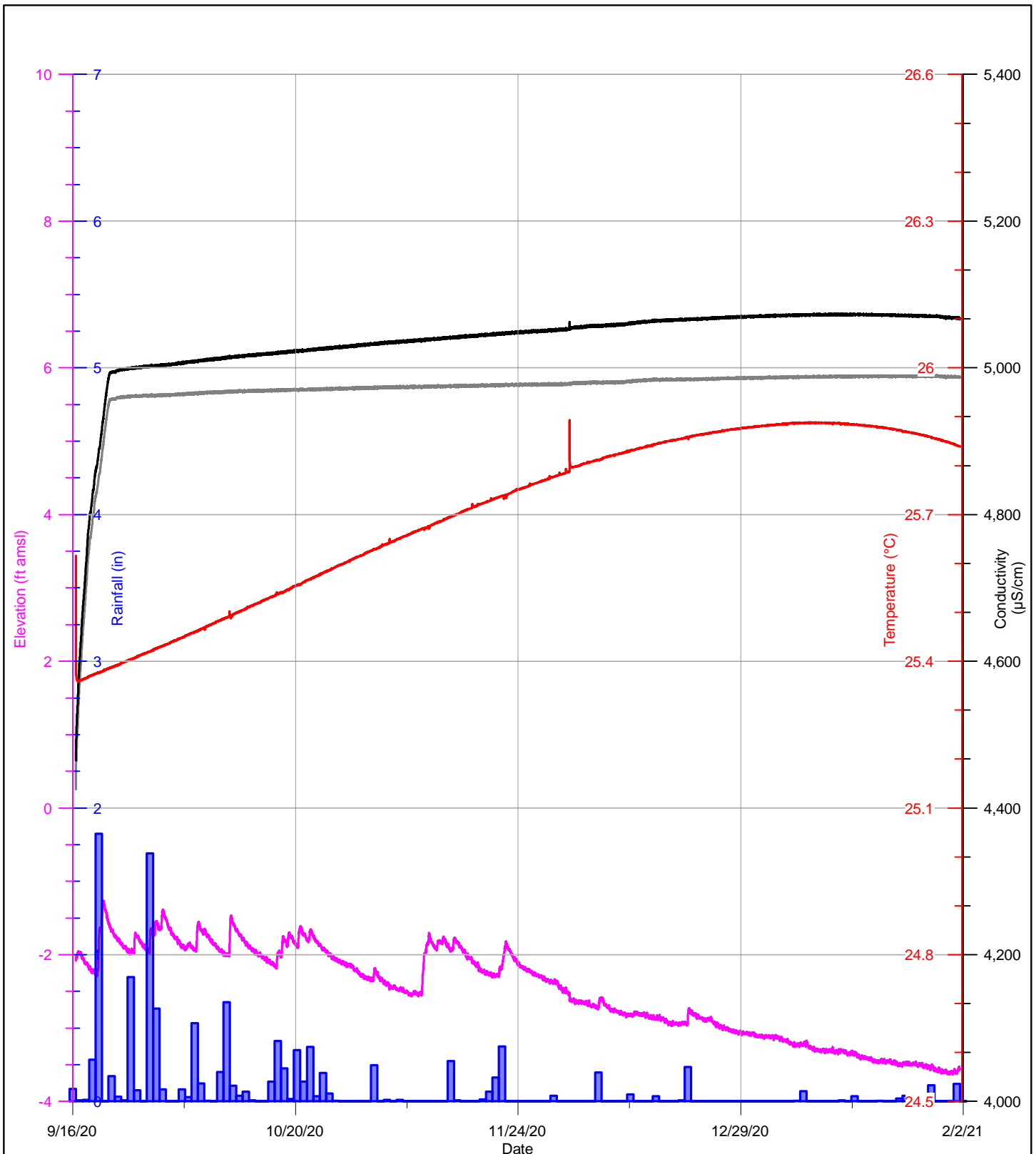
CRHE-MW0047 Transducer Data
 — Elevation — Actual Conductivity
 — Temperature — Specific Conductivity

AECOM

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-10
 CRHE-MW0047
 TRANSDUCER DATA

DATE: 6/8/2021 | DRWN: KMR | CHK: MJZ



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

CRHE-IW0014D Transducer Data

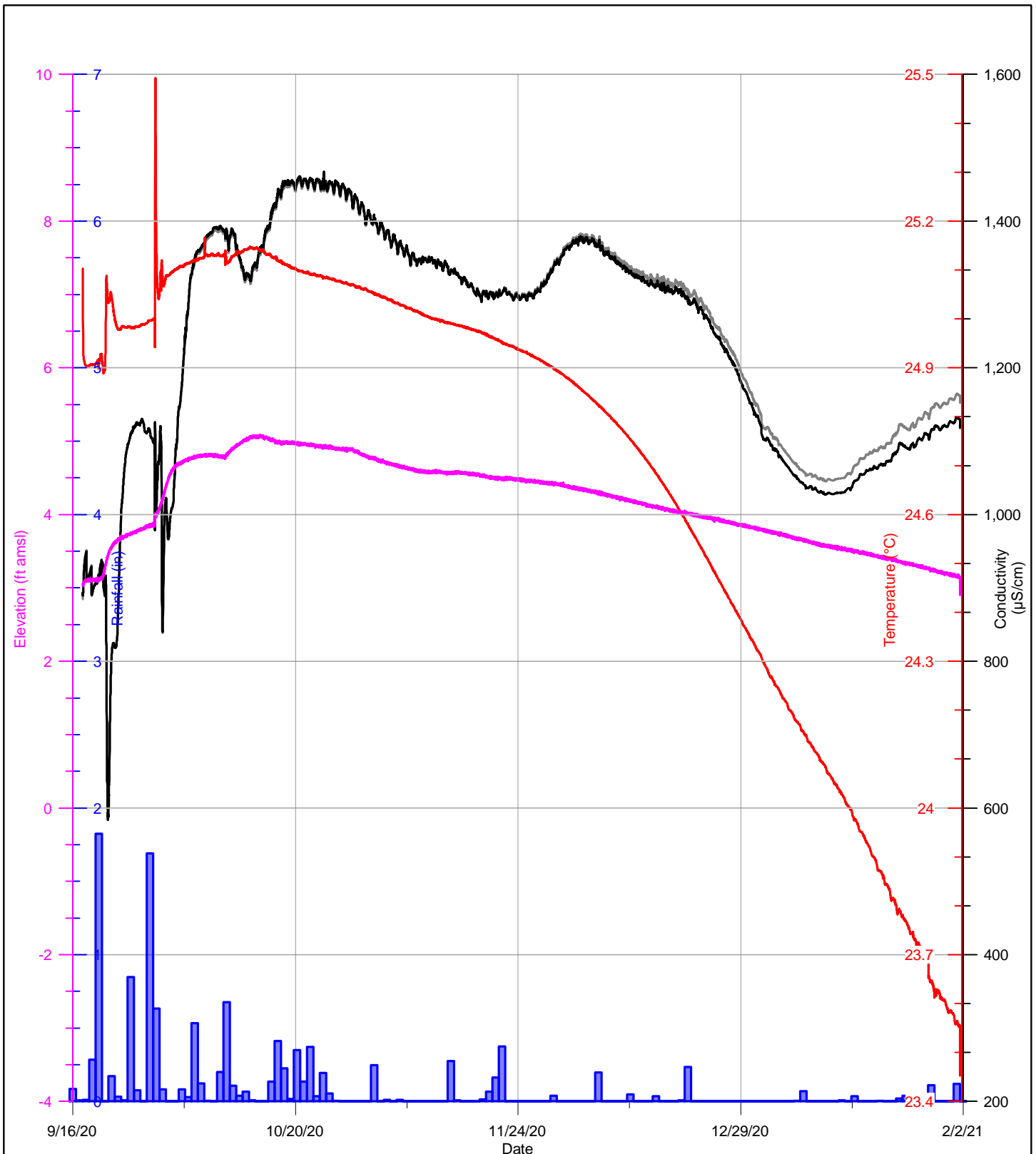
- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- █ Rainfall



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-11
 CRHE-IW0014D
 TRANSDUCER DATA

DATE: 6/8/2021 | DRWN: KMR | CHK: MJZ



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

FCDC-MW0001 Transducer Data

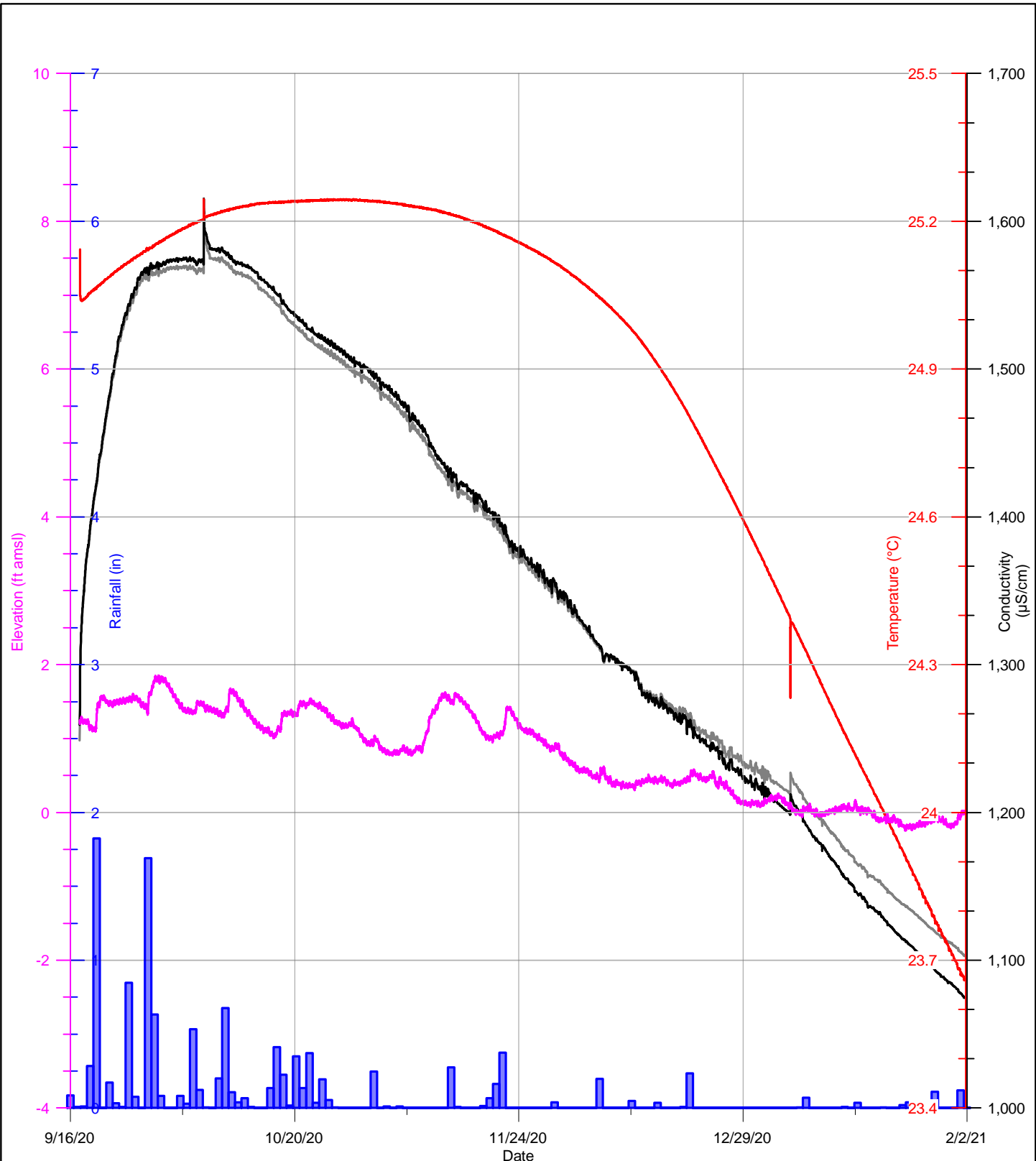
Elevation	Specific Conductivity
Temperature	Rainfall
Actual Conductivity	

AECOM

JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-12
 FCDC-MW0001
 TRANSDUCER DATA

DATE: 6/8/2021	DRWN: KMR	CHK: MJZ
----------------	-----------	----------



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

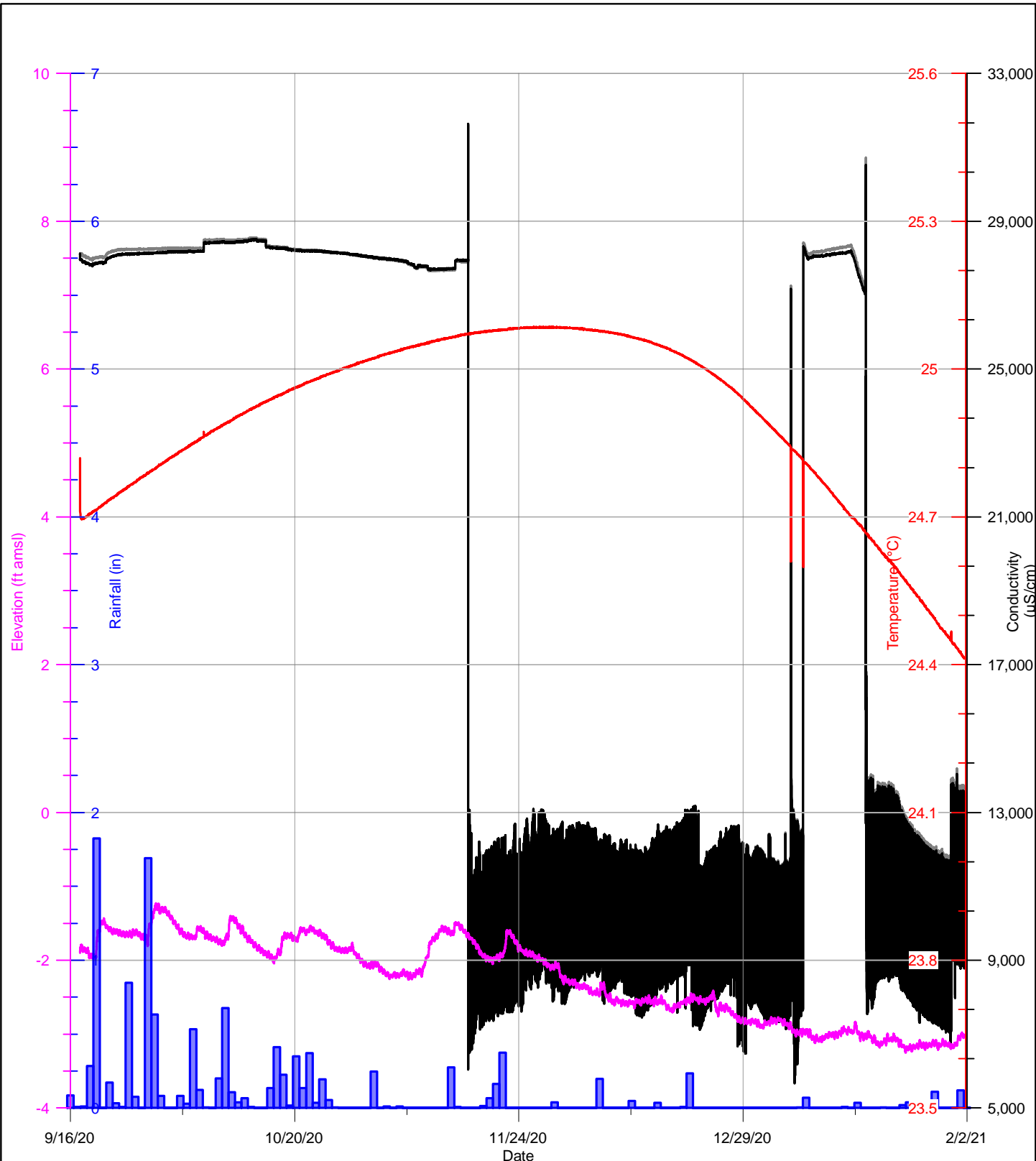
FDSA-MW0021S2 Transducer Data

Elevation	Specific Conductivity
Temperature	Rainfall
Actual Conductivity	



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-13
 FDSA-MW0021S2
 TRANSDUCER DATA



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

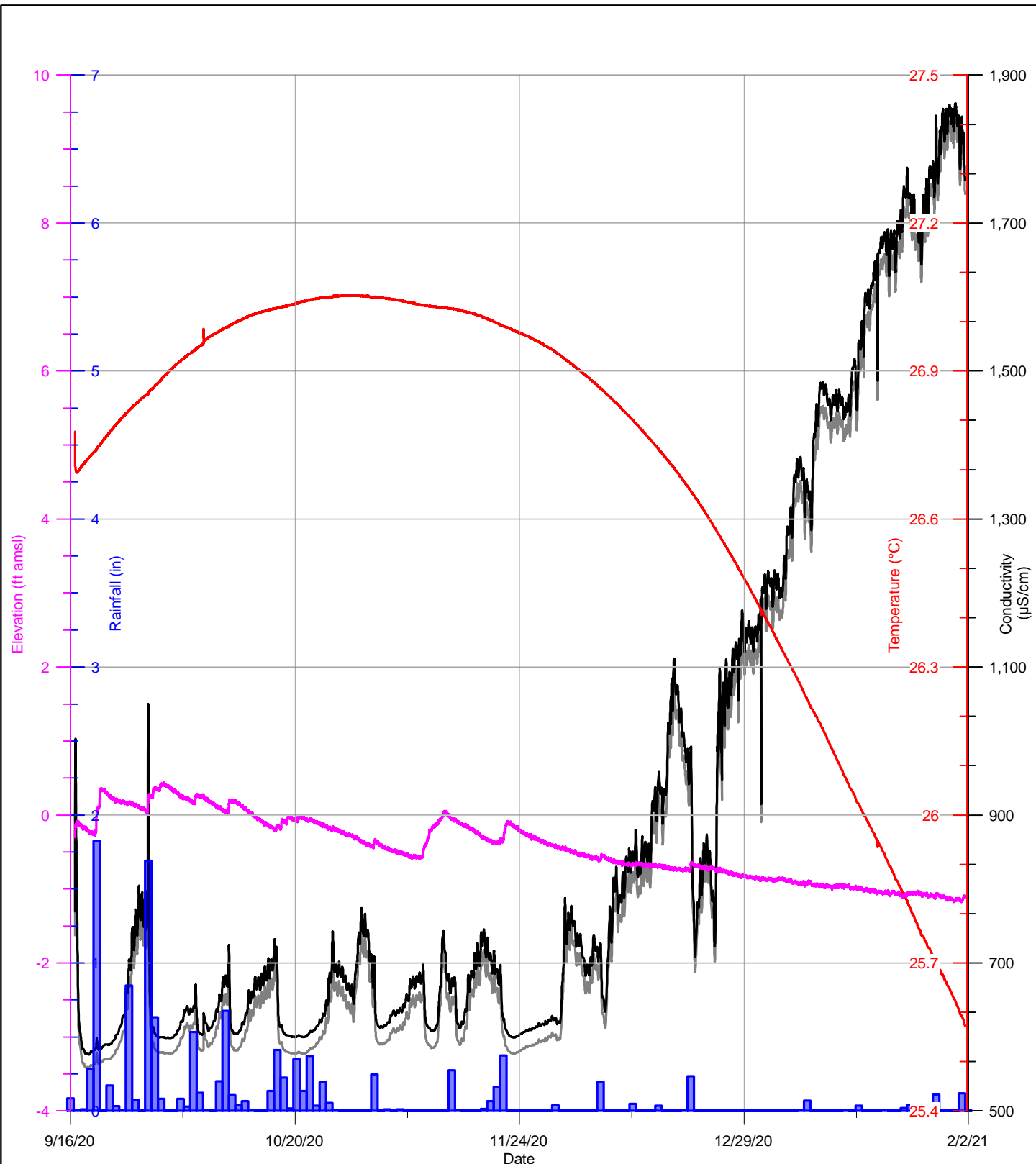
FDSA-MW0036 Transducer Data

- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- █ Rainfall



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-14
 FDSA-MW0036
 TRANSDUCER DATA



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

FDTL-IW0041 Transducer Data

Elevation	Specific Conductivity
Temperature	Rainfall
Actual Conductivity	



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-15
 FDTL-IW0041
 TRANSDUCER DATA



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

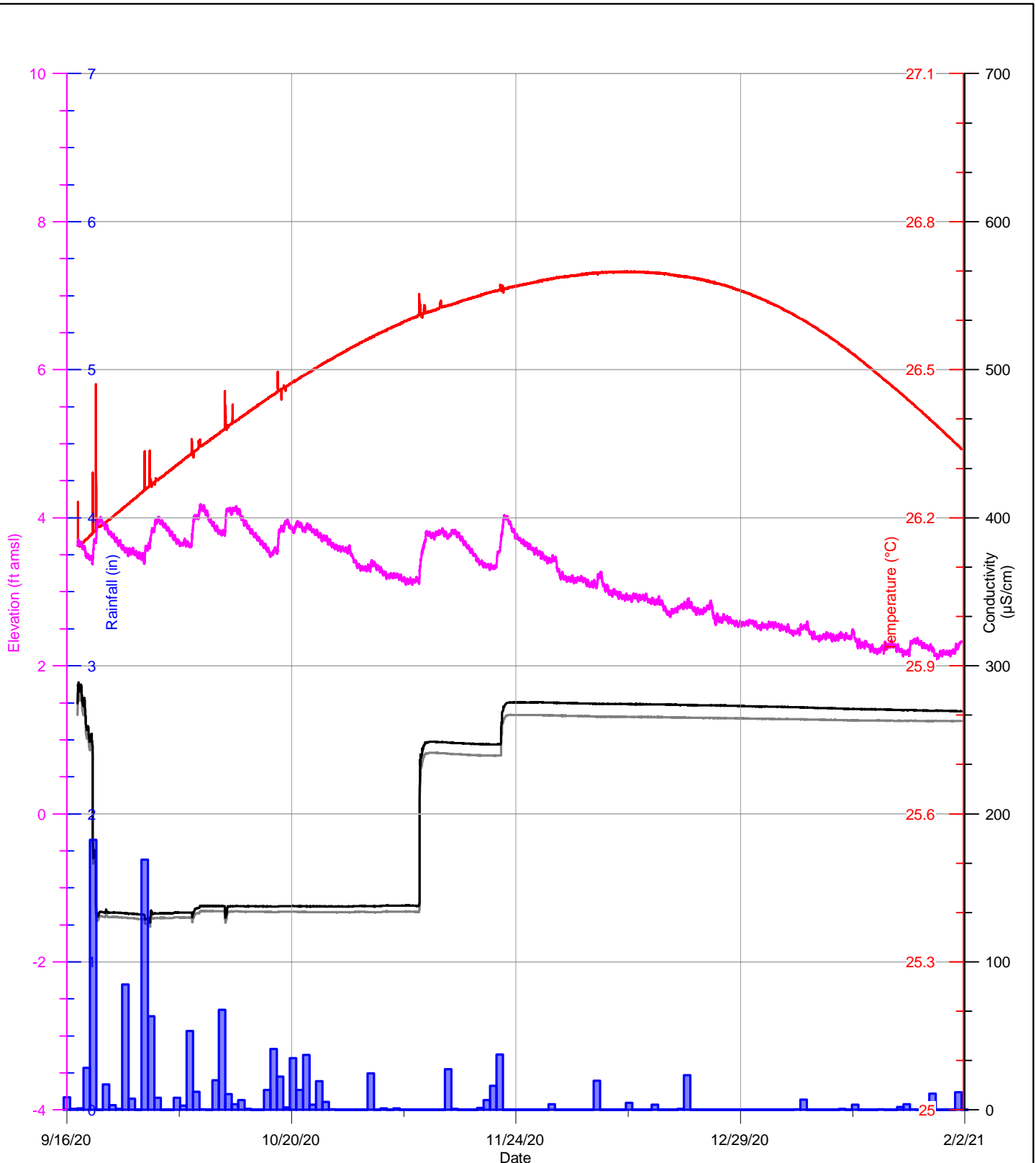
HMF-NLP-IW001D2 Transducer Data

Elevation	Specific Conductivity
Temperature	Rainfall
Actual Conductivity	



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-16
 HMF-NLP-IW001D2
 TRANSDUCER DATA

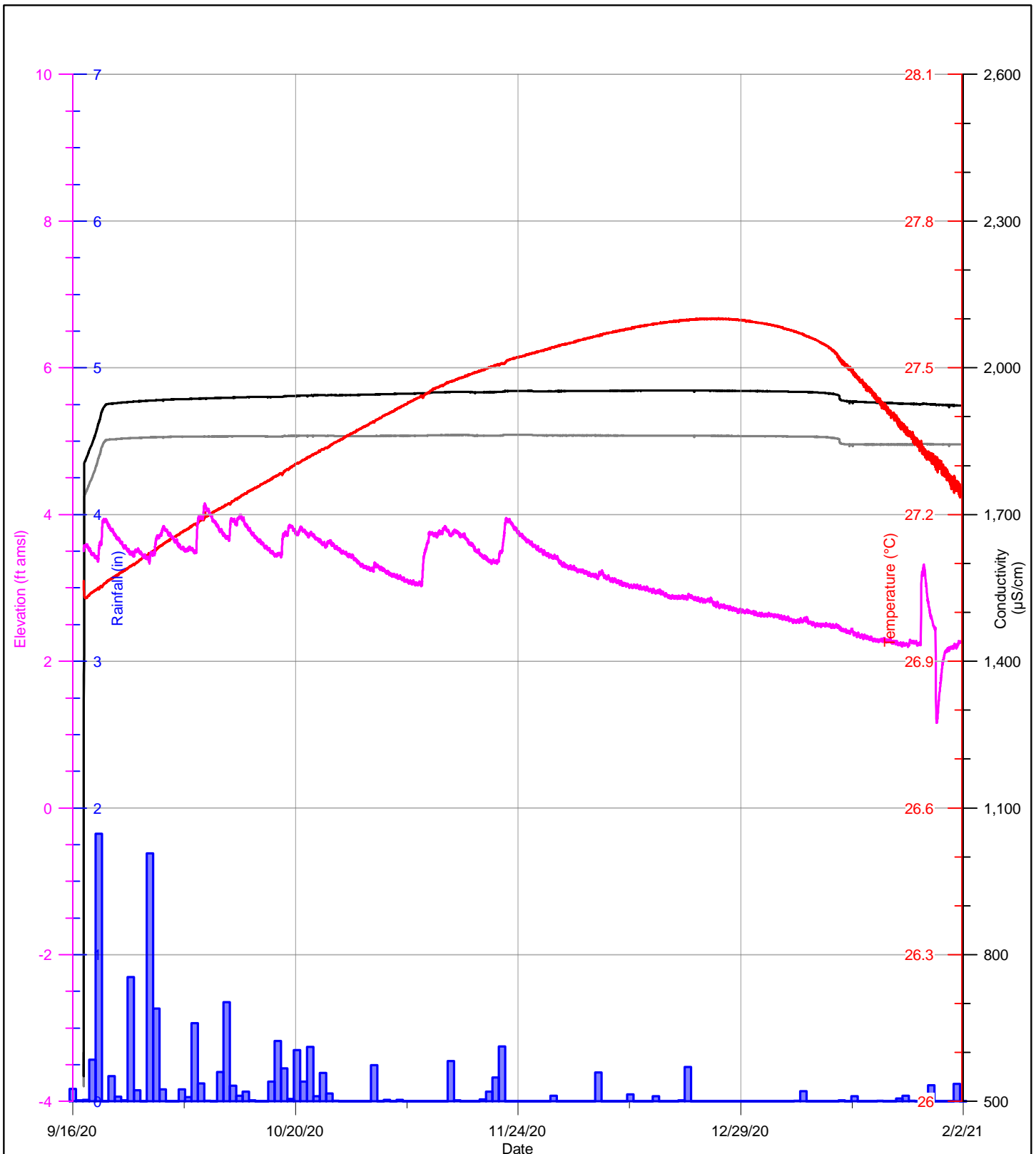


Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

LETf-MW0005 Transducer Data

Elevation	Specific Conductivity
Temperature	Rainfall
Actual Conductivity	



Definitions:

ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:

1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

POL-MW0009D Transducer Data

- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- █ Rainfall

AECOM

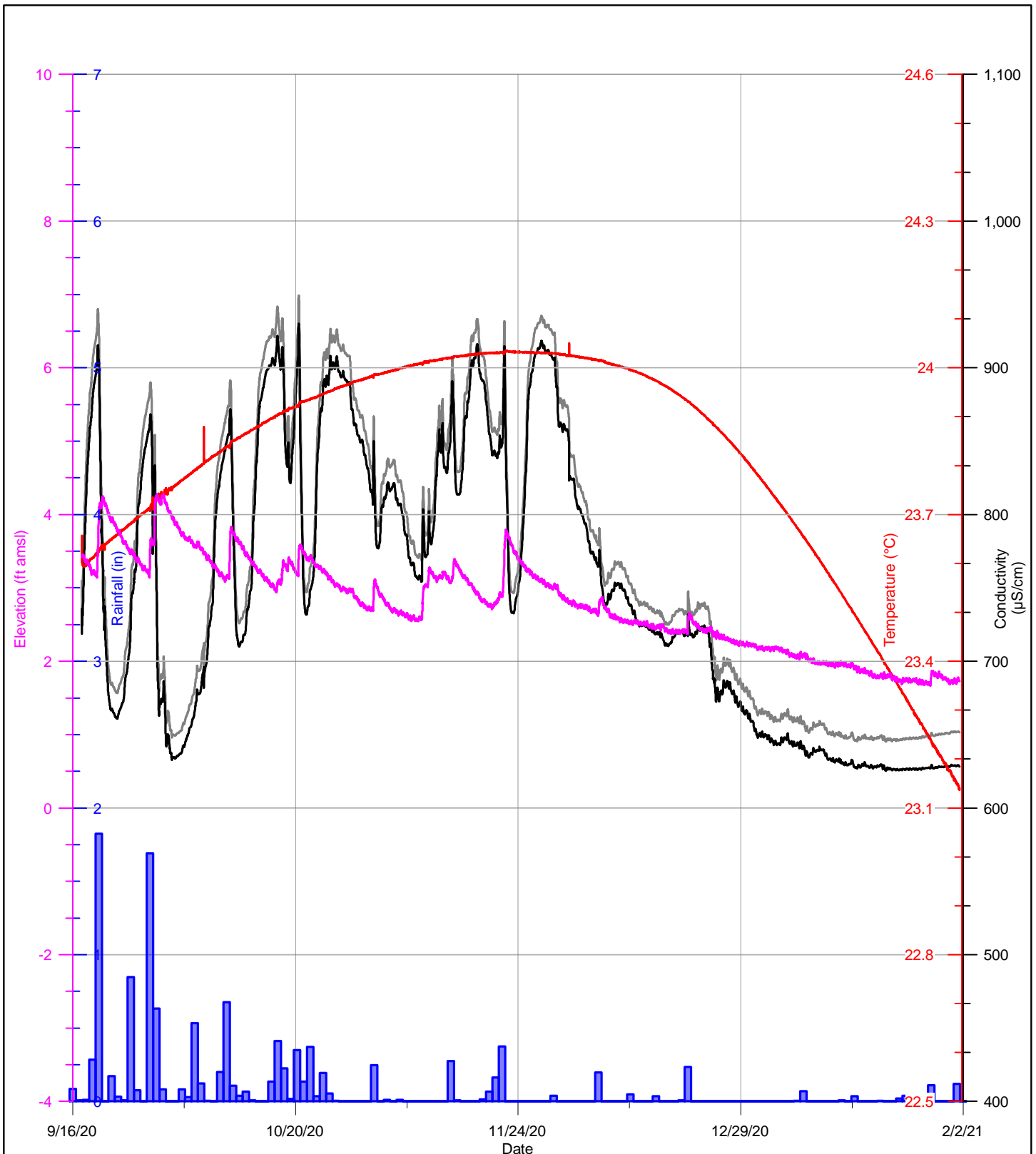
JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-18
 POL-MW0009D
 TRANSDUCER DATA

DATE: 6/8/2021

DRWN: KMR

CHK: MJZ



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

WILC-MW0087 Transducer Data

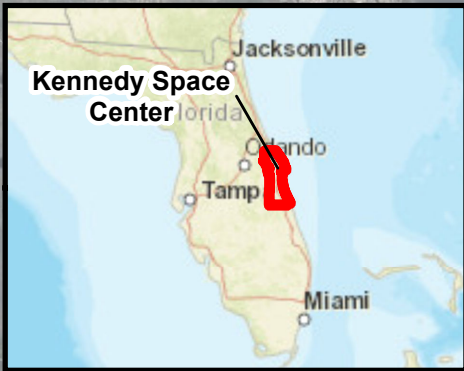
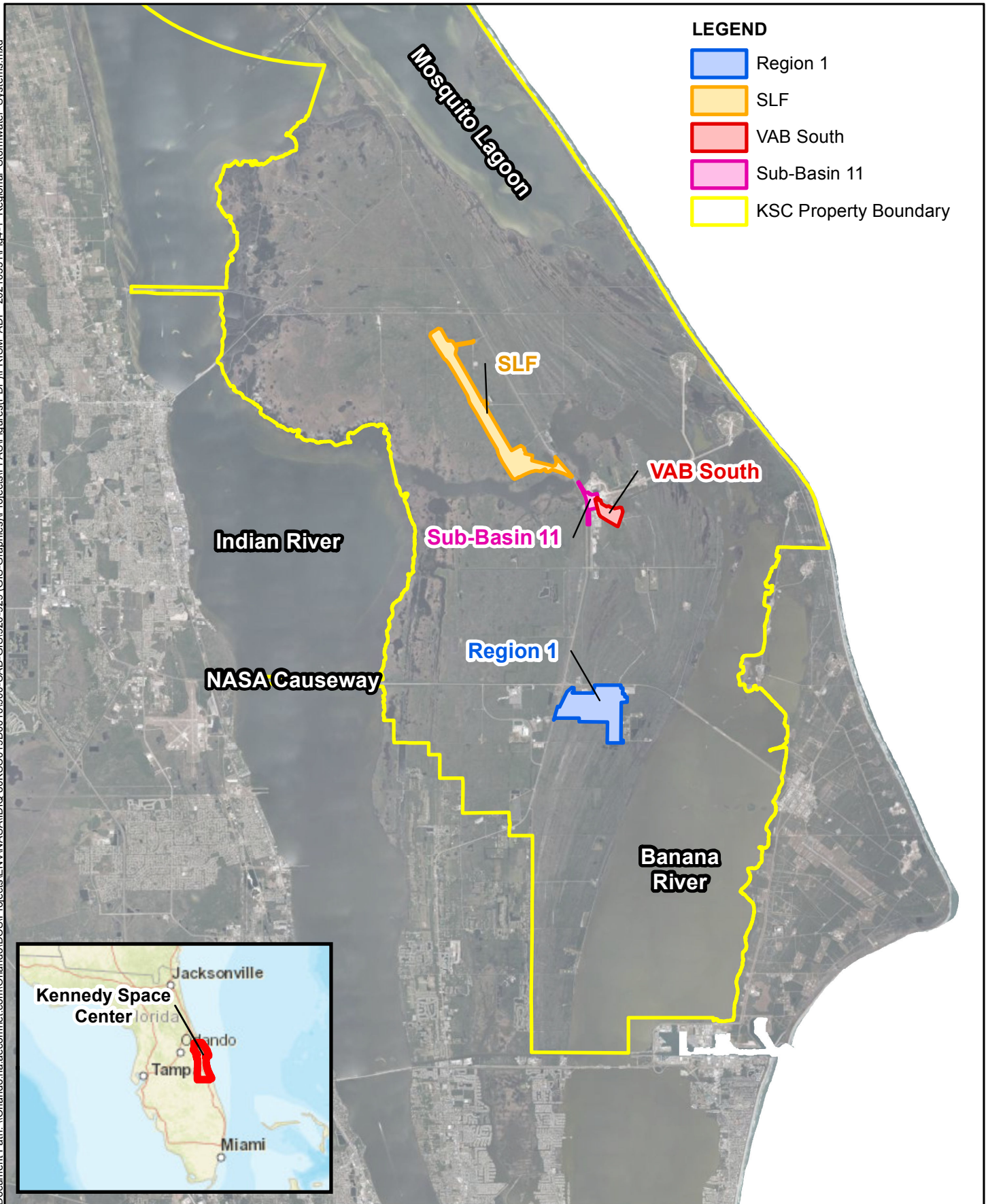
Elevation	Specific Conductivity
Temperature	Rainfall
Actual Conductivity	



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 3-19
 WILC-MW0087
 TRANSDUCER DATA

Document Path: \\Orlando.na.aecomnet.com\Orlando\DCS\Projects\EN\NASA\ID\Q_80KSC019D0010\900-CAD-GIS\920-929 (GIS-Graphics)\Projects\PFAS\Figures\PDF\PRISM_ADP_20210331\Fig4-1_Regional_Stormwater_Systems.mxd



AECOM

0 6,000 12,000
Feet

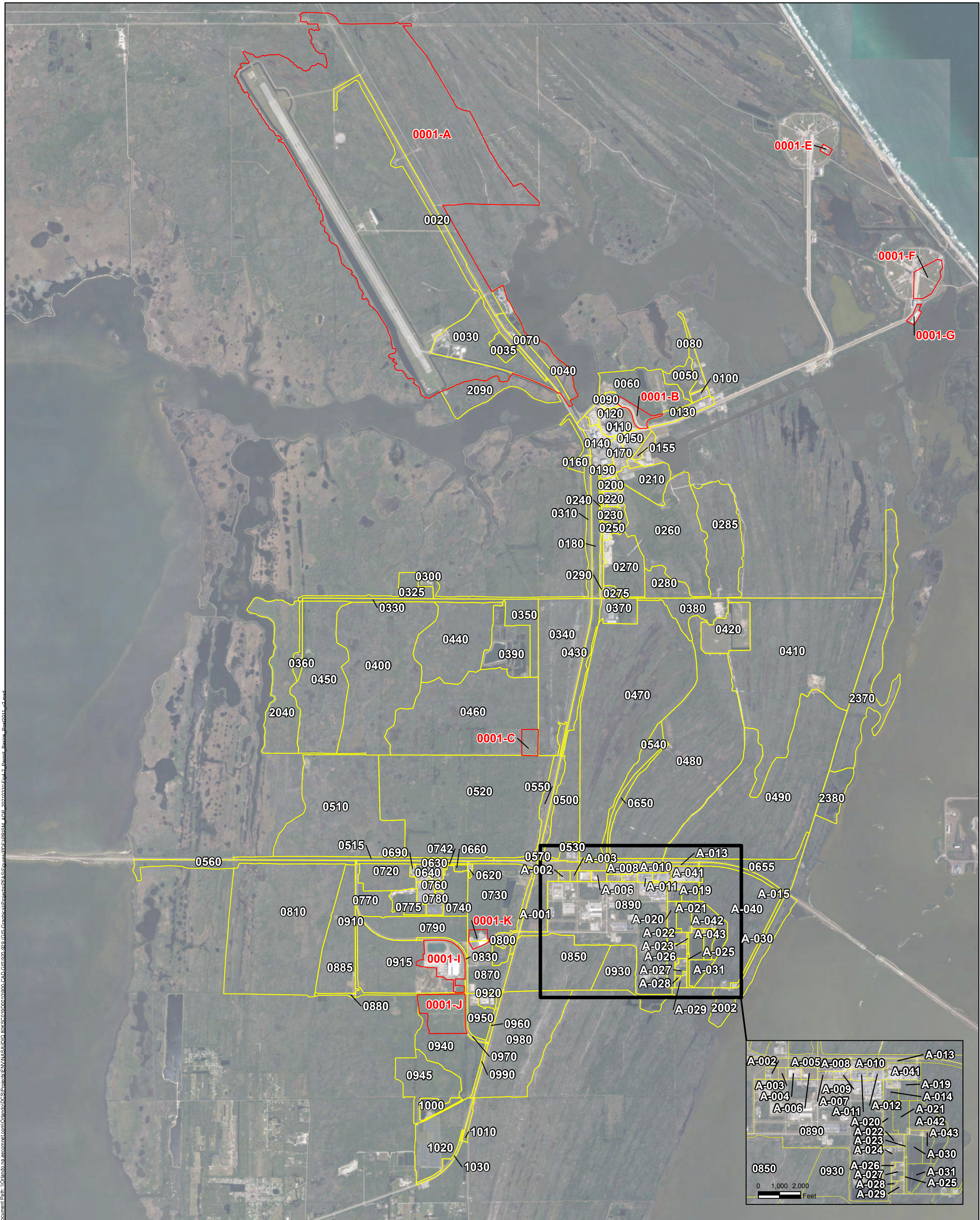


Source
Orthoimagery from Brevard County, 2018.

JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

DATE: 10/12/2021 | DRWN: TH

FIGURE 4-1
REGIONAL STORMWATER
SYSTEMS



Document Path: \\Orlando-na.aecomnet.com\Orlando\DCS\Projects\ENV\NAS\AUDIO_80K\SC01B\001\0000_CAD_GIS\021_021_GIS_Graphics\Projects\BFA\GIS\Permit_Basins_Post2011_02.mxd

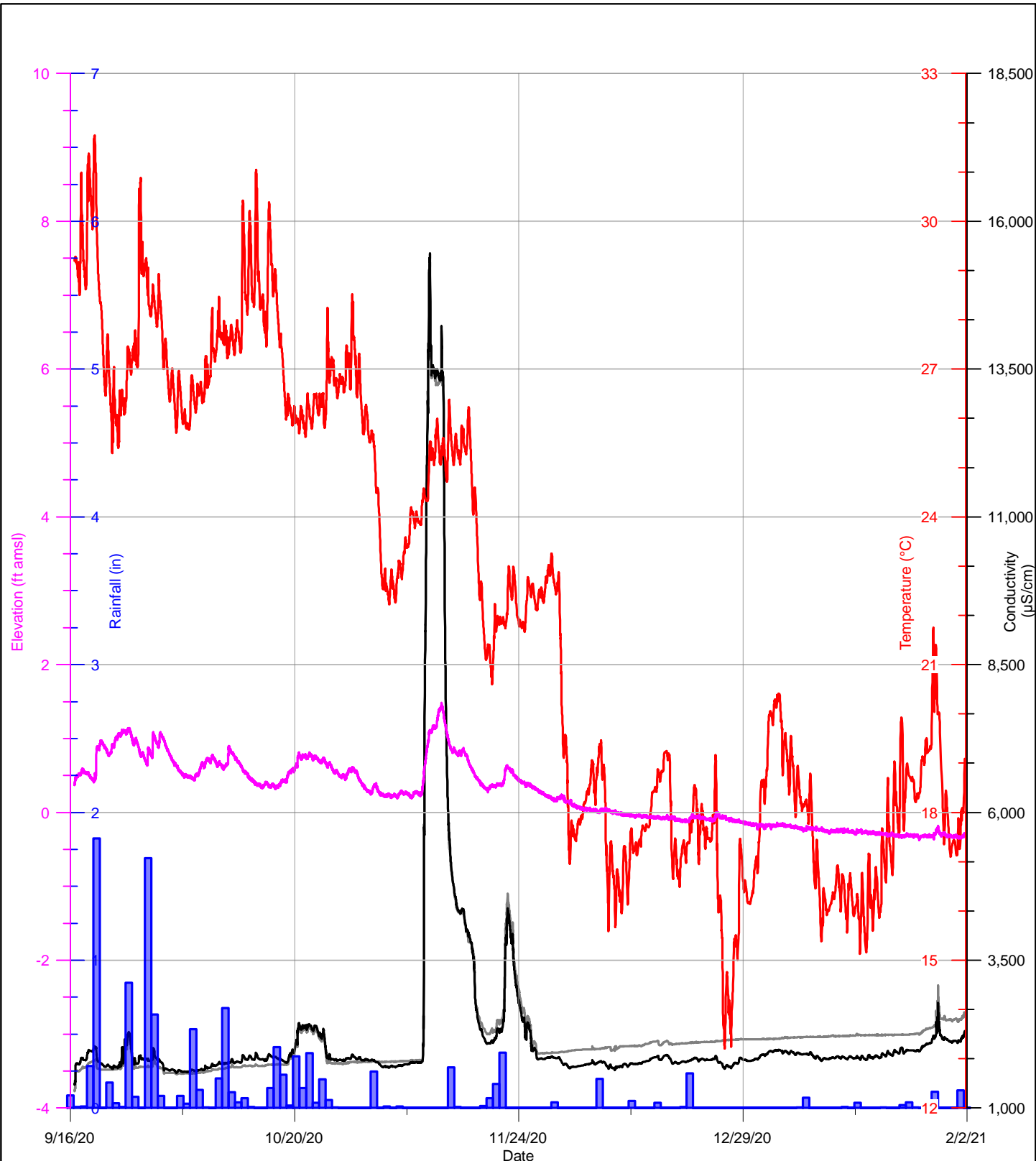


Legend
 Permit Basin (Post 2011)
 ICPR Basin

0 1,500 3,000 Feet
 Source: Orthoimagery from Brevard County, 2018.

JOHN F. KENNEDY SPACE CENTER
 MERRITT ISLAND, FLORIDA
 DATE: 10/12/2021 DRWN: SD

FIGURE 4-2 PERMIT BASINS - POST 2011



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

SLF Outfall Transducer Data

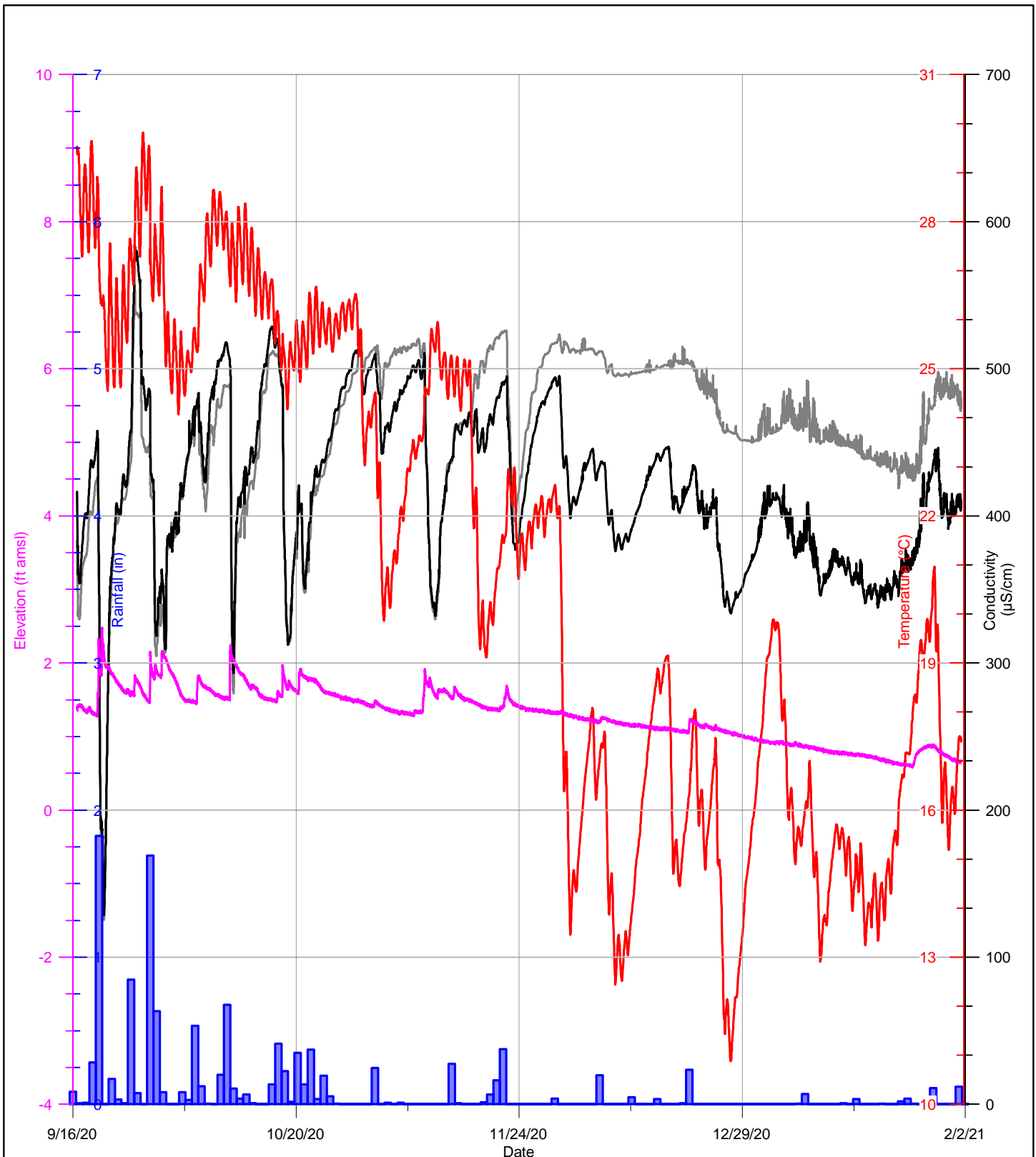
- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- █ Rainfall



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 4-3
 SLF Outfall
 TRANSDUCER DATA

DATE: 6/8/2021 | DRWN: KMR | CHK: MJZ



Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 μS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

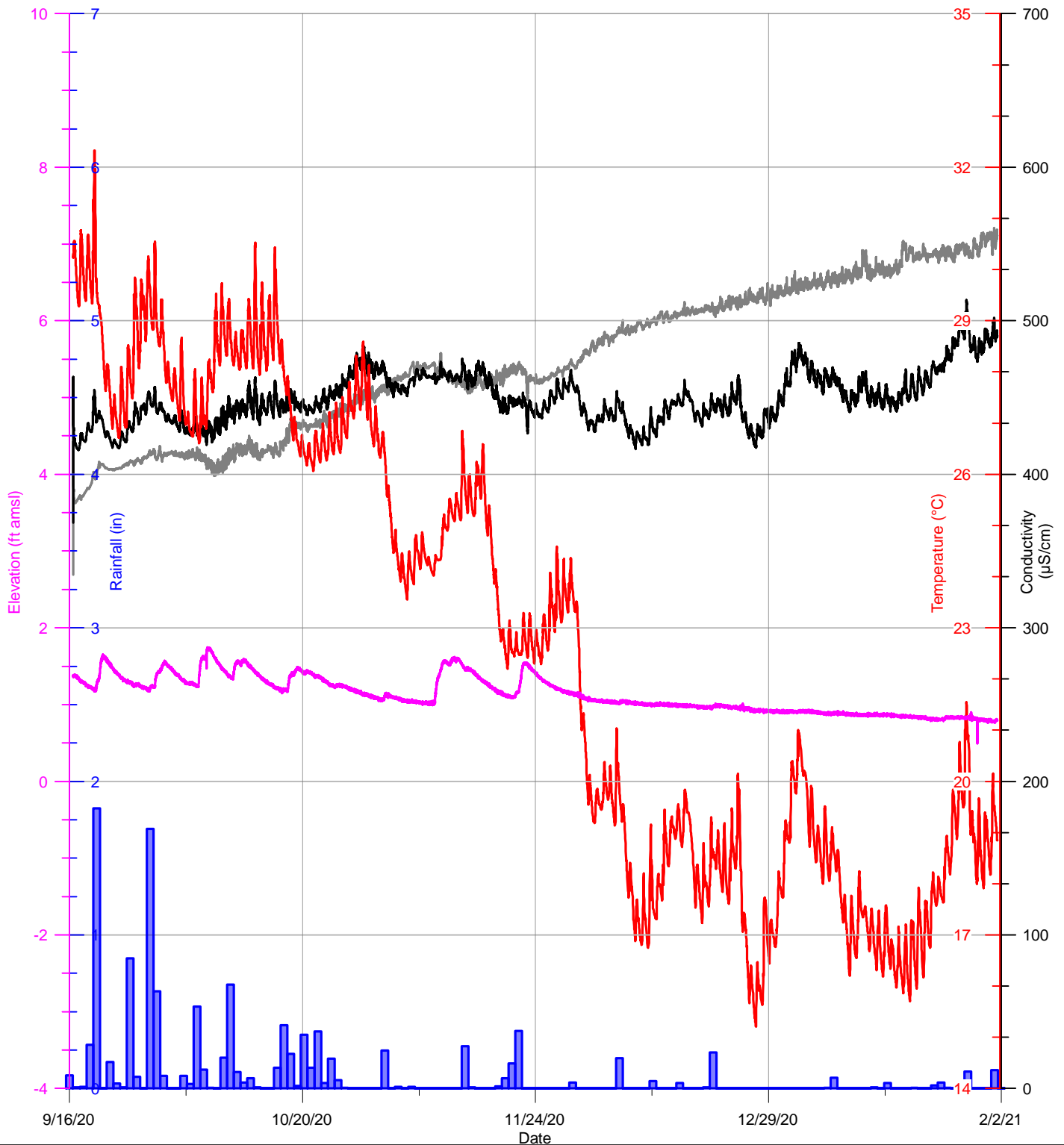
VAB Outfall Transducer Data

- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- █ Rainfall



JOHN F. KENNEDY
 SPACE CENTER
 MERRITT ISLAND, FLORIDA

FIGURE 4-4
 VAB Outfall
 TRANSDUCER DATA

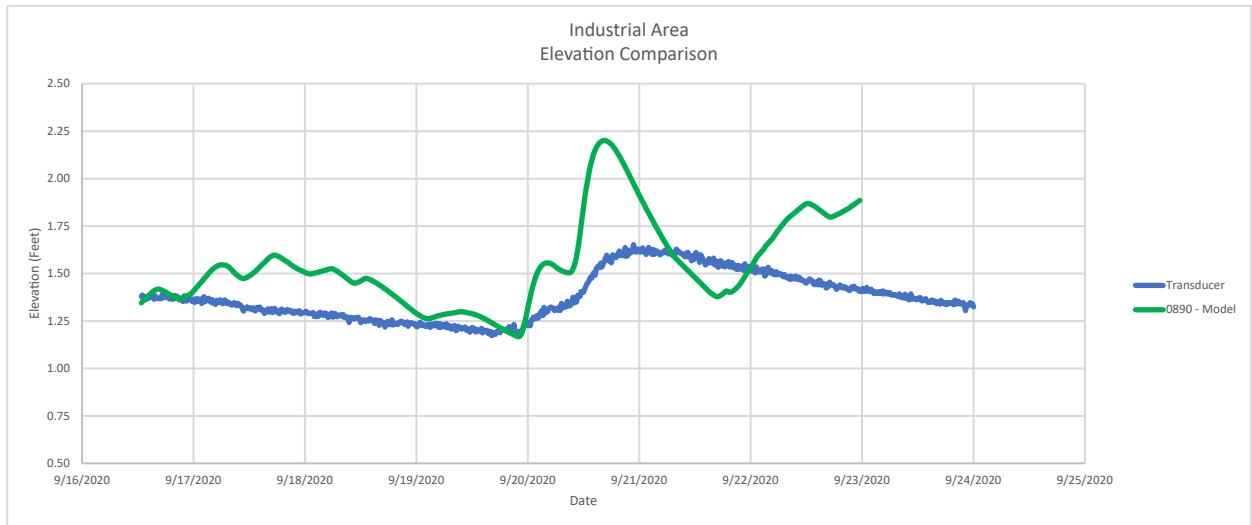
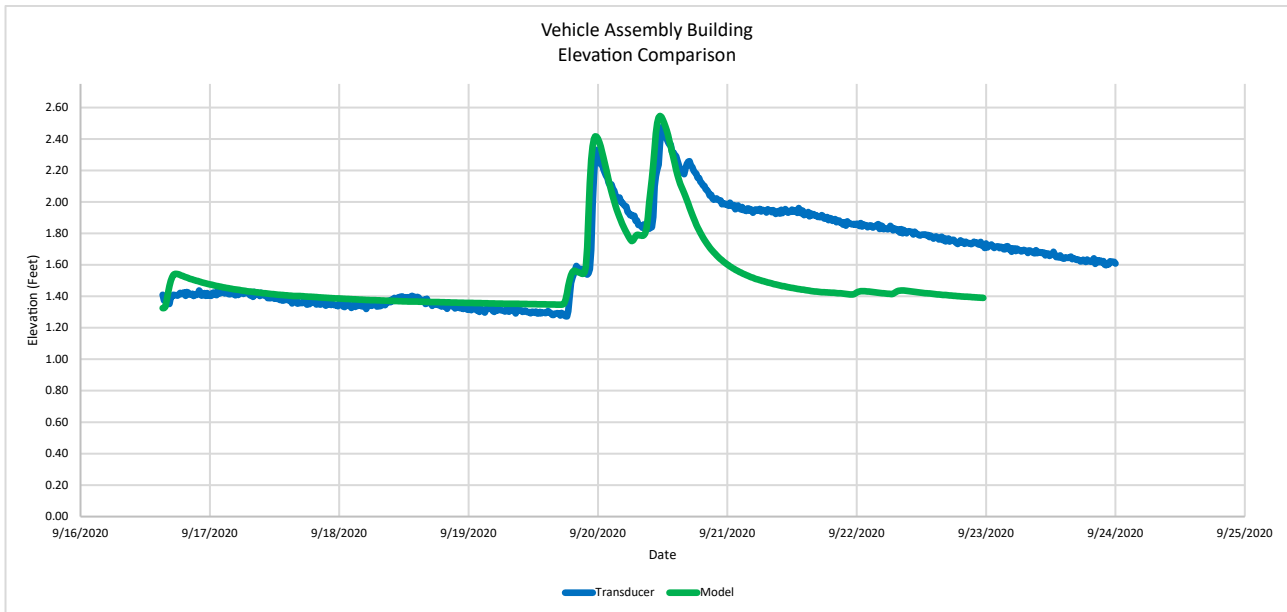
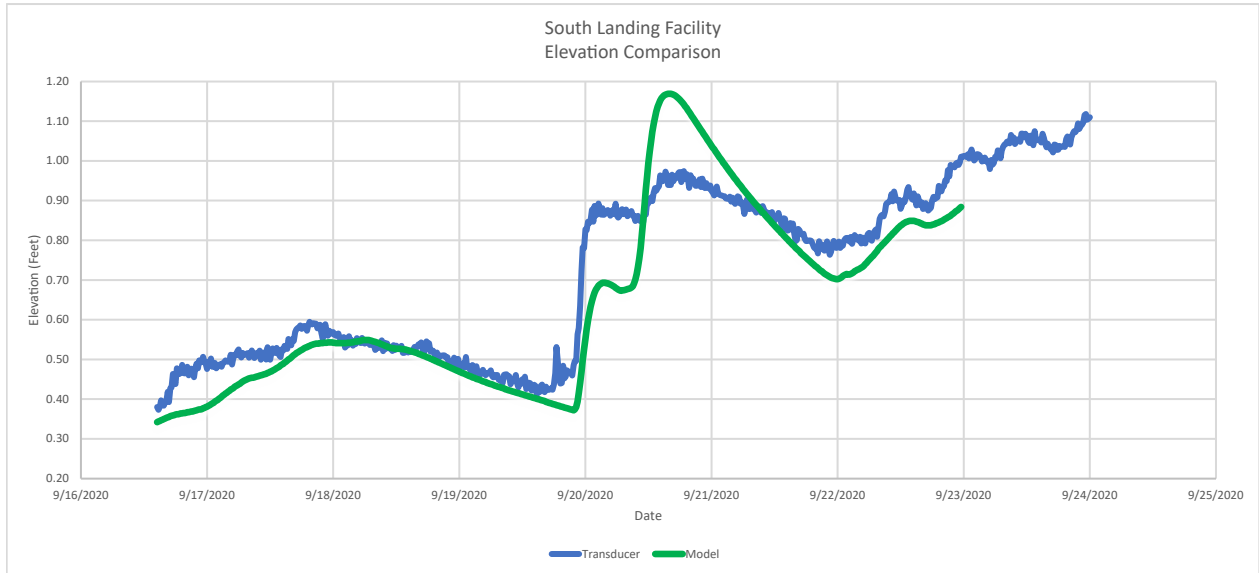


Definitions:
 ft amsl - Feet Above Mean Sea Level
 ft - Feet
 in - Inch
 µS/cm - Microsiemens per Centimeter
 °C - Degrees Celsius

Notes:
 1. Rainfall data from the John F. Kennedy Space Center Spaceport Weather Archive. <https://kscwxarchive.ksc.nasa.gov/>. Rainfall data obtained from all rain gauges were averaged and for visualization purposes only.

Industrial Area Outfall Transducer Data

- Elevation
- Temperature
- Actual Conductivity
- Specific Conductivity
- Rainfall



LEGEND

- ▲ Phase II Surface Water Sample Location
- Outfall

Document Path: \\Orlando.na.aecom.net.com\Orlando\DCS\Projects\EN\NAS\AID\IO_80\KSC019D00101900-CAD-C\GIS\920-929_GIS-Graphics\Protects\PFAS\Figures\PDF\PRISM_ADP_20210331\Fig-7_SW_and_Outfall_Loc_v2.mxd



0 2,500 5,000
Feet



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 4-7
STORMWATER SAMPLING
AND MODEL DISCHARGE
LOCATIONS

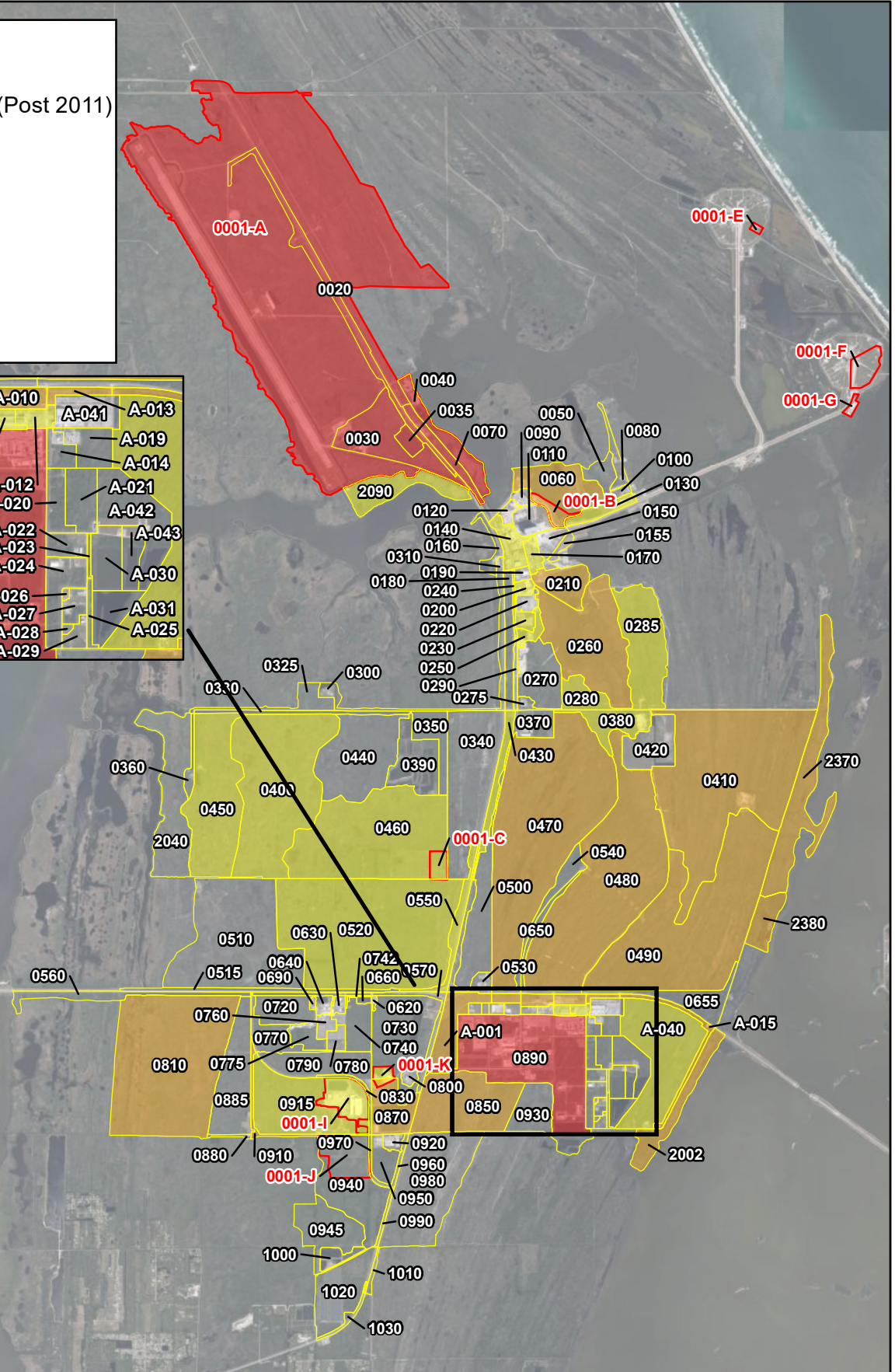
Source
Orthoimagery from Brevard County, 2018.

DATE: 11/2/2021

DRWN: TH

Legend

- ICPR Basin
- Permit Basin (Post 2011)
- >10 grams
- 1 - 10 grams
- 0.5 to 1 grams
- <0.5 grams



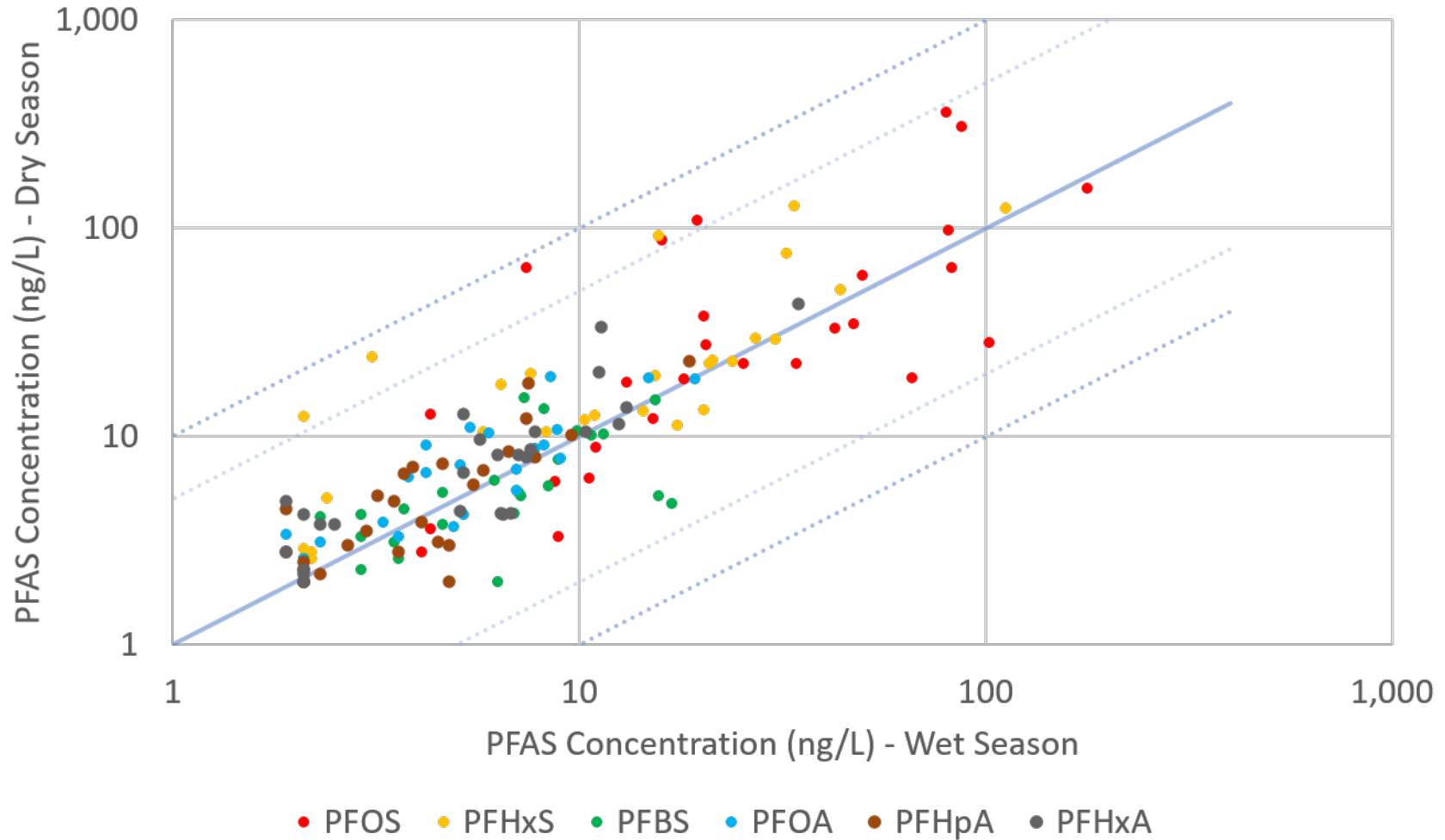
AECOM 0 3,000 6,000 Feet

Source: Orthoimagery from Brevard County, 2018.

JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

DATE: 11/2/2021 DRWN: SD

FIGURE 4-8
ICPR BASINS



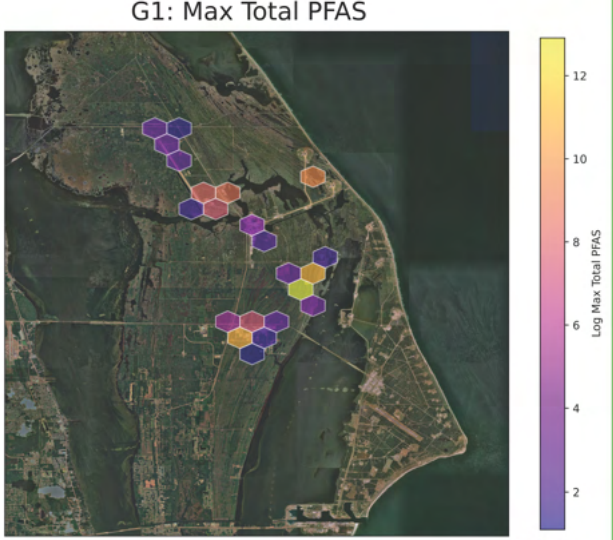
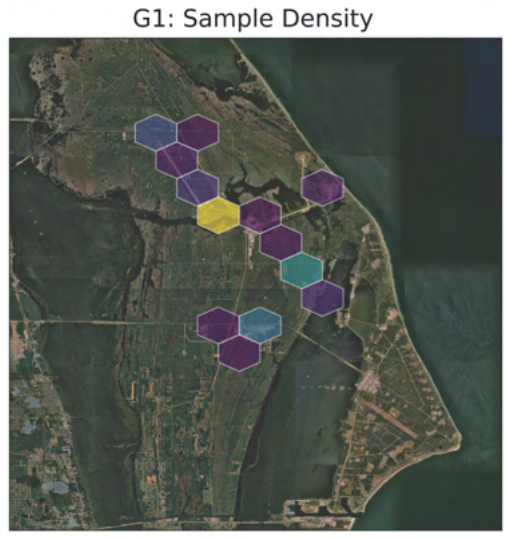
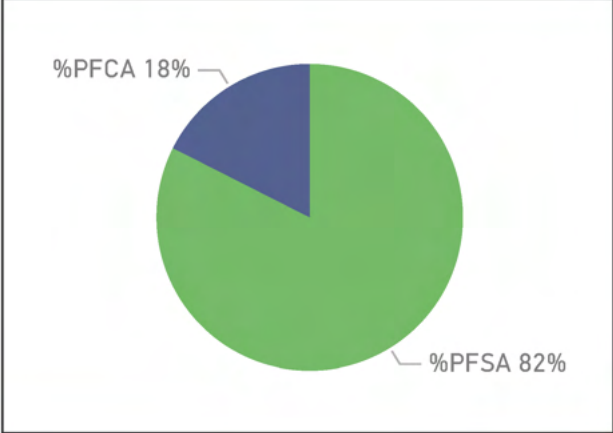
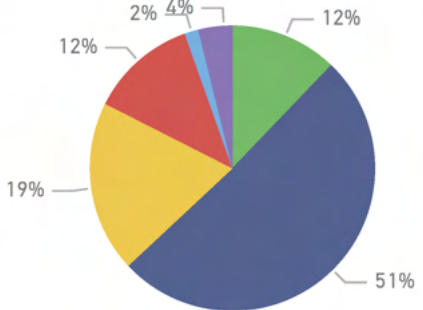
Cluster: G1

80
Count of Sample

52.60
Median of Total PFAS

403,436.61
Max of Total PFAS

- %PFBS
- %PFHxS
- %PFOS
- %PFHxA
- %PFHpA
- %PFOA



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-1
FORENSIC PROFILE OF
GROUNDWATER CLUSTER G1

DATE: 10/20/2021 | DRWN: SD

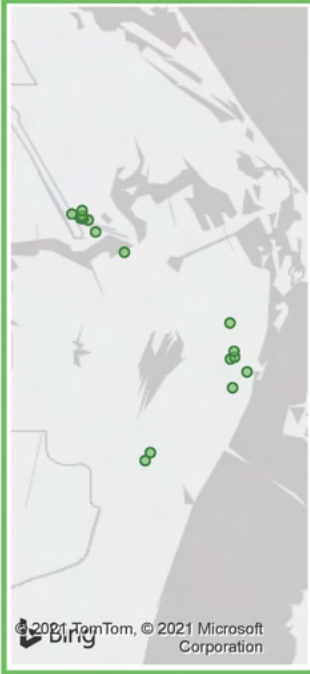
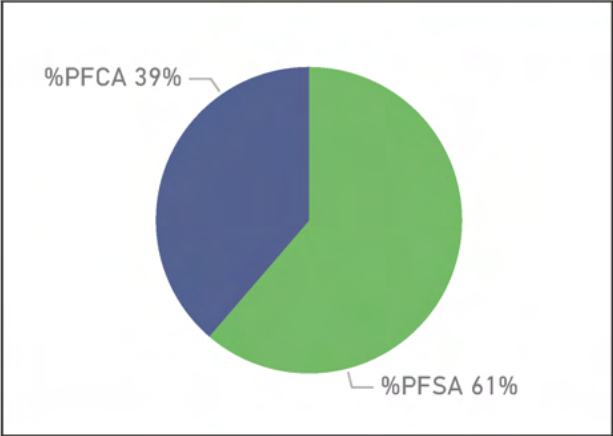
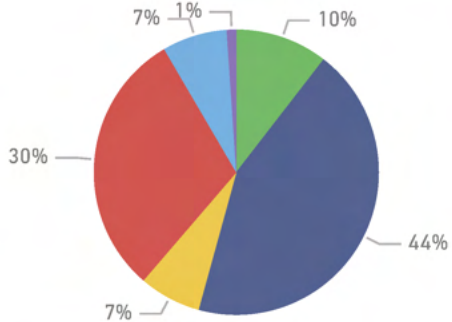
Cluster: G2

29
Count of Sample

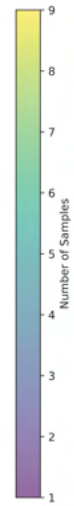
155.91
Median of Total PFAS

18,994.00
Max of Total PFAS

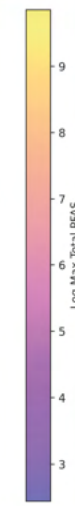
- %PFBS
- %PFHxS
- %PFOS
- %PFHxA
- %PFHpA
- %PFOA



G2: Sample Density



G2: Max Total PFAS



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd

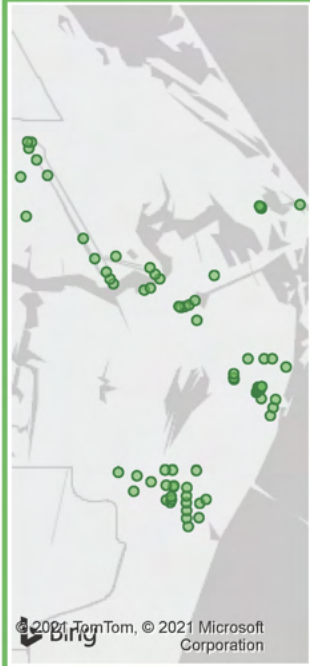
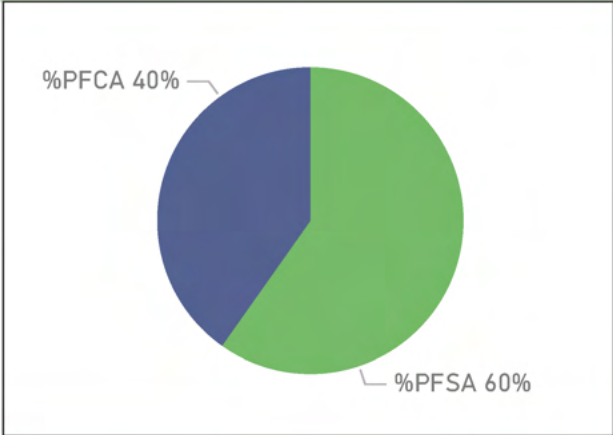
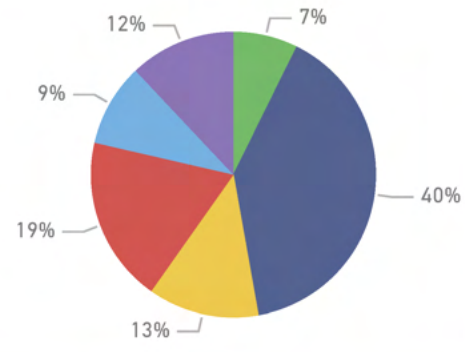
Cluster: G3

135
Count of Sample

64.10
Median of Total PFAS

131,176.65
Max of Total PFAS

- %PFBS
- %PFHxS
- %PFOS
- %PFHxA
- %PFHpA
- %PFOA



G3: Sample Density



G3: Max Total PFAS



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-3
FORENSIC PROFILE OF
GROUNDWATER CLUSTER G3

DATE: 10/20/2021 | DRWN: SD

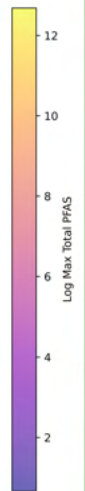
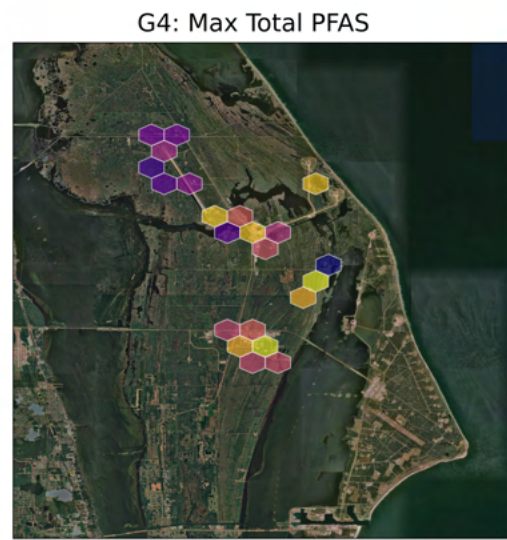
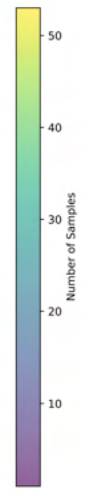
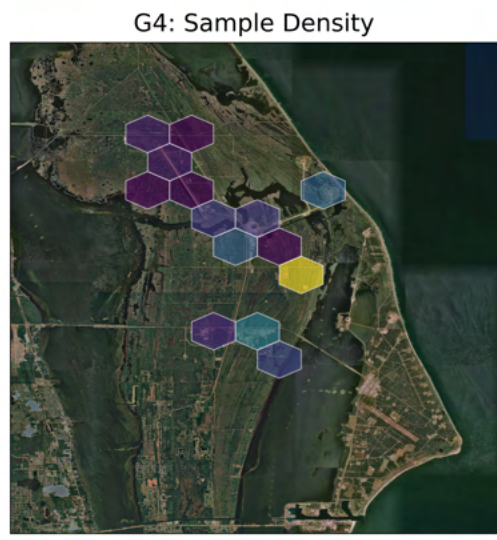
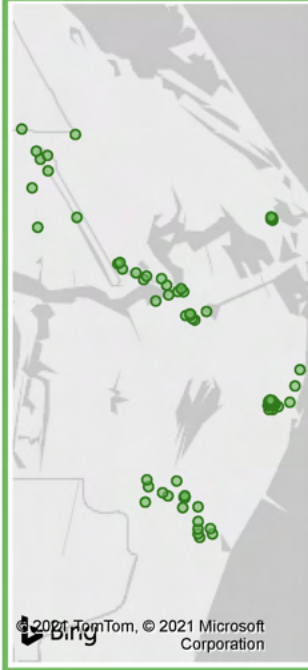
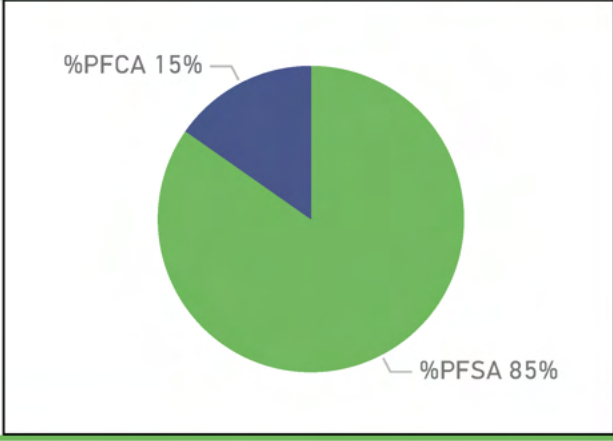
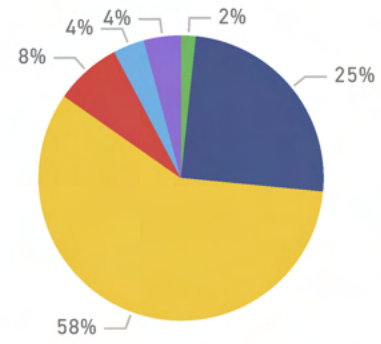
Cluster: G4

164
Count of Sample

2,623.00
Median of Total PFAS

321,880.00
Max of Total PFAS

- %PFBS
- %PFHxS
- %PFOS
- %PFHxA
- %PFHpA
- %PFOA



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-4
FORENSIC PROFILE OF
GROUNDWATER CLUSTER G4

DATE: 10/20/2021 | DRWN: SD

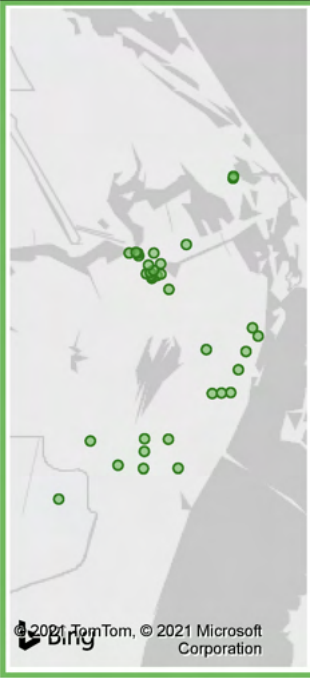
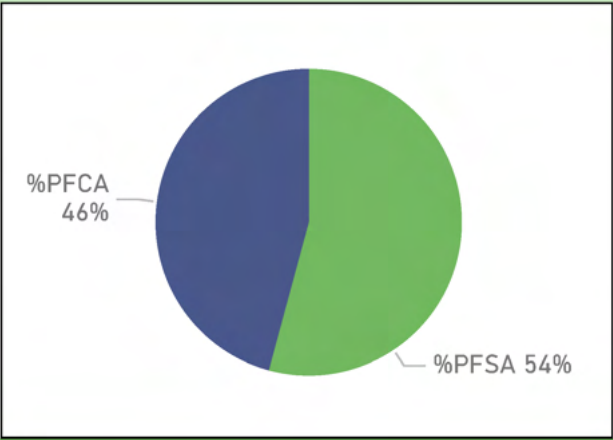
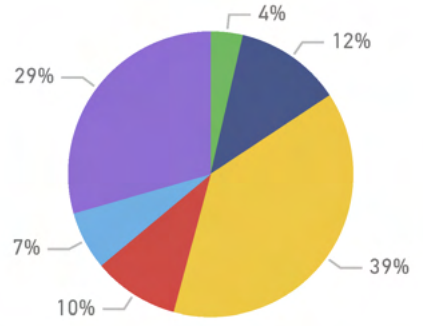
Cluster: G5

76
Count of Sample

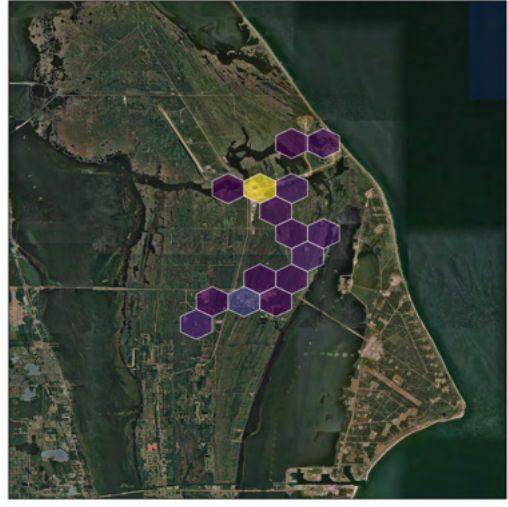
75.71
Median of Total PFAS

972.80
Max of Total PFAS

- %PFBS
- %PFHxS
- %PFOS
- %PFHxA
- %PFHpA
- %PFOA



G5: Sample Density



G5: Max Total PFAS



Document Path: C:\Sara_GIS_Local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-5
FORENSIC PROFILE OF
GROUNDWATER CLUSTER G5

DATE: 10/20/2021 | DRWN: SD

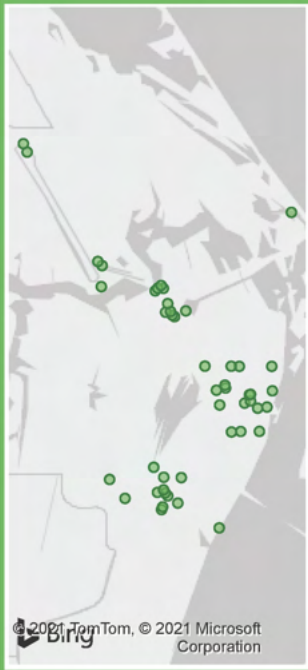
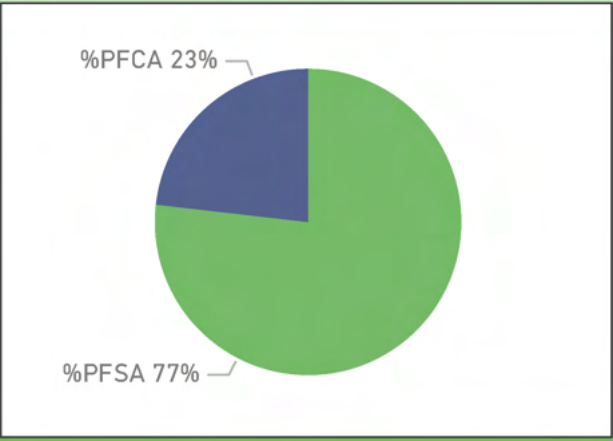
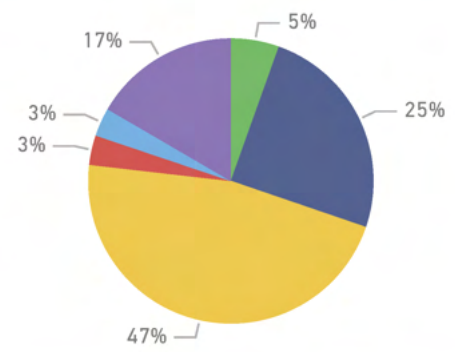
Cluster: G6

72
Count of Sample

13.90
Median of Total PFAS

92,600.00
Max of Total PFAS

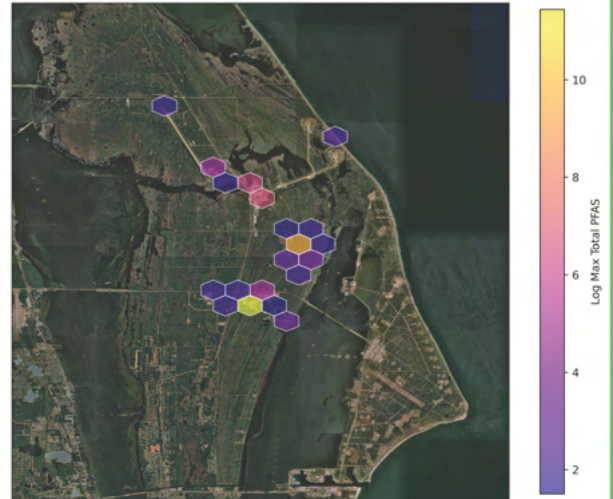
- %PFBS
- %PFHxS
- %PFOS
- %PFHxA
- %PFHpA
- %PFOA



G6: Sample Density



G6: Max Total PFAS



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd

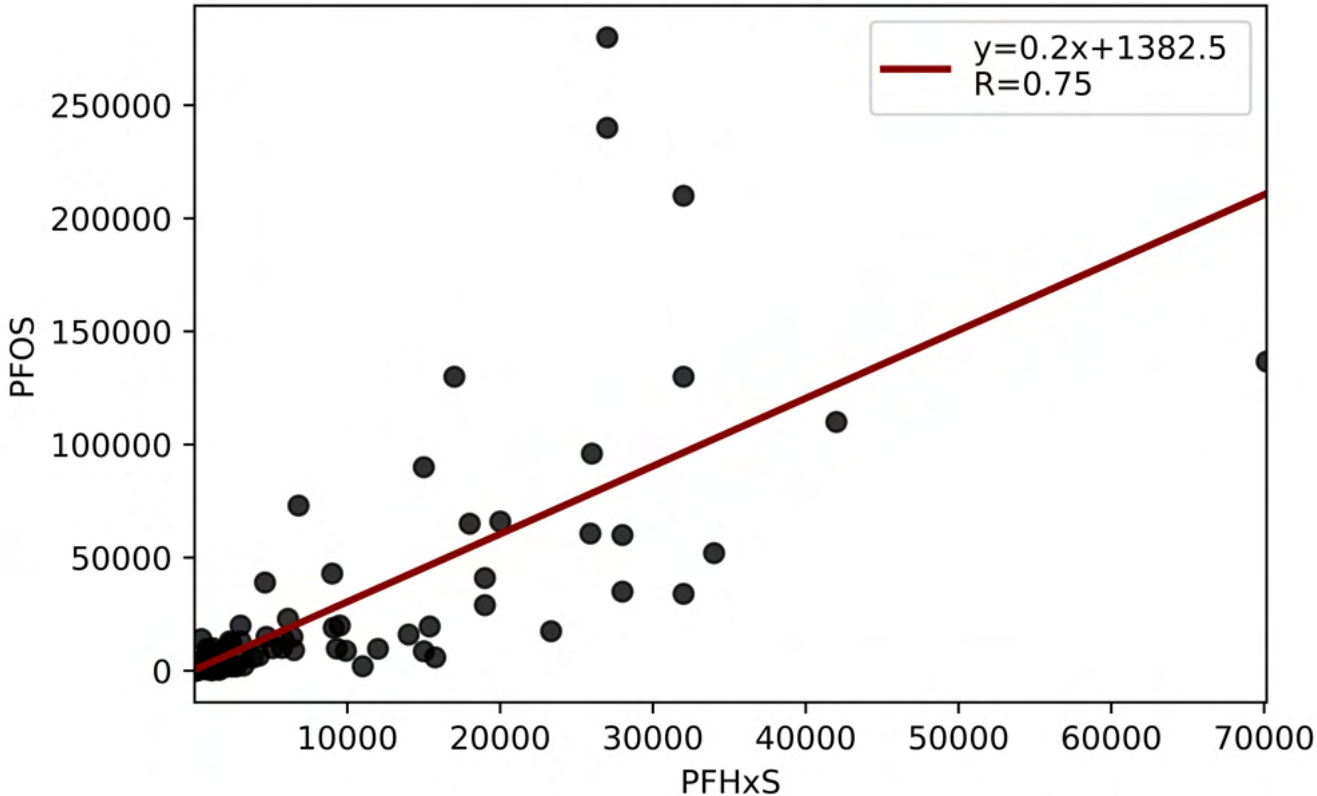


JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-6
FORENSIC PROFILE OF
GROUNDWATER CLUSTER G6

DATE: 10/20/2021 | DRWN: SD

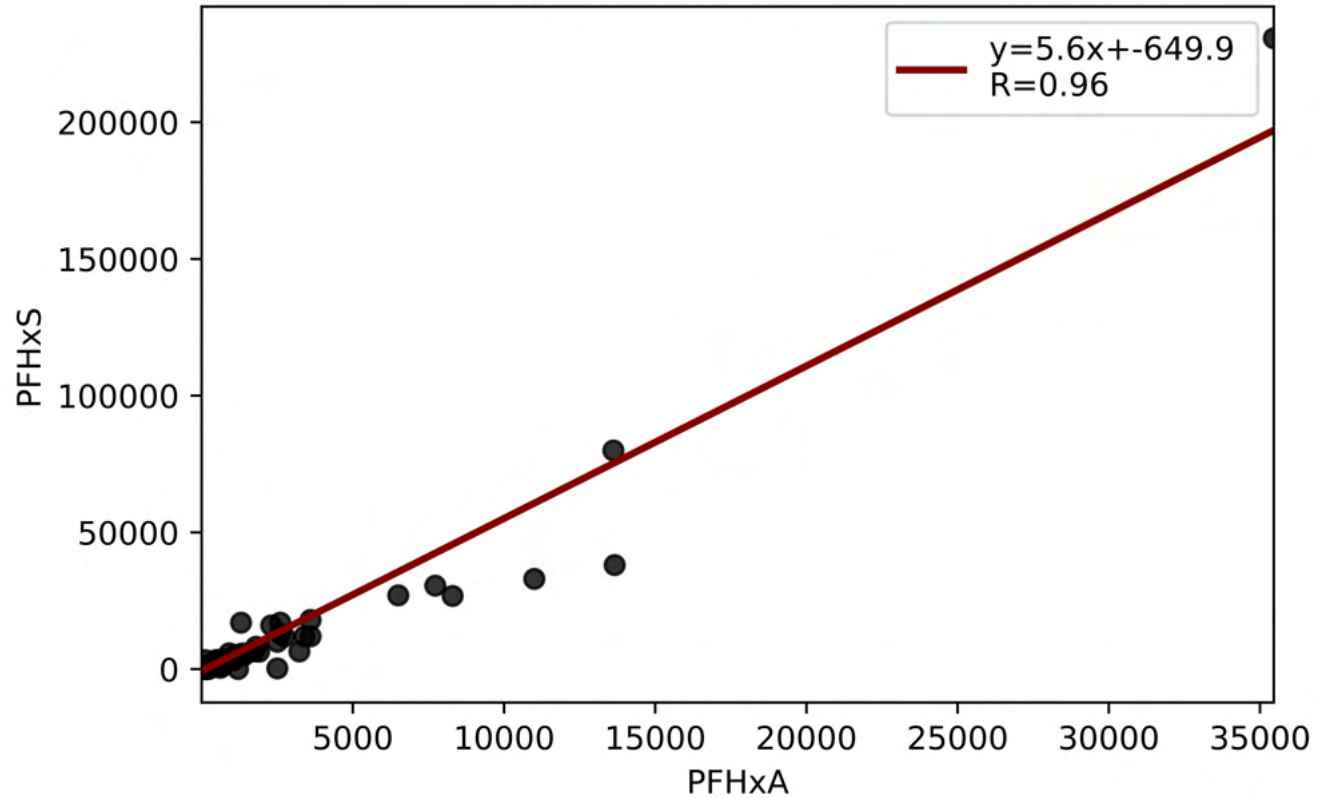
PFOS vs PFHxS as Legacy AFFF Indicator
Cluster G4 and G6



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd

Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd

PFHxS vs PFHxA as Modern Six-Carbon AFFF Indicator
Cluster G1, G2, and G3



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-8
PFHxS AND PFHxA
CORRELATION IN SIX-CARBON
AFFG GROUP

DATE: 10/20/2021 DRWN: SD

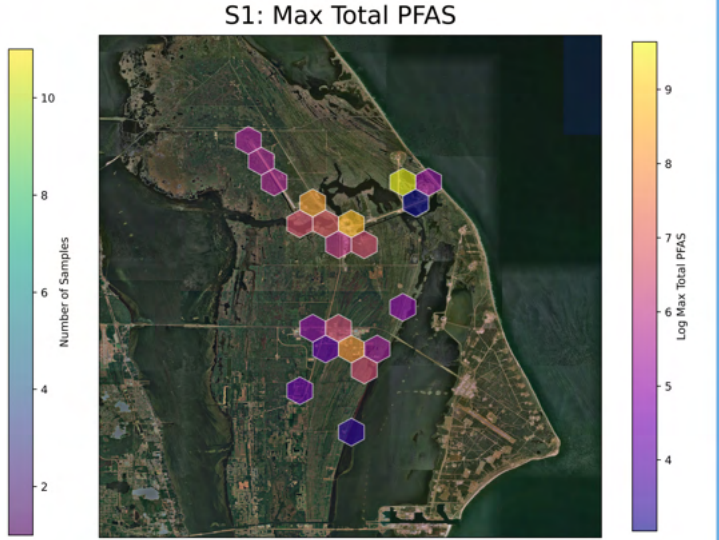
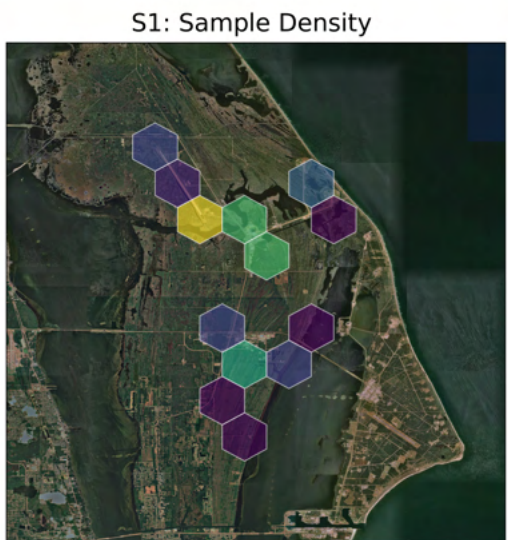
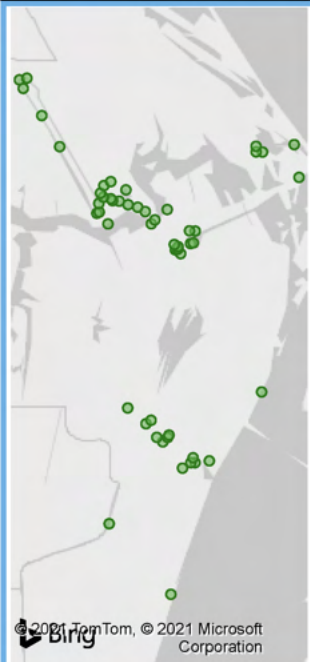
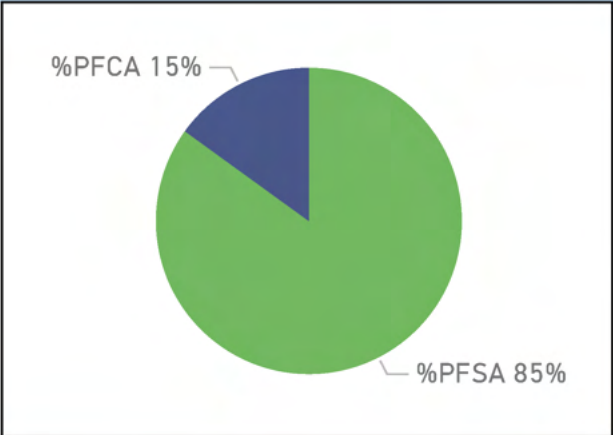
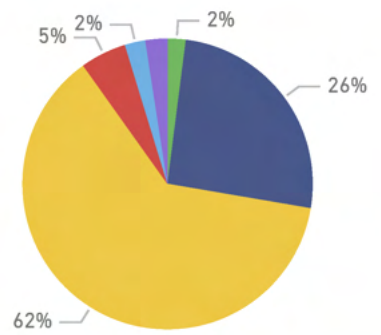
Cluster: S1

53
Count of Sample

282.00
Median of Total PFAS

15,400.00
Max of Total PFAS

- PFBS
- PFHxS
- PFOS
- PFHxA
- PFHpA
- PFOA



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-9
FORENSIC PROFILE OF
SURFACE WATER CLUSTER S1

DATE: 10/20/2021 | DRWN: SD

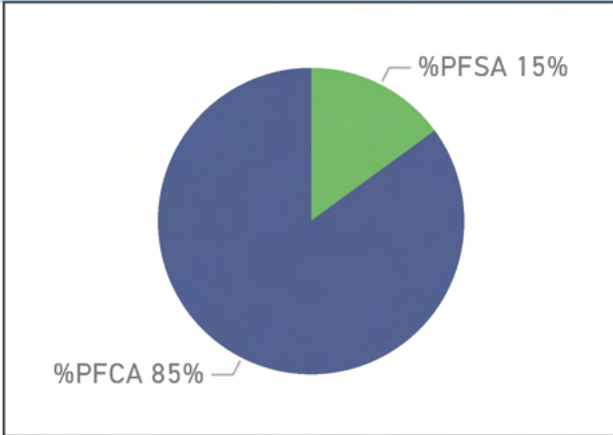
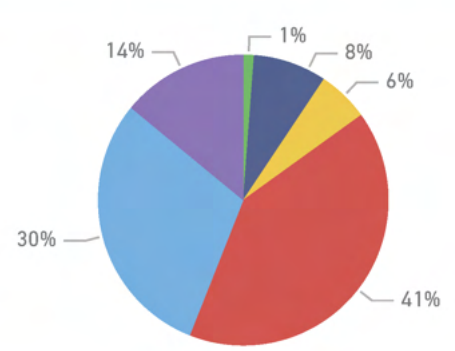
Cluster: S2

2
Count of Sample

225.50
Median of Total PFAS

338.00
Max of Total PFAS

- PFBS
- PFHxS
- PFOS
- PFHxA
- PFHpA
- PFOA



Document Path: C:\Sara_GIS_Local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd

© 2021 TomTom, © 2021 Microsoft Corporation



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

DATE: 10/20/2021 | DRWN: SD

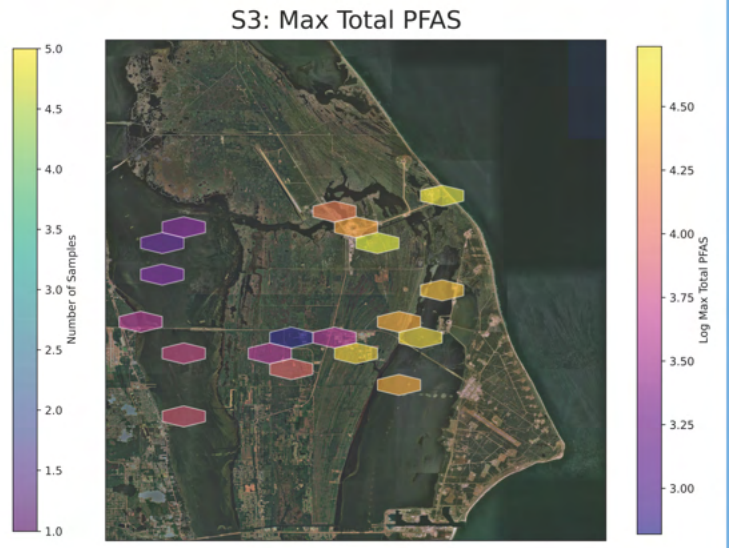
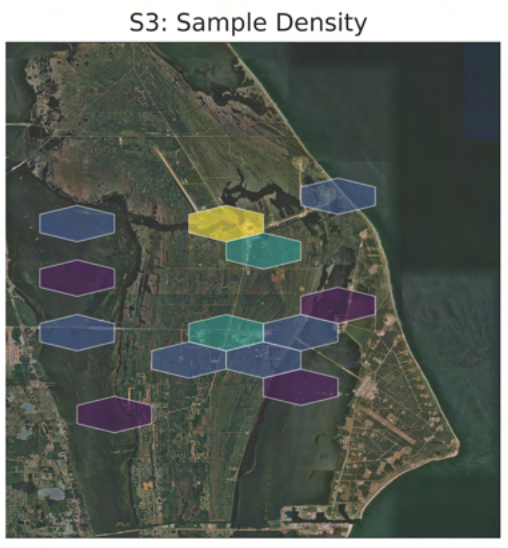
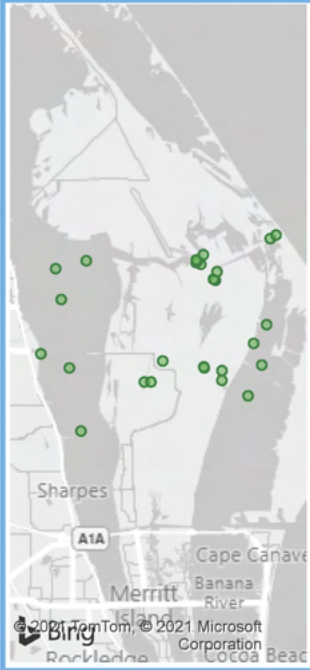
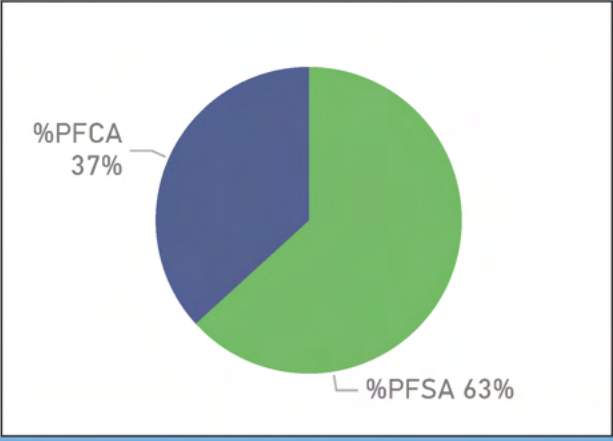
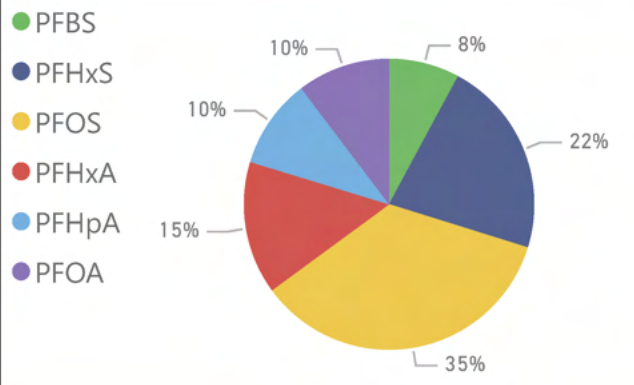
FIGURE 5-10
FORENSIC PROFILE OF
SURFACE WATER CLUSTER S2

Cluster: S3

27
Count of Sample

51.90
Median of Total PFAS

114.00
Max of Total PFAS



Document Path: C:\Sara_GIS_local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd



JOHN F. KENNEDY
SPACE CENTER
MERRITT ISLAND, FLORIDA

FIGURE 5-11
FORENSIC PROFILE OF
SURFACE WATER CLUSTER S3

DATE: 10/20/2021 | DRWN: SD

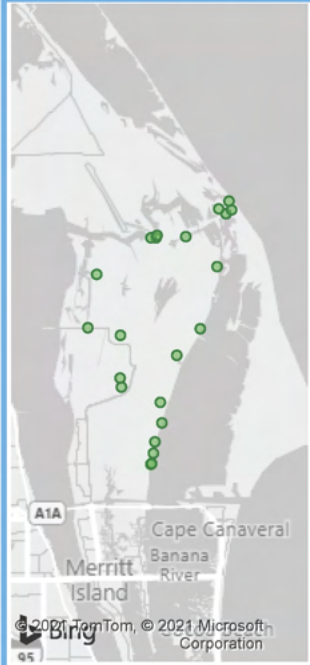
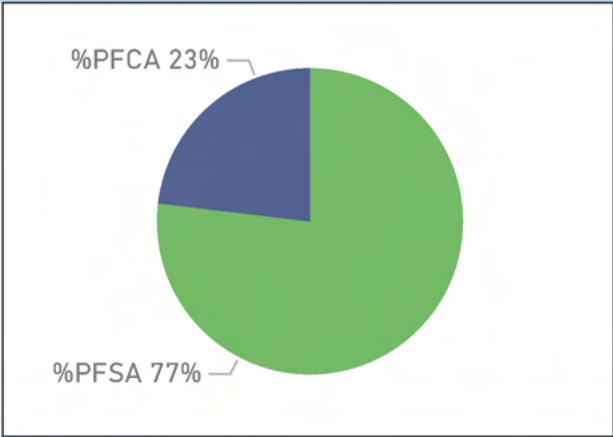
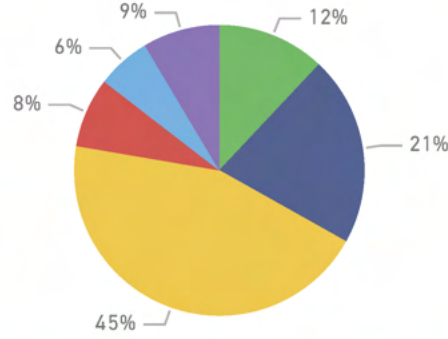
Cluster: S4

22
Count of Sample

47.60
Median of Total PFAS

147.00
Max of Total PFAS

- PFBS
- PFHxS
- PFOS
- PFHxA
- PFHpA
- PFOA



S4: Sample Density



S4: Max Total PFAS



Document Path: C:\Sara_GIS_Local\KSC\PFAS\TEMPLATE\PFAS_8p15x11_landscape.mxd

APPENDIX A
FIELD NOTES

This page intentionally left blank.

Projects (continued)

07/29/20

PFAS CENTER WIDE
GAMMA LOG RECON

MG/BF/GK

PG 1 OF 5

0615 MEGAN GARCIA ARRIVE AT DEPOT
TO LOAD TRUCK.

0620 BRITTANY FOLLETT ARRIVE AT DEPOT.

0630 GREG KUSEL ARRIVE AT DEPOT.

VEHICLE: F-150 (#903)

EQUIPMENT: METAL DETECTOR, DTW METER,
MISC HAND TOOLS, STAKES.

SOW: PERFORM SITE RECON FOR
GAMMA LOGGING EVENT ACROSS
CENTER.

0645 MOBILIZE TO SITE.

0745 MG/BF/GK ARRIVE ON SITE. HELD
HEALTH AND SAFETY MEETING.

0800 MOVED TO MLPV TO INVESTIGATE
MLPV-1W009D. CONFIRMED LOCATION
AND 2" WELL DIAMETER. LOCATION
STAKED, FLAGGED, AND MANHOLE COVER
PAINTED YELLOW FOR IDENTIFICATION.

0830 MOVED TO CRHE TO INVESTIGATE
CRHE-1W0017I. CONFIRMED LOCATION AND
2" DIAMETER. ALSO CONFIRMED
CRHE-1W004D 2" DIAMETER AS WELL.
US-70', COULD USE IF NEED BE DEEPER
THAN 17I.

①

07/29/20

PFAS CENTER WIDE
GAMMA LOG RECON

MG/BF/GK

PG 2 OF 5

9:00 MG/BK/BF MOVED TO CCF. CONFIRMED
CCF-1W005D 2" DIAMETER. FLAGGED
LOCATION. CONFIRMED CCF-1W002D -
2" DIAMETER.

10:00 MG/GK/BF TO LC39A FALCON SUPPORT
BUILDING FOR SPACE X TRAINING.

11:00 MOVED TO LC39A TO INVESTIGATE
39A-DBA-1W001D. CONFIRMED LOCATION
AND 2" DIAMETER.

11:45 MOVED TO LOX AREA NEAR LC39A.
CALLED 321-861-6677 TO OPEN
GATED AREA. CONFIRMED LOX-1W001D
2" DIAMETER. LOX-1W001E (33-38'6" S)
2" DIAMETER. LOX-1W0004D WAS NOT
2" DIAMETER. - I POSSIBLY TO
REPLACE -4D.

12:30 MOVED TO SATV TO INVESTIGATE
SATV-1W0003D. CONFIRMED IT IS
ABANDONED. CHECK AREA. COULD NOT
FIND 2" WELLS IN AREA.

13:25 MOVED TO WILC. CONFIRMED
WILC-MW0008 2" DIAMETER AND
WILC-MW0078 2" DIAMETER.

(7)

07/29/20

PFAS CENTER WIDE
GAMMA LOG RECON

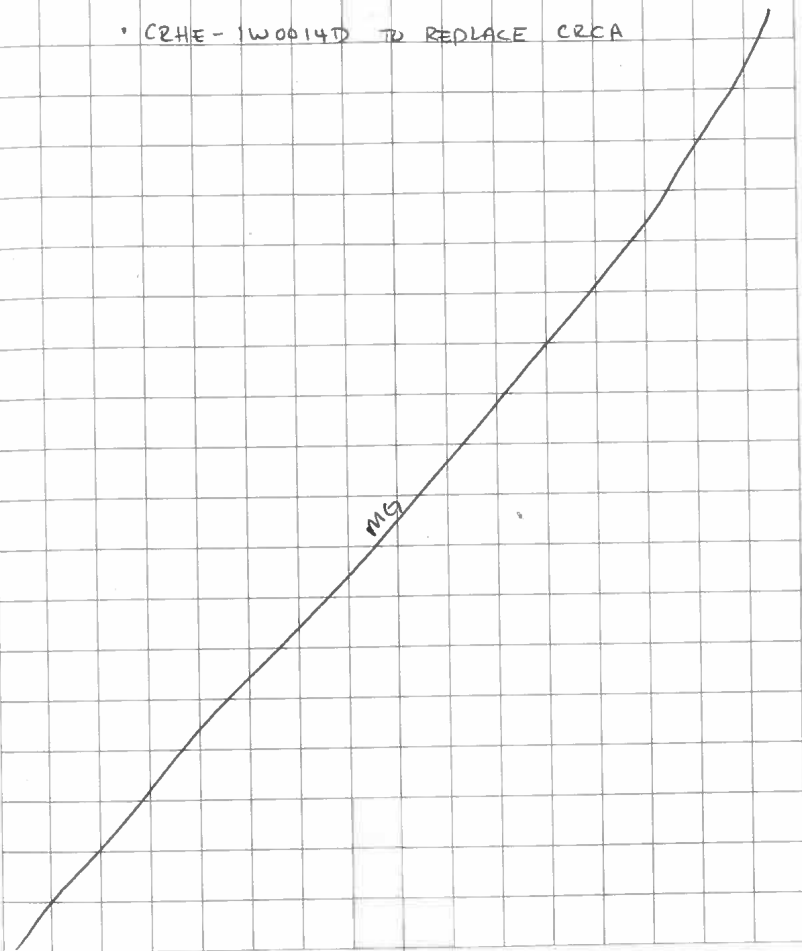
MG/BF/GK

PG 3 OF 5

14:00 MG/GK/BF OFF CENTER.

15:15 MG/GK/BF ARRIVE AT DEPOT

- NEED TO FIND SATV REPLACEMENT.
- CAN LOX-1W001E REPLACE LOX-1W0004D.
- 39A-DBA-1W0002E
- CRHE-1W0014D TO REPLACE CRCA



(3)

07/30/20

PFAS CENTER WIDE
GAMMA LOGS RECON

MG/GK

PG 4 OF 5

06:15

MEGAN GARCIA & GREG KUSEL ARRIVE
AT DEPOT.

06:20

MG/GK MOBILIZE TO SITE.

07:35

ARRIVE ON SITE. HELD H'S MEETING.

WEATHER: 78°C, HOT, HUMID

08:10

DROVE TO CCB. CONFIRMED WELL
CCB-MW0009D 2" WELL.

08:15

DROVE TO FDSA. CONFIRMED RW0003
WAS 4" DIAMETER. FOUND RW0001.
CONFIRMED IT WAS 4" DIAMETER.
VERY MUDDY / SWAMPY. CANNOT TAKE
VEHICLE TO WELLS.

09:36

DROVE TO MLPV AREA TO FIND SATV
WELL REPLACEMENT. FOUND PRES-1W0008I
SOUTH OF VAB. CONFIRMED 2". 42' b/s.
WILL USE IN PLACE OF SATV-1W0003D

09:45

DROVE TO GSR4. CONFIRMED GSR4-MW0021S
2". CONFIRMED GSR4-MW005B 2" DIAMETER.

09:50

DROVE TO GSSP. FOUND EW0001. CONFIRMED
IT WAS 4" DIAMETER. ABOUT 19' b/s TOTAL DEPTH
ALSO FOUND POSSIBLY AS-5 ABOUT 20' b/s.
TOTAL DEPTH.

10:10

DROVE TO POL. FOUND POL-MW0009Z.
CONFIRMED 2" DIAMETER. POL-MW0009D

07/30/20

PFAS CENTER WIDE
GAMMA LOGS RECON

MG/GK

PG 5 OF 5

NEAR POL-MW0009Z. CONFIRMED IT WAS
2" DIAMETER AS WELL. TO 50' b/s. ADD
TO GAMMA LOG LIST.

10:50

DROVE TO CHP. FOUND CHP-MW0017.
CONFIRMED 2" DIAMETER AND ABOUT 47' b/s
TOTAL DEPTH.

11:10

DROVE TO O.C. FOUND O.C-MW0005E.
CONFIRMED IT WAS 2" DIAMETER. CONFIRMED
NO OTHER WELLS TO RECON.

11:30

MG/GK MOBILIZE TO DEPOT.

- ADD POL-MW0009Z
- ADD GSSP AS WELL.
- ADD PRES-1W0008I / REMOVE SATV-1W0003D

6/5/20 RSC - PFAS Gamma logging GK
JM CL

pg. 1 of 2

0800 Greg Kusel and Sonathan Moskal meet at RSC Badging office, enter facility together to head to MLPV-IW0009D.

0820 GK + JM arrive at MLPV-IW0009D, Tailgate and go over SOW.

0845 locate MLPV-IW0009D and begin to set up equipment.

0850 Chad Lee onsite, Tailgate.
MLPV-IW0009D

DTW (hr)	Time	TOC EL.	Bottom
4.23	0904	- 0.1 ft	~ 50 ft

0920 begin gamma logging (less ^{moving} than 15 Fpm)

0935 Set up Spectral gamma.

0943 send down spectral gamma probe, - Troubleshoot equipment

1027 finish Spectral gamma Deployment.

1040 Stand down for phase 2 ^{lightning} warning

1110 phase 2 clear, Finish at IW0009D. Drive to CCF-IW0002D.

1120 open CCF-IW0002D. (Steel casing)

DTW	Time	TOC EL.	Bottom
3.35	1127	- 0.22	~ 77 ft

1135 begin gamma logging.

6/5/20 RSC - PFAS Gamma logging GK CL
SM

pg. 2 of 2

1145 Raise gamma logging Tool.

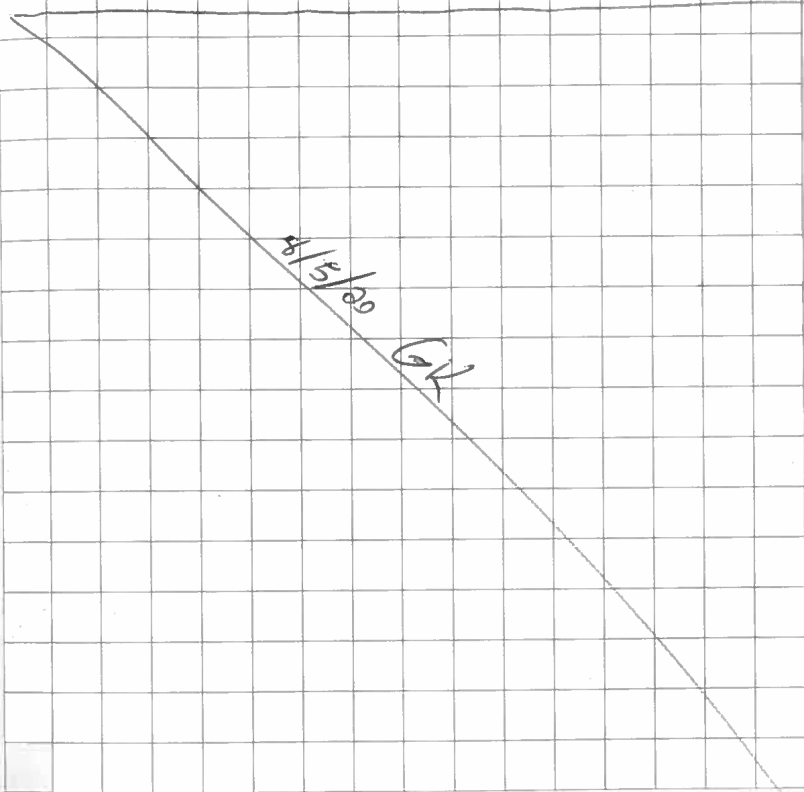
1150 Stand down for phase 2 warning.

1240 JM finishes collecting data with Spectral gamma Tool while sitting inside vehicle. Continue to stand down.

1300 CL offsite.

1315 GK + JM can work off due to storms.

1320 GK + JM offsite.



8/6/20 KSC - PFAS Gamma Logging

GK BF
JM

pg. 1 of 4

0700 Greg Kusel, Brittany Follett, and
Jonathan Moskal arrive at the
KSC bedding center. Drive to CRHE.

0720 GK, BF, JM RT CRHE. GK conducts
tailgate.

0725 open CRHE-IW0017I

DTW	Time	TOC EL.	BOTTOM
2.40	0730	-0.17	34.20

0740 begin gamma logging at ~~CRHE~~ ^{CRHE-IW0017I}

0745 bring up gamma log tool.

0755 Move to CRHE-IW0014D

DTW	Time	TOC EL.	BOTTOM
2.48	0800	-0.32	70.35

0810 begin gamma logging at CRHE-IW0014D

0815 bring up gamma log tool.

0825 switch to spectral tool.

0830 send down spectral to 61.58'

0836 begin collecting spectral data.

0842 bring up spectral tool.

0855 Move to O-C-MW0005I.

0908 open O-C-MW0005I

DTW	Time	TOC EL.	BOTTOM
7.03	0909	-0.27	43.79

0916 begin gamma logging at O-C-MW0005I

8/6/20 KSC - PFAS Gamma Logging

GK BF
JM

pg. 2 of 4

0925 bring up gamma log tool.

0935 switch to spectral tool.

0938 send down spectral tool to 7.60'

0943 bring up spectral tool.

0950 move equipment from JM car to
BF truck.

0957 Move to CHP-MW0017.

1010 open CHP-MW0017.

DTW	Time	TOC EL.	BOTTOM
3.88	1020	-0.30	47.40

1025 begin gamma logging at CHP-MW0017.

1030 bring up gamma log tool.

1045 Escort JM offsite.

1100 GK + BF break for lunch.

1130 GK + BF check SpaceX office to
see if LOX area is accessible.

no one at office. head to CLB-MW0009D.

1200 GK + BF check in at K7-0418.

Meet Ryan O'Meara at CLB area.

1215 open CLB-MW0009D.

DTW	Time	TOC EL.	BOTTOM
above TOC	1225	-0.27	100 +

1236 begin gamma logging at CLB-MW0009D

1250 bring up gamma log tool.

(9)

8/6/20 KSC - PFAS Gamma Logging ^{GK BF}

pg. 3 of 4

1305 Switch to Spectral tool.

1310 Send down Spectral to 65'.

1317 Collect Spectral data.

1322 bring up Spectral tool.

1325 Ryan offsite

1345 Check out of K7-0418

1350 GK + BF move to PRES-IW0008I.

1400 open PRES-IW0008I

DTW	time	TOC EL	Bottom
-----	------	--------	--------

4.71	1405	-0.35	43.31
------	------	-------	-------

1429 begin gamma logging at PRES-IW0008I.

1437 bring up gamma log tool.

1455 Move to GSRV-MW0002IS.

1500 open GSRV-MW0002IS. (stick-up)

DTW	time	TOC EL	Bottom
-----	------	--------	--------

4.50	1505	+3.00	32.41
------	------	-------	-------

1515 begin gamma logging at well.

1518 bring up gamma log tool.

1528 Move to GSRV-MW0058I.

1530 open GSRV-MW0058I.

DTW	Time	TOC EL	Bottom
-----	------	--------	--------

1.35	1535	-0.38	39.63
------	------	-------	-------

1543 begin gamma logging at well

1553 bring up gamma log tool.

8/6/20 KSC - PFAS Gamma Logging ^{GK BF}

pg. 4 of 4

1600 Switch to Spectral tool.

1605 Send Spectral tool to 25.58'.

1610 bring up Spectral tool.

1615 pack up equipment.

1630 GK and BF offsite.

8/6/2020

GK

8/7/2020 KSC - PFAS Gamma Logging GK BF

pg. 1 of 3

0700 Greg Kusel and Brittany Follett meet at KSC Badging Center.

Complete Tailgate meeting and go over SOW.

0715 Move to and set up equipment at BSSP - Ewood1 (4" well)

DTW	time	TOL EL	BOTTOM
2.79	0732	-0.48	19.78

0741 begin gamma logging at BSSP-Ewood1.

0743 bring up gamma log tool.

0750 move to POL-MW0009I.

Contacted Pat Fulton about work.

0800 open POL-MW0009I.

DTW	time	TOL EL	Bottom
3.33	0806	-0.19	29.26

0812 begin gamma logging at POL-MW0009I.

0819 bring up gamma log tool.

0823 move to POL-MW0009D.

0824 open POL-MW0009D

DTW	time	TOL EL	BOTTOM
3.42	0830	-0.18	51.30

0830 begin gamma logging at POL-MW0009D.

0835 bring up gamma log tool

0850 move to CCF-IW0005D.

8/7/20 KSC - PFAS Gamma Logging Pg. 2 of 3 GK BF

0927 open CCF - IW0005D (Steel casing)

DTW	Time	TOL EL	Bottom
7.68	0928	+2.34 0.25 GK	EL-35.38 79.39

0938 begin gamma logging at CCF-IW0005D.

0948 bring up gamma log tool.

1000 pack equipment back on hand cart to bring back to trucks.

1015 GK + BF check in at K7-0418.

1030 move to former drum storage area.

1045 load equipment on cart to bring to wells.

1110 open FDSA-RW0003.

DTW	time	TOL EL	Bottom
1.65	1115	+1.01	22.57

1125 begin gamma logging at FDSA-RW0003.

1135 run gamma logging a second time.
- spike at 12.5'

1150 switch to spectral tool.

1155 begin collecting spectral data. (13')

1205 open FDSA-RW0001

DTW	time	TOL EL	Bottom
7.19	1212	+0.85	24.61

1218 begin gamma logging at FDSA-RW0001.

1220 bring up gamma log tool.

1225 move equipment back to trucks by cart.

8/7/2020 KSC - PFAS Gamma Logging ^{pg. 3 of 3} GK BF

1300 GK + BF ~~ok~~ Signed out of KT-0418.

- break for lunch

1335 move to Wilson's Corner.

1350 open WILC-MW0068

DTW	Time	TOC EL	BOTTOM
-----	------	--------	--------

3.85	1354	+1.34	46.14
------	------	-------	-------

1400 begin gamma logging at WILC-MW0068.

1404 bring up gamma tool.

1410 move to WILC-MW0078.

1415 open WILC-MW0078

DTW	Time	TOC EL	BOTTOM
-----	------	--------	--------

4.91	1420	+2.00	72.80
------	------	-------	-------

1435 begin gamma logging at WILC-MW0078.

1440 bring up gamma log tool

1500 decon equipment and pack up.

1510 GK + BF OFFSITE.

8/7/2020

GK

9/16/20

KSG-PFAS Transducer Install
PS 1 of 5

BF/CLK/CL

0630 Brittany Follett and Greg Kusel meet
at depot to load truck

Vehicle: F-150 (#932)

Equipment: Metal Detector, DTW, meter,
misc hand tools, PVC pipes, well caps

SOW: Install transducers and Barotrolls
across center

0645 Mobilize to site

0800 Meet Chad Lee at badging office.

Held H+S meeting weather 89°F cloudy

0820 Mobilize to KARS PARK 2 to install Barotroll

0835 Mobilize to KARS PARK 1 to install Barotroll

~~0930~~

0850 Mobilize to CCF to install Barotroll

0910 Mobilize to CHRE to install
transducers

1018 Install transducer at CHRE-IW0014D

1029 Install transducer at CHRE-MW0047

1232 Install transducer on outfall structure
in retention pond by industrial area

1415 Install transducer on SLF outfall structure

1504 Install transducer on stormwater feature
at RO-0665 P1-P4

1554 Install transducer at FDTL-IW0042

Pg 2 of 5
Transducer Info for Both Days

Well	Time	DTW	S/N	Trans Depth	TD
KARS 2	Barro 1		643275		
KARS 1	BARO 2		549497		
CCF	BARO 3		540237		
CHRE-IW0014D	1018	7.31	652046	25.62	70
CHRE-MW0047	1029	1.30	582581	21.20	24.91
Industrial Area outfall	1232	3.73	651688	5.50	5.89
SLF outfall	1415	3.26	650407	8.05	8.06
RO-CWS P1-P4	1504	1.57	643821	3.72	4.26
FDTL-IW004Z	1554	5.02	582513	17.01	24.69
09/17/20					
WILL-MW0007	0830	4.81	59112	20.15	26.85
FDSA-MW2152	0958	5.55	651437	14.83	17.11
FDSA-MW0034	1009	4.49	614035	20.05	50.75
CCF-IW0039	1135	8.47	651633	23.00	53.03
CCF-IW0044	1153	6.25	572777	20.05	53.05
CCF-MW0012D	1204	2.63	651378	20.00	78.85
FCDL-MW001	1243	9.15	651387	14.90	16.87
CHP-MW0014	1314	3.43	643860	17.95	46.29
LETE-MW005	1501	6.04	582542	21.00	26.79
HMFN-MW0016	1518	3.47	651620	16.05	17.48
HMF-NLP ^{IW00} ₁₀₂	1549	0.19	652042	20.08	72.70
POL-MW009D	1601	3.11	555444	22.90	50.28

09/17/20 KSC - PFAS Transducer Installation Pg 3 of 5 BF/GK

0700 Brittany Fillett and Greg Kusel meet at depot to load truck

Vehicle: F-150 (#932)

Equipment: DTW meter, metal detector
misc. hand tools

Sow: Install transducers across
Center

0710 Depart depot for site

0800 Arrive on-site. Held H+S meeting.

0830 Install transducer at WILL-MW0007

0915 Arrive at FDSA to install transducer at - MW1552

- well is a 3/4 inch well attempted to place transducer in well, but would not go down/fit

- called Megan Garcia to find new well to replace - decided on - MW2152 (1-inch well)

0950 Install transducer at FDSA-MW2152

1009 Install transducer at FDSA-MW0034

1020 Attempt to install transducer at FDSA-MW17D3

- 3/4-inch well with spigot

- called MGT to find replacement well

09/17/20

PFAS - Transducer Installation
Pg 4 of 5

BF/GK

- All potential wells were 3/4 inch wells or had other obstructions
- MG called Matthew Zenker to determine a replacement well in a different area on the center.
- Decided to replace well with POL-MW009 located in the industrial area.

1135 Install transducer at CCF-IW0039

1153 Install transducer at CCF-IW0044

1206 Install transducer at CCF-MW120

1243 Install transducer at FDC-MW001

1314 Install transducer at CHP-MW0014

1330 GK Samples the Groundwater Protection (Driller) water tank for PFAS

- Decon Sprayer and Field Blank were also sampled for PFAS

1400 Samples submitted to SGS courier for analysis

1501 Transducer installed at LETF-MW0005

1518 Install transducer at HMFN-MW0016

1549 Located and installed transducer in HMF-NLP-IW00102

09/17/20

PFAS - Transducer Installation
Pg 5 of 5

BF/GK

1401 Install transducer at POL-MW009D - Replacement well for the FDSA-MW17D3

1630 Pick up Dig Permits from office building by CCF.

1645 End of day. Depart Site

10/6/20 PFAS GW Gauging
Pg. 1 of 2

0730 GK, BF, MG, JB, CM at
The depot to load gear.

0830 Crew meets with CL, DS, EH
at the Badging office.

CONDUCT tailgate to cover
Safety topics and SOW.

0915 crew at LES to organize
gear and calibrate DTW meters.

0925 Crew completes initial cal.

	<u>DTW</u>
Group 1	3.80
Group 2	3.80
Group 3	3.80
Group 4	3.80

0930 Crew departs LES to begin
GW gauging.

1200 Crew meets back at LES
to complete a mid-day calibration

	<u>DTW</u>	
Group 1	3.79	
Group 2	3.79	
Group 3	3.79	avg 3.78
Group 4	3.79	

1223 DEPART TO CONTINUE W/ EVENT.

Continued on next page

10/6/20 PEAS GW Gauging

pg. 2 of 2

1615 Crew meets at LES ~~OK~~
After completing the gauge
event to perform final
calibration.

1620

DTW

Group 1 3.79

Group 2 3.80

Group 3 3.79

Group 4 3.80

1645 Crew offsite.

10/6/20

OK

Group 1

Industrial Area

10/6/20 TUESDAY CHRIS MARSHALL (CM) AND GREG KUSEL (GK), NCCOM

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
CGO-MW0006	13:38	13:44	3.87	-
CGO-MW0023	13:35	13:42	1.75	-
CHP-MW0014	14:00	14:04	2.72	NEEDS NEW PAD.
CHP-MW0015	13:58	14:02	2.45	-
CM_S-MW00051	14:38	14:48	2.69	-
CM_S-MW0044	14:41	14:46	2.80	ACROSS wet ditch
CM_S-SDJ-MW000111	14:29	14:33	2.91	BULL ANTS
EDL-MW0004	11:30	11:35	4.65	-
HMF-NLP-IW0001D2	10:40	10:53	-	Artesian. not trip
HMF-NLP-IW00031	10:50	10:55	2.13	not Knee deep water. STICK UP
HMF-NLP-IW00041	10:45	10:58	2.69	STICK UP
HMPN-MW0009	-	-	-	System running - too much pressure to collect reading
HMPN-MW0016	11:22	11:25	4.28	BULL ANTS - STICK UP
HMPN-MW0026	11:10	11:19	0.49	SYSTEM RUNNING - NEEDS SPARKING IN AREA
LETF-MW0002	12:53	12:56	5.40	GK CHECKED IN AT OFFICE
LETF-MW0005	13:15	13:18	5.55	-
M_O-MW0004	14:19	14:22	1.33	NEEDS NEW CAP, BAD BULL ANTS, ACROSS wet ditch
M_O-MW0006	14:15	14:24	3.21	-
M505-MW0013	13:03	13:06	5.33	-
M505-MW0022	13:13	13:19	5.32	-
ORSY-EXC-MW00011	15:06	15:10	2.52	STICK UP OK
ORSY-EXC-MW00031	15:04	15:08	3.99	- STICK UP
POL-MW0009D	14:54	14:59	2.50	-
POL-MW0009S	14:52	14:57	2.63	-
POL-MW00331	15:14	15:19	3.20	-
PSB-MW00031	13:30	13:32	3.09	-
SSPF-MW0006	11:46	11:48	6.16	-
SSPF-MW0017	12:38	12:41	3.00	-
SW3-MW0001	15:34	15:40	4.52	-
SW3-MW0009	15:30	15:36	5.01	-
VPF-MW0001S	09:50	10:21	3.36	TOP OF STICKUP DETACHED BUT ON
VPF-MW00071	10:11	10:16	0.99	CRACKED PACIC, NEARLY VULNERATION
IA stilling well	10:30	10:33	3.40	-

Group 2

Southwest/Central

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
CSES-MW00121	12:32	12:44	0.57	
CSES-MW00175	12:36	12:41	2.30	
CRCA-MW0002	12:50	12:50 12:55	2.30 1.74	
CRCA-MW0005A	12:48	12:48 12:53	2.21	
CRHE-IW0014D	13:15	13:21	1.94	
CRHE-MW0047	13:27	13:27	1.93	
CRHE-MW0051	13:23	13:28	0.90	
MW 5 IEHF-MW0001	14:38	14:45	3.79	
MW 6 IEHF-MW0005	14:40	14:46	1.34	→ COULD NOT FIND DOOB, CAP MARKED 0006
FTDL-IW0004I	13:43	13:48	4.46	
FTDL-IW0011I				* BRUSH TOO THICK
GSRV-MW0045				
GSRV-MW0051				
GSSP-MW0019	14:51	14:56	1.98	
GSSP-MW0034	15:29	15:35	4.28	
GSSP-MW0053	14:58	15:03	1.98	
RRLF-MW0038I	11:10 11:18	11:23	3.37 3.62	
RRLF-MW0040I	10:56	11:01	3.17	6 inch PVC stick up
RRLF-MW0042I	11:34	11:39	2.62	
SDSA-MW0007				
SDSA-MW0019	11:51	11:56	1.98	
SFOC-IW0001S	13:06	13:11	2.71	
SFOC-IW0006S				* COULD NOT LOCATE, POSSIBLY UNDERWATER
VCMA-MW0002				

RRLF 391 - 11:10/11:15/3.37

Group 3

Central (VAB+CCF)

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
516S-MW0012	09:45	10:12	8.98	
516S-MW0021	09:45	10:00	8.61	
516S-MW0022	09:50	09:55	6.75	
CCB-MW0010D	10:30	10:37	0.00	
CCB-MW0064	10:48	10:54	1.88	
CCB-MW0096	10:50 11:30	10:54 11:30	2.34 2.34	Artesian (Shot water into air)
CCB-MW0098	10:57	11:02	-0.00	Artesian (Shot water into air)
CCB-MW0109	11:10	11:13	-0.00	
CCF-IW0002D	11:48	11:54	1.87	
CCF-IW0008ID	12:40	12:53	3.45	
CCF-IW0012D	11:56	11:59	1.65	Broken Pad
CCF-IW0034	12:44	12:50	3.52	
CCF-IW0039	12:38	12:41	8.24	
CCF-IW0044	12:32	12:38	5.64	Loose Pad
CCF-IW0046	12:38	12:52	9.49	
CCF-IW0062	11:32	11:38 11:38	5.61	
LES-IW0002S	09:15	09:32 09:32	4.72	
LES-IW0011S	09:15	09:30 09:30	3.80	
MLPV-IW0001D	13:04	13:09	2.81	
MLPV-IW0009I	13:12	13:17	3.15	
OPF3-IW0006S	13:31	13:36	2.41	
PCCA-MW0007	14:05	14:10	4.12	
PCCA-MW0017	14:00	14:05	3.18	
PRES-IW0002D	14:21	14:33	3.61	
PRES-IW0007I	14:16	14:21	3.05	
PRES-IW0008I	14:43	14:48	4.22	
SATV-IW0009I	13:48	13:54	3.78	
TPF-MW0001	13:35	13:40	4.48	
VABU-IW0006D	14:01 14:01	14:07 14:07	3.41 3.41	
WCPS-IW0005S	13:20	13:24	2.35	
WCPS-IW0006S	13:22	13:28	2.28	
SFOC-IW0000S	15:05	15:10	2.47	
SFOC-IW0004S	15:07	15:17	0.92	
SDSA-MW0007	15:52	15:57	2.28	
SDSA-MW0019	15:53	15:58	2.63	

Could not locate VCMA-MW0002 as it looks like a new building was just built adjacent to it, therefore it is probably destroyed or abandoned

Group 4

North - Scattered

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
39A-MW0011	15:10	15:17	2.81	
39A-MW0043	15:12	15:15	2.62	
39B-ECS-IW00081	13:44	13:47	0.58	
39B-MW0011	13:26	13:28	2.91	
39B-MW0020	13:34	13:35	0.56	
DAST-MW0003	10:07	10:09	7.61	
FCDC-MW0001	12:42	12:49	7.35	
FCDC-MW0002	12:44	12:46	7.75	
FDSA-MW0014S2	14:37	14:43	2.07	
FDSA-MW0015S2	14:39	14:41	2.05	
FDSA-MW0036	14:49	14:52	4.17	
FDSA-MW0037	nm			WASP NEST
FS6-MW0001	nm			UNDER WATER
FS6-MW0003	14:12	14:14	4.01	
LC390GA-MW0002	11:40	11:48	0.35	
LC390GA-MW0005	11:39	11:41	0.46	
UNOA-MW0001				CNL
WILC-MW0087	10:41	10:45	4.72	
WILC-MW0089	10:44	10:47	4.33	
UAB OUTFALL	15:34	15:35	1.26	
SLF OUTFALL	13:48	13:50	3.00	
FDSA-MW0021S2	14:32	14:33	5.21	

2/1/21

AFAS - GW Gauging

pg. 1 of 2

0800

crew arrives at LES area

- Safety meeting
- organize equipment
- gauge LES - ~~add~~ IWOODS together
- crew includes:

Group 1: Greg Kusel
Chris Marshall
Dustin Slater

Group 2: James Bradford
Chad Lee

Group 3: Madan Parsoyan
Megan Garcia

Group 4: Brittany Follett

gauge LES - IWOODS (calibration)

08:15

Group 1: 5.98 ← DTW (Fr)

Group 2: 5.98

Group 3: 5.98

Group 4: 5.98

0820

crews depart LES to begin gauging wells.

11:55

crews re-converge LES to perform midday WL motion cal-check

Group 1 5.98

Group 2 5.98

Group 3 5.98

Group 4 5.98

12:05

crews depart to continue gauging

2/1/21

14:20

14:45

15:00

15:45

2/1/21 PFAS - GW Gauging
pg. 2 of 2 cm/GK

14:20 ALL TEAMS BACK TO LES TO CAL OUT

GROUP 1 5.98

GROUP 2 5.98

GROUP 3 5.98

GROUP 4 5.98

14:45 AE COM personnel OFFSITE.

15:00 GK + CM AT CCF TO LOWER pH
IN SELECT IDW DRUMS.

<u>Drum ID</u>	<u>Initial pH</u>	<u>Final pH</u>
222816	8.78	6.2
222818	9.18	6.2
222819	11.69	6.2
222820	9.50	6.2

15:45 GK + CM OFFSITE.

~~2/1/21~~

~~GK~~

2/1/21 Greg Kusel + Chris Marshall

Group 1

Industrial Area

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
CGO-MW0006	13:19	13:23	5.68	
CGO-MW0023	13:18	13:25	3.76	
CHP-MW0014	11:41	11:45	4.70	WELL CAP BROKEN BY MOWER, TRANSDUCER DOWN WELL! - Cap replaced, transducer recovered 13:30
CHP-MW0015	11:35	11:39	4.49	
CM_S-MW00051	13:01	13:04	4.07	
CM_S-MW0044	13:01	13:10	4.12	
CM_S-SDJ-MW000111	13:12	13:15	4.28	BULL ANTS!
EDL-MW0004	10:10	10:13	6.37	
HMF-NLP-IW0001D2	09:02	09:05	1.22	
HMF-NLP-IW00031	09:03	09:06	3.58	
HMF-NLP-IW00041	09:01	09:01	4.22	NO CAP BUT PROTECTED BY PVC "U"
HMPN-MW0009	09:15	09:28	4.89	
HMPN-MW0016	09:21	09:26	7.05	transducer line cut! 14:06 ATTEMPTS TO FISH TRANS. OUT - HAD A TUTOR TECH
HMPN-MW0026	09:17	09:30	3.03	
LETF-MW0002	11:03	11:07	5.08 7.15	CK HAS SPECIAL ACCESS, GOES SOLO CARD + CALLED, THEY HAVE IT.
LETF-MW0005	10:38	10:41	7.35	
M_O-MW0004	11:26	11:29	3.62	BULL ANTS!
M_O-MW0006	11:20	11:24	5.33	TUBING NEEDED
M505-MW0013	10:52	10:55	7.04	
M505-MW0022	10:43	10:47	7.05	
ORSY-EXC-MW00011	12:52	12:56	4.02	
ORSY-EXC-MW00031	12:53	12:57	7.27	
POL-MW0009D	12:46	12:50	4.35	
POL-MW0009S	12:46	12:50	4.18	
POL-MW00331	12:28	12:30	5.07	
PSB-MW00031	10:32	10:35	5.08	
SSPF-MW0006	10:18	10:21	9.59	
SSPF-MW0017	10:24	10:27	4.28	
SW3-MW0001	12:36	12:40	6.43	
SW3-MW0009	12:34	12:41	6.95	
VPF-MW0001S	08:42	08:45	6.07	
VPF-MW00071	08:36	08:39	2.60	
IA Outfall	08:48	08:51	4.22	
M505-MW0020	10:45	10:49	6.66	

Group 2

Southwest/Central

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
CSES-MW0012I	11:34	11:35	2.15	
CSES-MW0017S	11:36	11:37	3.34	
CRCA-MW0002	11:04	11:06	4.61	
CRCA-MW0005A	11:02	11:03	5.03	
CRHE-IW0014D	10:49	10:49	3.68	
CRHE-MW0047	10:55	10:55	3.77	
CRHE-MW0051	10:53	10:52	2.56	
EHF-MW0001	11:20	11:20	4.98	
EHF-MW0005	11:21	11:21	4.57	
EHF-MW0006	11:17	11:19	2.59	
GSRV-MW0045	8:37	8:38	4.08	
GSRV-MW0051	8:31	8:34	2.99	
GSSP-MW0019	10:39	10:40	4.06	
- GSSP-MW0034	10:29	10:30	6.30	
GSSP-MW0053	10:35	10:35	4.00	
PRES-IW0002D	11:54	11:55	4.58	↳ NEXT TO 2 nd satellite
PRES-IW0007I	11:48	11:48	3.97	
PRES-IW0008I	11:45	11:46	5.38	
RRLF-MW0038I	9:28	9:30	5.66	
RRLF-MW0039I	9:39	9:41	5.12	→ (28.5032883, -80.6865398)
RRLF-MW0040I	9:04	9:05	5.28	
RRLF-MW0042I	9:08	9:09	4.64	
SDSA-MW0007	10:10	10:14	3.53	
SDSA-MW0019	10:08	10:09	3.91	
VCMA-MW0002				→ COULD NOT LOCATE

7E-1148: 3.97

2D: 1154 / 4.58

Group 3

Central (VAB+CCF)

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
5165-MW0012	08:20 08:24	08:36	10.75	
5165-MW0021	08:25	08:38	10.82	
5165-MW0022	08:31	08:41	8.11	
CCB-MW0010D	08:52	08:57	Artesian	
CCB-MW0064	09:02	09:13	4.00	
CCB-MW0096	09:00 09:30	09:00 09:35	09:00 4.48	
CCB-MW0098	09:06	09:11	2.75	
CCB-MW0109	09:23	09:28	5.95	
CCF-IW0002D	09:55	10:25	09:55 4.00	
CCF-IW0008ID	09:58	10:20	5.17	
CCF-IW0012D	09:44	09:49	3.33	Pull Transducer.
CCF-IW0034	09:56	10:22	4.65	
CCF-IW0039	10:03	10:09	9.42	Pull Transducer
CCF-IW0044	10:02	10:00 10:07	7.48	Pull Transducer
CCF-IW0046	10:00	10:00 10:14	12.53	.
CCF-IW0062	09:37	09:42	7.38	
FDTL-IW0004I	10:45	10:50	5.84	Pull Transducer
FDTL-IW0011I	11:02	11:08	5.33	
LES-IW0002S	08:02	08:19	6.98	
LES-IW0011S	08:00	08:17	5.98	Common Well Everyone Gauged.
MLPV-IW0001D	13:08	13:13	4.29	
MLPV-IW0009I	13:02	13:07	5.28	
OPF3-IW0006S	12:50	12:57	4.83	
PCCA-MW0007	11:45	11:50	5.95	
PCCA-MW0017	11:52	11:57	5.25	
SATV-IW0009I	12:18	12:23	5.78	
SFOC-IW0001S	11:35	11:40	5.22	
SFOC-IW0004S	11:34	11:42	3.41	
SFOC-IW0006S	11:28	11:33	4.73	Location on Google Earth File is incorrect.
TPF-MW0001	12:25	12:30	6.91	
VABU-IW0006D	12:12	12:17	5.28	
WCPS-IW0005S	13:15	13:20	4.15	
WCPS-IW0006S	13:14	13:21	4.46	

10:20: Pulled Baro Transducer at CCF

Group 4

North - Scattered

Well ID	Time opened	Time Gauged	DTW (ft bls)	Comments
39A-MW0011	10:56	10:58	3.81	
39A-MW0043	10:50	10:54	3.98	
39B-ECS-IW00081	12:43	12:45	6.17	
39B-MW0011	12:34	12:56	7.91	
39B-MW0020	12:50	12:31	5.81	
DAST-MW0003	-	-	-	ABANDONED
FCDC-MW0001	11:30	11:32	9.60	PULLED AT 11:32
FCDC-MW0002	11:31	11:33	8.34	PULLED AT
FDSA-MW0014S2	13:52	13:53	3.15	PULLED AT
FDSA-MW0015S2	13:53	13:54	3.52	
FDSA-MW0021S2	13:47	13:48	6.61	PULLED AT 13:47
FDSA-MW0036	13:42 13:43 Mo	13:43	5.59	PULLED AT 13:43
FDSA-MW0037	13:03	-	-	WASPS NEST
FS6-MW0001	10:28	-	-	UNDER WATER
FS6-MW0003	10:22	10:22	1.99	
LC390GA-MW0002	10:12	10:16	1.11	
LC390GA-MW0005	10:15	10:17	2.11	
UNOA-MW0001	11:19	11:21	3.24	
WILC-MW0087	9:19	9:22	6.48	PULLED AT 9:22
WILC-MW0089	9:16	9:14	6.25	
SLF Outfall	9:48	9:49	3.94	
VAB Outfall	8:24	8:26	2.27	PULLED TRANSDUCER C B 26

Borehole Geophysics Field Form

DATE: 8/5/20 Initials: _____

Page: _____ of 1

Site Name	KSC
Location	Merritt Island, FL
Project Number	60615673.4

Boring ID	MLVP-1W0009D
-----------	---------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.	X
<input type="checkbox"/>	Probe, Optical Televiwer	X
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	X
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	1
<input checked="" type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	2
<input type="checkbox"/>	Probe, 3 Arm Caliper	X

Recorded by	JM	Date	8/5/20
Checked by		Date	

Casing Height	TOC 0.1' BELOW GROUND SURFACE
Depth to Water	4.25

*bgs = below ground surface
* btoc = below top of casing (

Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.		
X		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
X		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START: 0920		
END: 0930		
Decon Method	ALCONOX	
Date	8/5	8/5
Time	0905	0935

Probe, Optical Televiwer		
X		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
X		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
START: 1050		
END: 1055		
Decon Method	ALCONOX	
Date	8/5	8/5
Time	1040	1100

Borehole Geophysics Field Form

DATE: 8/5/20 Initials: _____

Page: _____ of 1



Site Name	KSC
Location	Merritt Island, FL
Project Number	60615673.4

Boring ID	CCF-1W0002D
-----------	--------------------

Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.	X
<input type="checkbox"/>	Probe, Optical Televiwer	X
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	X
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	1
<input checked="" type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	2
<input type="checkbox"/>	Probe, 3 Arm Caliper	X

Recorded by	JM	Date	8/5/20
Checked by		Date	

Casing Height	TOC 0.23' BELOW GROUND SURFACE
Depth to Water	3.35

*bgs = below ground surface
* btoc = below top of casing (

~~Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.~~

Decon Method		
Date		
Time		

~~Probe, Temperature, Fluid Resistivity~~

Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.

START: 1140
END: 1150

Decon Method	ALCONOX	
Date	8/5	8/5
Time	1120	1155

~~Probe, Optical Televiwer~~

Decon Method		
Date		
Time		

~~Probe, 3 Arm Caliper~~

Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000

4.5' 52.5'
START: 1230 / 1240
END: 1235 / 1245

Decon Method	ALCONOX	
Date	8/5	8/5
Time	1225	1237

Borehole Geophysics Field Form

DATE: 8/6/20 Initials: GK

Page: 1 of 1

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>CRHE-IW00190</u>
-----------	---------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiwer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input checked="" type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	<u>2</u>
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/6/20</u>
Checked by		Date	

Casing Height	<u>0.32 below ground surface</u>
Depth to Water	<u>2.48 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
Start: <u>0810</u>		
End: <u>0815</u>		
Decon Method	<u>AICANOX</u>	
Date	<u>8/6</u>	<u>8/6</u>
Time	<u>0805</u>	<u>0830</u>

Probe, Optical Televiwer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Start: <u>0830</u>		
End: <u>0842</u>		
Decon Method	<u>AICANOX</u>	
Date	<u>8/6</u>	<u>8/6</u>
Time	<u>0830</u>	<u>0845</u>

Borehole Geophysics Field Form

DATE: 8/6/20 Initials: _____

Page: _____ of 1



Site Name	KSC
Location	Merritt Island, FL
Project Number	60615673.4

Boring ID	CRHE-1W0017I
-----------	--------------

Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.	X
<input type="checkbox"/>	Probe, Optical Televiwer	X
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	X
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	1
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	X
<input type="checkbox"/>	Probe, 3 Arm Caliper	X

Recorded by	JM	Date	8/5/20
Checked by		Date	

Casing Height	TOC 0.17' BELOW GROUND SURFACE
Depth to Water	2.40

*bgs = below ground surface
* btoc = below top of casing (

~~Probe, Acoustic Televiwer 2nd Gen, Top, 2cna-cent.~~

Decon Method		
Date		
Time		

~~Probe, Temperature, Fluid Resistivity~~

Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.

START: 0740
END: 0745

Decon Method	ALCONOX	
Date	8/6	8/6
Time	0735	0750

~~Probe, Optical Televiwer~~

Decon Method		
Date		
Time		

~~Probe, 3 Arm Caliper~~

Decon Method		
Date		
Time		

~~Probe, Spectral Gamma, 2SNA-S-1000~~

Decon Method		
Date		
Time		

Borehole Geophysics Field Form

DATE: 8/6/2020 Initials: OK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>D-C-NW00051</u>
-----------	--------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input checked="" type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input checked="" type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	<u>2</u>
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>OK</u>	Date	<u>8/6/20</u>
Checked by		Date	

Casing Height	<u>0.27 bgs</u>
Depth to Water	<u>7.03 btoc</u>

*bgs = below ground surface
* btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START: <u>0918</u>		
End: <u>0925</u>		
Decon Method	<u>AICONIX</u>	
Date	<u>8/6 8/6</u>	
Time	<u>0915</u>	<u>0930</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
START: <u>0938</u>		
End: <u>0943</u>		
Decon Method	<u>AICONIX</u>	
Date	<u>8/6 8/6</u>	
Time	<u>0930</u>	<u>0945</u>

Borehole Geophysics Field Form

DATE: 8/6/2020 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>CHP-MW0017</u>
-----------	-------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/6/20</u>
Checked by		Date	

Casing Height	<u>0.30</u> bgs
Depth to Water	<u>2.88</u> btoc

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
Start: <u>1025</u>		
End: <u>1030</u>		
Decon Method	<u>Aiconox</u>	
Date	<u>8/6</u>	<u>8/6</u>
Time	<u>1020</u>	<u>1035</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

Borehole Geophysics Field Form

DATE: 8/6/2020 Initials:

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>CLB-MW0009D</u>
-----------	--------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input checked="" type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input checked="" type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	<u>2</u>
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/6/20</u>
Checked by		Date	

Casing Height	<u>0.27 bgs</u>
Depth to Water	<u>ARTESIAN</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START : <u>1236</u>		
END : <u>1255</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/6</u>	<u>8/6</u>
Time	<u>1235</u>	<u>1255</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
START : <u>1317</u>		
END : <u>1322</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/6</u>	<u>8/6</u>
Time	<u>1315</u>	<u>1325</u>

Borehole Geophysics Field Form DATE: 8/6/2020 Initials: GR

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	
-----------	--



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GR</u>	Date	<u>8/6/20</u>
Checked by		Date	

Casing Height	<u>0.35 bgs</u>
Depth to Water	<u>4.71 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START : <u>1429</u>		
END : <u>1437</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/6</u>	<u>8/6</u>
Time	<u>1425</u>	<u>1440</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

Borehole Geophysics Field Form DATE: 8/6/2020 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60613673.4</u>

Boring ID GSRY-MWD002IS



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>6/8/20</u>
Checked by		Date	

Casing Height	<u>3.00 Ags (Above)</u>
Depth to Water	<u>4.50 BTWC</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.

Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity

Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.

Start: 1515
End: 1518

Decon Method	<u>Alconox</u>
Date	<u>8/6 8/6</u>
Time	<u>1512 1520</u>

Probe, Optical Televiewer

Decon Method		
Date		
Time		

Probe, 3 Arm Caliper

Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000

Decon Method		
Date		
Time		

Borehole Geophysics Field Form

DATE: 8/6/2020 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	00615073.4

Boring ID	GSRy - MW0058
-----------	---------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	1
<input checked="" type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	2
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	GK	Date	8/6
Checked by		Date	

Casing Height	0.39 bgs
Depth to Water	1.35 btoc

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START: 1543		
End: 1553		
Decon Method	ALCANOX	
Date	8/6	8/6
Time	1540	1555

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
START: 1605		
End: 1610		
Decon Method	ALCANOX	
Date	8/6	8/6
Time	1600	1615

Borehole Geophysics Field Form

DATE: 8/7/20 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>GSSP - EW001</u>
-----------	---------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/7/20</u>
Checked by		Date	

Casing Height	<u>0.48 bgs</u>
Depth to Water	<u>2.79 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
Start: <u>0741</u>		
End: <u>0743</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/7</u>	<u>8/7</u>
Time	<u>0740</u>	<u>0745</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

Borehole Geophysics Field Form DATE: 8/7/20 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>POL-MW0009I</u>
-----------	--------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/7/20</u>
Checked by		Date	

Casing Height	<u>0.19 bgs</u>
Depth to Water	<u>3.33 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START : <u>0812</u>		
End : <u>0819</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/7</u>	<u>8/7</u>
Time	<u>0810</u>	<u>0820</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

Borehole Geophysics Field Form

DATE: 8/7/2020 Initials: GK

Page: 1 of 1

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>6061567B.4</u>

Boring ID	<u>POL - MW0009D</u>
-----------	----------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/7/20</u>
Checked by		Date	

Casing Height	
Depth to Water	

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START : 0830		
END : 0835		
Decon Method	<u>Alconox</u>	
Date	<u>8/7</u>	<u>8/7</u>
Time		

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

Borehole Geophysics Field Form

DATE: 8 Initials: _____

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	60615673.4

Boring ID CCF-IW0005D



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	1
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/7/20..</u>
Checked by		Date	

Casing Height	<u>2.34 above gs</u>
Depth to Water	<u>7.68 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.

Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity

Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.

START : 0938
End : 0948

Decon Method	<u>Alconox</u>
Date	<u>8/7 8/7</u>
Time	<u>0935 0955</u>

Probe, Optical Televiewer

Decon Method		
Date		
Time		

Probe, 3 Arm Caliper

Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000

Decon Method		
Date		
Time		

Borehole Geophysics Field Form DATE: 8/7/2020 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>FDSA-RW0003</u>
-----------	--------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input checked="" type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	<u>2</u>
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/7/2020</u>
Checked by		Date	

Casing Height	<u>1.01 above gs</u>
Depth to Water	<u>1.65 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START: <u>1125</u>		
End: <u>1140</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/7</u>	<u>8/7</u>
Time	<u>1120</u>	<u>1145</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
START: <u>1155</u>		
End: <u>1209</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/8</u>	<u>8/7</u>
Time	<u>1150</u>	<u>1203</u>

Borehole Geophysics Field Form

DATE: 8/7/2020 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merrit Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>FDSA-RW0001</u>
-----------	--------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/7/20</u>
Checked by		Date	

Casing Height	<u>0.85 above gs</u>
Depth to Water	<u>1.19 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START : <u>1218</u>		
End : <u>1220</u>		
Decon Method	<u>Alconox</u>	
Date	<u>8/7</u>	<u>8/7</u>
Time	<u>1215</u>	<u>1222</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

Borehole Geophysics Field Form DATE: 8/7/2020 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	00615673.4

Boring ID	WILC - MW0068
-----------	---------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	1
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	GR	Date	8/7/20
Checked by		Date	

Casing Height	1.34 above gs
Depth to Water	3.85 btoc

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START: 1400		
END: 1404		
Decon Method	Alconox	
Date	8/7	9/1
Time	1358	1405

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

Borehole Geophysics Field Form

DATE: 8/7/2020 Initials: GK

Page: _____ of _____

Site Name	KSC
Location	Merritt Island, FL
Project Number	<u>60615673.4</u>

Boring ID	<u>WILC - MW0078</u>
-----------	----------------------



Probes Used		Order
<input type="checkbox"/>	Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.	
<input type="checkbox"/>	Probe, Optical Televiewer	
<input type="checkbox"/>	Probe, Temperature, Fluid Resistivity	
<input checked="" type="checkbox"/>	Probe, Gamma, SP, SPR 41mm, 1.61" O.D.	<u>1</u>
<input type="checkbox"/>	Probe, Spectral Gamma, 2SNA-S-1000	
<input type="checkbox"/>	Probe, 3 Arm Caliper	

Recorded by	<u>GK</u>	Date	<u>8/7/20</u>
Checked by		Date	

Casing Height	<u>2.00 above GS</u>
Depth to Water	<u>4.91 btoc</u>

*bgs = below ground surface
*btoc = below top of casing (

Probe, Acoustic Televiewer 2nd Gen, Top, 2cna-cent.		
Decon Method		
Date		
Time		

Probe, Temperature, Fluid Resistivity		
Decon Method		
Date		
Time		

Probe, Gamma, SP, SPR 41mm, 1.61" O.D.		
START: <u>1435</u>		
END: <u>1440</u>		
Decon Method	<u>Alcomox</u>	
Date	<u>8/7</u>	<u>8/7</u>
Time	<u>1433</u>	<u>1443</u>

Probe, Optical Televiewer		
Decon Method		
Date		
Time		

Probe, 3 Arm Caliper		
Decon Method		
Date		
Time		

Probe, Spectral Gamma, 2SNA-S-1000		
Decon Method		
Date		
Time		

ID	Site	Site Access Info	Location_type	Location_id	Northing	Easting
	GENERAL SERVICES ADMINISTRATION SEIZED PROPERTY (SWMU 095)	AECOM; Ryan/Chris Marshall	MONITORING WELL	EW0001 ✓	463579.9	232762.4
	PAINT AND OIL LOCKER (SWMU 067)	Tetra Tech's site; Dinh's site	MONITORING WELL	POL-MW0009I ✓	463444	233833
	PAINT AND OIL LOCKER (SWMU 067)	Tetra Tech's site; Dinh's site	MONITORING WELL	POL-MW0009D ✓	463444.07	233831.21
785	CENTRAL HEAT PLANT (SWMU 045)	Tetra Tech's site; Dinh's site; open, inactive site;	MONITORING WELL	CHP-MW0017 ✓	463985.06	233875.81
	GENERAL SERVICES ADMINISTRATION RECLAMATION YARD SW (SWMU 010)	AECOM; Mike/Chad	MONITORING WELL	GSRY-MW0002IS ✓		
	GENERAL SERVICES ADMINISTRATION RECLAMATION YARD NE (SWMU 010)	AECOM; Mike/Chad	MONITORING WELL	GSRY-MW00058 ✓	462494	232110
	OPERATIONS AND CHECKOUT BUILDING (SWMU 076)	GeoSyntec (2004); Mike Deliz	MONITORING WELL	O_C-MW0005I ✓		
899	CONTRACTORS ROAD HEAVY EQUIPMENT AREA (SWMU 055)	HGL site; Anne's site but Ryan is taking during le	MONITORING WELL	CRHE-IW0017I ✓	469919.22	233997.77
	CONTRACTORS ROAD HEAVY EQUIPMENT AREA (SWMU 055)	HGL site; Anne's site but Ryan is taking during le	MONITORING WELL	CRHE-IW0014D ✓	469515.73	233971.18
✓	MOBILE LAUNCH PLATFORM PARK SITES/VEHICLE ASSEMBLY BUILDING AREA (SWMU 056)	AECOM; Linnea	MONITORING WELL	MLPV-IW0009D ✓	471582.93	234169.89
	MOBILE LAUNCH PLATFORM PARK SITES/VEHICLE ASSEMBLY BUILDING AREA (SWMU 056)	AECOM; Linnea	MONITORING WELL	PRES-IW0008I ✓	470608	234323
	CONVERTOR/COMPRESSOR BUILDING (SWMU 089)	Tetra Tech's Site	MONITORING WELL	CCB-MW0009D ✓	471798	235613
	COMPONENT CLEANING FACILITY (SWMU 030)	HGL	MONITORING WELL	CCF-IW0002D ✓	471639	235483
	COMPONENT CLEANING FACILITY (SWMU 030)	HGL	MONITORING WELL	CCF-IW0005D ✓	471499	235158
	WILSON CORNERS (SWMU 001)	AECOM site; Ryan's site		WILC-MW0068 ✓	477681.53	229162.19
	WILSON CORNERS (SWMU 001)	AECOM site; Ryan's site		WILC-MW0078 ✓	477641.89	229243.65
	FORMER DRUM STORAGE AREA (SWMU 037)	HGL		FDSA-RW0001 ✓	473149	235274.9
	FORMER DRUM STORAGE AREA (SWMU 037)	HGL		FDSA-RW0003 ✓	473127	235283
	LAUNCH COMPLEX 39A (SWMU 008)	Tetra Tech's site	MONITORING WELL	LOX-IW0001D	473947	238216
	LAUNCH COMPLEX 39A (SWMU 008)	Tetra Tech's site	MONITORING WELL	LOX-IW0001I	473945	238217
	LAUNCH COMPLEX 39A (SWMU 008)	Tetra Tech's site	MONITORING WELL	39A-DBA-IW0001I	473827.8	238685
	LAUNCH COMPLEX 39A (SWMU 008)	Tetra Tech's site	MONITORING WELL	39A-DBA-IW0002I	473960	238725

Depth
19.74

29.26

51.30

47.40

32.41

39.63

43.79

34.20

70.35

45-50

43.31

~~105~~ 125'

77+

79.39

46.14

24.61

22.57

Notes	Site Contact Name	Site Contact Email	Contacted	Response	
	None	None	NA	NA	
Contact Alex Murphy (Tetra Tech) prior to site system for Treatment System Shutoff. Phone: 321.292.0842 Email: Alex.Murphy@tetratech.com	Elmer Burns	Elmer.burns-1@nasa.gov	Yes	Yes	Need to contact day of Dusty July 29 321-961-4324 or Pat Fulton at 321-794-8473
Contact Alex Murphy (Tetra Tech) prior to site system for Treatment System Shutoff. Phone: 321.292.0842 Email: Alex.Murphy@tetratech.com	Elmer Burns	Elmer.burns-1@nasa.gov			Need to contact day of Dusty July 29 321-961-4324 or Pat Fulton at 321-794-8473
	Chris Pike	chris.pike@tetratech.com	Yes	Yes	
	Fac Manager: Joeseeph Heggs Copy: Timothy Imka	joseph.heggs-1@nasa.gov timothy.p.imka@nasa.gov	yes		
	Fac Manager: Joeseeph Heggs Copy: Timothy Imka	joseph.heggs-1@nasa.gov timothy.p.imka@nasa.gov	yes		
	Todd Baker	todd.w.baker@nasa.gov	Yes	Yes	
Maybe we should use CRHE-IW0014D as it is 65-70 feet bis? Not sure of the diameter though. There are other options at this site that may be deeper than 35 feet as well.	Fac Manager: Mark Smith On-Site Contact: Mike Rajnish	mark.a.smith-3@nasa.gov michael.p.rajnish-1@nasa.gov	yes	Yes	
Maybe we should use CRHE-IW0014D as it is 65-70 feet bis? Not sure of the diameter though. There are other options at this site that may be deeper than 35 feet as well.	Fac Manager: Mark Smith On-Site Contact: Mike Rajnish	mark.a.smith-3@nasa.gov michael.p.rajnish-1@nasa.gov	yes	Yes	
			Yes		
This is an active site you will need to sign in at K7-0418 Mark.Jonnet@tetratech.com for system 412.921.8662	Thurman Abbott	thurman.p.abbott@nasa.gov	Yes	Yes	
Michelle Moore for Gate Code: 0560	Thurman Abbott	thurman.p.abbott@nasa.gov	Yes	Yes	
Michelle Moore for Gate Code: 0560	Thurman Abbott	thurman.p.abbott@nasa.gov	Yes	Yes	
	not needed	we have a key	NA	NA	
	not needed	we have a key	NA	NA	
There are instruction at K7-418 to check in when accessing FDSA.	Thurman Abbott	thurman.p.abbott@nasa.gov	Yes	Yes	
There are instruction at K7-418 to check in when accessing FDSA.	Thurman Abbott	thurman.p.abbott@nasa.gov	Yes	Yes	
Chris Pike - Tetra Tech - 412-302-1624; chris.pike@tetratech.com (for shut down of air sparge system) Need Tan SpaceX Badge	John Healy (Space X)	john.healy@spacex.com lc39A.pad.access@spacex.com	Yes	Yes	
Chris Pike - Tetra Tech - 412-302-1624; chris.pike@tetratech.com (for shut down of air sparge system) Need Tan SpaceX Badge	John Healy (Space X)	john.healy@spacex.com lc39A.pad.access@spacex.com	Yes	Yes	
Chris Pike - Tetra Tech - 412-302-1624; chris.pike@tetratech.com (for shut down of air sparge system) Need Tan SpaceX Badge	John Healy (Space X)	john.healy@spacex.com lc39A.pad.access@spacex.com	Yes	Yes	
Chris Pike - Tetra Tech - 412-302-1624; chris.pike@tetratech.com (for shut down of air sparge system) Need Tan SpaceX Badge	John Healy (Space X)	john.healy@spacex.com lc39A.pad.access@spacex.com	Yes	Yes	

CCB
CCF
CCF

11:20
11:21
11:22
11:23
11:24
11:25
11:26
11:27
11:28
11:29
11:30
11:31
11:32
11:33
11:34
11:35
11:36
11:37
11:38
11:39
11:40
11:41
11:42
11:43
11:44
11:45
11:46
11:47
11:48
11:49
11:50
11:51
11:52
11:53
11:54
11:55
11:56
11:57
11:58
11:59
12:00

HAND AUGER 0-5' SONIC RODS 4" + 6"

Drilling Progress							Geologic Description																
Depth	Time	FI/PI/D Reading (ppm)	Penetration Rate/ Blow Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Bor, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Texture	Comments							
							Stratigraphic Log Sketch																
							USCS/USDA Soil Classification Code																
							Clay																
							Silt																
							V. Fine Sand																
							Fine Sand																
							Medium Sand																
							Coarse Sand																
							V. Coarse Sand																
							Granular Gravel																
							Pebble Gravel																
							Cobble Gravel																
0-5	1415	100					10YR 7/1			NON	95			SA	CS	WS Q	Sand - 10YR 7/1, Tannish gray, no clay, loose, F. grained, very well sorted, < 5% organic matter, dry.						
5-10	1420	100					10YR 4/1			NON	95			SA	CS	WS Q	SAA - 10YR 4/1, WET						
10-18	1440	100					7.5YR 2.5/3			NON	50	50		SA-R		WS Q	Sand - 7.5YR 2.5/3, M-F grained						
18-20		100					10YR 4/4			NON	50	50		SA-R		WS Q	SA-R, WS, Wet. 18-20' - 10YR 4/4, Tannish brown.						
20-30	1450	100					10YR 6/1			NON	100			SA-R S		WS Q	Sand - 10YR 6/1, Light gray, loose, 5% shell marl, WS, SA-R, fine grained, wet.						
30-34.1	1570	100					10YR 6/1			NON	100			SA-R S		WS Q	30-34.1' - SAA						
34.1-35.5		100					10YR 6/1	30		LOW	70			SA		WS Q	34.1-35.5 - Clayey sand, low plastic fine grained to very fine grained						
35.5-40		100					10YR 6/1			NON	100			SA-R S		WS Q	SA, WS, 10YR 6/1, wet, 30% clay						
36-37.1		100					10YR 6/1			NON		10		A-SA 90		PS Q	35.5-40 - SAME AS 30-34.1						
																	36-37.1 - Shell Marl 90% to 100% med. grained sand.						
40-50	1540	100					10YR 6/1	40		MED	60			SA-R		WS Q	Clayey sand - low to med. plastic, 10YR 6/1, light gray, wet, fine grained, WS, SA-R, 40% clay						

90% SHELL MARL
70% ORGANIC MATTER

SHELL MARL

Boring ID: PFJ-MW0004

Boring Location Map:

Date: 9/23/20
 Client: KENNEDY SPACE CENTER
 Project No.: 60615673
 Site: TITUSVILLE, FL
 Logged By: ETHAN HOWE
 Drilling Co.: DRILL PRO LLC
 Operator: BILLY MOSS
 Drilling Method: SONIC
 Drill Bit Model: GEOPROBE 8150 LS

*Terminate boring at 50'

HAND AUGER 0-5'

SONIC RODS - 4" + 6"

Drilling Progress							Geologic Description																														
Depth	Time	FD/PID Reading (rpm)	Penetration (ft/sec) / Blow Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Non, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (B), Sub-Round (SB), Sub-Angular (SA), Angular (A)	Gravel Roundness: Round (B), Sub-Round (SB), Sub-Angular (SA), Angular (A)	Sorting: Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition: Rock Frags. (RF), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch										Texture	Comments							
																				Clay	Silt	V. Fine Sand	Fine Sand	Medium Sand	Coarse Sand	V. Coarse Sand	Granular Gravel	Pebble Gravel	Cobble Gravel	(Rounder Gravel)	Grain Size and Other Notes (Structures, Paleocurrents, Fossils, Color)	(Drilling-Induced Deformation or Homogenization, Fossils, Root Casts, Other Pedogenic Features, Sedimentary Facies, Potential Confining Bed or High-Permeability Unit)					
0-4	1005		100				5YR 3/3			NON	100			SA																			Sand - 5YR 3/3, dark brown, F. grained, SA, V. WS, loose, dry. 4'-5' - 10YR 5/6				
4-5			100				10YR 5/6			NON	100			SA																							
5-7			100				10YR 5/6			NON	100			SA																							
7-10			100				7.5YR 2.5/1	45		LOW	30	25		SA																						Siltty Sand - 7.5YR 2.5/1, dark gray, 45% silt, F-M grained, SA, WS, wet, 5% shell marl.	
10-11.3	1045		100				7.5YR 2.5/1	45		LOW	30	25		SA																							
11.3-12.6			100				7.5YR 2.5/1			NON	50	50		SA																							
12.6-15'			100				10YR 7/1			NON	50	50		SA																							
15-20'			100				7.5YR 4/1			NON	100			SA-R																							
20-30	1100		100				7.5YR 4/1			NON	100			SA	45																						
30-38	1110		100				7.5YR 4/1			NON	100			SA	45																						
38-48.1	1120		100				7.5YR 4/1			NON	10			A-SA	90																						
48.1-48.5			100				7.5YR 4/1	25		LOW	25			SA	50																						
48.5-50			100				7.5YR 4/1			NON	10			A-SA	90																						

7% shell marl
70 ORGANIC MATTER

SHELL MARL

Boring ID: PFAS - MW0011

Boring Location Map:

Date: 9/24/20
 Client: KENNEDY SPACE CENTER
 Project No.: 60615673
 Site: TITUSVILLE, FL
 Logged by: IETHAN HOUSE
 Logging Co.: DRILL PRO, LLC
 Operator: BILLY MASS
 Drilling Method: SONIC
 Drill Bit Model: GEOPROBE B150LS

*TERMINATE BORING AT 50'

AECOM

0-5' HAND AUGER

SONIC ~~RODS~~ RODS - 4" + 6"

PFAS-MW-0010

Drilling Progress						Geologic Description																			
Depth	Time	RO/PIO Reading (ppm)	Penetration Rate / Blow Count	Core Interval / Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% SILT	Plasticity of Fines: (Non, Low, Med., High)	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Gravel Roundness: Round (B), Sub-Round (BR), Sub-Angular (BS), Angular (A)	Soil: Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition: Rock Frags. (RF), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch					Texture	Comments
																				Grain Size and Other Notes (Structures, Paleocurrents, Fossils, Color)	(Drilling-Induced Deformation or Homogenization, Fossils, Root Casts, Other Pedogenic Features, Sedimentary Facies, Potential Confining Bed or High-Permeability Unit)				
0	1455		100				10YR 7/2			NON 95				SA										0-5' HAND AUGER	Sand - 10YR 7/2, tan, 5'-50' SONIC DRILL
4-5																									Lower, SA Fine grained, well sorted, 5% shells, damp.
5-10	1520		100				10YR 6/2			NON 100				SA											SAA - 10YR 6/2, wet, no shells
10-20	1537		100				10YR 4/3			NON 95				SA											SAND - 10YR 4/3, MED. BROWN, TRACE OF ROOTS/ORGANICS, VERY FINE TO FINE GRAINED, SA WET, WELL SORTED.
20-30	1545		100				10YR 4/3			20 LOW 80				SA											SILT SAND - SAA - TRACE 20% SILT 10YR 4/3, MED. BROWN, FINE GRAINED, SA, WELL SORTED, WET.
30-36.4	1555		100				10YR 4/3			10 LOW 90				SA											SAA - FINE + VERY FINE GRAINED, 10% SILT.
36.4-40			100				10YR 4/3			10 LOW 85				SA S											30-36.4 - SAA, 5% shells, marl
40-44	1605		100				10YR 5/1			10 NON 10				A-SA 80											Fragmented, light gray, 10YR 5/1, 10% SILT, 10% SAND, 80% SHELL FRAGMENTS, SA, Poorly Sorted, fine grained bands, very coarse grained shell frags, wet.
44-46.4			100				10YR 5/1			30 LOW 65				SA S											40-44 - SAA
46.4-49			100				10YR 5/1			MOD 60				SA											44-46.4 - SAA - 5% shells, 30% SILT + 65% sand, low clay.
49-50			100				10YR 5/1			10 NON 10				A-SA 80											46.4-49 - clayey sand, 10YR 5/1, fine grain, SA, mod. dirt, wet.

70% SHELL MARL

70% ORGANIC MATTER

SHELL MARL

Boring ID: PFAS-MW-0010

Boring Location Map

*TERMINATE @ 50'

49-50' - Same as 40-44'

DATE: 12/24/20
 CLIENT: KENNEDY SPACE CENTER
 PROJECT NO: 60615673
 LOCATION: TITUSVILLE, FL
 LOGGED BY: ETHAN HOUSE
 DRILLING CO: DRILL PRO, LLC
 DRILLER: BILLY MOSS
 DRILLING METHOD: SONIC
 LOGGING METHOD: LOGGING

0-5' HAND AUGER

SONIC RODS - 4" + 6"

AECOM

Drilling Progress						Geologic Description																														
Depth	Time	FID/PID Reading (ppm)	Penetration Rates/ Blow Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Non, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	70 SHELL MARL	70 ORGANIC MATTER	70 COQUINA	Sorting: Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition: Rock Frag. (BF), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch							Texture	Comments							
																						Clay	Silt	V. Fine Sand	Fine Sand	Medium Sand	Coarse Sand	V. Coarse Sand	Granular Gravel	Pebble Gravel	Blocky Gravel	Shell Marl	Grain Size and Other Notes (Structures, Paleocurrents, Fossils, Color)	(Drilling-Induced Deformation or Homogenization, Fossils, Root Casts, Other Pedogenic Features, Sedimentary Facies, Potential Confining Bed or High-Permeability Units)		
0-2	1005			100						NON	100			A					MS	Q														Sand - No pluc, black, 10YR 2/1, angular		
2-4				100						NON	95			A	KS				MS	Q														Fine grained, mod. poorly sorted, moist		
4-5	1010			100						NON	95			SA	KS				MS	Q														Sand - tan, 10YR 6/4, vary fine to fine grained, med. sorted, trace of organic matter, saturated		
5-10	1025			100						NON	60			SA-R		40	PS	Q																Silty Sand - Tan, 10YR 7/2, 60% sand, fine grained, SA-R, poorly sorted, saturated, vary coarse.		
10-17.2	1035			100				10	LOW		80			SA 10					MS	Q														Silty Sand - Low pluc, 10YR 5/1, gray, SA, med. grained, moderately sorted, 11% shell fragments, 10% silt, plat. 17-20' - 25% shell fragments.		
17.2-20				100				10	LOW		65			SA 25					MS	Q																
20-27	1045			100						NON	20	20		SA 60					PS	Q															Sandy Shells - No pluc, 10YR 5/1, gray, SA, fine to med. grained, poorly sorted, 40% sand, 60% shell, wet.	
27-30				100						NON	15	15		SA 60	10				PS	Q															27-30 - Same as 10-17, vary coarse.	
30-31.7	1055			100						NON	20	20		SA 60					PS	Q															30-31.7 - Same as 20-27.	
31.7-40				100				10	LOW		90			SA					WS	Q															31.7-40 - Silty Sand - Low pluc, SA, fine grained, well sorted, 10% silt, 90% sand, wet, 10YR 5/1, gray.	
40-46	1115			100				5			75			SA-R 20					MS	Q															40-46 - Shelly Sand - 10YR 5/1, gray, 20% shell, 5% silt, 75% sand, SA-R, fine grained, wet, MS.	
46-50				100				70	5		20			SA-R 5					MS	Q															46-50 - Sandy Clay - 10YR 5/1, gray, 50% shell, 5% silt, 20% sand, 70% clay, fine grained, SA-R, med. sorted, wet.	

*Terminate logging at 50' BGS

PFAS - MW0008

Date: 9/25/10
Client: KENNEDY SPACE CENTER
Project No.: 60615673

Site: KSC - TITUSVILLE, FL

Logged By: ETHAN HOUSE

Drilling Co.: DRILL PRO

Driller: BILLY MOSS

Drilling Method: SONIC
Soil By Method: GEOPROBE R150LS

Date

of

HAND AUGER 0-5

SONIC RODS - 4" + 6"

TO SHELL MARL
% ORGANIC MATTER

% COQUINA

COQUINA SHELL MARL

Drilling Progress					Geologic Description																						
Depth	Time	FI0/FID Reading (ppm)	Penetration Rates/ Blow Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Non, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Soils: Well Sorted (WS), Poorly Sorted (PS)	Rock Frag. (RF), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch					Texture	Comments			
																		Grain Size and Other Notes (Structures, Paleocurrents, Fossils, Color)					Drilling-Induced Deformation or Homogenization, Fossils, Root Cuts, Other Pedogenic Features, Sedimentary Facies, Potential Confined Bed or High-Permeability Unit				
0-2	1435		100				5YR 7/3			NON	80			SA-SR	10	WS	Q							80% FILL - MIX OF SILTY SAND, 10% GRAVEL, WOOD + ORGANIC MATTER, BLACK, DRY, 5YR 7/3			
3-5	1450		100				7.5YR 4/2	70		HIGH	30			SA-R		WS	Q							Sandy clay - 7.5YR 4/2, granular brown, SA-R, 30% sand, 70% clay, fine to very fine grained, damp, well sorted, high plastic.			
5-8.7	1515		100				2.5Y 8/2	10	NON		80			SA	10	MS	Q								Silty sand - Tan 2.5Y 8/2, fine grained, mod. sorted, fine grained, SA, 10% silt, 10% sand, 80% COQUINA sand, wet, 8.7-10' - 20% shell fragments, 0% sandstone, 10% silt, 70% sand.		
8.7-10'			100				2.5Y 8/2	10	NON		70			SA	20	MS	Q										
10-17.7	1525		100				2.5Y 6/1			NON	100			SA-R		WS	Q								Sand - 2.5Y 6/1, light gray, SA-R, med. grained, well sorted, no clay, 17.7-20' - Same as above, 40% shells + 60% sand, wet, MS.		
17.7-20'			100				2.5Y 6/1			NON	60			SA-R	40	MS	Q										
20-28.7	1535		100				2.5Y 6/2	10	NON				A	90	PS										1 Silty shelly sand - 2.5Y 6/2 tan, 10% silt, 40% shell, poorly sorted, very coarse, angular, wet. 28.7-30' - Same as 10-17.7'.		
28.7-30'			100				2.5Y 6/1			NON	100			SA-R		WS	Q										
30-40	1540		100				2.5Y 6/1	20	LOW		50			SA	30	MS	Q								1 Silty sand - light gray, 2.5Y 6/1, SA, fine grained, SA, 20% silt, 30% shells + 50% sand, wet, MS.		
40-46.5	1555		100				2.5Y 6/1	20	LOW		50			SA	30	MS	Q								1 40-46.5 SAA		
46.5-47.2			100				2.5Y 6/1	60	20	MED	10			SA	10	MS	Q								46.5-47.2 - Silty clay - gray, 2.5Y 6/1, 10% sand, 20% silt, 10% shells, 60% clay, mod. plastic, fine grained, SA, mod. poorly sorted, wet.		
47.2-50			100				2.5Y 6/1				60			A-SA	40	PS	Q								47.2-50 - Shelly sand - gray, 2.5Y 6/1, 60% fine grained sand, 40% shell fragments, wet, A-SA, very coarse, wet.		

Boring ID: PFAS - MW0001

Boring Location Map:

Date: 9/25/20
 Client: KENNEDY SPACE CENTER
 Project No: 60615673
 Site: TITUSVILLE, FL
 Logged By: JETHAN HOUSE
 Drilling Co.: BILLY MOSS, LLC
 Officer: BILLY MOSS
 Drilling Method: SONIC
 Drill Bit Material: GEOPROBE 8150LS

* Terminates Boring at 50' BGS

AECOM

4" + 6" - SONIC RODS
9/28/20 PFAS-MW0009

HAND AUGER 0-5'

70% SHELL MARL
9% ORGANIC MATTER

Drilling Progress					Geologic Description																			
Depth	Time	FI/PI Reading (ppm)	Penetration Rate/ Blow Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Non, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Sorting: Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition: Rock Frag., (BD), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch					Texture	Comments
<p>Grain Size and Other Notes (Structures, Palaeocurrents, Fossils, Color)</p> <p>(Drilling-Induced Deformation or Homogenization, Fossils, Root Casts, Other Pedogenic Features, Sedimentary Facies, Potential Confining Bed or High-Permeability Unit)</p>																								
0 - 1.5'	11:05	100	100			2.5Y 5/2		5	NON	46	46			SA-R			MS Q						SAND - 2.5Y 5/2, GRAYISH TAN, 5% SILT, 3% ORGANIC MATTER, FINE TO MED. GRAINED, SA-R, well sorted, dry, MS.	
3 - 5'						7.5YR 3/3		5	NON	92				SA-R			MS Q						3-5' - SFA BUT 4.5YR 2.5/3, Fine grained, damp. Wet at 4'.	
5 - 10'	11:25	100				7.5YR 3/4			NON	50	50			SA			MS Q						SAND - 7.5YR 3/4, Tannish brown, med to coarse grained, SA, mod. sorted, wet, no clay.	
10 - 17.7'	11:35	100				2.5Y 6/1		20	LOW	75				SA-SR	5		WS Q							
17.7 - 20'		100				2.5Y 6/1			NON	60				SA-SR	40		WS Q							1 Silty Sand - 2.5Y 6/1, gray, 20% silt, 5% shell marl, SA-R, med. grained, well sorted, low clay, damp. 17.7 - 20' - 40% shell marl.
20 - 27.2'	11:50	100				2.5Y 5/1		10	LOW	85				SR	5		WS Q							Sand - 2.5Y 5/1, gray, 10% silt, very poorly sorted, SR, fine grained, 5% shell marl, 100% shell marl at 27.2 - 30', well sorted.
27.2 - 30'		100				2.5Y 5/1		10	NON	80				SR	10		WS Q							
30 - 36.3'	12:05	100				2.5Y 5/1			NON	30	30			A-SA	40		MS Q							Shelly Marl Sand - 2.5Y 5/1, gray, 40% shell marl, 60% sand, A-SA, med - very coarse, mod. sorted, damp. 36.3 - 40' - 90% shell marl, 10% sand, moist, A-SR, very coarse & poorly sorted.
36.3 - 40'		100				2.5Y 5/1			NON	5	5			A-SR	90		PS Q							
40 - 48'	12:20	100				2.5Y 5/1		10	LOW	60				SA	30		MS Q							40 - 48' shelly Marl Sand - 2.5Y 5/1, gray, SA, fine grained, med. sorting, 30% shell marl, 10% silt, 60% sand, low clay, saturated.
48 - 50'		100				2.5Y 5/1		20	LOW	25	25			SA-R	10		MS Q							48 - 50' - silty clayey sand - 2.5Y 5/1 gray, 20% sand, 20% silt, 20% clay, fine to med. grained sand, 10% shell marl, SA-R, low clay, moist, MOD. sorted, 20% clay.

Boring ID: PFAS-MW0009

Boring Log Map:

Date: 9/28/20
Client: KENNEDY SPACE CENTER
Project No.: 60615673
Site: TITUSVILLE FL
Logged By: ETHAN HOUSE
Drilling Co.: DRILL PRO, LLC
Printer: BILLY MOSS
Drilling Method: SONIC
Well Bar Model: GEOPROBE 8150LS

* Terminate boring at 50'

AECOM

HAND AUGER 0-5'

4" + 6" SONIC ROSS

AECOM

Drilling Progress					Geologic Description																			
Depth	Time	FD/PD Reading (ppm)	Penetration Rate/Block Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Non, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Soil Classification	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch					Texture	Comments	
																	Grain Size and Other Notes (Structures, Paleocurrents, Fossils, Color)	(Drilling-Induced Deformation or Homogenization, Fossils, Root Casts, Other Pedogenic Features, Sedimentary Facies, Potential Confining Bed or High-Permeability Unit)						
0-10	1350		100				10YR 2/1	10	LOW		90	90	SA-SR		WS							Silty Sand - 10YR 2/1, Dark brown, SA-SR, coarse grained, 10% silt, 90% sand, med. plat., well sorted, wet, 7-10' - Silty Sand - 2.5Y 6/3, tan, SA-R, med. to coarse grained, med. sorted, 10% silt, 10% shell marl, 80% sand, wet.		
10-13.7	1400		100				2.5Y 7/1		NON		70	70	A-SR 5		ZS MS							Shelly Marl Sand - 2.5Y 7/1, light gray, A-SR, 25% Coquina, 5% shell marl, 70% sand, coarse grained, wet, med. sorted, 13.7-16.1 - 20% sand, 80% shell marl.		
13.7-16.1			100				2.5Y 7/1		NON		100		SA		WS								16.1-20' - Sand - 2.5Y 7/1, light gray, SA, fine grained, well sorted, moist.	
16.1-20			100				2.5Y 7/1		NON		100		SA		WS								Sand - 2.5Y 7/1, light gray, SA-R, 90% sand + 10% shell marl, no plat., fine to med. grained, well sorted, moist, not saturated.	
20-30	1415		100				2.5Y 7/1		NON		45	45	SA-R 10		WS								30-31.9' - Clay - 2.5Y 3/1, Dark gray, 10% sand, 90% clay, very fine grained, wet, high plat., moist.	
30-31.9	1435		100				5Y 3/1 90		HIGH	10													31.9-36.8' - Sand - 2.5Y 6/1, light gray, fine grained, SA-R, very well sorted, moist, 10% silt, 90% sand.	
31.9-40			100				2.5Y 6/1	10	NON	90			SA-R		WS								36.8-37.6' - Sandy Shell Marl lens - 80% shell marl, 20% fine grained sand, A-SR, poorly sorted, wet.	
36.8-37.6			100				2.5Y 6/1		NON	20			A-SR 80		PS									

SHELL MARL 9%
 ORGANIC MATTER 9%
 COQUINA 9%

SHELL MARL

PFAS - 0005

Boring Location Map

*Terminate boring at 40' BGS

Date: 9/29/20
 Client: KENNEDY SPACE CENTER
 Project No.: 60615673
 Site: TITUSVILLE, FL
 Prepared By: ETHAN HOUSE
 Boring Co.: DRILL PRO, LLC
 Driller: BILLY MOSS
 Drilling Method: SONIC
 Well Air Method: GEOPROBE B15DL5

Date

HAND AUGER 0-5' 4" & 6" RODS

SHELL MARL 9%
ORGANIC MATTER 9%

Drilling Progress								Geologic Description																													
Depth	Time	FI/PI Reading (ppm)	Penetration Rate/ Blow Count	Cone Interval/ Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Non, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Gravel Roundness: Round (B), Sub-Round (SB), Sub-Angular (SB), Angular (B)	Sorting: Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition: Rock frag. (BE), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch								Texture	Comments									
																Clay	Silt	V. Fine Sand	Fine Sand	Medium Sand	Coarse Sand	V. Coarse Sand	Granular Gravel	Pebble Gravel	Cobble Gravel	Grain Size and Other Notes (Structures, Paleocurrents, Fossils, Color)			Drilling-induced Deformation or Homogenization, Fossils, Root Casts, Other Pedogenic Features, Sedimentary Facies, Potential Confining Bed or High-Permeability Unit)								
0-5'	0820		100				2.5Y 7/2			NON				SA-R				WS Q												0-5' - sand - 2.5Y 7/2, Tan, med. grained, SA-R, well sorted, 95% sand, 5% organic matter, dry. 5-10' - same as above but 2.5Y 5/1 in color, dark brown, wet.							
5-10'	0830		100				2.5Y 2-5/1			NON				SA-R				WS Q																			
10-20'	0840		100				2.5Y 3/3			NON	100			SR				WS Q																			
11.8-12.4'							2.5Y 2-5/1			NON																											
20-30'	0850		100				2.5Y 5/1	10	NON	30	30		A-SR 30					MS Q																			
30-40'	0900		100				2.5Y 5/1	10	NON	80			A-SR 10					VWS Q																			
36.4-38'							2.5Y 5/1		NON		15	15	A-SR 70					PS Q																			
40-50'	0925		100				2.5Y 5/1		NON		70		A-SR 30					MS Q																			
47.3-48.3'			100				2.5Y 5/1		NON		20		A-SR 80					PS Q																			
48.3-50'			100				2.5Y 5/1	40	MOD	60			A-SA					WS Q																			

Boring ID: PFAS - MW003

DATE: 9/30/20
CLIENT: KENNEDY SPACE CENTER

PROJECT NO.: 60615673

SITE: TITUSVILLE, FL

LOGGED BY: ETHAN HOUSE

DRAWING CO.: DRILL PRO, LLC

DRAWER: BILLY MOSS

DRAWING METHOD: SONIC

DRAWING FILE NUMBER: GEOPROBE B15025

AECOM

* Terminate boring at 50'

HAND AUGER 0-5' 4" & 6" RODS

AECOM

Drilling Progress					Geologic Description																													
Depth	Time	FID/FID Reading (ppm)	Penetration Rates/ Blow Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: Non, Low, Med., High	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (B), Sub-Round (SB), Sub-Angular (SA), Angular (A)	Gravel Roundness: Round (B), Sub-Round (SB), Sub-Angular (SA), Angular (A)	Sorting: Well sorted (WS), poorly sorted (PS)	Majority Sand Mineral Composition: Rock Frag. (BF), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch										Texture	Comments				
																				Clay	Silt	V. Fine Sand	Fine Sand	Medium Sand	Coarse Sand	V. Coarse Sand	Granular Gravel	Pebble Gravel	Cobble Gravel	Gravel	Grain Size and Other Notes (Structures, Paleocurrents, Fossils, Color)	(Drilling-Induced Deformation or Homogenization, Fossils, Root Cuts, Other Pedogenic Features, Sedimentary Facies, Potential Confining Bed or High-Permeability Unit)		
0-5'	1425		100				2.5Y4			NON	90			SA-R					10	VWS	Q												Sand - 2.5Y4/4, brownish-tan, SA-R, 90% fine grained sand, 10% organic matter, very well sorted, wet.	
5-10'	1440		100				2.5Y3/2	10	LOW		90			SA-R						WS	Q												Sand - 2.5Y3/2, dark brown, SA-R, med. grained sand, 90% sand, 10% silt, wet, well sorted.	
10-20'	1450		100				10YR5/4			NON	100			SR-R						WS	Q												Sand - 10YR5/4, Dark brown, SR-R, med. grained, well sorted, wet.	
20-25.8'	1500		100				2.5Y5/1			NON	35	35		SA-SR	30					MS	Q												Shelly Marl Sand - 2.5Y5/1, med. gray, fine to med. grained, SA-SR, med. sorted, 70% sand, 30% shell marl, wet.	
25.8-30'			100				2.5Y5/1	15	LOW		40	40		SA-SR	5					MS	Q												SAME AS ABOVE, 80% SAND, 20% shell marl, 15% silt.	
30-40'	1515		100				2.5Y5/1	15	LOW		30	30		SA-SR	25					MS	Q												Shelly Marl Sand - 2.5Y5/1, med. gray, SA-R, fine to med. grained, med. sorted, 25% shell marl, 15% silt, 60% sand, wet.	
34.5-34.9'							2.5Y5/1			NON					100																		Shell marl lenses 34.5-34.9' + 36.6-37.2'	
36.6-37.2'							2.5Y5/1			NON					100																		clay lenses 31'-31.1' AND 35.1' TO 35.7' - Firm, high plan.	
31-31.1'							2.5Y5/1	100		HIGH																								
35.1-35.7'							2.5Y5/1	100		HIGH																								

SHELL MARL 90% ORGANIC MATTER 90%

Boiling ID: PFAS - MW0012

Boiling location: 10%

*Terminate logging at 40'

Date: 9/30/20
 Client: KENNEDY SPACE CENTER
 Project No.: 60615673
 Site: TITUSVILLE, FL
 Logged By: ETHAN HOUSE
 Drilling Co.: DRILL PRO, LLC
 Driller: BILLY MOSS
 Logging Method: SONIC
 Drill Bit Model: GEOPROBE B150LS

0-5' HAND AUGERED 4" + 6" RODS

AECOM

Drilling Progress

Geologic Description

Depth	Time	FD/PID Reading (ppm)	Penetration Rate / Blow Count	Core Interval / Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines (Bow, Low, Med., High)	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Gravel Roundness: Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Sorting: Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition: Rock Frag. (RF), Quartz (Q), Feldspar (F)	USCS/ASTM Soil Classification Code	Stratigraphic Log Sketch																			
																			Clay	Silt	V. Fine Sand	Fine Sand	Medium Sand	Coarse Sand	V. Coarse Sand	Granular Gravel	Pebble Gravel	Cobble Gravel										
0-5'	1330		100				2.5Y 4/3	NgN	97					SA-R	W		WS	Q																	Sand - Tan, 2.5Y 4/3, SA-R, med. sorted, med. grained, 97% sand, 3% organic matter, moist. 4-5' - SA - 3% shell med, saturated.			
5-10'	1405		100				2.5Y 3/2	LW	85					SA-R	-		WS	Q																	Silty Sand - 2.5Y 3/2, dark brown SA-R, well sorted, 85% fine grained sand, 15% silt, low clay, wet.			
10-20'	1415		100				10YR 4/4	NgN	90					SR-R			WS	Q																	Sand - 10YR 4/4, brown, SR-R, well sorted, med. grained, 90% sand, 10% silt, wet.			
15-20'	1415		100				10YR 4/1	NgN	45	45				SR-R			WS	Q																	15-20' - Sand - 10YR 4/1, gray, fine to med. grain, well sorted, SR-R, wet.			
20-30'	1425		100				10YR 5/4	NgN	45	50				SA-SR	5		WS	Q																	Sand - 10YR 5/4 Gray, SA-SR, well sorted, F-M grained, 5% shell med, 95% sand, wet. 27.7-30' - 10% shell med, 90% sand, saturated.			
30-40'	1440		100				2.5Y 6/1	35 NgN	30					R	70		PS	Q																	1 Sandy Shelly Marl - 2.5Y 6/1, light gray, 70% shell med, 30% fine grained sand, R, poorly sorted, saturated. 33-39.5' - Silty Sand - 2.5Y 6/1, light gray, 35% silt, 5% shell med, 60% fine grained sand, SA-R, well sorted, wet. 39.5-40' - Shell Marl, wet.			
33-39.5'	1440		100				2.5Y 6/1	35 NgN	60					SA-R	5		WS	Q																		41 fine grained sand, R, poorly sorted, saturated. 33-39.5' - Silty Sand - 2.5Y 6/1, light gray, 35% silt, 5% shell med, 60% fine grained sand, SA-R, well sorted, wet. 39.5-40' - Shell Marl, wet.		
39.5-40'	1440		100				2.5Y 6/1	35 NgN	60					SA-R	5		WS	Q																		41 fine grained sand, R, poorly sorted, saturated. 33-39.5' - Silty Sand - 2.5Y 6/1, light gray, 35% silt, 5% shell med, 60% fine grained sand, SA-R, well sorted, wet. 39.5-40' - Shell Marl, wet.		
40-50'	1455		100				5Y 5/1	35 NgN	30	30				SA-SR	5		PS	Q																	Silty Sand - 5Y 5/1, med. gray, SA-SR, poorly sorted, 60% F-M grained sand, 35% silt, 5% shell med, wet. 43.1-43.7' - sandy shelly marl lenses. 44.6-44.7' - thin clay lenses. 47.5-50' - Sandy Clay - 5Y 5/1, light gray, 50% clay 30% sand, 10% silt, 10% shell med, high clay, well sorted, fine grained sand, sand is rounded, moist.			
43.1-43.7'	1455		100				5Y 5/1	50 HIGH	30					R	10		WS	Q																		41 fine grained sand, R, poorly sorted, saturated. 33-39.5' - Silty Sand - 2.5Y 6/1, light gray, 35% silt, 5% shell med, 60% fine grained sand, SA-R, well sorted, wet. 39.5-40' - Shell Marl, wet.		
47.5-50'	1455		100				5Y 5/1	50 HIGH	30					R	10		WS	Q																				

SHELL MARL %
ORGANIC MATER %

Boring ID: PFAS - MW0007

*Terminate boring at 50'

Date: 10/1/20
 Client: KENNEDY SPACE CENTER
 Project No.: 60615673
 Location: TITUSVILLE, FL
 Logged by: ETHAN HOUSE
 Boring Co.: DRILL PRO, LLC
 Borer: BILLY MOSS
 Logging Method: SONIC
 Data File Name: GEOPROBE 0150LS

HAND AUGER 0-5' 4" & 6" RODS

Drilling Progress						Geologic Description																													
Depth	Time	TD/PO Reading (ppm)	Penetration Rate/ Blow Count	Core Interval/ Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines: (Non, Low, Med., High)	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness: (Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A))	Gravel Roundness: (Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A))	Sorting: Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition: (Rock Frag. (RF), Quartz (Q), Feldspar (F))	USCS/ASTM Soil Classification Code	Stratigraphic Log Sketch					Texture	Comments										
																			Clay	Silt	V. Fine Sand	Fine Sand	Medium Sand	Coarse Sand	V. Coarse Sand	Granular Gravel	Pebble Gravel	Cobble Gravel							
0-5	0950		100				10YR 7/4	5	NON		90			A-SA		WS	Q															Sand - 10YR 7/4, med. brown, 5% silt, 5% organic matter, 90% med. grained sand, A-SA, well sorted, moist.			
5-10	1000		100				10YR 7/1	20	LOW		80			SA-SR	<1	WS	Q															Sand Silty Sand - 10YR 7/1, dark brown, 20% silt, 80% fine grained sand, SA-SR, well sorted, saturated, <1% organic matter.			
8.4-10			100				10YR 6/2	20	LOW		80			SA-SR		WS	Q																8.4-10 - 10YR 6/2, No organic matter		
10-12	1010		100				2.5Y 4/1	20	LOW		80			SA-SR		WS	Q																10-12' - SAME AS ABOVE, 12-17.2' - Sand - 2.5Y 4/1, med. gray, 5% shell, med, 95% fine to med. grained, SA, well sorted, moist.		
12-17.2			100						NON	45	50			SA	5	WS	Q																12-17.2' - 30% shell, med, 70% sand, A-SR, poorly sorted, wet.		
17.2-20			100						NON	35	35			A-SR	30	PS	Q																Same as 12-17.2'		
20-26.3	1020		100				2.5Y 4/1		NON		75			SA-R	25	MS	Q																20-26.3' - 30% shell, med, 70% sand, A-SR, poorly sorted, wet.		
26.3-30			100				2.5Y 4/1		NON		20			A-SR	80	PS	Q																30-31.1' - SAME AS ABOVE, 31.1-40' - Sand - 2.5Y 6/1, light gray, SA-R, med. grained sand, well sorted, <1% shell, med, wet. Shell Marlsense 39.4-39.8.		
30-31.1	1035		100				2.5Y 4/1		NON		20			A-SR	80	PS	Q																		
31.1-39.4			100				2.5Y 6/1		NON		100			SA-R	41	WS	Q																		
39.4-39.8															100	PS																			
40-40.7	1050		100				2.5Y 6/1		NON					A-SA	100	PS	Q																		
40.7-45.6			100				2.5Y 6/1	10	NON	40	45			SA	5	WS	Q																		
45.6-50			100				2.5Y 6/1	25	LOW	25	25				25	PS	Q																		
48-48.1								100	HIGH																										
48.5-48.6								100	HIGH																										
49-49.1								100	HIGH																										
49.1-50									NON					A-SA	100	PS																			

SHELL MARL 9% ORGANIC MATTER 9%

Boring Location: PFAS-MW0006

Boring Location: 10/11/20

* Terminate boring at 50'

clay lenses at 48-48.1, 48.5-48.6 & 49-49.1
Shell Marlsense 49.1-50'

Date: 10/11/20
 Client: KENNEDY SPARE CENTER
 Project No.: 60615673
 Site: TITUSVILLE, FL
 Logged By: ETHAN HOUSE
 Logging Co.: DRILL PRO, LLC
 Driller: BILLY MOSS
 Logging Method: SONIC
 Drill Bit Model: GEOPROBE 8150LS



D-1000

HAND AUGER 0-5'

4" + 6" SONIC RODS

Drilling Progress				Geologic Description																													
Depth	Time	RO/TO Reading (ppm)	Penetration Rate/ Blow Count	Core Interval/Recovery	Analytical Sample Interval	Monitoring Well Completion Sketch	Munsell Color Code	% Clay	% Silt	Plasticity of Fines (Non, Low, Med., High)	% Fine Sand	% Medium Sand	% Coarse Sand	Sand Grain Roundness Round (R), Sub-Round (SR), Sub-Angular (SA), Angular (A)	Soil (Log) Well Sorted (WS), Poorly Sorted (PS)	Majority Sand Mineral Composition Rock Frag. (BE), Quartz (Q), Feldspar (F)	USCS/USDA Soil Classification Code	Stratigraphic Log Sketch						Texture	Comments								
																		Clay	Silt	V. Fine Sand	Fine Sand	Medium Sand	Coarse Sand	V. Coarse Sand	Granular Gravel	Pebble Gravel	Cobble Gravel	Shell					
0-5'	1020		100				2.5Y 3/1				50	50	SA-SR	CS	WS	Q															Sand - 2.5Y 3/1, blackish gray, M-C grained, well sorted, low plan.; SA-SR, wet, <5% silt.		
5-7.6'	1045		100				10Y 2/1	30			70		SA-SR		WS	Q															Silty Sand - 10Y 2/1, black, SA-SR, M-C grained, well sorted, low plan., 30% silt, wet.		
7.6-10'			100				2.5Y 7/1				50	25	A-SR 25		MS	Q															Shelly Sand - 2.5Y 7/1 tanish gray, F-M grained, A-SR, mod. sorted, 25% shell mark, 75% sand, wet.		
10-20'	1100	100	100				2.5Y 7/1	10			20	20	A-SR 40	10	PS	Q															Shelly Sand - 2.5Y 7/1, light gray, A-SR, M-VC grained, PS, 10% silt, 40% sand, 40% shell mark, wet.		
20-24.4'	1115	100	100				2.5Y 7/1	10			20	20	A-SR 40	10	PS	Q															SAME AS ABOVE		
24.4-24.8'		100	100				2.5Y 7/1	70	20					10																		Silty Clay - High plan. 2.5Y 5/1, 70% clay, 20% silt, 10% shell mark.	
24.8-30'		100	100				2.5Y 7/1				20	20	A-SR 60		PS	Q															Sandy Shell Marl - 2.5Y 7/1, PS, A-SR, M-VC grained, no plan, wet, 60% shell mark, 40% sand.		
30-37.8'	1140	100	100				2.5Y 7/2				20	20	A-SR 60		PS	Q															SAME AS ABOVE - 2.5Y 7/2		
37.8-40'		100	100				2.5Y 6/1	10			45	40	A-SR 45		WS	Q																Silty Sand - 2.5Y 6/1, very low plan.; M-C grained, A-SR, well sorted, 85% sand, 10% silt, <5% shell mark.	
40-44'	1155	100	100				2.5Y 6/1	10			45	40	A-SR 45		WS	Q																Same as above.	
44-45'		100	100				2.5Y 6/1	10			35	35	A-SA 20		MS	Q																Shelly sand - 2.5Y 6/1, low plan, 20% shell, 70% F-M sand, A-SA, mod. sorted, wet, 10% silt.	
45-48'		100	100				2.5Y 6/1	20			80		A-SA		VWS	Q																Silty Sand - 2.5Y 6/1, F. grained, VW sorted, A-SA, wet, low plan., 80% sand, 20% silt.	
48-50'		100	100				2.5Y 6/1	20			80		A-SA <1		VWS	Q																Clayey Sand - 2.5Y 6/1, F. grain, VW sorted, A-SA, wet, low plan, 80% sand, 20% clay, <1% shell mark, wet.	

SHELL MARL 0%

ORGANIC MATTER 0%

COQUINA 0%

Boring ID: PFAN - MW0002

Boring Location Map:

DATE: 10/19/20
 CLIENT: KENNEDY SPACE CENTER
 PROJECT NO.: 60615673
 LOCATION: TITUSVILLE FL
 LOGGED BY: ETHAN HOUSE
 DRILLING CO.: DRILL PRO LLC
 DRILLER: BILLY MOSS
 DRILLING METHOD: SONIC
 R/C MODEL: GEOPROBE 050LS

* Terminate boring at 50'

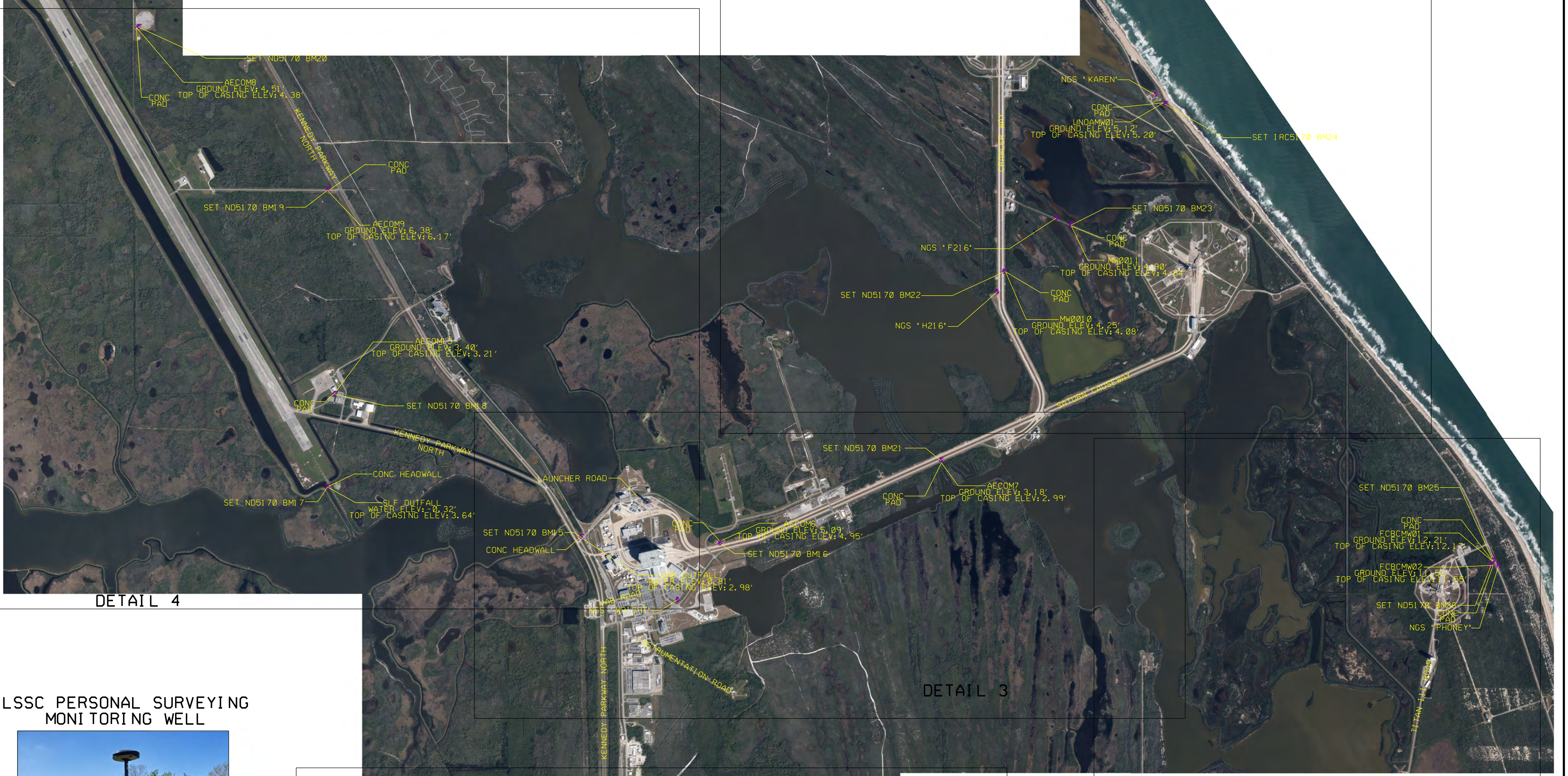
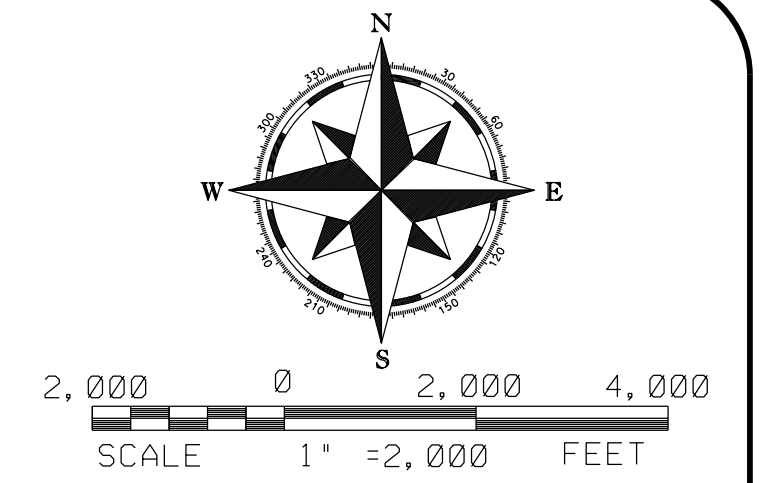
AECON

APPENDIX B
SURVEY INFORMATION

This page intentionally left blank.

MONITORING WELL AS-BUILT SURVEY

AECOM CENTERWIDE WELLS AND OUTFALLS OVERALL KSC



LSSC PERSONAL SURVEYING
MONITORING WELL



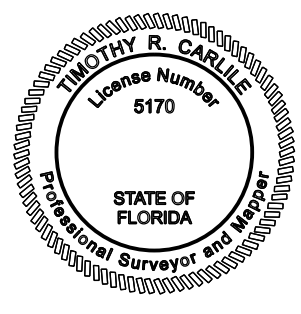
LEGEND	
	BENCHMARK
	BM BENCHMARK
	ND NAIL AND DISC
	MW MONITORING WELL
	+ MONITORING WELL
	HH HAND HOLE
	IRC IRON ROD AND CAP
	CONC CONCRETE

- NOTES
- NO UNDERGROUND IMPROVEMENTS LOCATED, EXCEPT AS SHOWN.
 - THIS SURVEY IS A TRUE AND CORRECT REPRESENTATION OF THE LAND AS SHOWN AND NOTED AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 53-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
 - NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
 - FIELD WORK WAS COMPLETED ON 02-02-21.
 - HORIZONTAL DATUM BASED UPON NAD83 STATE PLANE COORDINATES FLORIDA EAST ZONE 901, VERTICAL DATUM BASED UPON NAVD83.
 - THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TIMOTHY R. CARLILE, PLS 5170, ON THE DATE INDICATED. PRINTED COPIES ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED LAND SURVEYOR AND MAPPER.

CERTIFICATION

I, TIM R. CARLILE, FLORIDA REGISTERED SURVEYOR NUMBER 5170, DO HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED UNDER MY DIRECTION AND THAT IT MEETS THE MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYING IN THE STATE OF FLORIDA (CHAPTER 61G17-6) FOR THE TYPE OF SURVEY SHOWN HEREON AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

02-09-21
DATE
TIM R. CARLILE P.L.S.
FLORIDA P.L.S. 5170
(NOT VALID UNLESS SEALED)



LAND AND SEA SURVEYING
CONCEPTS, INC.

WWW.LAND-AND-SEA-SURVEYING.COM

SHEET: 1 OF 5
JOB NUMBER: 2021-002
NAME: KSC CENTERWIDE WELLS AND OUTFALLS

LAND BUSINESS #6447
PHONE: 321-454-6310
FAX: 321-454-6998
E-MAIL: TC5170@AOL.COM
1605 CHASE HAMMOCK RD.
MERRITT ISLAND, FL 32953

SURVEY FOR: AECOM

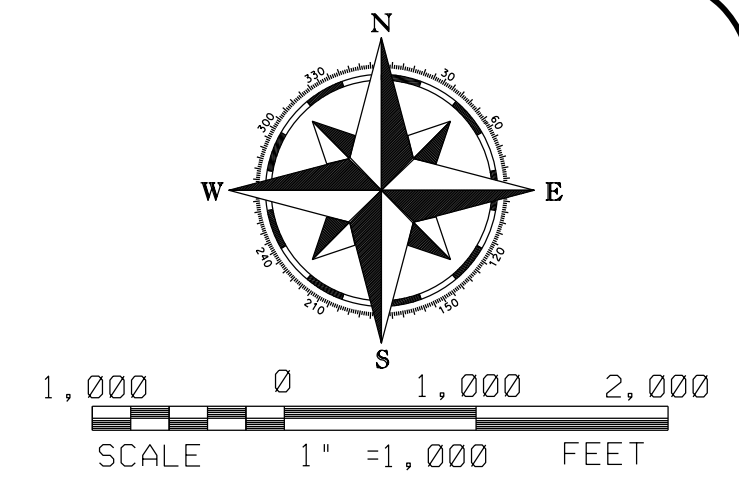
MONITORING WELL AS-BUILT SURVEY OVERALL KSC

REVISIONS	BY	DATE

SCALE 1" = 2,000'
DATE 02-09-21

MONITORING WELL AS-BUILT SURVEY

AECOM CENTERWIDE WELLS AND OUTFALLS OVERALL KSC



CONTROL CHART AS PER LSSC

NORTHING	EASTING	ELEVATION (NAVD 88')	DESCRIPTION
1504805.90	749819.27	4.31'	NGS MONUMENT "COURTENAY"
1523464.75	769124.56	9.36'	NGS MONUMENT "APOLLO"
1520663.02	771882.34	5.97'	NGS MONUMENT "RANGE"
1544816.33	768783.06	7.45'	NGS MONUMENT "WRIGHT"
1566717.44	752756.40	6.82'	NGS MONUMENT "WILSON"
1553401.96	777693.66	5.47'	NGS MONUMENT "H216"
1555460.94	779340.64	9.33'	NGS MONUMENT "F216"
1558888.64	782103.16	21.23'	NGS MONUMENT "KAREN"
1545763.70	791662.78	9.05'	NGS MONUMENT "PHONEY"
1516994.47	761194.39	3.71'	SET ND5170 BM1
1517136.72	761181.87	3.61'	SET ND5170 BM2
1517342.48	761544.41	3.53'	SET ND5170 BM3
1517570.80	762317.43	5.23'	SET IRC5170 BM4
1518720.07	765366.29	9.60'	SET IRC5170 BM5
1523591.80	760440.35	5.50'	SET ND5170 BM6
1522731.21	764717.22	8.05'	SET ND5170 BM7
1520512.60	767156.07	7.38'	SET ND5170 BM8
1521989.45	768819.25	6.85'	SET IRC5170 BM9
1519741.78	769752.16	4.54'	SET ND5170 BM10
1518126.70	771339.10	5.33'	SET IRC5170 BM11
1517329.51	770008.82	5.10'	SET IRC5170 BM12
1529926.66	770391.34	6.73'	SET ND5170 BM13
1537510.42	766454.02	6.07'	SET ND5170 BM14
1546572.71	766096.47	2.87'	SET ND5170 BM15
1546388.41	769970.43	6.35'	SET ND5170 BM16
1547962.27	759032.40	3.68'	SET ND5170 BM17
1550552.00	759236.09	3.91'	SET ND5170 BM18
1556246.43	759047.52	7.10'	SET ND5170 BM19
1560783.19	753766.23	4.37'	SET ND5170 BM20
1548702.83	776121.63	5.94'	SET ND5170 BM21
1553958.34	777878.62	6.13'	SET ND5170 BM22
1555265.96	779751.33	6.61'	SET ND5170 BM23
1558639.57	782372.41	5.72'	SET IRC5170 BM24
1545907.79	791513.36	10.85'	SET ND5170 BM25
1545772.60	791450.85	13.20'	SET ND5170 BM26

Outfalls Coordinates and Elevations (NAVD 88')

Outfall Name	Northing	Easting	Water Elevation	Top of Casing Elevation	Ground Elevation
IA OUTFALL	1517371.65	770027.39	0.91'	5.11'	N/A
VAB OUTFALL	1546568.38	766087.40	0.81'	2.98'	2.72'
SLF OUTFALL	1547964.02	759032.92	-0.32'	3.64'	N/A

Monitoring Well Coordinates and Elevations (NAVD88')

Monitoring Well #	Northing	Easting	Ground Elevation	Top of Casing Elevation	Top of Lid Elevation	Bottom of well Elevation
GSRYMW	1517353.78	761575.60	4.36'	4.01'	4.40'	3.93'
AECOM2	1517580.62	762382.89	4.29'	4.20'	4.49'	4.06'
AECOM3	1518708.64	765360.10	9.74'	9.46'	9.87'	9.35'
AECOM1	1523576.52	760537.14	5.34'	4.98'	5.38'	4.85'
M_O-MW006	1522735.80	764697.09	7.95'	7.74'	8.00'	7.63'
POL-MW0009D	1520482.72	767157.13	6.62'	6.61'	6.78'	6.31'
AECOM4	1521964.93	768841.93	7.30'	7.09'	7.36'	6.87'
AECOM12	1519756.23	769820.36	4.34'	4.09'	4.49'	3.93'
HMF-MW001D2	1518109.65	771327.58	2.09'	1.85'	2.13'	1.61'
EHF-006	1529936.47	770364.75	6.44'	6.34'	6.51'	6.13'
EHF-001	1529837.68	770389.50	5.66'	8.77'	N/A	N/A
AECOM5	1537582.51	766458.40	4.97'	4.72'	5.09'	4.58'
AECOM6	1546454.98	769970.52	5.09'	4.95'	5.23'	4.79'
AECOM7	1548640.92	776141.15	3.18'	2.99'	3.29'	2.89'
MW0010	1553963.23	777927.56	4.25'	4.08'	4.35'	4.01'
MW0011	1555237.05	779760.79	4.90'	4.84'	5.05'	4.63'
UNOAMW01	1558672.60	782328.80	5.12'	5.20'	5.43'	5.07'
FCBCMW01	1545893.25	791500.48	12.21'	12.17'	12.38'	11.81'
FCBCMW02	1545783.97	791515.78	11.52'	11.55'	11.79'	11.33'
AECOM9	1556213.49	759046.76	6.38'	6.17'	6.56'	6.06'
AECOM8	1560774.61	753708.55	4.51'	4.38'	4.71'	4.13'
AECOM13	1550569.05	759224.80	3.40'	3.21'	3.53'	3.06'



SHEET: 2 OF 5
 JOB NUMBER: 2021-002
 NAME: KSC CENTERWIDE WELLS AND OUTFALLS
 LAND BUSINESS #6447
 PHONE: 321-454-6310
 FAX: 321-454-6998
 E-MAIL: TCS170@AOL.COM
 1605 CHASE HAMMOCK RD.
 MERRITT ISLAND, FL 32953
 WWW.LAND-AND-SEA-SURVEYING.COM

SURVEY FOR: AECOM

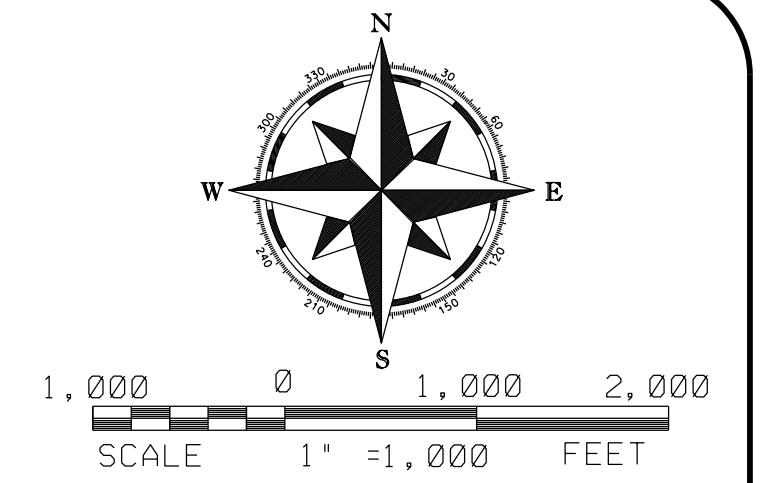
MONITORING WELL AS-BUILT SURVEY OVERALL KSC

REVISIONS	BY	DATE

SCALE: 1" = 1,000'
 DATE: 02-03-21

MONITORING WELL AS-BUILT SURVEY

AECOM CENTERWIDE WELLS AND OUTFALLS DETAILS KSC



DETAIL 1



DETAIL 2



SHEET: 3 OF 5
 JOB NUMBER: 2021-002
 NAME: KSC CENTERWIDE WELLS AND OUTFALLS
 LAND BUSINESS #6447
 PHONE: 321-454-6310
 FAX: 321-454-6998
 E-MAIL: TC5170@AOL.COM
 1605 CHASE HAMMOCK RD.
 MERRITT ISLAND, FL 32953

SURVEY FOR: AECOM

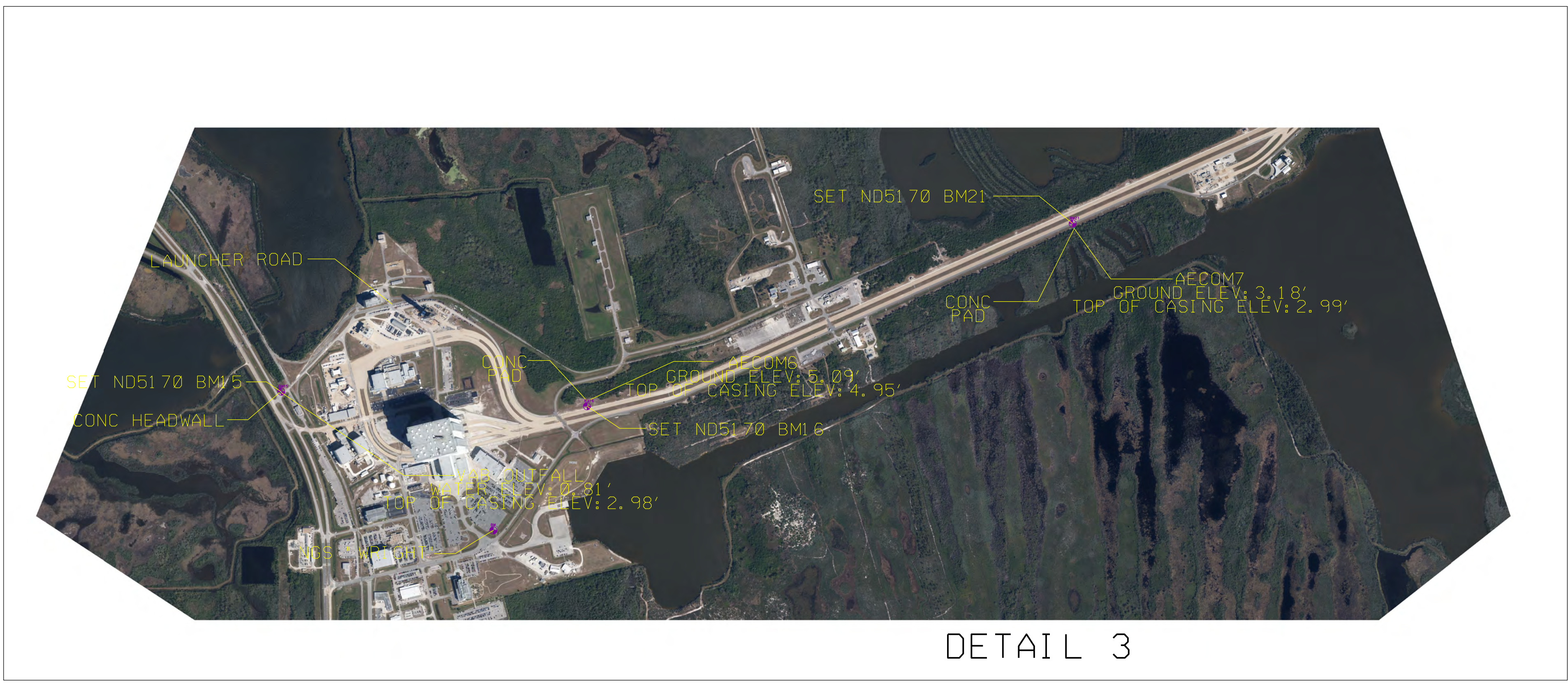
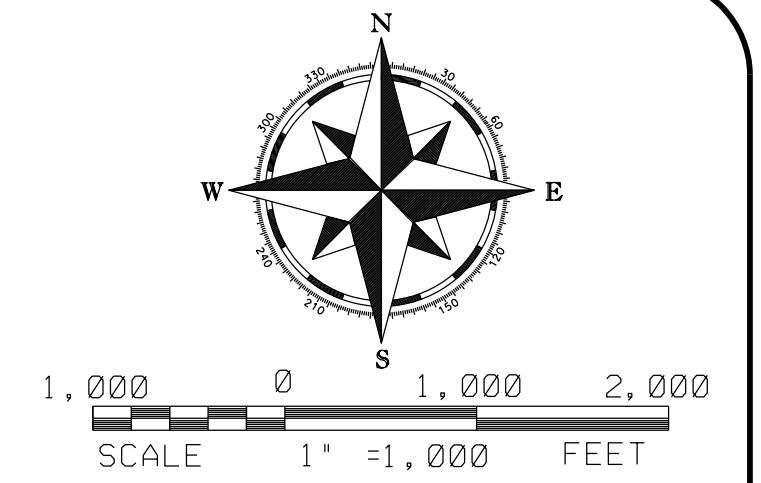
MONITORING WELL AS-BUILT SURVEY DETAILS KSC

REVISIONS	BY	DATE

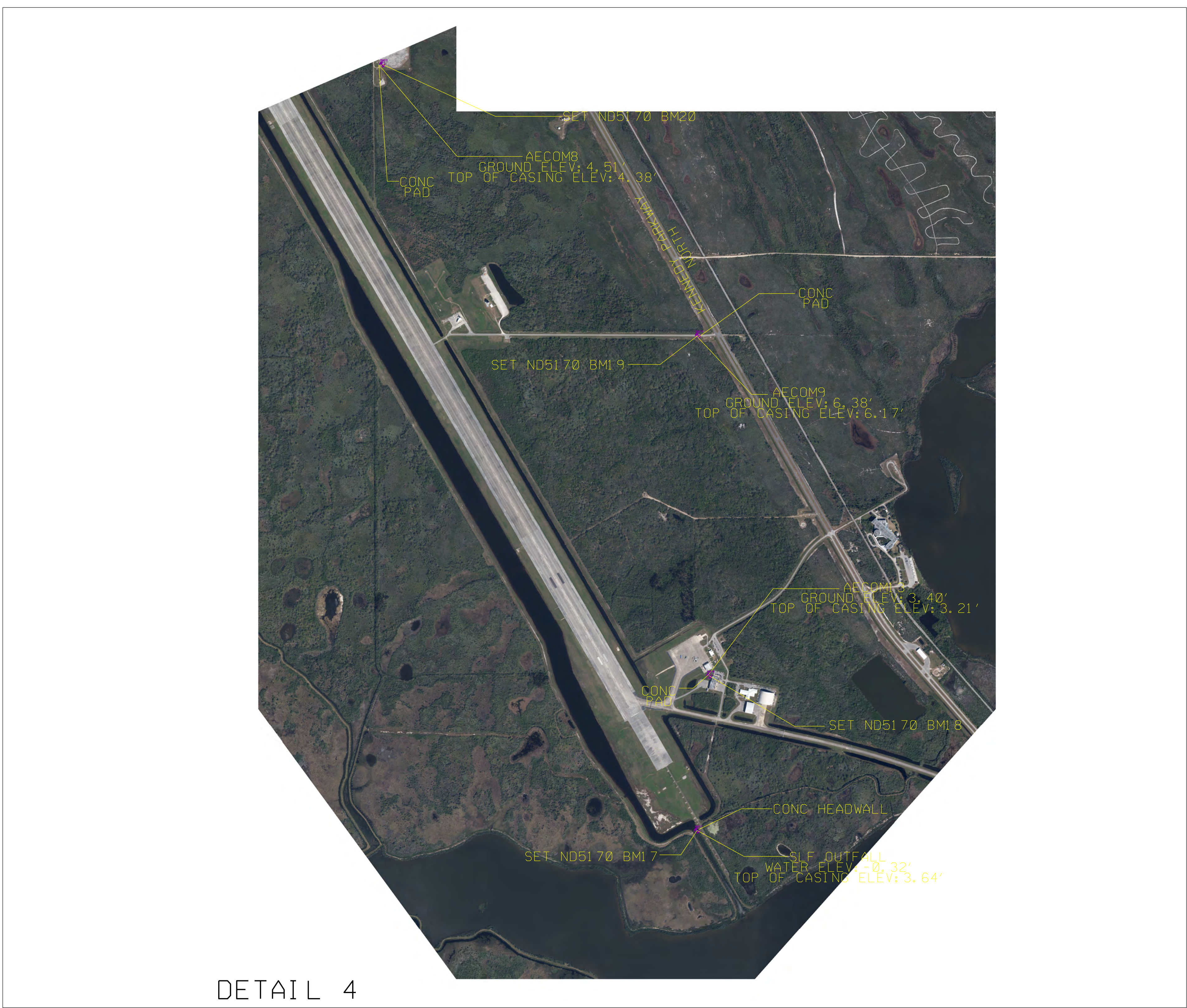
SCALE	1" = 1,000'
DATE	02-04-21

MONITORING WELL AS-BUILT SURVEY

AECOM CENTERWIDE WELLS AND OUTFALLS DETAILS KSC



DETAIL 3



DETAIL 4

LAND-SEA SURVEYING
CONCEPTS, INC.

SHEET: 4 OF 5
JOB NUMBER: 2021-002
NAME: KSC CENTERWIDE WELLS AND OUTFALLS

LAND BUSINESS #6447
PHONE: 321-454-6310
FAX: 321-454-6998
E-MAIL: TC5170@AOL.COM
1605 CHASE HAMMOCK RD.
MERRITT ISLAND, FL 32953

WWW.LAND-AND-SEA-SURVEYING.COM

SURVEY FOR: AECOM

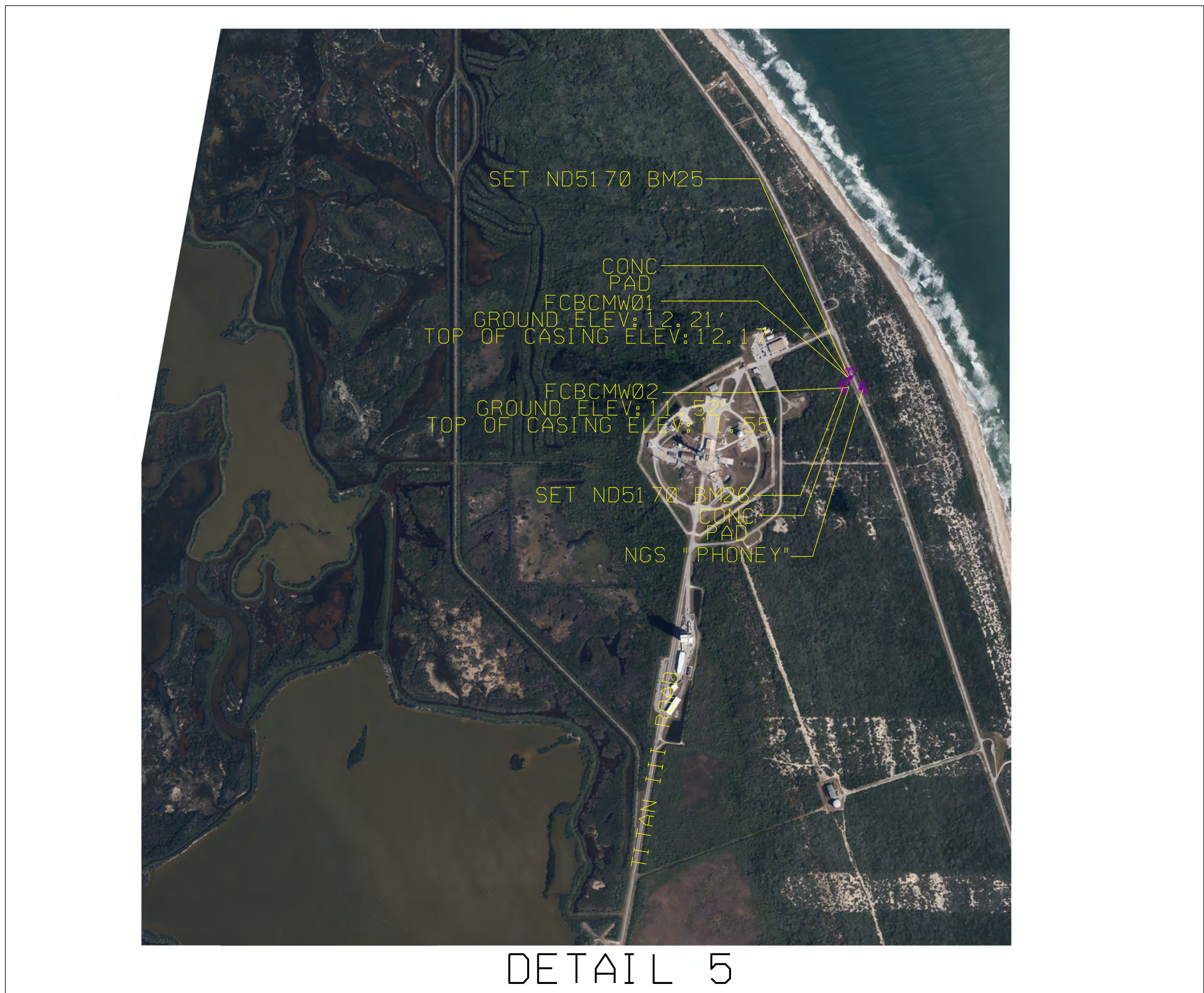
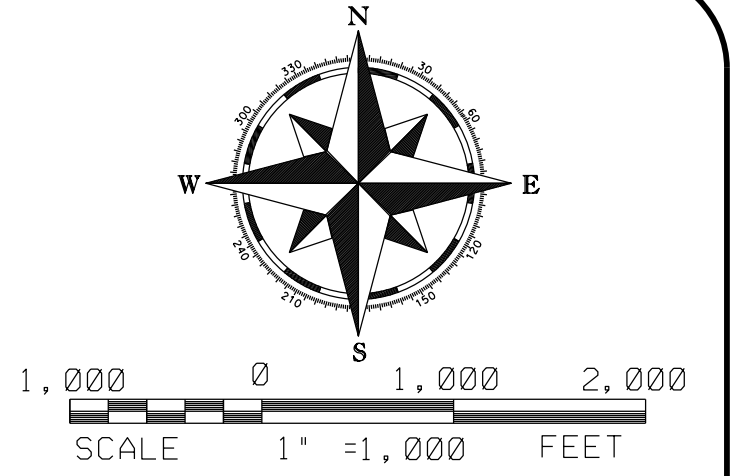
MONITORING WELL AS-BUILT SURVEY DETAILS KSC

REVISIONS	BY	DATE

SCALE: 1" = 1,000 FEET
DATE: 02-03-21

MONITORING WELL AS-BUILT SURVEY

AECOM CENTERWIDE WELLS AND OUTFALLS DETAILS KSC



DETAIL 5

DETAIL 6



SHEET: 5 OF 5
 JOB NUMBER: 2021-002
 NAME: KSC CENTERWIDE WELLS AND OUTFALLS
 LAND BUSINESS #6447
 PHONE: 321-454-6310
 FAX: 321-454-6998
 E-MAIL: TC5170@AOL.COM
 1605 CHASE HAMMOCK RD.
 MERRITT ISLAND, FL 32953

SURVEY FOR: AECOM

MONITORING WELL AS-BUILT SURVEY DETAILS KSC

REVISIONS	BY	DATE

SCALE: 1" = 1,000 FEET
 DATE: 02-05-21

This page intentionally left blank.

APPENDIX C

GAMMA LOGS and WELL CONSTRUCTION RECORDS

This page intentionally left blank.

GEOPHYSICAL RECORD OF BOREHOLE: CCB-MW0009D

Kennedy Space Center
Merrit Island, Florida



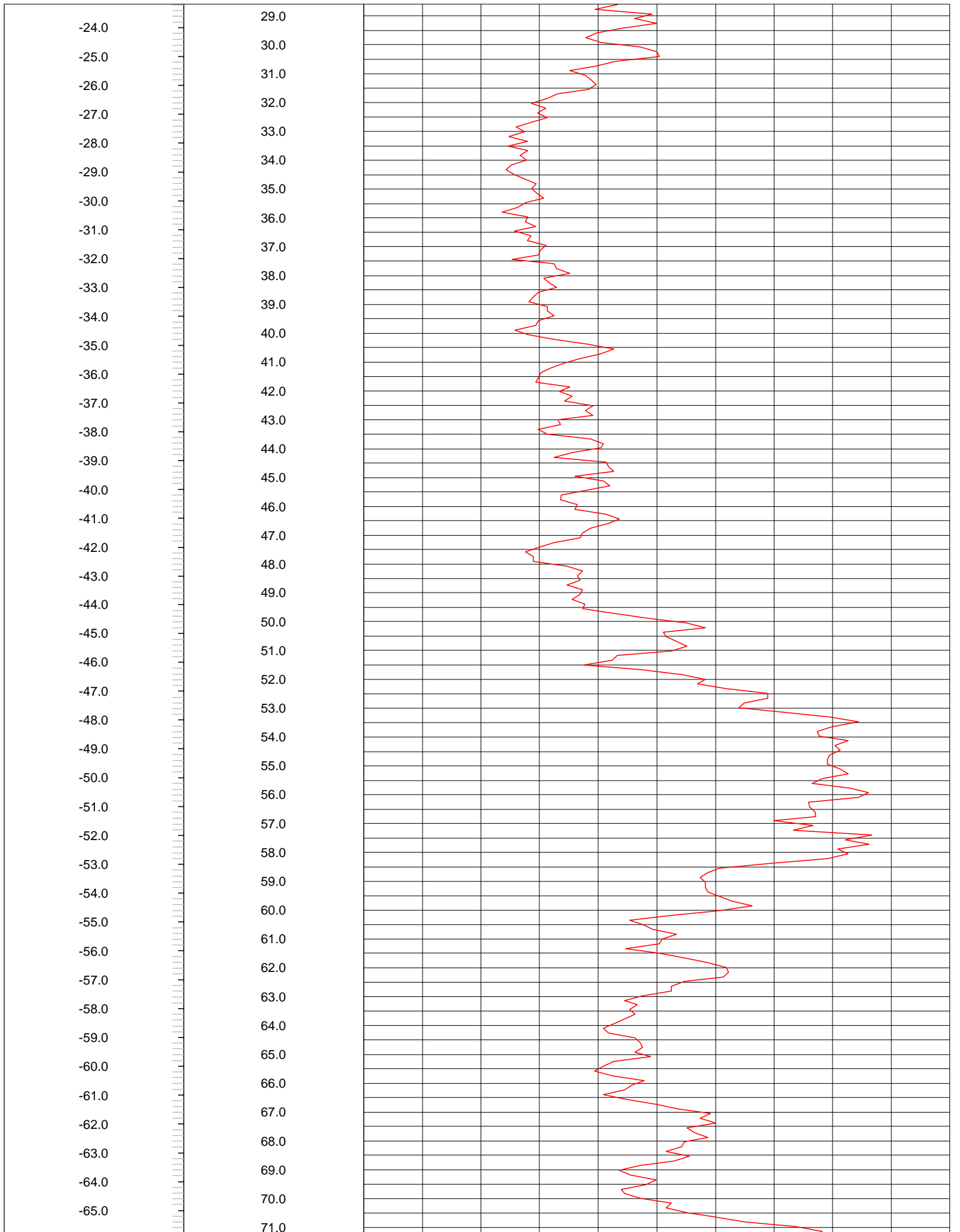
Project Number: 60615673
Date: 8/15/2020

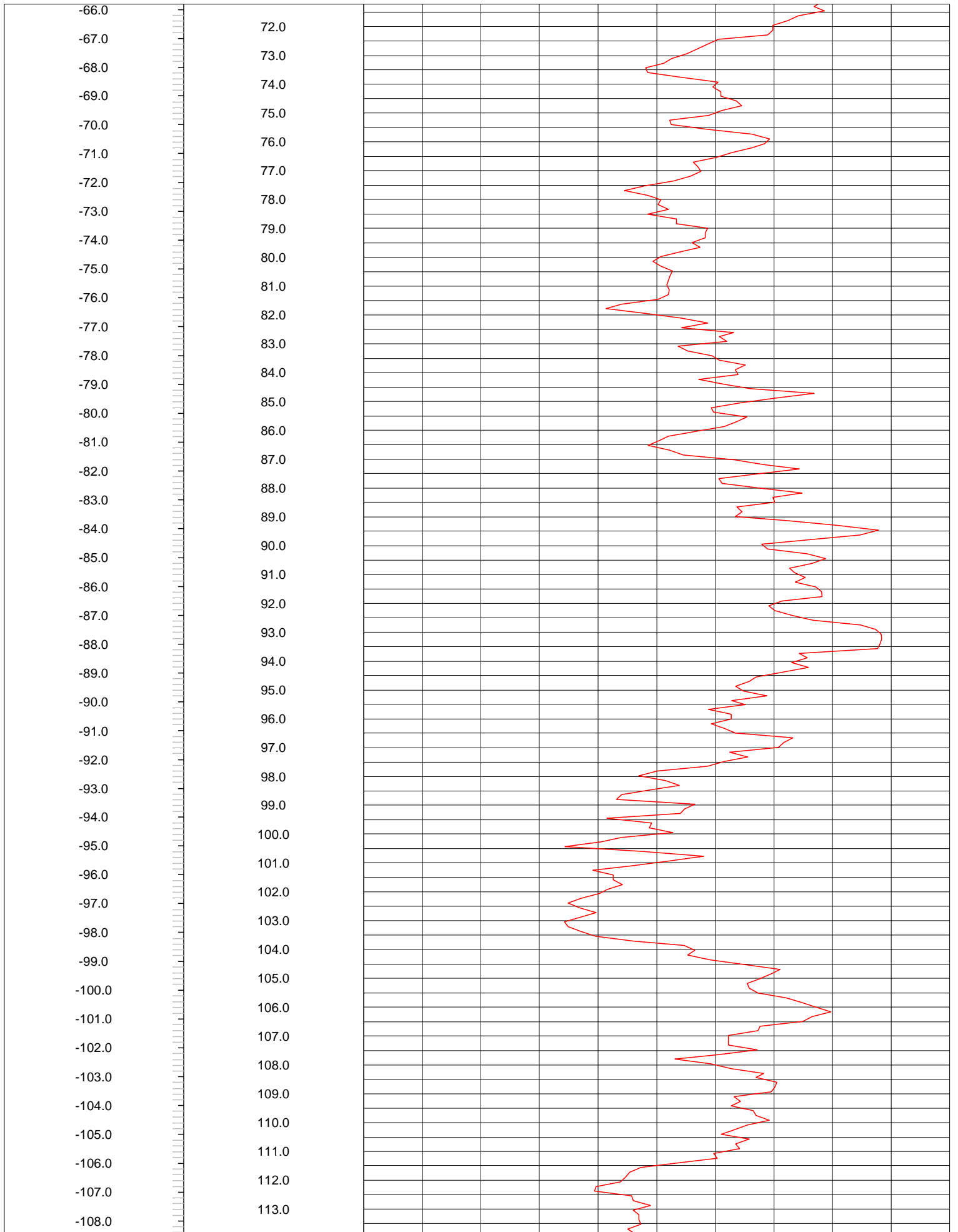
Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 235613.00	Drilling Method xxx	Casing Stick-up: 0.27 ft bgs	Log Date: 8/6/2020
Northing: 471798.00	Borehole Size: xx	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 5.41 ft	Drilled Depth: 130 ft	Casing Depth: NA	

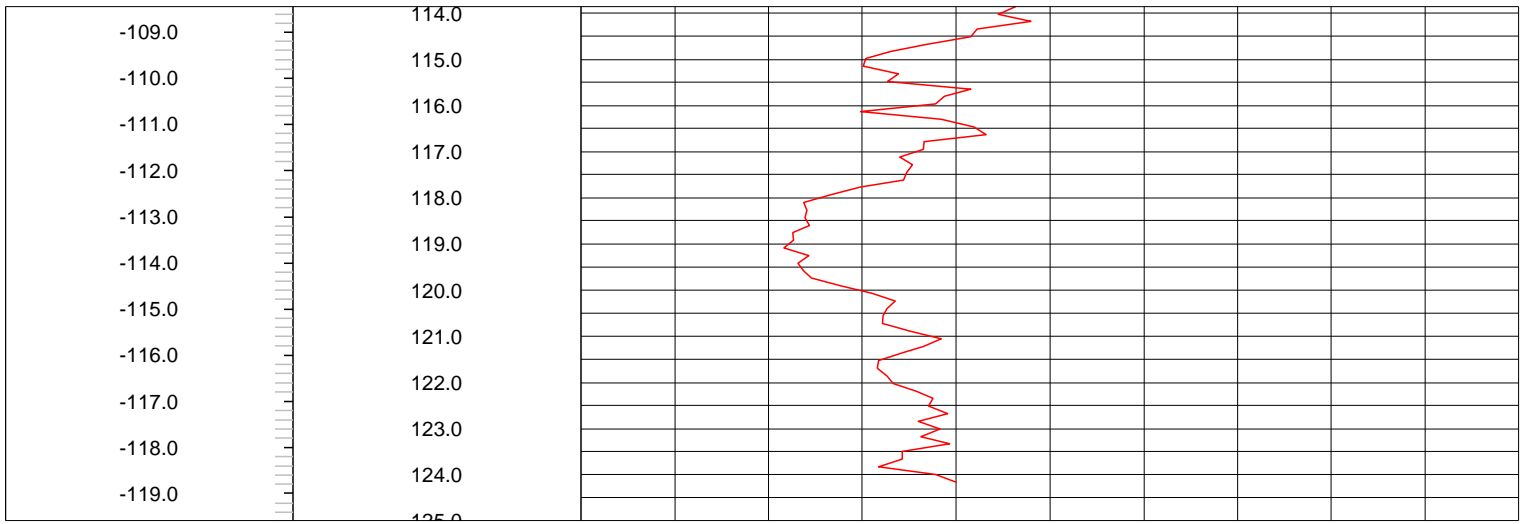
Depth to Water: 0.0 ft bgs before logging

Notes: Artesian Well









GEOPHYSICAL RECORD OF BOREHOLE: CCF-IW0002D

Kennedy Space Center
Merrit Island, Florida

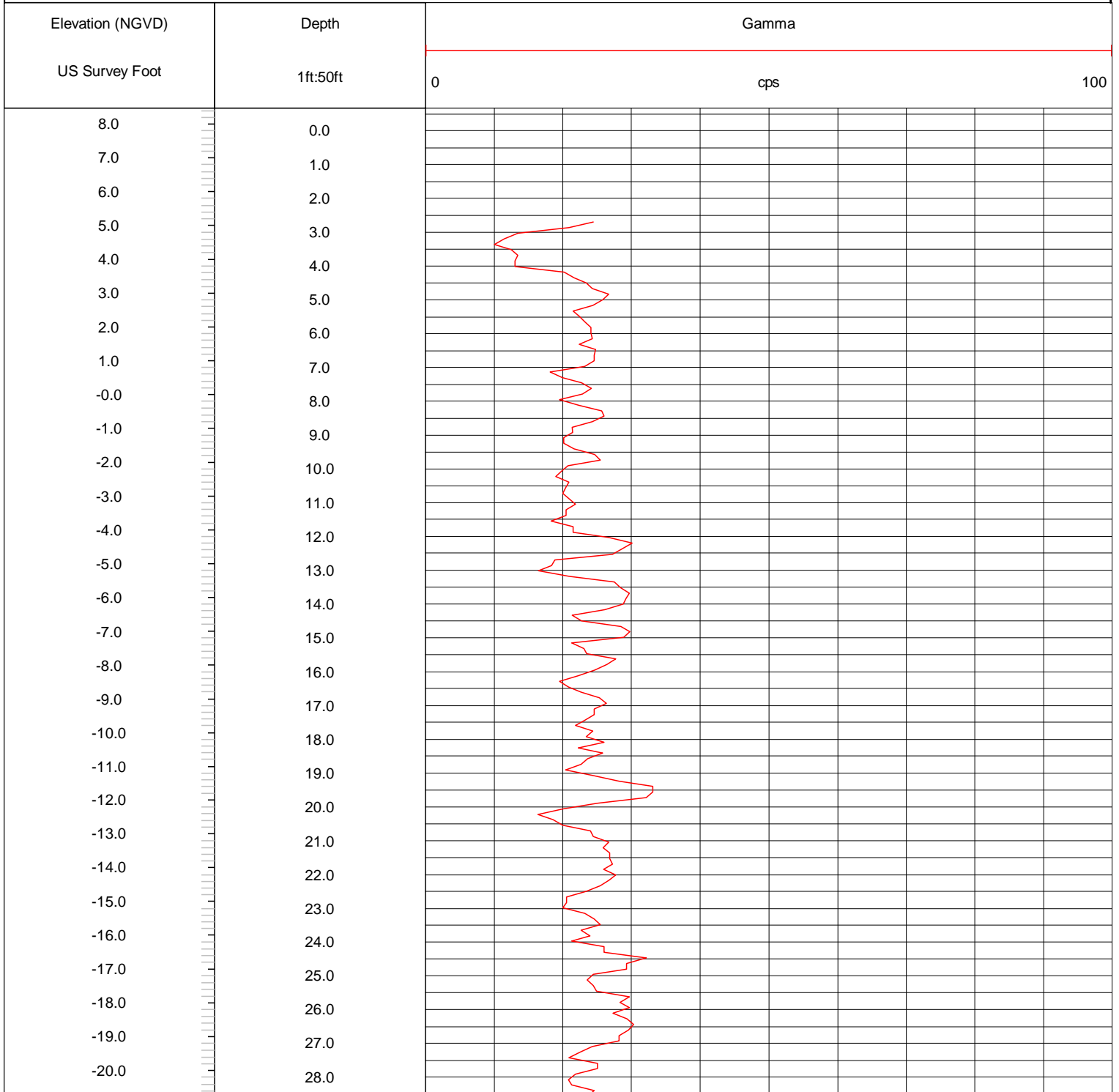


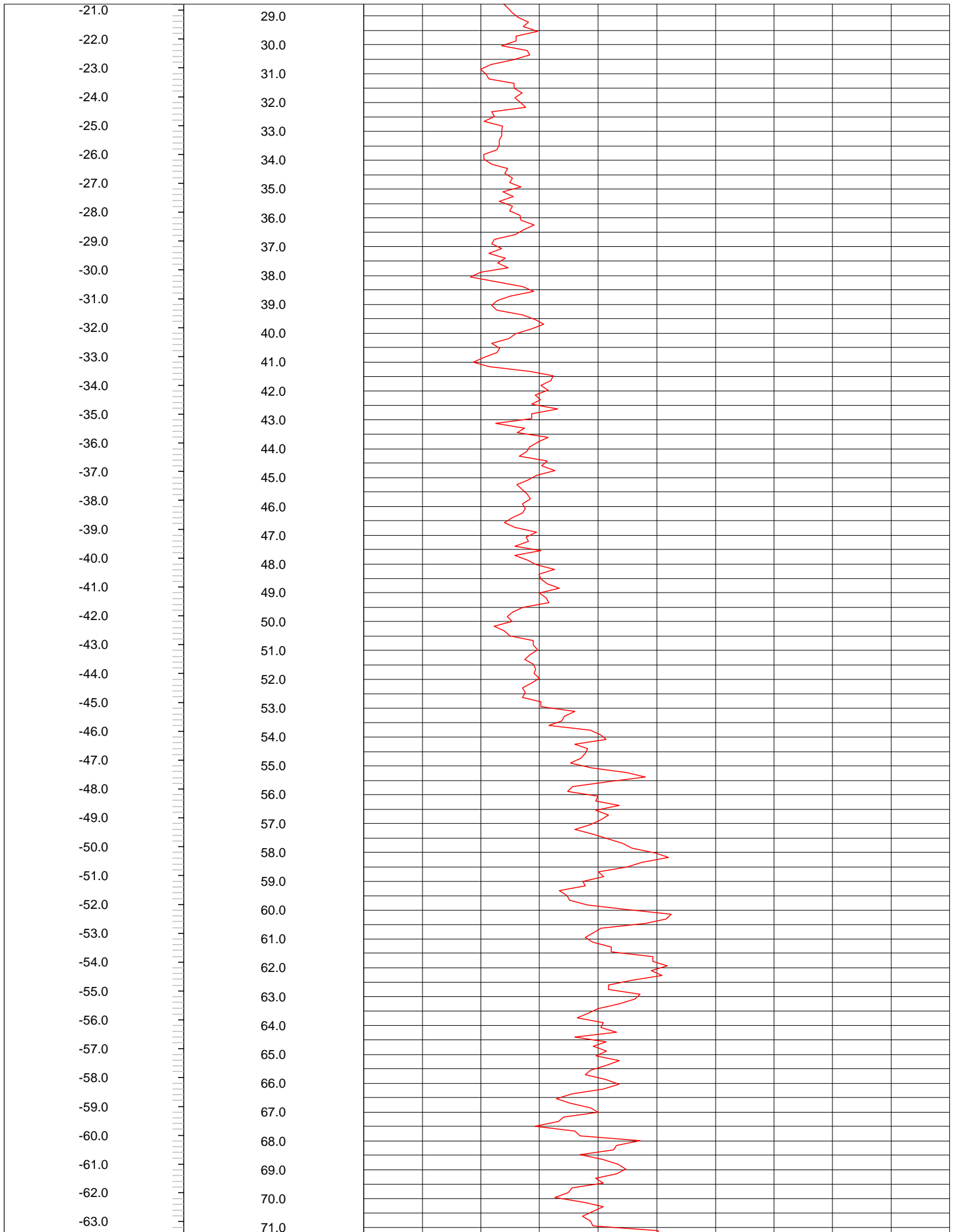
Project Number: 60615673
Date: 8/15/2020

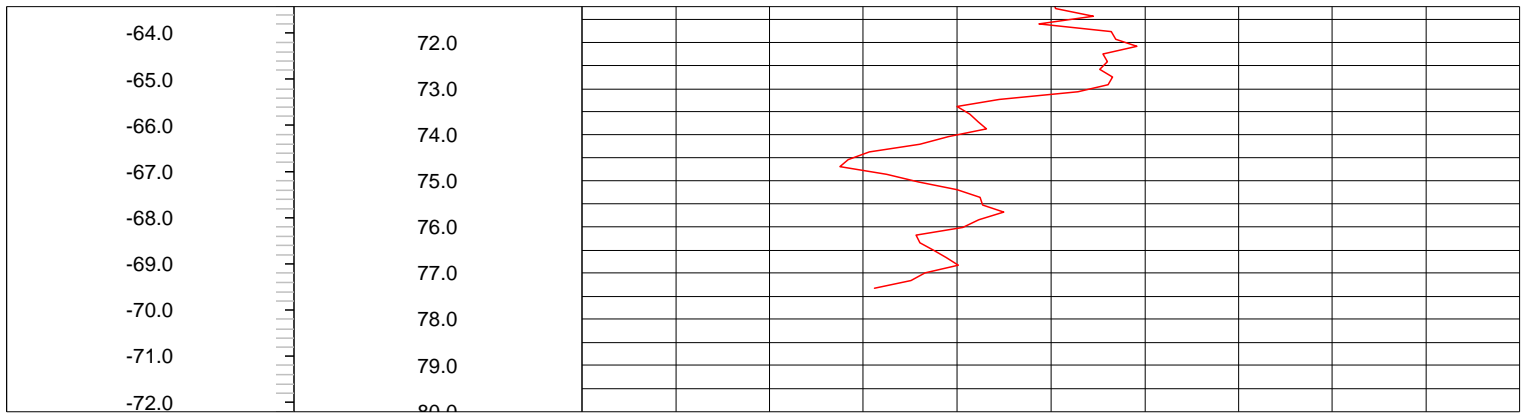
Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: xxx	Location: Merrit Island, FL
Easting: 235483	Drilling Method xxx	Casing Stick-up: 0.23 ft bgs	Log Date: 8/5/2020
Northing: 471639	Borehole Size: xx	Casing Diameter: 2 in PVC	Logged By: JM
Ground Elev msl: 7.8 ft	Drilled Depth: xx	Casing Depth: NA	

Depth to Water: 3.58 ft bgs before logging 8/5/2020

Notes:







GEOPHYSICAL RECORD OF BOREHOLE: CCF-IW0005D

Kennedy Space Center
Merrit Island, Florida



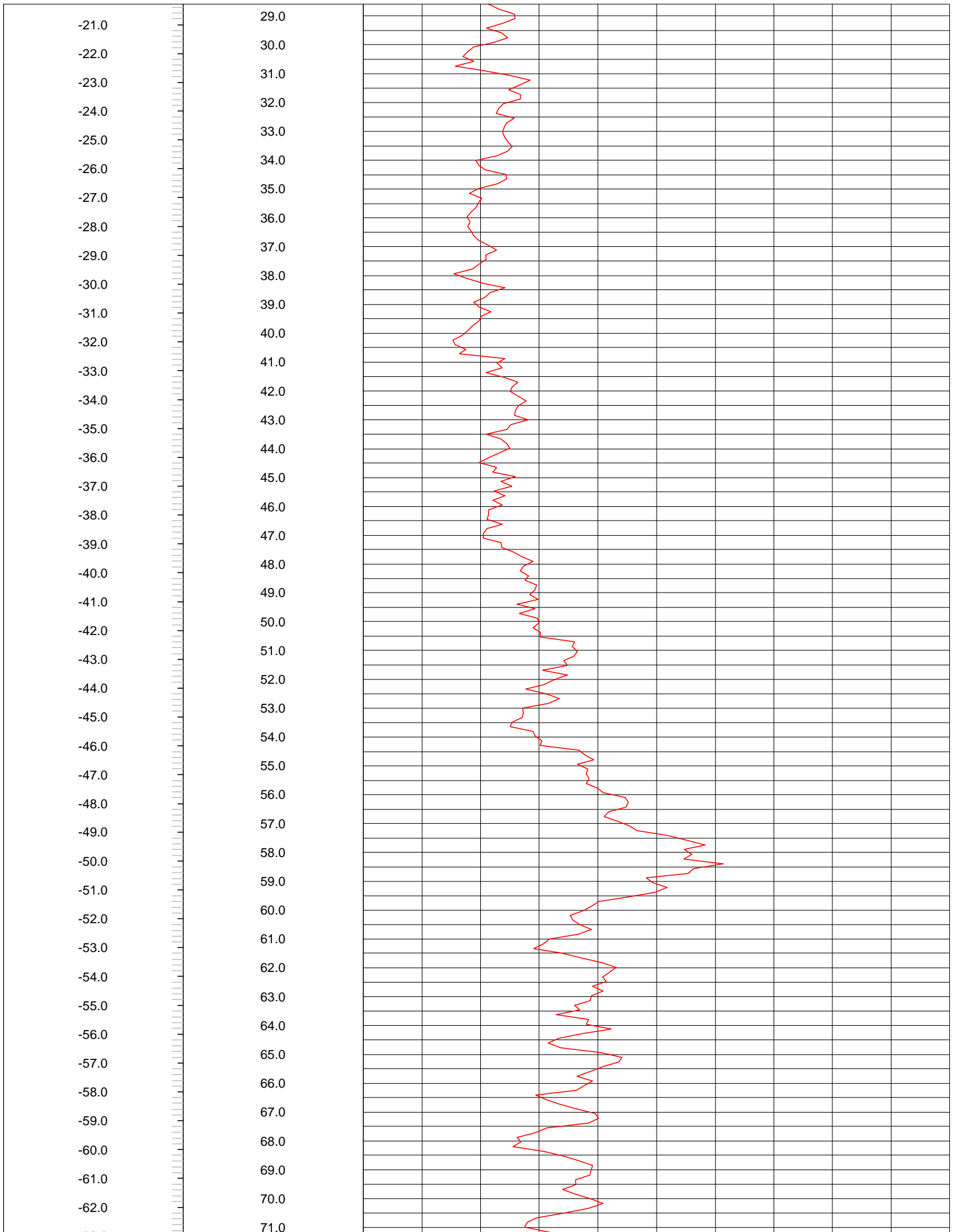
Project Number: 60615673
Date: 8/15/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 235483	Drilling Method NA	Casing Stick-up: 2.34 ft ags	Log Date: 8/7/2020
Northing: 471639	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 8.3 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 5.34 ft bgs before logging on 8/7/2020

Notes:







GEOPHYSICAL RECORD OF BOREHOLE: CHP-MW0017

Kennedy Space Center
Merrit Island, Florida

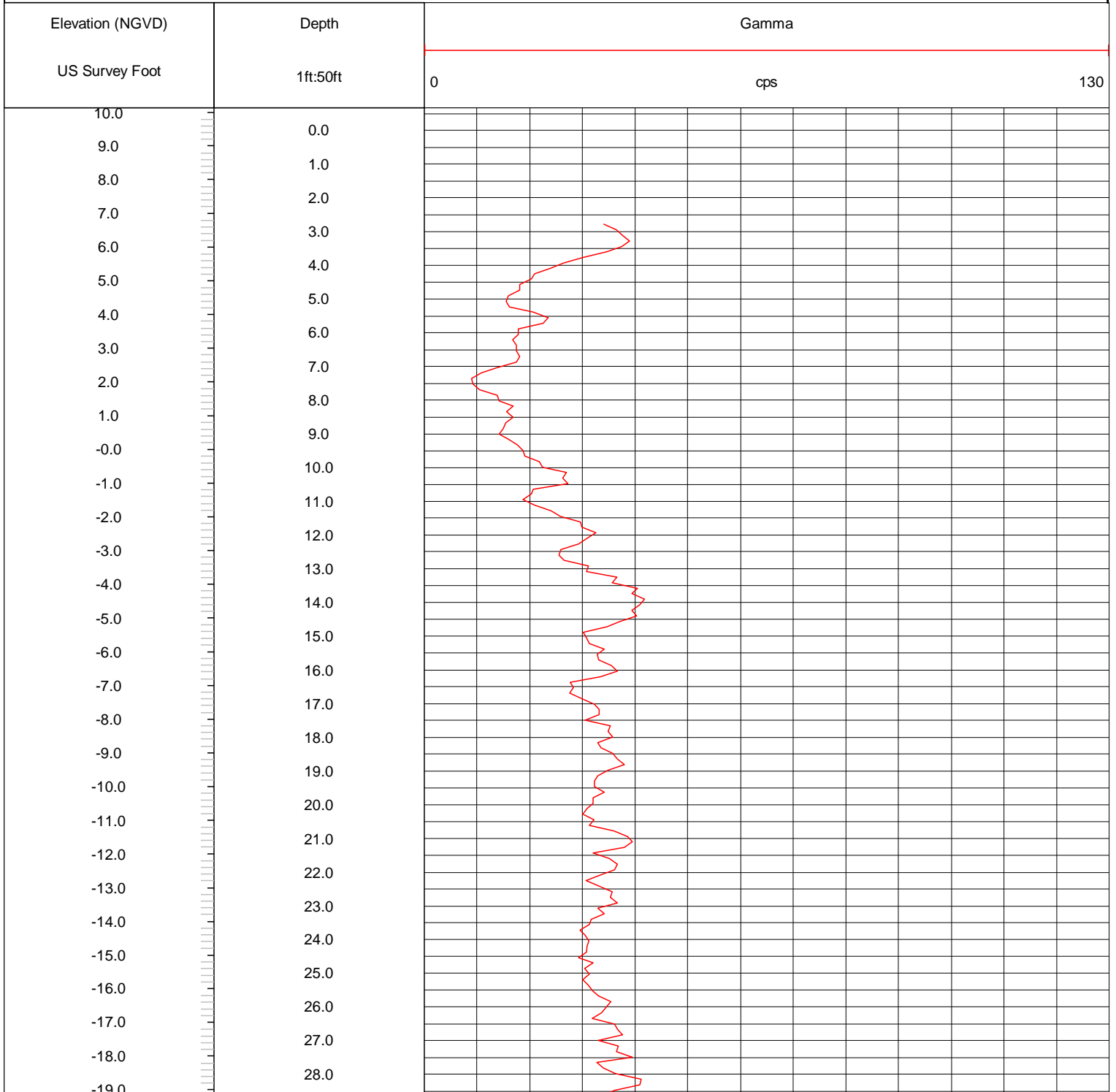


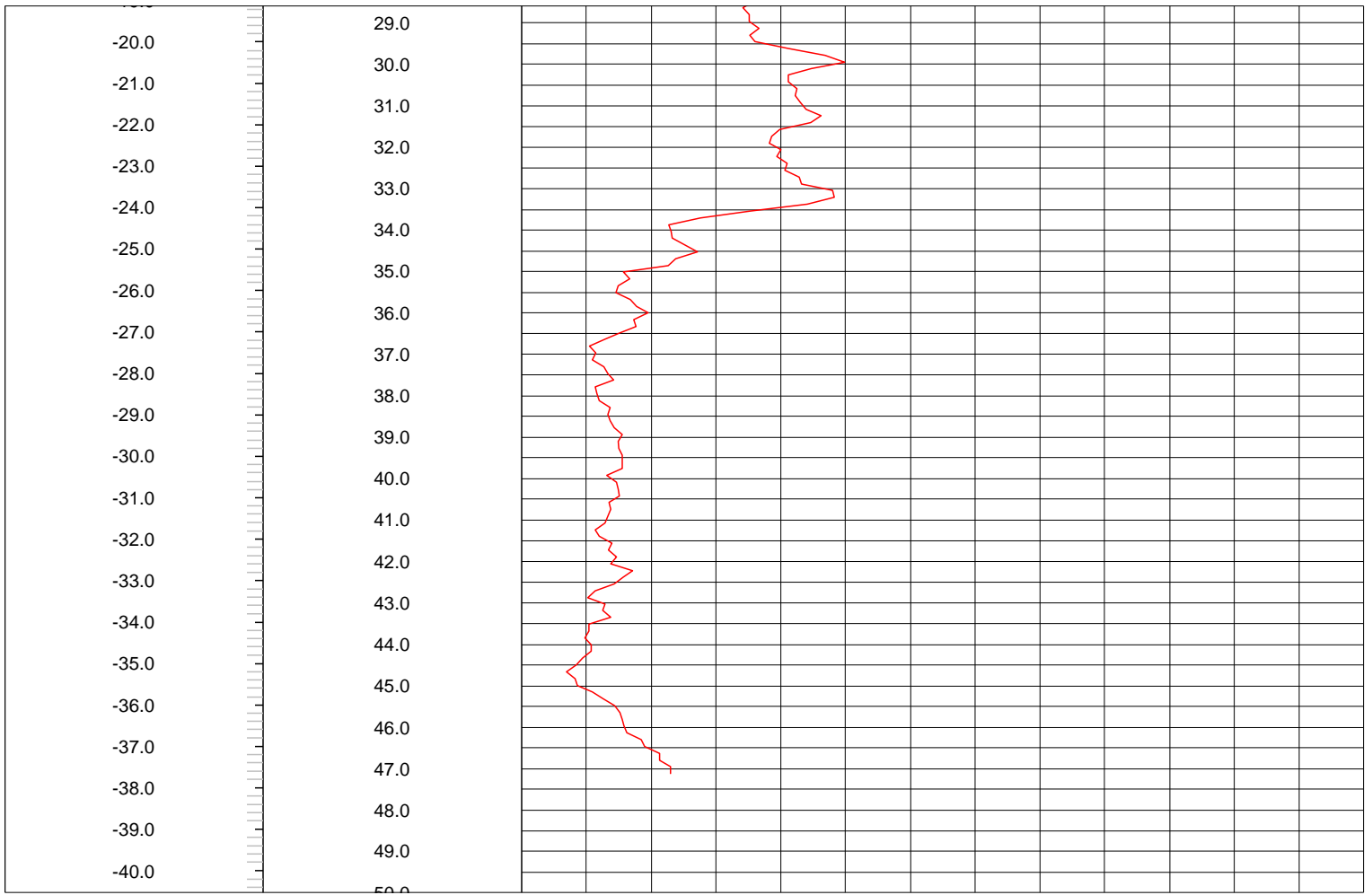
Project Number: 60615673
Date: 8/15/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 233875.81	Drilling Method NA	Casing Stick-up: 0.3 ft bgs	Log Date: 8/6/2020
Northing: 463985.06	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 9.46 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 4.18 ft bgs before logging on 8/6/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: CRHE-IW0014D

Kennedy Space Center
Merrit Island, Florida



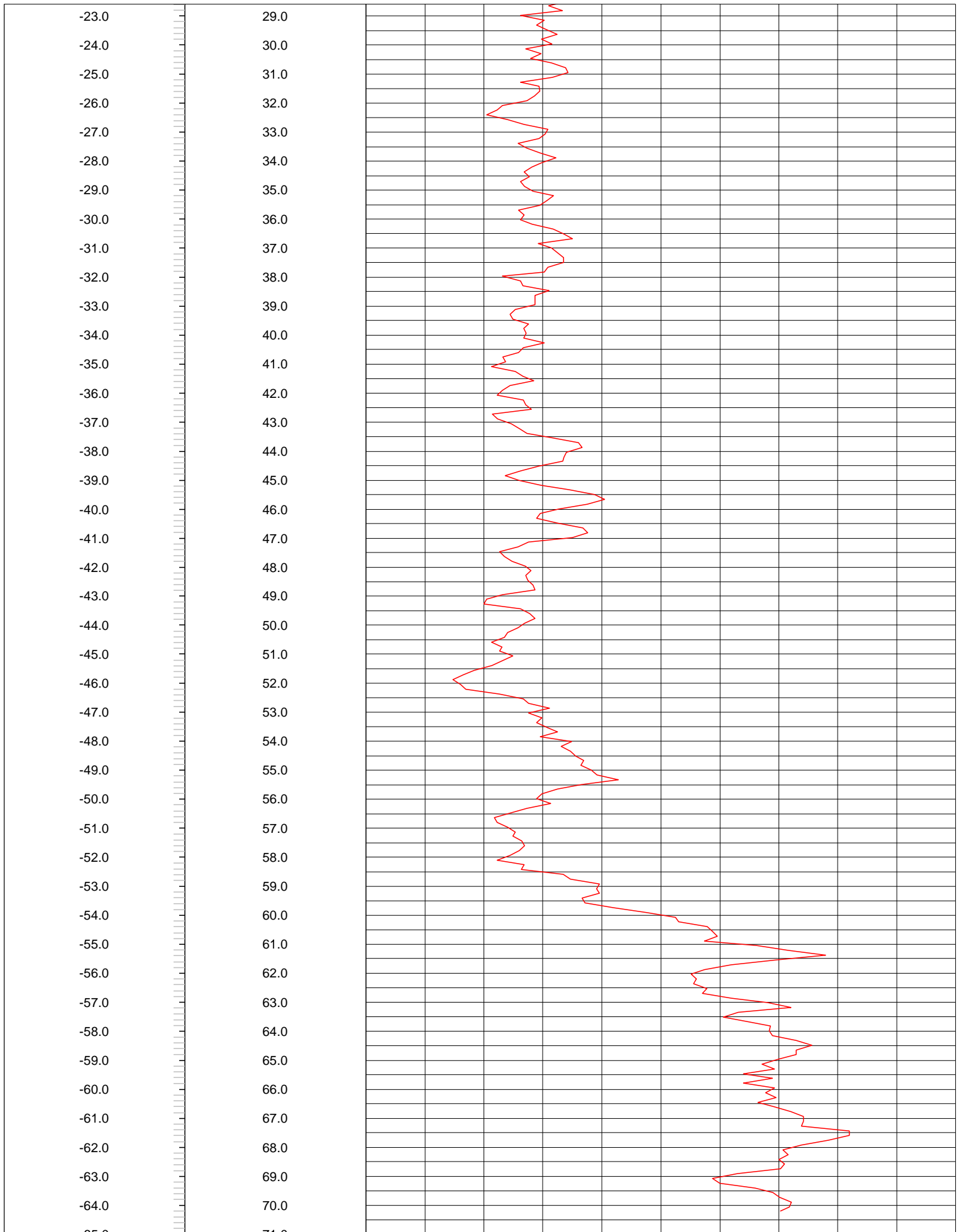
Project Number: 60615673
Date: 8/15/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 233971.18	Drilling Method NA	Casing Stick-up: 0.32 ft bgs	Log Date: 8/6/2020
Northing: 469515.73	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 6.0 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 2.8 bgs before logging on 8/6/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: CRHE-IW0017I

Kennedy Space Center
Merrit Island, Florida

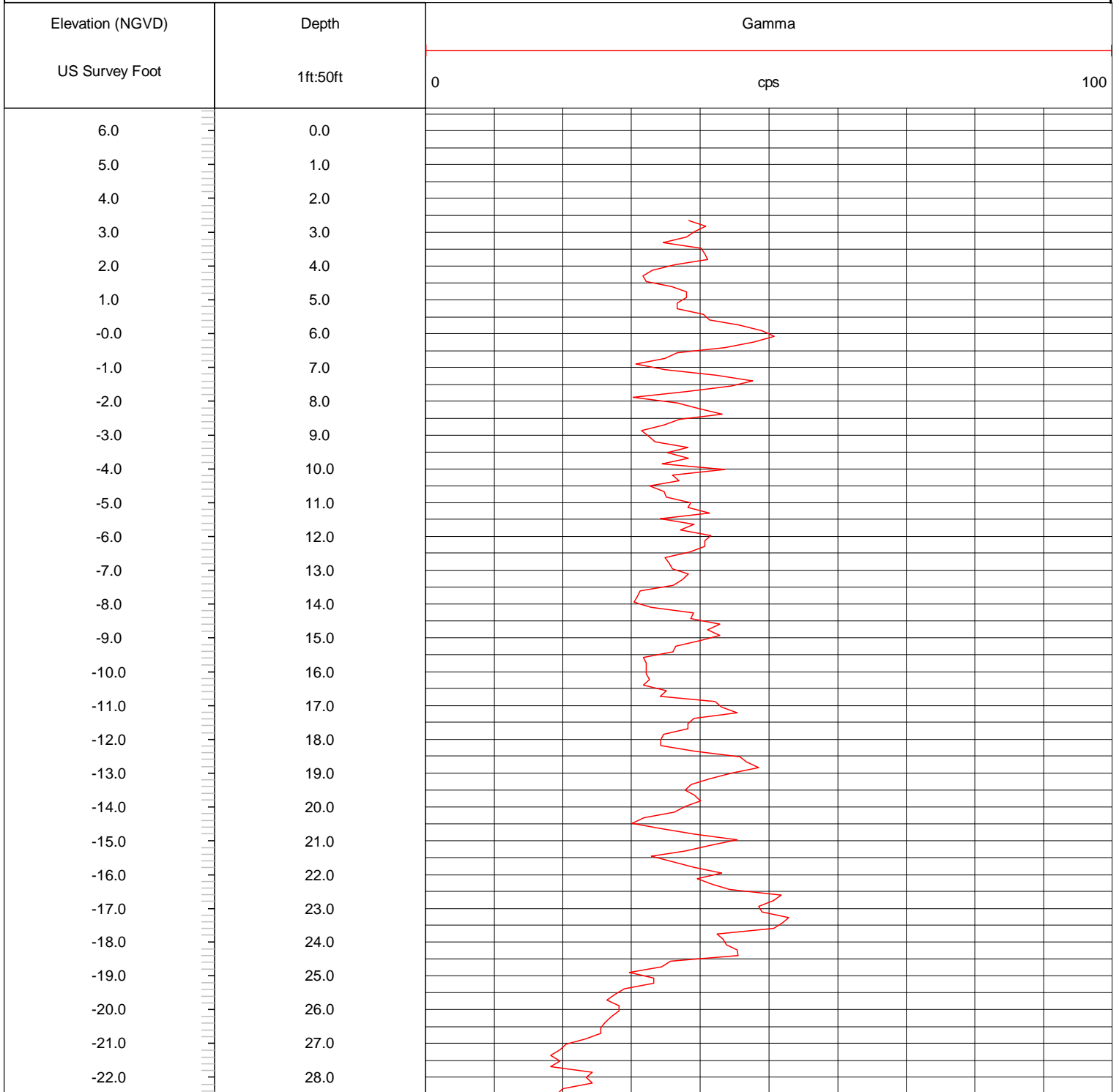


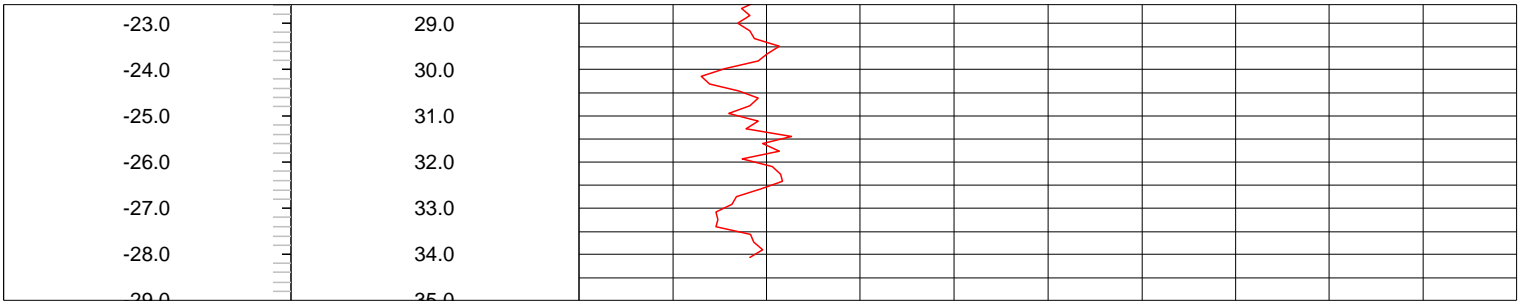
Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 233997.77	Drilling Method NA	Casing Stick-up: 0.17 ft bgs	Log Date: 8/6/2020
Northing: 469919.22	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: JM
Ground Elev msl: 6.0 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 2.57 ft bgs before logging on 8/6/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: FDSA-RW0001

Kennedy Space Center
Merrit Island, Florida



Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 235274.91	Drilling Method NA	Casing Stick-up: 0.85 ft ags	Log Date: 8/7/2020
Northing: 473149.05	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: -0.32 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 0.34 ft bgs before logging on 8/7/2020
Notes:



GEOPHYSICAL RECORD OF BOREHOLE: FDSA-RW0003

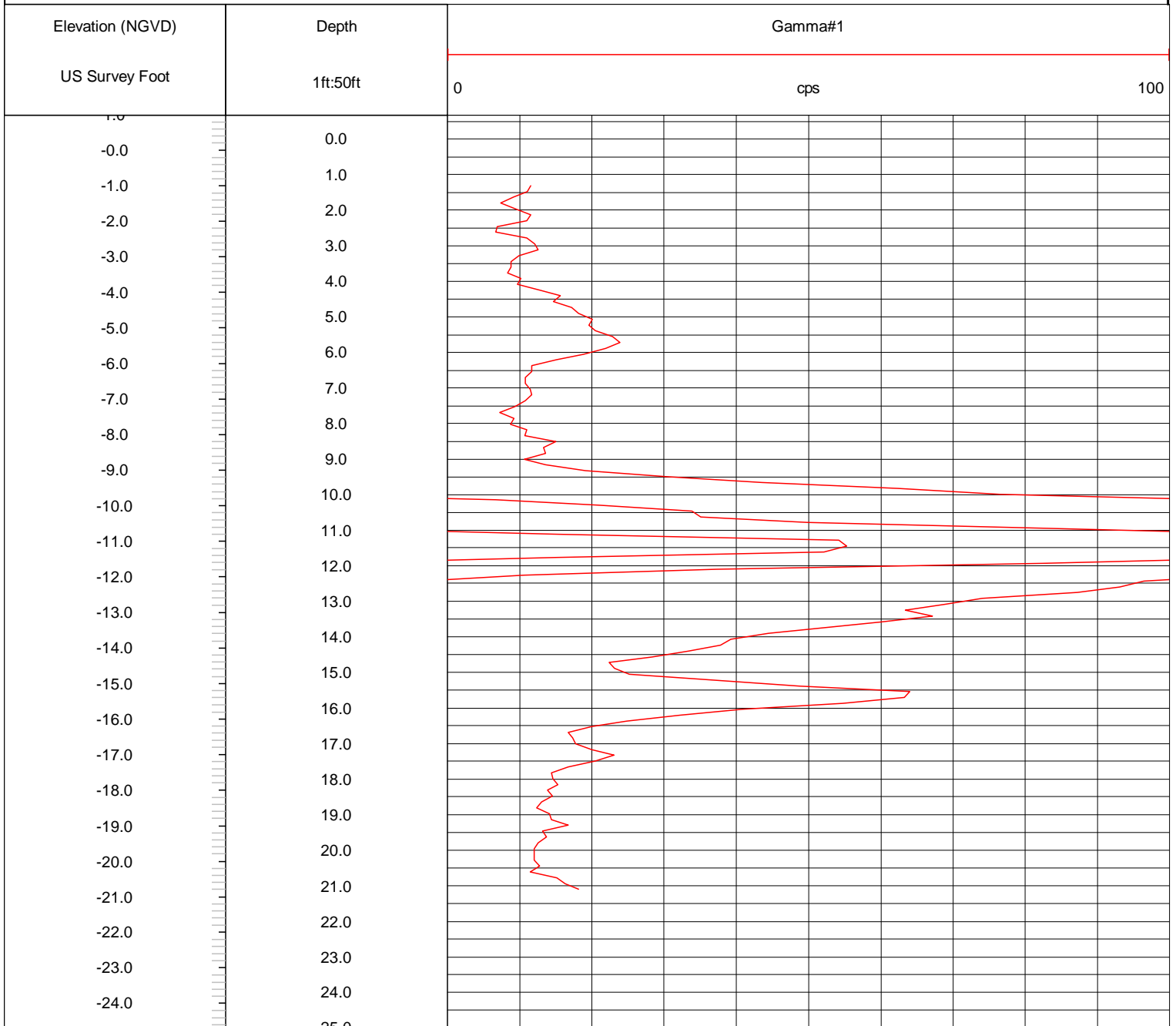
Kennedy Space Center
Merrit Island, Florida



Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 235283	Drilling Method NA	Casing Stick-up: 1.01 ft ags	Log Date: 8/7/2020
Northing: 473127	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 0.31 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 0.64 ft bgs before logging on 8/7/2020
Notes:



GEOPHYSICAL RECORD OF BOREHOLE: FDSA-RW0003

Kennedy Space Center
Merrit Island, Florida

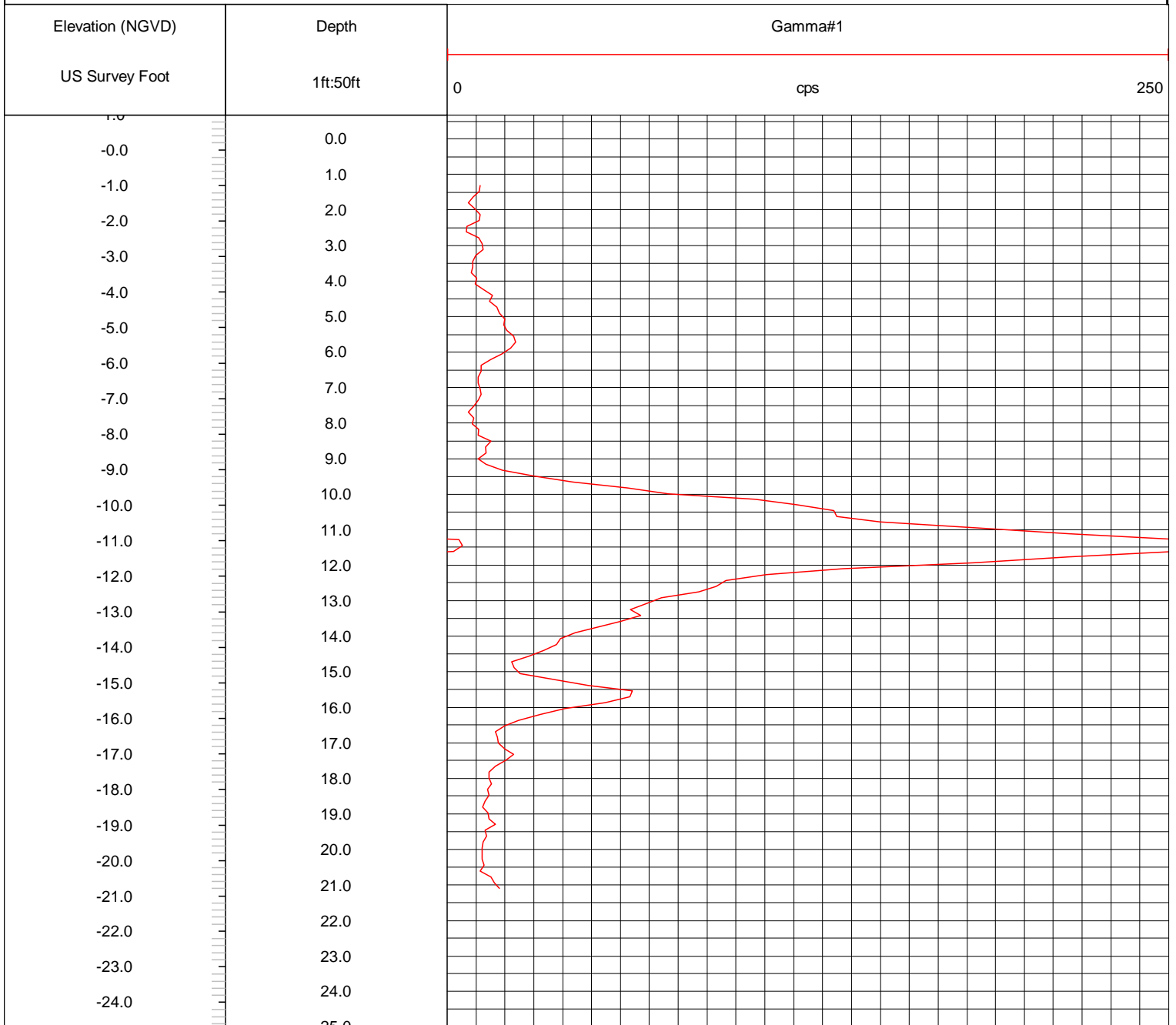


Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 235283	Drilling Method NA	Casing Stick-up: 1.01 ft ags	Log Date: 8/7/2020
Northing: 473127	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 0.31 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 0.64 ft bgs before logging on 8/7/2020
Notes:

Same log as above with gamma scale change to 250 cps



GEOPHYSICAL RECORD OF BOREHOLE: GSRV-MW0002IS

Kennedy Space Center
Merrit Island, Florida



Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 231971.83	Drilling Method NA	Casing Stick-up: 3.0 ft ags	Log Date: 8/6/2020
Northing: 462432.72	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 4.0 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 1.5 ft bgs before logging on 8/6/2020
Notes:



-25.0	 	29.0												
26.0		29.0												

GEOPHYSICAL RECORD OF BOREHOLE: GSRV-MW0058

Kennedy Space Center
Merrit Island, Florida

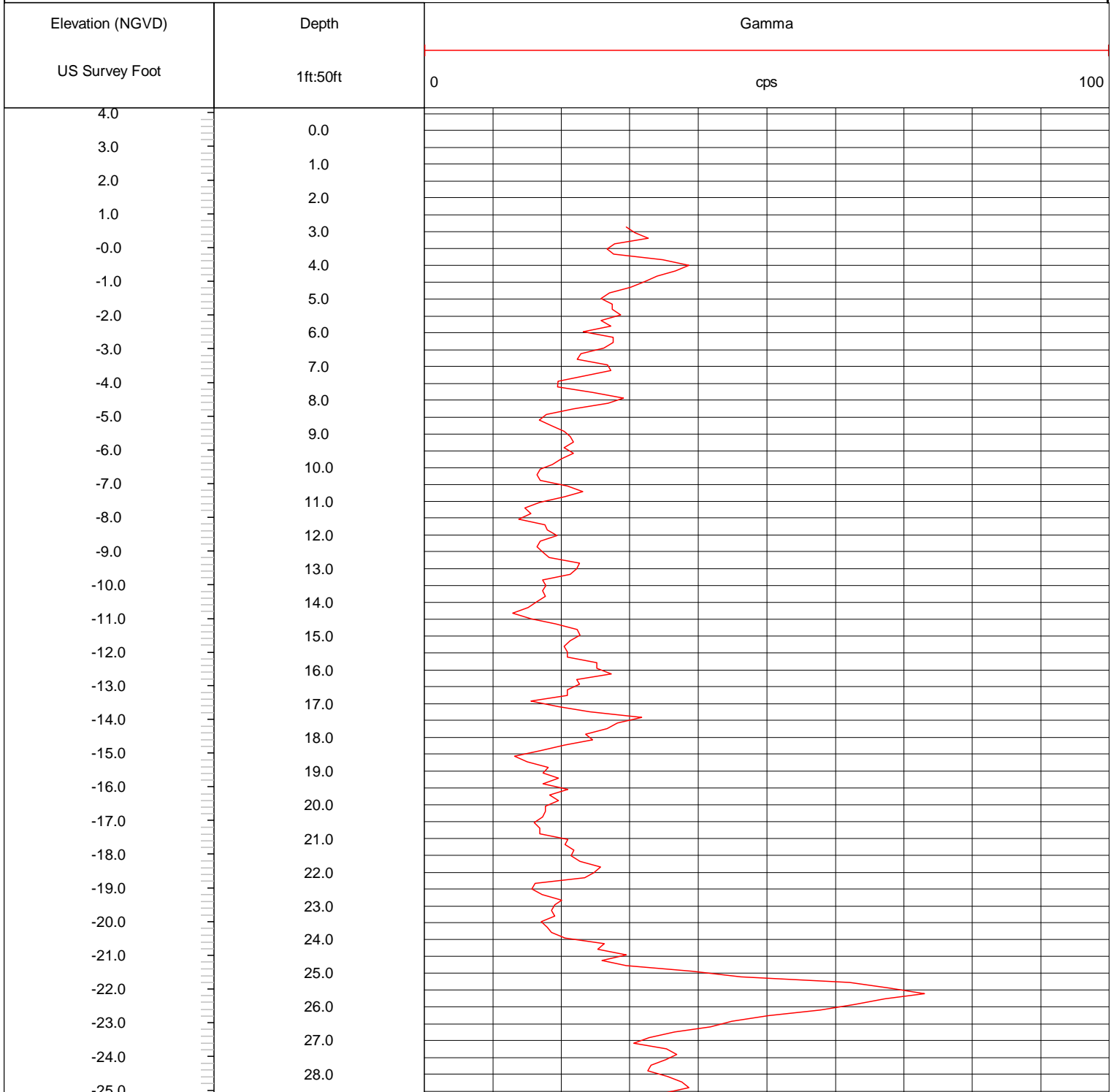


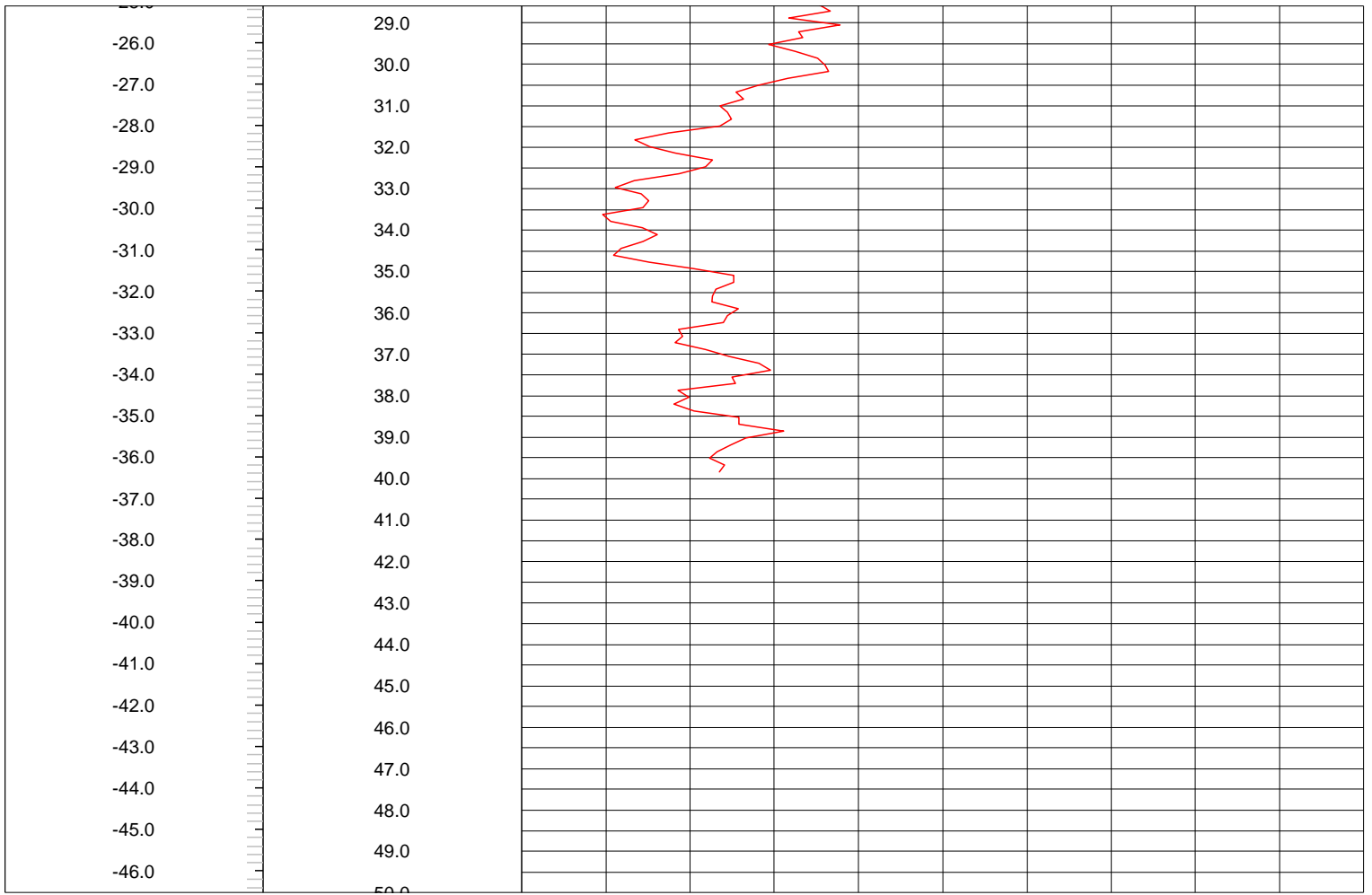
Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 232110.0	Drilling Method NA	Casing Stick-up: 0.38 ft bgs	Log Date: 8/6/2020
Northing: 462494.0	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 3.47 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 1.73 ft bgs before logging on 8/6/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: GSSP-EW0001

Kennedy Space Center
Merrit Island, Florida



Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference: Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 232762.44	Drilling Method: NA	Casing Stick-up: 0.48 ft bgs	Log Date: 8/7/2020
Northing: 463579.88	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 6.8 ft	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 3.27 ft bgs before logging on 8/7/2020
Notes:



GEOPHYSICAL RECORD OF BOREHOLE: MLPV-IW0009D

Kennedy Space Center
Merrit Island, Florida

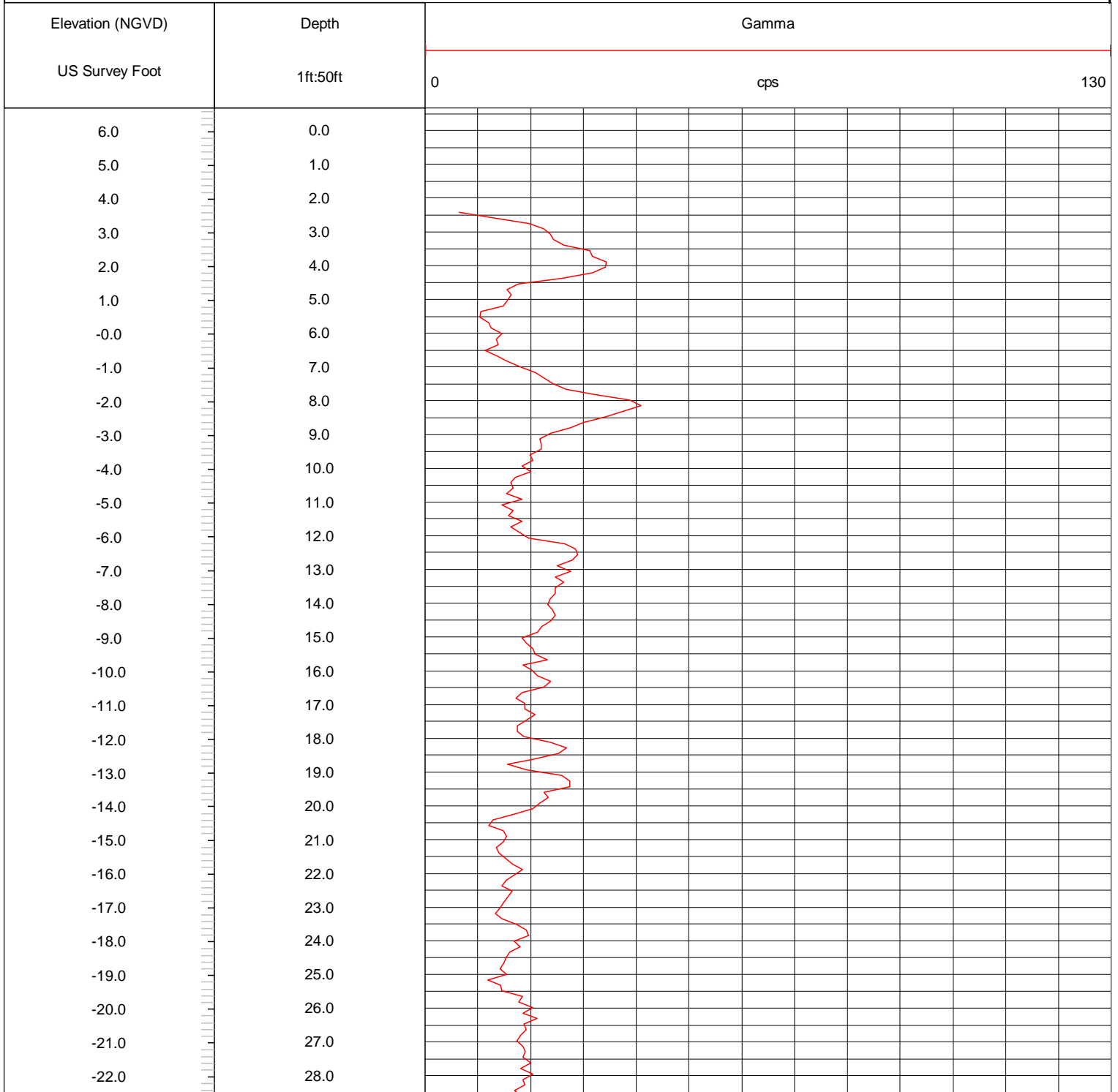


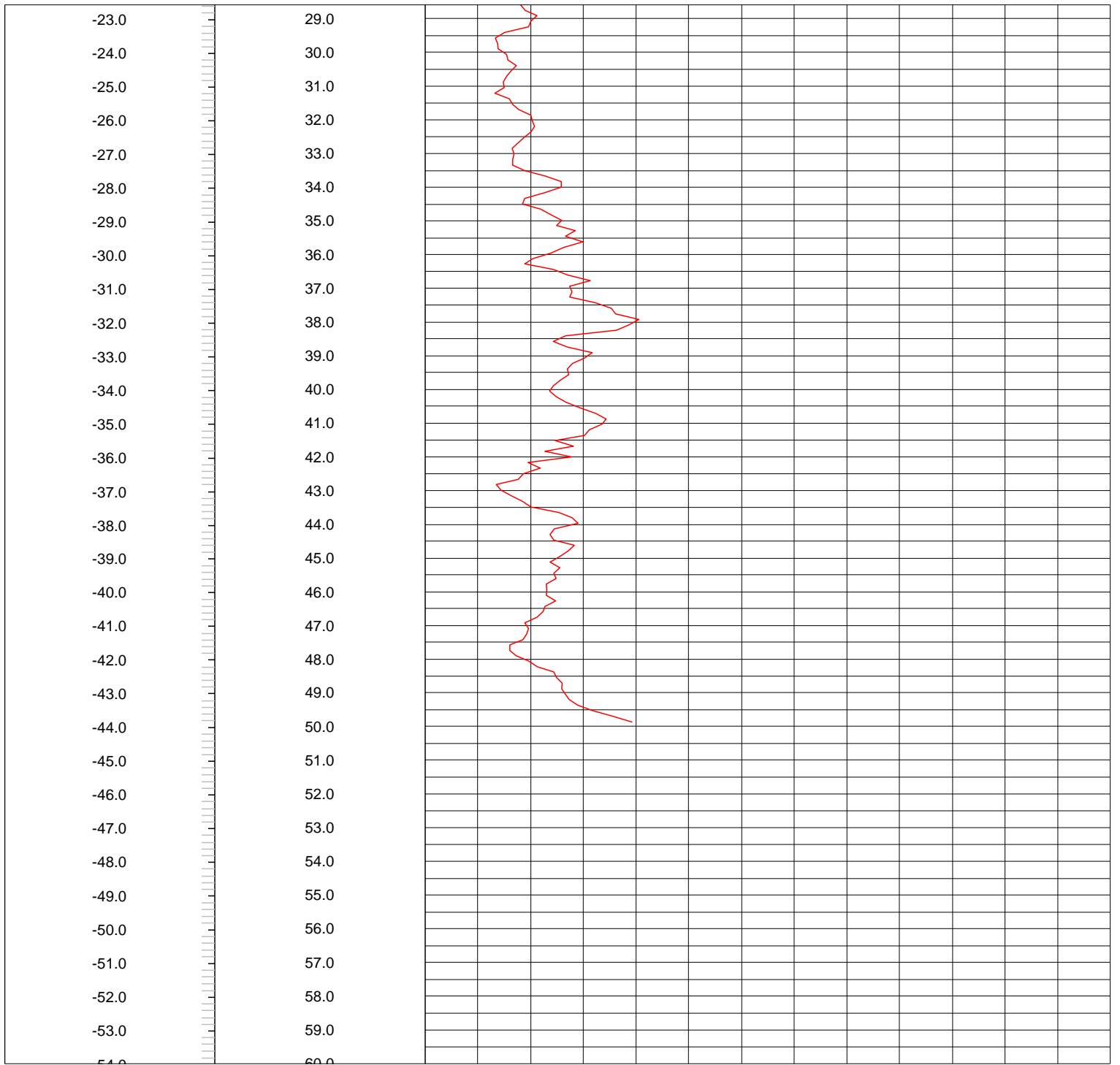
Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 234169.89	Drilling Method NA	Casing Stick-up: 0.1 ft bgs	Log Date: 8/5/2020
Northing: 471582.93	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: JM
Ground Elev msl: 6.03	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 4.35 ft bgs before logging on 8/5/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: O_C-MW0005I

Kennedy Space Center
Merrit Island, Florida



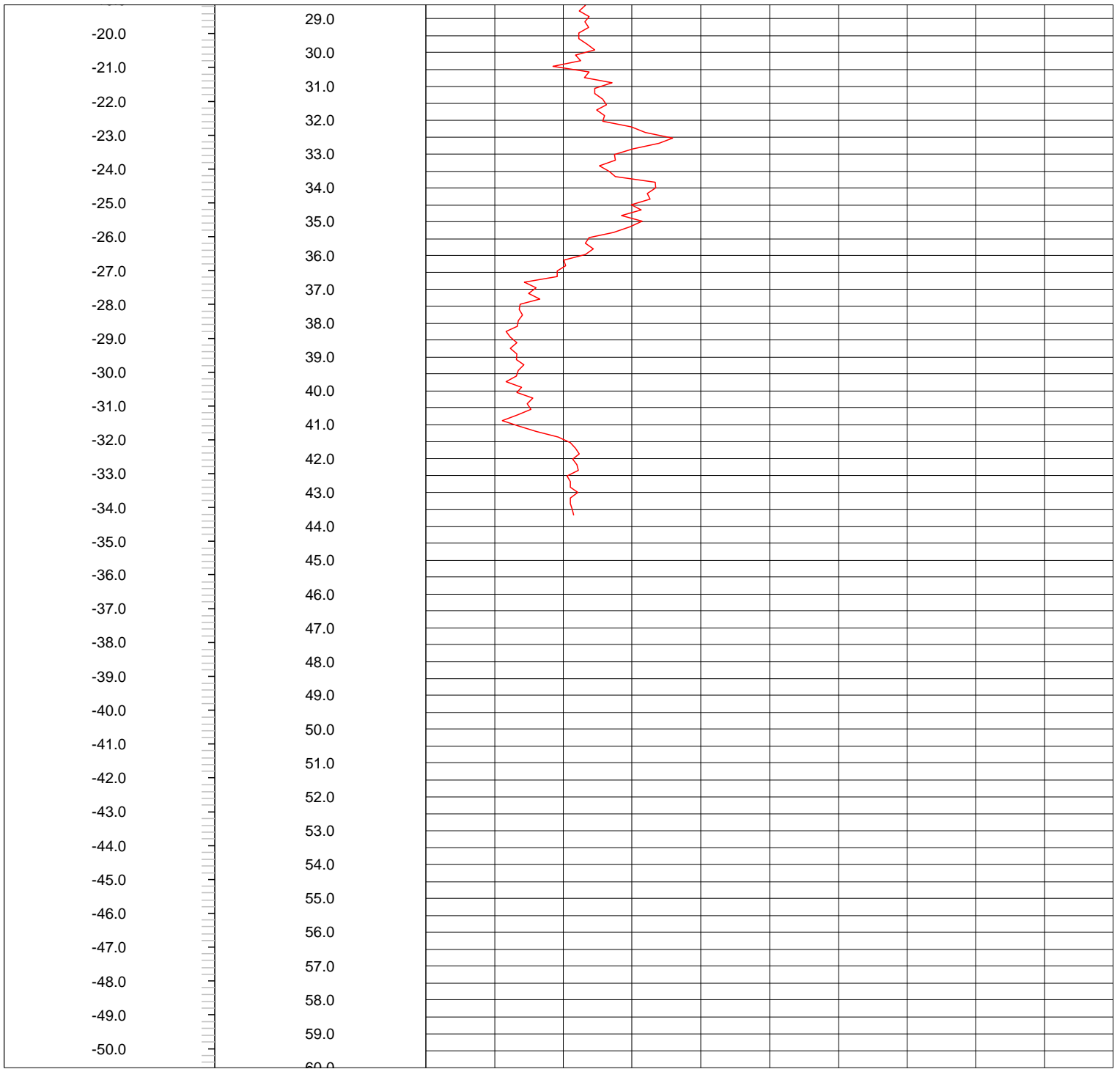
Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 234631.62	Drilling Method NA	Casing Stick-up: 0.27 ft bgs	Log Date: 8/6/2020
Northing: 464439.46	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 9.44	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 7.3 ft bgs before logging on 8/6/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: POL-MW0009D

Kennedy Space Center
Merrit Island, Florida

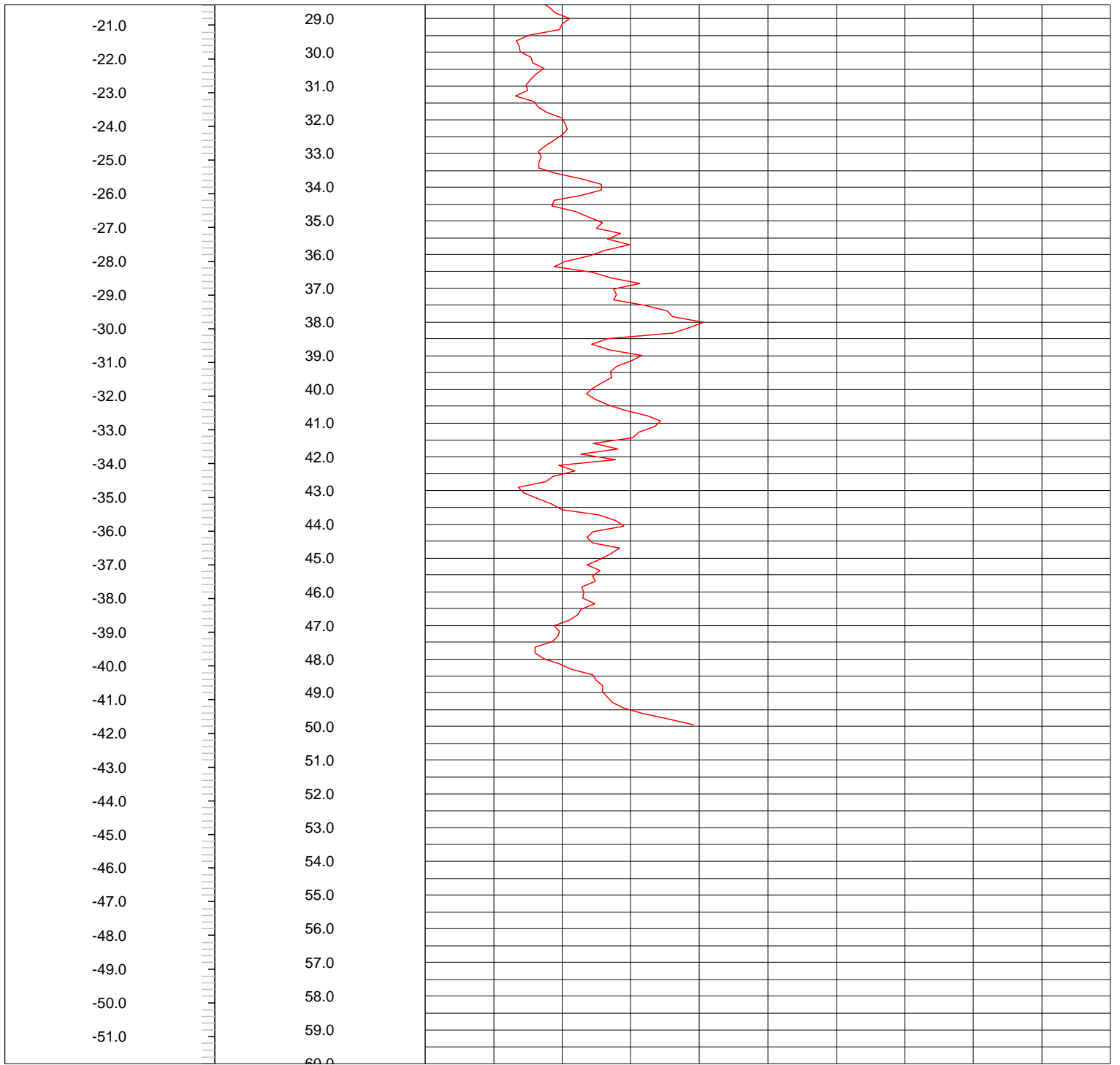


Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 233831.21	Drilling Method NA	Casing Stick-up: 0.18 ft bgs	Log Date: 8/7/2020
Northing: 463444.07	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 8.1	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 3.6 ft bgs before logging on 8/7/2020
Notes:





GEOPHYSICAL RECORD OF BOREHOLE: POL-MW0009D

Kennedy Space Center
Merrit Island, Florida



Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 233833.00	Drilling Method NA	Casing Stick-up: 0.19 ft bgs	Log Date: 8/7/2020
Northing: 463444.00	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 6.94	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 3.52 ft bgs before logging on 8/7/2020
Notes:



GEOPHYSICAL RECORD OF BOREHOLE: PRES-IW0008I

Kennedy Space Center
Merrit Island, Florida

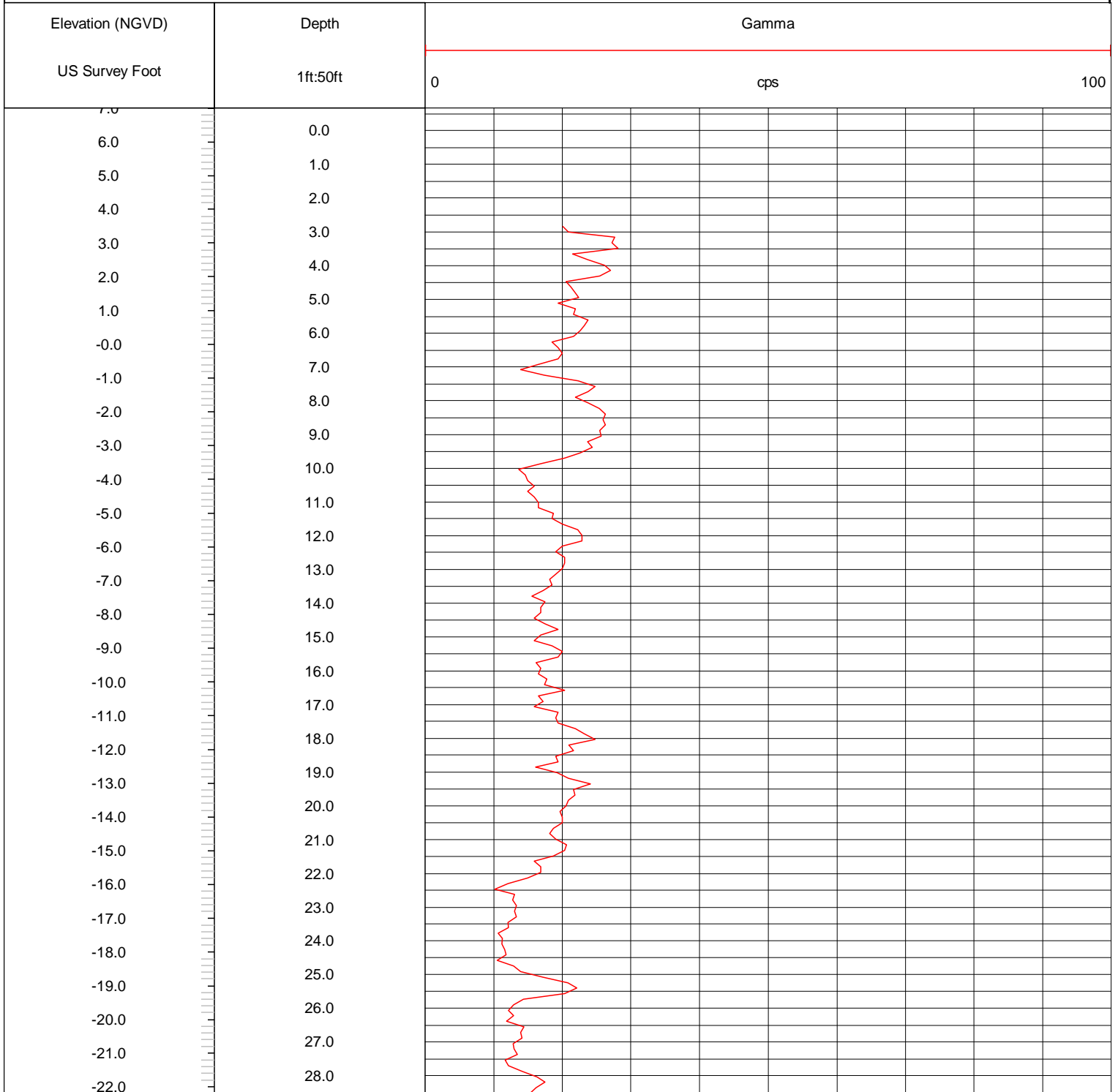


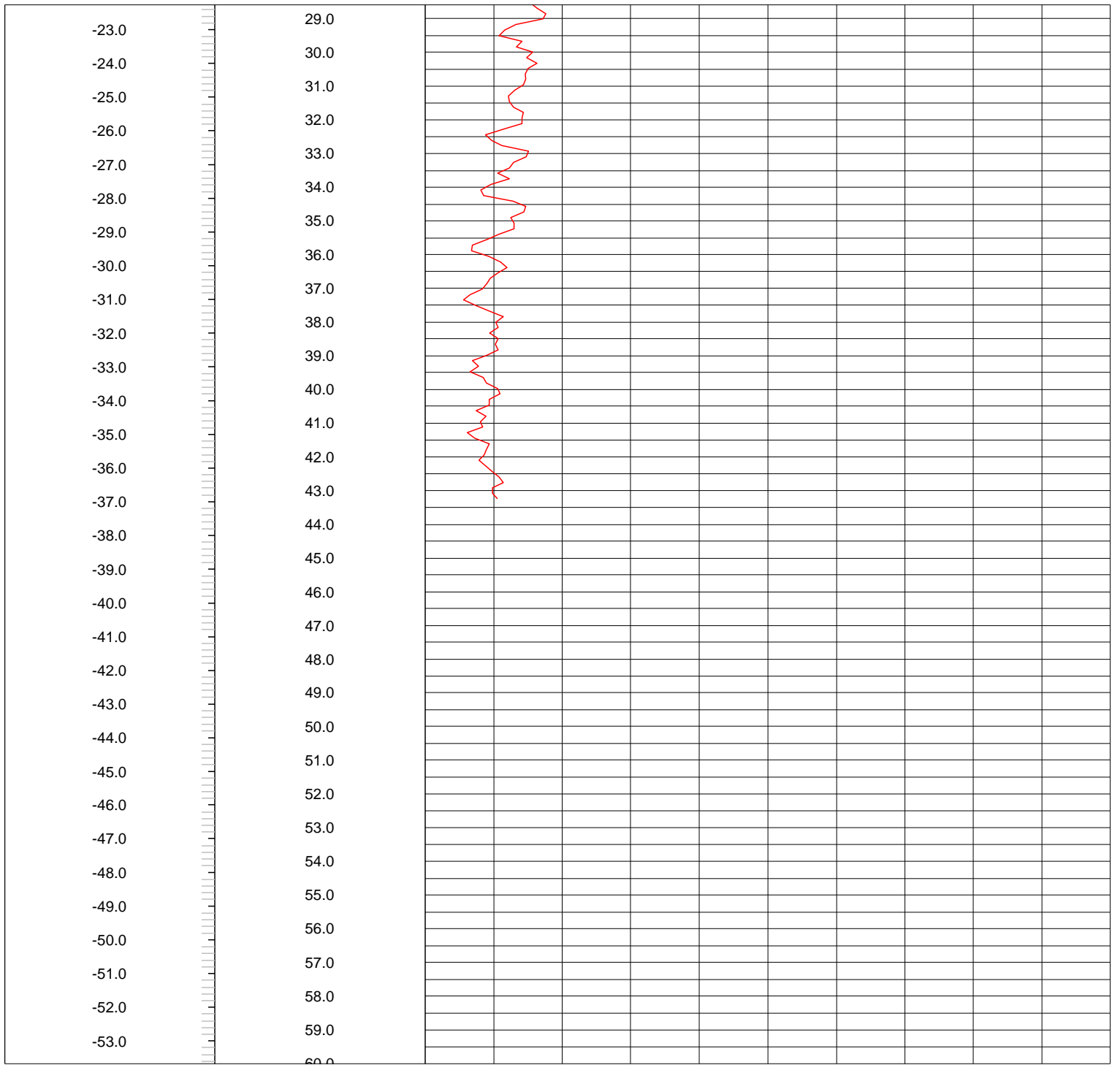
Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 234323.00	Drilling Method NA	Casing Stick-up: 0.35 ft bgs	Log Date: 8/6/2020
Northing: 470608.00	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 6.33	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 5.06 ft bgs before logging on 8/6/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: WILC-MW0068

Kennedy Space Center
Merrit Island, Florida



Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 229162.19	Drilling Method NA	Casing Stick-up: 1.34 ft ags	Log Date: 8/7/2020
Northing: 477681.53	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 5.6	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 2.51 ft bgs before logging on 8/7/2020
Notes:





GEOPHYSICAL RECORD OF BOREHOLE: WILC-MW0078

Kennedy Space Center
Merrit Island, Florida



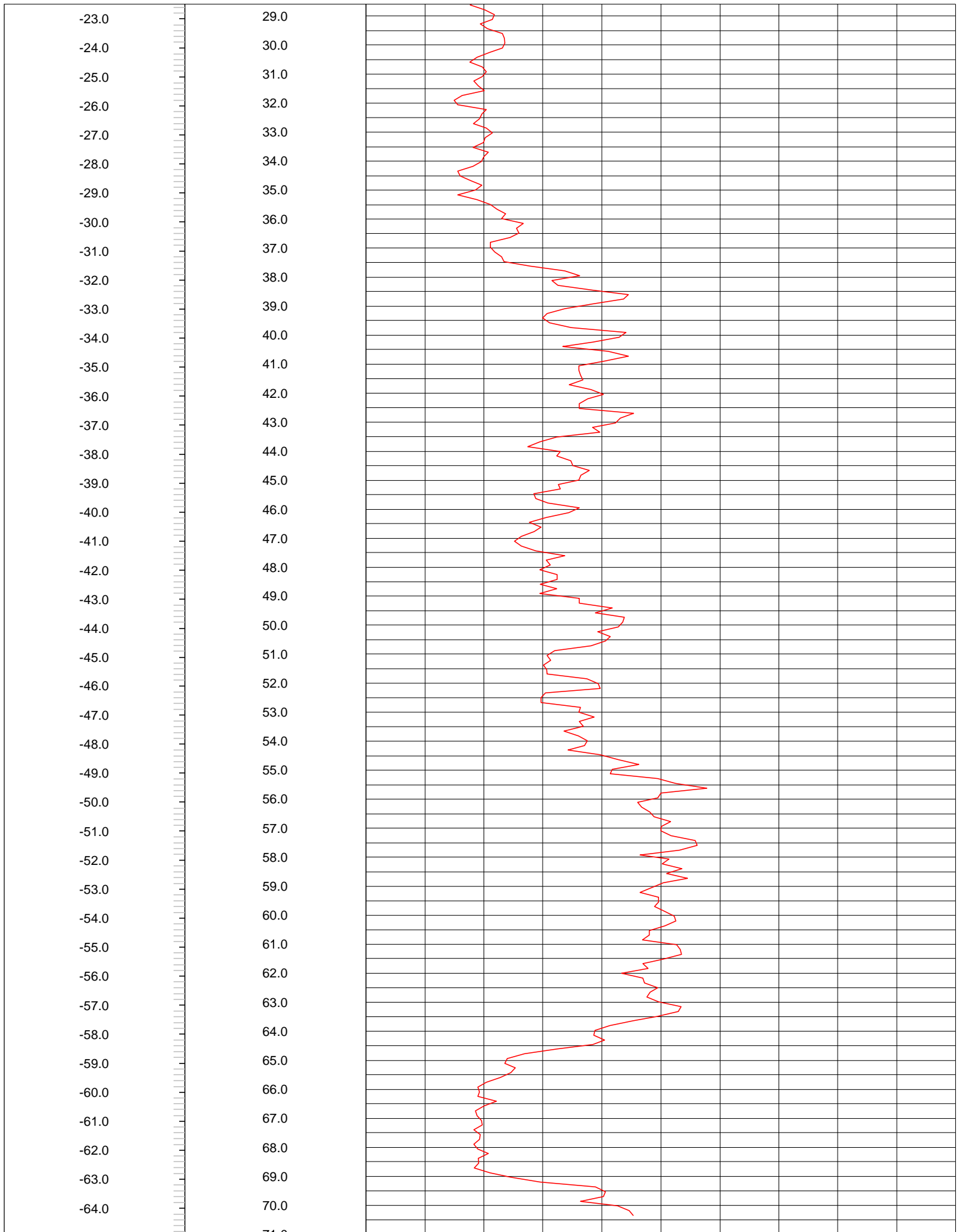
Project Number: 60615673
Date: 8/16/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: NA	Location: Merrit Island, FL
Easting: 229243.65	Drilling Method NA	Casing Stick-up: 2.0 ft ags	Log Date: 8/7/2020
Northing: 477641.89	Borehole Size: NA	Casing Diameter: 2 in PVC	Logged By: GK
Ground Elev msl: 6.1	Drilled Depth: NA	Casing Depth: NA	

Depth to Water: 2.91 ft bgs before logging on 8/7/2020

Notes:





GEOPHYSICAL RECORD OF BOREHOLE: 39A-DBA-IW0001I



Project Number: 60615673

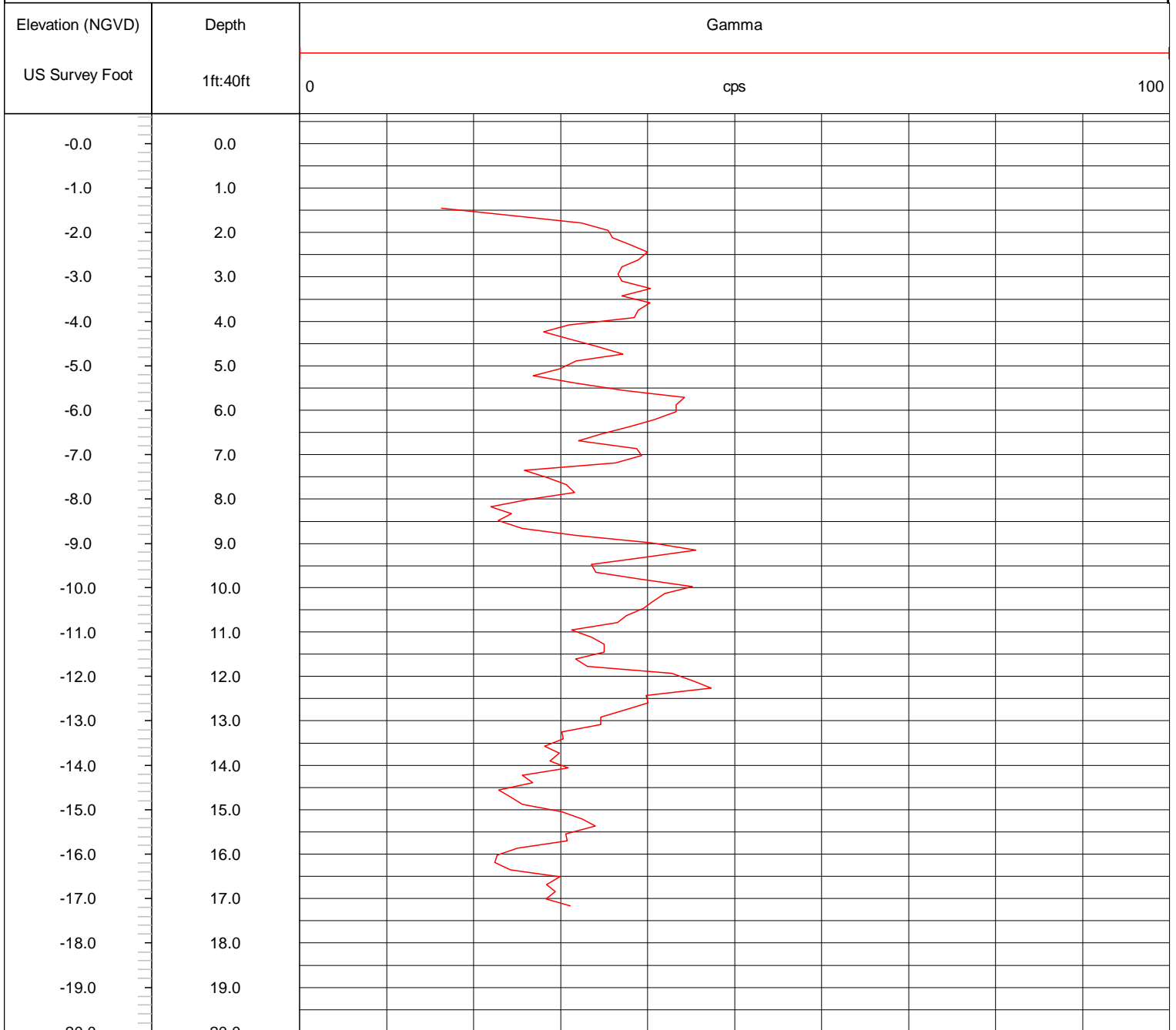
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: xxx	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.85 ft ags	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 1.8 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: 39A-DBA-IW0002I



Project Number: 60615673

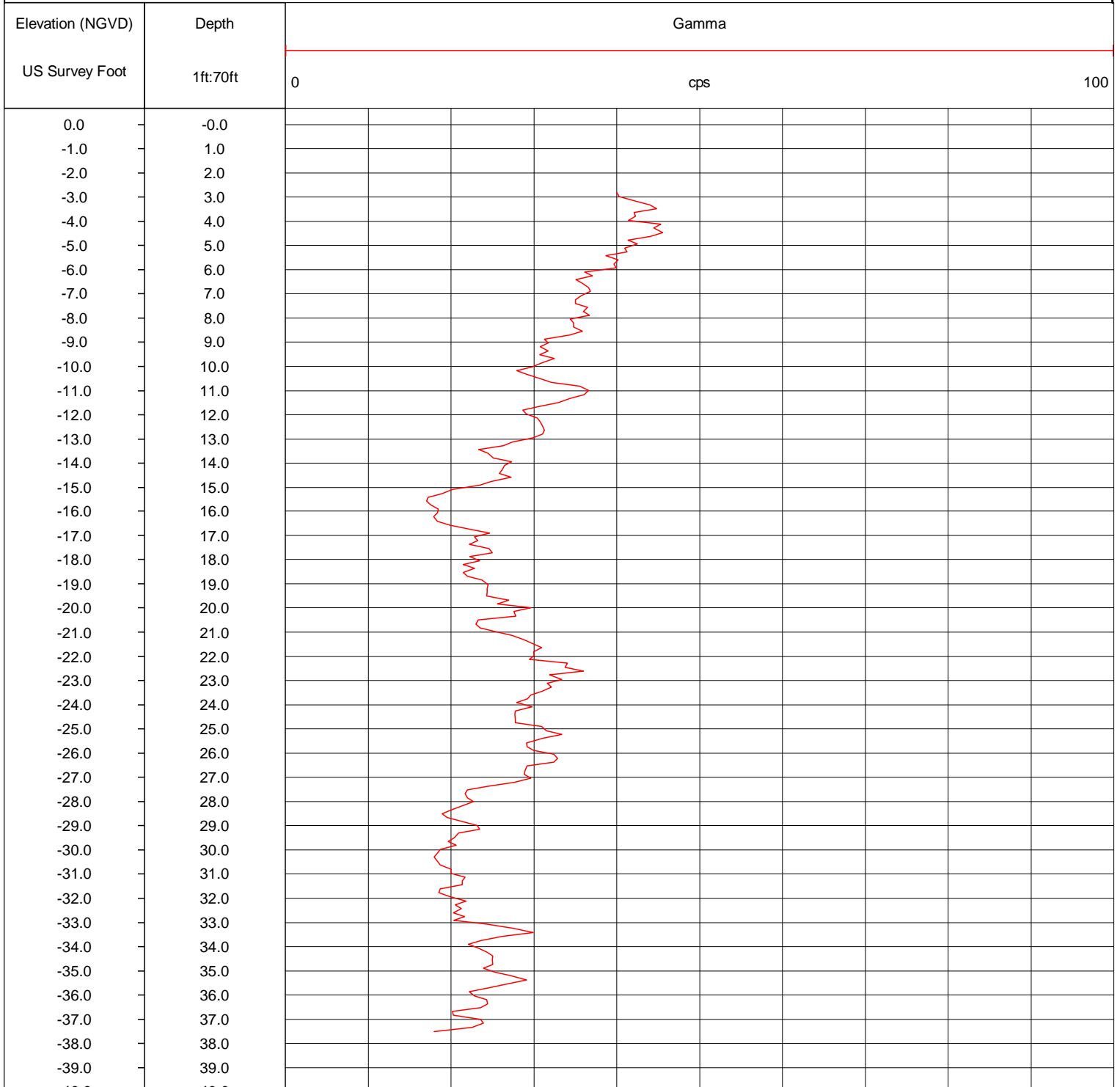
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: xxx	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.34 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 2.77 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: 39A-DBA-IW0003I



Project Number: 60615673

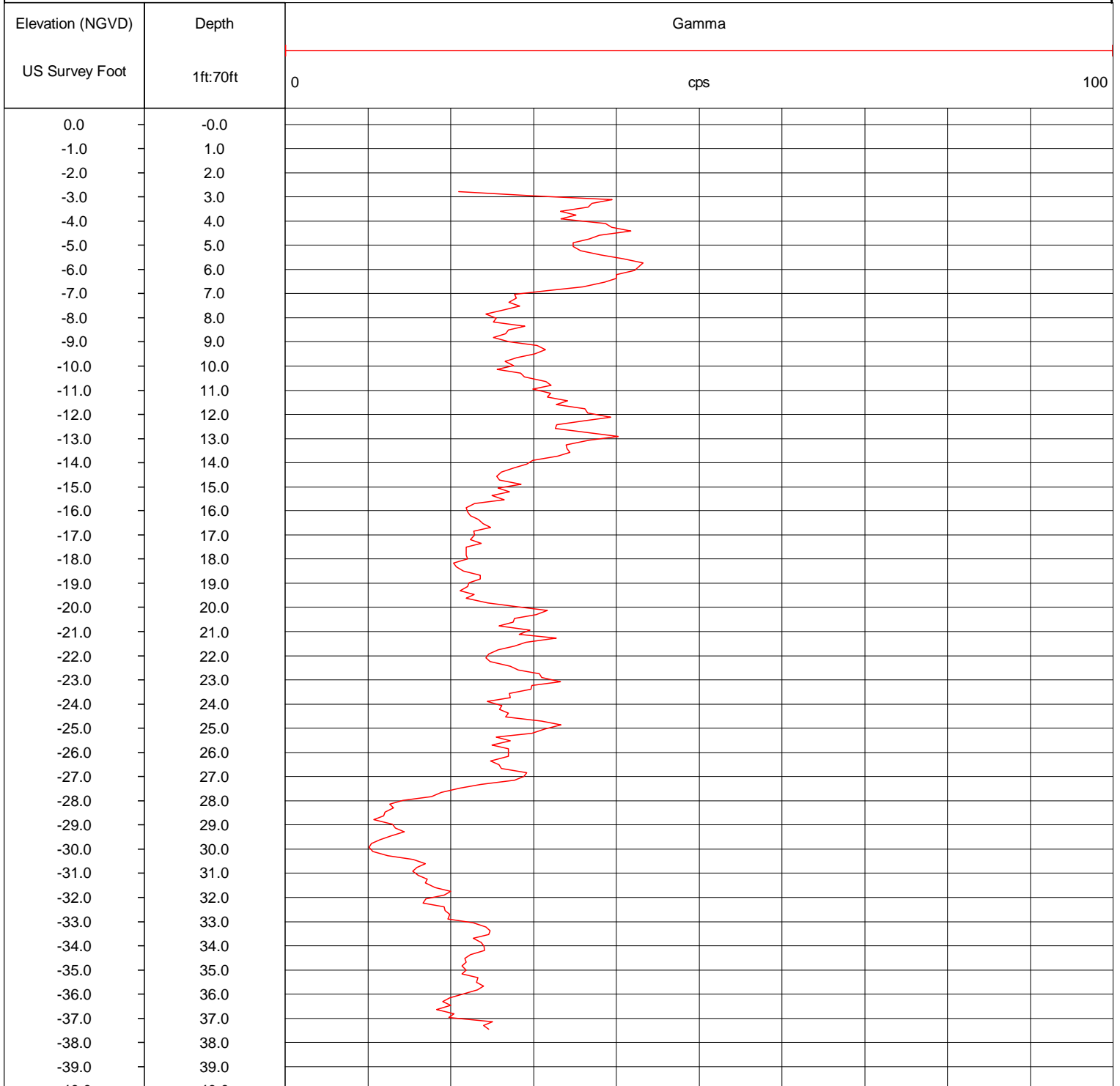
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: xxx	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.45 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 2.45 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: 39A-LOX-IW0001D



Project Number: 60615673

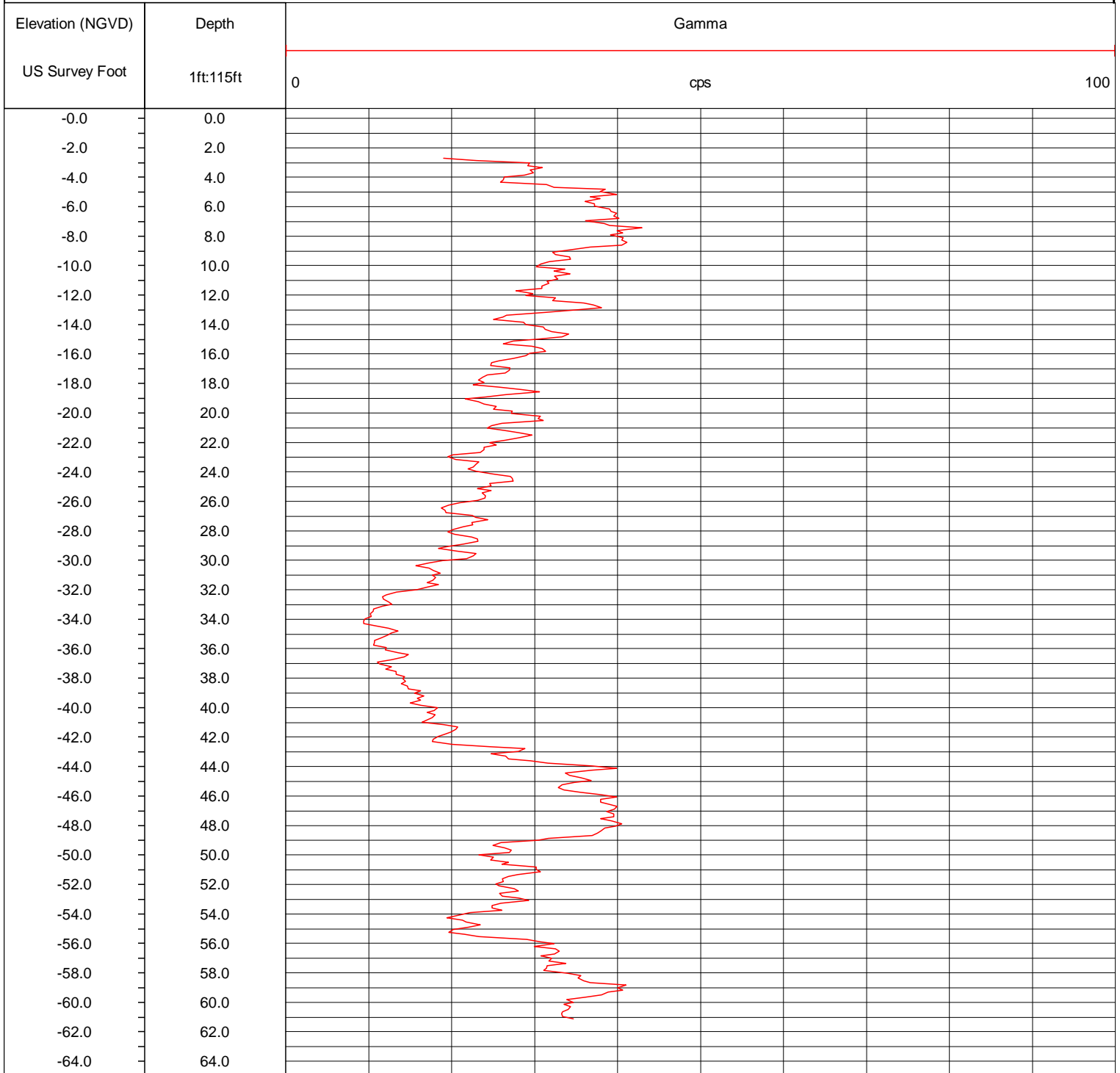
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: xxx	Location: Merritt Island,
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.38 ft bgs	Log Date: FL October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 3.33 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: 39A-LOX-IW0001I



Project Number: 60615673

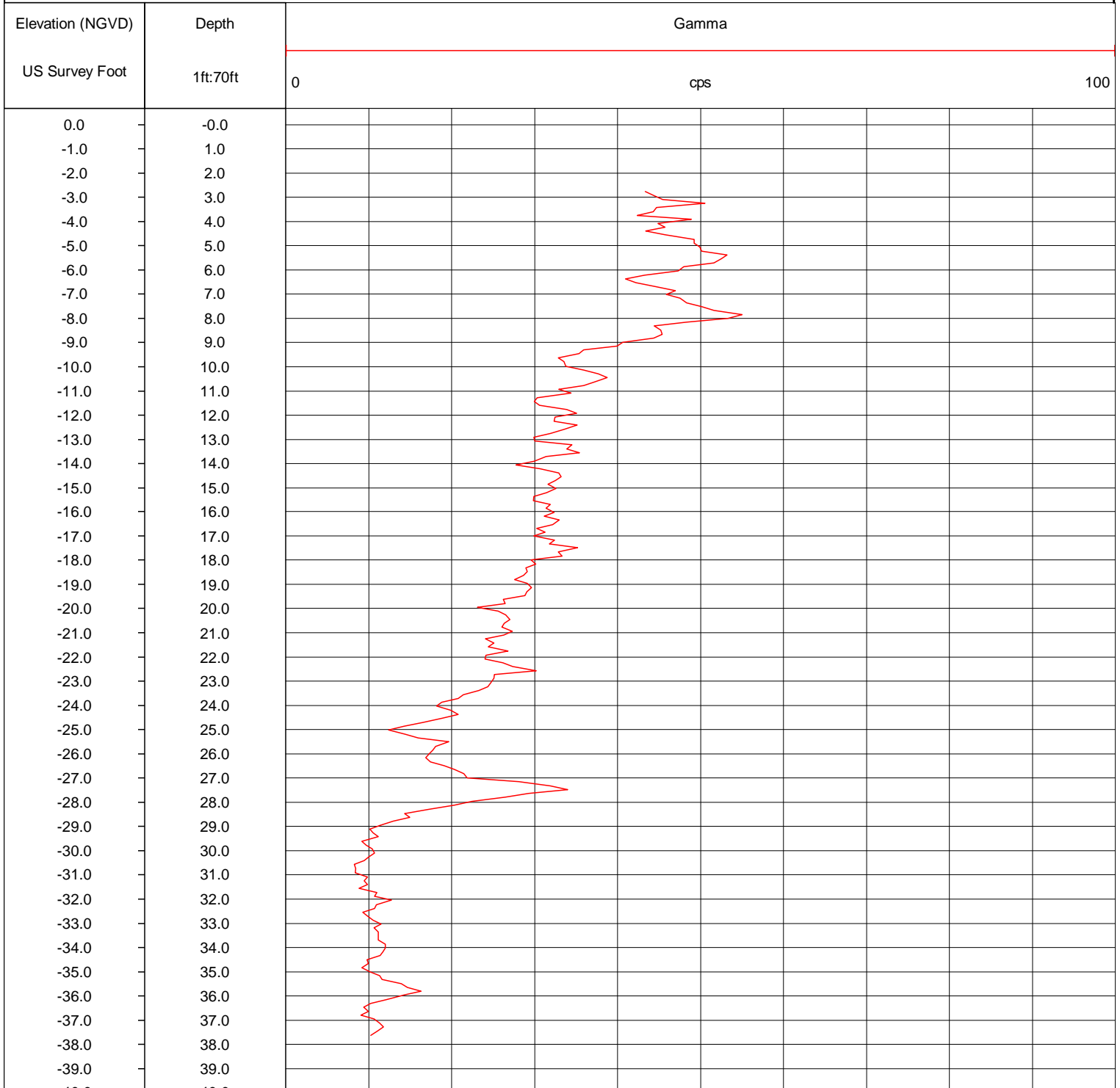
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: xxx	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.29 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 4.04 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0001



Project Number: 60615673

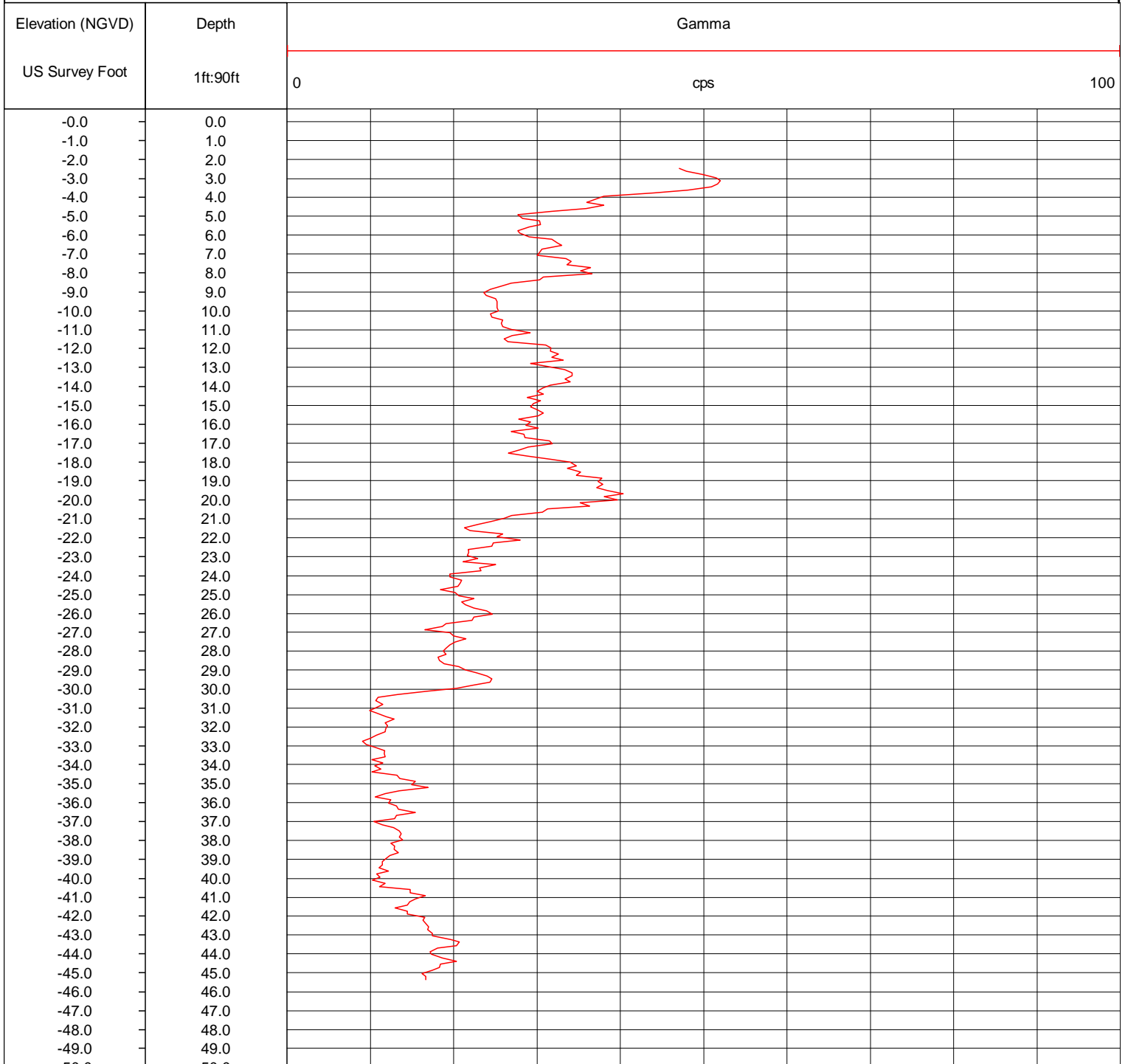
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.41 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 3.1 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0002



Project Number: 60615673

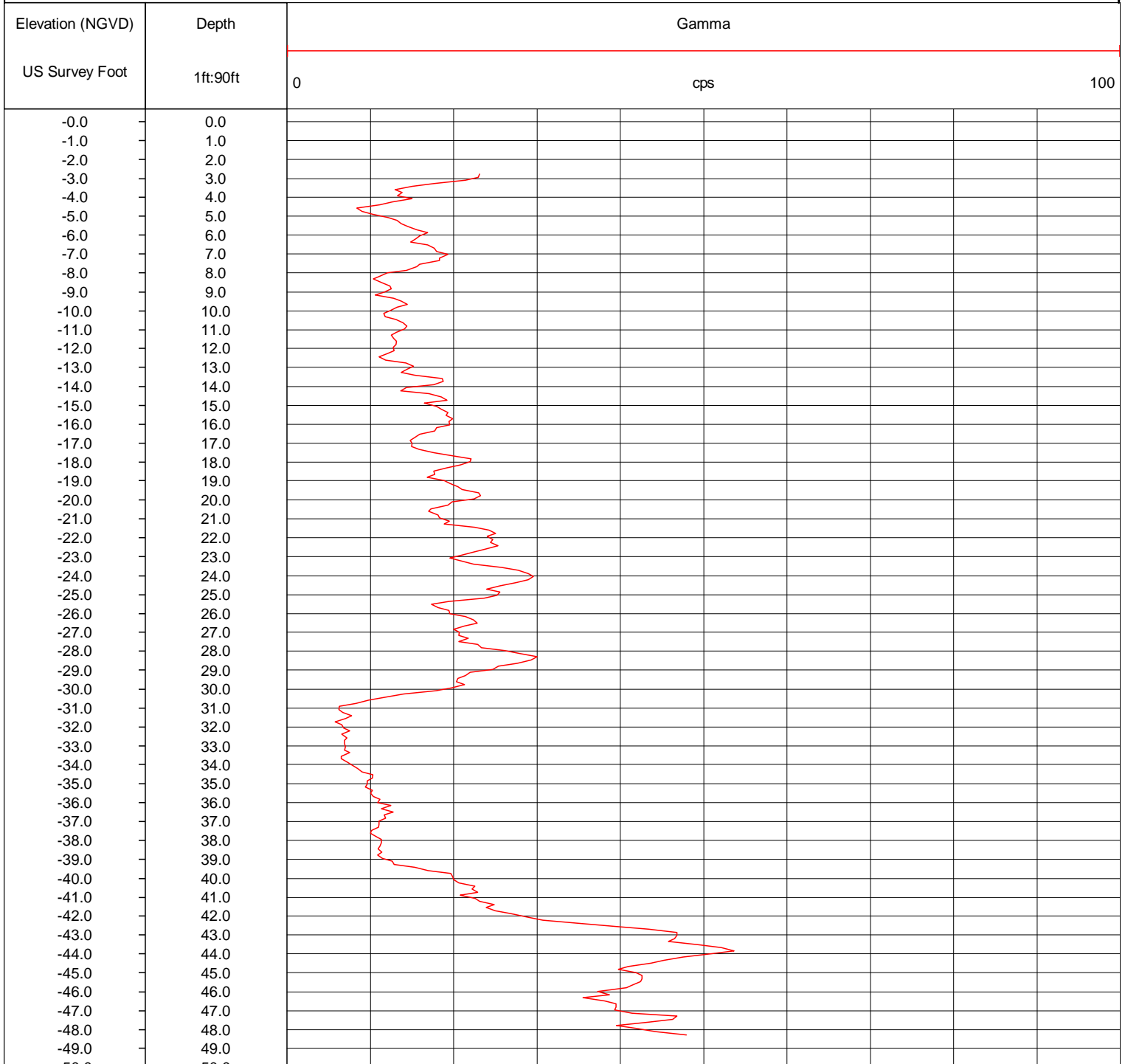
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date: xxx	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.30 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 0.99 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0003



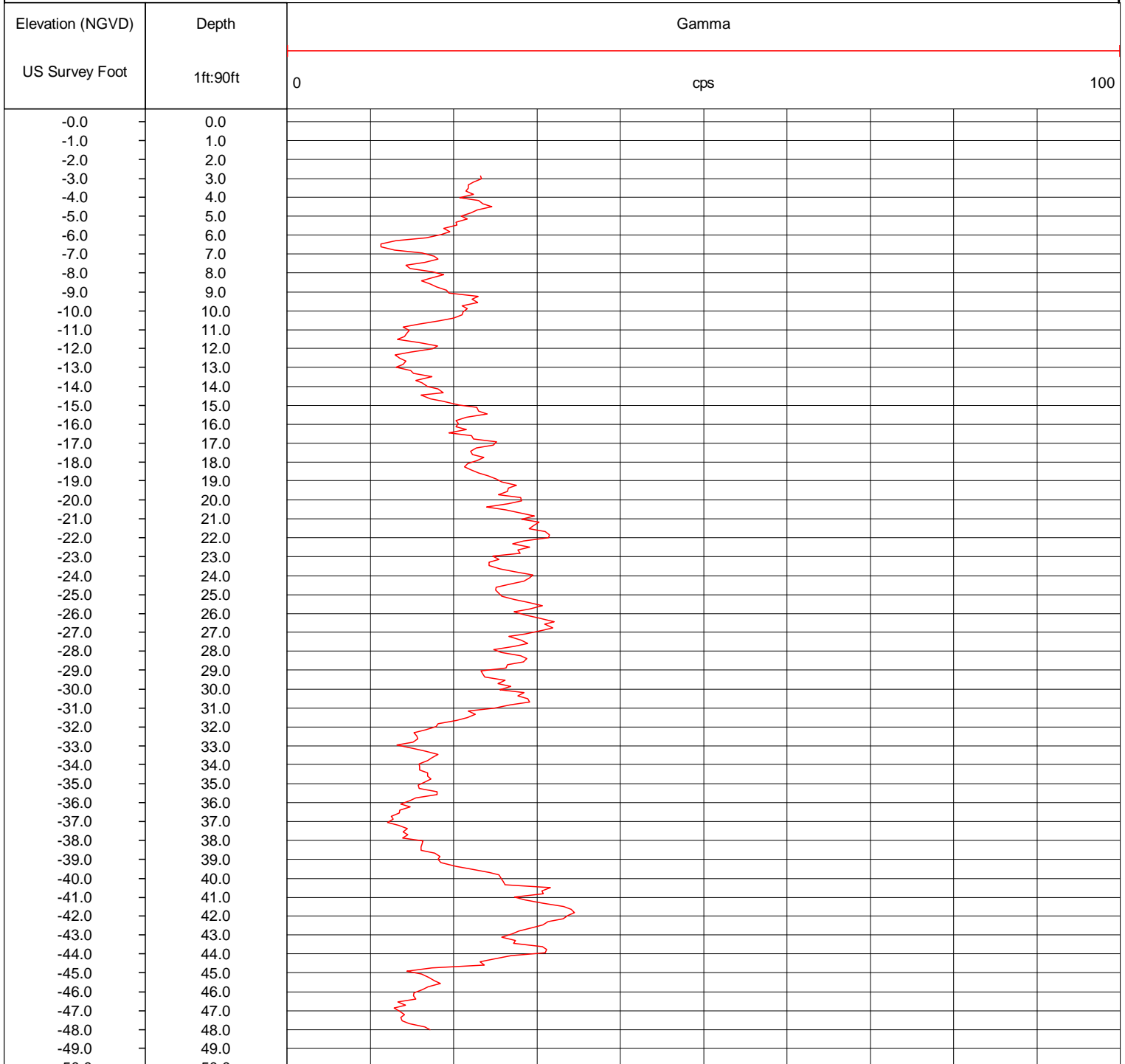
Project Number: 60615673

Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.38 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs
 Depth to Water: 3.93 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0004



Project Number: 60615673

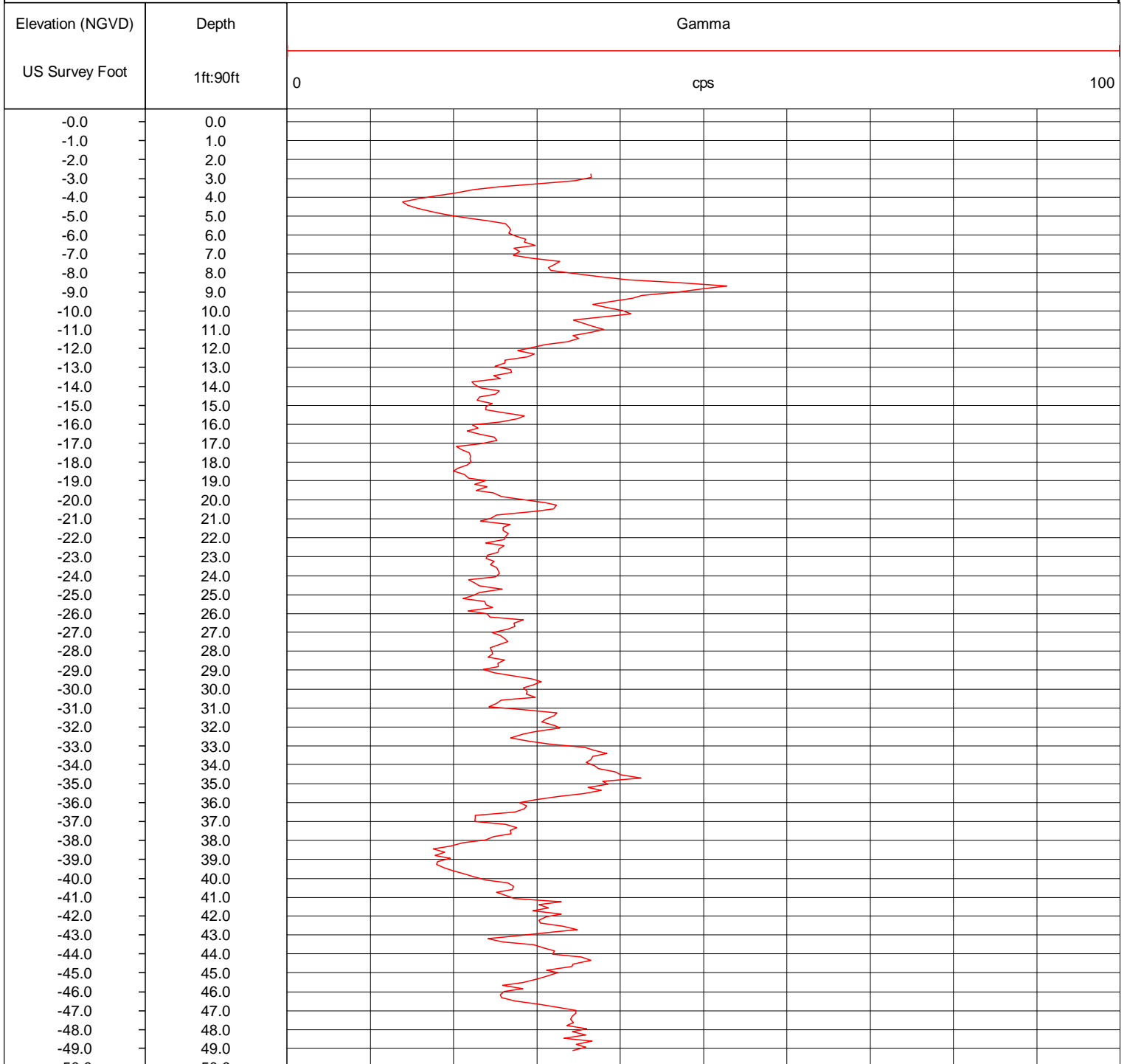
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.31 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 2.96 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0005



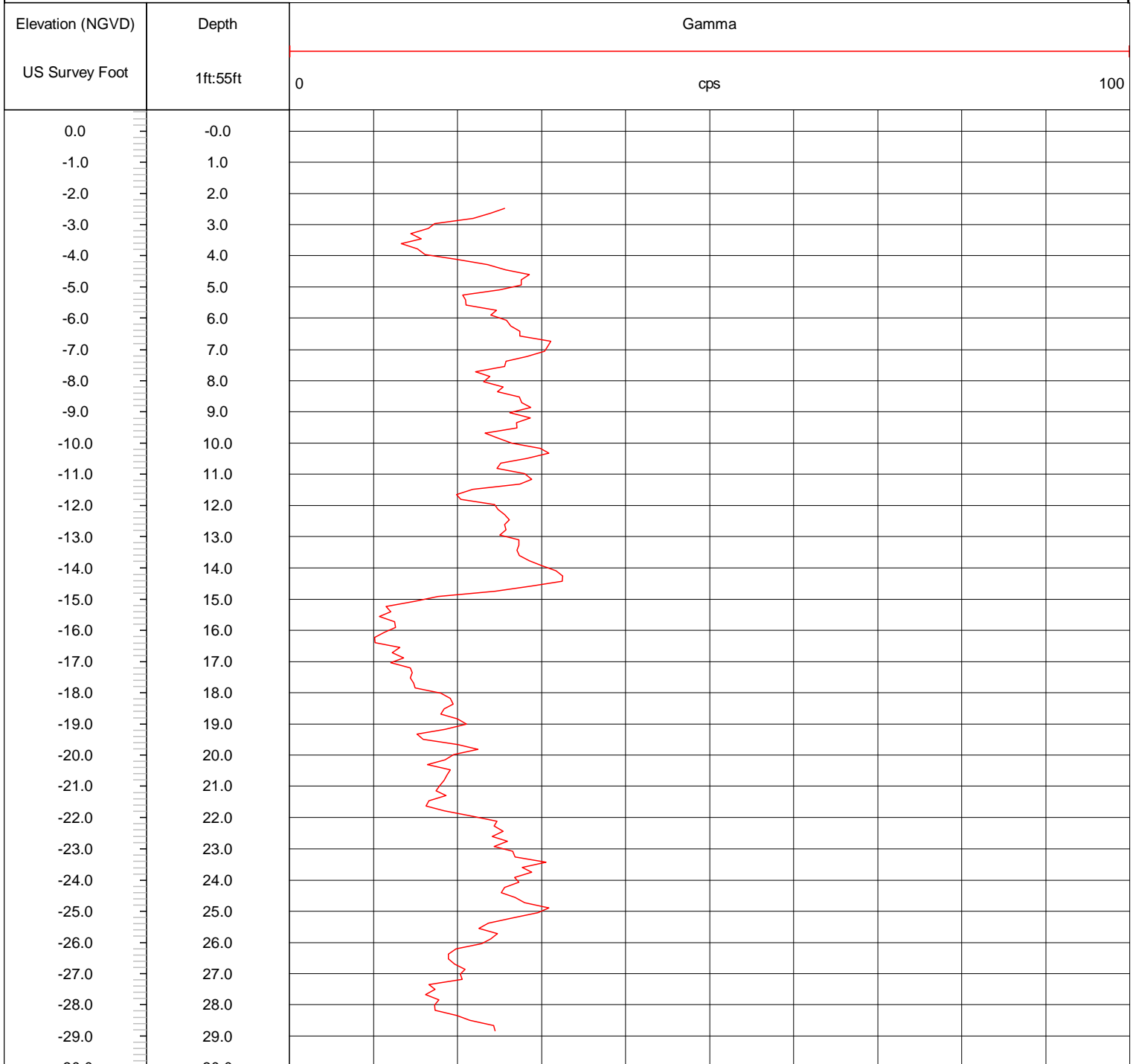
Project Number: 60615673

Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.37 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs
 Depth to Water: 2.37 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0006



Project Number: 60615673

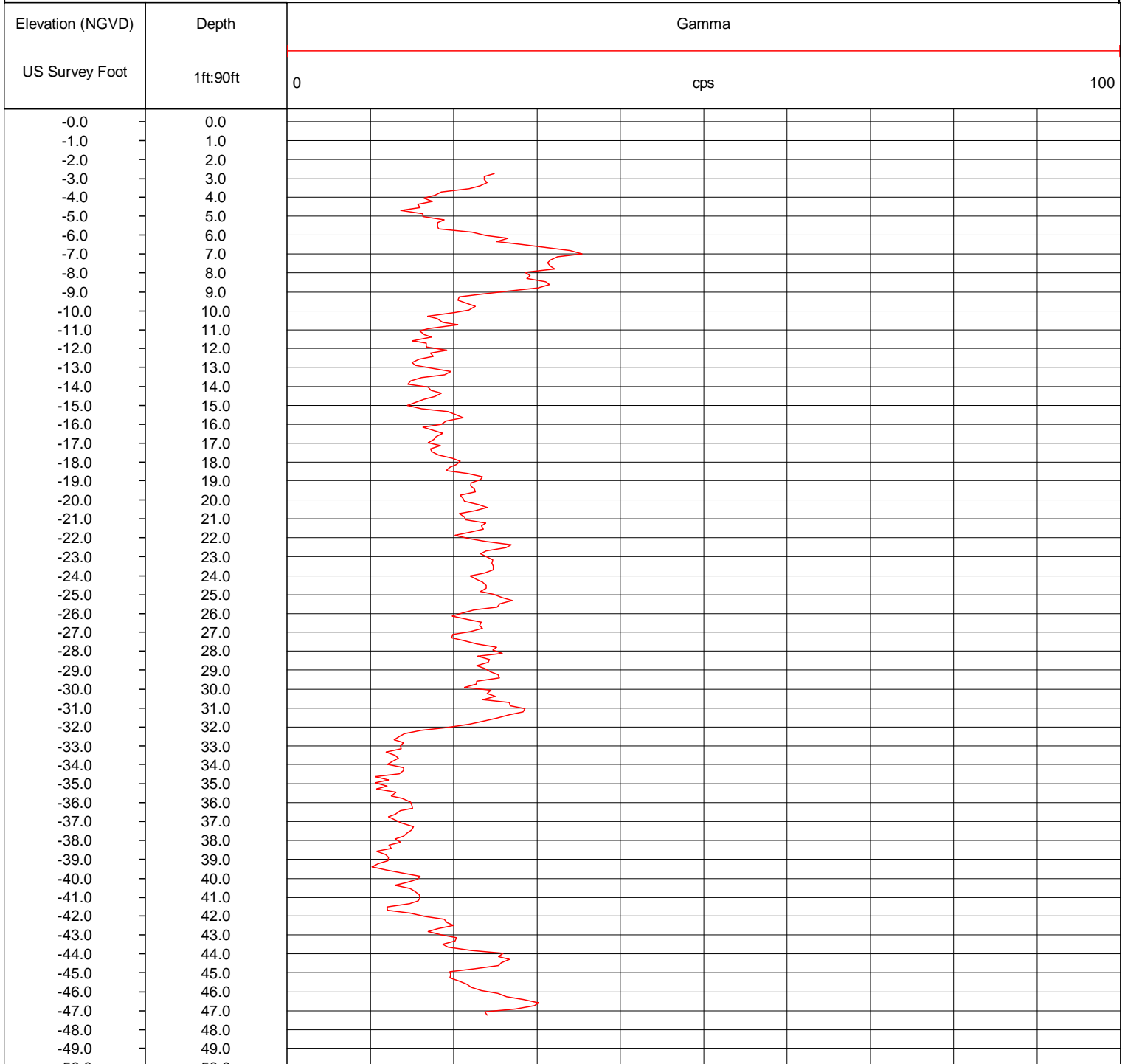
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.26 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product: ft bgs

Depth to Water: 2.23 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0007



Project Number: 60615673

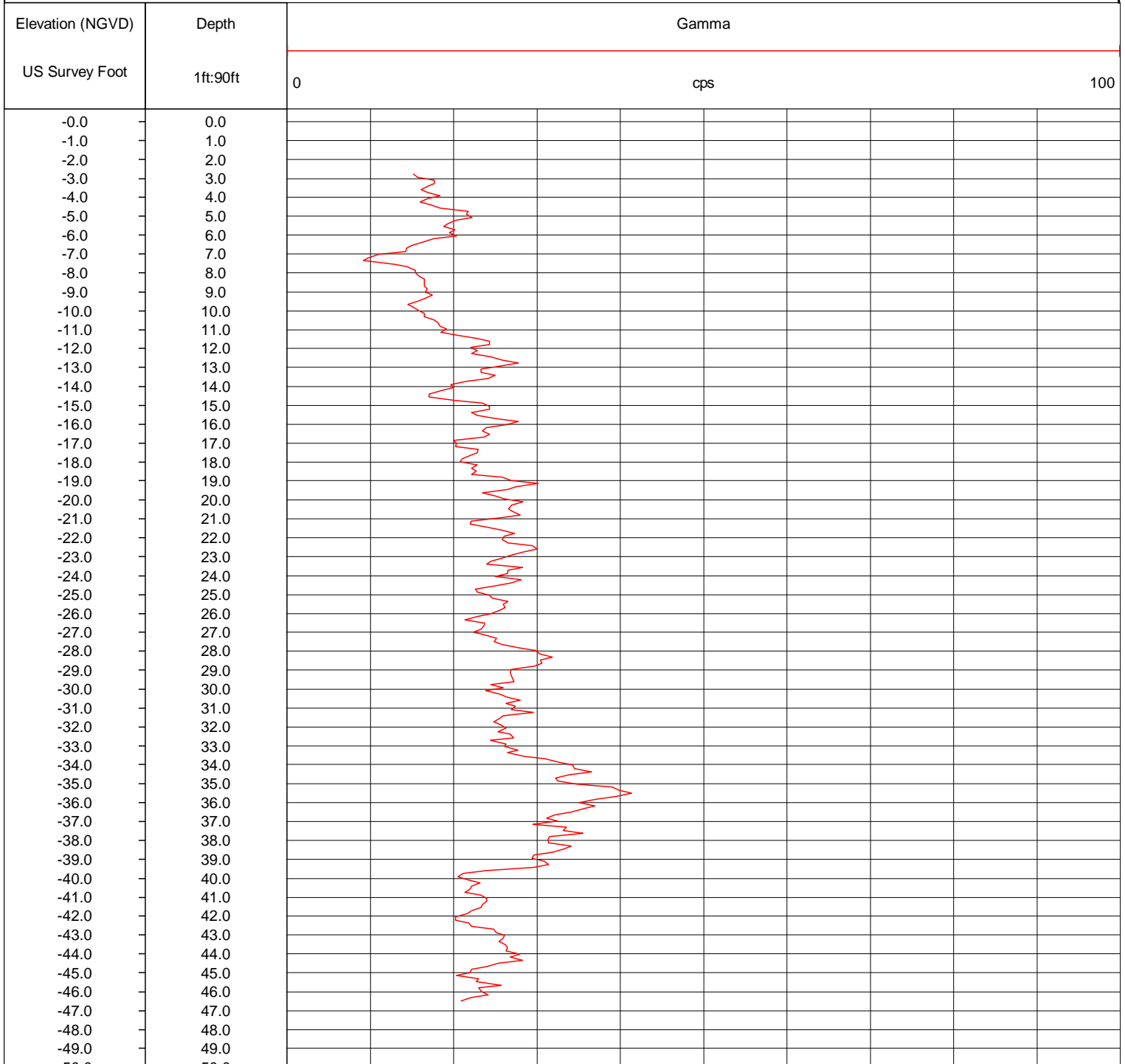
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.30 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product:

Depth to Water: 0.99 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0008



Project Number: 60615673

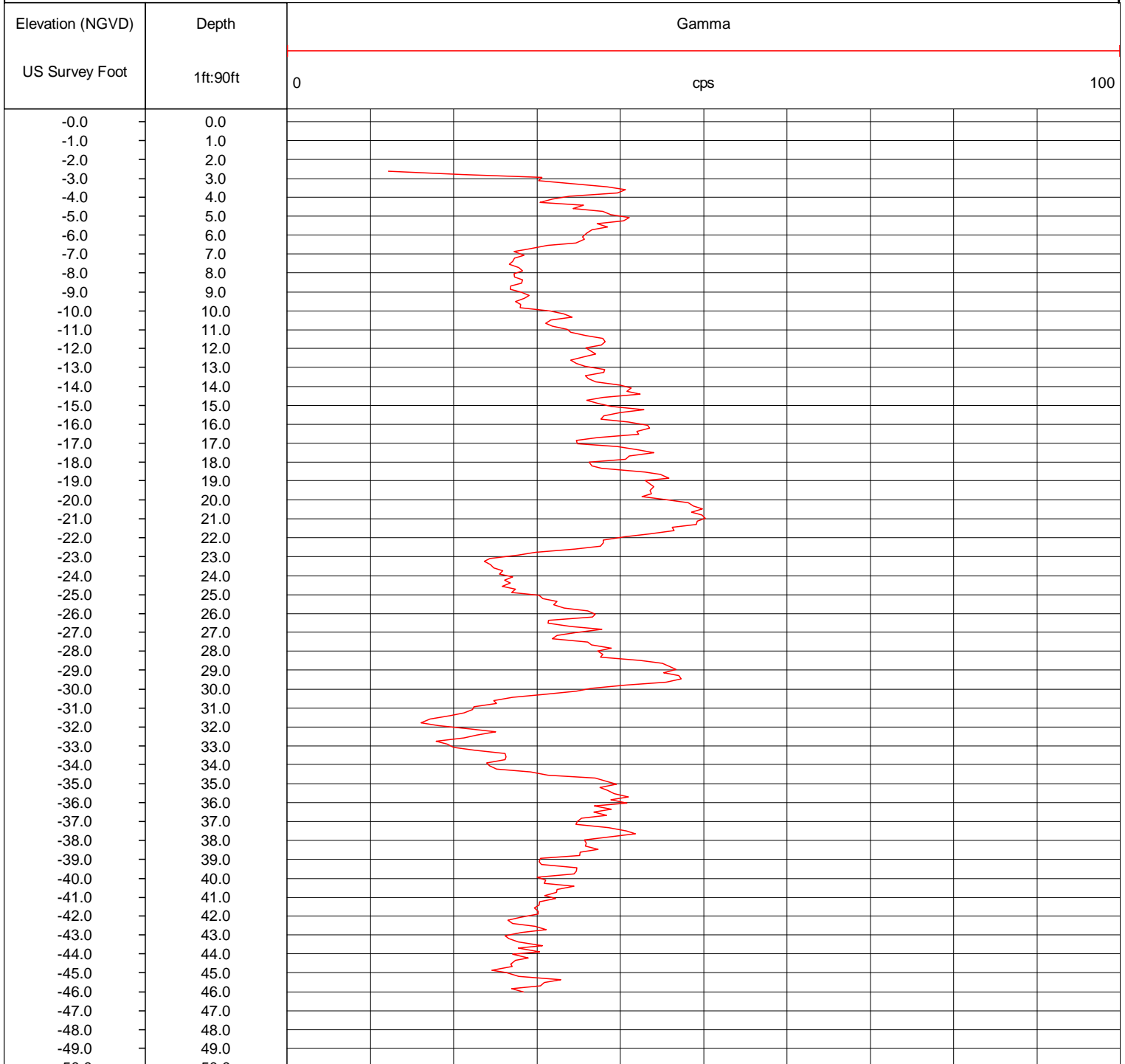
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.32 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product:

Depth to Water: 0.8 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0009



Project Number: 60615673

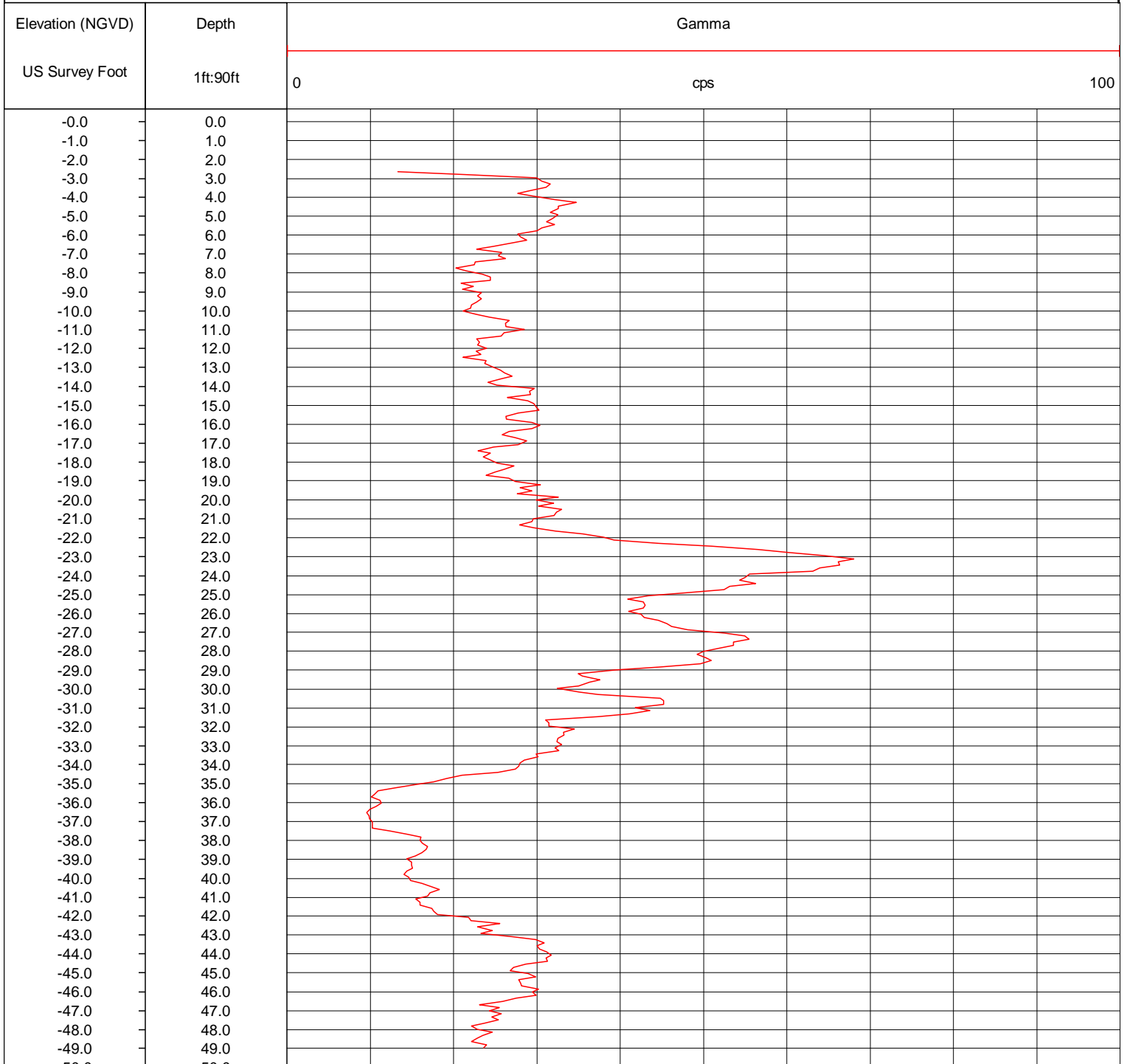
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.34 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product:

Depth to Water: 2.41 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0010



Project Number: 60615673

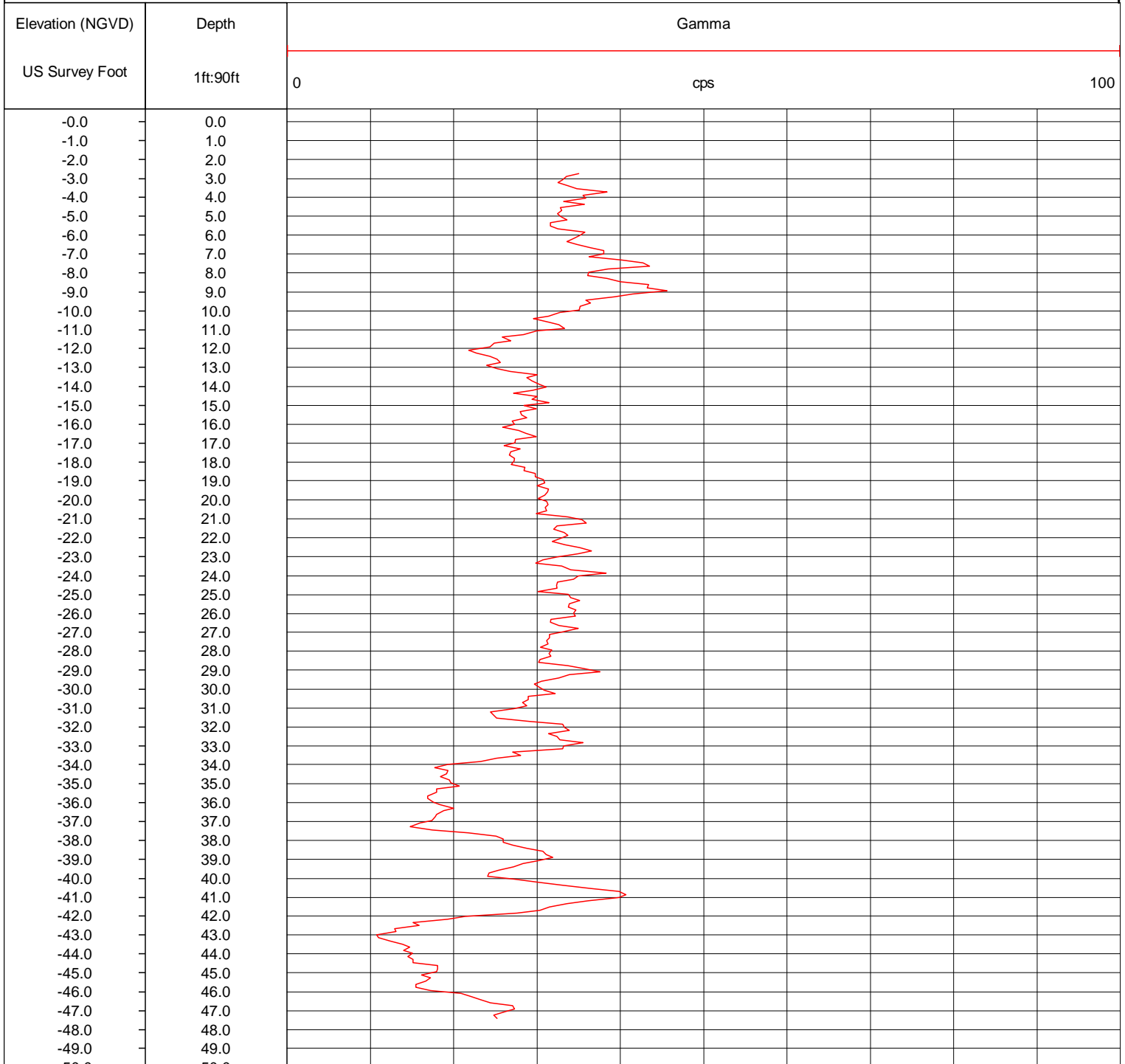
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.26 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product:

Depth to Water: 1.8 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0011



Project Number: 60615673

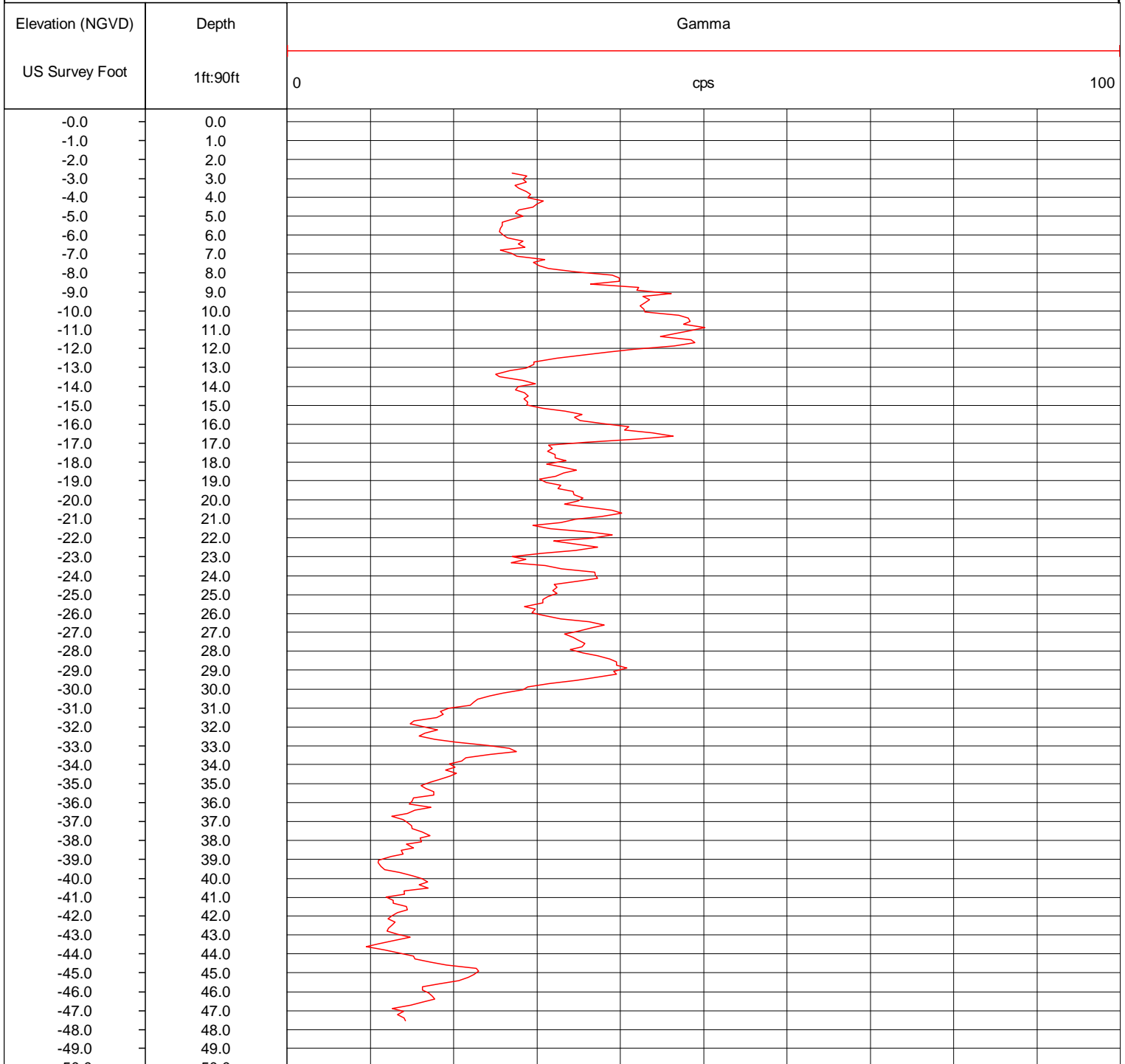
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.23 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product:

Depth to Water: 1.43 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0012



Project Number: 60615673

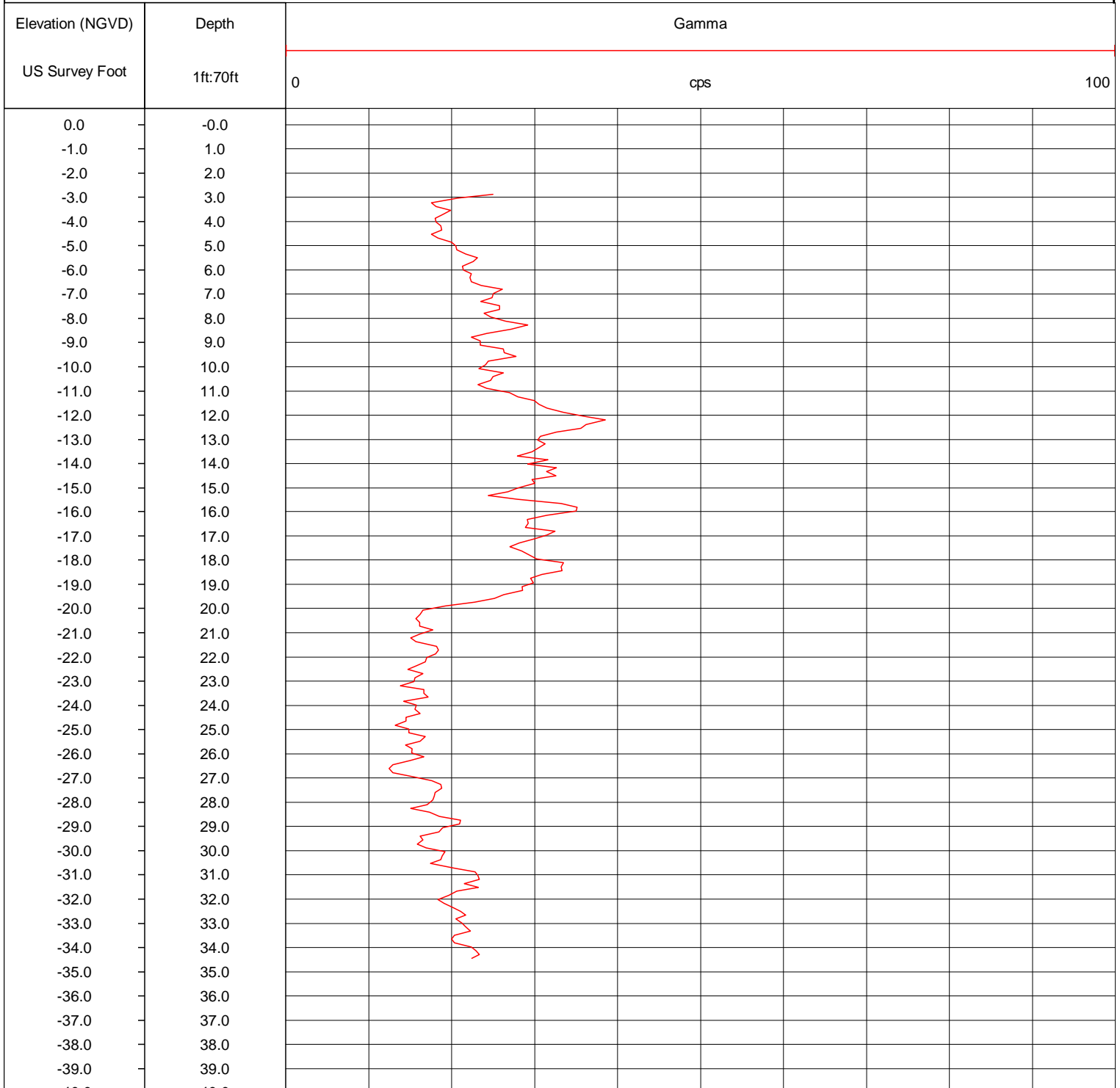
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.41 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product:

Depth to Water: 1.43 ft bgs prior to logging



GEOPHYSICAL RECORD OF BOREHOLE: PFAS-MW0013



Project Number: 60615673

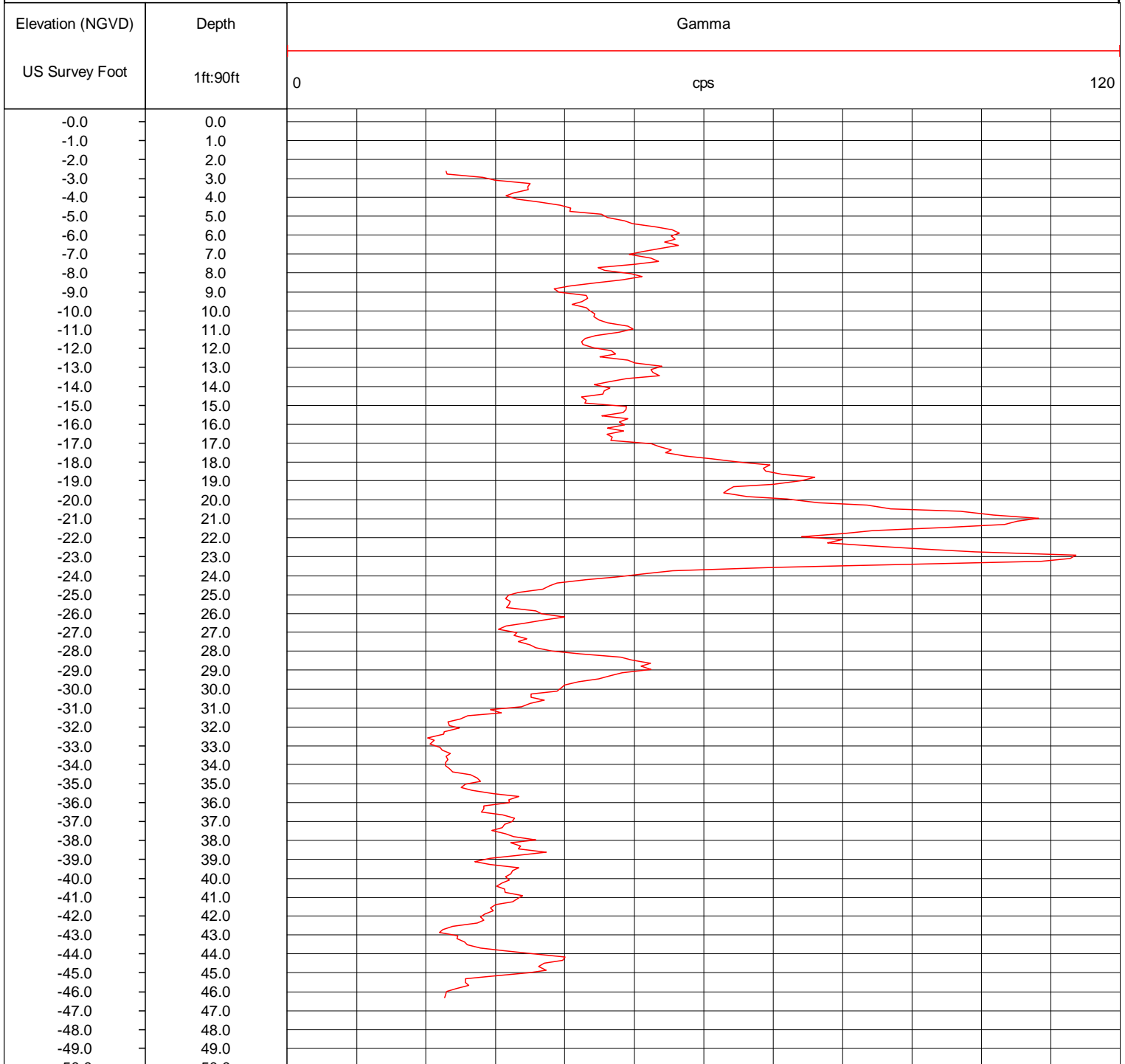
Date: 10/26/2020

Datum: FL SPCS NAD83 (m)	Depth Reference Ground Surface	Drill Comp Date:	Location: Merritt Island, FL
Easting: xxx	Drilling Method 6in Sonic	Casing Stick-up: 0.31 ft bgs	Log Date: October 2020
Northing: xxx	Borehole Size: 6 in	Casing Diameter: 2 in PVC	Logged By: Ethan House
Ground Elev msl: xxx	Drilled Depth: xxx	Casing Depth: NA	

Notes:

Depth to Product:

Depth to Water: 1.81 ft bgs prior to logging



Project: NASA KSC PFAS Investigation

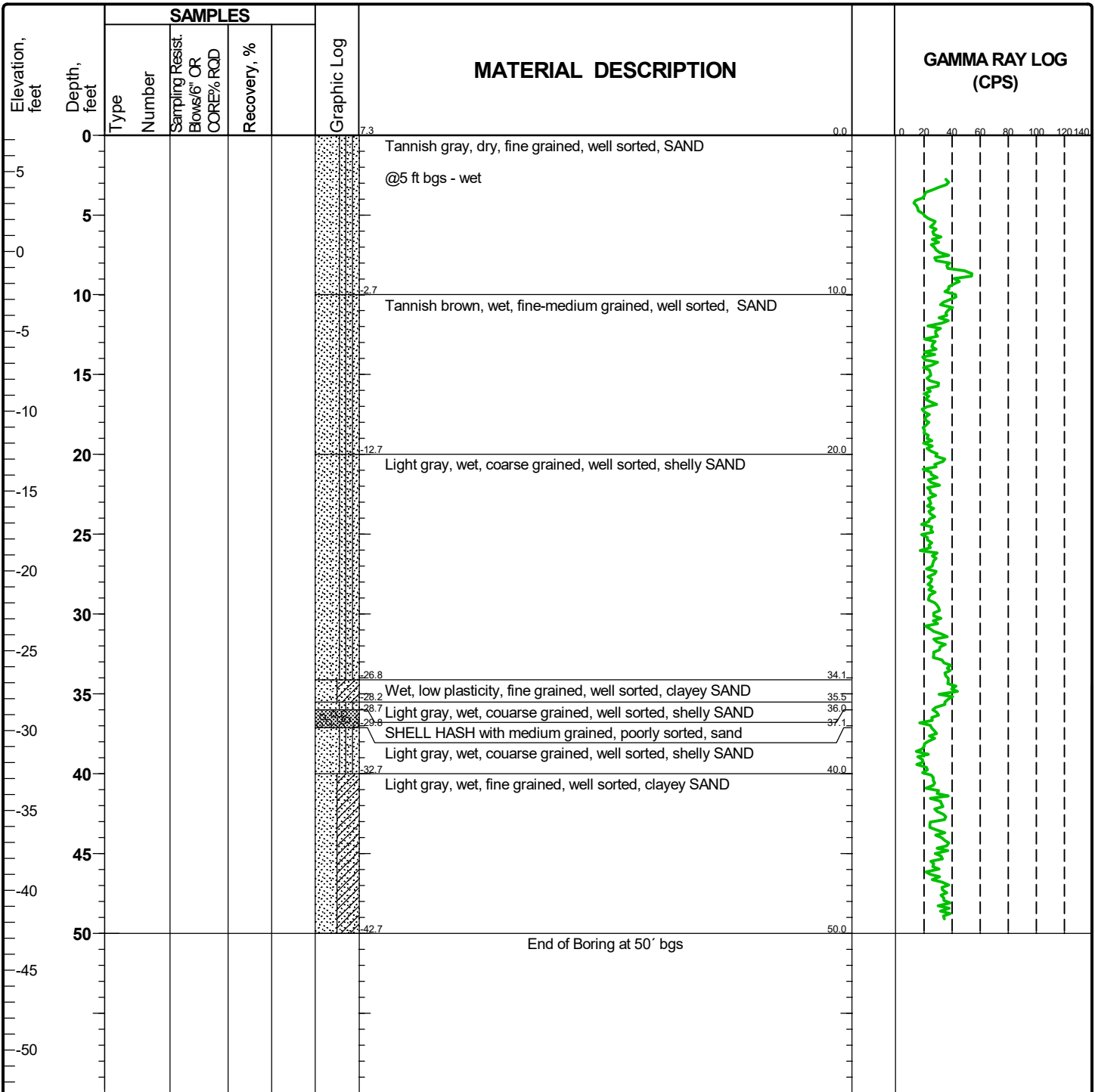
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0004

Sheet 1 of 1

Date(s) Drilled	9/23/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	7.30 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR; File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ; 6/28/2021 11:37:34 AM



Project: NASA KSC PFAS Investigation

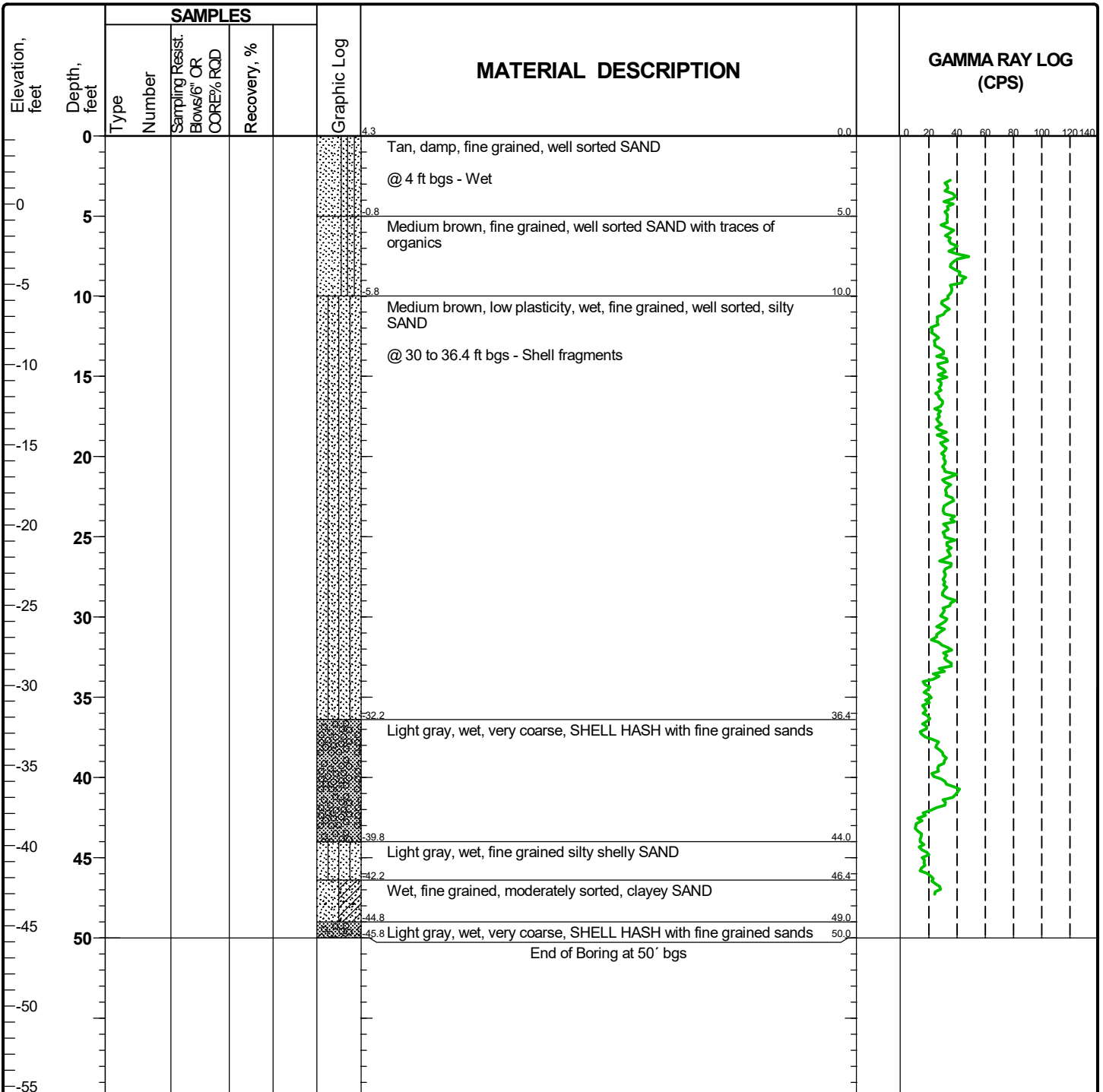
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0010

Sheet 1 of 1

Date(s) Drilled	9/24/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	4.25 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR: File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ, 6/28/2021 11:37:40 AM



Project: NASA KSC PFAS Investigation

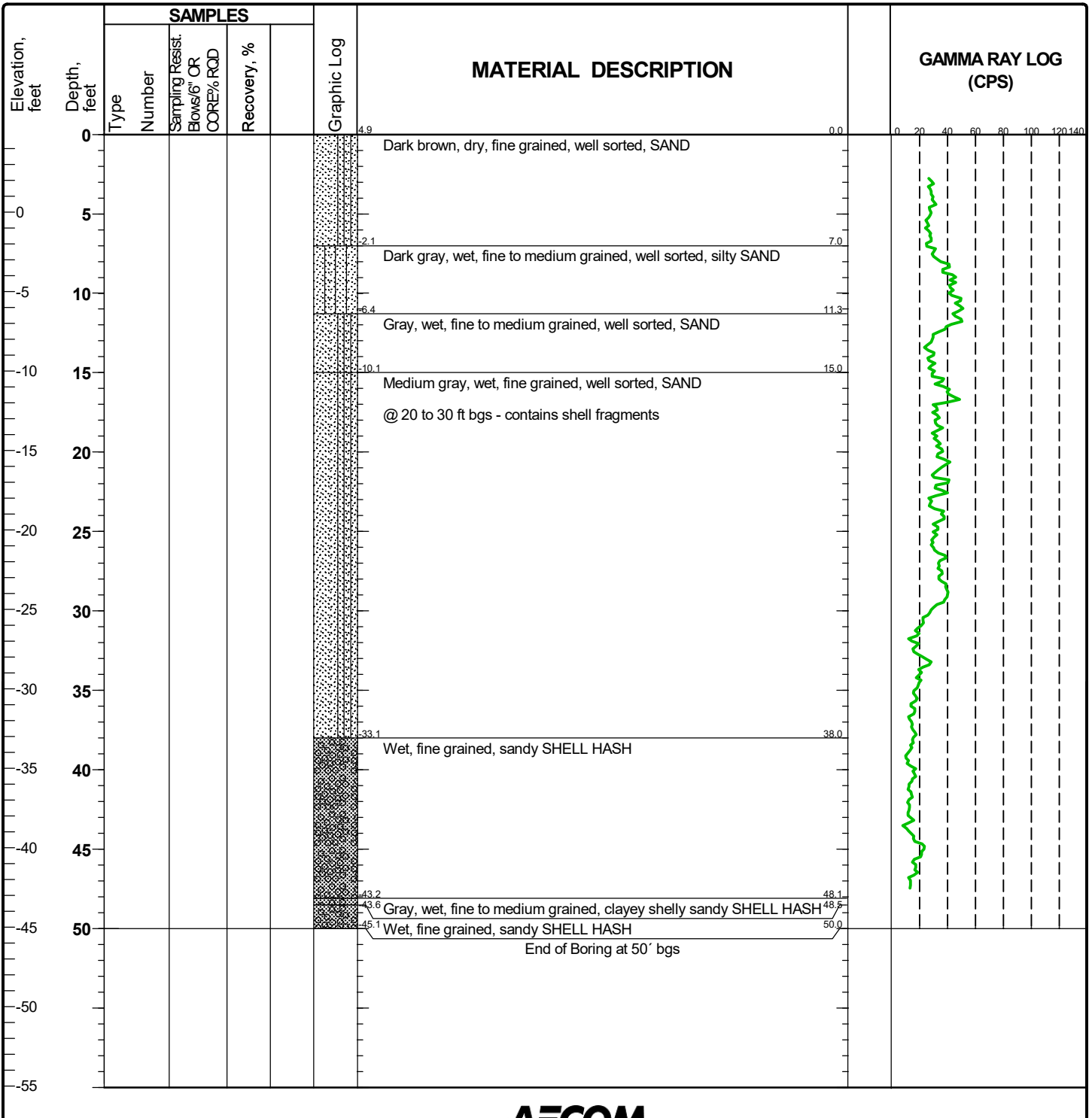
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0011

Sheet 1 of 1

Date(s) Drilled	9/24/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	4.90 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR: File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ, 6/28/2021 11:37:41 AM

Project: NASA KSC PFAS Investigation

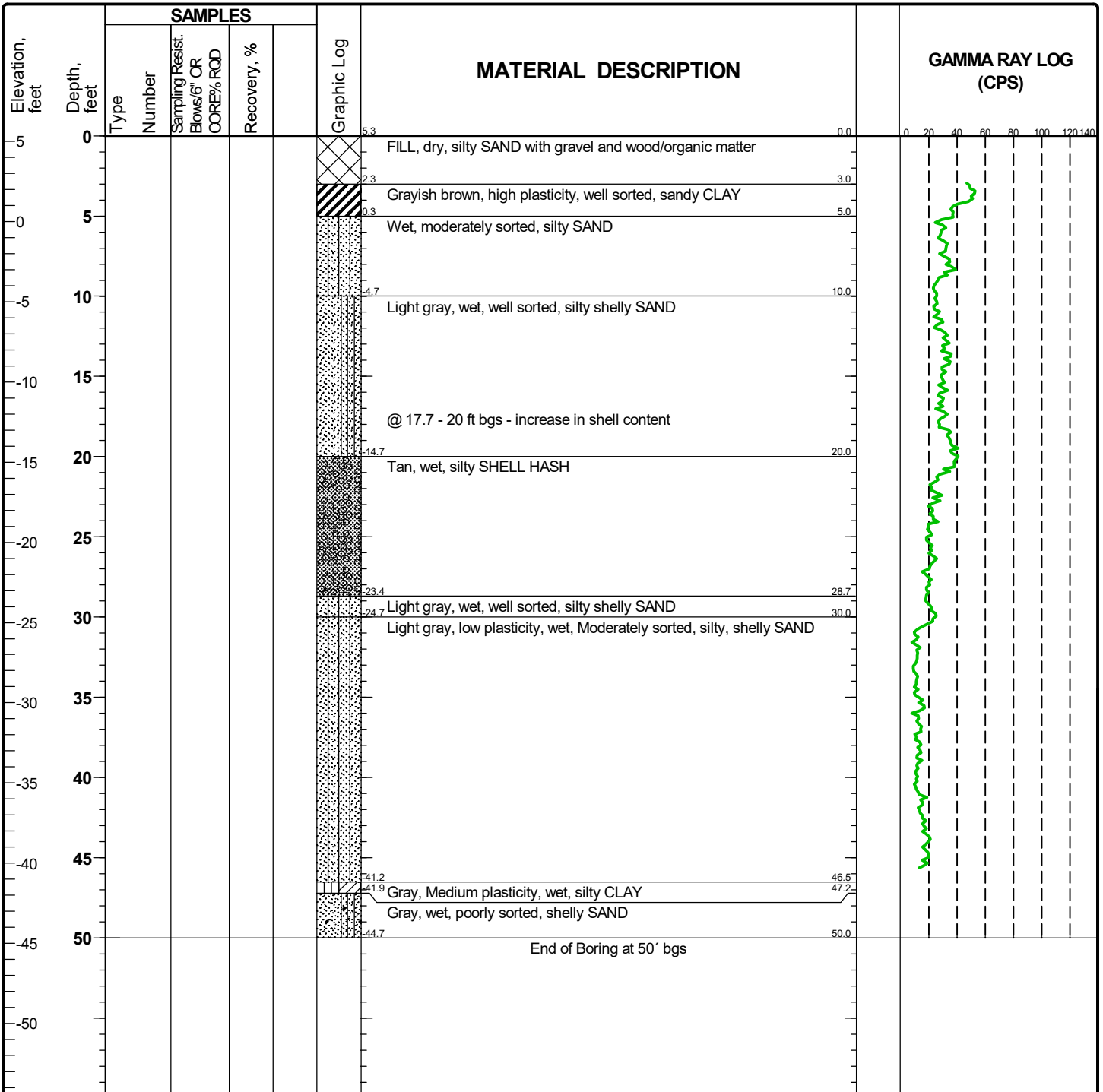
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0001

Sheet 1 of 1

Date(s) Drilled	9/25/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	5.34 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR; File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ; 6/28/2021 11:37:31 AM



Project: NASA KSC PFAS Investigation

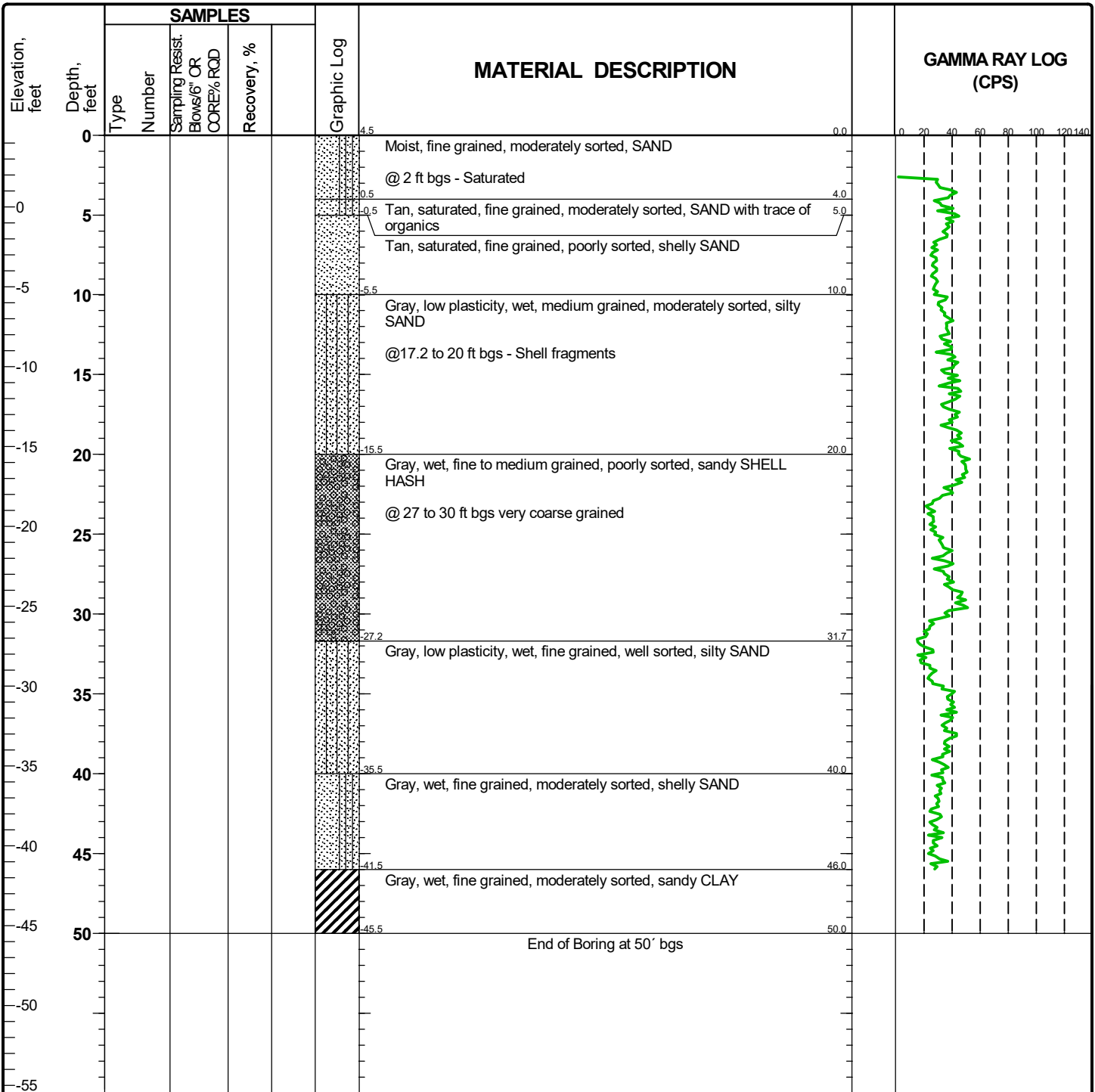
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0008

Sheet 1 of 1

Date(s) Drilled	9/25/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	4.51 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR: File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ, 6/28/2021 11:37:38 AM



Project: NASA KSC PFAS Investigation

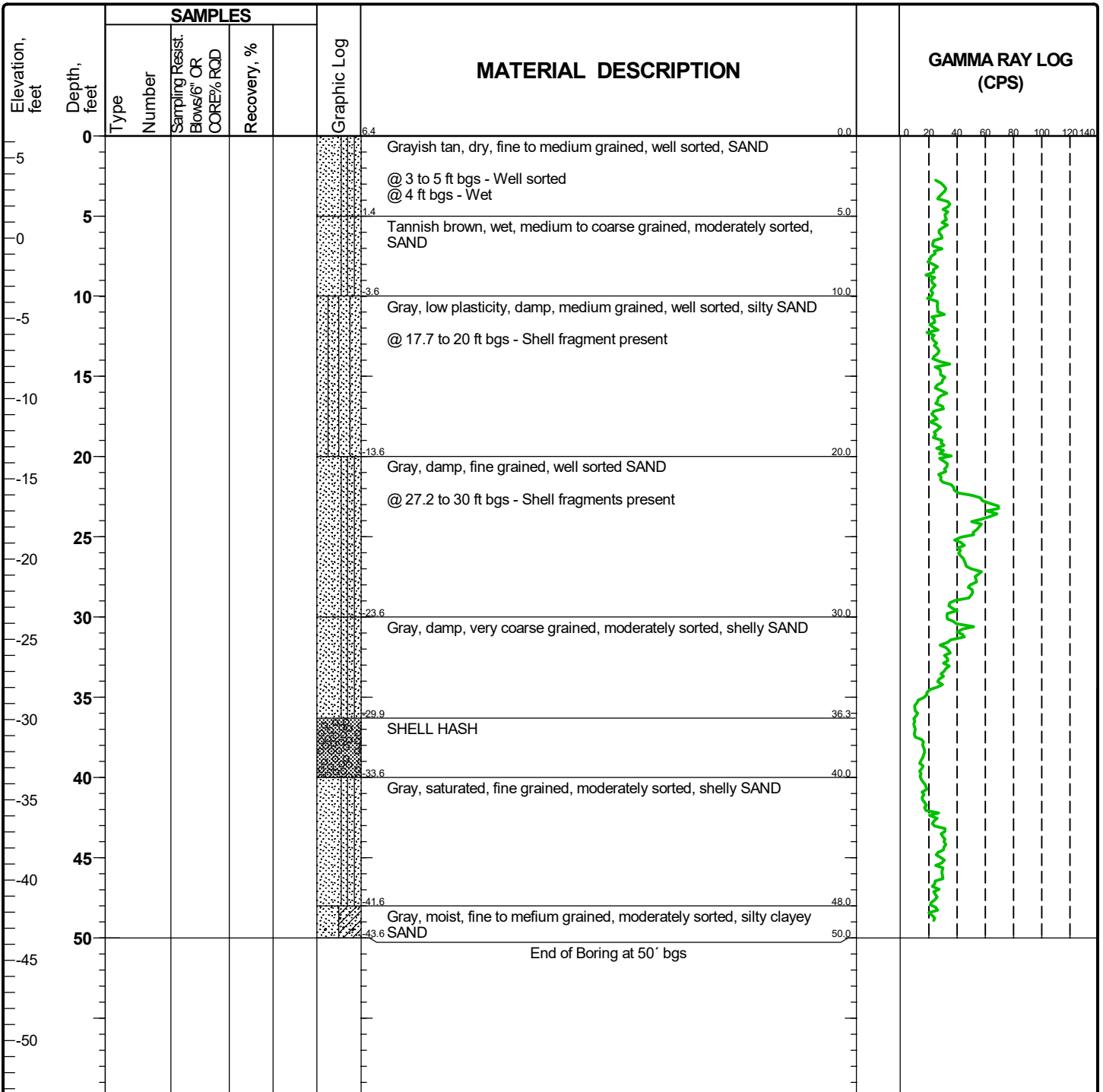
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0009

Sheet 1 of 1

Date(s) Drilled	9/28/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	6.38 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ, 6/28/2021 11:37:39 AM

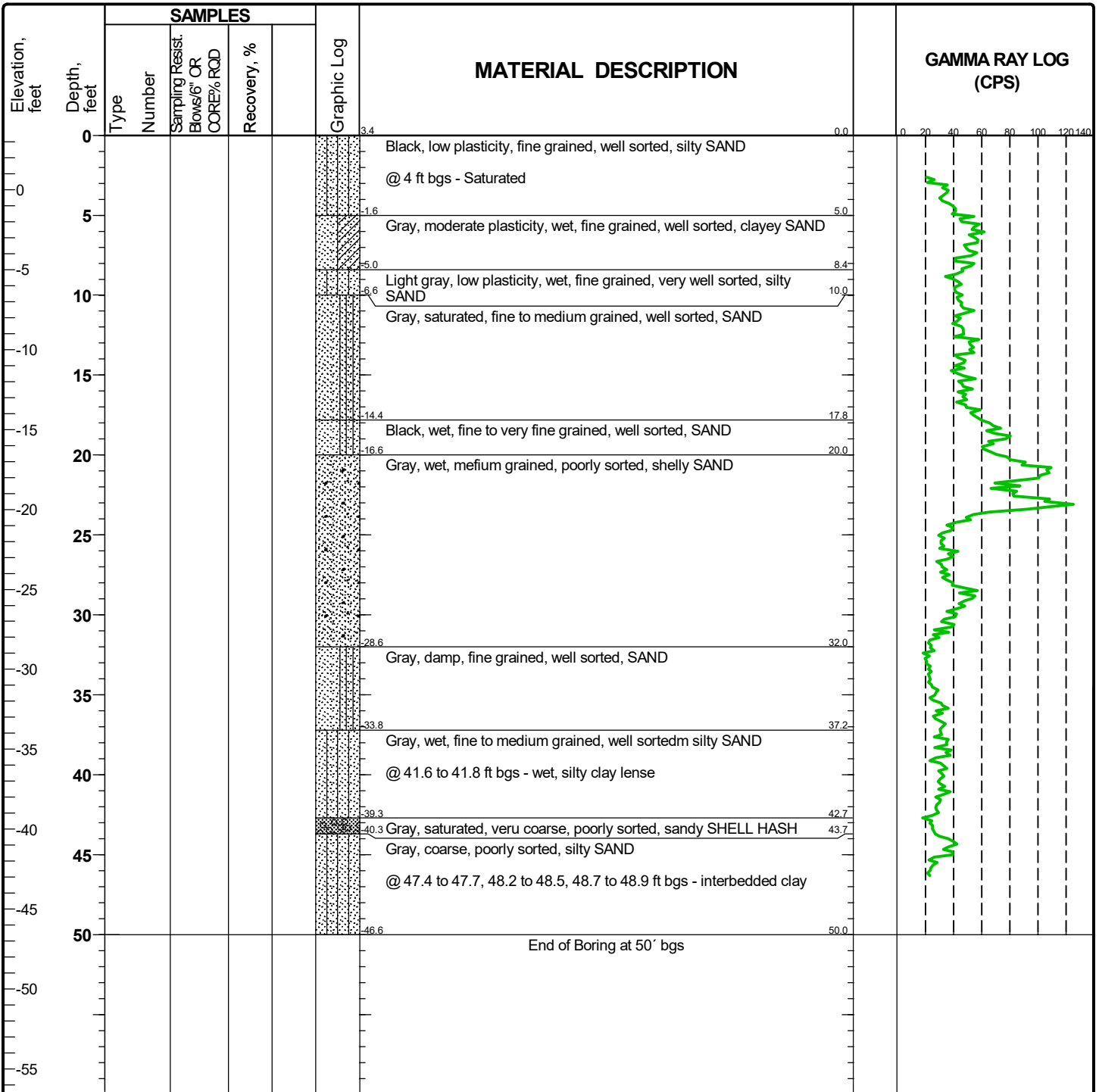


Project: NASA KSC PFAS Investigation
Project Location: Kennedy Space Center, Florida
Project Number: 60615673

Log of PFAS-MW0013

Sheet 1 of 1

Date(s) Drilled	9/28/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	3.40 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR; File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ; 6/28/2021 11:37:43 AM



Project: NASA KSC PFAS Investigation

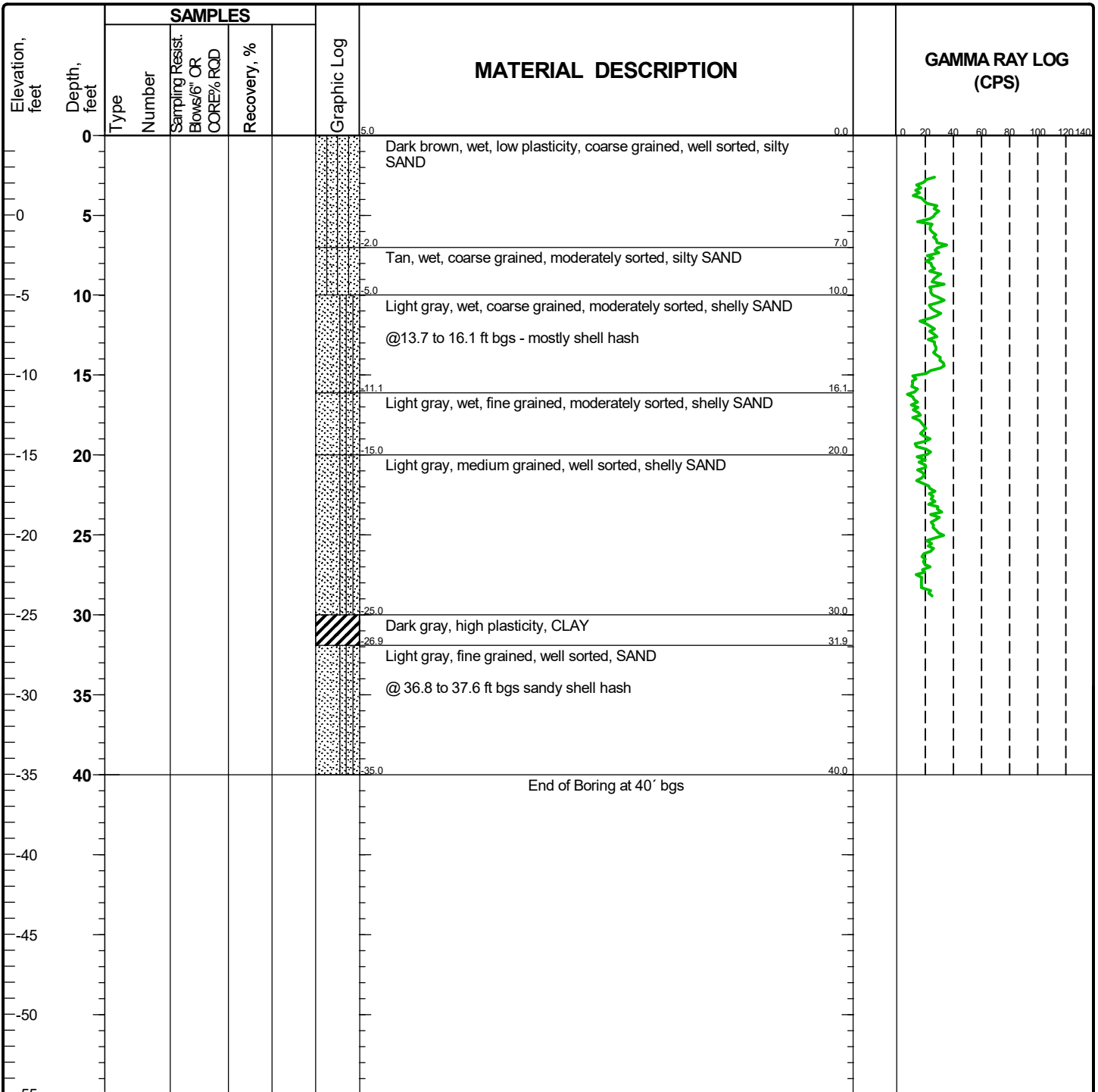
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0005

Sheet 1 of 1

Date(s) Drilled	9/29/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	40.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	4.97 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ, 6/28/2021 11:37:35 AM



Project: NASA KSC PFAS Investigation

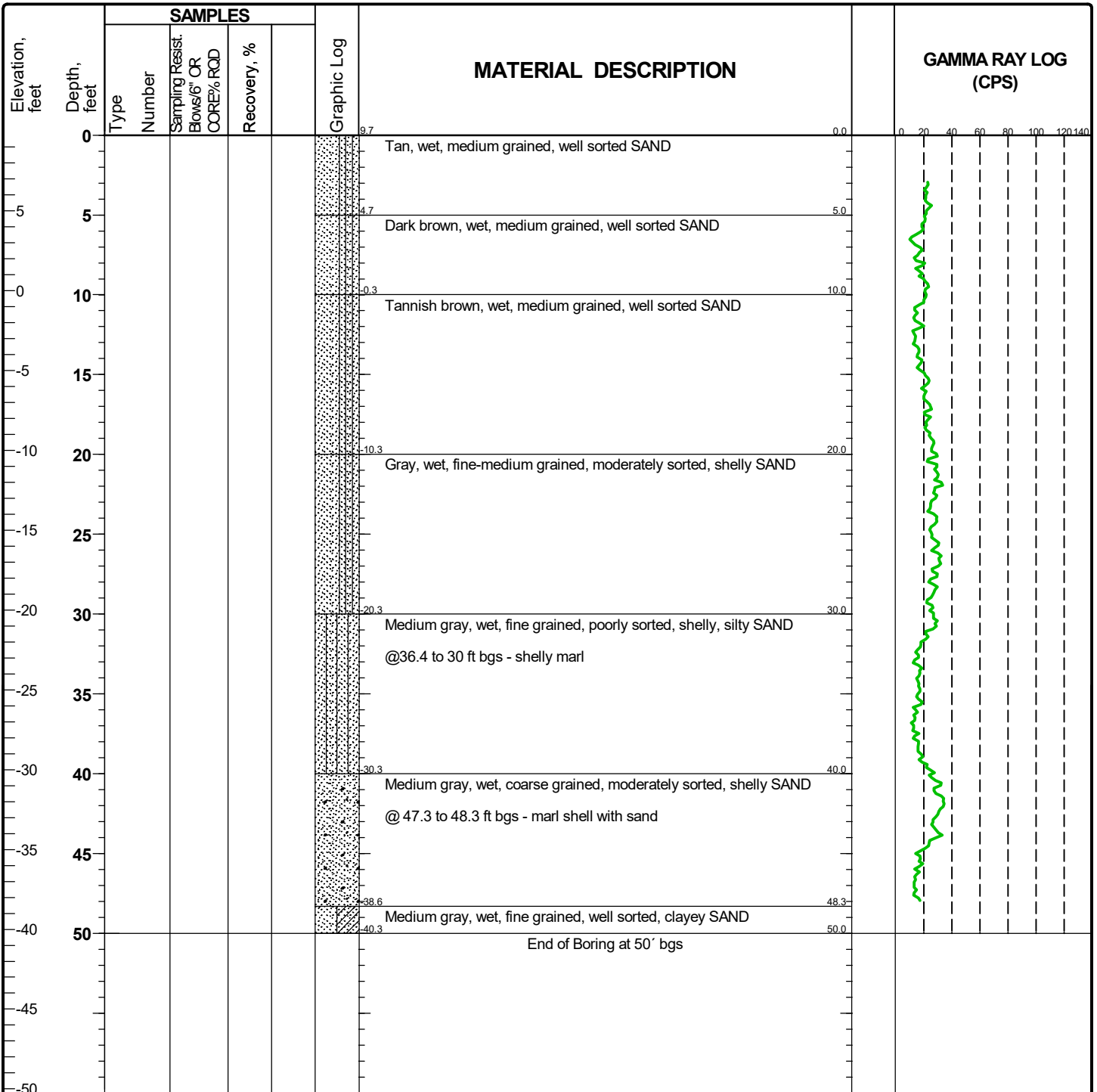
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0003

Sheet 1 of 1

Date(s) Drilled	9/30/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	9.74 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR: File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ, 6/28/2021 11:37:33 AM



Project: NASA KSC PFAS Investigation

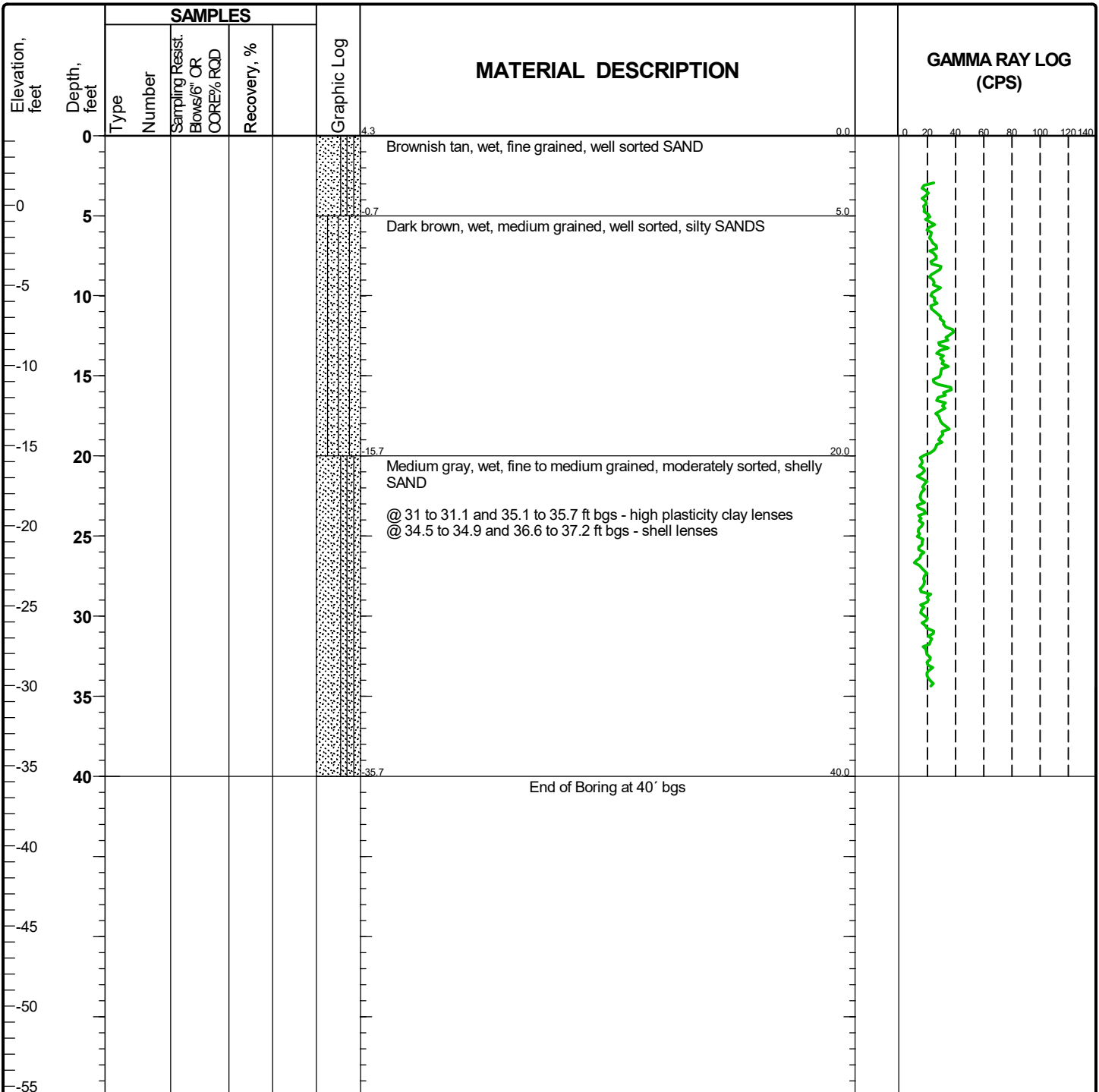
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0012

Sheet 1 of 1

Date(s) Drilled 9/30/2020	Logged By E. House	Checked By J. Whitley
Drilling Method Rotosonic	Drill Bit Size/Type Nominal 4", 6" (Sonic)	Total Depth of Borehole 40.0' bgs
Drill Rig Type GEOPROBE 8150LS	Drilling Contractor Drillpro, LLC	Surface Elevation 4.34 ft above msl
Borehole Backfill	Sampling Method(s) 6-inch sonic	Hammer Data NA
Groundwater Level(s)		



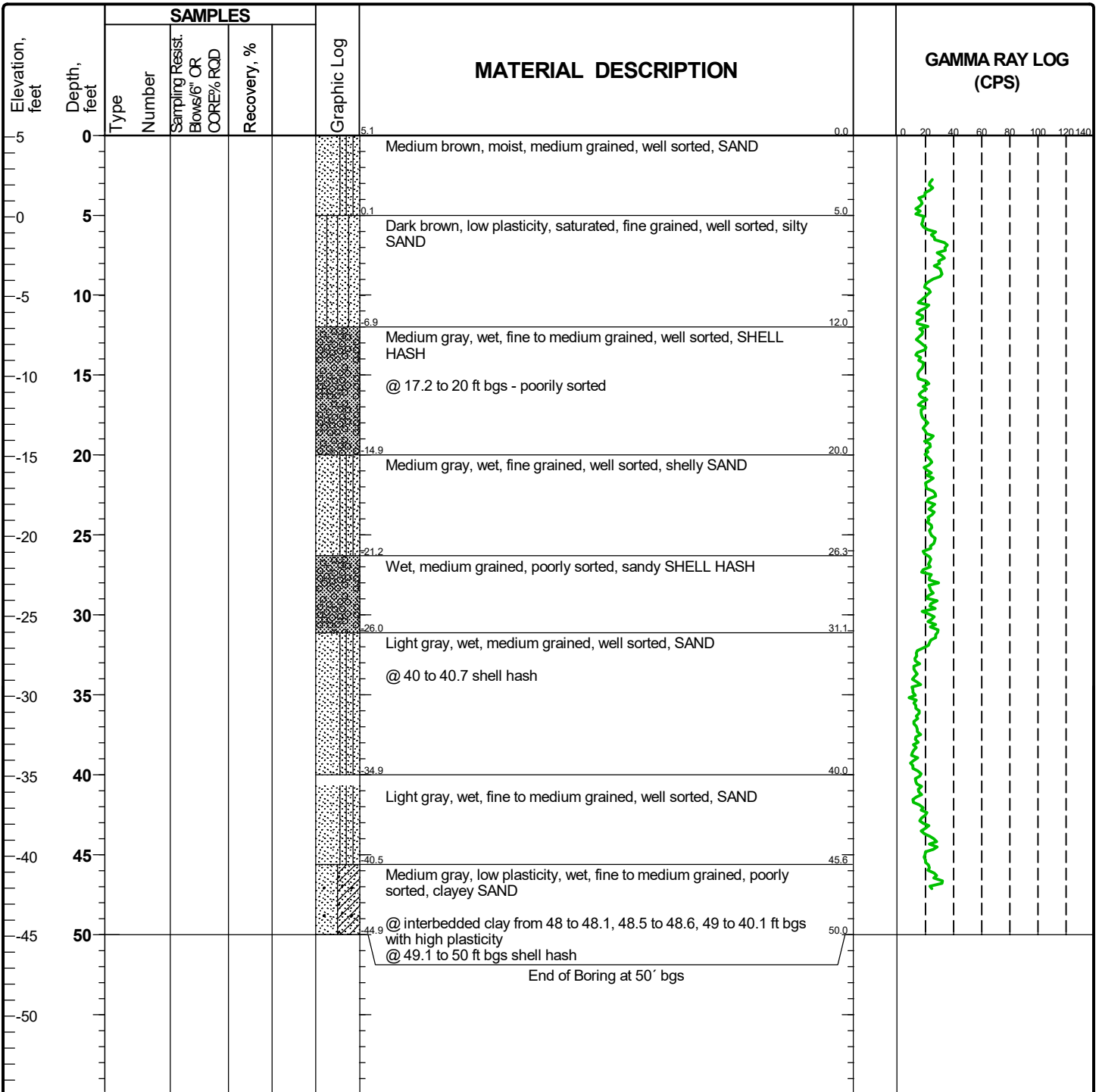
Report: GEO_CR; File C:\USERS\WHITLEY\DESKTOP\NASA_LOGS\NASA - KENNEDY SPACE CENTER.GPJ; 6/28/2021 11:37:42 AM

Project: NASA KSC PFAS Investigation
Project Location: Kennedy Space Center, Florida
Project Number: 60615673

Log of PFAS-MW0006

Sheet 1 of 1

Date(s) Drilled	10/1/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	5.09 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR; File C:\USERS\WHITLEY\DESKTOP\NASA_LOGS\NASA - KENNEDY SPACE CENTER.GPJ; 6/28/2021 11:37:36 AM

Project: NASA KSC PFAS Investigation

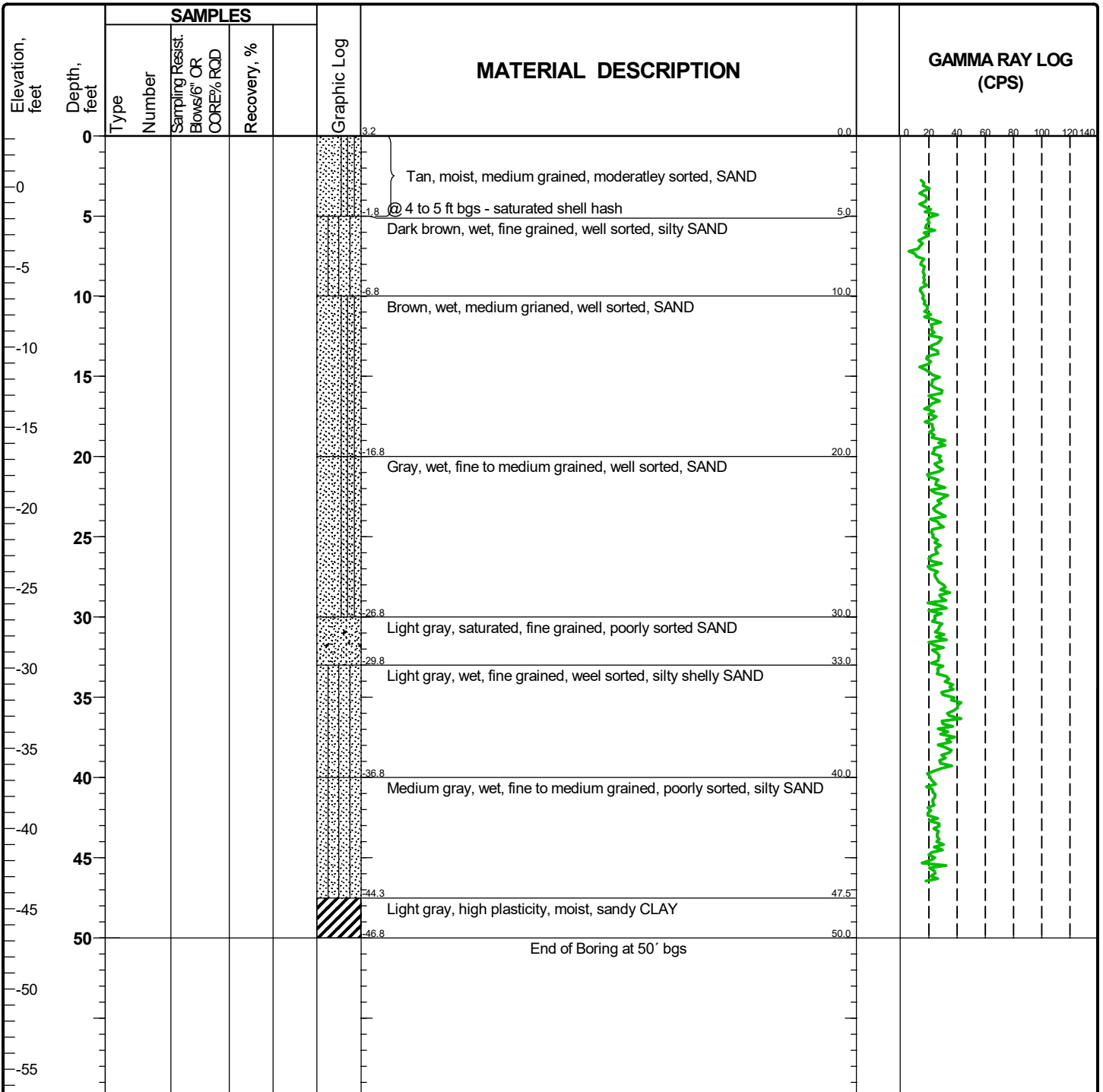
Project Location: Kennedy Space Center, Florida

Project Number: 60615673

Log of PFAS-MW0007

Sheet 1 of 1

Date(s) Drilled	10/1/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	3.18 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	N/A
Groundwater Level(s)					



Report: GEO_CR; File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ; 6/28/2021 11:37:37 AM

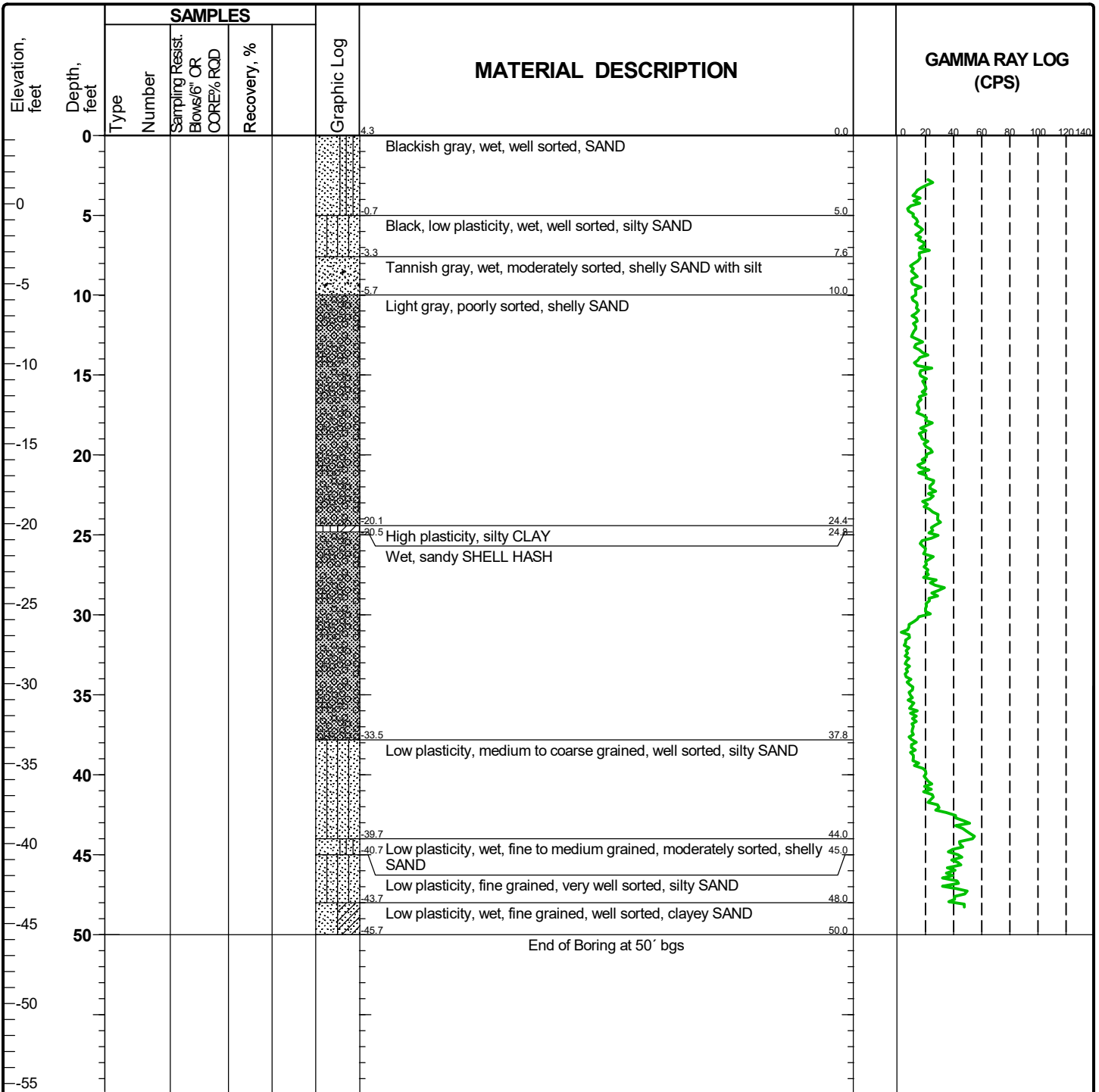


Project: NASA KSC PFAS Investigation
Project Location: Kennedy Space Center, Florida
Project Number: 60615673

Log of PFAS-MW0002

Sheet 1 of 1

Date(s) Drilled	10/19/2020	Logged By	E. House	Checked By	J. Whitley
Drilling Method	Rotosonic	Drill Bit Size/Type	Nominal 4", 6" (Sonic)	Total Depth of Borehole	50.0' bgs
Drill Rig Type	GEOPROBE 8150LS	Drilling Contractor	Drillpro, LLC	Surface Elevation	4.29 ft above msl
Borehole Backfill		Sampling Method(s)	6-inch sonic	Hammer Data	NA
Groundwater Level(s)					



Report: GEO_CR; File C:\USERS\WHITLEY\DESKTOP\NASA LOGS\NASA - KENNEDY SPACE CENTER.GPJ; 6/28/2021 11:37:32 AM

APPENDIX D

STORMWATER MODELING FILES

This page intentionally left blank.

**Table D-1
Basins Added to Stormwater Model
Center-Wide PFAS Investigation, PRL 237**

Basin ID	Permit Number	Notes
0001-A	16630-11	Because of the basin boundary being adjusted, a singular discharge point was designated to flow through a weir structure located at the southern end of the boundary area. All previous basins and stormwater features were removed to reflect that the basin's stormwater accumulation would discharge through the weir.
0001-B	23996-2	This area was created to reflect modifications to the basins, an updated discharge pipe, and impervious area related to a constructed launch tower.
0001-C	157352-3	This basin area was created to reflect the construction of a SpaceX facility. The basin area and outfall were added to the model.
0001-E	138585-1	This basin area was created to reflect changes in impervious area and flow of water to a discharge location south of the basin boundary. This area was previously not included in the Jones Edmunds ICPR Version 4 model, and it is lacking information on the entire facility.
0001-F	158609-1	This basin area was created to reflect changes in basin area and outfalls. This area was previously not included in the Jones Edmunds ICPR Version 4 mode, and only part of the facility has been permitted.
0001-G	81270-3	This basin area was created for the addition of the basin and outfall being included in the model. This area was previously not included in the Jones Edmunds ICPR Version 4 model.
0001-I	143199-9	This basin area was created to reflect changes in impervious area and flow of water of the Blue Origin North Campus.
0001-J	143199-7	This basin area was created to reflect changes in impervious area and flow of water Blue Origin South Campus and Exploration Park Phase 2.
0001-K	69567-5	This area was based on Exploration Park Phase 1, and it consists of an updated basin and outfall.
NASA Consolidated Waste Management Facility	128795	Basin and outfall locations updated.
Region 1 Stormwater Treatment Modification	16585	Update to the outfall structure.

Notes:

Permit information derived from St. Johns River Water Management District Regulatory Permit Search on-line database.

Current Directory:
 C:\Users\james.condon\Documents\Work\KSA\KSA_Models\KSA_Model_Copy_V22_A\1D\KSA_Model
 1
 Engine Name: C:\XPSWMM\engine\SWMMEN~2.EXE
 Input File:
 C:\Users\james.condon\Documents\Work\KSA\KSA_Models\KSA_Model_Copy_V22_A\1D\KSA_Model
 1_Sept 2020\KSA_Model_Sept 2020.XP

```

*=====*
|                                     |
|               xpswmm               |
|      Storm and Wastewater Management Model      |
|      Developed by Innovyze.                |
|-----|
| Last Update       : Apr 10 2020          |
| Interface Version: 2019.1.3              |
| Engine Version    : 12.0                 |
| Data File Version: 12.62                |
|-----|
*=====*
  
```

Engine Name: C:\XPSWMM\engine\SWMMEN~2.EXE

```

*=====*
| Input and Output file names by Layer |
*=====*
  
```

```

Input File to Layer #    1 JIN.US
Output File to Layer #   1
C:\Users\james.condon\Documents\Work\KSA\KSA_Model_Copy_V5\DATA.INT
Input File to Layer #    2
C:\Users\james.condon\Documents\Work\KSA\KSA_Model_Copy_V5\DATA.INT
Output File to Layer #   2 JOT.US
  
```

```

*=====*
|               Configuration Parameters               |
| Configuration Parameters, both those that are hardwired |
| and those added to the simulation are listed below.    |
| Configuration Parameters that start with a $ are set in |
| the engine as defaults. The remaining in UPPERCASE   |
| have been added to the simulation in the Configuration-> |
| Configuration Parameters dialog or as Engine Defaults in |
| the SWMXP.INI file.                                   |
|                                                       |
| Consult the Help File for the specific meaning/purpose   |
| of any particular parameter.                          |
|                                                       |
| Note:                                                  |
  
```

| The second column denotes the value of the parameter. |
 =====

\$powerstation	0.0000	1	2
\$perv	0.0000	0	4
\$oldegg	0.0000	0	7
\$as	0.0000	0	11
\$noflat	0.0000	0	21
\$oldomega	0.0000	0	24
\$oldvol	0.0000	1	28
\$implicit	0.0000	1	29
\$oldhot	0.0000	1	31
\$oldscs	0.0000	0	33
\$flood	0.0000	1	40
\$nokeys	0.0000	0	42
\$pzero	0.0000	0	55
\$oldvol2	0.0000	2	59
\$storage2	0.0000	3	62
\$oldhot1	0.0000	1	63
\$pumpwt	0.0000	1	70
\$ecloss	0.0000	1	77
\$exout	0.0000	0	97
\$spatial = 0.90	0.9000	5	124
\$djref = -1.0	-0.1000	3	143
\$weirlen = 50	50.0000	1	153
\$oldbnd	0.0000	1	154
\$nogrelev	0.0000	1	161
\$ncmid	0.0000	0	164
\$new_nl_97	0.0000	2	290
SCSIADEPTH=ON	0.0000	1	293
\$best97	0.0000	1	294
\$newbound	0.0000	1	295
\$q_tol = 0.01	0.0001	1	316
\$new_storage	0.0000	1	322
\$old_iteration	0.0000	1	333
MINLEN=10	10.0000	1	346
\$review_elevation	0.0000	1	383
\$use_half_volume	0.0000	1	385
VERT_WALLS=ON	0.0000	1	389
\$min_ts = 1.0	1.0000	1	407
\$design_restart = on	0.0000	1	412
\$zero_value=1.e-05	0.0000	1	415
SUBCATCHMENT_RES=ON	0.0000	1	419
\$relax_depth = on	0.0000	1	427
\$saveallpts = on	0.0000	1	434
PUMP_NEGHD=ON	0.0000	1	437
\$channel_geometry=1	0.0000	1	456
PROJUNITS == US	0.0000	1	462

=====

The XPSWMM/XPSTORM engine internally uses object IDs instead of full object names to represent objects. Included below is a table of these IDs along with the name of the object that ID corresponds to.

=====

Object ID Number	Object Name
202	N0335
203	N0550
204	N0690
205	N0640
206	N0780
207	N0830
208	N0790
209	N0800
210	N0870
211	N0510
212	N0520
213	N0390
214	N0350
215	N0450
216	N0770
217	N0720
218	N0960
219	N0920
220	N0950
221	N0970
222	N0915

223 N0885
224 N0560
225 N0810
226 N0570
227 N0990
228 N1000
229 N1020
230 N1030
231 N0890
232 N0850
233 N0930
234 N0980
235 N1010
236 N0430
237 N0500
238 N0230
239 N0220
240 N0200
241 N0190
242 N0130
243 N0100
244 N0090
245 N0120
246 N0110
247 N0170

248 N0210
249 N0260
250 N0250
251 N0240
252 N0140
253 N0150
254 N0270
255 N0290
256 N0180
257 N0370
258 N0285
259 N0420
260 N0490
261 N0410
262 N0380
263 N0660
264 N0740
265 N0730
269 N0940
270 N0530
271 N0060
272 N0050
274 N0325
275 N0160
276 N0470

277 N0540
278 N0650
279 N0400
280 N0360
281 N0480
282 N0080
283 N0310
284 N0300
285 N0460
286 N0440
287 N0330
288 N0655
289 N0375
290 N0385
291 N0275
292 N0280
293 N0202
295 N0340
296 N0515
297 N-001
298 N-002
299 N-003
300 N-004
301 N-005
302 N-008

303 N-010
304 N-013
305 N-015
306 N-006
307 N-007
308 N-009
309 N-011
310 N-014
311 N-012
312 N-025
313 N-023
314 N-021
315 N-019
316 N-041
317 N-020
318 N-022
319 N-024
320 N-029
321 N-026
322 N-027
323 N-028
324 N-030
325 N-043
326 N-042
327 N-031

328 N-040
329 N0620
330 N0900
331 N-009mh
332 N0205
333 N0386
334 N0388
335 N0775
336 N2040
338 N2380
339 N0155
340 N0945
341 N2002
342 N2090
343 N0742
344 N0910
345 N0880
451 N9004
457 N9004-B
459 N9004-C
461 N9004-D
463 N9004-F
467 N9001-B
471 N9001-D
473 N9001-F

475 N9000
477 N9003
480 N9005
485 N9005-E
487 N9005-G
489 N9004-J
491 N9004-G
493 N9002
495 N2370
727 N9000-B
729 N9000-C
733 N9000-E
735 N9000-F
739 N9001-E
741 N9001-G
743 N9001-H
745 N9001-J
747 N9001-K
751 N9002-A
753 N9002-B
755 N9003-A
757 N9003-B
759 N9003-C
761 N9003-D
763 N9003-E

765 N9003-F
767 N9003-G
769 N9004-A
771 N9004-E
773 N9004-H
775 N9004-I
777 N9004-K
779 N9005-A
781 N9005-B
783 N9005-C
785 N9005-D
787 N9005-F
789 N9005-H
790 N9000-D
792 N-0001A
794 N-0001B
796 N0001-C
800 N-0001-E
801 N-0001E-OF
803 N-0001-F
804 N-0001-G
805 N-0001F-OF-A
807 N-0001F-OF-B
811 N9004-L
814 N0001-J

815 N9005-J
818 N9005-K
821 N0001-I
823 N-0001K
825 N0140-A
396 R0870
407 R0770-P2
411 R0900
414 R0370
418 R0280
419 R0202
420 RN-002
421 RN-003
430 RN-006
431 RN-007
432 RN-009
433 RN-009MH
434 RN-011
435 RN-014
436 RN-012
437 RN-023
438 RN-021
439 RN-041
440 RN-020
441 RN-022

442 RN-024
444 RN-026
445 RN-027
446 RN-028
449 R0742-P3
458 R0655-P2
460 R0655-P3
462 R0655-P4
474 R0120-P2
488 R1010-P2
490 RN-025-P1
492 RN-025-P2
494 R0155-P1
674 R0386
675 R0388
676 R0385
677 R0375
680 R0335
795 R-0001B-P1
C{358.1} R0540-P1
C{358.2} R0540-P2
C{358.3} R0540-P3
C{359.1} R0290-P1
C{360.1} R0285.1
C{363.1} R0250.1

C{364.1} R0230.1
C{365.1} R0220.1
C{366.1} R0200.1
C{367.1} R0190.1
C{368.1} R0170.1
C{369.1} R0180-P1
C{369.2} R0180-P2
C{370.1} R0140.1
C{370.3} R0140-P3.1
C{371.1} R0150-P1
C{371.2} R0150-P2
C{371.3} R0150-P3
C{371.4} R0150-P4
C{371.5} R0150-P5
C{372.1} R0110.1
C{373.1} R0130-P1
C{373.2} R0130-P2
C{374.1} R0100-P1
C{374.2} R0100-P2
C{379.1} R0310.1
C{380.1} R0430-P1
C{380.2} R0430-P2
C{380.3} R0430-P3
C{380.4} R0430-P4
C{381.1} R0340-P1

C{381.2} R0340-P2
C{382.1} R0350-P1
C{382.2} R0350-P2
C{383.1} R0330-P1
C{383.2} R0330-P2
C{385.1} R0450-P1
C{385.2} R0450-P2
C{386.1} P0360-P1
C{386.2} P0360-P2
C{388.1} R0550-P1
C{388.2} R0550-P2
C{389.1} R0560-P1
C{389.2} R0560-P2
C{389.3} R0560-P3
C{391.1} R0780.1
C{392.1} R0740.1
C{394.1} R0730.1
C{395.1} R0880.1
C{397.1} R0950.1
C{398.1} R0920.1
C{399.1} R0960.1
C{400.1} R0990.1
C{401.1} R1010-P3
C{401.2} R1010-P4
C{401.3} R1010-P5

C{402.1} R0980-P1.1
C{403.1} R0980-P2.1
C{404.1} R0850-P1
C{404.2} R0850-P2
C{404.3} R0850-P3
C{405.1} R0570-P1
C{405.2} R0570-P2
C{405.3} R0570-P3
C{406.1} R0770-P1.1
C{408.1} R0770-P3
C{408.2} R0770-P4
C{409.1} R0790-P1
C{409.2} R0790-P2
C{410.1} R0530-P1
C{410.2} R0530-P2
C{410.3} R0530-P3
C{413.1} R0910-P1
C{413.2} R0910-P2
C{415.1} R0380-P1
C{415.2} R0380-P2
C{416.1} R0300-P1
C{416.2} R0300-P2
C{417.1} R0290-P2.1
C{422.1} RN-004-P1
C{422.2} RN-004-P2

C{422.3} RN-004-P3
C{423.1} RN-001-P1
C{423.2} RN-001-P2
C{423.3} RN-001-P3
C{424.1} RN-005-P1
C{424.2} RN-005-P2
C{424.3} RN-005-P3
C{425.1} RN-008-P1.1
C{425.2} RN-008-P2
C{425.3} RN-008-P3
C{426.1} RN-010-P1
C{426.2} RN-010-P2
C{426.3} RN-010-P3
C{427.1} RN-013-P1
C{427.2} RN-013-P2
C{427.3} RN-013-P3
C{428.1} RN-015-P1
C{428.2} RN-015-P2
C{428.3} RN-015-P3
C{443.1} RN-029-P1
C{443.2} RN-029-P2
C{448.1} R0742-P1
C{448.2} R0742-P2
C{452.1} R0655-P1.1
C{464.1} R0490-P8

C{464.2} R0490-P7
C{468.1} R0140-P2.1
C{468.3} R0140-P1.1
C{472.1} R0120-P1.1
C{476.1} R0160-P1.1
C{478.1} R0325-P1.1
C{479.1} R0400-P1.1
C{481.1} R0880-P2.1
C{486.1} R1010-P1.1
C{496.1} R-0410-P4
C{496.2} R-0410-P5
C{496.3} R-0410-P6
C{496.4} R-0410-P7
C{496.5} R0410-P1
C{496.6} R0410-P2
C{496.7} R0410-P3
C{498.1} 498.1
C{498.2} R0490-P1.1
C{499.1} R0490-P3
C{499.2} R0490-P4
C{499.3} R0490-P5
C{499.4} R0490-P6
C{813.3} R0890-ORF-2
C{813.5} R0890-ORF-5
C{813.6} R0890ORF-3

C{813.7} R0890-ORF-4
C{826.1} N0140-A-W1.1
P{481.4} R0880-PUMP
W{395.2} R0880-WPump
W{398.2} R0920-P2-W1
W{398.3} R0920-P2-W2
W{413.3} R0910-W1
W{478.2} R0325-DS-W1
W{479.3} R0400-WPump
W{481.3} R0880-WPump2
W{481.5} R0880-DS-W1
W{593.2} R0520-DS-W1
W{610.2} R0640-P1-W1
W{610.3} R0640-P1-W2
W{610.4} R0640-P2-W1
W{615.2} R0690-P1-W1
W{634.2} R0940-DS-W1
W{636.2} R0945-DS-W1
W{645.2} R1020-DS-W1
W{656.1} R0205-W1
W{656.2} R0205-W2
W{656.3} R0205-W3
W{656.4} R0205-W4
W{657.1} R0210-W1.1
W{658.1} R0515-W1.1

W{659.1} R0515-W2.1
W{660.1} R0620-W1
W{660.2} R0620-W2
W{660.3} R0620-W3
W{661.1} R0650-W2.1
W{662.1} R0660-W3.1
W{663.1} R0742-W1.1
W{664.1} R0890-W1.1
W{665.1} R0915-W1.1
W{722.1} RN-019-P1-W1
W{722.2} R019-P1-W2
W{723.1} R0830-P1-W1.1
W{723.2} R0830-P1-W2
W{724.1} R0970-P1-W1
W{724.2} R0970-P1-W2
W{793.1} R-0001A-W1.1
W{793.2} R-0001A-W2
W{798.1} R0001C-W1.1
W{798.2} R0001C-W2
W{798.3} R0001C-W3
W{802.1} R0001E-W1
W{809.1} R0001F-W1.1
W{809.2} R0001F-W2
W{809.3} R0001F-W3
W{809.4} R0001F-W4

W{809.5} R0001F-W5
W{810.1} R001G-W1
W{813.1} R0930-W6.1.1
W{817.1} R0001J-W1.1
W{817.2} R000J-W2
W{817.3} R000J-W3
W{817.4} R000J-W4
W{817.5} R000J-W5
W{817.6} R000J-W6
W{817.7} R000J-W7
W{820.1} R0001J-W8
W{820.2} R0001J-W9
W{820.3} R0001J-W10
W{820.4} R0001J-W11
W{820.5} R0001J-W12
W{820.6} R0001J-W13
W{820.7} R0001J-W14
W{822.1} R0001I-W1.1
W{822.2} R001I-W2
W{822.3} R0001I-W3
W{822.4} R001I-W4
W{822.5} R001I-W5
W{822.6} R0001I-W7
W{822.7} R0001I-W7.1
W{824.1} R0001K-W1.1

W{824.2} R0001K-W2
W{824.3} R0001K-W3
D{358.4} R0540-W3
D{359.2} R0290-P5
D{360.2} R0285-W2
D{363.2} R0250-W1
D{364.2} R0230-W1
D{365.2} R0220-W2
D{366.2} R0200-W3
D{367.2} R0190-W4
D{368.2} R0170-W3
D{369.3} R0180-W1
D{370.4} R0140-W1
D{371.6} R0150-W3
D{372.2} R0110-W1
D{373.3} R0130-W1
D{374.3} R0100-W4
D{379.2} R0310-W5.1
D{380.5} R0430-W3
D{381.3} R0340-W3
D{382.3} R0350-W1
D{385.3} R0330-W1
D{386.3} R0360-W1
D{388.3} R0550-W2
D{389.4} R0560-W1

D{391.2} R0780-W1
D{392.2} R0740-W3
D{394.2} R0870-W1
D{397.2} R0950-W1
D{399.2} R0960-W2
D{400.2} R0990-W2
D{401.4} R1010-W2
D{402.2} R0980-W2
D{403.2} R0850-W2
D{406.2} R0770-W2
D{410.4} R0530-W4
D{415.3} R0380-W3
D{416.3} R0300-W2
D{417.2} R0290-W1
D{452.2} R0655-W2
D{468.2} R0140-W2
D{472.2} R0120-W2
D{476.2} R0160-W1
D{479.2} R0400-W1
D{481.2} R0880-W2
D{486.2} R1010-W1
D{498.3} R0490-W2
D{507.1} R0050-W1.1
D{508.1} R0050-W2.1
D{509.1} R0060-W1.1

D{512.1} R0080-W1.1
D{513.1} R0080-W2.1
D{514.1} R0090-W1.1
D{515.1} R0090-W2.1
D{516.1} R0090-W3.1
D{517.1} R0090-W4.1
D{518.1} R0100-W1.1
D{519.1} R0100-W2.1
D{520.1} R0100-W3.1
D{521.1} R0110-W2.1
D{522.1} R0120-W1.1
D{523.1} R0130-W2.1
D{524.1} R0150-W1.1
D{525.1} R0150-W2.1
D{527.1} R0170-W1.1
D{528.1} R0170-W2.1
D{529.1} R0190-W1.1
D{530.1} R0190-W2.1
D{531.1} R0190-W3.1
D{532.1} R0200-W1.1
D{533.1} R0200-W2.1
D{534.1} R0220-W1.1
D{535.1} R0240-W1.1
D{536.1} R0240-W2.1
D{537.1} R0240-W3.1

D{538.1} R0240-W4.1
D{539.1} R0240-W5.1
D{540.1} R0240-W6.1
D{541.1} R0250-W2.1
D{542.1} R0250-W3.1
D{543.1} R0260-W1.1
D{544.1} R0270-W1.1
D{544.2} R0270-W3
D{545.1} R0270-W2.1
D{546.1} R0275-W1.1
D{547.1} R0280-W1.1
D{548.1} R0285-W1.1
D{549.1} R0290-W2.1
D{550.1} R0290-W3.1
D{551.1} R0290-W4.1
D{552.1} R0300-W1.1
D{553.1} R0310-W1.1
D{554.1} R0310-W2.1
D{555.1} R0310-W3.1
D{556.1} R0310-W4.1
D{557.1} R0325-W2.1
D{558.1} R0330-W2.1
D{559.1} R0330-W3.1
D{560.1} R0340-W1.1
D{561.1} R0340-W2.1

D{562.1} R0350-W2.1
D{563.1} R0350-W3.1
D{564.1} R0360-W2.1
D{565.1} R0360-W3.1
D{566.1} R0370-W1.1
D{567.1} R0370-W2.1
D{568.1} R0370-W3.1
D{569.1} R0380-W1.1
D{570.1} R0380-W2.1
D{571.1} R0380-W4.1
D{572.1} R0390-W1.1
D{573.1} R0390-W2
D{574.1} R0400-W2.1
D{575.1} R0410-W1.1
D{576.1} R0420-W1.1
D{577.1} R0420-W2.1
D{578.1} R0430-W1.1
D{579.1} R0430-W2.1
D{580.1} R0440-W1.1
D{581.1} R0450-W1.1
D{582.1} R0450-W2.1
D{584.1} R0460-W1.1
D{585.1} R0460-W2.1
D{586.1} R0480-W1.1
D{587.1} R0480-W2.1

D{588.1} R0480-W3.1
D{589.1} R0490-W1.1
D{590.1} R0490-W3.1
D{591.1} R0500-W1.1
D{592.1} R0510-W2.1
D{593.1} R0520-W1.1
D{594.1} R0520-W2.1
D{595.1} R0530-W1.1
D{596.1} R0530-W2.1
D{597.1} R0530-W3
D{598.1} R0540-W1.1
D{599.1} R0540-W2.1
D{600.1} R0550-W1.1
D{601.1} R0550-W3.1
D{602.1} R0560-W2.1
D{603.1} R0560-W3.1
D{604.1} R0560-W4.1
D{605.1} R0560-W5.1
D{606.1} R0570-W1.1
D{607.1} R0570-W3.1
D{608.1} R0570-W4.1
D{609.1} R0570-W5.1
D{610.1} R0640-W1.1
D{611.1} R0650-W1.1
D{613.1} R0660-W1.1

D{614.1} R0660-W2.1
D{615.1} R0690-W2.1
D{616.1} R0720-W1.1
D{617.1} R0730-W1.1
D{618.1} R0740-W2.1
D{620.1} R0740-W4.1
D{621.1} R0775-W1.1
D{622.1} R0780-W2.1
D{623.1} R0790-W1
D{624.1} R0800-W1.1
D{625.1} R0800-W2.1
D{626.1} R0810-W1.1
D{627.1} R0830-W3.1
D{629.1} R0850-W3.1
D{630.1} R0870-W2.1
D{631.1} R0885-W1.1
D{632.1} R0910-W2.1
D{633.1} R0930-W1.1
D{634.1} R0940-W1.1
D{635.1} R0940-W2.1
D{636.1} R0945-W1.1
D{637.1} R0950-W2.1
D{638.1} R0960-W1.1
D{639.1} R0960-W3.1
D{640.1} R0960-W4.1

D{641.1} R0980-W1.1
D{642.1} R0990-W1.1
D{643.1} R0990-W3.1
D{644.1} R1000-W1.1
D{645.1} R1020-W1.1
D{646.1} R1030-W1.1
D{647.1} R1030-W2.1
D{648.1} R2002-W1.1
D{649.1} R02040-W1.1
D{650.1} R2090-W1.1
D{651.1} R2370-W4.1
D{652.1} R2380-W2.1
D{654.1} R2380-W3.1
D{655.1} R0440-W2.1
D{667.1} R015-W1.1
D{668.1} R020-W1.1
D{669.1} R021-W1.1
D{670.1} R030-W1.1
D{671.1} R031-W1.1
D{672.1} R042-W1.1
D{673.1} R043-W1.1
D{827.1} R0850-W1.1

=====

| Parameter Values on the Tapes Common Block. These are the |
| values read from the data file and dynamically allocated |
| by the model for this simulation. |

=====

Number of Subcatchments in the Runoff Block (NW)....	145
Number of Channel/Pipes in the Runoff Block (NG)....	0
Runoff Water quality constituents (NRQ).....	1
Runoff Land Uses per Subcatchment (NLU).....	6
Number of Elements in the Transport Block (NET)....	0
Number of Storage Junctions in Transport (NTSE)....	0
Number of Input Hydrographs in Transport (NTH).....	0
Number of Elements in the Extran Block (NEE).....	494
Number of Groundwater Subcatchments in Runoff (NGW)..	0
Number of Interface locations for all Blocks (NIE)..	494
Number of Pumps in Extran (NEP).....	1
Number of Orifices in Extran (NEO).....	0
Number of Tide Gates/Free Outfalls in Extran (NTG)..	52
Number of Extran Weirs (NEW).....	74
Number of scs hydrograph points.....	13825
Number of Extran printout locations (NPO).....	0
Number of Tide elements in Extran (NTE).....	52
Number of Natural channels (NNC).....	5
Number of Storage junctions in Extran (NVSE).....	149
Number of Time history data points in Extran(NTVAL)..	98
Number of Variable storage elements in Extran (NVST)	99
Number of Input Hydrographs in Extran (NEH).....	0
Number of Particle sizes in Transport Block (NPS)...	0
Number of User defined conduits (NHW).....	145
Number of Connecting conduits in Extran (NECC).....	20
Number of Upstream elements in Transport (NTCC)....	10
Number of Storage/treatment plants (NSTU).....	1
Number of Values for R1 lines in Transport (NR1)....	0
Number of Nodes to be allowed for (NNOD).....	494
Number of Plugs in a Storage Treatment Unit.....	1

```
#####
#   Entry made to the Runoff Layer(Block) of SWMM   #
#   Last Updated June, 2014 by Innovyze             #
#####
```

=====

```
|   RUNOFF TABLES IN THE OUTPUT FILE.   |
|   These are the more important tables in the output file.   |
|   You can use your editor to find the table numbers,       |
|   for example: search for Table R3 to check continuity.    |
|   This output file can be imported into a Word Processor   |
|   and printed on US letter or A4 paper using portrait      |
|   mode, courier font, a size of 8 pt. and margins of 0.75 |
|
| Table R1 - Physical Hydrology Data
| Table R2 - Infiltration data
| Table R3 - Raingage and Infiltration Database Names
```

Table R4 - Groundwater Data	
Table R5 - Continuity Check for Surface Water	
Table R6 - Continuity Check for Channels/Pipes	
Table R7 - Continuity Check for Subsurface Water	
Table R8 - Infiltration/Inflow Continuity Check	
Table R9 - Summary Statistics for Subcatchments	
Table R10 - Sensitivity analysis for Subcatchments	

=====

RUNOFF JOB CONTROL #
#####

Snowmelt parameter - ISNOW.....	0
Number of rain gages - NRGAG.....	1
Quality is simulated - KWALTY.....	1
Default evaporation rate used - IVAP.....	0
Hour of day at start of storm - NHR.....	0
Minute of hour at start of storm - NMN.....	0
Time TZERO at start of storm (hours).....	0.000
Use U.S. Customary units for most I/O - METRIC...	0
Runoff input print control...	0
Runoff graph plot control....	0
Runoff output print control..	0
Limit number of groundwater convergence messages to	10000
Print headers every 50 lines - NOHEAD (0=yes, 1=no)	0
Print land use load percentages -LANDUPR (0=no, 1=yes)	0
Month, day, year of start of storm is:	9/15/2020
Wet time step length (seconds).....	60.0
Dry time step length (seconds).....	86400.0
Wet/Dry time step length (seconds)...	60.0
Simulation length is.....	192.0 Hours
If Horton infiltration model is being used	
A mixture of infiltration options may be used in	
XP-SWMM as a watershed specific option.	
Rate for regeneration of infiltration = REGEN * DECAY	
Decay is read in for each subcatchment	
REGEN =	0.01000
Raingage #.....	1
KTYPE - Rainfall input type.....	0
NHISTO - Total number of rainfall values..	2533

```

KINC - Rainfall values(pairs) per line.. 10
KPRINT - Print rainfall(0-Yes,1-No)..... 0
KTIME - Precipitation time units
0 --> Minutes 1 --> Hours..... 0
KPREP - Precipitation unit type
0 --> Intensity 1 --> Volume..... 1
KTHIS - Variable rainfall intervals
0 --> No, >= 1 --> Yes..... 0
THISTO - Rainfall time interval..... 5.00
TZRAIN - Starting time(KTIME units)..... 0.00

```

```

#####
# Rainfall input summary from Runoff #
#####

```

Total rainfall for gage # 1 is 3.5850 inches

```

#####
# Data Group F1 #
# Evaporation Rate (in/day) #
#####

```

```

JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV DEC.
---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ----
0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100

```

```

#####
# Table R1. S U B C A T C H M E N T D A T A #
# Physical Hydrology Data #
#####

```

Slope ft/ft	Subcatchment		Deprs	Deprs	Prcnt	Width (ft)	Area (ac)	Per- cent Imperv
	"n" Imprv	"n" Perv	Storge Imprv	Storge Perv	Zero Deten- tion			
0.010	1	N0190#1	0.020	0.000	0.000	1.0000	11.180	95.00
0.010	2	N0230#1	0.020	0.000	0.000	1.0000	19.500	90.00
0.010	3	N0220#1	0.020	0.000	0.000	1.0000	18.470	97.00
0.010	4	N0290#1	0.020	0.000	0.000	1.0000	14.120	20.00

0.010	0.020	0.020	0.000	0.000	0.000			
	5		N0370#1		N0370	1.0000	55.440	42.00
0.010	0.020	0.020	0.000	0.000	0.000			
	6		N0275#1		N0275	1.0000	12.910	39.00
0.010	0.020	0.020	0.000	0.000	0.000			
	7		N0280#1		N0280	1.0000	62.940	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	8		N0285#1		N0285	1.0000	243.72	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	9		N0380#1		N0380	1.0000	88.580	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	10		N0385#1		N0385	1.0000	7.0000	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	11		N0386#1		N0386	1.0000	7.0000	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	12		N0388#1		N0388	1.0000	7.0000	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	13		N0420#1		N0420	1.0000	115.60	8.00
0.010	0.020	0.020	0.000	0.000	0.000			
	14		N0530#1		N0530	1.0000	54.070	22.00
0.010	0.020	0.020	0.000	0.000	0.000			
	15		N0430#1		N0430	1.0000	55.630	15.00
0.010	0.020	0.020	0.000	0.000	0.000			
	16		N0310#1		N0310	1.0000	45.910	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
	17		N0160#1		N0160	1.0000	29.420	15.00
0.010	0.020	0.020	0.000	0.000	0.000			
	18		N0300#1		N0300	1.0000	36.450	17.00
0.010	0.020	0.020	0.000	0.000	0.000			
	19		N0340#1		N0340	1.0000	365.08	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	20		N0390#1		N0390	1.0000	136.36	42.00
0.010	0.020	0.020	0.000	0.000	0.000			
	21		N0001-C#1		N0001-C	1.0000	22.600	30.00
0.010	0.020	0.020	0.000	0.000	0.000			
	22		N0460#1		N0460	1.0000	639.89	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	23		N0440#1		N0440	1.0000	296.78	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	24		N0360#1		N0360	1.0000	20.860	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
	25		N2040#1		N2040	1.0000	267.92	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	26		N0450#1		N0450	1.0000	389.21	2.00
0.010	0.020	0.020	0.000	0.000	0.000			
	27		N0400#1		N0400	1.0000	639.15	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	28		N0550#1		N0550	1.0000	60.910	4.00
0.010	0.020	0.020	0.000	0.000	0.000			
	29		N0640#1		N0640	1.0000	15.270	85.00

0.010	0.020	0.020	0.000	0.000	0.000			
	30		N0660#1		N0660	1.0000	11.360	90.00
0.010	0.020	0.020	0.000	0.000	0.000			
	31		N0780#1		N0780	1.0000	21.410	98.00
0.010	0.020	0.020	0.000	0.000	0.000			
	32		N0775#1		N0775	1.0000	19.640	95.00
0.010	0.020	0.020	0.000	0.000	0.000			
	33		N0690#1		N0690	1.0000	3.8900	84.00
0.010	0.020	0.020	0.000	0.000	0.000			
	34		N0720#1		N0720	1.0000	84.380	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	35		N0770#1		N0770	1.0000	69.800	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	36		N0885#1		N0885	1.0000	204.75	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	37		N0960#1		N0960	1.0000	10.390	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
	38		N0990#1		N0990	1.0000	8.8700	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
	39		N1010#1		N1010	1.0000	8.2300	15.00
0.010	0.020	0.020	0.000	0.000	0.000			
	40		N1030#1		N1030	1.0000	13.300	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
	41		N1020#1		N1020	1.0000	162.18	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	42		N0940#1		N0940	1.0000	255.69	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	43		N1000#1		N1000	1.0000	29.140	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	44		N0945#1		N0945	1.0000	146.33	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	45		N0980#1		N0980	1.0000	378.70	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	46		N0850#1		N0850	1.0000	282.37	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	47		N0890#1		N0890	1.0000	535.54	4.00
0.010	0.020	0.020	0.000	0.000	0.000			
	48		N0930#1		N0930	1.0000	120.62	8.00
0.010	0.020	0.020	0.000	0.000	0.000			
	49		N0920#1		N0920	1.0000	16.330	3.00
0.010	0.020	0.020	0.000	0.000	0.000			
	50		N0950#1		N0950	1.0000	49.450	13.00
0.010	0.020	0.020	0.000	0.000	0.000			
	51		N0830#1		N0830	1.0000	14.300	15.00
0.010	0.020	0.020	0.000	0.000	0.000			
	52		N0970#1		N0970	1.0000	10.140	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
	53		N-0001K#1		N-0001K	1.0000	18.370	55.00
0.010	0.020	0.020	0.000	0.000	0.000			
	54		N0870#1		N0870	1.0000	102.60	0.00

0.010	0.020	0.020	0.000	0.000	0.000			
	55		N0790#1		N0790	1.0000	137.57	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	56		N0001-I#1		N0001-I	1.0000	75.139	49.00
0.010	0.020	0.020	0.000	0.000	0.000			
	57		N0915#1		N0915	1.0000	348.24	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	58		N0900#1		N0900	1.0000	0.10000E-01	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	59		N0910#1		N0910	1.0000	25.860	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	60		N0880#1		N0880	1.0000	5.6500	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	61		N0810#1		N0810	1.0000	781.07	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	62		N0740#1		N0740	1.0000	74.740	1.00
0.010	0.020	0.020	0.000	0.000	0.000			
	63		N0742#1		N0742	1.0000	2.7000	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	64		N0800#1		N0800	1.0000	12.730	80.00
0.010	0.020	0.020	0.000	0.000	0.000			
	65		N0620#1		N0620	1.0000	3.1500	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
	66		N0730#1		N0730	1.0000	260.63	7.00
0.010	0.020	0.020	0.000	0.000	0.000			
	67		N0570#1		N0570	1.0000	59.960	25.00
0.010	0.020	0.020	0.000	0.000	0.000			
	68		N0560#1		N0560	1.0000	78.230	14.00
0.010	0.020	0.020	0.000	0.000	0.000			
	69		N0515#1		N0515	1.0000	53.270	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	70		N0510#1		N0510	1.0000	572.78	2.00
0.010	0.020	0.020	0.000	0.000	0.000			
	71		N0520#1		N0520	1.0000	941.67	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
	72		N0350#1		N0350	1.0000	77.070	2.00
0.010	0.020	0.020	0.000	0.000	0.000			
	73		N0330#1		N0330	1.0000	40.240	38.00
0.010	0.020	0.020	0.000	0.000	0.000			
	74		N0325#1		N0325	1.0000	56.130	10.00
0.010	0.020	0.020	0.000	0.000	0.000			
	75		N0180#1		N0180	1.0000	63.440	5.00
0.010	0.020	0.020	0.000	0.000	0.000			
	76		N0090#1		N0090	1.0000	15.180	86.00
0.010	0.020	0.020	0.000	0.000	0.000			
	77		N-0001B#1		N-0001B	1.0000	15.270	30.00
0.010	0.020	0.020	0.000	0.000	0.000			
	78		N0100#1		N0100	1.0000	9.8600	44.00
0.010	0.020	0.020	0.000	0.000	0.000			
	79		N0130#1		N0130	1.0000	42.060	29.00

0.010	0.020	0.020	0.000	0.000	0.000			
80			N0080#1		N0080	1.0000	29.800	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
81			N0050#1		N0050	1.0000	40.140	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
82			N0170#1		N0170	1.0000	25.550	95.00
0.010	0.020	0.020	0.000	0.000	0.000			
83			N0205#1		N0205	1.0000	4.0000	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
84			N0210#1		N0210	1.0000	84.950	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
85			N0150#1		N0150	1.0000	37.410	84.00
0.010	0.020	0.020	0.000	0.000	0.000			
86			N0155#1		N0155	1.0000	13.150	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
87			N0060#1		N0060	1.0000	185.38	4.00
0.010	0.020	0.020	0.000	0.000	0.000			
88			N0120#1		N0120	1.0000	15.330	65.00
0.010	0.020	0.020	0.000	0.000	0.000			
89			N0110#1		N0110	1.0000	51.350	50.00
0.010	0.020	0.020	0.000	0.000	0.000			
90			N0140#1		N0140	1.0000	57.340	90.00
0.010	0.020	0.020	0.000	0.000	0.000			
91			N0140-A#1		N0140-A	1.0000	0.40000E-01	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
92			N0500#1		N0500	1.0000	171.56	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
93			N0470#1		N0470	1.0000	983.12	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
94			N0540#1		N0540	1.0000	63.450	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
95			N0650#1		N0650	1.0000	39.430	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
96			N0490#1		N0490	1.0000	870.19	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
97			N2380#1		N2380	1.0000	68.550	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
98			N2370#1		N2370	1.0000	271.77	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
99			N0655#1		N0655	1.0000	97.840	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
100			N0480#1		N0480	1.0000	853.18	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
101			N0410#1		N0410	1.0000	936.92	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
102			N0270#1		N0270	1.0000	133.23	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
103			N0260#1		N0260	1.0000	384.59	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
104			N0250#1		N0250	1.0000	23.160	27.00

0.010	0.020	0.020	0.000	0.000	0.000			
105			N0240#1		N0240	1.0000	7.1500	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
106			N0200#1		N0200	1.0000	14.400	90.00
0.010	0.020	0.020	0.000	0.000	0.000			
107			N-002#1		N-002	1.0000	7.6700	30.00
0.010	0.020	0.020	0.000	0.000	0.000			
108			N-003#1		N-003	1.0000	4.5400	70.00
0.010	0.020	0.020	0.000	0.000	0.000			
109			N-004#1		N-004	1.0000	9.0300	90.00
0.010	0.020	0.020	0.000	0.000	0.000			
110			N-001#1		N-001	1.0000	103.80	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
111			N-006#1		N-006	1.0000	10.100	26.00
0.010	0.020	0.020	0.000	0.000	0.000			
112			N-005#1		N-005	1.0000	14.120	7.00
0.010	0.020	0.020	0.000	0.000	0.000			
113			N-007#1		N-007	1.0000	6.6600	35.00
0.010	0.020	0.020	0.000	0.000	0.000			
114			N-009#1		N-009	1.0000	7.3500	80.00
0.010	0.020	0.020	0.000	0.000	0.000			
115			N-008#1		N-008	1.0000	21.160	45.00
0.010	0.020	0.020	0.000	0.000	0.000			
116			N-011#1		N-011	1.0000	9.5200	100.00
0.010	0.020	0.020	0.000	0.000	0.000			
117			N-010#1		N-010	1.0000	19.000	36.00
0.010	0.020	0.020	0.000	0.000	0.000			
118			N-014#1		N-014	1.0000	13.120	20.00
0.010	0.020	0.020	0.000	0.000	0.000			
119			N-012#1		N-012	1.0000	10.500	95.00
0.010	0.020	0.020	0.000	0.000	0.000			
120			N-013#1		N-013	1.0000	8.0400	12.00
0.010	0.020	0.020	0.000	0.000	0.000			
121			N-015#1		N-015	1.0000	39.500	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
122			N2002#1		N2002	1.0000	107.20	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
123			N-020#1		N-020	1.0000	17.800	0.00
0.010	0.020	0.020	0.000	0.000	0.000			
124			N-022#1		N-022	1.0000	13.610	24.00
0.010	0.020	0.020	0.000	0.000	0.000			
125			N-026#1		N-026	1.0000	1.1700	5.00
0.010	0.020	0.020	0.000	0.000	0.000			
126			N-027#1		N-027	1.0000	10.070	40.00
0.010	0.020	0.020	0.000	0.000	0.000			
127			N-028#1		N-028	1.0000	1.4300	40.00
0.010	0.020	0.020	0.000	0.000	0.000			
128			N-024#1		N-024	1.0000	30.990	15.00
0.010	0.020	0.020	0.000	0.000	0.000			
129			N-029#1		N-029	1.0000	7.8400	26.00

0.010	0.020	0.020	0.000	0.000	0.000			
130		N-030#1		N-030	1.0000	27.030	0.00	
0.010	0.020	0.020	0.000	0.000	0.000			
131		N-023#1		N-023	1.0000	2.3100	30.00	
0.010	0.020	0.020	0.000	0.000	0.000			
132		N-031#1		N-031	1.0000	24.760	0.00	
0.010	0.020	0.020	0.000	0.000	0.000			
133		N-025#1		N-025	1.0000	5.4600	20.00	
0.010	0.020	0.020	0.000	0.000	0.000			
134		N-041#1		N-041	1.0000	29.210	90.00	
0.010	0.020	0.020	0.000	0.000	0.000			
135		N-019#1		N-019	1.0000	23.590	15.00	
0.010	0.020	0.020	0.000	0.000	0.000			
136		N-021#1		N-021	1.0000	27.110	0.00	
0.010	0.020	0.020	0.000	0.000	0.000			
137		N-043#1		N-043	1.0000	17.170	0.00	
0.010	0.020	0.020	0.000	0.000	0.000			
138		N-042#1		N-042	1.0000	61.620	0.00	
0.010	0.020	0.020	0.000	0.000	0.000			
139		N-040#1		N-040	1.0000	341.70	0.00	
0.010	0.020	0.020	0.000	0.000	0.000			
140		N2090#1		N2090	1.0000	127.23	0.00	
0.010	0.020	0.020	0.000	0.000	0.000			
141		N-0001A#1		N-0001A	1.0000	3439.6	12.30	
0.010	0.020	0.020	0.000	0.000	0.000			
142		N-0001-E#1		N-0001-E	1.0000	3.3700	39.00	
0.010	0.020	0.020	0.000	0.000	0.000			
143		N-0001-F#1		N-0001-F	1.0000	44.700	33.00	
0.010	0.020	0.020	0.000	0.000	0.000			
144		N-0001-G#1		N-0001-G	1.0000	7.3400	66.00	
0.010	0.020	0.020	0.000	0.000	0.000			
145		N0001-J#1		N0001-J	1.0000	84.700	17.00	
0.010	0.020	0.020	0.000	0.000	0.000			

#####

#####

Table R2. SUBCATCHMENT DATA

#

Infiltration or Time of Concentration Data

#

#

#

Infiltration Type Infl #1(#5) Infl #2(#6) Infl #3(#7)

Infl #4(#8) #

SCS -> Comp CN Time Conc Shape Factor

Depth or Fraction #

SBUH -> Comp CN Time Conc N/A

N/A #

Green Ampt -> Suction Hydr Cond Initial MD

```

N/A #
# Horton -> Max Rate Min Rate Decay Rate (1/sec)
Max. Infiltration Volume #
# Proportional -> Constant N/A N/A
N/A #
# Initial/Cont Loss -> Initial Continuing N/A
N/A #
# Initial/Proportional -> Initial Constant N/A
N/A #
# Laurenson Parameters -> B Value Pervious "n" Impervious Cont
Exponent #
# Rational Formula -> Tc Method Flow Path Length Flow Path Slope
Roughness or Retardance #
# (#1 - #4 is Impervious Data / #5 - #8 is Pervious
Data) #
# Rational Formula Tc Method: 1 = Constant
#
# 2 = Friend's Equation
#
# 3 = Kinematic Wave
#
# 4 = Alameda Method
#
# 5 = Izzard's Formula
#
# 6 = Kerby's Equation
#
# 7 = Kirpich's Equation
#
# 8 = Bransby Williams Equation
#
# 9 = Federal Aviation Authority
Equation #
#####
#####

```

Infl	Subcatchment	Infl	Infl	Infl	Infl	Infl	
Infl	Infl	Infl	Infl	Infl	Infl	Infl	
Number	Name	# 1	# 2	# 3	# 4	# 5	# 6
# 7	# 8						
1	N0190#1	96.700	0.167	256.000	0.200		
2	N0230#1	96.200	0.200	256.000	0.200		
3	N0220#1	97.460	0.500	256.000	0.200		
4	N0290#1	77.200	0.983	256.000	0.200		
5	N0370#1	82.920	0.383	256.000	0.200		
6	N0275#1	82.140	0.167	256.000	0.200		
7	N0280#1	72.000	0.367	100.000	0.200		
8	N0285#1	72.000	3.500	100.000	0.200		

9	N0380#1	72.000	1.000	100.000	0.200
10	N0385#1	72.000	0.167	256.000	0.200
11	N0386#1	72.000	0.167	256.000	0.200
12	N0388#1	72.000	0.167	256.000	0.200
13	N0420#1	74.080	0.167	256.000	0.200
14	N0530#1	77.720	0.967	256.000	0.200
15	N0430#1	75.900	1.050	256.000	0.200
16	N0310#1	77.200	0.867	256.000	0.200
17	N0160#1	75.900	0.317	256.000	0.200
18	N0300#1	76.420	4.383	256.000	0.200
19	N0340#1	72.000	4.800	100.000	0.200
20	N0390#1	82.920	0.417	100.000	0.200
21	N0001-C#1	79.800	0.600	256.000	0.200
22	N0460#1	72.000	1.017	100.000	0.200
23	N0440#1	72.000	1.650	100.000	0.200
24	N0360#1	77.200	0.933	100.000	0.200
25	N2040#1	72.000	1.133	100.000	0.200
26	N0450#1	72.520	1.750	100.000	0.200
27	N0400#1	72.000	1.717	100.000	0.200
28	N0550#1	73.040	1.467	256.000	0.200
29	N0640#1	94.100	0.200	256.000	0.200
30	N0660#1	95.400	0.167	100.000	0.200
31	N0780#1	97.480	0.233	256.000	0.200
32	N0775#1	96.700	0.200	256.000	0.200
33	N0690#1	93.840	0.167	256.000	0.200
34	N0720#1	72.000	0.633	100.000	0.200
35	N0770#1	72.000	1.350	100.000	0.200
36	N0885#1	72.000	1.100	100.000	0.200
37	N0960#1	77.200	0.317	256.000	0.200
38	N0990#1	77.200	0.350	256.000	0.200
39	N1010#1	75.900	0.267	256.000	0.200
40	N1030#1	77.200	0.317	256.000	0.200
41	N1020#1	72.000	0.883	100.000	0.200
42	N0940#1	72.000	2.050	100.000	0.200
43	N1000#1	72.000	0.233	100.000	0.200
44	N0945#1	72.000	2.050	100.000	0.200
45	N0980#1	72.000	2.317	100.000	0.200
46	N0850#1	72.000	1.083	100.000	0.200
47	N0890#1	73.040	2.500	256.000	0.200
48	N0930#1	74.080	1.800	100.000	0.200
49	N0920#1	72.780	0.167	256.000	0.200
50	N0950#1	75.380	1.233	100.000	0.200
51	N0830#1	75.900	0.633	256.000	0.200
52	N0970#1	77.200	0.400	256.000	0.200
53	N-0001K#1	86.300	0.167	256.000	0.200
54	N0870#1	72.000	0.883	100.000	0.200
55	N0790#1	72.000	1.517	100.000	0.200
56	N0001-I#1	84.740	0.167	256.000	0.200
57	N0915#1	72.000	0.367	100.000	0.200
58	N0900#1	72.000	0.167	256.000	0.200

59	N0910#1	72.000	0.367	100.000	0.200
60	N0880#1	72.000	0.500	100.000	0.200
61	N0810#1	72.000	3.467	100.000	0.200
62	N0740#1	72.260	0.400	100.000	0.200
63	N0742#1	72.000	0.167	256.000	0.200
64	N0800#1	92.800	0.167	256.000	0.200
65	N0620#1	77.200	0.250	256.000	0.200
66	N0730#1	73.820	2.567	100.000	0.200
67	N0570#1	78.500	1.650	256.000	0.200
68	N0560#1	75.640	4.217	100.000	0.200
69	N0515#1	72.000	1.550	100.000	0.200
70	N0510#1	72.520	1.550	100.000	0.200
71	N0520#1	72.000	2.250	100.000	0.200
72	N0350#1	72.520	0.733	100.000	0.200
73	N0330#1	81.880	1.250	100.000	0.200
74	N0325#1	74.600	1.683	100.000	0.200
75	N0180#1	73.300	0.767	256.000	0.200
76	N0090#1	95.480	0.167	256.000	0.200
77	N-0001B#1	79.800	1.589	256.000	0.200
78	N0100#1	83.440	0.167	256.000	0.200
79	N0130#1	79.540	0.250	256.000	0.200
80	N0080#1	72.000	0.483	256.000	0.200
81	N0050#1	72.000	0.967	100.000	0.200
82	N0170#1	97.100	0.200	256.000	0.200
83	N0205#1	72.000	0.167	256.000	0.200
84	N0210#1	72.000	1.750	100.000	0.200
85	N0150#1	95.120	0.167	256.000	0.200
86	N0155#1	72.000	0.167	256.000	0.200
87	N0060#1	73.040	1.167	100.000	0.200
88	N0120#1	91.700	0.333	256.000	0.200
89	N0110#1	89.000	0.333	256.000	0.200
90	N0140#1	96.200	0.500	256.000	0.200
91	N0140-A#1	72.000	0.167	484.000	0.200
92	N0500#1	72.000	6.983	100.000	0.200
93	N0470#1	72.000	0.983	100.000	0.200
94	N0540#1	72.000	2.383	100.000	0.200
95	N0650#1	72.000	1.117	100.000	0.200
96	N0490#1	72.000	3.300	100.000	0.222
97	N2380#1	72.000	0.500	100.000	0.200
98	N2370#1	72.000	0.667	100.000	0.200
99	N0655#1	72.000	0.950	100.000	0.200
100	N0480#1	72.000	0.767	100.000	0.200
101	N0410#1	72.000	6.733	100.000	0.200
102	N0270#1	72.000	1.233	100.000	0.200
103	N0260#1	72.000	1.267	100.000	0.200
104	N0250#1	79.020	0.333	256.000	0.200
105	N0240#1	77.200	0.167	256.000	0.200
106	N0200#1	96.200	0.400	256.000	0.200
107	N-002#1	79.800	0.167	256.000	0.200
108	N-003#1	90.200	0.167	256.000	0.200

109	N-004#1	95.400	0.183	256.000	0.200
110	N-001#1	72.000	1.517	100.000	0.200
111	N-006#1	78.760	0.200	256.000	0.200
112	N-005#1	73.820	0.167	256.000	0.200
113	N-007#1	81.100	0.183	256.000	0.200
114	N-009#1	92.800	0.167	256.000	0.200
115	N-008#1	83.700	0.200	256.000	0.200
116	N-011#1	98.000	0.167	256.000	0.200
117	N-010#1	81.360	0.267	256.000	0.200
118	N-014#1	77.200	0.733	256.000	0.200
119	N-012#1	96.700	0.167	256.000	0.200
120	N-013#1	75.120	0.167	256.000	0.200
121	N-015#1	72.000	0.167	100.000	0.200
122	N2002#1	72.000	0.383	100.000	0.200
123	N-020#1	72.000	0.750	100.000	0.200
124	N-022#1	78.240	0.367	256.000	0.200
125	N-026#1	73.300	0.167	256.000	0.200
126	N-027#1	82.400	0.350	256.000	0.200
127	N-028#1	82.400	0.167	256.000	0.200
128	N-024#1	75.900	0.567	256.000	0.200
129	N-029#1	78.760	0.167	256.000	0.200
130	N-030#1	72.000	0.317	100.000	0.200
131	N-023#1	79.800	0.233	256.000	0.200
132	N-031#1	72.000	0.583	100.000	0.200
133	N-025#1	77.200	0.167	256.000	0.200
134	N-041#1	95.400	0.167	256.000	0.200
135	N-019#1	75.900	0.583	256.000	0.200
136	N-021#1	72.000	0.600	100.000	0.200
137	N-043#1	72.000	0.383	100.000	0.200
138	N-042#1	72.000	4.933	100.000	0.200
139	N-040#1	72.000	5.283	100.000	0.200
140	N2090#1	72.000	0.933	100.000	0.200
141	N-0001A#1	75.198	1.667	256.000	0.200
142	N-0001-E#1	82.140	0.747	256.000	0.200
143	N-0001-F#1	80.580	0.167	256.000	0.200
144	N-0001-G#1	89.160	0.980	256.000	0.200
145	N0001-J#1	76.420	0.167	256.000	0.200

```
#####
#      Table R3.  SUBCATCHMENT DATA      #
#      Rainfall and Infiltration Database Names #
#####
```

Subcatchment Number	Name	Gage No	Infiltration Type	Routing Type
1	N0190#1	1	SCS Method	SCS curvilinear
2	N0230#1	1	SCS Method	SCS curvilinear
3	N0220#1	1	SCS Method	SCS curvilinear

4	N0290#1	1	SCS Method	SCS curvilinear
5	N0370#1	1	SCS Method	SCS curvilinear
6	N0275#1	1	SCS Method	SCS curvilinear
7	N0280#1	1	SCS Method	SCS curvilinear
8	N0285#1	1	SCS Method	SCS curvilinear
9	N0380#1	1	SCS Method	SCS curvilinear
10	N0385#1	1	SCS Method	SCS curvilinear
11	N0386#1	1	SCS Method	SCS curvilinear
12	N0388#1	1	SCS Method	SCS curvilinear
13	N0420#1	1	SCS Method	SCS curvilinear
14	N0530#1	1	SCS Method	SCS curvilinear
15	N0430#1	1	SCS Method	SCS curvilinear
16	N0310#1	1	SCS Method	SCS curvilinear
17	N0160#1	1	SCS Method	SCS curvilinear
18	N0300#1	1	SCS Method	SCS curvilinear
19	N0340#1	1	SCS Method	SCS curvilinear
20	N0390#1	1	SCS Method	SCS curvilinear
21	N0001-C#1	1	SCS Method	SCS curvilinear
22	N0460#1	1	SCS Method	SCS curvilinear
23	N0440#1	1	SCS Method	SCS curvilinear
24	N0360#1	1	SCS Method	SCS curvilinear
25	N2040#1	1	SCS Method	SCS curvilinear
26	N0450#1	1	SCS Method	SCS curvilinear
27	N0400#1	1	SCS Method	SCS curvilinear
28	N0550#1	1	SCS Method	SCS curvilinear
29	N0640#1	1	SCS Method	SCS curvilinear
30	N0660#1	1	SCS Method	SCS curvilinear
31	N0780#1	1	SCS Method	SCS curvilinear
32	N0775#1	1	SCS Method	SCS curvilinear
33	N0690#1	1	SCS Method	SCS curvilinear
34	N0720#1	1	SCS Method	SCS curvilinear
35	N0770#1	1	SCS Method	SCS curvilinear
36	N0885#1	1	SCS Method	SCS curvilinear
37	N0960#1	1	SCS Method	SCS curvilinear
38	N0990#1	1	SCS Method	SCS curvilinear
39	N1010#1	1	SCS Method	SCS curvilinear
40	N1030#1	1	SCS Method	SCS curvilinear
41	N1020#1	1	SCS Method	SCS curvilinear
42	N0940#1	1	SCS Method	SCS curvilinear
43	N1000#1	1	SCS Method	SCS curvilinear
44	N0945#1	1	SCS Method	SCS curvilinear
45	N0980#1	1	SCS Method	SCS curvilinear
46	N0850#1	1	SCS Method	SCS curvilinear
47	N0890#1	1	SCS Method	SCS curvilinear
48	N0930#1	1	SCS Method	SCS curvilinear
49	N0920#1	1	SCS Method	SCS curvilinear
50	N0950#1	1	SCS Method	SCS curvilinear
51	N0830#1	1	SCS Method	SCS curvilinear
52	N0970#1	1	SCS Method	SCS curvilinear
53	N-0001K#1	1	SCS Method	SCS curvilinear

54	N0870#1	1	SCS Method	SCS curvilinear
55	N0790#1	1	SCS Method	SCS curvilinear
56	N0001-I#1	1	SCS Method	SCS curvilinear
57	N0915#1	1	SCS Method	SCS curvilinear
58	N0900#1	1	SCS Method	SCS curvilinear
59	N0910#1	1	SCS Method	SCS curvilinear
60	N0880#1	1	SCS Method	SCS curvilinear
61	N0810#1	1	SCS Method	SCS curvilinear
62	N0740#1	1	SCS Method	SCS curvilinear
63	N0742#1	1	SCS Method	SCS curvilinear
64	N0800#1	1	SCS Method	SCS curvilinear
65	N0620#1	1	SCS Method	SCS curvilinear
66	N0730#1	1	SCS Method	SCS curvilinear
67	N0570#1	1	SCS Method	SCS curvilinear
68	N0560#1	1	SCS Method	SCS curvilinear
69	N0515#1	1	SCS Method	SCS curvilinear
70	N0510#1	1	SCS Method	SCS curvilinear
71	N0520#1	1	SCS Method	SCS curvilinear
72	N0350#1	1	SCS Method	SCS curvilinear
73	N0330#1	1	SCS Method	SCS curvilinear
74	N0325#1	1	SCS Method	SCS curvilinear
75	N0180#1	1	SCS Method	SCS curvilinear
76	N0090#1	1	SCS Method	SCS curvilinear
77	N-0001B#1	1	SCS Method	SCS curvilinear
78	N0100#1	1	SCS Method	SCS curvilinear
79	N0130#1	1	SCS Method	SCS curvilinear
80	N0080#1	1	SCS Method	SCS curvilinear
81	N0050#1	1	SCS Method	SCS curvilinear
82	N0170#1	1	SCS Method	SCS curvilinear
83	N0205#1	1	SCS Method	SCS curvilinear
84	N0210#1	1	SCS Method	SCS curvilinear
85	N0150#1	1	SCS Method	SCS curvilinear
86	N0155#1	1	SCS Method	SCS curvilinear
87	N0060#1	1	SCS Method	SCS curvilinear
88	N0120#1	1	SCS Method	SCS curvilinear
89	N0110#1	1	SCS Method	SCS curvilinear
90	N0140#1	1	SCS Method	SCS curvilinear
91	N0140-A#1	1	SCS Method	SCS curvilinear
92	N0500#1	1	SCS Method	SCS curvilinear
93	N0470#1	1	SCS Method	SCS curvilinear
94	N0540#1	1	SCS Method	SCS curvilinear
95	N0650#1	1	SCS Method	SCS curvilinear
96	N0490#1	1	SCS Method	SCS curvilinear
97	N2380#1	1	SCS Method	SCS curvilinear
98	N2370#1	1	SCS Method	SCS curvilinear
99	N0655#1	1	SCS Method	SCS curvilinear
100	N0480#1	1	SCS Method	SCS curvilinear
101	N0410#1	1	SCS Method	SCS curvilinear
102	N0270#1	1	SCS Method	SCS curvilinear
103	N0260#1	1	SCS Method	SCS curvilinear

104	N0250#1	1	SCS Method	SCS curvilinear
105	N0240#1	1	SCS Method	SCS curvilinear
106	N0200#1	1	SCS Method	SCS curvilinear
107	N-002#1	1	SCS Method	SCS curvilinear
108	N-003#1	1	SCS Method	SCS curvilinear
109	N-004#1	1	SCS Method	SCS curvilinear
110	N-001#1	1	SCS Method	SCS curvilinear
111	N-006#1	1	SCS Method	SCS curvilinear
112	N-005#1	1	SCS Method	SCS curvilinear
113	N-007#1	1	SCS Method	SCS curvilinear
114	N-009#1	1	SCS Method	SCS curvilinear
115	N-008#1	1	SCS Method	SCS curvilinear
116	N-011#1	1	SCS Method	SCS curvilinear
117	N-010#1	1	SCS Method	SCS curvilinear
118	N-014#1	1	SCS Method	SCS curvilinear
119	N-012#1	1	SCS Method	SCS curvilinear
120	N-013#1	1	SCS Method	SCS curvilinear
121	N-015#1	1	SCS Method	SCS curvilinear
122	N2002#1	1	SCS Method	SCS curvilinear
123	N-020#1	1	SCS Method	SCS curvilinear
124	N-022#1	1	SCS Method	SCS curvilinear
125	N-026#1	1	SCS Method	SCS curvilinear
126	N-027#1	1	SCS Method	SCS curvilinear
127	N-028#1	1	SCS Method	SCS curvilinear
128	N-024#1	1	SCS Method	SCS curvilinear
129	N-029#1	1	SCS Method	SCS curvilinear
130	N-030#1	1	SCS Method	SCS curvilinear
131	N-023#1	1	SCS Method	SCS curvilinear
132	N-031#1	1	SCS Method	SCS curvilinear
133	N-025#1	1	SCS Method	SCS curvilinear
134	N-041#1	1	SCS Method	SCS curvilinear
135	N-019#1	1	SCS Method	SCS curvilinear
136	N-021#1	1	SCS Method	SCS curvilinear
137	N-043#1	1	SCS Method	SCS curvilinear
138	N-042#1	1	SCS Method	SCS curvilinear
139	N-040#1	1	SCS Method	SCS curvilinear
140	N2090#1	1	SCS Method	SCS curvilinear
141	N-0001A#1	1	SCS Method	SCS curvilinear
142	N-0001-E#1	1	SCS Method	SCS curvilinear
143	N-0001-F#1	1	SCS Method	SCS curvilinear
144	N-0001-G#1	1	SCS Method	SCS curvilinear
145	N0001-J#1	1	SCS Method	SCS curvilinear

Total Number of Subcatchments...	145
Total Tributary Area (acres)....	20273.45
Impervious Area (acres).....	1235.36
Pervious Area (acres).....	19038.09
Total Width (feet).....	145.00
Impervious Area (%).....	6.09

```
#####
#           S U B C A T C H M E N T   D A T A           #
#   Default, Ratio values for subcatchment data   #
#   Used with the calibrate node in the runoff.   #
# 1 - width      2 - area      3 - impervious %   #
# 4 - slope      5 - imp "n"    6 - perv "n"     #
# 7 - imp ds     8 - perv ds    9 - 1st infil    #
#10 - 2nd infil      11 - 3rd infil   #
#####
```

Column	1	2	3	4	5	6	7
8	9	10	11				
Default	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000				
Ratio	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000				

```
*****
*   Arrangement of Subcatchments and Channel/Pipes   *
*****
```

```

Inlet
N0190      No Tributary Channel/Pipes
           Tributary Subareas..... N0190#1
N0230      No Tributary Channel/Pipes
           Tributary Subareas..... N0230#1
N0220      No Tributary Channel/Pipes
           Tributary Subareas..... N0220#1
N0290      No Tributary Channel/Pipes
           Tributary Subareas..... N0290#1
N0370      No Tributary Channel/Pipes
           Tributary Subareas..... N0370#1
N0275      No Tributary Channel/Pipes
           Tributary Subareas..... N0275#1
N0280      No Tributary Channel/Pipes
           Tributary Subareas..... N0280#1
N0285      No Tributary Channel/Pipes
           Tributary Subareas..... N0285#1
N0380      No Tributary Channel/Pipes
           Tributary Subareas..... N0380#1
N0385      No Tributary Channel/Pipes
           Tributary Subareas..... N0385#1
N0386      No Tributary Channel/Pipes
           Tributary Subareas..... N0386#1
N0388      No Tributary Channel/Pipes
           Tributary Subareas..... N0388#1
N0420      No Tributary Channel/Pipes
           Tributary Subareas..... N0420#1
```

N0530	No Tributary Channel/Pipes
	Tributary Subareas..... N0530#1
N0430	No Tributary Channel/Pipes
	Tributary Subareas..... N0430#1
N0310	No Tributary Channel/Pipes
	Tributary Subareas..... N0310#1
N0160	No Tributary Channel/Pipes
	Tributary Subareas..... N0160#1
N0300	No Tributary Channel/Pipes
	Tributary Subareas..... N0300#1
N0340	No Tributary Channel/Pipes
	Tributary Subareas..... N0340#1
N0390	No Tributary Channel/Pipes
	Tributary Subareas..... N0390#1
N0001-C	No Tributary Channel/Pipes
	Tributary Subareas..... N0001-C#1
N0460	No Tributary Channel/Pipes
	Tributary Subareas..... N0460#1
N0440	No Tributary Channel/Pipes
	Tributary Subareas..... N0440#1
N0360	No Tributary Channel/Pipes
	Tributary Subareas..... N0360#1
N2040	No Tributary Channel/Pipes
	Tributary Subareas..... N2040#1
N0450	No Tributary Channel/Pipes
	Tributary Subareas..... N0450#1
N0400	No Tributary Channel/Pipes
	Tributary Subareas..... N0400#1
N0550	No Tributary Channel/Pipes
	Tributary Subareas..... N0550#1
N0640	No Tributary Channel/Pipes
	Tributary Subareas..... N0640#1
N0660	No Tributary Channel/Pipes
	Tributary Subareas..... N0660#1
N0780	No Tributary Channel/Pipes
	Tributary Subareas..... N0780#1
N0775	No Tributary Channel/Pipes
	Tributary Subareas..... N0775#1
N0690	No Tributary Channel/Pipes
	Tributary Subareas..... N0690#1
N0720	No Tributary Channel/Pipes
	Tributary Subareas..... N0720#1
N0770	No Tributary Channel/Pipes
	Tributary Subareas..... N0770#1
N0885	No Tributary Channel/Pipes
	Tributary Subareas..... N0885#1
N0960	No Tributary Channel/Pipes
	Tributary Subareas..... N0960#1
N0990	No Tributary Channel/Pipes
	Tributary Subareas..... N0990#1

N1010	No Tributary Channel/Pipes
	Tributary Subareas..... N1010#1
N1030	No Tributary Channel/Pipes
	Tributary Subareas..... N1030#1
N1020	No Tributary Channel/Pipes
	Tributary Subareas..... N1020#1
N0940	No Tributary Channel/Pipes
	Tributary Subareas..... N0940#1
N1000	No Tributary Channel/Pipes
	Tributary Subareas..... N1000#1
N0945	No Tributary Channel/Pipes
	Tributary Subareas..... N0945#1
N0980	No Tributary Channel/Pipes
	Tributary Subareas..... N0980#1
N0850	No Tributary Channel/Pipes
	Tributary Subareas..... N0850#1
N0890	No Tributary Channel/Pipes
	Tributary Subareas..... N0890#1
N0930	No Tributary Channel/Pipes
	Tributary Subareas..... N0930#1
N0920	No Tributary Channel/Pipes
	Tributary Subareas..... N0920#1
N0950	No Tributary Channel/Pipes
	Tributary Subareas..... N0950#1
N0830	No Tributary Channel/Pipes
	Tributary Subareas..... N0830#1
N0970	No Tributary Channel/Pipes
	Tributary Subareas..... N0970#1
N-0001K	No Tributary Channel/Pipes
	Tributary Subareas..... N-0001K#1
N0870	No Tributary Channel/Pipes
	Tributary Subareas..... N0870#1
N0790	No Tributary Channel/Pipes
	Tributary Subareas..... N0790#1
N0001-I	No Tributary Channel/Pipes
	Tributary Subareas..... N0001-I#1
N0915	No Tributary Channel/Pipes
	Tributary Subareas..... N0915#1
N0900	No Tributary Channel/Pipes
	Tributary Subareas..... N0900#1
N0910	No Tributary Channel/Pipes
	Tributary Subareas..... N0910#1
N0880	No Tributary Channel/Pipes
	Tributary Subareas..... N0880#1
N0810	No Tributary Channel/Pipes
	Tributary Subareas..... N0810#1
N0740	No Tributary Channel/Pipes
	Tributary Subareas..... N0740#1
N0742	No Tributary Channel/Pipes
	Tributary Subareas..... N0742#1

N0800	No Tributary Channel/Pipes
	Tributary Subareas..... N0800#1
N0620	No Tributary Channel/Pipes
	Tributary Subareas..... N0620#1
N0730	No Tributary Channel/Pipes
	Tributary Subareas..... N0730#1
N0570	No Tributary Channel/Pipes
	Tributary Subareas..... N0570#1
N0560	No Tributary Channel/Pipes
	Tributary Subareas..... N0560#1
N0515	No Tributary Channel/Pipes
	Tributary Subareas..... N0515#1
N0510	No Tributary Channel/Pipes
	Tributary Subareas..... N0510#1
N0520	No Tributary Channel/Pipes
	Tributary Subareas..... N0520#1
N0350	No Tributary Channel/Pipes
	Tributary Subareas..... N0350#1
N0330	No Tributary Channel/Pipes
	Tributary Subareas..... N0330#1
N0325	No Tributary Channel/Pipes
	Tributary Subareas..... N0325#1
N0180	No Tributary Channel/Pipes
	Tributary Subareas..... N0180#1
N0090	No Tributary Channel/Pipes
	Tributary Subareas..... N0090#1
N-0001B	No Tributary Channel/Pipes
	Tributary Subareas..... N-0001B#1
N0100	No Tributary Channel/Pipes
	Tributary Subareas..... N0100#1
N0130	No Tributary Channel/Pipes
	Tributary Subareas..... N0130#1
N0080	No Tributary Channel/Pipes
	Tributary Subareas..... N0080#1
N0050	No Tributary Channel/Pipes
	Tributary Subareas..... N0050#1
N0170	No Tributary Channel/Pipes
	Tributary Subareas..... N0170#1
N0205	No Tributary Channel/Pipes
	Tributary Subareas..... N0205#1
N0210	No Tributary Channel/Pipes
	Tributary Subareas..... N0210#1
N0150	No Tributary Channel/Pipes
	Tributary Subareas..... N0150#1
N0155	No Tributary Channel/Pipes
	Tributary Subareas..... N0155#1
N0060	No Tributary Channel/Pipes
	Tributary Subareas..... N0060#1
N0120	No Tributary Channel/Pipes
	Tributary Subareas..... N0120#1

N0110	No Tributary Channel/Pipes
	Tributary Subareas..... N0110#1
N0140	No Tributary Channel/Pipes
	Tributary Subareas..... N0140#1
N0140-A	No Tributary Channel/Pipes
	Tributary Subareas..... N0140-A#1
N0500	No Tributary Channel/Pipes
	Tributary Subareas..... N0500#1
N0470	No Tributary Channel/Pipes
	Tributary Subareas..... N0470#1
N0540	No Tributary Channel/Pipes
	Tributary Subareas..... N0540#1
N0650	No Tributary Channel/Pipes
	Tributary Subareas..... N0650#1
N0490	No Tributary Channel/Pipes
	Tributary Subareas..... N0490#1
N2380	No Tributary Channel/Pipes
	Tributary Subareas..... N2380#1
N2370	No Tributary Channel/Pipes
	Tributary Subareas..... N2370#1
N0655	No Tributary Channel/Pipes
	Tributary Subareas..... N0655#1
N0480	No Tributary Channel/Pipes
	Tributary Subareas..... N0480#1
N0410	No Tributary Channel/Pipes
	Tributary Subareas..... N0410#1
N0270	No Tributary Channel/Pipes
	Tributary Subareas..... N0270#1
N0260	No Tributary Channel/Pipes
	Tributary Subareas..... N0260#1
N0250	No Tributary Channel/Pipes
	Tributary Subareas..... N0250#1
N0240	No Tributary Channel/Pipes
	Tributary Subareas..... N0240#1
N0200	No Tributary Channel/Pipes
	Tributary Subareas..... N0200#1
N-002	No Tributary Channel/Pipes
	Tributary Subareas..... N-002#1
N-003	No Tributary Channel/Pipes
	Tributary Subareas..... N-003#1
N-004	No Tributary Channel/Pipes
	Tributary Subareas..... N-004#1
N-001	No Tributary Channel/Pipes
	Tributary Subareas..... N-001#1
N-006	No Tributary Channel/Pipes
	Tributary Subareas..... N-006#1
N-005	No Tributary Channel/Pipes
	Tributary Subareas..... N-005#1
N-007	No Tributary Channel/Pipes
	Tributary Subareas..... N-007#1

N-009	No Tributary Channel/Pipes
	Tributary Subareas..... N-009#1
N-008	No Tributary Channel/Pipes
	Tributary Subareas..... N-008#1
N-011	No Tributary Channel/Pipes
	Tributary Subareas..... N-011#1
N-010	No Tributary Channel/Pipes
	Tributary Subareas..... N-010#1
N-014	No Tributary Channel/Pipes
	Tributary Subareas..... N-014#1
N-012	No Tributary Channel/Pipes
	Tributary Subareas..... N-012#1
N-013	No Tributary Channel/Pipes
	Tributary Subareas..... N-013#1
N-015	No Tributary Channel/Pipes
	Tributary Subareas..... N-015#1
N2002	No Tributary Channel/Pipes
	Tributary Subareas..... N2002#1
N-020	No Tributary Channel/Pipes
	Tributary Subareas..... N-020#1
N-022	No Tributary Channel/Pipes
	Tributary Subareas..... N-022#1
N-026	No Tributary Channel/Pipes
	Tributary Subareas..... N-026#1
N-027	No Tributary Channel/Pipes
	Tributary Subareas..... N-027#1
N-028	No Tributary Channel/Pipes
	Tributary Subareas..... N-028#1
N-024	No Tributary Channel/Pipes
	Tributary Subareas..... N-024#1
N-029	No Tributary Channel/Pipes
	Tributary Subareas..... N-029#1
N-030	No Tributary Channel/Pipes
	Tributary Subareas..... N-030#1
N-023	No Tributary Channel/Pipes
	Tributary Subareas..... N-023#1
N-031	No Tributary Channel/Pipes
	Tributary Subareas..... N-031#1
N-025	No Tributary Channel/Pipes
	Tributary Subareas..... N-025#1
N-041	No Tributary Channel/Pipes
	Tributary Subareas..... N-041#1
N-019	No Tributary Channel/Pipes
	Tributary Subareas..... N-019#1
N-021	No Tributary Channel/Pipes
	Tributary Subareas..... N-021#1
N-043	No Tributary Channel/Pipes
	Tributary Subareas..... N-043#1
N-042	No Tributary Channel/Pipes
	Tributary Subareas..... N-042#1

N-040	No Tributary Channel/Pipes
	Tributary Subareas..... N-040#1
N2090	No Tributary Channel/Pipes
	Tributary Subareas..... N2090#1
N-0001A	No Tributary Channel/Pipes
	Tributary Subareas..... N-0001A#1
N-0001-E	No Tributary Channel/Pipes
	Tributary Subareas..... N-0001-E#1
N-0001-F	No Tributary Channel/Pipes
	Tributary Subareas..... N-0001-F#1
N-0001-G	No Tributary Channel/Pipes
	Tributary Subareas..... N-0001-G#1
N0001-J	No Tributary Channel/Pipes
	Tributary Subareas..... N0001-J#1

 * Hydrographs will be stored for the following 145 INLETS *

N0190	N0230	N0220
N0290	N0370	N0275
N0280	N0285	N0380
N0385	N0386	N0388
N0420	N0530	N0430
N0310	N0160	N0300
N0340	N0390	N0001-C
N0460	N0440	N0360
N2040	N0450	N0400
N0550	N0640	N0660
N0780	N0775	N0690
N0720	N0770	N0885
N0960	N0990	N1010
N1030	N1020	N0940
N1000	N0945	N0980
N0850	N0890	N0930
N0920	N0950	N0830
N0970	N-0001K	N0870
N0790	N0001-I	N0915
N0900	N0910	N0880
N0810	N0740	N0742
N0800	N0620	N0730
N0570	N0560	N0515
N0510	N0520	N0350
N0330	N0325	N0180
N0090	N-0001B	N0100
N0130	N0080	N0050
N0170	N0205	N0210
N0150	N0155	N0060
N0120	N0110	N0140
N0140-A	N0500	N0470

N0540	N0650	N0490
N2380	N2370	N0655
N0480	N0410	N0270
N0260	N0250	N0240
N0200	N-002	N-003
N-004	N-001	N-006
N-005	N-007	N-009
N-008	N-011	N-010
N-014	N-012	N-013
N-015	N2002	N-020
N-022	N-026	N-027
N-028	N-024	N-029
N-030	N-023	N-031
N-025	N-041	N-019
N-021	N-043	N-042
N-040	N2090	N-0001A
N-0001-E	N-0001-F	N-0001-G
N0001-J		

```
#####
#           Quality Simulation           #
#####
#   General Quality Control data groups   #
#####
```

Description -----	Variable -----	Value -----
Number of quality constituents.....	NQS.....	1
Number of land uses.....	JLAND.....	6
Standard catchbasin volume.....	CBVOL.....	0.00 cubic feet
Erosion is not simulated.....	IROS.....	0
Dry days prior to start of storm...	DRYDAY.....	100.00 days
Dry Days required to recharge catchbasin concentration to Initial Values.....	DRYBSN.....	1.00 DAYS
Dust and Dirt Street Sweeping Efficiency.....	REFFDD.....	0.000
Day of year on which street Sweeping begins.....	KLNBGN.....	1
Day of year on which street		

Sweeping ends..... KLNEND..... 1

 # Land use data on data group J2 #
 #####

avail. factor land use fraction (lname) (avswp)	days since buildup last equation sweeping (method) (dslcl)	functional dependence of buildup parameter(jacgut)	buildup quantity (ddlim)	buildup power (ddpow)	limiting buildup coeff. (ddfact)	cleaning interval in days (clfreq)
SW-94 0.000	Power Linear 0.000	Area(1)	1.000E+25	0.000	1.000	0.000
SW-98 0.000	Power Linear 0.000	Area(1)	1.000E+25	0.000	1.000	0.000
SW-59 0.000	Power Linear 0.000	Area(1)	1.000E+25	0.000	1.000	0.000
SW-95 0.000	Power Linear 0.000	Area(1)	1.000E+25	0.000	1.000	0.000
SW-96 0.000	Power Linear 0.000	Area(1)	1.000E+25	0.000	1.000	0.000
SW-83 0.000	Power Linear 0.000	Area(1)	1.000E+25	0.000	1.000	0.000

 # Constituent data on data group J3 #
 #####

	PFOS
Constituent units.....	mg/l
Type of units.....	0
Decay rate (1/day).....	0.000
KALC.....	4
Type of Buildup CALC.....	No Buildup(4)
KWASH.....	3
Type of Washoff CALC.....	EMC
KACGUT.....	0
Dependence of buildup....	Chan. Length(0)
LINKUP.....	0
Linkage to snowmelt.....	No snow linkage
First buildup parameter..	0.000

Second buildup parameter.	0.000
Third buildup parameter..	0.000
Fourth buildup parameter.	0.000
Fifth buildup parameter..	0.000
Exponent for washoff.....	8.700
Coefficient for washoff..	1.000
Initial catchbasin conc..	0.000
Precipitation conc.....	0.000
Street sweeping eff.....	0.000
Remove fraction (REMOVE).	0.000
1st order QDECAY, 1/day..	0.000
Land use number.....	1

PFOS

Constituent units.....	mg/l
Type of units.....	0
Decay rate (1/day).....	0.000
KALC.....	4
Type of Buildup CALC.....	No Buildup(4)
KWASH.....	3
Type of Washoff CALC.....	EMC
KACGUT.....	0
Dependence of buildup....	Chan. Length(0)
LINKUP.....	0
Linkage to snowmelt.....	No snow linkage
First buildup parameter..	0.000
Second buildup parameter.	0.000
Third buildup parameter..	0.000
Fourth buildup parameter.	0.000
Fifth buildup parameter..	0.000
Exponent for washoff.....	4.300
Coefficient for washoff..	1.000
Initial catchbasin conc..	0.000
Precipitation conc.....	0.000
Street sweeping eff.....	0.000
Remove fraction (REMOVE).	0.000
1st order QDECAY, 1/day..	0.000
Land use number.....	2

PFOS

Constituent units.....	mg/l
Type of units.....	0
Decay rate (1/day).....	0.000
KALC.....	4
Type of Buildup CALC.....	No Buildup(4)
KWASH.....	3
Type of Washoff CALC.....	EMC
KACGUT.....	0

Dependence of buildup....	Chan. Length(0)
LINKUP.....	0
Linkage to snowmelt.....	No snow linkage
First buildup parameter..	0.000
Second buildup parameter.	0.000
Third buildup parameter..	0.000
Fourth buildup parameter.	0.000
Fifth buildup parameter..	0.000
Exponent for washoff.....	107.000
Coefficient for washoff..	1.000
Initial catchbasin conc..	0.000
Precipitation conc.....	0.000
Street sweeping eff.....	0.000
Remove fraction (REMOVE).	0.000
1st order QDECAY, 1/day..	0.000
Land use number.....	3

PFOS

Constituent units.....	mg/l
Type of units.....	0
Decay rate (1/day).....	0.000
KALC.....	4
Type of Buildup CALC.....	No Buildup(4)
KWASH.....	3
Type of Washoff CALC.....	EMC
KACGUT.....	0
Dependence of buildup....	Chan. Length(0)
LINKUP.....	0
Linkage to snowmelt.....	No snow linkage
First buildup parameter..	0.000
Second buildup parameter.	0.000
Third buildup parameter..	0.000
Fourth buildup parameter.	0.000
Fifth buildup parameter..	0.000
Exponent for washoff.....	82.600
Coefficient for washoff..	1.000
Initial catchbasin conc..	0.000
Precipitation conc.....	0.000
Street sweeping eff.....	0.000
Remove fraction (REMOVE).	0.000
1st order QDECAY, 1/day..	0.000
Land use number.....	4

PFOS

Constituent units.....	mg/l
Type of units.....	0
Decay rate (1/day).....	0.000
KALC.....	4

Type of Buildup CALC.....	No Buildup(4)
KWASH.....	3
Type of Washoff CALC.....	EMC
KACGUT.....	0
Dependence of buildup....	Chan. Length(0)
LINKUP.....	0
Linkage to snowmelt.....	No snow linkage
First buildup parameter..	0.000
Second buildup parameter.	0.000
Third buildup parameter..	0.000
Fourth buildup parameter.	0.000
Fifth buildup parameter..	0.000
Exponent for washoff.....	7.400
Coefficient for washoff..	1.000
Initial catchbasin conc..	0.000
Precipitation conc.....	0.000
Street sweeping eff.....	0.000
Remove fraction (REMOVE).	0.000
1st order QDECAY, 1/day..	0.000
Land use number.....	5

PFOS

Constituent units.....	mg/l
Type of units.....	0
Decay rate (1/day).....	0.000
KALC.....	4
Type of Buildup CALC.....	No Buildup(4)
KWASH.....	3
Type of Washoff CALC.....	EMC
KACGUT.....	0
Dependence of buildup....	Chan. Length(0)
LINKUP.....	0
Linkage to snowmelt.....	No snow linkage
First buildup parameter..	0.000
Second buildup parameter.	0.000
Third buildup parameter..	0.000
Fourth buildup parameter.	0.000
Fifth buildup parameter..	0.000
Exponent for washoff.....	4.100
Coefficient for washoff..	1.000
Initial catchbasin conc..	0.000
Precipitation conc.....	0.000
Street sweeping eff.....	0.000
Remove fraction (REMOVE).	0.000
1st order QDECAY, 1/day..	0.000
Land use number.....	6

* Subcatchment surface quality on data group L1 *

	Land No.	Land Usage	Land Use No.	Total Gutter Length 10**2ft	Number of Catch- Basins	Input Loading of PFOS
	---	-----	----	-----	-----	-----
4	255#	SW-95	4	0.00	0.00	0.0E+00
5	257#	SW-83	6	0.00	0.00	0.0E+00
11	333#	SW-95	4	0.00	0.00	0.0E+00
12	334#	SW-95	4	0.00	0.00	0.0E+00
13	259#	SW-83	6	0.00	0.00	0.0E+00
14	270#	SW-96	5	0.00	0.00	0.0E+00
15	236#	SW-95	4	0.00	0.00	0.0E+00
18	284#	SW-94	1	0.00	0.00	0.0E+00
19	295#	SW-94	1	0.00	0.00	0.0E+00
20	213#	SW-94	1	0.00	0.00	0.0E+00
21	796#	SW-94	1	0.00	0.00	0.0E+00
22	285#	SW-94	1	0.00	0.00	0.0E+00
23	286#	SW-94	1	0.00	0.00	0.0E+00
24	280#	SW-94	1	0.00	0.00	0.0E+00
25	336#	SW-94	1	0.00	0.00	0.0E+00
26	215#	SW-94	1	0.00	0.00	0.0E+00
27	279#	SW-94	1	0.00	0.00	0.0E+00
28	203#	SW-95	4	0.00	0.00	0.0E+00
29	205#	SW-59	3	0.00	0.00	0.0E+00
63	343#	SW-59	3	0.00	0.00	0.0E+00
65	329#	SW-59	3	0.00	0.00	0.0E+00
67	226#	SW-98	2	0.00	0.00	0.0E+00
69	296#	SW-98	2	0.00	0.00	0.0E+00
70	211#	SW-98	2	0.00	0.00	0.0E+00
71	212#	SW-98	2	0.00	0.00	0.0E+00
72	214#	SW-94	1	0.00	0.00	0.0E+00
73	287#	SW-94	1	0.00	0.00	0.0E+00
74	274#	SW-94	1	0.00	0.00	0.0E+00
92	237#	SW-96	5	0.00	0.00	0.0E+00
93	276#	SW-95	4	0.00	0.00	0.0E+00
94	277#	SW-96	5	0.00	0.00	0.0E+00
95	278#	SW-96	5	0.00	0.00	0.0E+00
96	260#	SW-95	4	0.00	0.00	0.0E+00
97	338#	SW-95	4	0.00	0.00	0.0E+00
98	495#	SW-96	5	0.00	0.00	0.0E+00
99	288#	SW-96	5	0.00	0.00	0.0E+00
100	281#	SW-95	4	0.00	0.00	0.0E+00
101	261#	SW-95	4	0.00	0.00	0.0E+00
			Totals	0.00	0.00	0.0E+00

```

*****
* Precipitation Interface File Summary *
* Number of precipitation station.... 1 *
*****

```

```

Location Station Number
-----
1. 1

```

```

*****
* End of time step DO-loop in Runoff *
*****

```

```

Final Date (Mo/Day/Year) = 9/23/2020
Total number of time steps = 11520
Final Julian Date = 2020267
Final time of day = 0. seconds.
Final time of day = 0.00 hours.
Final running time = 192.0000 hours.
Final running time = 8.0000 days.

```

```

*****
* Extrapolation Summary for Watersheds *
* Explains the number of time steps and iterations *
* used in the solution of the subcatchments. *
* # Steps ==> Total Number of Extrapolated Steps *
* # Calls ==> Total Number of OVERLND Calls *
*****

```

Subcatchment Calls	Subcatchment	# Steps	# Calls	Subcatchment	# Steps	#
0	N0190#1	0	0	N0230#1	0	
	N0220#1	0	0			
0	N0290#1	0	0	N0370#1	0	
	N0275#1	0	0			
0	N0280#1	0	0	N0285#1	0	
	N0380#1	0	0			
0	N0385#1	0	0	N0386#1	0	
	N0388#1	0	0			
0	N0420#1	0	0	N0530#1	0	
	N0430#1	0	0			
0	N0310#1	0	0	N0160#1	0	
	N0300#1	0	0			
0	N0340#1	0	0	N0390#1	0	
	N0001-C#1	0	0			
	N0460#1	0	0	N0440#1	0	

0	N0360#1	0	0	0		
	N2040#1	0	0	0	N0450#1	0
0	N0400#1	0	0	0		
	N0550#1	0	0	0	N0640#1	0
0	N0660#1	0	0	0		
	N0780#1	0	0	0	N0775#1	0
0	N0690#1	0	0	0		
	N0720#1	0	0	0	N0770#1	0
0	N0885#1	0	0	0		
	N0960#1	0	0	0	N0990#1	0
0	N1010#1	0	0	0		
	N1030#1	0	0	0	N1020#1	0
0	N0940#1	0	0	0		
	N1000#1	0	0	0	N0945#1	0
0	N0980#1	0	0	0		
	N0850#1	0	0	0	N0890#1	0
0	N0930#1	0	0	0		
	N0920#1	0	0	0	N0950#1	0
0	N0830#1	0	0	0		
	N0970#1	0	0	0	N-0001K#1	0
0	N0870#1	0	0	0		
	N0790#1	0	0	0	N0001-I#1	0
0	N0915#1	0	0	0		
	N0900#1	0	0	0	N0910#1	0
0	N0880#1	0	0	0		
	N0810#1	0	0	0	N0740#1	0
0	N0742#1	0	0	0		
	N0800#1	0	0	0	N0620#1	0
0	N0730#1	0	0	0		
	N0570#1	0	0	0	N0560#1	0
0	N0515#1	0	0	0		
	N0510#1	0	0	0	N0520#1	0
0	N0350#1	0	0	0		
	N0330#1	0	0	0	N0325#1	0
0	N0180#1	0	0	0		
	N0090#1	0	0	0	N-0001B#1	0
0	N0100#1	0	0	0		
	N0130#1	0	0	0	N0080#1	0
0	N0050#1	0	0	0		
	N0170#1	0	0	0	N0205#1	0
0	N0210#1	0	0	0		
	N0150#1	0	0	0	N0155#1	0
0	N0060#1	0	0	0		
	N0120#1	0	0	0	N0110#1	0
0	N0140#1	0	0	0		
	N0140-A#1	0	0	0	N0500#1	0
0	N0470#1	0	0	0		
	N0540#1	0	0	0	N0650#1	0
0	N0490#1	0	0	0		
	N2380#1	0	0	0	N2370#1	0

0	N0655#1	0	0	0		
	N0480#1	0	0	0	N0410#1	0
0	N0270#1					
	N0260#1	0	0	0	N0250#1	0
0	N0240#1					
	N0200#1	0	0	0	N-002#1	0
0	N-003#1	0	0	0		
	N-004#1	0	0	0	N-001#1	0
0	N-006#1	0	0	0		
	N-005#1	0	0	0	N-007#1	0
0	N-009#1	0	0	0		
	N-008#1	0	0	0	N-011#1	0
0	N-010#1	0	0	0		
	N-014#1	0	0	0	N-012#1	0
0	N-013#1	0	0	0		
	N-015#1	0	0	0	N2002#1	0
0	N-020#1	0	0	0		
	N-022#1	0	0	0	N-026#1	0
0	N-027#1	0	0	0		
	N-028#1	0	0	0	N-024#1	0
0	N-029#1	0	0	0		
	N-030#1	0	0	0	N-023#1	0
0	N-031#1	0	0	0		
	N-025#1	0	0	0	N-041#1	0
0	N-019#1	0	0	0		
	N-021#1	0	0	0	N-043#1	0
0	N-042#1	0	0	0		
	N-040#1	0	0	0	N2090#1	0
0	N-0001A#1	0	0	0		
	N-0001-E#1	0	0	0	N-0001-F#1	0
0	N-0001-G#1	0	0	0		
	N0001-J#1	0	0	0		

Rainfall input summary from Runoff Continuity Check #
#####

Total rainfall read for gage # 1 is 3.5850 in
Total rainfall duration for gage # 1 is 1265.00 minutes

* Table R5. CONTINUITY CHECK FOR SURFACE WATER *
* Any continuity error can be fixed by lowering the *
* wet and transition time step. The transition time *
* should not be much greater than the wet time step. *

		Inches over
	cubic feet	Total Basin
Total Precipitation (Rain plus Snow)	2.638295E+08	3.585

Total Infiltration	1.672554E+08	2.273
Total Evaporation	6.464907E+06	0.088
Surface Runoff from Watersheds	8.959237E+07	1.217
Total Water remaining in Surface Storage	0.000000E+00	0.000
Infiltration over the Pervious Area...	1.672554E+08	2.420

Infiltration + Evaporation + Surface Runoff + Snow removal + Water remaining in Surface Storage + Water remaining in Snow Cover.....	2.633127E+08	3.578
Total Precipitation + Initial Storage.	2.638295E+08	3.585

The error in continuity is calculated as

```

*****
* Precipitation + Initial Snow Cover *
*       - Infiltration -             *
*Evaporation - Snow removal -       *
*Surface Runoff from Watersheds -   *
*Water in Surface Storage -         *
*Water remaining in Snow Cover      *
*-----*
* Precipitation + Initial Snow Cover *
*****
Percent Continuity Error.....

```

0.1959

```

*****
* Table R6. Continuity Check for Channel/Pipes *
*       You should have zero continuity error *
*       if you are not using runoff hydraulics *
*****

```

	cubic feet	Inches over Total Basin
Initial Channel/Pipe Storage.....	0.000000E+00	0.000
Final Channel/Pipe Storage.....	0.000000E+00	0.000
Surface Runoff from Watersheds.....	8.959237E+07	1.217
Groundwater Subsurface Inflow or Diversion..	0.000000E+00	0.000
Evaporation Loss from Channels.....	0.000000E+00	0.000
Groundwater Flow Diverted Out of Network....	0.000000E+00	0.000
Channel/Pipe/Inlet Outflow.....	8.959237E+07	1.217
Initial Storage + Inflow.....	8.959237E+07	1.217
Final Storage + Outflow + Diverted GW.....	8.959237E+07	1.217

* Final Storage + Outflow + Evaporation - *		
* Watershed Runoff - Groundwater Inflow - *		
* Initial Channel/Pipe Storage *		
* ----- *		
* Final Storage + Outflow + Evaporation *		

Percent Continuity Error..... 0.0000

 # Table R9. Summary Statistics for Subcatchments #
 #####

Note: Total Runoff Depth includes pervious & impervious areas.
 Pervious and Impervious Runoff Depth is only the runoff from those two areas.
 For catchments receiving redirected flow, this flow will only be shown if the
 flow is not
 directed directly to the outlet. Flow that is getting redirected is also
 listed with
 the original subcatchment.

Subcatchment.....		N0190#1	N0230#1
N0220#1	N0290#1	N0370#1	
Area (acres).....		11.18000	19.50000
18.47000	14.12000	55.44000	
Percent Impervious.....		95.00000	90.00000
97.00000	20.00000	42.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	
Pervious Area			

Total Runoff Depth (in)		0.15565	0.30600
0.09577	1.15109	1.07196	
Peak Runoff Rate (cfs).		0.69556	2.26034
0.49852	3.44661	17.10839	
Total Impervious Area			

Total Runoff Depth (in)		2.95741	2.75398
3.09663	0.28777	0.77625	
Peak Runoff Rate (cfs).		13.21561	20.34306
16.11885	0.86165	12.38883	
Impervious Area with depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Area without depression storage			

Total Runoff Depth (in)		0.00000	0.00000

0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		3.11306	3.05998
3.19240	1.43886	1.84821	
Peak Runoff Rate (cfs).		13.91117	22.60340
16.61737	4.30826	29.49722	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0275#1	N0280#1
N0285#1	N0380#1	N0385#1	
Area (acres).....		12.91000	62.94000
243.72000	88.58000	7.00000	
Percent Impervious.....		39.00000	0.00000
0.00000	0.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.09047	1.11304
1.11203	1.11466	1.11712	
Peak Runoff Rate (cfs).		4.69291	15.72904
13.78611	11.87498	3.11368	

Total Impervious Area			

Total Runoff Depth (in)		0.69719	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		3.00039	0.00000
0.00000	0.00000	0.00000	
Impervious Area with depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Area without depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Total Area			

Total Runoff Depth (in)		1.78766	1.11304
1.11203	1.11466	1.11712	
Peak Runoff Rate (cfs).		7.69330	15.72904
13.78611	11.87498	3.11368	
Rational Formula			

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0386#1	N0388#1
N0420#1	N0530#1	N0430#1	
Area (acres).....		7.00000	7.00000
115.60000	54.07000	55.63000	
Percent Impervious.....		0.00000	0.00000
8.00000	22.00000	15.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.11712	1.11712
1.14143	1.14899	1.15191	
Peak Runoff Rate (cfs).		3.11368	3.11368
50.62208	13.18335	13.40075	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.00000
0.09925	0.32407	0.20328	
Peak Runoff Rate (cfs).		0.00000	0.00000
4.40192	3.71838	2.36484	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.11712	1.11712
1.24069	1.47306	1.35519	
Peak Runoff Rate (cfs).		3.11368	3.11368
55.02400	16.90173	15.76559	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000

0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0310#1	N0160#1
N0300#1	N0340#1	N0390#1	
Area (acres).....		45.91000	29.42000
36.45000	365.08000	136.36000	
Percent Impervious.....		20.00000	15.00000
17.00000	0.00000	42.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.15138	1.15243
1.15078	1.10799	1.06036	
Peak Runoff Rate (cfs).		11.90366	11.12574
3.40265	16.21004	25.85554	

Total Impervious Area

Total Runoff Depth (in)		0.28785	0.20337
0.23570	0.00000	0.76785	
Peak Runoff Rate (cfs).		2.97592	1.96337
0.69693	0.00000	18.72297	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.43923	1.35580
1.38649	1.10799	1.82822	
Peak Runoff Rate (cfs).		14.87958	13.08910
4.09958	16.21004	44.57851	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0001-C#1	N0460#1
N0440#1	N0360#1	N2040#1	
Area (acres).....		22.60000	639.89000
296.78000	20.86000	267.92000	
Percent Impervious.....		30.00000	0.00000
0.00000	20.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.13206	1.11465
1.11475	1.14554	1.11471	
Peak Runoff Rate (cfs).		6.44212	84.83469
28.13099	2.79409	32.92895	

Total Impervious Area

Total Runoff Depth (in)		0.48517	0.00000
0.00000	0.28638	0.00000	
Peak Runoff Rate (cfs).		2.76091	0.00000
0.00000	0.69852	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.61724	1.11465
1.11475	1.43192	1.11471	
Peak Runoff Rate (cfs).		9.20302	84.83469
28.13099	3.49261	32.92895	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000

0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0450#1	N0400#1
N0550#1	N0640#1	N0660#1	
Area (acres).....		389.21000	639.15000
60.91000	15.27000	11.36000	
Percent Impervious.....		2.00000	0.00000
4.00000	85.00000	90.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.12200	1.11470
1.13243	0.42589	0.29456	
Peak Runoff Rate (cfs).		35.47494	58.97770
12.46285	2.45391	0.95163	

Total Impervious Area

Total Runoff Depth (in)		0.02290	0.00000
0.04718	2.41340	2.65108	
Peak Runoff Rate (cfs).		0.72398	0.00000
0.51929	13.90550	8.56467	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.14490	1.11470
1.17962	2.83930	2.94564	
Peak Runoff Rate (cfs).		36.19892	58.97770
12.98213	16.35941	9.51630	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0780#1	N0775#1
N0690#1	N0720#1	N0770#1	
Area (acres).....		21.41000	19.64000
3.89000	84.38000	69.80000	
Percent Impervious.....		98.00000	95.00000
84.00000	0.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		0.06403	0.15572
0.44986	1.11411	1.11483	
Peak Runoff Rate (cfs).		0.49031	1.15685
0.69614	15.32756	7.60192	

Total Impervious Area

Total Runoff Depth (in)		3.13739	2.95866
2.36177	0.00000	0.00000	
Peak Runoff Rate (cfs).		24.02537	21.98019
3.65472	0.00000	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		3.20142	3.11438
2.81163	1.11411	1.11483	
Peak Runoff Rate (cfs).		24.51568	23.13704
4.35085	15.32756	7.60192	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0885#1	N0960#1
N0990#1	N1010#1	N1030#1	
Area (acres).....		204.75000	10.39000
8.87000	8.23000	13.30000	
Percent Impervious.....		0.00000	20.00000
20.00000	15.00000	20.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200

1.57200	1.57200	1.57200	
Pervious Area			

Total Runoff Depth (in)		1.11473	1.15239
1.15242	1.15228	1.15239	
Peak Runoff Rate (cfs).		25.68975	3.84302
3.19707	3.24161	4.91936	
Total Impervious Area			

Total Runoff Depth (in)		0.00000	0.28810
0.28811	0.20334	0.28810	
Peak Runoff Rate (cfs).		0.00000	0.96075
0.79927	0.57205	1.22984	
Impervious Area with depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Area without depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Total Area			

Total Runoff Depth (in)		1.11473	1.44048
1.44053	1.35562	1.44048	
Peak Runoff Rate (cfs).		25.68975	4.80377
3.99634	3.81366	6.14919	
Rational Formula			

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000

0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N1020#1	N0940#1
N1000#1	N0945#1	N0980#1	
Area (acres).....		162.18000	255.69000
29.14000	146.33000	378.70000	
Percent Impervious.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.11451	1.11443
1.11121	1.11443	1.11408	
Peak Runoff Rate (cfs).		23.56919	20.99739
8.96438	12.01669	28.67646	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.11451	1.11443
1.11121	1.11443	1.11408	
Peak Runoff Rate (cfs).		23.56919	20.99739
8.96438	12.01669	28.67646	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0850#1	N0890#1
N0930#1	N0920#1	N0950#1	
Area (acres).....		282.37000	535.54000
120.62000	16.33000	49.45000	
Percent Impervious.....		0.00000	4.00000
8.00000	3.00000	13.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.11468	1.13244
1.13883	1.12778	1.14622	
Peak Runoff Rate (cfs).		35.81020	76.64170
10.76545	7.23126	5.65009	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.04719
0.09903	0.03488	0.17127	
Peak Runoff Rate (cfs).		0.00000	3.19340

0.93613 0.22365 0.84427

Impervious Area with depression storage

```

-----
Total Runoff Depth (in)                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Peak Runoff Rate (cfs).                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
  
```

Impervious Area without depression storage

```

-----
Total Runoff Depth (in)                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Peak Runoff Rate (cfs).                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
  
```

Total Area

```

-----
Total Runoff Depth (in)                      1.11468                      1.17963
1.23786                      1.16266                      1.31749
Peak Runoff Rate (cfs).                      35.81020                      79.83511
11.70157                      7.45491                      6.49436
  
```

Rational Formula

```

-----
Pervious Tc. (mins)....                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Perv. Intensity (in/hr)                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Pervious C .....                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Impervious Tc. (mins)..                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Imp. Intensity (in/hr).                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Impervious C .....                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Partial Area (Ha).....                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Partial Area Tc.....                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
Partial Area Intensity.                      0.00000                      0.00000
0.00000                      0.00000                      0.00000
  
```

```

Subcatchment.....                      N0830#1                      N0970#1
N-0001K#1                      N0870#1                      N0790#1
Area (acres).....                      14.30000                      10.14000
18.37000                      102.60000                      137.57000
Percent Impervious.....                      15.00000                      20.00000
  
```

55.00000	0.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.15238	1.15243
0.95270	1.11451	1.11479	
Peak Runoff Rate (cfs).		4.32516	3.51873
6.30271	14.91059	13.81297	

Total Impervious Area

Total Runoff Depth (in)		0.20336	0.28811
1.16441	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.76326	0.87968
7.70332	0.00000	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.35574	1.44053
2.11712	1.11451	1.11479	
Peak Runoff Rate (cfs).		5.08843	4.39841
14.00603	14.91059	13.81297	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000

0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0001-I#1	N0915#1
N0900#1	N0910#1	N0880#1	
Area (acres).....		75.13900	348.24000
0.01000	25.86000	5.65000	
Percent Impervious.....		49.00000	0.00000
0.00000	0.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.01463	1.11304
1.11712	1.11304	1.11377	
Peak Runoff Rate (cfs).		26.62622	87.02701
0.00445	6.46255	1.18802	

Total Impervious Area

Total Runoff Depth (in)		0.97484	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		25.58205	0.00000
0.00000	0.00000	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000

0.00000	0.00000	0.00000	
Total Area			

Total Runoff Depth (in)		1.98947	1.11304
1.11712	1.11304	1.11377	
Peak Runoff Rate (cfs).		52.20827	87.02701
0.00445	6.46255	1.18802	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0810#1	N0740#1
N0742#1	N0800#1	N0620#1	
Area (acres).....		781.07000	74.74000
2.70000	12.73000	3.15000	
Percent Impervious.....		0.00000	1.00000
0.00000	80.00000	20.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.11209	1.11703
1.11712	0.54151	1.15217	
Peak Runoff Rate (cfs).		44.49844	17.83069
1.20099	2.72112	1.22972	

Total Impervious Area

```

-----
Total Runoff Depth (in)          0.00000          0.01128
0.00000          2.16605          0.28804
Peak Runoff Rate (cfs).         0.00000          0.18011
0.00000          10.88449          0.30743

```

Impervious Area with depression storage

```

-----
Total Runoff Depth (in)          0.00000          0.00000
0.00000          0.00000          0.00000
Peak Runoff Rate (cfs).         0.00000          0.00000
0.00000          0.00000          0.00000

```

Impervious Area without depression storage

```

-----
Total Runoff Depth (in)          0.00000          0.00000
0.00000          0.00000          0.00000
Peak Runoff Rate (cfs).         0.00000          0.00000
0.00000          0.00000          0.00000

```

Total Area

```

-----
Total Runoff Depth (in)          1.11209          1.12831
1.11712          2.70756          1.44022
Peak Runoff Rate (cfs).         44.49844          18.01080
1.20099          13.60561          1.53715

```

Rational Formula

```

-----
Pervious Tc. (mins)....         0.00000          0.00000
0.00000          0.00000          0.00000
Perv. Intensity (in/hr)         0.00000          0.00000
0.00000          0.00000          0.00000
Pervious C .....              0.00000          0.00000
0.00000          0.00000          0.00000
Impervious Tc. (mins)..         0.00000          0.00000
0.00000          0.00000          0.00000
Imp. Intensity (in/hr).         0.00000          0.00000
0.00000          0.00000          0.00000
Impervious C .....              0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area (Ha).....          0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area Tc.....           0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area Intensity.         0.00000          0.00000
0.00000          0.00000          0.00000

```

```

Subcatchment.....              N0730#1          N0570#1

```


N0560#1	N0515#1	N0510#1	
Area (acres).....		260.63000	59.96000
78.23000	53.27000	572.78000	
Percent Impervious.....		7.00000	25.00000
14.00000	0.00000	2.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	
Pervious Area			

Total Runoff Depth (in)		1.13565	1.14163
1.14282	1.11479	1.12209	
Peak Runoff Rate (cfs).		18.47950	10.64657
3.88687	5.26840	56.67394	
Total Impervious Area			

Total Runoff Depth (in)		0.08548	0.38054
0.18604	0.00000	0.02290	
Peak Runoff Rate (cfs).		1.39093	3.54886
0.63275	0.00000	1.15661	
Impervious Area with depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Area without depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Total Area			

Total Runoff Depth (in)		1.22113	1.52218
1.32886	1.11479	1.14499	
Peak Runoff Rate (cfs).		19.87043	14.19543
4.51961	5.26840	57.83056	
Rational Formula			

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000

0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0520#1	N0350#1
N0330#1	N0325#1	N0180#1	
Area (acres).....		941.67000	77.07000
40.24000	56.13000	63.44000	
Percent Impervious.....		0.00000	2.00000
38.00000	10.00000	5.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.11418	1.12160
1.08011	1.14254	1.13534	
Peak Runoff Rate (cfs).		72.70927	12.71109
3.97910	5.22474	18.18563	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.02289
0.66200	0.12695	0.05975	
Peak Runoff Rate (cfs).		0.00000	0.25941
2.43880	0.58053	0.95714	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

```

-----
Total Runoff Depth (in)          0.00000          0.00000
0.00000          0.00000          0.00000
Peak Runoff Rate (cfs).         0.00000          0.00000
0.00000          0.00000          0.00000

```

Total Area

```

-----
Total Runoff Depth (in)          1.11418          1.14449
1.74212          1.26949          1.19509
Peak Runoff Rate (cfs).         72.70927         12.97050
6.41791          5.80527          19.14277

```

Rational Formula

```

-----
Pervious Tc. (mins)....         0.00000          0.00000
0.00000          0.00000          0.00000
Perv. Intensity (in/hr)         0.00000          0.00000
0.00000          0.00000          0.00000
Pervious C .....               0.00000          0.00000
0.00000          0.00000          0.00000
Impervious Tc. (mins)..         0.00000          0.00000
0.00000          0.00000          0.00000
Imp. Intensity (in/hr).         0.00000          0.00000
0.00000          0.00000          0.00000
Impervious C .....             0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area (Ha).....         0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area Tc.....           0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area Intensity.         0.00000          0.00000
0.00000          0.00000          0.00000

```

```

Subcatchment.....             N0090#1          N-0001B#1
N0100#1          N0130#1          N0080#1
Area (acres).....             15.18000         15.27000
9.86000          42.06000         29.80000
Percent Impervious.....       86.00000         30.00000
44.00000          29.00000         0.00000
Total Rainfall (in)....        3.58500          3.58500
3.58500          3.58500          3.58500
Max Intensity (in/hr)..        1.57200          1.57200
1.57200          1.57200          1.57200

```

Pervious Area

```

-----
Total Runoff Depth (in)          0.41743          1.12662
1.05666          1.13597          1.11846

```

Peak Runoff Rate (cfs).	2.53657	2.69159
3.53977 15.54079	10.28484	

Total Impervious Area

Total Runoff Depth (in)	2.56423	0.48284
0.83023 0.46399	0.00000	
Peak Runoff Rate (cfs).	15.58179	1.15354
2.78125 6.34765	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)	0.00000	0.00000
0.00000 0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000
0.00000 0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)	0.00000	0.00000
0.00000 0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000
0.00000 0.00000	0.00000	

Total Area

Total Runoff Depth (in)	2.98166	1.60945
1.88690 1.59996	1.11846	
Peak Runoff Rate (cfs).	18.11836	3.84513
6.32102 21.88843	10.28484	

Rational Formula

Pervious Tc. (mins)....	0.00000	0.00000
0.00000 0.00000	0.00000	
Perv. Intensity (in/hr)	0.00000	0.00000
0.00000 0.00000	0.00000	
Pervious C	0.00000	0.00000
0.00000 0.00000	0.00000	
Impervious Tc. (mins)..	0.00000	0.00000
0.00000 0.00000	0.00000	
Imp. Intensity (in/hr).	0.00000	0.00000
0.00000 0.00000	0.00000	
Impervious C	0.00000	0.00000
0.00000 0.00000	0.00000	
Partial Area (Ha).....	0.00000	0.00000
0.00000 0.00000	0.00000	
Partial Area Tc.....	0.00000	0.00000
0.00000 0.00000	0.00000	
Partial Area Intensity.	0.00000	0.00000

0.00000	0.00000	0.00000	
Subcatchment.....		N0050#1	N0170#1
N0205#1	N0210#1	N0150#1	
Area (acres).....		40.14000	25.55000
4.00000	84.95000	37.41000	
Percent Impervious.....		0.00000	95.00000
0.00000	0.00000	84.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.11461	0.15792
1.11712	1.11470	0.47099	
Peak Runoff Rate (cfs).		5.49246	1.52305
1.77924	7.73698	7.04791	

Total Impervious Area

Total Runoff Depth (in)		0.00000	3.00050
0.00000	0.00000	2.47271	
Peak Runoff Rate (cfs).		0.00000	28.93793
0.00000	0.00000	37.00151	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.11461	3.15842
1.11712	1.11470	2.94370	
Peak Runoff Rate (cfs).		5.49246	30.46098
1.77924	7.73698	44.04942	

Rational Formula

```

-----
Pervious Tc. (mins)....      0.00000      0.00000
0.00000      0.00000      0.00000
Perv. Intensity (in/hr)    0.00000      0.00000
0.00000      0.00000      0.00000
Pervious C .....          0.00000      0.00000
0.00000      0.00000      0.00000
Impervious Tc. (mins)..    0.00000      0.00000
0.00000      0.00000      0.00000
Imp. Intensity (in/hr).    0.00000      0.00000
0.00000      0.00000      0.00000
Impervious C .....          0.00000      0.00000
0.00000      0.00000      0.00000
Partial Area (Ha).....     0.00000      0.00000
0.00000      0.00000      0.00000
Partial Area Tc.....       0.00000      0.00000
0.00000      0.00000      0.00000
Partial Area Intensity.    0.00000      0.00000
0.00000      0.00000      0.00000

```

```

Subcatchment.....         N0155#1      N0060#1
N0120#1      N0110#1      N0140#1
Area (acres).....         13.15000     185.38000
15.33000     51.35000     57.34000
Percent Impervious.....   0.00000     4.00000
65.00000     50.00000     90.00000
Total Rainfall (in)....   3.58500     3.58500
3.58500     3.58500     3.58500
Max Intensity (in/hr)..   1.57200     1.57200
1.57200     1.57200     1.57200

```

Pervious Area

```

-----
Total Runoff Depth (in)   1.11712     1.12853
0.91082     1.17609     0.30545
Peak Runoff Rate (cfs).   5.84927     22.30905
4.59575     19.52988     4.99076

```

Total Impervious Area

```

-----
Total Runoff Depth (in)   0.00000     0.04702
1.69151     1.17609     2.74905
Peak Runoff Rate (cfs).   0.00000     0.92954
8.53496     19.52988     44.91680

```

Impervious Area with depression storage

```

-----
Total Runoff Depth (in)   0.00000     0.00000
0.00000     0.00000     0.00000

```

Peak Runoff Rate (cfs).	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)	1.11712	1.17556	1.17556
2.60233	2.35217	3.05450	
Peak Runoff Rate (cfs).	5.84927	23.23859	23.23859
13.13070	39.05976	49.90756	

Rational Formula

Pervious Tc. (mins)....	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....	N0140-A#1	N0500#1	
N0470#1	N0540#1	N0650#1	
Area (acres).....	0.04000	171.56000	171.56000
983.12000	63.45000	39.43000	
Percent Impervious....	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Total Rainfall (in)....	3.58500	3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..	1.57200	1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area		

Total Runoff Depth (in)	1.11902	1.06545
1.11460 1.11397	1.11472	
Peak Runoff Rate (cfs).	0.01925	5.66574
133.13735 4.71406	4.89532	
Total Impervious Area		

Total Runoff Depth (in)	0.00000	0.00000
0.00000 0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000
0.00000 0.00000	0.00000	
Impervious Area with depression storage		

Total Runoff Depth (in)	0.00000	0.00000
0.00000 0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000
0.00000 0.00000	0.00000	
Impervious Area without depression storage		

Total Runoff Depth (in)	0.00000	0.00000
0.00000 0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000
0.00000 0.00000	0.00000	
Total Area		

Total Runoff Depth (in)	1.11902	1.06545
1.11460 1.11397	1.11472	
Peak Runoff Rate (cfs).	0.01925	5.66574
133.13735 4.71406	4.89532	
Rational Formula		

Pervious Tc. (mins)....	0.00000	0.00000
0.00000 0.00000	0.00000	
Perv. Intensity (in/hr)	0.00000	0.00000
0.00000 0.00000	0.00000	
Pervious C	0.00000	0.00000
0.00000 0.00000	0.00000	
Impervious Tc. (mins)..	0.00000	0.00000
0.00000 0.00000	0.00000	
Imp. Intensity (in/hr).	0.00000	0.00000
0.00000 0.00000	0.00000	
Impervious C	0.00000	0.00000
0.00000 0.00000	0.00000	
Partial Area (Ha).....	0.00000	0.00000

0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0490#1	N2380#1
N2370#1	N0655#1	N0480#1	
Area (acres).....		870.19000	68.55000
271.77000	97.84000	853.18000	
Percent Impervious.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.05710	1.11377
1.11422	1.11462	1.11439	
Peak Runoff Rate (cfs).		49.45947	14.41397
47.77311	13.52780	136.71420	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.05710	1.11377
1.11422	1.11462	1.11439	

Peak Runoff Rate (cfs).		49.45947	14.41397
47.77311	13.52780	136.71420	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N0410#1	N0270#1
N0260#1	N0250#1	N0240#1	
Area (acres).....		936.92000	133.23000
384.59000	23.16000	7.15000	
Percent Impervious....		0.00000	0.00000
0.00000	27.00000	20.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.07183	1.11476
1.11480	1.14165	1.15129	
Peak Runoff Rate (cfs).		31.86570	15.45091
43.78264	8.12134	2.98773	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.42225	0.28782	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	3.00378	0.74693	

Impervious Area with depression storage

Total Runoff Depth (in)	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)	1.07183	1.11476	
1.11480	1.56390	1.43911	
Peak Runoff Rate (cfs).	31.86570	15.45091	
43.78264	11.12512	3.73467	

Rational Formula

Pervious Tc. (mins)....	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....	N0200#1	N-002#1	
N-003#1	N-004#1	N-001#1	
Area (acres).....	14.40000	7.67000	
4.54000	9.03000	103.80000	
Percent Impervious.....	90.00000	30.00000	
70.00000	90.00000	0.00000	
Total Rainfall (in)....	3.58500	3.58500	

3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		0.30590	1.13196
0.73783	0.29739	1.11479	
Peak Runoff Rate (cfs).		1.37229	3.00777
1.28382	1.04527	10.42223	

Total Impervious Area

Total Runoff Depth (in)		2.75311	0.48512
1.72160	2.67653	0.00000	
Peak Runoff Rate (cfs).		12.35058	1.28905
2.99557	9.40742	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		3.05901	1.61708
2.45943	2.97392	1.11479	
Peak Runoff Rate (cfs).		13.72287	4.29682
4.27939	10.45269	10.42223	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000

0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N-006#1	N-005#1
N-007#1	N-009#1	N-008#1	
Area (acres).....		10.10000	14.12000
6.66000	7.35000	21.16000	
Percent Impervious.....		26.00000	7.00000
35.00000	80.00000	45.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.14340	1.13913
1.11216	0.54151	1.04938	
Peak Runoff Rate (cfs).		3.96544	6.19939
2.47279	1.57111	7.44262	

Total Impervious Area

Total Runoff Depth (in)		0.40174	0.08574
0.59886	2.16605	0.85858	
Peak Runoff Rate (cfs).		1.39326	0.46662
1.33150	6.28445	6.08942	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area			

Total Runoff Depth (in)		1.54514	1.22487
1.71102	2.70756	1.90796	
Peak Runoff Rate (cfs).		5.35870	6.66601
3.80430	7.85556	13.53204	

Rational Formula			

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N-011#1	N-010#1
N-014#1	N-012#1	N-013#1	
Area (acres).....		9.52000	19.00000
13.12000	10.50000	8.04000	
Percent Impervious.....		100.00000	36.00000
20.00000	95.00000	12.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area			

Total Runoff Depth (in)		0.00000	1.10789
1.15174	0.15565	1.14845	
Peak Runoff Rate (cfs).		0.00000	6.56091
3.66275	0.65325	3.47752	

Total Impervious Area			

Total Runoff Depth (in)		3.25791	0.62319

0.28793	2.95741	0.15661	
Peak Runoff Rate (cfs).		12.26711	3.69051
0.91569	12.41180	0.47421	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		3.25791	1.73107
1.43967	3.11306	1.30505	
Peak Runoff Rate (cfs).		12.26711	10.25143
4.57844	13.06505	3.95173	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N-015#1	N2002#1
N-020#1	N-022#1	N-026#1	
Area (acres).....		39.50000	107.20000

17.80000	13.61000	1.17000	
Percent Impervious.....		0.00000	0.00000
0.00000	24.00000	5.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.10921	1.11310
1.11440	1.14785	1.13387	
Peak Runoff Rate (cfs).		13.71554	26.17835
2.89478	4.74059	0.51608	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.36248	0.05968	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	1.49703	0.02716	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.10921	1.11310
1.11440	1.51032	1.19355	
Peak Runoff Rate (cfs).		13.71554	26.17835
2.89478	6.23762	0.54324	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000

0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N-027#1	N-028#1
N-024#1	N-029#1	N-030#1	
Area (acres).....		10.07000	1.43000
30.99000	7.84000	27.03000	
Percent Impervious.....		40.00000	40.00000
15.00000	26.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.08527	1.08435
1.15244	1.14291	1.11259	
Peak Runoff Rate (cfs).		3.22157	0.51831
9.77798	3.16284	7.26012	

Total Impervious Area

Total Runoff Depth (in)		0.72351	0.72290
0.20337	0.40156	0.00000	
Peak Runoff Rate (cfs).		2.14771	0.34554
1.72553	1.11127	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000

0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.80878	1.80724
1.35582	1.54447	1.11259	
Peak Runoff Rate (cfs).		5.36928	0.86384
11.50351	4.27411	7.26012	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N-023#1	N-031#1
N-025#1	N-041#1	N-019#1	
Area (acres).....		2.31000	24.76000
5.46000	29.21000	23.59000	
Percent Impervious.....		30.00000	0.00000
20.00000	90.00000	15.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.13272	1.11399
1.15129	0.29732	1.15243	
Peak Runoff Rate (cfs).		0.85890	4.73774
2.28154	3.47607	7.36267	

Total Impervious Area			

Total Runoff Depth (in)		0.48545	0.00000
0.28782	2.67588	0.20337	
Peak Runoff Rate (cfs).		0.36810	0.00000
0.57039	31.28465	1.29929	
Impervious Area with depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Area without depression storage			

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	
Total Area			

Total Runoff Depth (in)		1.61818	1.11399
1.43911	2.97320	1.35580	
Peak Runoff Rate (cfs).		1.22701	4.73774
2.85193	34.76072	8.66196	
Rational Formula			

Pervious Tc. (mins)....		0.00000	0.00000
0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N-021#1	N-043#1
N-042#1	N-040#1	N2090#1	
Area (acres).....		27.11000	17.17000
61.62000	341.70000	127.23000	
Percent Impervious.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.11408	1.11310
1.10643	1.10176	1.11456	
Peak Runoff Rate (cfs).		5.09631	4.19293
2.67649	14.03727	17.79741	

Total Impervious Area

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Total Area

Total Runoff Depth (in)		1.11408	1.11310
1.10643	1.10176	1.11456	
Peak Runoff Rate (cfs).		5.09631	4.19293
2.67649	14.03727	17.79741	

Rational Formula

Pervious Tc. (mins)....		0.00000	0.00000

0.00000	0.00000	0.00000	
Perv. Intensity (in/hr)		0.00000	0.00000
0.00000	0.00000	0.00000	
Pervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious Tc. (mins)..		0.00000	0.00000
0.00000	0.00000	0.00000	
Imp. Intensity (in/hr).		0.00000	0.00000
0.00000	0.00000	0.00000	
Impervious C		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area (Ha).....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Tc.....		0.00000	0.00000
0.00000	0.00000	0.00000	
Partial Area Intensity.		0.00000	0.00000
0.00000	0.00000	0.00000	

Subcatchment.....		N-0001A#1	N-0001-E#1
N-0001-F#1	N-0001-G#1	N0001-J#1	
Area (acres).....		3439.55000	3.37000
44.70000	7.34000	84.70000	
Percent Impervious.....		12.30000	39.00000
33.00000	66.00000	17.00000	
Total Rainfall (in)....		3.58500	3.58500
3.58500	3.58500	3.58500	
Max Intensity (in/hr)..		1.57200	1.57200
1.57200	1.57200	1.57200	

Pervious Area

Total Runoff Depth (in)		1.14962	1.08854
1.12079	0.79636	1.15203	
Peak Runoff Rate (cfs).		639.35459	0.81645
17.11227	1.07975	35.91079	

Total Impervious Area

Total Runoff Depth (in)		0.16124	0.69595
0.55203	1.54587	0.23596	
Peak Runoff Rate (cfs).		89.67003	0.52199
8.42843	2.09599	7.35522	

Impervious Area with depression storage

Total Runoff Depth (in)		0.00000	0.00000
0.00000	0.00000	0.00000	
Peak Runoff Rate (cfs).		0.00000	0.00000
0.00000	0.00000	0.00000	

Impervious Area without depression storage

```

-----
Total Runoff Depth (in)          0.00000          0.00000
0.00000          0.00000          0.00000
Peak Runoff Rate (cfs).         0.00000          0.00000
0.00000          0.00000          0.00000
  
```

Total Area

```

-----
Total Runoff Depth (in)          1.31086          1.78450
1.67282          2.34223          1.38799
Peak Runoff Rate (cfs).         729.02462        1.33844
25.54070          3.17574          43.26601
  
```

Rational Formula

```

-----
Pervious Tc. (mins)....         0.00000          0.00000
0.00000          0.00000          0.00000
Perv. Intensity (in/hr)         0.00000          0.00000
0.00000          0.00000          0.00000
Pervious C .....               0.00000          0.00000
0.00000          0.00000          0.00000
Impervious Tc. (mins)..         0.00000          0.00000
0.00000          0.00000          0.00000
Imp. Intensity (in/hr).         0.00000          0.00000
0.00000          0.00000          0.00000
Impervious C .....             0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area (Ha).....          0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area Tc.....           0.00000          0.00000
0.00000          0.00000          0.00000
Partial Area Intensity.         0.00000          0.00000
0.00000          0.00000          0.00000
  
```

1

```

#####
#           Runoff Quality Summary Page           #
# If NDIM = 0 Units for:  loads  mass rates      #
#           METRIC = 1   lb      lb/sec         #
#           METRIC = 2   kg      kg/sec         #
# If NDIM = 1 Loads are in units of quantity    #
#           and mass rates are quantity/sec     #
# If NDIM = 2 loads are in units of concentration #
#           times volume and mass rates have units#
#           of concentration times volume/second #
#####
  
```

PFOS

mg/l

Inputs

-
- 1. INITIAL SURFACE LOAD..... 0.000E+00
 - 2. TOTAL SURFACE BUILDUP..... 0.000E+00
 - 3. INITIAL CATCHBASIN LOAD..... 0.000E+00
 - 4. TOTAL CATCHBASIN LOAD..... 0.000E+00
 - 5. TOTAL CATCHBASIN AND SURFACE BUILDUP (2+4)..... 0.000E+00

Remaining Loads

-
- 6. LOAD REMAINING ON SURFACE... 0.000E+00
 - 7. REMAINING IN CATCHBASINS... 0.000E+00
 - 8. REMAINING IN CHANNEL/PIPES.. 0.000E+00

Removals

-
- 9. STREET SWEEPING REMOVAL..... 0.000E+00
 - 10. NET SURFACE BUILDUP (2-9)... 0.000E+00
 - 11. SURFACE WASHOFF..... 9.158E+04
 - 12. CATCHBASIN WASHOFF..... 0.000E+00
 - 13. TOTAL WASHOFF (11+12)..... 9.158E+04
 - 14. LOAD FROM OTHER CONSTITUENTS 0.000E+00
 - 15. PRECIPITATION LOAD..... 0.000E+00
 - 15a.SUM SURFACE LOAD (13+14+15). 9.158E+04
 - 16. TOTAL GROUNDWATER LOAD..... 0.000E+00
 - 16a.TOTAL I/I LOAD..... 0.000E+00
 - 17. NET SUBCATCHMENT LOAD (15a-15b-15c-15d+16+16a).... 9.158E+04
 - >>Removal in channel/pipes (17a, 17b):
 - 17a.REMOVE BY BMP FRACTION..... 0.000E+00
 - 17b.REMOVE BY 1st ORDER DECAY... 0.000E+00
 - 18. TOTAL LOAD TO INLETS..... 9.158E+04
 - 19. FLOW WT'D AVE.CONCENTRATION (INLET LOAD/TOTAL FLOW)..... 1.638E+01

Percentages

-
- 20. STREET SWEEPING (9/2)..... 0.000
 - 21. SURFACE WASHOFF (11/2)..... 0.000
 - 22. NET SURFACE WASHOFF(11/10).. 0.000
 - 23. WASHOFF/SUBCAT LOAD(11/17).. 100.000
 - 24. SURFACE WASHOFF/INLET LOAD (11/18)..... 100.000
 - 25. CATCHBASIN WASHOFF/ SUBCATCHMENT LOAD (12/17)... 0.000
 - 26. CATCHBASIN WASHOFF/ INLET LOAD (12/18)..... 0.000

27. OTHER CONSTITUENT LOAD/ SUBCATCHMENT LOAD (14/17)...	0.000
28. INSOLUBLE FRACTION/ INLET LOAD (14/18).....	0.000
29. PRECIPITATION/ SUBCATCHMENT LOAD (15/17)...	0.000
30. PRECIPITATION/ INLET LOAD (15/18).....	0.000
31. GROUNDWATER LOAD/ SUBCATCHMENT LOAD (16/17)...	0.000
32. GROUNDWATER LOAD/ INLET LOAD (16/18).....	0.000
32a. INFILTRATION/INFLOW LOAD/ SUBCATCHMENT LOAD (16a/17)..	0.000
32b. INFILTRATION/INFLOW LOAD/ INLET LOAD (16a/18).....	0.000
32c. CH/PIPE BMP FRACTION REMOVAL/ SUBCATCHMENT LOAD (17a/17)..	0.000
32d. CH/PIPE 1st ORDER DECAY REMOVAL/ SUBCATCHMENT LOAD (17b/17)..	0.000
33. INLET LOAD SUMMATION ERROR (18+8+6a+17a+17b-17)/17.....	0.000

CAUTION. Due to method of quality routing (Users Manual, Appendix IX) quality routing through channel/pipes is sensitive to the time step. Large "Inlet Load Summation Errors" may result. These can be reduced by adjusting the time step(s). Note: surface accumulation during dry time steps at end of simulation is not included in totals. Buildup is only performed at beginning of wet steps or for street cleaning.

==> Runoff simulation ended normally.
 XXX End of Header Section XXX

```
#####
#   Entry made to the HYDRAULIC Layer of XP-SWMM   #
#   Last Updated in June, 2014 by Innovyze         #
#####
```

```
*=====*
```

	HYDRAULICS TABLES IN THE OUTPUT FILE	
	These are the more important tables in the output file.	
	You can use your editor to find the table numbers,	
	for example: search for Table E20 to check continuity.	

This output file can be imported into a Word Processor and printed on US letter or A4 paper using portrait mode, courier font, a size of 8 pt. and margins of 0.75

- Table E1 - Basic Conduit Data
- Table E2 - Conduit Factor Data
- Table E3a - Junction Data
- Table E3b - Junction Data
- Table E4 - Conduit Connectivity Data
- Table E4a - Dry Weather Flow Data
- Table E4b - Real Time Control Data
- Table E5 - Junction Time Step Limitation Summary
- Table E5a - Conduit Explicit Condition Summary
- Table E6 - Final Model Condition
- Table E7 - Iteration Summary
- Table E8 - Junction Time Step Limitation Summary
- Table E9 - Junction Summary Statistics
- Table E10 - Conduit Summary Statistics
- Table E11 - Area assumptions used in the analysis
- Table E12 - Mean conduit information
- Table E13 - Channel losses(H) and culvert info
- Table E13a - Culvert Analysis Classification
- Table E14 - Natural Channel Overbank Flow Information
- Table E14a - Natural Channel Encroachment Information
- Table E14b - Floodplain Mapping
- Table E15 - Spreadsheet Info List
- Table E15a - Spreadsheet Reach List
- Table E16 - New Conduit Output Section
- Table E17 - Pump Operation
- Table E18 - Junction Continuity Error
- Table E19 - Junction Inflow & Outflow Listing
- Table E20 - Junction Flooding and Volume List
- Table E21 - Continuity balance at simulation end
- Table E22 - Model Judgement Section

Time Control from Hydraulics Job Control

Year.....	2020	Month.....	9
Day.....	15	Hour.....	0
Minute.....	0	Second.....	0

Control information for simulation

Integration cycles.....	11520
Length of integration step is.....	60.00 seconds
Simulation length.....	192.00 hours
Do not create equiv. pipes(NEQUAL).	0
Use U.S. customary units for I/O...	0

Printing starts in cycle..... 1
 Intermediate printout intervals of. 500 cycles
 Intermediate printout intervals of. 500.00 minutes
 Summary printout intervals of..... 500 cycles
 Summary printout time interval of.. 500.00 minutes
 Hot start file parameter (REDO).... 0
 Initial time..... 0.00 hours

Iteration variables: Flow Tolerance. 0.00010
 Head Tolerance. 0.00050
 Minimum depth (m or ft)..... 0.00001
 Underrelaxation parameter..... 0.85000
 Time weighting parameter..... 0.85000
 Conduit roughness factor..... 1.00000
 Flow adjustment factor..... 1.00000
 Initial Condition Smoothing..... 0
 Courant Time Step Factor..... 1.00000
 Default Expansion/Contraction K. 0.00000
 Default Entrance/Exit K..... 0.00000
 Routing Method..... Dynamic Wave
 Default surface area of junctions... 12.57 square feet.
 Minimum Junction/Conduit Depth..... 0.00001 feet.
 Ponding Area Coefficient..... 5000.00
 Ponding Area Exponent..... 1.0000
 Minimum Orifice Length..... 1000.00 feet.
 NJSW input hydrograph junctions..... 0
 or user defined hydrographs....

Natural Cross-Section information for Channel R0386

=====

Cross-Section ID (from X1 card) : 1.0 Channel sequence number : 1

Left Overbank Length	:	33.0 ft	Maximum Elevation	:	
8.34 ft.					
Main Channel Length	:	33.0 ft	Maximum Depth	:	
6.07 ft.					
Right Overbank Length	:	33.0 ft	Maximum Section Area	:	
194.6050 ft^2					
			Maximum hydraulic radius	:	
2.41 ft.					
Manning N	:	0.035 to Station	18.0	Max topwidth	:
79.00 ft.					
" "	:	0.035 in main Channel		Maximum Wetted Perimeter	:
8.09E+01 ft					
" "	:	0.035 Beyond station	63.0	Max left bank area	:
13.77 ft^2					
				Max right bank area	:
4.48 ft^2					
Allowable Encroachment Depth	:	0.00 ft		Max center channel area	:
176.3550 ft^2					

Natural Cross-Section information for Channel R0388

=====

Cross-Section ID (from X1 card) :	2.0	Channel sequence number :	2
Left Overbank Length :	33.0 ft	Maximum Elevation :	
8.34 ft.			
Main Channel Length :	33.0 ft	Maximum Depth :	
6.07 ft.			
Right Overbank Length :	33.0 ft	Maximum Section Area :	
194.6050 ft^2		Maximum hydraulic radius :	
2.41 ft.			
Manning N :	0.035 to Station	18.0	Max topwidth :
79.00 ft.			
" " :	0.035 in main Channel		Maximum Wetted Perimeter :
8.09E+01 ft			
" " :	0.035 Beyond station	63.0	Max left bank area :
13.77 ft^2			Max right bank area :
4.48 ft^2			Max center channel area :
Allowable Encroachment Depth :	0.00 ft		
176.3550 ft^2			

Natural Cross-Section information for Channel R0385

=====

Cross-Section ID (from X1 card) :	3.0	Channel sequence number :	3
Left Overbank Length :	33.0 ft	Maximum Elevation :	
8.34 ft.			
Main Channel Length :	33.0 ft	Maximum Depth :	
6.07 ft.			
Right Overbank Length :	33.0 ft	Maximum Section Area :	
194.6050 ft^2		Maximum hydraulic radius :	
2.41 ft.			
Manning N :	0.035 to Station	18.0	Max topwidth :
79.00 ft.			
" " :	0.035 in main Channel		Maximum Wetted Perimeter :
8.09E+01 ft			
" " :	0.035 Beyond station	63.0	Max left bank area :
13.77 ft^2			Max right bank area :
4.48 ft^2			Max center channel area :
Allowable Encroachment Depth :	0.00 ft		
176.3550 ft^2			

Natural Cross-Section information for Channel R0375

=====

Cross-Section ID (from X1 card) :	4.0	Channel sequence number :	4
-----------------------------------	-----	---------------------------	---

Left Overbank Length	:	33.0 ft	Maximum Elevation	:	
7.30 ft.					
Main Channel Length	:	33.0 ft	Maximum Depth	:	
5.43 ft.					
Right Overbank Length	:	33.0 ft	Maximum Section Area	:	
200.9050 ft^2					
			Maximum hydraulic radius	:	
2.86 ft.					
Manning N	:	0.035 to Station	18.0	Max topwidth	:
69.00 ft.					
" "	:	0.035 in main Channel		Maximum Wetted Perimeter	:
7.02E+01 ft					
" "	:	0.035 Beyond station	62.0	Max left bank area	:
5.49 ft^2					
				Max right bank area	:
14.04 ft^2					
Allowable Encroachment Depth	:	0.00 ft		Max center channel area	:
181.3800 ft^2					

Natural Cross-Section information for Channel R0335

=====

Cross-Section ID (from X1 card) : 5.0 Channel sequence number : 5

Left Overbank Length	:	33.0 ft	Maximum Elevation	:	
6.16 ft.					
Main Channel Length	:	33.0 ft	Maximum Depth	:	
6.88 ft.					
Right Overbank Length	:	33.0 ft	Maximum Section Area	:	
228.5800 ft^2					
			Maximum hydraulic radius	:	
2.94 ft.					
Manning N	:	0.035 to Station	13.0	Max topwidth	:
76.00 ft.					
" "	:	0.035 in main Channel		Maximum Wetted Perimeter	:
7.77E+01 ft					
" "	:	0.035 Beyond station	76.0	Max left bank area	:
1.17 ft^2					
				Max right bank area	:
0.00 ft^2					
Allowable Encroachment Depth	:	0.00 ft		Max center channel area	:
227.4100 ft^2					

Input Information from Internal Weir R0540-W3

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----

1	5.930	45.000	1.500	2.600
2	5.940	20.000	1.500	2.600
3	5.915	70.000	1.500	2.600
4	5.905	35.000	1.500	2.600
5	5.875	24.000	1.500	2.600
6	5.880	55.000	1.500	2.600
7	5.955	25.000	1.500	2.600
8	5.975	15.000	1.500	2.600
9	5.940	25.000	1.500	2.600
10	5.895	10.000	1.500	2.600
11	5.920	30.000	1.500	2.600
12	5.940	15.000	1.500	2.600
13	5.875	40.000	1.500	2.600
14	5.785	55.000	1.500	2.600
15	5.730	20.000	1.500	2.600
16	5.695	25.000	1.500	2.600
17	5.635	9.000	1.500	2.600
18	5.430	45.000	1.500	2.600
19	5.250	10.000	1.500	2.600
20	5.225	5.000	1.500	2.600
21	5.235	10.000	1.500	2.600
22	5.205	50.000	1.500	2.600
23	5.070	15.000	1.500	2.600
24	5.035	30.000	1.500	2.600
25	5.125	15.000	1.500	2.600

=====
Input Information from Internal Weir R0290-P5
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.880	0.000	1.500	2.600
2	7.040	43.000	1.500	2.600
3	7.310	67.000	1.500	2.600
4	7.320	76.000	1.500	2.600
5	7.140	95.000	1.500	2.600

=====
Input Information from Internal Weir R0285-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.395	39.000	1.500	2.600
2	6.545	15.000	1.500	2.600
3	6.630	29.000	1.500	2.600
4	6.760	10.000	1.500	2.600

5	6.805	20.000	1.500	2.600
6	6.805	10.000	1.500	2.600
7	6.975	29.000	1.500	2.600
8	6.980	19.000	1.500	2.600
9	7.020	24.000	1.500	2.600
10	7.055	34.000	1.500	2.600
11	7.040	15.000	1.500	2.600
12	6.995	10.000	1.500	2.600
13	6.870	35.000	1.500	2.600
14	6.730	10.000	1.500	2.600
15	6.610	49.000	1.500	2.600
16	6.520	10.000	1.500	2.600
17	6.505	15.000	1.500	2.600
18	6.450	15.000	1.500	2.600
19	6.320	45.000	1.500	2.600
20	6.230	10.000	1.500	2.600
21	6.165	14.000	1.500	2.600
22	6.080	10.000	1.500	2.600
23	6.005	35.000	1.500	2.600
24	5.885	23.000	1.500	2.600
25	5.810	52.000	1.500	2.600
26	5.880	19.000	1.500	2.600
27	5.790	34.000	1.500	2.600
28	5.805	34.000	1.500	2.600
29	5.830	29.000	1.500	2.600

=====
Input Information from Internal Weir R0250-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	4.165	32.000	1.500	2.600
2	4.160	37.000	1.500	2.600
3	4.215	9.000	1.500	2.600
4	4.225	15.000	1.500	2.600
5	4.245	20.000	1.500	2.600
6	4.285	15.000	1.500	2.600
7	4.240	20.000	1.500	2.600
8	4.365	5.000	1.500	2.600
9	4.355	10.000	1.500	2.600
10	4.195	39.000	1.500	2.600
11	4.260	30.000	1.500	2.600
12	4.310	10.000	1.500	2.600
13	4.315	34.000	1.500	2.600
14	4.200	49.000	1.500	2.600
15	4.060	10.000	1.500	2.600
16	3.995	14.000	1.500	2.600
17	4.005	39.000	1.500	2.600

18	4.045	5.000	1.500	2.600
19	4.035	14.000	1.500	2.600
20	4.060	54.000	1.500	2.600
21	4.095	20.000	1.500	2.600

=====
Input Information from Internal Weir R0230-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	2.600	15.000	1.500	2.600
2	2.660	5.000	1.500	2.600
3	2.820	20.000	1.500	2.600
4	2.765	24.000	1.500	2.600
5	2.790	20.000	1.500	2.600
6	2.860	25.000	1.500	2.600
7	2.860	5.000	1.500	2.600
8	2.765	15.000	1.500	2.600
9	2.735	15.000	1.500	2.600
10	2.780	9.000	1.500	2.600
11	2.665	45.000	1.500	2.600
12	2.540	10.000	1.500	2.600
13	2.490	10.000	1.500	2.600
14	2.390	10.000	1.500	2.600
15	2.460	19.000	1.500	2.600
16	2.580	10.000	1.500	2.600
17	2.585	15.000	1.500	2.600
18	2.590	25.000	1.500	2.600
19	2.725	35.000	1.500	2.600
20	2.880	14.000	1.500	2.600
21	2.860	10.000	1.500	2.600
22	2.810	10.000	1.500	2.600
23	2.610	30.000	1.500	2.600
24	2.460	54.000	1.500	2.600
25	2.490	12.000	1.500	2.600
26	2.440	10.000	1.500	2.600
27	2.270	29.000	1.500	2.600
28	2.245	5.000	1.500	2.600
29	2.420	15.000	1.500	2.600
30	3.245	33.000	1.500	2.600
31	3.800	15.000	1.500	2.600
32	3.750	10.000	1.500	2.600
33	3.640	10.000	1.500	2.600
34	3.705	24.000	1.500	2.600
35	3.800	10.000	1.500	2.600
36	3.715	15.000	1.500	2.600
37	3.620	19.000	1.500	2.600
38	3.625	20.000	1.500	2.600

39	3.670	5.000	1.500	2.600
40	3.635	4.000	1.500	2.600
41	3.675	10.000	1.500	2.600
42	3.510	30.000	1.500	2.600
43	3.435	14.000	1.500	2.600
44	3.470	23.000	1.500	2.600
45	3.575	16.000	1.500	2.600
46	3.670	18.000	1.500	2.600
47	3.725	14.000	1.500	2.600
48	3.865	31.000	1.500	2.600
49	3.845	30.000	1.500	2.600
50	3.690	10.000	1.500	2.600
51	3.740	24.000	1.500	2.600
52	3.755	45.000	1.500	2.600
53	3.735	34.000	1.500	2.600
54	3.730	15.000	1.500	2.600

=====
Input Information from Internal Weir R0220-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.080	14.000	1.500	2.600
2	5.000	20.000	1.500	2.600
3	5.130	14.000	1.500	2.600
4	5.355	29.000	1.500	2.600
5	5.395	10.000	1.500	2.600
6	5.455	19.000	1.500	2.600
7	5.395	75.000	1.500	2.600
8	5.295	10.000	1.500	2.600
9	5.365	30.000	1.500	2.600
10	5.270	15.000	1.500	2.600
11	5.275	24.000	1.500	2.600
12	5.265	69.000	1.500	2.600
13	5.275	9.000	1.500	2.600
14	5.410	18.000	1.500	2.600
15	5.330	18.000	1.500	2.600
16	5.270	18.000	1.500	2.600
17	5.545	20.000	1.500	2.600
18	5.660	11.000	1.500	2.600
19	5.570	4.000	1.500	2.600
20	5.460	9.000	1.500	2.600
21	5.450	15.000	1.500	2.600
22	5.465	9.000	1.500	2.600
23	5.245	49.000	1.500	2.600

=====
Input Information from Internal Weir R0200-W3
=====


```

=====
Point      Data      Data      Data      Data
No.        Column   Column   Column   Column
           # 1     # 2     # 3     # 4
-----
1          7.640   38.000   1.500   2.600
2          7.490    8.000   1.500   2.600
3          7.420   31.000   1.500   2.600
4          7.485   58.000   1.500   2.600
5          7.605   14.000   1.500   2.600
6          7.800   10.000   1.500   2.600
7          7.945    5.000   1.500   2.600
8          7.955   24.000   1.500   2.600

```

```

=====
Input Information from Internal Weir R0190-W4
=====

```

```

Point      Data      Data      Data      Data
No.        Column   Column   Column   Column
           # 1     # 2     # 3     # 4
-----
1          7.180    5.000   1.500   2.600
2          7.295    5.000   1.500   2.600
3          7.370   15.000   1.500   2.600
4          7.430   19.000   1.500   2.600
5          7.555   50.000   1.500   2.600
6          7.795   59.000   1.500   2.600
7          8.000   15.000   1.500   2.600
8          8.025   19.000   1.500   2.600
9          7.960   25.000   1.500   2.600
10         7.855   44.000   1.500   2.600
11         7.950    5.000   1.500   2.600
12         7.940   15.000   1.500   2.600
13         7.960   15.000   1.500   2.600
14         7.925   44.000   1.500   2.600
15         7.845   20.000   1.500   2.600
16         7.765   34.000   1.500   2.600
17         7.745   44.000   1.500   2.600
18         7.745   40.000   1.500   2.600
19         7.735   30.000   1.500   2.600
20         7.770   10.000   1.500   2.600
21         7.745   15.000   1.500   2.600
22         7.595   34.000   1.500   2.600
23         7.405   45.000   1.500   2.600
24         7.335   15.000   1.500   2.600
25         7.415   30.000   1.500   2.600
26         7.490   10.000   1.500   2.600
27         7.490    5.000   1.500   2.600
28         7.630   20.000   1.500   2.600
29         7.545   70.000   1.500   2.600

```

30	7.155	43.000	1.500	2.600
31	7.070	15.000	1.500	2.600
32	7.200	9.000	1.500	2.600

=====
Input Information from Internal Weir R0170-W3
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	8.215	20.000	1.500	2.600
2	7.975	15.000	1.500	2.600
3	7.690	10.000	1.500	2.600
4	7.725	5.000	1.500	2.600
5	7.785	40.000	1.500	2.600
6	7.805	5.000	1.500	2.600
7	8.100	10.000	1.500	2.600
8	8.160	10.000	1.500	2.600
9	7.895	10.000	1.500	2.600
10	7.890	10.000	1.500	2.600
11	7.875	15.000	1.500	2.600
12	7.855	15.000	1.500	2.600
13	8.170	10.000	1.500	2.600
14	8.960	45.000	1.500	2.600
15	9.395	15.000	1.500	2.600
16	9.505	50.000	1.500	2.600
17	9.440	29.000	1.500	2.600
18	8.850	40.000	1.500	2.600
19	8.735	21.000	1.500	2.600
20	8.705	24.000	1.500	2.600
21	8.565	25.000	1.500	2.600
22	8.570	14.000	1.500	2.600
23	8.625	25.000	1.500	2.600
24	8.755	13.000	1.500	2.600
25	8.505	29.000	1.500	2.600
26	8.390	33.000	1.500	2.600
27	8.285	33.000	1.500	2.600
28	7.745	27.000	1.500	2.600
29	7.275	5.000	1.500	2.600
30	7.095	10.000	1.500	2.600
31	6.935	10.000	1.500	2.600
32	6.795	5.000	1.500	2.600
33	7.005	69.000	1.500	2.600
34	7.280	78.000	1.500	2.600
35	7.460	10.000	1.500	2.600
36	7.510	15.000	1.500	2.600
37	7.575	9.000	1.500	2.600
38	7.635	15.000	1.500	2.600
39	7.700	25.000	1.500	2.600

=====
Input Information from Internal Weir R0180-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.470	16.000	1.500	2.600
2	7.260	24.000	1.500	2.600
3	7.090	10.000	1.500	2.600
4	7.030	10.000	1.500	2.600
5	7.030	10.000	1.500	2.600
6	7.005	15.000	1.500	2.600
7	7.210	10.000	1.500	2.600
8	7.240	20.000	1.500	2.600
9	7.300	40.000	1.500	2.600
10	7.455	35.000	1.500	2.600
11	7.560	10.000	1.500	2.600
12	7.585	19.000	1.500	2.600
13	7.550	40.000	1.500	2.600
14	7.505	10.000	1.500	2.600
15	7.480	9.000	1.500	2.600
16	7.495	15.000	1.500	2.600
17	7.605	64.000	1.500	2.600
18	7.790	30.000	1.500	2.600
19	7.895	10.000	1.500	2.600
20	7.920	14.000	1.500	2.600
21	7.955	10.000	1.500	2.600

=====
Input Information from Internal Weir R0140-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	8.330	23.000	1.500	2.600
2	7.925	14.000	1.500	2.600
3	7.620	10.000	1.500	2.600
4	7.435	5.000	1.500	2.600
5	7.760	9.000	1.500	2.600
6	7.685	19.000	1.500	2.600
7	7.795	28.000	1.500	2.600
8	8.315	17.000	1.500	2.600

=====
Input Information from Internal Weir R0150-W3
=====

Point	Data	Data	Data	Data
-------	------	------	------	------

No.	Column # 1	Column # 2	Column # 3	Column # 4
1	5.590	25.000	1.500	2.600
2	5.655	19.000	1.500	2.600
3	5.650	15.000	1.500	2.600
4	5.635	5.000	1.500	2.600
5	5.590	10.000	1.500	2.600
6	5.515	29.000	1.500	2.600
7	5.250	10.000	1.500	2.600
8	5.055	40.000	1.500	2.600
9	5.085	5.000	1.500	2.600
10	5.215	24.000	1.500	2.600
11	5.215	5.000	1.500	2.600
12	5.300	10.000	1.500	2.600
13	5.470	20.000	1.500	2.600
14	5.335	19.000	1.500	2.600
15	4.785	20.000	1.500	2.600
16	4.470	10.000	1.500	2.600
17	4.485	30.000	1.500	2.600
18	4.450	20.000	1.500	2.600
19	4.555	14.000	1.500	2.600
20	4.475	20.000	1.500	2.600
21	4.375	15.000	1.500	2.600
22	4.385	23.000	1.500	2.600
23	4.305	39.000	1.500	2.600
24	4.390	30.000	1.500	2.600
25	4.485	25.000	1.500	2.600
26	4.370	10.000	1.500	2.600
27	4.420	15.000	1.500	2.600
28	4.610	20.000	1.500	2.600
29	4.500	25.000	1.500	2.600
30	4.365	29.000	1.500	2.600
31	4.495	15.000	1.500	2.600
32	4.565	20.000	1.500	2.600
33	4.625	15.000	1.500	2.600
34	4.610	5.000	1.500	2.600
35	4.620	80.000	1.500	2.600
36	4.640	10.000	1.500	2.600
37	4.615	10.000	1.500	2.600
38	4.715	20.000	1.500	2.600
39	4.895	10.000	1.500	2.600
40	4.950	20.000	1.500	2.600
41	4.990	45.000	1.500	2.600
42	5.105	25.000	1.500	2.600
43	5.050	40.000	1.500	2.600
44	5.170	10.000	1.500	2.600
45	5.190	15.000	1.500	2.600
46	5.165	10.000	1.500	2.600

=====
Input Information from Internal Weir R0110-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.540	24.000	1.500	2.600
2	6.455	34.000	1.500	2.600
3	6.340	4.000	1.500	2.600
4	6.455	20.000	1.500	2.600
5	6.510	30.000	1.500	2.600
6	6.555	32.000	1.500	2.600
7	6.585	9.000	1.500	2.600
8	6.600	62.000	1.500	2.600
9	6.635	109.000	1.500	2.600
10	6.670	10.000	1.500	2.600
11	6.770	39.000	1.500	2.600
12	6.710	10.000	1.500	2.600
13	6.740	45.000	1.500	2.600
14	6.760	10.000	1.500	2.600
15	6.800	10.000	1.500	2.600
16	6.855	5.000	1.500	2.600
17	6.825	53.000	1.500	2.600
18	6.780	10.000	1.500	2.600
19	6.795	24.000	1.500	2.600
20	6.820	19.000	1.500	2.600
21	6.805	5.000	1.500	2.600

=====
Input Information from Internal Weir R0130-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.825	60.000	1.500	2.600
2	7.845	24.000	1.500	2.600
3	7.880	20.000	1.500	2.600
4	7.910	10.000	1.500	2.600
5	7.785	45.000	1.500	2.600
6	7.765	10.000	1.500	2.600
7	7.720	10.000	1.500	2.600
8	7.675	65.000	1.500	2.600
9	7.610	15.000	1.500	2.600
10	7.550	60.000	1.500	2.600
11	7.490	5.000	1.500	2.600
12	7.460	15.000	1.500	2.600
13	7.495	10.000	1.500	2.600
14	7.525	40.000	1.500	2.600

15	7.510	10.000	1.500	2.600
16	7.520	55.000	1.500	2.600
17	7.460	15.000	1.500	2.600
18	7.365	15.000	1.500	2.600
19	7.295	20.000	1.500	2.600

=====
Input Information from Internal Weir R0100-W4
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.155	15.000	1.500	2.600
2	5.920	60.000	1.500	2.600
3	5.835	5.000	1.500	2.600
4	5.835	20.000	1.500	2.600
5	5.875	24.000	1.500	2.600
6	5.905	30.000	1.500	2.600
7	5.920	10.000	1.500	2.600
8	5.950	10.000	1.500	2.600
9	5.985	5.000	1.500	2.600
10	5.975	10.000	1.500	2.600
11	5.935	40.000	1.500	2.600
12	5.920	10.000	1.500	2.600
13	5.970	25.000	1.500	2.600
14	5.835	15.000	1.500	2.600
15	5.760	20.000	1.500	2.600
16	5.710	9.000	1.500	2.600
17	5.695	15.000	1.500	2.600
18	5.625	20.000	1.500	2.600
19	5.510	20.000	1.500	2.600
20	5.645	5.000	1.500	2.600
21	5.675	40.000	1.500	2.600
22	5.710	40.000	1.500	2.600
23	5.725	20.000	1.500	2.600
24	5.675	25.000	1.500	2.600
25	5.625	14.000	1.500	2.600
26	5.610	15.000	1.500	2.600
27	5.620	15.000	1.500	2.600
28	5.600	20.000	1.500	2.600
29	5.560	40.000	1.500	2.600
30	5.535	10.000	1.500	2.600
31	5.490	30.000	1.500	2.600
32	5.460	40.000	1.500	2.600
33	5.490	5.000	1.500	2.600
34	5.475	9.000	1.500	2.600
35	5.450	5.000	1.500	2.600
36	5.465	40.000	1.500	2.600
37	5.650	25.000	1.500	2.600

38	5.650	10.000	1.500	2.600
39	5.735	40.000	1.500	2.600
40	5.810	10.000	1.500	2.600
41	5.745	10.000	1.500	2.600
42	5.695	15.000	1.500	2.600
43	5.770	10.000	1.500	2.600
44	5.760	44.000	1.500	2.600
45	5.615	10.000	1.500	2.600
46	5.555	10.000	1.500	2.600
47	5.435	40.000	1.500	2.600

=====
Input Information from Internal Weir R0310-W5.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	10.190	15.000	1.500	2.600
2	9.870	10.000	1.500	2.600
3	9.855	10.000	1.500	2.600
4	10.065	15.000	1.500	2.600
5	10.020	5.000	1.500	2.600
6	9.740	10.000	1.500	2.600
7	9.815	15.000	1.500	2.600
8	10.065	10.000	1.500	2.600
9	9.885	5.000	1.500	2.600
10	9.160	10.000	1.500	2.600
11	8.240	10.000	1.500	2.600
12	7.910	15.000	1.500	2.600
13	7.685	20.000	1.500	2.600
14	7.065	15.000	1.500	2.600
15	6.595	5.000	1.500	2.600
16	5.910	20.000	1.500	2.600
17	4.845	25.000	1.500	2.600
18	3.955	10.000	1.500	2.600
19	3.380	5.000	1.500	2.600
20	3.230	10.000	1.500	2.600
21	3.285	10.000	1.500	2.600
22	3.155	10.000	1.500	2.600
23	2.785	15.000	1.500	2.600
24	2.615	10.000	1.500	2.600
25	2.620	5.000	1.500	2.600
26	2.890	15.000	1.500	2.600
27	4.635	50.000	1.500	2.600
28	6.450	35.000	1.500	2.600
29	6.780	25.000	1.500	2.600
30	6.335	15.000	1.500	2.600
31	5.740	10.000	1.500	2.600
32	5.670	24.000	1.500	2.600

33	5.650	25.000	1.500	2.600
34	5.270	5.000	1.500	2.600
35	4.740	10.000	1.500	2.600
36	4.555	10.000	1.500	2.600
37	4.930	10.000	1.500	2.600
38	5.600	20.000	1.500	2.600

=====
Input Information from Internal Weir R0430-W3
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.280	19.000	1.500	2.600
2	6.310	10.000	1.500	2.600
3	6.335	29.000	1.500	2.600
4	6.350	25.000	1.500	2.600
5	6.355	14.000	1.500	2.600
6	6.375	20.000	1.500	2.600
7	6.360	14.000	1.500	2.600
8	6.355	15.000	1.500	2.600
9	6.335	40.000	1.500	2.600
10	6.290	25.000	1.500	2.600
11	6.285	29.000	1.500	2.600
12	6.305	35.000	1.500	2.600
13	6.300	35.000	1.500	2.600
14	6.285	30.000	1.500	2.600
15	6.245	20.000	1.500	2.600
16	6.235	79.000	1.500	2.600
17	6.250	29.000	1.500	2.600
18	6.195	60.000	1.500	2.600
19	6.115	20.000	1.500	2.600
20	6.085	10.000	1.500	2.600
21	6.200	54.000	1.500	2.600
22	6.170	9.000	1.500	2.600
23	6.185	15.000	1.500	2.600
24	6.190	116.000	1.500	2.600
25	6.245	25.000	1.500	2.600
26	6.225	34.000	1.500	2.600
27	6.140	37.000	1.500	2.600

=====
Input Information from Internal Weir R0340-W3
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.295	15.000	1.500	2.600

2	5.360	20.000	1.500	2.600
3	5.645	49.000	1.500	2.600
4	5.645	20.000	1.500	2.600
5	5.620	10.000	1.500	2.600
6	5.555	65.000	1.500	2.600
7	5.525	34.000	1.500	2.600
8	5.460	60.000	1.500	2.600
9	5.355	10.000	1.500	2.600
10	5.330	10.000	1.500	2.600
11	5.205	40.000	1.500	2.600
12	5.235	14.000	1.500	2.600
13	5.360	55.000	1.500	2.600
14	5.350	15.000	1.500	2.600
15	5.370	20.000	1.500	2.600
16	5.435	30.000	1.500	2.600
17	5.310	15.000	1.500	2.600
18	5.310	9.000	1.500	2.600
19	5.355	10.000	1.500	2.600
20	5.425	10.000	1.500	2.600
21	5.605	15.000	1.500	2.600
22	5.510	15.000	1.500	2.600
23	5.600	15.000	1.500	2.600
24	5.615	50.000	1.500	2.600
25	5.465	15.000	1.500	2.600
26	5.395	14.000	1.500	2.600
27	5.300	15.000	1.500	2.600
28	5.255	20.000	1.500	2.600
29	5.235	20.000	1.500	2.600
30	5.045	20.000	1.500	2.600
31	4.725	15.000	1.500	2.600
32	4.915	10.000	1.500	2.600
33	5.225	20.000	1.500	2.600
34	5.175	10.000	1.500	2.600
35	5.135	10.000	1.500	2.600
36	5.165	25.000	1.500	2.600
37	5.200	5.000	1.500	2.600
38	5.200	10.000	1.500	2.600
39	5.140	60.000	1.500	2.600
40	5.325	35.000	1.500	2.600
41	5.425	30.000	1.500	2.600
42	5.450	15.000	1.500	2.600
43	5.460	20.000	1.500	2.600
44	5.415	25.000	1.500	2.600

=====
Input Information from Internal Weir R0350-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----------	-----------------	-----------------	-----------------	-----------------

1	7.560	5.000	1.500	2.600
2	7.960	42.000	1.500	2.600
3	8.635	28.000	1.500	2.600

Input Information from Internal Weir R0330-W1

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.480	15.000	1.500	2.600
2	5.505	15.000	1.500	2.600
3	5.545	10.000	1.500	2.600
4	5.625	5.000	1.500	2.600
5	5.295	10.000	1.500	2.600
6	5.205	15.000	1.500	2.600
7	5.340	5.000	1.500	2.600
8	5.320	14.000	1.500	2.600
9	5.595	10.000	1.500	2.600
10	5.840	5.000	1.500	2.600
11	5.685	15.000	1.500	2.600
12	5.575	10.000	1.500	2.600
13	5.955	15.000	1.500	2.600
14	6.170	5.000	1.500	2.600
15	5.720	5.000	1.500	2.600
16	5.125	5.000	1.500	2.600
17	4.790	5.000	1.500	2.600
18	4.990	10.000	1.500	2.600
19	5.225	10.000	1.500	2.600
20	5.550	15.000	1.500	2.600
21	6.080	10.000	1.500	2.600
22	5.900	15.000	1.500	2.600
23	5.630	5.000	1.500	2.600
24	6.010	5.000	1.500	2.600
25	6.795	4.000	1.500	2.600
26	7.170	5.000	1.500	2.600
27	6.705	5.000	1.500	2.600
28	6.090	5.000	1.500	2.600
29	5.800	5.000	1.500	2.600
30	5.855	5.000	1.500	2.600
31	5.875	10.000	1.500	2.600
32	5.930	5.000	1.500	2.600
33	6.075	5.000	1.500	2.600
34	5.945	5.000	1.500	2.600
35	5.780	10.000	1.500	2.600
36	5.590	10.000	1.500	2.600
37	5.930	40.000	1.500	2.600
38	6.220	5.000	1.500	2.600

39	5.855	15.000	1.500	2.600
40	5.745	20.000	1.500	2.600
41	5.730	5.000	1.500	2.600
42	5.940	9.000	1.500	2.600
43	6.245	5.000	1.500	2.600
44	5.995	10.000	1.500	2.600
45	5.795	15.000	1.500	2.600
46	5.840	5.000	1.500	2.600
47	5.625	5.000	1.500	2.600
48	5.395	5.000	1.500	2.600
49	5.275	30.000	1.500	2.600
50	5.230	5.000	1.500	2.600
51	5.450	5.000	1.500	2.600
52	6.185	10.000	1.500	2.600
53	6.800	5.000	1.500	2.600
54	6.730	5.000	1.500	2.600
55	6.620	5.000	1.500	2.600
56	6.885	10.000	1.500	2.600
57	7.075	10.000	1.500	2.600
58	7.205	5.000	1.500	2.600
59	7.690	5.000	1.500	2.600
60	8.065	5.000	1.500	2.600
61	7.715	10.000	1.500	2.600
62	7.235	15.000	1.500	2.600
63	7.020	5.000	1.500	2.600
64	6.055	15.000	1.500	2.600
65	5.220	4.000	1.500	2.600
66	5.475	10.000	1.500	2.600
67	5.680	20.000	1.500	2.600
68	5.755	10.000	1.500	2.600
69	5.810	5.000	1.500	2.600
70	5.470	5.000	1.500	2.600
71	5.070	5.000	1.500	2.600
72	5.110	30.000	1.500	2.600
73	5.210	20.000	1.500	2.600
74	5.275	10.000	1.500	2.600
75	6.065	15.000	1.500	2.600
76	6.750	5.000	1.500	2.600
77	6.625	5.000	1.500	2.600
78	5.940	10.000	1.500	2.600
79	5.375	5.000	1.500	2.600
80	5.420	15.000	1.500	2.600
81	5.385	25.000	1.500	2.600
82	5.085	20.000	1.500	2.600
83	4.795	10.000	1.500	2.600
84	4.710	10.000	1.500	2.600
85	4.525	10.000	1.500	2.600
86	4.350	5.000	1.500	2.600

=====

Input Information from Internal Weir R0360-W1

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.300	19.000	1.500	2.600
2	4.615	53.000	1.500	2.600
3	5.845	49.000	1.500	2.600
4	7.100	9.000	1.500	2.600

Input Information from Internal Weir R0550-W2

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	8.335	15.000	1.500	2.600
2	8.220	9.000	1.500	2.600
3	8.005	15.000	1.500	2.600
4	7.770	24.000	1.500	2.600
5	7.490	49.000	1.500	2.600
6	7.265	4.000	1.500	2.600
7	6.775	5.000	1.500	2.600
8	6.005	10.000	1.500	2.600

Input Information from Internal Weir R0560-W1

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	9.260	44.000	1.500	2.600
2	9.280	14.000	1.500	2.600
3	9.350	24.000	1.500	2.600
4	9.250	25.000	1.500	2.600
5	9.175	24.000	1.500	2.600
6	9.275	10.000	1.500	2.600
7	9.225	65.000	1.500	2.600
8	9.145	15.000	1.500	2.600
9	9.410	15.000	1.500	2.600
10	9.675	10.000	1.500	2.600
11	9.750	50.000	1.500	2.600
12	9.670	25.000	1.500	2.600
13	9.610	10.000	1.500	2.600
14	9.565	10.000	1.500	2.600
15	9.585	55.000	1.500	2.600
16	9.605	30.000	1.500	2.600

17	9.585	19.000	1.500	2.600
18	9.600	80.000	1.500	2.600
19	9.620	20.000	1.500	2.600
20	9.580	5.000	1.500	2.600
21	9.545	65.000	1.500	2.600
22	9.565	5.000	1.500	2.600
23	9.555	15.000	1.500	2.600
24	9.530	5.000	1.500	2.600
25	9.565	10.000	1.500	2.600
26	9.570	20.000	1.500	2.600
27	9.555	10.000	1.500	2.600
28	9.600	10.000	1.500	2.600

=====
Input Information from Internal Weir R0780-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.780	62.000	1.500	2.600
2	7.045	39.000	1.500	2.600
3	6.855	24.000	1.500	2.600
4	7.170	40.000	1.500	2.600
5	7.795	25.000	1.500	2.600
6	8.090	25.000	1.500	2.600
7	8.180	4.000	1.500	2.600
8	8.195	10.000	1.500	2.600
9	8.210	20.000	1.500	2.600
10	8.220	10.000	1.500	2.600
11	8.135	64.000	1.500	2.600
12	8.050	10.000	1.500	2.600
13	8.035	30.000	1.500	2.600
14	8.030	10.000	1.500	2.600
15	8.015	5.000	1.500	2.600
16	8.005	24.000	1.500	2.600
17	7.980	25.000	1.500	2.600
18	7.920	30.000	1.500	2.600
19	7.835	15.000	1.500	2.600
20	8.065	24.000	1.500	2.600
21	8.240	20.000	1.500	2.600

=====
Input Information from Internal Weir R0740-W3
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.905	24.000	1.500	2.600

2	3.965	25.000	1.500	2.600
3	4.520	9.000	1.500	2.600
4	4.860	5.000	1.500	2.600

=====
Input Information from Internal Weir R0870-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.945	26.000	1.500	2.600
2	5.860	15.000	1.500	2.600
3	5.870	5.000	1.500	2.600
4	6.055	5.000	1.500	2.600
5	6.120	10.000	1.500	2.600
6	6.085	5.000	1.500	2.600
7	6.100	9.000	1.500	2.600
8	6.145	20.000	1.500	2.600
9	5.970	20.000	1.500	2.600
10	5.830	20.000	1.500	2.600
11	5.975	10.000	1.500	2.600
12	6.045	20.000	1.500	2.600
13	6.065	24.000	1.500	2.600
14	5.985	20.000	1.500	2.600
15	5.645	10.000	1.500	2.600
16	5.605	20.000	1.500	2.600
17	5.630	10.000	1.500	2.600
18	5.895	20.000	1.500	2.600
19	6.250	5.000	1.500	2.600
20	5.745	10.000	1.500	2.600
21	5.240	5.000	1.500	2.600
22	5.585	10.000	1.500	2.600
23	6.000	14.000	1.500	2.600
24	5.915	15.000	1.500	2.600
25	5.920	10.000	1.500	2.600
26	6.260	25.000	1.500	2.600
27	6.350	10.000	1.500	2.600
28	6.330	15.000	1.500	2.600
29	6.270	10.000	1.500	2.600
30	6.280	34.000	1.500	2.600
31	6.310	15.000	1.500	2.600
32	6.310	10.000	1.500	2.600
33	5.985	24.000	1.500	2.600
34	5.585	15.000	1.500	2.600
35	5.550	15.000	1.500	2.600
36	5.615	9.000	1.500	2.600
37	5.660	10.000	1.500	2.600
38	5.610	34.000	1.500	2.600
39	6.185	34.000	1.500	2.600

40	7.075	15.000	1.500	2.600
41	7.140	15.000	1.500	2.600
42	6.950	10.000	1.500	2.600
43	6.895	15.000	1.500	2.600
44	6.895	20.000	1.500	2.600
45	7.005	15.000	1.500	2.600
46	7.020	15.000	1.500	2.600
47	6.830	25.000	1.500	2.600
48	6.655	15.000	1.500	2.600
49	6.750	26.000	1.500	2.600
50	6.690	14.000	1.500	2.600
51	6.670	71.000	1.500	2.600
52	6.635	14.000	1.500	2.600
53	6.545	44.000	1.500	2.600
54	6.810	88.000	1.500	2.600

=====
Input Information from Internal Weir R0950-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.595	44.000	1.500	2.600
2	3.245	15.000	1.500	2.600
3	2.990	35.000	1.500	2.600
4	2.930	10.000	1.500	2.600
5	3.245	14.000	1.500	2.600
6	3.380	25.000	1.500	2.600
7	3.305	35.000	1.500	2.600
8	3.275	5.000	1.500	2.600
9	3.315	40.000	1.500	2.600
10	3.390	5.000	1.500	2.600
11	3.410	5.000	1.500	2.600
12	3.390	50.000	1.500	2.600
13	3.380	5.000	1.500	2.600
14	3.370	10.000	1.500	2.600
15	3.410	35.000	1.500	2.600
16	3.445	25.000	1.500	2.600
17	3.425	30.000	1.500	2.600
18	3.460	10.000	1.500	2.600
19	3.530	10.000	1.500	2.600
20	3.560	10.000	1.500	2.600
21	3.655	89.000	1.500	2.600
22	3.815	35.000	1.500	2.600

=====
Input Information from Internal Weir R0960-W2
=====

Point	Data	Data	Data	Data
-------	------	------	------	------

No.	Column # 1	Column # 2	Column # 3	Column # 4
1	4.190	10.000	1.500	2.600
2	4.300	28.000	1.500	2.600
3	4.400	19.000	1.500	2.600
4	4.795	57.000	1.500	2.600
5	5.145	43.000	1.500	2.600
6	5.270	24.000	1.500	2.600
7	5.470	9.000	1.500	2.600

=====
Input Information from Internal Weir R0990-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.790	5.000	1.500	2.600
2	4.810	4.000	1.500	2.600
3	4.560	24.000	1.500	2.600
4	4.430	32.000	1.500	2.600
5	4.330	40.000	1.500	2.600
6	3.780	34.000	1.500	2.600
7	3.340	25.000	1.500	2.600

=====
Input Information from Internal Weir R1010-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.375	34.000	1.500	2.600
2	5.370	25.000	1.500	2.600
3	5.355	10.000	1.500	2.600
4	5.290	10.000	1.500	2.600
5	5.210	10.000	1.500	2.600
6	5.200	4.000	1.500	2.600
7	5.165	30.000	1.500	2.600
8	5.115	35.000	1.500	2.600
9	5.135	30.000	1.500	2.600
10	5.140	10.000	1.500	2.600
11	5.065	25.000	1.500	2.600
12	5.000	15.000	1.500	2.600
13	4.975	44.000	1.500	2.600
14	4.970	10.000	1.500	2.600
15	4.915	10.000	1.500	2.600
16	4.865	15.000	1.500	2.600
17	4.890	15.000	1.500	2.600

18	4.940	10.000	1.500	2.600
19	4.995	10.000	1.500	2.600
20	5.035	10.000	1.500	2.600
21	5.000	54.000	1.500	2.600
22	4.930	20.000	1.500	2.600
23	4.890	5.000	1.500	2.600
24	4.905	5.000	1.500	2.600
25	5.055	65.000	1.500	2.600
26	5.120	24.000	1.500	2.600
27	5.090	20.000	1.500	2.600
28	5.130	5.000	1.500	2.600
29	5.160	25.000	1.500	2.600
30	5.175	10.000	1.500	2.600
31	5.080	30.000	1.500	2.600
32	5.080	25.000	1.500	2.600
33	5.155	19.000	1.500	2.600
34	5.215	149.000	1.500	2.600

=====
Input Information from Internal Weir R0980-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.335	33.000	1.500	2.600
2	4.650	24.000	1.500	2.600
3	4.705	14.000	1.500	2.600

=====
Input Information from Internal Weir R0850-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.670	23.000	1.500	2.600
2	5.065	14.000	1.500	2.600
3	4.360	34.000	1.500	2.600
4	3.845	34.000	1.500	2.600
5	3.765	20.000	1.500	2.600
6	3.700	39.000	1.500	2.600
7	3.620	10.000	1.500	2.600
8	3.700	29.000	1.500	2.600
9	3.795	10.000	1.500	2.600
10	3.690	30.000	1.500	2.600
11	3.490	48.000	1.500	2.600
12	3.360	39.000	1.500	2.600
13	3.330	10.000	1.500	2.600
14	3.355	9.000	1.500	2.600

15	3.340	5.000	1.500	2.600
16	3.380	15.000	1.500	2.600
17	3.615	44.000	1.500	2.600
18	3.775	79.000	1.500	2.600
19	3.810	34.000	1.500	2.600
20	3.825	30.000	1.500	2.600
21	3.745	30.000	1.500	2.600
22	3.690	10.000	1.500	2.600
23	3.795	24.000	1.500	2.600
24	4.025	25.000	1.500	2.600
25	4.220	10.000	1.500	2.600
26	4.290	5.000	1.500	2.600
27	4.195	35.000	1.500	2.600
28	4.255	9.000	1.500	2.600
29	4.445	5.000	1.500	2.600
30	4.570	10.000	1.500	2.600
31	4.715	10.000	1.500	2.600
32	4.840	5.000	1.500	2.600
33	4.695	5.000	1.500	2.600
34	4.675	5.000	1.500	2.600
35	4.735	5.000	1.500	2.600
36	5.035	15.000	1.500	2.600
37	5.665	50.000	1.500	2.600
38	5.950	5.000	1.500	2.600
39	5.790	54.000	1.500	2.600

=====
Input Information from Internal Weir R0770-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	9.780	15.000	1.500	2.600
2	8.665	29.000	1.500	2.600
3	6.875	19.000	1.500	2.600
4	5.885	5.000	1.500	2.600
5	5.810	15.000	1.500	2.600
6	5.685	9.000	1.500	2.600
7	5.585	10.000	1.500	2.600
8	5.475	20.000	1.500	2.600
9	5.430	13.000	1.500	2.600
10	5.565	9.000	1.500	2.600
11	5.770	12.000	1.500	2.600
12	6.000	8.000	1.500	2.600
13	5.875	24.000	1.500	2.600
14	5.835	10.000	1.500	2.600
15	5.895	5.000	1.500	2.600
16	5.565	9.000	1.500	2.600
17	5.225	5.000	1.500	2.600

18	5.345	20.000	1.500	2.600
19	5.910	14.000	1.500	2.600
20	6.410	10.000	1.500	2.600
21	6.480	14.000	1.500	2.600
22	6.735	39.000	1.500	2.600
23	7.080	20.000	1.500	2.600
24	7.005	19.000	1.500	2.600
25	6.935	10.000	1.500	2.600
26	6.880	10.000	1.500	2.600
27	6.735	24.000	1.500	2.600
28	6.860	15.000	1.500	2.600
29	7.230	10.000	1.500	2.600
30	7.470	30.000	1.500	2.600
31	7.665	15.000	1.500	2.600
32	7.835	4.000	1.500	2.600
33	7.670	8.000	1.500	2.600
34	7.670	24.000	1.500	2.600
35	7.745	10.000	1.500	2.600
36	7.320	14.000	1.500	2.600
37	6.910	30.000	1.500	2.600
38	6.630	24.000	1.500	2.600
39	6.400	15.000	1.500	2.600
40	6.580	30.000	1.500	2.600

=====
Input Information from Internal Weir R0530-W4
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.380	10.000	1.500	2.600
2	4.370	10.000	1.500	2.600
3	4.370	19.000	1.500	2.600
4	4.330	10.000	1.500	2.600
5	4.570	24.000	1.500	2.600
6	4.685	20.000	1.500	2.600
7	4.680	20.000	1.500	2.600
8	5.005	9.000	1.500	2.600
9	5.135	20.000	1.500	2.600
10	5.185	5.000	1.500	2.600
11	5.285	5.000	1.500	2.600
12	4.860	15.000	1.500	2.600
13	4.520	9.000	1.500	2.600
14	4.500	5.000	1.500	2.600
15	4.660	5.000	1.500	2.600
16	5.095	20.000	1.500	2.600

=====
Input Information from Internal Weir R0380-W3
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.295	14.000	1.500	2.600
2	6.935	5.000	1.500	2.600
3	6.140	4.000	1.500	2.600
4	5.370	5.000	1.500	2.600
5	4.950	5.000	1.500	2.600
6	4.885	4.000	1.500	2.600
7	5.115	5.000	1.500	2.600
8	6.285	14.000	1.500	2.600
9	7.425	5.000	1.500	2.600
10	7.660	10.000	1.500	2.600
11	7.765	30.000	1.500	2.600
12	7.700	19.000	1.500	2.600
13	7.830	20.000	1.500	2.600
14	8.000	10.000	1.500	2.600
15	8.015	15.000	1.500	2.600
16	8.005	5.000	1.500	2.600
17	8.150	25.000	1.500	2.600
18	8.535	55.000	1.500	2.600
19	8.815	9.000	1.500	2.600

Input Information from Internal Weir R0300-W2

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.610	36.000	1.500	2.600
2	6.575	15.000	1.500	2.600
3	6.595	35.000	1.500	2.600
4	6.650	20.000	1.500	2.600
5	6.680	10.000	1.500	2.600
6	6.660	20.000	1.500	2.600
7	6.650	10.000	1.500	2.600
8	6.695	5.000	1.500	2.600
9	6.765	20.000	1.500	2.600
10	6.830	10.000	1.500	2.600
11	6.870	14.000	1.500	2.600
12	6.910	15.000	1.500	2.600
13	6.975	20.000	1.500	2.600
14	7.065	30.000	1.500	2.600
15	7.095	15.000	1.500	2.600
16	7.140	60.000	1.500	2.600
17	7.250	25.000	1.500	2.600
18	7.265	15.000	1.500	2.600

19	7.225	25.000	1.500	2.600
20	7.210	65.000	1.500	2.600
21	7.440	15.000	1.500	2.600
22	7.680	30.000	1.500	2.600
23	8.625	30.000	1.500	2.600
24	9.585	10.000	1.500	2.600
25	9.830	5.000	1.500	2.600
26	10.015	5.000	1.500	2.600
27	10.040	5.000	1.500	2.600

=====
Input Information from Internal Weir R0290-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.590	20.000	1.500	2.600
2	5.515	20.000	1.500	2.600
3	5.530	24.000	1.500	2.600
4	5.520	25.000	1.500	2.600
5	5.495	35.000	1.500	2.600
6	5.485	15.000	1.500	2.600
7	5.490	30.000	1.500	2.600
8	5.410	24.000	1.500	2.600
9	5.385	15.000	1.500	2.600
10	5.455	10.000	1.500	2.600
11	5.470	90.000	1.500	2.600
12	5.455	10.000	1.500	2.600
13	5.370	19.000	1.500	2.600
14	5.540	50.000	1.500	2.600
15	5.560	15.000	1.500	2.600
16	5.515	25.000	1.500	2.600
17	5.535	34.000	1.500	2.600
18	5.560	15.000	1.500	2.600
19	5.660	25.000	1.500	2.600
20	5.565	84.000	1.500	2.600
21	5.660	43.000	1.500	2.600
22	5.860	5.000	1.500	2.600
23	5.870	5.000	1.500	2.600

=====
Input Information from Internal Weir R0655-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	9.060	15.000	1.500	2.600
2	9.015	25.000	1.500	2.600

3	9.050	25.000	1.500	2.600
4	9.100	10.000	1.500	2.600
5	9.045	15.000	1.500	2.600
6	9.125	20.000	1.500	2.600
7	9.060	114.000	1.500	2.600
8	9.020	10.000	1.500	2.600
9	9.040	5.000	1.500	2.600
10	9.040	15.000	1.500	2.600
11	9.035	14.000	1.500	2.600
12	8.990	15.000	1.500	2.600
13	8.865	14.000	1.500	2.600
14	8.885	19.000	1.500	2.600
15	9.095	15.000	1.500	2.600
16	9.045	10.000	1.500	2.600
17	9.065	53.000	1.500	2.600
18	9.055	52.000	1.500	2.600
19	8.820	10.000	1.500	2.600
20	8.435	10.000	1.500	2.600
21	8.145	4.000	1.500	2.600
22	8.450	10.000	1.500	2.600
23	8.810	5.000	1.500	2.600
24	8.605	9.000	1.500	2.600
25	8.050	5.000	1.500	2.600
26	7.640	4.000	1.500	2.600
27	8.140	34.000	1.500	2.600
28	8.705	5.000	1.500	2.600
29	8.280	19.000	1.500	2.600
30	7.850	5.000	1.500	2.600
31	7.855	5.000	1.500	2.600
32	8.200	15.000	1.500	2.600
33	8.475	5.000	1.500	2.600
34	8.295	4.000	1.500	2.600
35	8.145	5.000	1.500	2.600
36	8.430	20.000	1.500	2.600
37	8.880	5.000	1.500	2.600
38	9.035	24.000	1.500	2.600
39	8.855	23.000	1.500	2.600
40	8.805	10.000	1.500	2.600
41	8.705	9.000	1.500	2.600
42	8.815	19.000	1.500	2.600
43	9.215	10.000	1.500	2.600
44	9.255	19.000	1.500	2.600
45	9.495	35.000	1.500	2.600
46	9.675	21.000	1.500	2.600

=====
Input Information from Internal Weir R0140-W2
=====

Point No.	Data Column	Data Column	Data Column	Data Column
-----------	-------------	-------------	-------------	-------------

	# 1	# 2	# 3	# 4
1	8.040	35.000	1.500	2.600
2	7.625	25.000	1.500	2.600
3	7.745	48.000	1.500	2.600
4	7.485	39.000	1.500	2.600
5	7.040	10.000	1.500	2.600
6	6.925	10.000	1.500	2.600
7	6.720	10.000	1.500	2.600
8	6.750	10.000	1.500	2.600
9	6.880	34.000	1.500	2.600
10	7.170	20.000	1.500	2.600
11	7.425	10.000	1.500	2.600
12	7.755	25.000	1.500	2.600
13	8.455	19.000	1.500	2.600
14	8.950	10.000	1.500	2.600
15	9.000	5.000	1.500	2.600
16	9.015	15.000	1.500	2.600
17	9.085	10.000	1.500	2.600
18	8.800	30.000	1.500	2.600
19	8.515	24.000	1.500	2.600
20	8.625	10.000	1.500	2.600
21	8.665	20.000	1.500	2.600
22	8.695	15.000	1.500	2.600
23	8.845	34.000	1.500	2.600
24	8.745	30.000	1.500	2.600
25	8.675	5.000	1.500	2.600
26	8.750	15.000	1.500	2.600
27	8.615	54.000	1.500	2.600
28	8.565	10.000	1.500	2.600

=====
Input Information from Internal Weir R0120-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.170	5.000	1.500	2.600
2	7.170	54.000	1.500	2.600
3	7.055	10.000	1.500	2.600
4	7.060	35.000	1.500	2.600
5	7.055	10.000	1.500	2.600
6	7.030	5.000	1.500	2.600
7	7.010	45.000	1.500	2.600
8	7.010	74.000	1.500	2.600
9	7.020	20.000	1.500	2.600
10	7.010	10.000	1.500	2.600
11	6.970	20.000	1.500	2.600
12	6.865	24.000	1.500	2.600

13	6.970	20.000	1.500	2.600
14	6.980	15.000	1.500	2.600
15	6.950	20.000	1.500	2.600
16	6.965	45.000	1.500	2.600
17	7.000	10.000	1.500	2.600
18	7.000	5.000	1.500	2.600
19	6.810	25.000	1.500	2.600
20	6.815	10.000	1.500	2.600
21	6.855	15.000	1.500	2.600
22	6.885	30.000	1.500	2.600
23	6.900	10.000	1.500	2.600
24	6.920	10.000	1.500	2.600
25	6.960	20.000	1.500	2.600
26	6.985	29.000	1.500	2.600
27	7.075	114.000	1.500	2.600
28	7.005	10.000	1.500	2.600
29	7.040	15.000	1.500	2.600
30	7.040	14.000	1.500	2.600
31	6.955	25.000	1.500	2.600
32	6.880	10.000	1.500	2.600
33	6.835	20.000	1.500	2.600
34	6.820	64.000	1.500	2.600
35	6.835	19.000	1.500	2.600

=====
Input Information from Internal Weir R0160-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.125	23.000	1.500	2.600
2	3.815	16.000	1.500	2.600
3	3.220	10.000	1.500	2.600
4	2.890	29.000	1.500	2.600
5	2.925	4.000	1.500	2.600
6	3.610	5.000	1.500	2.600
7	4.310	5.000	1.500	2.600
8	4.550	5.000	1.500	2.600
9	4.405	10.000	1.500	2.600
10	4.290	5.000	1.500	2.600
11	4.630	10.000	1.500	2.600
12	4.580	10.000	1.500	2.600
13	4.150	9.000	1.500	2.600
14	4.185	10.000	1.500	2.600
15	4.700	15.000	1.500	2.600
16	5.260	10.000	1.500	2.600
17	5.450	10.000	1.500	2.600
18	5.275	25.000	1.500	2.600
19	5.315	15.000	1.500	2.600

20	5.570	4.000	1.500	2.600
21	5.585	5.000	1.500	2.600
22	5.550	10.000	1.500	2.600
23	5.075	10.000	1.500	2.600
24	4.505	10.000	1.500	2.600
25	4.390	15.000	1.500	2.600
26	4.665	20.000	1.500	2.600
27	4.920	5.000	1.500	2.600
28	4.715	10.000	1.500	2.600
29	4.765	14.000	1.500	2.600
30	4.990	5.000	1.500	2.600
31	4.735	20.000	1.500	2.600
32	3.945	14.000	1.500	2.600
33	3.230	10.000	1.500	2.600
34	3.150	5.000	1.500	2.600
35	3.475	5.000	1.500	2.600
36	3.840	5.000	1.500	2.600
37	3.520	14.000	1.500	2.600
38	2.940	10.000	1.500	2.600
39	2.850	5.000	1.500	2.600
40	3.215	10.000	1.500	2.600
41	3.680	10.000	1.500	2.600
42	3.655	4.000	1.500	2.600
43	3.150	5.000	1.500	2.600
44	2.675	5.000	1.500	2.600
45	2.160	34.000	1.500	2.600
46	1.780	5.000	1.500	2.600
47	2.060	20.000	1.500	2.600
48	2.555	37.000	1.500	2.600
49	2.675	5.000	1.500	2.600
50	2.130	10.000	1.500	2.600
51	1.820	10.000	1.500	2.600
52	1.905	9.000	1.500	2.600
53	2.040	15.000	1.500	2.600
54	2.150	10.000	1.500	2.600
55	2.125	5.000	1.500	2.600
56	2.895	14.000	1.500	2.600
57	3.615	5.000	1.500	2.600
58	3.120	10.000	1.500	2.600
59	2.430	5.000	1.500	2.600
60	2.240	10.000	1.500	2.600
61	2.555	4.000	1.500	2.600
62	2.885	20.000	1.500	2.600
63	3.155	5.000	1.500	2.600
64	3.470	19.000	1.500	2.600
65	3.475	5.000	1.500	2.600
66	3.145	5.000	1.500	2.600
67	2.775	59.000	1.500	2.600
68	2.855	5.000	1.500	2.600
69	3.635	10.000	1.500	2.600

70	4.270	5.000	1.500	2.600
71	4.260	30.000	1.500	2.600
72	4.235	9.000	1.500	2.600
73	4.405	10.000	1.500	2.600
74	4.290	15.000	1.500	2.600
75	3.990	5.000	1.500	2.600
76	4.370	10.000	1.500	2.600
77	4.930	5.000	1.500	2.600
78	4.345	10.000	1.500	2.600
79	3.585	4.000	1.500	2.600
80	3.665	25.000	1.500	2.600
81	3.825	10.000	1.500	2.600
82	3.795	15.000	1.500	2.600
83	4.050	28.000	1.500	2.600
84	4.105	27.000	1.500	2.600

=====
Input Information from Internal Weir R0400-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.060	39.000	1.500	2.600
2	7.085	10.000	1.500	2.600
3	7.075	15.000	1.500	2.600
4	7.105	9.000	1.500	2.600
5	7.145	15.000	1.500	2.600
6	7.155	5.000	1.500	2.600
7	7.260	20.000	1.500	2.600
8	7.500	14.000	1.500	2.600
9	7.645	10.000	1.500	2.600
10	7.735	10.000	1.500	2.600
11	7.830	29.000	1.500	2.600
12	7.840	29.000	1.500	2.600
13	8.030	15.000	1.500	2.600
14	8.100	10.000	1.500	2.600
15	8.325	20.000	1.500	2.600
16	8.575	25.000	1.500	2.600
17	8.720	10.000	1.500	2.600
18	8.395	63.000	1.500	2.600
19	7.660	38.000	1.500	2.600
20	7.200	10.000	1.500	2.600
21	7.140	24.000	1.500	2.600
22	7.670	15.000	1.500	2.600
23	8.025	4.000	1.500	2.600
24	7.725	16.000	1.500	2.600
25	7.500	9.000	1.500	2.600
26	7.320	9.000	1.500	2.600
27	6.465	33.000	1.500	2.600

=====
 Input Information from Internal Weir R0880-W2
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	8.710	15.000	1.500	2.600
2	8.820	15.000	1.500	2.600
3	9.475	10.000	1.500	2.600
4	9.970	5.000	1.500	2.600
5	9.635	15.000	1.500	2.600
6	9.445	5.000	1.500	2.600
7	9.595	14.000	1.500	2.600
8	9.350	30.000	1.500	2.600
9	9.440	15.000	1.500	2.600
10	9.865	20.000	1.500	2.600
11	9.870	10.000	1.500	2.600
12	9.925	5.000	1.500	2.600
13	9.835	10.000	1.500	2.600
14	9.750	10.000	1.500	2.600
15	9.960	20.000	1.500	2.600
16	9.930	5.000	1.500	2.600
17	9.395	10.000	1.500	2.600
18	8.945	5.000	1.500	2.600
19	9.305	15.000	1.500	2.600
20	9.955	4.000	1.500	2.600
21	10.150	15.000	1.500	2.600
22	9.885	5.000	1.500	2.600
23	9.605	5.000	1.500	2.600
24	9.570	10.000	1.500	2.600
25	9.265	20.000	1.500	2.600
26	9.030	5.000	1.500	2.600
27	9.690	10.000	1.500	2.600
28	10.070	10.000	1.500	2.600
29	9.875	10.000	1.500	2.600
30	9.900	10.000	1.500	2.600
31	9.780	15.000	1.500	2.600
32	9.365	5.000	1.500	2.600
33	9.055	5.000	1.500	2.600
34	9.100	20.000	1.500	2.600
35	8.975	5.000	1.500	2.600
36	8.660	5.000	1.500	2.600
37	8.825	15.000	1.500	2.600
38	9.070	10.000	1.500	2.600
39	9.150	5.000	1.500	2.600
40	9.240	5.000	1.500	2.600
41	9.115	10.000	1.500	2.600
42	9.025	5.000	1.500	2.600

43	9.255	10.000	1.500	2.600
44	9.650	5.000	1.500	2.600
45	9.900	5.000	1.500	2.600
46	9.470	15.000	1.500	2.600
47	8.915	5.000	1.500	2.600
48	8.890	5.000	1.500	2.600
49	8.870	5.000	1.500	2.600
50	8.380	10.000	1.500	2.600
51	7.935	5.000	1.500	2.600
52	7.965	15.000	1.500	2.600
53	8.240	10.000	1.500	2.600
54	8.515	10.000	1.500	2.600
55	8.860	10.000	1.500	2.600
56	9.170	5.000	1.500	2.600
57	9.115	5.000	1.500	2.600
58	9.085	10.000	1.500	2.600
59	9.325	10.000	1.500	2.600
60	9.310	15.000	1.500	2.600
61	9.325	5.000	1.500	2.600
62	9.585	5.000	1.500	2.600
63	9.460	5.000	1.500	2.600
64	9.540	15.000	1.500	2.600
65	9.680	30.000	1.500	2.600
66	9.280	29.000	1.500	2.600
67	9.280	10.000	1.500	2.600
68	9.515	5.000	1.500	2.600
69	8.960	20.000	1.500	2.600
70	8.445	15.000	1.500	2.600
71	8.540	15.000	1.500	2.600
72	8.820	10.000	1.500	2.600
73	8.990	15.000	1.500	2.600
74	8.805	19.000	1.500	2.600
75	8.425	30.000	1.500	2.600
76	8.375	5.000	1.500	2.600
77	9.010	15.000	1.500	2.600
78	9.145	10.000	1.500	2.600
79	8.735	5.000	1.500	2.600
80	8.730	5.000	1.500	2.600
81	9.100	10.000	1.500	2.600
82	9.270	10.000	1.500	2.600
83	8.745	35.000	1.500	2.600
84	8.255	24.000	1.500	2.600
85	8.255	5.000	1.500	2.600
86	8.900	10.000	1.500	2.600
87	9.580	5.000	1.500	2.600
88	9.635	5.000	1.500	2.600
89	9.635	5.000	1.500	2.600
90	9.580	20.000	1.500	2.600
91	9.465	5.000	1.500	2.600

=====
Input Information from Internal Weir R1010-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.030	15.000	1.500	2.600
2	6.045	10.000	1.500	2.600
3	6.030	20.000	1.500	2.600
4	6.145	5.000	1.500	2.600
5	6.435	5.000	1.500	2.600
6	6.180	25.000	1.500	2.600
7	6.115	10.000	1.500	2.600
8	6.110	15.000	1.500	2.600
9	5.820	40.000	1.500	2.600
10	5.855	5.000	1.500	2.600
11	6.235	9.000	1.500	2.600
12	6.535	5.000	1.500	2.600
13	6.110	15.000	1.500	2.600
14	5.895	15.000	1.500	2.600
15	6.215	25.000	1.500	2.600
16	6.265	10.000	1.500	2.600
17	6.390	10.000	1.500	2.600
18	6.530	5.000	1.500	2.600
19	6.610	10.000	1.500	2.600
20	6.310	15.000	1.500	2.600
21	5.865	5.000	1.500	2.600
22	6.010	10.000	1.500	2.600
23	5.835	35.000	1.500	2.600
24	5.690	25.000	1.500	2.600
25	5.785	25.000	1.500	2.600
26	5.885	10.000	1.500	2.600
27	6.465	10.000	1.500	2.600
28	6.935	5.000	1.500	2.600
29	6.635	10.000	1.500	2.600
30	6.375	10.000	1.500	2.600
31	6.395	5.000	1.500	2.600
32	5.960	5.000	1.500	2.600
33	5.545	4.000	1.500	2.600
34	5.535	5.000	1.500	2.600
35	5.495	10.000	1.500	2.600
36	5.455	15.000	1.500	2.600
37	5.275	15.000	1.500	2.600
38	4.945	10.000	1.500	2.600
39	4.610	10.000	1.500	2.600
40	4.345	5.000	1.500	2.600
41	4.840	30.000	1.500	2.600
42	5.270	19.000	1.500	2.600
43	5.335	10.000	1.500	2.600

44	5.345	15.000	1.500	2.600
45	5.225	25.000	1.500	2.600
46	5.250	5.000	1.500	2.600
47	5.570	10.000	1.500	2.600
48	5.860	5.000	1.500	2.600
49	5.450	10.000	1.500	2.600
50	4.980	10.000	1.500	2.600
51	5.360	19.000	1.500	2.600
52	5.475	15.000	1.500	2.600
53	5.110	10.000	1.500	2.600
54	5.270	10.000	1.500	2.600
55	5.215	10.000	1.500	2.600
56	4.900	5.000	1.500	2.600
57	4.815	15.000	1.500	2.600
58	4.545	25.000	1.500	2.600
59	4.505	10.000	1.500	2.600
60	4.570	10.000	1.500	2.600
61	5.070	9.000	1.500	2.600
62	5.790	5.000	1.500	2.600
63	5.870	5.000	1.500	2.600
64	5.685	10.000	1.500	2.600
65	5.045	65.000	1.500	2.600
66	4.965	34.000	1.500	2.600
67	5.170	20.000	1.500	2.600
68	5.140	9.000	1.500	2.600
69	5.255	5.000	1.500	2.600
70	5.095	10.000	1.500	2.600
71	5.160	19.000	1.500	2.600
72	5.270	19.000	1.500	2.600
73	5.220	10.000	1.500	2.600
74	5.475	9.000	1.500	2.600
75	5.625	5.000	1.500	2.600

=====
Input Information from Internal Weir R0490-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.925	25.000	1.500	2.600
2	3.955	15.000	1.500	2.600
3	4.000	15.000	1.500	2.600
4	4.020	15.000	1.500	2.600
5	4.025	30.000	1.500	2.600
6	4.015	10.000	1.500	2.600
7	3.985	24.000	1.500	2.600
8	4.030	15.000	1.500	2.600
9	4.025	65.000	1.500	2.600
10	3.545	65.000	1.500	2.600

11	3.280	20.000	1.500	2.600
12	3.215	10.000	1.500	2.600
13	3.140	54.000	1.500	2.600
14	3.120	5.000	1.500	2.600
15	3.080	15.000	1.500	2.600
16	3.015	25.000	1.500	2.600
17	3.205	75.000	1.500	2.600
18	3.475	30.000	1.500	2.600
19	3.715	54.000	1.500	2.600
20	3.900	5.000	1.500	2.600
21	3.880	15.000	1.500	2.600
22	3.880	15.000	1.500	2.600
23	3.940	95.000	1.500	2.600
24	3.955	59.000	1.500	2.600
25	3.915	10.000	1.500	2.600
26	3.880	30.000	1.500	2.600
27	3.870	10.000	1.500	2.600
28	3.980	65.000	1.500	2.600
29	3.945	10.000	1.500	2.600
30	3.960	5.000	1.500	2.600
31	4.025	20.000	1.500	2.600

=====
Input Information from Internal Weir R0050-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.415	10.000	1.500	2.600
2	4.350	9.000	1.500	2.600
3	4.040	10.000	1.500	2.600
4	3.995	14.000	1.500	2.600
5	3.905	15.000	1.500	2.600
6	3.955	28.000	1.500	2.600
7	4.035	5.000	1.500	2.600
8	3.860	30.000	1.500	2.600
9	3.910	20.000	1.500	2.600
10	3.730	10.000	1.500	2.600
11	3.465	25.000	1.500	2.600
12	3.425	10.000	1.500	2.600
13	3.485	15.000	1.500	2.600
14	4.010	15.000	1.500	2.600
15	4.385	10.000	1.500	2.600
16	4.585	10.000	1.500	2.600
17	4.840	5.000	1.500	2.600
18	4.775	5.000	1.500	2.600
19	4.860	7.000	1.500	2.600
20	5.075	5.000	1.500	2.600
21	4.965	9.000	1.500	2.600

22	5.420	15.000	1.500	2.600
23	5.850	5.000	1.500	2.600
24	4.880	14.000	1.500	2.600
25	4.125	10.000	1.500	2.600
26	4.130	5.000	1.500	2.600
27	3.925	4.000	1.500	2.600
28	3.805	13.000	1.500	2.600
29	4.315	23.000	1.500	2.600
30	4.810	15.000	1.500	2.600
31	4.575	13.000	1.500	2.600
32	4.285	12.000	1.500	2.600
33	3.840	15.000	1.500	2.600
34	3.375	4.000	1.500	2.600
35	3.495	15.000	1.500	2.600
36	3.380	29.000	1.500	2.600
37	3.225	20.000	1.500	2.600
38	3.320	9.000	1.500	2.600
39	3.075	10.000	1.500	2.600
40	2.890	5.000	1.500	2.600
41	3.405	19.000	1.500	2.600
42	3.710	17.000	1.500	2.600
43	3.970	17.000	1.500	2.600
44	4.095	13.000	1.500	2.600
45	3.645	15.000	1.500	2.600
46	3.255	14.000	1.500	2.600
47	3.255	15.000	1.500	2.600
48	3.715	20.000	1.500	2.600
49	3.790	15.000	1.500	2.600
50	3.890	19.000	1.500	2.600
51	4.075	15.000	1.500	2.600
52	4.270	15.000	1.500	2.600
53	4.460	10.000	1.500	2.600
54	4.540	25.000	1.500	2.600
55	4.400	9.000	1.500	2.600
56	4.175	14.000	1.500	2.600
57	4.080	15.000	1.500	2.600
58	3.970	5.000	1.500	2.600
59	4.160	5.000	1.500	2.600
60	4.130	20.000	1.500	2.600
61	3.800	15.000	1.500	2.600
62	3.800	15.000	1.500	2.600
63	3.920	5.000	1.500	2.600
64	3.690	10.000	1.500	2.600
65	3.390	15.000	1.500	2.600
66	3.520	34.000	1.500	2.600
67	3.650	5.000	1.500	2.600
68	3.590	5.000	1.500	2.600
69	3.775	15.000	1.500	2.600
70	4.290	10.000	1.500	2.600
71	4.625	15.000	1.500	2.600

72	4.865	11.000	1.500	2.600
73	5.030	5.000	1.500	2.600
74	4.485	10.000	1.500	2.600
75	3.980	5.000	1.500	2.600
76	3.715	20.000	1.500	2.600
77	3.430	5.000	1.500	2.600

=====
Input Information from Internal Weir R0050-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.215	24.000	1.500	2.600
2	4.430	9.000	1.500	2.600
3	4.330	29.000	1.500	2.600
4	4.605	19.000	1.500	2.600
5	4.710	15.000	1.500	2.600
6	4.960	14.000	1.500	2.600
7	5.200	15.000	1.500	2.600
8	4.835	15.000	1.500	2.600
9	4.430	10.000	1.500	2.600
10	4.555	20.000	1.500	2.600
11	4.705	10.000	1.500	2.600
12	4.850	14.000	1.500	2.600
13	5.000	10.000	1.500	2.600
14	5.285	15.000	1.500	2.600
15	5.565	10.000	1.500	2.600
16	5.610	15.000	1.500	2.600
17	5.685	10.000	1.500	2.600
18	5.725	5.000	1.500	2.600
19	6.350	20.000	1.500	2.600
20	6.710	10.000	1.500	2.600
21	5.920	10.000	1.500	2.600
22	5.115	5.000	1.500	2.600
23	5.000	10.000	1.500	2.600
24	5.070	19.000	1.500	2.600
25	5.090	5.000	1.500	2.600
26	5.380	10.000	1.500	2.600
27	5.615	5.000	1.500	2.600
28	5.280	10.000	1.500	2.600
29	4.945	4.000	1.500	2.600
30	5.240	25.000	1.500	2.600
31	5.295	19.000	1.500	2.600
32	4.955	25.000	1.500	2.600
33	5.290	10.000	1.500	2.600
34	5.835	10.000	1.500	2.600
35	5.820	5.000	1.500	2.600
36	4.955	10.000	1.500	2.600

37	4.090	5.000	1.500	2.600
38	3.780	19.000	1.500	2.600
39	3.825	15.000	1.500	2.600
40	3.935	15.000	1.500	2.600
41	4.710	25.000	1.500	2.600
42	5.820	10.000	1.500	2.600
43	6.010	20.000	1.500	2.600
44	5.845	10.000	1.500	2.600
45	5.825	5.000	1.500	2.600
46	6.620	9.000	1.500	2.600
47	7.535	5.000	1.500	2.600
48	7.355	15.000	1.500	2.600
49	7.095	5.000	1.500	2.600
50	7.750	10.000	1.500	2.600
51	8.105	15.000	1.500	2.600
52	7.985	15.000	1.500	2.600
53	7.815	24.000	1.500	2.600
54	7.740	8.000	1.500	2.600
55	7.525	19.000	1.500	2.600
56	7.215	5.000	1.500	2.600
57	7.755	19.000	1.500	2.600
58	8.595	45.000	1.500	2.600
59	8.995	12.000	1.500	2.600
60	9.240	10.000	1.500	2.600
61	9.145	10.000	1.500	2.600
62	8.680	14.000	1.500	2.600
63	8.580	10.000	1.500	2.600
64	8.510	24.000	1.500	2.600
65	8.535	29.000	1.500	2.600
66	8.305	34.000	1.500	2.600
67	7.655	14.000	1.500	2.600
68	7.580	13.000	1.500	2.600
69	7.690	8.000	1.500	2.600
70	7.735	10.000	1.500	2.600
71	7.690	18.000	1.500	2.600
72	7.615	5.000	1.500	2.600

=====
Input Information from Internal Weir R0060-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.890	40.000	1.500	2.600
2	5.840	30.000	1.500	2.600
3	5.515	25.000	1.500	2.600
4	5.250	40.000	1.500	2.600
5	4.860	20.000	1.500	2.600
6	4.590	10.000	1.500	2.600

7	5.100	20.000	1.500	2.600
8	5.490	9.000	1.500	2.600
9	5.515	15.000	1.500	2.600
10	5.470	20.000	1.500	2.600
11	5.310	35.000	1.500	2.600
12	5.335	5.000	1.500	2.600
13	5.515	45.000	1.500	2.600
14	5.550	30.000	1.500	2.600
15	5.545	10.000	1.500	2.600
16	5.620	20.000	1.500	2.600
17	5.855	15.000	1.500	2.600
18	6.090	5.000	1.500	2.600
19	5.885	30.000	1.500	2.600
20	4.330	20.000	1.500	2.600
21	2.765	5.000	1.500	2.600
22	2.495	5.000	1.500	2.600
23	2.505	5.000	1.500	2.600
24	2.395	10.000	1.500	2.600
25	2.205	5.000	1.500	2.600
26	2.300	10.000	1.500	2.600
27	2.320	15.000	1.500	2.600
28	2.345	25.000	1.500	2.600
29	2.910	20.000	1.500	2.600
30	3.605	30.000	1.500	2.600
31	3.740	59.000	1.500	2.600
32	3.715	10.000	1.500	2.600
33	3.695	10.000	1.500	2.600
34	3.750	110.000	1.500	2.600
35	3.870	20.000	1.500	2.600
36	3.930	15.000	1.500	2.600
37	3.995	15.000	1.500	2.600
38	4.100	35.000	1.500	2.600
39	4.765	34.000	1.500	2.600
40	5.195	13.000	1.500	2.600
41	5.175	5.000	1.500	2.600
42	5.080	9.000	1.500	2.600
43	5.125	33.000	1.500	2.600
44	5.100	10.000	1.500	2.600
45	4.950	19.000	1.500	2.600
46	4.950	10.000	1.500	2.600
47	4.790	19.000	1.500	2.600

=====
Input Information from Internal Weir R0080-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
----- 1	----- 3.240	----- 10.000	----- 1.500	----- 2.600

2	3.115	5.000	1.500	2.600
3	3.055	9.000	1.500	2.600
4	2.970	10.000	1.500	2.600
5	2.885	5.000	1.500	2.600
6	2.285	10.000	1.500	2.600
7	1.565	19.000	1.500	2.600
8	1.425	10.000	1.500	2.600
9	1.240	15.000	1.500	2.600
10	1.080	29.000	1.500	2.600
11	1.295	5.000	1.500	2.600
12	1.715	10.000	1.500	2.600
13	2.200	15.000	1.500	2.600
14	2.875	14.000	1.500	2.600
15	3.445	5.000	1.500	2.600
16	3.340	10.000	1.500	2.600
17	3.245	15.000	1.500	2.600
18	3.095	5.000	1.500	2.600
19	2.910	14.000	1.500	2.600
20	2.790	10.000	1.500	2.600
21	2.820	10.000	1.500	2.600
22	2.925	5.000	1.500	2.600
23	2.250	15.000	1.500	2.600
24	1.335	24.000	1.500	2.600
25	1.740	44.000	1.500	2.600
26	2.675	15.000	1.500	2.600
27	2.985	13.000	1.500	2.600
28	3.015	10.000	1.500	2.600
29	2.895	5.000	1.500	2.600
30	2.525	10.000	1.500	2.600
31	2.645	10.000	1.500	2.600
32	2.790	10.000	1.500	2.600
33	2.440	10.000	1.500	2.600
34	2.650	9.000	1.500	2.600
35	2.955	4.000	1.500	2.600
36	2.915	5.000	1.500	2.600
37	2.840	30.000	1.500	2.600
38	2.755	5.000	1.500	2.600
39	2.225	15.000	1.500	2.600
40	1.380	24.000	1.500	2.600
41	1.235	15.000	1.500	2.600
42	1.955	10.000	1.500	2.600
43	2.745	12.000	1.500	2.600
44	2.995	12.000	1.500	2.600
45	3.000	5.000	1.500	2.600
46	2.975	8.000	1.500	2.600
47	2.915	5.000	1.500	2.600
48	3.470	20.000	1.500	2.600
49	4.470	15.000	1.500	2.600
50	4.980	10.000	1.500	2.600
51	5.145	5.000	1.500	2.600

52	5.470	15.000	1.500	2.600
53	5.565	10.000	1.500	2.600
54	5.550	9.000	1.500	2.600
55	5.575	10.000	1.500	2.600
56	5.595	5.000	1.500	2.600
57	5.660	47.000	1.500	2.600
58	5.755	22.000	1.500	2.600
59	5.775	21.000	1.500	2.600
60	5.760	12.000	1.500	2.600
61	5.655	13.000	1.500	2.600
62	5.540	5.000	1.500	2.600
63	5.520	15.000	1.500	2.600
64	5.595	34.000	1.500	2.600
65	5.665	5.000	1.500	2.600
66	5.700	34.000	1.500	2.600
67	5.775	50.000	1.500	2.600
68	5.730	24.000	1.500	2.600
69	5.805	10.000	1.500	2.600
70	5.780	29.000	1.500	2.600
71	5.735	15.000	1.500	2.600

=====
Input Information from Internal Weir R0080-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.235	28.000	1.500	2.600
2	5.180	5.000	1.500	2.600
3	5.215	5.000	1.500	2.600
4	5.270	19.000	1.500	2.600
5	5.320	19.000	1.500	2.600
6	5.335	55.000	1.500	2.600
7	5.370	44.000	1.500	2.600
8	5.395	30.000	1.500	2.600
9	5.365	35.000	1.500	2.600
10	5.325	5.000	1.500	2.600
11	5.215	15.000	1.500	2.600
12	5.345	39.000	1.500	2.600
13	5.420	15.000	1.500	2.600
14	5.425	10.000	1.500	2.600
15	5.370	20.000	1.500	2.600
16	5.250	104.000	1.500	2.600
17	5.195	35.000	1.500	2.600
18	5.200	5.000	1.500	2.600
19	5.185	9.000	1.500	2.600
20	5.230	25.000	1.500	2.600
21	5.375	30.000	1.500	2.600
22	5.425	30.000	1.500	2.600

23	5.370	14.000	1.500	2.600
24	5.435	40.000	1.500	2.600
25	5.530	39.000	1.500	2.600
26	5.810	35.000	1.500	2.600
27	6.050	34.000	1.500	2.600
28	5.805	8.000	1.500	2.600
29	5.510	25.000	1.500	2.600
30	5.330	35.000	1.500	2.600
31	5.200	10.000	1.500	2.600
32	5.090	79.000	1.500	2.600
33	5.115	40.000	1.500	2.600
34	5.295	59.000	1.500	2.600

=====
Input Information from Internal Weir R0090-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.050	41.000	1.500	2.600
2	8.000	10.000	1.500	2.600
3	8.015	15.000	1.500	2.600
4	8.025	5.000	1.500	2.600
5	8.045	69.000	1.500	2.600
6	8.050	29.000	1.500	2.600
7	8.035	10.000	1.500	2.600
8	7.950	44.000	1.500	2.600
9	7.830	10.000	1.500	2.600
10	7.680	40.000	1.500	2.600
11	7.625	83.000	1.500	2.600
12	7.660	19.000	1.500	2.600
13	7.665	15.000	1.500	2.600
14	7.700	20.000	1.500	2.600
15	7.605	59.000	1.500	2.600
16	7.455	24.000	1.500	2.600
17	7.395	15.000	1.500	2.600
18	7.710	20.000	1.500	2.600
19	7.965	19.000	1.500	2.600
20	7.830	15.000	1.500	2.600
21	8.065	15.000	1.500	2.600
22	8.540	10.000	1.500	2.600
23	8.625	9.000	1.500	2.600
24	8.895	25.000	1.500	2.600
25	9.110	10.000	1.500	2.600
26	9.170	30.000	1.500	2.600
27	9.015	70.000	1.500	2.600
28	8.960	19.000	1.500	2.600
29	9.155	15.000	1.500	2.600
30	9.255	10.000	1.500	2.600

31	9.350	10.000	1.500	2.600
32	9.345	40.000	1.500	2.600
33	9.450	5.000	1.500	2.600
34	9.455	15.000	1.500	2.600
35	9.480	5.000	1.500	2.600
36	9.485	13.000	1.500	2.600
37	9.485	20.000	1.500	2.600
38	9.655	108.000	1.500	2.600
39	9.650	9.000	1.500	2.600

=====
Input Information from Internal Weir R0090-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	9.310	5.000	1.500	2.600
2	9.250	33.000	1.500	2.600
3	9.400	39.000	1.500	2.600
4	9.495	19.000	1.500	2.600
5	9.530	25.000	1.500	2.600
6	9.525	10.000	1.500	2.600
7	9.405	54.000	1.500	2.600
8	9.305	13.000	1.500	2.600
9	9.105	4.000	1.500	2.600
10	9.175	19.000	1.500	2.600
11	9.250	5.000	1.500	2.600
12	8.870	5.000	1.500	2.600
13	8.540	4.000	1.500	2.600
14	8.460	24.000	1.500	2.600
15	8.320	14.000	1.500	2.600
16	8.220	14.000	1.500	2.600
17	8.110	21.000	1.500	2.600
18	8.030	18.000	1.500	2.600
19	8.010	19.000	1.500	2.600
20	7.940	15.000	1.500	2.600
21	8.070	24.000	1.500	2.600
22	8.145	24.000	1.500	2.600
23	8.220	19.000	1.500	2.600

=====
Input Information from Internal Weir R0090-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	9.885	24.000	1.500	2.600
2	9.880	23.000	1.500	2.600

3	9.810	69.000	1.500	2.600
4	9.645	45.000	1.500	2.600
5	9.710	29.000	1.500	2.600
6	9.685	25.000	1.500	2.600
7	9.680	24.000	1.500	2.600
8	9.730	40.000	1.500	2.600
9	9.770	10.000	1.500	2.600
10	9.765	30.000	1.500	2.600
11	9.770	14.000	1.500	2.600
12	9.800	10.000	1.500	2.600
13	9.815	35.000	1.500	2.600
14	9.825	15.000	1.500	2.600
15	9.850	20.000	1.500	2.600
16	9.865	15.000	1.500	2.600
17	9.880	25.000	1.500	2.600
18	9.915	20.000	1.500	2.600
19	9.915	54.000	1.500	2.600
20	9.920	30.000	1.500	2.600
21	9.970	35.000	1.500	2.600
22	9.985	10.000	1.500	2.600
23	9.900	20.000	1.500	2.600
24	9.990	10.000	1.500	2.600
25	9.930	49.000	1.500	2.600
26	9.890	10.000	1.500	2.600
27	9.980	20.000	1.500	2.600

=====
Input Information from Internal Weir R0090-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	9.865	24.000	1.500	2.600
2	9.885	23.000	1.500	2.600
3	9.950	41.000	1.500	2.600
4	9.980	20.000	1.500	2.600
5	10.010	10.000	1.500	2.600
6	9.945	44.000	1.500	2.600
7	10.030	15.000	1.500	2.600
8	10.060	15.000	1.500	2.600
9	10.055	10.000	1.500	2.600
10	9.935	64.000	1.500	2.600
11	9.795	25.000	1.500	2.600
12	9.465	65.000	1.500	2.600
13	9.130	93.000	1.500	2.600
14	9.025	10.000	1.500	2.600
15	9.015	24.000	1.500	2.600
16	9.150	34.000	1.500	2.600
17	9.275	10.000	1.500	2.600

18	9.385	16.000	1.500	2.600
19	9.255	20.000	1.500	2.600
20	9.150	20.000	1.500	2.600
21	9.240	5.000	1.500	2.600
22	9.220	20.000	1.500	2.600
23	9.230	10.000	1.500	2.600
24	9.275	10.000	1.500	2.600
25	9.340	39.000	1.500	2.600
26	9.415	73.000	1.500	2.600

=====
Input Information from Internal Weir R0100-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.930	10.000	1.500	2.600
2	6.790	15.000	1.500	2.600
3	6.035	5.000	1.500	2.600
4	5.225	5.000	1.500	2.600
5	5.495	5.000	1.500	2.600
6	6.305	5.000	1.500	2.600
7	6.615	14.000	1.500	2.600
8	6.460	15.000	1.500	2.600
9	6.165	20.000	1.500	2.600
10	6.110	5.000	1.500	2.600
11	6.020	20.000	1.500	2.600
12	5.915	39.000	1.500	2.600
13	5.855	15.000	1.500	2.600
14	5.845	5.000	1.500	2.600
15	5.885	5.000	1.500	2.600
16	5.865	15.000	1.500	2.600
17	5.790	10.000	1.500	2.600
18	5.755	64.000	1.500	2.600
19	5.955	15.000	1.500	2.600
20	5.980	10.000	1.500	2.600
21	5.930	29.000	1.500	2.600
22	6.075	10.000	1.500	2.600
23	6.140	15.000	1.500	2.600
24	6.200	10.000	1.500	2.600
25	6.230	20.000	1.500	2.600
26	6.210	39.000	1.500	2.600
27	6.270	15.000	1.500	2.600
28	6.385	5.000	1.500	2.600
29	6.425	24.000	1.500	2.600
30	6.500	15.000	1.500	2.600
31	6.520	28.000	1.500	2.600
32	6.475	15.000	1.500	2.600
33	6.415	20.000	1.500	2.600

34	6.390	35.000	1.500	2.600
35	6.440	20.000	1.500	2.600
36	6.240	13.000	1.500	2.600
37	6.165	25.000	1.500	2.600
38	6.135	5.000	1.500	2.600
39	6.030	10.000	1.500	2.600
40	6.135	5.000	1.500	2.600
41	6.135	40.000	1.500	2.600
42	6.105	10.000	1.500	2.600
43	6.065	15.000	1.500	2.600
44	6.000	15.000	1.500	2.600
45	5.975	10.000	1.500	2.600
46	5.910	10.000	1.500	2.600
47	6.035	10.000	1.500	2.600
48	5.995	15.000	1.500	2.600
49	5.870	20.000	1.500	2.600
50	5.815	20.000	1.500	2.600
51	5.825	10.000	1.500	2.600
52	5.785	59.000	1.500	2.600
53	5.800	35.000	1.500	2.600
54	5.875	20.000	1.500	2.600
55	6.035	22.000	1.500	2.600

=====
Input Information from Internal Weir R0100-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.760	18.000	1.500	2.600
2	5.845	19.000	1.500	2.600
3	5.960	25.000	1.500	2.600
4	5.900	20.000	1.500	2.600
5	5.875	15.000	1.500	2.600
6	5.805	60.000	1.500	2.600
7	5.875	10.000	1.500	2.600
8	5.895	9.000	1.500	2.600
9	6.070	5.000	1.500	2.600
10	6.320	5.000	1.500	2.600
11	6.055	15.000	1.500	2.600
12	5.680	25.000	1.500	2.600
13	5.605	10.000	1.500	2.600
14	5.740	10.000	1.500	2.600
15	5.815	55.000	1.500	2.600
16	6.340	89.000	1.500	2.600
17	6.850	20.000	1.500	2.600
18	6.825	10.000	1.500	2.600

Input Information from Internal Weir R0100-W3.1

```

=====
Point      Data      Data      Data      Data
No.       Column   Column   Column   Column
         # 1     # 2     # 3     # 4
-----
  1       6.300   45.000   1.500   2.600
  2       6.205   29.000   1.500   2.600
  3       6.160   10.000   1.500   2.600
  4       6.150   45.000   1.500   2.600
  5       6.165   15.000   1.500   2.600
  6       6.180   10.000   1.500   2.600
  7       6.190   24.000   1.500   2.600
  8       6.240   15.000   1.500   2.600
  9       6.265   10.000   1.500   2.600
 10       6.275   25.000   1.500   2.600
 11       6.265   35.000   1.500   2.600
 12       6.260   10.000   1.500   2.600
 13       6.300   29.000   1.500   2.600
 14       6.300   55.000   1.500   2.600
 15       6.285   49.000   1.500   2.600
 16       6.255   25.000   1.500   2.600
 17       6.270   15.000   1.500   2.600

```

Input Information from Internal Weir R0110-W2.1

```

=====
Point      Data      Data      Data      Data
No.       Column   Column   Column   Column
         # 1     # 2     # 3     # 4
-----
  1       8.225   18.000   1.500   2.600
  2       8.045   57.000   1.500   2.600
  3       7.975   20.000   1.500   2.600
  4       7.935   15.000   1.500   2.600
  5       7.875   29.000   1.500   2.600
  6       7.845   59.000   1.500   2.600
  7       7.835   10.000   1.500   2.600
  8       7.785   10.000   1.500   2.600
  9       7.750   34.000   1.500   2.600
 10       7.755   19.000   1.500   2.600
 11       7.860   30.000   1.500   2.600
 12       7.790    4.000   1.500   2.600
 13       7.770   25.000   1.500   2.600
 14       7.750   14.000   1.500   2.600
 15       7.705   15.000   1.500   2.600
 16       7.840   10.000   1.500   2.600
 17       7.995   30.000   1.500   2.600
 18       7.910   35.000   1.500   2.600
 19       7.805   25.000   1.500   2.600

```

20	7.710	24.000	1.500	2.600
21	7.630	25.000	1.500	2.600
22	7.590	20.000	1.500	2.600
23	7.615	55.000	1.500	2.600
24	7.925	30.000	1.500	2.600
25	8.095	15.000	1.500	2.600
26	8.140	15.000	1.500	2.600
27	8.150	15.000	1.500	2.600
28	8.210	11.000	1.500	2.600
29	8.340	44.000	1.500	2.600
30	8.360	45.000	1.500	2.600
31	8.270	34.000	1.500	2.600
32	8.180	24.000	1.500	2.600
33	8.050	10.000	1.500	2.600
34	7.690	43.000	1.500	2.600
35	7.340	10.000	1.500	2.600
36	7.105	33.000	1.500	2.600
37	7.050	15.000	1.500	2.600
38	6.815	42.000	1.500	2.600
39	6.530	5.000	1.500	2.600
40	6.595	24.000	1.500	2.600

=====
Input Information from Internal Weir R0120-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.625	29.000	1.500	2.600
2	7.705	44.000	1.500	2.600
3	7.620	14.000	1.500	2.600
4	7.685	29.000	1.500	2.600
5	7.750	20.000	1.500	2.600
6	7.730	54.000	1.500	2.600
7	7.690	5.000	1.500	2.600
8	7.630	28.000	1.500	2.600
9	7.595	30.000	1.500	2.600
10	7.555	15.000	1.500	2.600
11	7.710	9.000	1.500	2.600
12	7.735	13.000	1.500	2.600
13	7.740	11.000	1.500	2.600
14	7.755	8.000	1.500	2.600
15	7.710	32.000	1.500	2.600
16	7.665	19.000	1.500	2.600
17	7.655	25.000	1.500	2.600
18	7.560	77.000	1.500	2.600
19	7.445	25.000	1.500	2.600
20	7.430	9.000	1.500	2.600
21	7.475	43.000	1.500	2.600

22	7.505	27.000	1.500	2.600
23	7.515	30.000	1.500	2.600
24	7.725	107.000	1.500	2.600
25	7.900	5.000	1.500	2.600
26	7.810	72.000	1.500	2.600
27	7.780	15.000	1.500	2.600
28	7.880	14.000	1.500	2.600
29	7.985	19.000	1.500	2.600
30	8.200	54.000	1.500	2.600
31	8.445	34.000	1.500	2.600
32	8.480	5.000	1.500	2.600
33	8.340	5.000	1.500	2.600
34	8.420	10.000	1.500	2.600
35	8.410	39.000	1.500	2.600
36	8.345	5.000	1.500	2.600
37	8.285	20.000	1.500	2.600

=====
Input Information from Internal Weir R0130-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.375	55.000	1.500	2.600
2	7.335	10.000	1.500	2.600
3	7.380	60.000	1.500	2.600
4	7.420	20.000	1.500	2.600
5	7.445	20.000	1.500	2.600
6	7.535	40.000	1.500	2.600
7	7.585	5.000	1.500	2.600
8	7.525	44.000	1.500	2.600
9	7.500	25.000	1.500	2.600
10	7.515	50.000	1.500	2.600
11	7.480	30.000	1.500	2.600
12	7.265	84.000	1.500	2.600
13	6.985	43.000	1.500	2.600
14	6.840	15.000	1.500	2.600
15	6.855	59.000	1.500	2.600
16	6.975	24.000	1.500	2.600
17	7.035	14.000	1.500	2.600
18	6.990	14.000	1.500	2.600
19	6.910	14.000	1.500	2.600
20	6.865	24.000	1.500	2.600
21	6.935	18.000	1.500	2.600
22	7.180	38.000	1.500	2.600
23	7.150	15.000	1.500	2.600
24	7.135	24.000	1.500	2.600
25	7.090	24.000	1.500	2.600
26	6.990	14.000	1.500	2.600

27	6.955	13.000	1.500	2.600
28	6.955	15.000	1.500	2.600
29	6.920	10.000	1.500	2.600
30	6.785	24.000	1.500	2.600
31	6.800	15.000	1.500	2.600
32	7.145	14.000	1.500	2.600
33	7.575	20.000	1.500	2.600
34	7.715	15.000	1.500	2.600
35	7.590	9.000	1.500	2.600
36	7.455	25.000	1.500	2.600
37	7.340	29.000	1.500	2.600
38	7.340	24.000	1.500	2.600

=====
Input Information from Internal Weir R0150-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.845	21.000	1.500	2.600
2	5.820	27.000	1.500	2.600
3	5.820	5.000	1.500	2.600
4	5.820	5.000	1.500	2.600
5	5.840	15.000	1.500	2.600
6	5.875	5.000	1.500	2.600
7	5.850	44.000	1.500	2.600
8	5.635	10.000	1.500	2.600
9	5.585	10.000	1.500	2.600
10	5.590	9.000	1.500	2.600
11	5.580	35.000	1.500	2.600
12	5.555	10.000	1.500	2.600
13	5.575	15.000	1.500	2.600
14	5.620	29.000	1.500	2.600
15	5.645	10.000	1.500	2.600
16	5.660	29.000	1.500	2.600
17	5.660	10.000	1.500	2.600
18	5.555	34.000	1.500	2.600
19	5.590	48.000	1.500	2.600
20	5.705	24.000	1.500	2.600
21	5.535	5.000	1.500	2.600

=====
Input Information from Internal Weir R0150-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.480	5.000	1.500	2.600

2	7.685	5.000	1.500	2.600
3	7.460	19.000	1.500	2.600
4	7.320	15.000	1.500	2.600
5	7.325	10.000	1.500	2.600
6	7.160	19.000	1.500	2.600
7	7.180	25.000	1.500	2.600
8	7.145	9.000	1.500	2.600
9	6.960	54.000	1.500	2.600
10	6.785	10.000	1.500	2.600
11	6.720	29.000	1.500	2.600
12	6.645	15.000	1.500	2.600
13	6.535	34.000	1.500	2.600
14	6.400	20.000	1.500	2.600
15	6.335	9.000	1.500	2.600
16	6.280	20.000	1.500	2.600
17	6.165	29.000	1.500	2.600
18	5.990	78.000	1.500	2.600
19	5.855	45.000	1.500	2.600
20	5.825	10.000	1.500	2.600
21	5.755	40.000	1.500	2.600
22	5.835	39.000	1.500	2.600
23	5.840	10.000	1.500	2.600
24	5.835	15.000	1.500	2.600
25	5.835	10.000	1.500	2.600
26	5.850	25.000	1.500	2.600

=====
Input Information from Internal Weir R0170-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.585	56.000	1.500	2.600
2	7.570	24.000	1.500	2.600
3	7.490	33.000	1.500	2.600
4	7.460	68.000	1.500	2.600
5	7.435	19.000	1.500	2.600
6	7.300	26.000	1.500	2.600
7	7.270	24.000	1.500	2.600
8	7.265	27.000	1.500	2.600
9	7.260	45.000	1.500	2.600
10	7.250	36.000	1.500	2.600
11	7.245	24.000	1.500	2.600
12	7.265	19.000	1.500	2.600
13	7.270	37.000	1.500	2.600
14	7.210	5.000	1.500	2.600
15	7.380	5.000	1.500	2.600
16	7.580	5.000	1.500	2.600
17	7.405	19.000	1.500	2.600

18	7.190	15.000	1.500	2.600
19	7.090	10.000	1.500	2.600
20	7.090	40.000	1.500	2.600
21	7.300	5.000	1.500	2.600
22	7.615	5.000	1.500	2.600
23	7.900	35.000	1.500	2.600
24	8.055	10.000	1.500	2.600
25	8.395	10.000	1.500	2.600
26	8.510	10.000	1.500	2.600
27	8.510	10.000	1.500	2.600
28	8.515	14.000	1.500	2.600
29	8.370	30.000	1.500	2.600
30	8.405	30.000	1.500	2.600
31	8.330	10.000	1.500	2.600

=====
Input Information from Internal Weir R0170-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.445	5.000	1.500	2.600
2	8.400	20.000	1.500	2.600
3	8.400	10.000	1.500	2.600
4	8.365	10.000	1.500	2.600
5	8.295	20.000	1.500	2.600
6	8.315	15.000	1.500	2.600
7	8.370	10.000	1.500	2.600
8	8.380	10.000	1.500	2.600
9	8.355	29.000	1.500	2.600
10	8.240	25.000	1.500	2.600
11	8.095	30.000	1.500	2.600
12	7.985	20.000	1.500	2.600
13	7.855	10.000	1.500	2.600
14	7.790	15.000	1.500	2.600
15	7.830	25.000	1.500	2.600
16	7.790	15.000	1.500	2.600
17	7.610	10.000	1.500	2.600
18	7.690	25.000	1.500	2.600
19	7.695	10.000	1.500	2.600
20	7.740	10.000	1.500	2.600
21	7.900	30.000	1.500	2.600
22	7.800	35.000	1.500	2.600
23	7.755	54.000	1.500	2.600
24	7.760	15.000	1.500	2.600
25	7.750	10.000	1.500	2.600
26	7.770	15.000	1.500	2.600
27	7.665	20.000	1.500	2.600
28	7.745	15.000	1.500	2.600

29	7.790	20.000	1.500	2.600
30	7.770	40.000	1.500	2.600
31	7.750	15.000	1.500	2.600
32	7.720	10.000	1.500	2.600
33	7.745	25.000	1.500	2.600
34	7.795	10.000	1.500	2.600
35	7.805	5.000	1.500	2.600
36	7.735	20.000	1.500	2.600
37	7.840	5.000	1.500	2.600
38	7.855	5.000	1.500	2.600
39	7.835	10.000	1.500	2.600
40	7.775	25.000	1.500	2.600
41	7.655	30.000	1.500	2.600
42	7.765	25.000	1.500	2.600
43	7.795	35.000	1.500	2.600
44	7.815	10.000	1.500	2.600
45	7.790	5.000	1.500	2.600
46	7.765	30.000	1.500	2.600
47	7.925	5.000	1.500	2.600
48	7.895	20.000	1.500	2.600
49	7.870	15.000	1.500	2.600
50	7.845	15.000	1.500	2.600
51	7.825	10.000	1.500	2.600
52	7.880	40.000	1.500	2.600
53	7.770	10.000	1.500	2.600
54	7.930	15.000	1.500	2.600
55	8.065	15.000	1.500	2.600

=====
Input Information from Internal Weir R0190-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.155	10.000	1.500	2.600
2	8.120	14.000	1.500	2.600
3	8.120	25.000	1.500	2.600
4	7.840	107.000	1.500	2.600
5	7.290	19.000	1.500	2.600
6	7.165	15.000	1.500	2.600

=====
Input Information from Internal Weir R0190-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.140	10.000	1.500	2.600

2	8.235	5.000	1.500	2.600
3	8.445	25.000	1.500	2.600
4	8.310	30.000	1.500	2.600
5	8.200	14.000	1.500	2.600
6	8.205	10.000	1.500	2.600
7	8.190	30.000	1.500	2.600
8	8.200	5.000	1.500	2.600
9	8.330	50.000	1.500	2.600
10	8.440	15.000	1.500	2.600
11	8.430	5.000	1.500	2.600
12	8.445	15.000	1.500	2.600
13	8.460	20.000	1.500	2.600
14	8.520	34.000	1.500	2.600
15	8.455	10.000	1.500	2.600
16	8.480	10.000	1.500	2.600
17	8.515	10.000	1.500	2.600
18	8.505	35.000	1.500	2.600
19	8.430	20.000	1.500	2.600
20	8.400	10.000	1.500	2.600
21	8.305	20.000	1.500	2.600
22	8.215	15.000	1.500	2.600
23	8.215	24.000	1.500	2.600
24	8.215	20.000	1.500	2.600
25	8.200	15.000	1.500	2.600

=====
Input Information from Internal Weir R0190-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.680	35.000	1.500	2.600
2	7.675	10.000	1.500	2.600
3	7.635	15.000	1.500	2.600
4	7.615	10.000	1.500	2.600
5	7.675	10.000	1.500	2.600
6	7.755	44.000	1.500	2.600
7	7.775	15.000	1.500	2.600
8	7.745	10.000	1.500	2.600
9	7.775	15.000	1.500	2.600
10	7.755	15.000	1.500	2.600
11	7.715	20.000	1.500	2.600
12	7.680	25.000	1.500	2.600
13	7.670	25.000	1.500	2.600
14	7.715	10.000	1.500	2.600
15	7.750	20.000	1.500	2.600
16	7.695	15.000	1.500	2.600
17	7.660	14.000	1.500	2.600
18	7.690	40.000	1.500	2.600

19	7.780	20.000	1.500	2.600
20	7.845	15.000	1.500	2.600
21	7.790	10.000	1.500	2.600
22	7.825	60.000	1.500	2.600
23	7.915	15.000	1.500	2.600
24	7.945	10.000	1.500	2.600
25	8.020	25.000	1.500	2.600
26	8.100	5.000	1.500	2.600
27	8.110	14.000	1.500	2.600
28	8.125	10.000	1.500	2.600
29	8.125	10.000	1.500	2.600
30	8.225	15.000	1.500	2.600
31	8.260	45.000	1.500	2.600
32	8.200	25.000	1.500	2.600
33	8.240	15.000	1.500	2.600
34	8.355	20.000	1.500	2.600
35	8.245	5.000	1.500	2.600
36	8.110	10.000	1.500	2.600
37	8.135	10.000	1.500	2.600

=====
Input Information from Internal Weir R0200-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.880	5.000	1.500	2.600
2	7.740	14.000	1.500	2.600
3	7.700	19.000	1.500	2.600
4	7.750	19.000	1.500	2.600
5	7.755	24.000	1.500	2.600
6	7.780	58.000	1.500	2.600
7	7.790	9.000	1.500	2.600
8	7.755	15.000	1.500	2.600
9	7.735	35.000	1.500	2.600
10	7.735	5.000	1.500	2.600
11	7.650	40.000	1.500	2.600
12	7.530	24.000	1.500	2.600
13	7.550	10.000	1.500	2.600
14	7.590	30.000	1.500	2.600
15	7.605	15.000	1.500	2.600

=====
Input Information from Internal Weir R0200-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----

1	9.065	15.000	1.500	2.600
2	8.300	10.000	1.500	2.600
3	7.745	10.000	1.500	2.600
4	7.770	29.000	1.500	2.600

=====
Input Information from Internal Weir R0220-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.425	12.000	1.500	2.600
2	6.420	33.000	1.500	2.600
3	6.390	39.000	1.500	2.600
4	6.370	14.000	1.500	2.600
5	6.355	15.000	1.500	2.600
6	6.370	9.000	1.500	2.600
7	6.365	15.000	1.500	2.600
8	6.300	12.000	1.500	2.600
9	6.140	36.000	1.500	2.600
10	6.180	59.000	1.500	2.600
11	6.165	20.000	1.500	2.600
12	6.120	60.000	1.500	2.600
13	6.045	45.000	1.500	2.600
14	5.915	5.000	1.500	2.600
15	6.010	19.000	1.500	2.600
16	6.025	15.000	1.500	2.600
17	6.000	14.000	1.500	2.600
18	6.010	5.000	1.500	2.600

=====
Input Information from Internal Weir R0240-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.120	14.000	1.500	2.600
2	5.140	15.000	1.500	2.600
3	5.065	58.000	1.500	2.600
4	4.830	74.000	1.500	2.600
5	4.860	10.000	1.500	2.600
6	4.930	20.000	1.500	2.600
7	4.775	25.000	1.500	2.600
8	4.720	10.000	1.500	2.600
9	4.770	10.000	1.500	2.600
10	4.655	10.000	1.500	2.600
11	4.640	5.000	1.500	2.600
12	4.690	20.000	1.500	2.600

13	4.770	25.000	1.500	2.600
14	4.750	15.000	1.500	2.600
15	4.740	15.000	1.500	2.600
16	4.755	45.000	1.500	2.600
17	4.735	10.000	1.500	2.600
18	4.740	15.000	1.500	2.600
19	4.700	25.000	1.500	2.600
20	4.805	5.000	1.500	2.600
21	4.885	19.000	1.500	2.600
22	4.765	20.000	1.500	2.600
23	4.730	10.000	1.500	2.600
24	4.760	5.000	1.500	2.600
25	4.780	15.000	1.500	2.600
26	4.745	10.000	1.500	2.600
27	4.715	20.000	1.500	2.600
28	4.725	5.000	1.500	2.600
29	4.705	5.000	1.500	2.600
30	4.710	15.000	1.500	2.600
31	4.770	20.000	1.500	2.600
32	4.805	10.000	1.500	2.600
33	4.790	4.000	1.500	2.600
34	4.790	9.000	1.500	2.600
35	4.795	9.000	1.500	2.600
36	4.815	28.000	1.500	2.600

=====
Input Information from Internal Weir R0240-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.205	5.000	1.500	2.600
2	5.120	15.000	1.500	2.600
3	5.010	9.000	1.500	2.600
4	5.130	5.000	1.500	2.600
5	5.150	20.000	1.500	2.600
6	5.165	19.000	1.500	2.600
7	5.230	30.000	1.500	2.600

=====
Input Information from Internal Weir R0240-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	4.855	15.000	1.500	2.600
2	4.745	10.000	1.500	2.600
3	4.745	10.000	1.500	2.600

4	4.890	25.000	1.500	2.600
5	4.910	89.000	1.500	2.600
6	4.820	10.000	1.500	2.600
7	4.875	35.000	1.500	2.600
8	4.980	15.000	1.500	2.600
9	4.860	5.000	1.500	2.600
10	4.875	10.000	1.500	2.600
11	4.860	30.000	1.500	2.600
12	4.845	14.000	1.500	2.600
13	4.900	10.000	1.500	2.600
14	4.910	10.000	1.500	2.600
15	4.890	10.000	1.500	2.600
16	4.925	10.000	1.500	2.600
17	4.870	15.000	1.500	2.600
18	4.740	15.000	1.500	2.600
19	4.650	35.000	1.500	2.600
20	4.620	45.000	1.500	2.600
21	4.805	9.000	1.500	2.600
22	4.810	25.000	1.500	2.600
23	4.800	64.000	1.500	2.600
24	4.785	15.000	1.500	2.600
25	4.735	59.000	1.500	2.600
26	4.835	20.000	1.500	2.600
27	4.805	20.000	1.500	2.600
28	4.765	9.000	1.500	2.600
29	4.775	65.000	1.500	2.600
30	4.795	10.000	1.500	2.600
31	4.780	10.000	1.500	2.600
32	4.795	9.000	1.500	2.600
33	4.825	35.000	1.500	2.600
34	4.810	15.000	1.500	2.600
35	4.755	40.000	1.500	2.600
36	4.765	14.000	1.500	2.600
37	4.815	15.000	1.500	2.600
38	4.795	20.000	1.500	2.600

=====
Input Information from Internal Weir R0240-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.875	10.000	1.500	2.600
2	3.890	10.000	1.500	2.600
3	3.890	10.000	1.500	2.600
4	3.895	20.000	1.500	2.600
5	3.905	54.000	1.500	2.600
6	3.900	10.000	1.500	2.600
7	3.865	10.000	1.500	2.600

8	3.865	10.000	1.500	2.600
9	3.895	10.000	1.500	2.600
10	3.905	55.000	1.500	2.600
11	3.895	15.000	1.500	2.600
12	3.880	5.000	1.500	2.600
13	3.985	15.000	1.500	2.600
14	3.940	49.000	1.500	2.600
15	3.960	25.000	1.500	2.600
16	3.940	10.000	1.500	2.600
17	3.910	5.000	1.500	2.600
18	3.895	15.000	1.500	2.600
19	3.950	15.000	1.500	2.600
20	4.005	5.000	1.500	2.600
21	3.950	15.000	1.500	2.600
22	3.855	10.000	1.500	2.600
23	3.800	15.000	1.500	2.600
24	3.990	24.000	1.500	2.600
25	3.940	25.000	1.500	2.600
26	3.905	25.000	1.500	2.600
27	3.830	10.000	1.500	2.600
28	3.600	5.000	1.500	2.600
29	3.675	10.000	1.500	2.600
30	3.675	10.000	1.500	2.600
31	3.780	10.000	1.500	2.600
32	3.910	10.000	1.500	2.600
33	4.010	15.000	1.500	2.600
34	4.030	10.000	1.500	2.600
35	4.030	10.000	1.500	2.600
36	4.105	16.000	1.500	2.600
37	4.180	19.000	1.500	2.600
38	4.185	30.000	1.500	2.600
39	4.110	10.000	1.500	2.600
40	4.145	19.000	1.500	2.600
41	4.400	25.000	1.500	2.600
42	4.770	15.000	1.500	2.600
43	4.375	34.000	1.500	2.600
44	3.925	14.000	1.500	2.600
45	4.175	30.000	1.500	2.600
46	4.305	10.000	1.500	2.600
47	4.250	10.000	1.500	2.600
48	4.240	5.000	1.500	2.600
49	4.220	5.000	1.500	2.600
50	4.450	5.000	1.500	2.600
51	4.570	5.000	1.500	2.600
52	4.510	20.000	1.500	2.600
53	4.615	5.000	1.500	2.600
54	4.555	24.000	1.500	2.600
55	4.455	10.000	1.500	2.600
56	4.410	15.000	1.500	2.600
57	4.395	78.000	1.500	2.600

58	4.595	19.000	1.500	2.600
59	4.685	15.000	1.500	2.600

=====
Input Information from Internal Weir R0240-W5.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.520	43.000	1.500	2.600
2	5.735	24.000	1.500	2.600
3	5.875	9.000	1.500	2.600
4	5.790	19.000	1.500	2.600

=====
Input Information from Internal Weir R0240-W6.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	4.835	5.000	1.500	2.600
2	4.840	5.000	1.500	2.600
3	4.845	50.000	1.500	2.600
4	4.825	25.000	1.500	2.600
5	4.800	54.000	1.500	2.600
6	4.765	10.000	1.500	2.600
7	4.740	10.000	1.500	2.600
8	4.745	10.000	1.500	2.600
9	4.805	10.000	1.500	2.600
10	4.860	10.000	1.500	2.600
11	4.870	15.000	1.500	2.600
12	4.830	20.000	1.500	2.600
13	4.865	45.000	1.500	2.600
14	4.870	15.000	1.500	2.600
15	4.765	49.000	1.500	2.600
16	4.885	10.000	1.500	2.600
17	4.885	45.000	1.500	2.600
18	4.865	20.000	1.500	2.600
19	4.800	40.000	1.500	2.600
20	4.730	25.000	1.500	2.600
21	4.725	10.000	1.500	2.600
22	4.765	10.000	1.500	2.600
23	4.765	59.000	1.500	2.600
24	4.750	15.000	1.500	2.600
25	4.710	10.000	1.500	2.600
26	4.680	10.000	1.500	2.600
27	4.710	10.000	1.500	2.600
28	4.745	20.000	1.500	2.600

29	4.780	115.000	1.500	2.600
30	4.785	19.000	1.500	2.600
31	4.775	5.000	1.500	2.600
32	4.820	20.000	1.500	2.600
33	4.895	10.000	1.500	2.600

=====
Input Information from Internal Weir R0250-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.290	10.000	1.500	2.600
2	5.150	20.000	1.500	2.600
3	4.485	9.000	1.500	2.600
4	3.975	5.000	1.500	2.600
5	3.500	15.000	1.500	2.600
6	2.875	35.000	1.500	2.600
7	2.655	10.000	1.500	2.600
8	2.875	14.000	1.500	2.600
9	2.995	20.000	1.500	2.600
10	3.050	10.000	1.500	2.600
11	3.250	10.000	1.500	2.600
12	3.585	10.000	1.500	2.600
13	3.955	5.000	1.500	2.600
14	4.040	24.000	1.500	2.600
15	4.315	9.000	1.500	2.600
16	4.535	26.000	1.500	2.600
17	4.130	10.000	1.500	2.600
18	3.710	4.000	1.500	2.600
19	3.760	19.000	1.500	2.600
20	3.825	19.000	1.500	2.600
21	4.010	35.000	1.500	2.600
22	4.430	8.000	1.500	2.600
23	4.535	13.000	1.500	2.600
24	4.600	9.000	1.500	2.600
25	4.370	14.000	1.500	2.600
26	4.215	41.000	1.500	2.600
27	4.230	20.000	1.500	2.600
28	4.220	30.000	1.500	2.600
29	4.235	24.000	1.500	2.600
30	4.095	20.000	1.500	2.600
31	4.000	10.000	1.500	2.600
32	3.820	10.000	1.500	2.600
33	4.040	10.000	1.500	2.600
34	4.255	10.000	1.500	2.600
35	3.810	10.000	1.500	2.600
36	3.510	5.000	1.500	2.600
37	4.000	10.000	1.500	2.600

38	4.175	10.000	1.500	2.600
39	3.950	10.000	1.500	2.600
40	3.790	10.000	1.500	2.600
41	3.670	5.000	1.500	2.600

=====
Input Information from Internal Weir R0250-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.160	10.000	1.500	2.600
2	4.045	44.000	1.500	2.600
3	3.940	16.000	1.500	2.600
4	3.750	46.000	1.500	2.600
5	3.670	12.000	1.500	2.600
6	3.860	15.000	1.500	2.600
7	4.090	15.000	1.500	2.600
8	3.955	15.000	1.500	2.600
9	3.840	24.000	1.500	2.600
10	3.845	10.000	1.500	2.600
11	3.845	5.000	1.500	2.600
12	3.825	10.000	1.500	2.600
13	3.830	5.000	1.500	2.600
14	3.840	15.000	1.500	2.600
15	3.740	30.000	1.500	2.600
16	3.480	25.000	1.500	2.600
17	3.285	15.000	1.500	2.600
18	3.665	20.000	1.500	2.600
19	4.000	45.000	1.500	2.600
20	3.890	8.000	1.500	2.600
21	3.455	10.000	1.500	2.600
22	2.995	20.000	1.500	2.600
23	2.950	10.000	1.500	2.600
24	3.290	10.000	1.500	2.600
25	3.530	20.000	1.500	2.600
26	3.635	9.000	1.500	2.600
27	3.625	8.000	1.500	2.600
28	3.280	9.000	1.500	2.600
29	3.100	9.000	1.500	2.600
30	2.970	10.000	1.500	2.600
31	2.745	9.000	1.500	2.600
32	3.665	28.000	1.500	2.600
33	4.320	4.000	1.500	2.600
34	3.975	5.000	1.500	2.600
35	4.145	24.000	1.500	2.600
36	4.115	20.000	1.500	2.600
37	3.720	29.000	1.500	2.600
38	3.825	29.000	1.500	2.600

39	4.045	10.000	1.500	2.600
40	4.095	4.000	1.500	2.600
41	4.280	17.000	1.500	2.600
42	4.410	18.000	1.500	2.600
43	4.350	9.000	1.500	2.600
44	4.385	10.000	1.500	2.600
45	4.390	18.000	1.500	2.600
46	4.420	33.000	1.500	2.600
47	4.080	28.000	1.500	2.600
48	3.625	14.000	1.500	2.600
49	3.765	5.000	1.500	2.600
50	4.480	29.000	1.500	2.600
51	5.845	14.000	1.500	2.600
52	6.710	5.000	1.500	2.600
53	6.850	10.000	1.500	2.600
54	6.140	14.000	1.500	2.600
55	5.320	5.000	1.500	2.600
56	5.560	24.000	1.500	2.600
57	5.810	12.000	1.500	2.600
58	5.395	11.000	1.500	2.600
59	4.945	10.000	1.500	2.600
60	4.940	14.000	1.500	2.600
61	5.030	10.000	1.500	2.600
62	5.125	9.000	1.500	2.600
63	5.230	5.000	1.500	2.600
64	5.005	9.000	1.500	2.600
65	4.795	5.000	1.500	2.600

=====
Input Information from Internal Weir R0260-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.200	64.000	1.500	2.600
2	6.380	15.000	1.500	2.600
3	6.565	39.000	1.500	2.600
4	6.100	30.000	1.500	2.600
5	4.970	15.000	1.500	2.600
6	4.030	20.000	1.500	2.600
7	3.485	18.000	1.500	2.600
8	3.240	22.000	1.500	2.600
9	3.115	5.000	1.500	2.600
10	3.115	9.000	1.500	2.600
11	3.060	15.000	1.500	2.600
12	2.985	18.000	1.500	2.600
13	3.185	15.000	1.500	2.600
14	3.170	23.000	1.500	2.600
15	3.080	15.000	1.500	2.600

16	3.070	14.000	1.500	2.600
17	3.090	10.000	1.500	2.600
18	3.110	19.000	1.500	2.600
19	3.230	25.000	1.500	2.600
20	3.460	30.000	1.500	2.600
21	3.360	20.000	1.500	2.600
22	3.210	19.000	1.500	2.600
23	3.005	19.000	1.500	2.600
24	2.795	28.000	1.500	2.600
25	2.610	19.000	1.500	2.600
26	2.645	19.000	1.500	2.600
27	2.895	10.000	1.500	2.600
28	2.875	5.000	1.500	2.600
29	2.900	15.000	1.500	2.600
30	3.110	4.000	1.500	2.600
31	3.240	10.000	1.500	2.600
32	3.070	10.000	1.500	2.600
33	2.900	10.000	1.500	2.600
34	3.210	10.000	1.500	2.600
35	3.390	5.000	1.500	2.600
36	3.330	24.000	1.500	2.600
37	3.325	10.000	1.500	2.600
38	3.370	53.000	1.500	2.600
39	3.270	10.000	1.500	2.600
40	3.410	19.000	1.500	2.600
41	3.655	10.000	1.500	2.600
42	3.660	14.000	1.500	2.600
43	3.610	29.000	1.500	2.600
44	3.495	10.000	1.500	2.600
45	3.325	25.000	1.500	2.600
46	3.355	80.000	1.500	2.600
47	3.535	24.000	1.500	2.600
48	3.595	15.000	1.500	2.600
49	3.635	34.000	1.500	2.600
50	3.655	9.000	1.500	2.600
51	3.725	10.000	1.500	2.600

=====
Input Information from Internal Weir R0270-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.365	5.000	1.500	2.600
2	7.185	5.000	1.500	2.600
3	7.450	15.000	1.500	2.600
4	7.595	35.000	1.500	2.600
5	7.260	10.000	1.500	2.600
6	6.425	15.000	1.500	2.600

7	5.715	20.000	1.500	2.600
8	5.840	20.000	1.500	2.600
9	6.215	5.000	1.500	2.600
10	6.470	5.000	1.500	2.600
11	6.490	10.000	1.500	2.600
12	6.610	15.000	1.500	2.600
13	7.165	10.000	1.500	2.600
14	7.550	20.000	1.500	2.600
15	7.480	4.000	1.500	2.600
16	7.460	10.000	1.500	2.600
17	7.935	12.000	1.500	2.600

=====
Input Information from Internal Weir R0270-W3
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.215	5.000	1.500	2.600
2	7.170	4.000	1.500	2.600
3	7.970	12.000	1.500	2.600
4	8.525	5.000	1.500	2.600
5	8.110	5.000	1.500	2.600
6	6.895	10.000	1.500	2.600
7	5.650	5.000	1.500	2.600
8	5.080	5.000	1.500	2.600
9	4.745	5.000	1.500	2.600
10	4.555	10.000	1.500	2.600
11	4.745	10.000	1.500	2.600
12	5.645	15.000	1.500	2.600
13	7.265	10.000	1.500	2.600
14	8.475	4.000	1.500	2.600

=====
Input Information from Internal Weir R0270-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	4.625	20.000	1.500	2.600
2	4.845	25.000	1.500	2.600
3	5.185	29.000	1.500	2.600
4	4.725	37.000	1.500	2.600
5	4.330	14.000	1.500	2.600
6	4.425	18.000	1.500	2.600
7	4.545	9.000	1.500	2.600
8	4.740	4.000	1.500	2.600
9	4.465	10.000	1.500	2.600

10	4.560	10.000	1.500	2.600
11	5.030	14.000	1.500	2.600
12	4.870	14.000	1.500	2.600
13	4.545	14.000	1.500	2.600
14	4.335	5.000	1.500	2.600
15	3.720	10.000	1.500	2.600
16	3.060	10.000	1.500	2.600
17	2.845	9.000	1.500	2.600
18	2.975	15.000	1.500	2.600
19	3.195	25.000	1.500	2.600
20	3.440	9.000	1.500	2.600
21	3.295	15.000	1.500	2.600
22	2.990	5.000	1.500	2.600
23	3.175	10.000	1.500	2.600
24	3.535	4.000	1.500	2.600
25	4.165	5.000	1.500	2.600
26	4.615	5.000	1.500	2.600
27	4.370	20.000	1.500	2.600
28	4.120	4.000	1.500	2.600
29	4.725	18.000	1.500	2.600
30	5.405	5.000	1.500	2.600
31	5.450	5.000	1.500	2.600
32	5.230	5.000	1.500	2.600
33	4.770	5.000	1.500	2.600
34	4.295	5.000	1.500	2.600
35	4.135	24.000	1.500	2.600
36	4.095	15.000	1.500	2.600
37	4.325	10.000	1.500	2.600
38	5.110	10.000	1.500	2.600
39	5.650	5.000	1.500	2.600
40	5.470	9.000	1.500	2.600
41	5.005	5.000	1.500	2.600
42	4.240	5.000	1.500	2.600
43	3.760	5.000	1.500	2.600
44	3.965	5.000	1.500	2.600
45	4.175	14.000	1.500	2.600
46	4.175	10.000	1.500	2.600
47	3.940	10.000	1.500	2.600
48	3.895	10.000	1.500	2.600
49	4.575	14.000	1.500	2.600
50	6.420	53.000	1.500	2.600
51	7.790	5.000	1.500	2.600
52	7.700	5.000	1.500	2.600
53	7.185	5.000	1.500	2.600
54	6.340	5.000	1.500	2.600
55	5.505	5.000	1.500	2.600
56	4.965	43.000	1.500	2.600
57	4.775	4.000	1.500	2.600
58	4.575	13.000	1.500	2.600
59	4.415	9.000	1.500	2.600

60	4.675	15.000	1.500	2.600
61	4.760	14.000	1.500	2.600
62	4.880	15.000	1.500	2.600
63	5.555	15.000	1.500	2.600
64	6.140	21.000	1.500	2.600
65	5.885	13.000	1.500	2.600
66	5.265	25.000	1.500	2.600
67	5.145	5.000	1.500	2.600
68	5.435	4.000	1.500	2.600
69	5.650	5.000	1.500	2.600
70	5.570	10.000	1.500	2.600
71	5.150	10.000	1.500	2.600
72	4.735	5.000	1.500	2.600
73	4.700	10.000	1.500	2.600
74	4.955	10.000	1.500	2.600
75	5.040	20.000	1.500	2.600
76	4.485	14.000	1.500	2.600
77	3.985	5.000	1.500	2.600
78	4.300	10.000	1.500	2.600
79	6.890	25.000	1.500	2.600
80	10.370	10.000	1.500	2.600
81	12.435	9.000	1.500	2.600
82	13.510	5.000	1.500	2.600
83	14.055	11.000	1.500	2.600
84	14.320	4.000	1.500	2.600

=====
Input Information from Internal Weir R0275-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	4.740	9.000	1.500	2.600
2	4.185	5.000	1.500	2.600
3	3.410	5.000	1.500	2.600
4	2.110	14.000	1.500	2.600
5	1.575	4.000	1.500	2.600
6	2.390	5.000	1.500	2.600
7	3.140	4.000	1.500	2.600
8	3.400	19.000	1.500	2.600
9	0.570	-65.000	1.500	2.600

=====
Input Information from Internal Weir R0280-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----

1	7.045	14.000	1.500	2.600
2	6.790	5.000	1.500	2.600
3	6.380	5.000	1.500	2.600
4	5.590	4.000	1.500	2.600
5	4.410	5.000	1.500	2.600
6	3.340	5.000	1.500	2.600
7	3.040	5.000	1.500	2.600
8	3.505	4.000	1.500	2.600
9	4.375	5.000	1.500	2.600
10	5.270	5.000	1.500	2.600
11	5.810	5.000	1.500	2.600
12	5.935	9.000	1.500	2.600

=====
Input Information from Internal Weir R0285-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.490	3.000	1.500	2.600
2	7.455	10.000	1.500	2.600
3	7.015	3.000	1.500	2.600
4	6.705	5.000	1.500	2.600
5	6.695	20.000	1.500	2.600
6	6.740	5.000	1.500	2.600
7	6.355	5.000	1.500	2.600
8	5.860	5.000	1.500	2.600
9	5.555	10.000	1.500	2.600
10	6.120	15.000	1.500	2.600
11	7.040	5.000	1.500	2.600
12	7.260	5.000	1.500	2.600
13	7.025	20.000	1.500	2.600
14	6.745	10.000	1.500	2.600
15	6.165	10.000	1.500	2.600
16	5.365	10.000	1.500	2.600
17	5.230	10.000	1.500	2.600
18	5.165	10.000	1.500	2.600
19	5.125	10.000	1.500	2.600
20	5.220	5.000	1.500	2.600
21	4.910	10.000	1.500	2.600
22	4.725	9.000	1.500	2.600
23	5.190	10.000	1.500	2.600
24	5.500	5.000	1.500	2.600
25	5.445	5.000	1.500	2.600
26	5.590	5.000	1.500	2.600
27	6.160	15.000	1.500	2.600
28	6.365	4.000	1.500	2.600
29	5.480	9.000	1.500	2.600
30	4.650	5.000	1.500	2.600

31	4.645	4.000	1.500	2.600
32	5.610	14.000	1.500	2.600
33	6.185	9.000	1.500	2.600
34	6.335	18.000	1.500	2.600
35	5.900	20.000	1.500	2.600
36	4.875	10.000	1.500	2.600
37	4.725	5.000	1.500	2.600
38	4.750	5.000	1.500	2.600
39	4.745	15.000	1.500	2.600
40	4.745	5.000	1.500	2.600
41	4.855	10.000	1.500	2.600
42	4.845	10.000	1.500	2.600
43	4.745	10.000	1.500	2.600
44	5.210	14.000	1.500	2.600
45	5.660	5.000	1.500	2.600
46	5.645	5.000	1.500	2.600
47	5.690	5.000	1.500	2.600
48	6.145	5.000	1.500	2.600
49	6.670	5.000	1.500	2.600
50	6.925	5.000	1.500	2.600
51	6.955	5.000	1.500	2.600
52	6.755	5.000	1.500	2.600
53	6.255	5.000	1.500	2.600
54	5.725	5.000	1.500	2.600
55	4.940	25.000	1.500	2.600
56	4.225	10.000	1.500	2.600
57	4.250	15.000	1.500	2.600
58	4.680	10.000	1.500	2.600
59	5.275	5.000	1.500	2.600
60	6.585	9.000	1.500	2.600
61	7.515	5.000	1.500	2.600
62	6.515	15.000	1.500	2.600
63	4.915	20.000	1.500	2.600
64	4.485	10.000	1.500	2.600
65	4.740	5.000	1.500	2.600
66	4.595	15.000	1.500	2.600
67	4.450	10.000	1.500	2.600
68	4.670	20.000	1.500	2.600
69	5.180	10.000	1.500	2.600
70	5.440	5.000	1.500	2.600
71	4.990	10.000	1.500	2.600
72	4.610	4.000	1.500	2.600
73	5.285	10.000	1.500	2.600
74	5.875	5.000	1.500	2.600
75	5.630	5.000	1.500	2.600
76	5.405	5.000	1.500	2.600
77	5.470	24.000	1.500	2.600
78	5.190	14.000	1.500	2.600
79	4.815	5.000	1.500	2.600
80	4.935	5.000	1.500	2.600

81	5.495	5.000	1.500	2.600
82	7.640	14.000	1.500	2.600
83	9.100	10.000	1.500	2.600
84	8.350	5.000	1.500	2.600
85	7.080	4.000	1.500	2.600
86	5.945	5.000	1.500	2.600
87	5.405	22.000	1.500	2.600
88	6.015	24.000	1.500	2.600
89	6.740	9.000	1.500	2.600
90	6.950	10.000	1.500	2.600
91	7.115	10.000	1.500	2.600
92	7.120	4.000	1.500	2.600
93	7.540	5.000	1.500	2.600
94	7.820	5.000	1.500	2.600
95	7.550	5.000	1.500	2.600
96	6.680	9.000	1.500	2.600
97	5.995	5.000	1.500	2.600
98	6.145	5.000	1.500	2.600
99	6.415	5.000	1.500	2.600
100	6.210	14.000	1.500	2.600
101	5.920	10.000	1.500	2.600
102	5.575	14.000	1.500	2.600
103	5.440	15.000	1.500	2.600
104	6.490	14.000	1.500	2.600
105	7.530	5.000	1.500	2.600
106	7.765	5.000	1.500	2.600
107	6.885	15.000	1.500	2.600
108	5.890	4.000	1.500	2.600
109	6.095	15.000	1.500	2.600

=====
Input Information from Internal Weir R0290-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.785	9.000	1.500	2.600
2	4.805	52.000	1.500	2.600
3	4.855	44.000	1.500	2.600
4	4.725	44.000	1.500	2.600
5	4.715	15.000	1.500	2.600
6	4.755	5.000	1.500	2.600
7	4.840	49.000	1.500	2.600
8	4.910	25.000	1.500	2.600
9	4.915	15.000	1.500	2.600
10	4.935	24.000	1.500	2.600
11	4.835	15.000	1.500	2.600
12	4.860	30.000	1.500	2.600
13	4.655	57.000	1.500	2.600

14	4.560	19.000	1.500	2.600
15	4.750	14.000	1.500	2.600
16	4.720	64.000	1.500	2.600
17	4.785	5.000	1.500	2.600
18	4.780	10.000	1.500	2.600
19	4.640	35.000	1.500	2.600
20	4.650	75.000	1.500	2.600
21	4.790	10.000	1.500	2.600
22	4.805	9.000	1.500	2.600
23	4.795	15.000	1.500	2.600
24	4.740	24.000	1.500	2.600
25	4.645	15.000	1.500	2.600
26	4.845	15.000	1.500	2.600
27	4.900	10.000	1.500	2.600
28	4.905	14.000	1.500	2.600
29	4.985	54.000	1.500	2.600
30	4.810	19.000	1.500	2.600
31	4.730	14.000	1.500	2.600
32	4.700	19.000	1.500	2.600
33	4.710	14.000	1.500	2.600
34	5.260	28.000	1.500	2.600
35	5.805	15.000	1.500	2.600

=====
Input Information from Internal Weir R0290-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.410	20.000	1.500	2.600
2	5.480	20.000	1.500	2.600
3	5.265	145.000	1.500	2.600
4	5.070	15.000	1.500	2.600
5	5.050	10.000	1.500	2.600
6	5.050	45.000	1.500	2.600
7	5.095	15.000	1.500	2.600
8	5.100	24.000	1.500	2.600
9	5.105	20.000	1.500	2.600
10	5.130	30.000	1.500	2.600
11	5.095	45.000	1.500	2.600
12	5.050	30.000	1.500	2.600
13	5.080	20.000	1.500	2.600

=====
Input Information from Internal Weir R0290-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----------	-----------------	-----------------	-----------------	-----------------

1	4.960	25.000	1.500	2.600
2	5.085	34.000	1.500	2.600
3	5.205	45.000	1.500	2.600
4	5.210	10.000	1.500	2.600
5	5.205	10.000	1.500	2.600
6	5.230	25.000	1.500	2.600
7	5.235	24.000	1.500	2.600
8	5.150	40.000	1.500	2.600
9	5.115	5.000	1.500	2.600
10	5.155	25.000	1.500	2.600
11	5.200	29.000	1.500	2.600
12	5.240	15.000	1.500	2.600
13	5.270	15.000	1.500	2.600
14	5.285	30.000	1.500	2.600
15	5.280	10.000	1.500	2.600
16	5.280	30.000	1.500	2.600
17	5.300	14.000	1.500	2.600
18	5.315	15.000	1.500	2.600
19	5.355	30.000	1.500	2.600
20	5.430	20.000	1.500	2.600
21	5.465	25.000	1.500	2.600
22	5.495	14.000	1.500	2.600
23	5.535	40.000	1.500	2.600

=====
Input Information from Internal Weir R0300-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.755	20.000	1.500	2.600
2	6.710	29.000	1.500	2.600
3	6.540	15.000	1.500	2.600
4	6.210	10.000	1.500	2.600
5	6.220	10.000	1.500	2.600
6	6.540	10.000	1.500	2.600
7	6.855	10.000	1.500	2.600
8	7.120	5.000	1.500	2.600
9	7.090	10.000	1.500	2.600
10	6.920	10.000	1.500	2.600
11	6.900	24.000	1.500	2.600
12	6.925	5.000	1.500	2.600
13	7.275	5.000	1.500	2.600
14	7.315	15.000	1.500	2.600
15	7.135	15.000	1.500	2.600
16	7.560	39.000	1.500	2.600
17	8.235	10.000	1.500	2.600
18	8.420	5.000	1.500	2.600

19	7.325	15.000	1.500	2.600
20	6.300	5.000	1.500	2.600
21	6.485	5.000	1.500	2.600
22	6.760	5.000	1.500	2.600
23	6.785	10.000	1.500	2.600
24	6.795	5.000	1.500	2.600
25	6.700	10.000	1.500	2.600
26	6.690	14.000	1.500	2.600
27	6.800	5.000	1.500	2.600
28	6.120	10.000	1.500	2.600
29	5.310	5.000	1.500	2.600
30	5.320	10.000	1.500	2.600
31	5.270	15.000	1.500	2.600
32	5.155	15.000	1.500	2.600
33	5.240	5.000	1.500	2.600
34	4.770	15.000	1.500	2.600
35	4.300	5.000	1.500	2.600
36	4.805	15.000	1.500	2.600
37	5.435	5.000	1.500	2.600
38	5.365	19.000	1.500	2.600
39	5.275	10.000	1.500	2.600
40	5.520	5.000	1.500	2.600
41	6.015	5.000	1.500	2.600
42	6.315	5.000	1.500	2.600
43	5.640	5.000	1.500	2.600
44	4.685	5.000	1.500	2.600
45	4.505	15.000	1.500	2.600
46	4.355	35.000	1.500	2.600
47	4.120	5.000	1.500	2.600
48	4.575	15.000	1.500	2.600
49	5.045	5.000	1.500	2.600
50	4.690	20.000	1.500	2.600
51	4.330	25.000	1.500	2.600
52	4.700	10.000	1.500	2.600
53	5.060	5.000	1.500	2.600
54	4.950	5.000	1.500	2.600
55	4.760	15.000	1.500	2.600
56	5.055	15.000	1.500	2.600
57	5.425	5.000	1.500	2.600
58	5.190	15.000	1.500	2.600
59	5.150	10.000	1.500	2.600
60	5.600	20.000	1.500	2.600
61	6.230	15.000	1.500	2.600
62	6.655	10.000	1.500	2.600
63	6.835	5.000	1.500	2.600
64	7.725	10.000	1.500	2.600
65	8.455	5.000	1.500	2.600
66	8.240	5.000	1.500	2.600
67	7.620	15.000	1.500	2.600
68	7.300	24.000	1.500	2.600

69	7.480	10.000	1.500	2.600
70	7.465	10.000	1.500	2.600
71	7.715	10.000	1.500	2.600
72	8.120	5.000	1.500	2.600
73	7.510	15.000	1.500	2.600
74	6.710	5.000	1.500	2.600
75	6.865	10.000	1.500	2.600
76	7.240	5.000	1.500	2.600
77	7.000	25.000	1.500	2.600
78	6.815	5.000	1.500	2.600
79	6.960	5.000	1.500	2.600
80	6.935	20.000	1.500	2.600
81	7.380	30.000	1.500	2.600
82	7.580	5.000	1.500	2.600
83	7.060	10.000	1.500	2.600
84	7.015	24.000	1.500	2.600

=====
Input Information from Internal Weir R0310-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.840	48.000	1.500	2.600
2	6.035	5.000	1.500	2.600
3	6.000	4.000	1.500	2.600
4	6.275	29.000	1.500	2.600
5	6.280	14.000	1.500	2.600

=====
Input Information from Internal Weir R0310-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	8.335	19.000	1.500	2.600
2	8.215	5.000	1.500	2.600
3	8.160	14.000	1.500	2.600
4	8.525	20.000	1.500	2.600
5	8.610	9.000	1.500	2.600
6	8.290	10.000	1.500	2.600
7	8.275	10.000	1.500	2.600
8	8.225	13.000	1.500	2.600
9	8.220	9.000	1.500	2.600
10	8.335	13.000	1.500	2.600
11	8.190	22.000	1.500	2.600
12	7.955	51.000	1.500	2.600
13	7.950	19.000	1.500	2.600

14	7.950	9.000	1.500	2.600
15	8.020	127.000	1.500	2.600
16	8.020	93.000	1.500	2.600
17	7.955	10.000	1.500	2.600
18	7.960	30.000	1.500	2.600
19	7.940	10.000	1.500	2.600
20	7.875	15.000	1.500	2.600
21	7.915	29.000	1.500	2.600
22	7.925	25.000	1.500	2.600
23	7.875	18.000	1.500	2.600
24	7.950	47.000	1.500	2.600
25	7.880	20.000	1.500	2.600
26	7.925	5.000	1.500	2.600
27	7.860	4.000	1.500	2.600
28	7.810	15.000	1.500	2.600
29	7.845	10.000	1.500	2.600
30	7.780	43.000	1.500	2.600

=====
Input Information from Internal Weir R0310-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.610	24.000	1.500	2.600
2	7.280	20.000	1.500	2.600
3	7.015	9.000	1.500	2.600
4	7.205	5.000	1.500	2.600
5	7.090	5.000	1.500	2.600
6	6.740	19.000	1.500	2.600
7	6.540	15.000	1.500	2.600
8	6.125	27.000	1.500	2.600
9	5.570	13.000	1.500	2.600
10	5.475	10.000	1.500	2.600
11	5.735	10.000	1.500	2.600
12	5.995	5.000	1.500	2.600
13	6.130	5.000	1.500	2.600
14	6.010	20.000	1.500	2.600
15	5.355	20.000	1.500	2.600
16	5.135	20.000	1.500	2.600
17	4.790	30.000	1.500	2.600
18	4.465	25.000	1.500	2.600
19	4.680	5.000	1.500	2.600
20	4.350	10.000	1.500	2.600
21	4.060	14.000	1.500	2.600
22	4.035	10.000	1.500	2.600
23	4.180	15.000	1.500	2.600
24	4.420	10.000	1.500	2.600
25	4.435	10.000	1.500	2.600

26	4.165	15.000	1.500	2.600
27	4.100	10.000	1.500	2.600
28	3.880	20.000	1.500	2.600
29	3.485	5.000	1.500	2.600
30	3.745	10.000	1.500	2.600
31	3.950	5.000	1.500	2.600
32	3.650	10.000	1.500	2.600
33	3.485	5.000	1.500	2.600
34	4.235	15.000	1.500	2.600
35	5.060	25.000	1.500	2.600
36	5.160	5.000	1.500	2.600
37	4.765	10.000	1.500	2.600
38	3.645	10.000	1.500	2.600
39	2.725	5.000	1.500	2.600
40	3.315	25.000	1.500	2.600
41	4.095	5.000	1.500	2.600
42	4.015	15.000	1.500	2.600
43	3.885	25.000	1.500	2.600
44	3.595	15.000	1.500	2.600
45	3.490	30.000	1.500	2.600
46	4.105	15.000	1.500	2.600
47	4.540	5.000	1.500	2.600
48	4.020	30.000	1.500	2.600
49	3.400	10.000	1.500	2.600
50	3.390	5.000	1.500	2.600
51	3.895	15.000	1.500	2.600
52	4.465	10.000	1.500	2.600
53	4.455	10.000	1.500	2.600
54	3.855	10.000	1.500	2.600
55	3.585	15.000	1.500	2.600
56	3.770	5.000	1.500	2.600
57	3.660	10.000	1.500	2.600
58	3.800	5.000	1.500	2.600
59	4.145	5.000	1.500	2.600
60	4.145	20.000	1.500	2.600
61	4.705	10.000	1.500	2.600
62	5.620	9.000	1.500	2.600
63	6.700	20.000	1.500	2.600
64	7.830	15.000	1.500	2.600
65	7.770	10.000	1.500	2.600
66	6.450	30.000	1.500	2.600
67	5.780	15.000	1.500	2.600
68	5.920	10.000	1.500	2.600
69	5.775	20.000	1.500	2.600
70	5.865	5.000	1.500	2.600
71	6.570	10.000	1.500	2.600
72	7.385	5.000	1.500	2.600
73	7.880	10.000	1.500	2.600
74	8.255	15.000	1.500	2.600
75	7.325	15.000	1.500	2.600

76 6.225 10.000 1.500 2.600

=====
Input Information from Internal Weir R0310-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.755	9.000	1.500	2.600
2	7.935	29.000	1.500	2.600
3	7.905	38.000	1.500	2.600
4	7.575	34.000	1.500	2.600
5	7.540	5.000	1.500	2.600
6	7.490	9.000	1.500	2.600
7	7.410	25.000	1.500	2.600
8	7.305	34.000	1.500	2.600
9	7.280	10.000	1.500	2.600
10	7.355	34.000	1.500	2.600
11	7.395	14.000	1.500	2.600
12	7.390	15.000	1.500	2.600
13	7.380	5.000	1.500	2.600
14	7.385	9.000	1.500	2.600
15	7.400	24.000	1.500	2.600
16	7.335	19.000	1.500	2.600
17	7.325	20.000	1.500	2.600
18	7.400	10.000	1.500	2.600
19	7.415	29.000	1.500	2.600
20	7.440	24.000	1.500	2.600
21	7.500	5.000	1.500	2.600

=====
Input Information from Internal Weir R0325-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.655	20.000	1.500	2.600
2	9.210	20.000	1.500	2.600
3	8.785	20.000	1.500	2.600
4	8.180	20.000	1.500	2.600
5	7.505	20.000	1.500	2.600
6	7.170	0.000	1.500	2.600

=====
Input Information from Internal Weir R0330-W2.1
=====

Point No.	Data Column	Data Column	Data Column	Data Column
--------------	----------------	----------------	----------------	----------------

	# 1	# 2	# 3	# 4
1	4.380	20.000	1.500	2.600
2	4.645	10.000	1.500	2.600
3	4.920	45.000	1.500	2.600
4	4.790	15.000	1.500	2.600
5	4.305	40.000	1.500	2.600
6	4.315	10.000	1.500	2.600
7	4.890	14.000	1.500	2.600
8	5.100	20.000	1.500	2.600
9	5.280	20.000	1.500	2.600
10	5.675	5.000	1.500	2.600
11	5.870	5.000	1.500	2.600
12	5.955	15.000	1.500	2.600
13	5.820	15.000	1.500	2.600
14	5.650	15.000	1.500	2.600
15	5.990	10.000	1.500	2.600
16	6.360	10.000	1.500	2.600
17	6.180	15.000	1.500	2.600
18	5.985	10.000	1.500	2.600
19	5.760	10.000	1.500	2.600
20	5.455	10.000	1.500	2.600
21	5.525	10.000	1.500	2.600
22	6.100	15.000	1.500	2.600
23	6.435	10.000	1.500	2.600
24	6.465	10.000	1.500	2.600
25	6.565	10.000	1.500	2.600
26	6.620	5.000	1.500	2.600
27	6.220	15.000	1.500	2.600
28	5.590	15.000	1.500	2.600
29	5.575	35.000	1.500	2.600
30	5.290	9.000	1.500	2.600
31	5.150	10.000	1.500	2.600
32	5.430	5.000	1.500	2.600
33	5.310	5.000	1.500	2.600
34	4.720	10.000	1.500	2.600
35	4.330	5.000	1.500	2.600
36	4.565	5.000	1.500	2.600
37	4.745	5.000	1.500	2.600
38	4.590	15.000	1.500	2.600
39	4.130	15.000	1.500	2.600
40	3.885	10.000	1.500	2.600
41	3.860	10.000	1.500	2.600
42	3.845	10.000	1.500	2.600
43	3.750	25.000	1.500	2.600
44	3.725	15.000	1.500	2.600
45	3.925	25.000	1.500	2.600
46	4.265	15.000	1.500	2.600
47	4.540	25.000	1.500	2.600
48	4.870	15.000	1.500	2.600

49	5.215	5.000	1.500	2.600
50	4.880	15.000	1.500	2.600
51	4.520	5.000	1.500	2.600
52	4.830	10.000	1.500	2.600
53	5.170	20.000	1.500	2.600
54	5.385	5.000	1.500	2.600

=====
Input Information from Internal Weir R0330-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.660	10.000	1.500	2.600
2	7.510	5.000	1.500	2.600
3	6.905	10.000	1.500	2.600
4	6.235	5.000	1.500	2.600
5	6.015	10.000	1.500	2.600
6	6.075	5.000	1.500	2.600
7	7.185	20.000	1.500	2.600
8	8.205	5.000	1.500	2.600
9	7.280	24.000	1.500	2.600
10	6.750	40.000	1.500	2.600
11	7.250	20.000	1.500	2.600
12	7.510	10.000	1.500	2.600
13	7.655	5.000	1.500	2.600
14	7.220	20.000	1.500	2.600
15	7.015	15.000	1.500	2.600
16	7.130	5.000	1.500	2.600
17	6.825	5.000	1.500	2.600
18	6.730	10.000	1.500	2.600
19	7.400	15.000	1.500	2.600
20	7.595	10.000	1.500	2.600
21	7.285	10.000	1.500	2.600
22	6.945	19.000	1.500	2.600
23	6.830	15.000	1.500	2.600
24	7.310	5.000	1.500	2.600
25	7.455	5.000	1.500	2.600
26	6.940	10.000	1.500	2.600
27	6.510	5.000	1.500	2.600
28	6.425	5.000	1.500	2.600
29	6.350	5.000	1.500	2.600
30	6.030	40.000	1.500	2.600
31	5.870	5.000	1.500	2.600
32	6.115	5.000	1.500	2.600
33	6.225	15.000	1.500	2.600
34	6.790	20.000	1.500	2.600
35	7.220	10.000	1.500	2.600
36	6.995	5.000	1.500	2.600

37	6.055	14.000	1.500	2.600
38	4.870	10.000	1.500	2.600
39	4.690	10.000	1.500	2.600
40	4.875	5.000	1.500	2.600
41	4.290	15.000	1.500	2.600
42	3.660	20.000	1.500	2.600
43	3.715	10.000	1.500	2.600
44	4.170	5.000	1.500	2.600
45	4.700	5.000	1.500	2.600
46	4.600	20.000	1.500	2.600
47	4.430	25.000	1.500	2.600
48	4.515	24.000	1.500	2.600
49	4.675	10.000	1.500	2.600
50	4.885	5.000	1.500	2.600
51	4.665	15.000	1.500	2.600
52	4.545	15.000	1.500	2.600
53	5.005	10.000	1.500	2.600
54	6.110	15.000	1.500	2.600
55	7.430	25.000	1.500	2.600
56	7.850	20.000	1.500	2.600
57	7.210	20.000	1.500	2.600
58	6.675	5.000	1.500	2.600
59	6.715	9.000	1.500	2.600
60	7.195	25.000	1.500	2.600
61	7.420	15.000	1.500	2.600
62	7.270	5.000	1.500	2.600
63	7.580	10.000	1.500	2.600
64	8.575	10.000	1.500	2.600
65	9.290	5.000	1.500	2.600
66	9.035	10.000	1.500	2.600
67	8.165	10.000	1.500	2.600
68	7.590	10.000	1.500	2.600
69	7.045	10.000	1.500	2.600
70	6.395	5.000	1.500	2.600
71	6.995	20.000	1.500	2.600
72	7.575	9.000	1.500	2.600
73	7.085	20.000	1.500	2.600
74	7.360	30.000	1.500	2.600
75	8.045	5.000	1.500	2.600
76	7.915	5.000	1.500	2.600
77	7.070	20.000	1.500	2.600
78	6.615	15.000	1.500	2.600
79	6.955	21.000	1.500	2.600

=====
Input Information from Internal Weir R0340-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----------	-----------------	-----------------	-----------------	-----------------

1	7.815	35.000	1.500	2.600
2	7.855	64.000	1.500	2.600
3	7.690	54.000	1.500	2.600
4	7.540	35.000	1.500	2.600
5	7.330	34.000	1.500	2.600
6	7.080	25.000	1.500	2.600
7	6.805	45.000	1.500	2.600
8	6.595	9.000	1.500	2.600
9	6.445	25.000	1.500	2.600
10	5.980	114.000	1.500	2.600
11	5.755	15.000	1.500	2.600
12	5.695	34.000	1.500	2.600
13	5.520	79.000	1.500	2.600
14	5.520	59.000	1.500	2.600
15	5.690	25.000	1.500	2.600
16	5.640	15.000	1.500	2.600
17	5.475	4.000	1.500	2.600
18	5.600	5.000	1.500	2.600
19	5.575	10.000	1.500	2.600
20	5.385	30.000	1.500	2.600
21	5.320	30.000	1.500	2.600
22	5.425	15.000	1.500	2.600
23	5.410	15.000	1.500	2.600
24	5.250	20.000	1.500	2.600
25	5.270	10.000	1.500	2.600

=====
Input Information from Internal Weir R0340-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.985	50.000	1.500	2.600
2	4.885	25.000	1.500	2.600
3	4.925	15.000	1.500	2.600
4	5.075	29.000	1.500	2.600
5	5.130	30.000	1.500	2.600
6	5.110	40.000	1.500	2.600
7	5.075	10.000	1.500	2.600
8	5.090	20.000	1.500	2.600
9	5.115	15.000	1.500	2.600
10	5.100	15.000	1.500	2.600
11	5.105	39.000	1.500	2.600
12	5.085	10.000	1.500	2.600
13	5.095	10.000	1.500	2.600
14	5.165	5.000	1.500	2.600
15	5.205	5.000	1.500	2.600
16	5.230	5.000	1.500	2.600

17	5.245	5.000	1.500	2.600
18	5.270	5.000	1.500	2.600
19	5.300	30.000	1.500	2.600
20	5.290	20.000	1.500	2.600
21	5.250	10.000	1.500	2.600
22	5.265	15.000	1.500	2.600
23	5.270	5.000	1.500	2.600
24	5.325	40.000	1.500	2.600
25	5.395	5.000	1.500	2.600
26	5.335	35.000	1.500	2.600
27	5.250	20.000	1.500	2.600
28	5.235	30.000	1.500	2.600
29	5.240	10.000	1.500	2.600
30	5.170	30.000	1.500	2.600
31	5.130	20.000	1.500	2.600
32	5.205	20.000	1.500	2.600
33	5.240	5.000	1.500	2.600
34	5.240	20.000	1.500	2.600
35	5.265	30.000	1.500	2.600
36	5.240	10.000	1.500	2.600
37	5.225	5.000	1.500	2.600
38	5.215	15.000	1.500	2.600
39	5.200	5.000	1.500	2.600
40	5.250	25.000	1.500	2.600
41	5.340	30.000	1.500	2.600
42	5.395	30.000	1.500	2.600
43	5.585	90.000	1.500	2.600
44	5.830	44.000	1.500	2.600
45	5.900	15.000	1.500	2.600
46	5.940	53.000	1.500	2.600

=====
Input Information from Internal Weir R0350-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.465	20.000	1.500	2.600
2	6.495	22.000	1.500	2.600
3	6.520	17.000	1.500	2.600
4	6.390	32.000	1.500	2.600
5	6.130	63.000	1.500	2.600
6	5.975	15.000	1.500	2.600
7	5.965	15.000	1.500	2.600
8	5.915	64.000	1.500	2.600
9	5.795	15.000	1.500	2.600
10	5.630	15.000	1.500	2.600
11	5.585	15.000	1.500	2.600
12	5.720	19.000	1.500	2.600

13	5.820	15.000	1.500	2.600
14	5.910	20.000	1.500	2.600
15	6.010	64.000	1.500	2.600

=====
Input Information from Internal Weir R0350-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	9.050	40.000	1.500	2.600
2	9.165	25.000	1.500	2.600
3	9.215	9.000	1.500	2.600
4	9.240	10.000	1.500	2.600
5	9.320	25.000	1.500	2.600
6	9.270	40.000	1.500	2.600
7	9.260	10.000	1.500	2.600
8	9.240	15.000	1.500	2.600
9	9.170	44.000	1.500	2.600
10	8.880	35.000	1.500	2.600
11	8.475	25.000	1.500	2.600
12	8.485	10.000	1.500	2.600
13	8.390	20.000	1.500	2.600
14	8.170	15.000	1.500	2.600
15	8.030	10.000	1.500	2.600
16	7.870	14.000	1.500	2.600
17	7.720	15.000	1.500	2.600
18	7.305	15.000	1.500	2.600
19	6.705	9.000	1.500	2.600
20	6.265	10.000	1.500	2.600
21	5.860	15.000	1.500	2.600
22	5.300	10.000	1.500	2.600
23	4.880	10.000	1.500	2.600
24	4.795	14.000	1.500	2.600
25	4.700	30.000	1.500	2.600
26	4.565	25.000	1.500	2.600
27	4.685	15.000	1.500	2.600
28	4.640	20.000	1.500	2.600
29	4.680	34.000	1.500	2.600
30	4.815	10.000	1.500	2.600
31	4.850	10.000	1.500	2.600
32	4.890	15.000	1.500	2.600
33	4.990	24.000	1.500	2.600
34	5.145	15.000	1.500	2.600
35	5.290	10.000	1.500	2.600
36	5.410	25.000	1.500	2.600
37	5.485	4.000	1.500	2.600
38	5.530	10.000	1.500	2.600
39	5.620	10.000	1.500	2.600

40	5.770	15.000	1.500	2.600
41	5.880	5.000	1.500	2.600
42	5.930	10.000	1.500	2.600
43	6.030	9.000	1.500	2.600
44	6.125	5.000	1.500	2.600
45	6.145	10.000	1.500	2.600
46	6.155	20.000	1.500	2.600
47	6.135	15.000	1.500	2.600
48	6.070	14.000	1.500	2.600
49	5.990	15.000	1.500	2.600
50	6.205	14.000	1.500	2.600
51	6.825	15.000	1.500	2.600
52	7.205	4.000	1.500	2.600
53	6.500	20.000	1.500	2.600
54	5.825	5.000	1.500	2.600
55	6.095	15.000	1.500	2.600
56	6.690	9.000	1.500	2.600
57	6.425	15.000	1.500	2.600
58	5.795	5.000	1.500	2.600
59	6.015	10.000	1.500	2.600
60	6.835	28.000	1.500	2.600
61	7.070	8.000	1.500	2.600
62	6.640	9.000	1.500	2.600
63	6.105	9.000	1.500	2.600
64	5.575	5.000	1.500	2.600
65	5.335	4.000	1.500	2.600
66	5.290	5.000	1.500	2.600

=====
Input Information from Internal Weir R0360-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.080	20.000	1.500	2.600
2	2.740	25.000	1.500	2.600
3	2.810	10.000	1.500	2.600
4	2.705	15.000	1.500	2.600
5	2.745	10.000	1.500	2.600
6	3.220	15.000	1.500	2.600
7	3.430	5.000	1.500	2.600
8	3.720	15.000	1.500	2.600
9	4.060	5.000	1.500	2.600
10	3.905	10.000	1.500	2.600
11	3.685	10.000	1.500	2.600
12	3.550	5.000	1.500	2.600
13	2.980	10.000	1.500	2.600
14	2.605	25.000	1.500	2.600
15	2.430	10.000	1.500	2.600

16	2.355	40.000	1.500	2.600
17	2.435	5.000	1.500	2.600
18	2.455	10.000	1.500	2.600
19	2.365	15.000	1.500	2.600
20	2.150	30.000	1.500	2.600
21	2.405	10.000	1.500	2.600
22	2.465	20.000	1.500	2.600
23	2.450	15.000	1.500	2.600
24	2.670	20.000	1.500	2.600
25	2.515	25.000	1.500	2.600
26	2.420	10.000	1.500	2.600
27	2.400	10.000	1.500	2.600
28	2.295	20.000	1.500	2.600
29	2.195	10.000	1.500	2.600
30	2.055	19.000	1.500	2.600
31	1.935	20.000	1.500	2.600
32	1.715	20.000	1.500	2.600
33	1.600	5.000	1.500	2.600
34	1.615	5.000	1.500	2.600
35	1.820	10.000	1.500	2.600
36	2.050	20.000	1.500	2.600
37	2.260	15.000	1.500	2.600
38	2.235	14.000	1.500	2.600
39	1.885	54.000	1.500	2.600
40	1.725	5.000	1.500	2.600
41	1.770	14.000	1.500	2.600
42	2.120	15.000	1.500	2.600
43	2.700	32.000	1.500	2.600
44	3.075	5.000	1.500	2.600
45	3.735	10.000	1.500	2.600
46	4.265	24.000	1.500	2.600

=====
Input Information from Internal Weir R0360-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.535	20.000	1.500	2.600
2	3.475	9.000	1.500	2.600
3	3.430	15.000	1.500	2.600
4	3.440	15.000	1.500	2.600
5	3.455	15.000	1.500	2.600
6	3.590	49.000	1.500	2.600
7	3.795	24.000	1.500	2.600
8	3.685	10.000	1.500	2.600
9	3.765	20.000	1.500	2.600
10	3.760	10.000	1.500	2.600
11	3.585	19.000	1.500	2.600

12	3.475	15.000	1.500	2.600
13	3.500	19.000	1.500	2.600
14	3.575	10.000	1.500	2.600
15	3.655	24.000	1.500	2.600
16	3.525	35.000	1.500	2.600
17	3.395	19.000	1.500	2.600
18	3.450	15.000	1.500	2.600
19	3.230	10.000	1.500	2.600
20	3.125	15.000	1.500	2.600
21	2.895	39.000	1.500	2.600
22	2.645	15.000	1.500	2.600
23	2.810	9.000	1.500	2.600
24	3.005	15.000	1.500	2.600
25	3.015	5.000	1.500	2.600
26	2.705	9.000	1.500	2.600
27	2.365	5.000	1.500	2.600
28	2.485	10.000	1.500	2.600
29	2.665	4.000	1.500	2.600
30	2.420	14.000	1.500	2.600
31	2.425	27.000	1.500	2.600
32	2.625	23.000	1.500	2.600
33	2.790	40.000	1.500	2.600
34	2.930	8.000	1.500	2.600
35	3.010	8.000	1.500	2.600
36	3.440	28.000	1.500	2.600
37	3.630	8.000	1.500	2.600
38	3.660	12.000	1.500	2.600
39	3.770	18.000	1.500	2.600
40	3.920	47.000	1.500	2.600
41	4.480	49.000	1.500	2.600
42	5.005	35.000	1.500	2.600
43	4.860	15.000	1.500	2.600
44	4.400	38.000	1.500	2.600
45	4.340	9.000	1.500	2.600
46	4.540	22.000	1.500	2.600
47	4.540	9.000	1.500	2.600
48	4.215	13.000	1.500	2.600
49	4.090	18.000	1.500	2.600
50	4.125	9.000	1.500	2.600
51	4.085	31.000	1.500	2.600
52	4.070	14.000	1.500	2.600
53	4.070	4.000	1.500	2.600
54	4.065	22.000	1.500	2.600

=====
Input Information from Internal Weir R0370-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
--------------	-----------------------	-----------------------	-----------------------	-----------------------

1	4.710	40.000	1.500	2.600
2	4.680	10.000	1.500	2.600
3	4.750	50.000	1.500	2.600

Input Information from Internal Weir R0370-W2.1

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.195	5.000	1.500	2.600
2	5.165	10.000	1.500	2.600
3	5.005	9.000	1.500	2.600
4	4.990	10.000	1.500	2.600
5	5.075	15.000	1.500	2.600
6	4.905	14.000	1.500	2.600
7	4.785	59.000	1.500	2.600
8	4.920	9.000	1.500	2.600
9	5.085	49.000	1.500	2.600
10	5.060	9.000	1.500	2.600
11	4.970	29.000	1.500	2.600
12	4.995	20.000	1.500	2.600
13	4.900	5.000	1.500	2.600
14	4.720	15.000	1.500	2.600
15	4.750	25.000	1.500	2.600
16	4.745	19.000	1.500	2.600
17	4.740	15.000	1.500	2.600
18	4.690	15.000	1.500	2.600
19	4.425	5.000	1.500	2.600
20	4.230	20.000	1.500	2.600
21	4.330	15.000	1.500	2.600
22	4.525	39.000	1.500	2.600
23	4.475	20.000	1.500	2.600
24	4.480	10.000	1.500	2.600
25	4.520	24.000	1.500	2.600
26	4.570	15.000	1.500	2.600
27	4.600	25.000	1.500	2.600
28	4.615	34.000	1.500	2.600
29	4.510	30.000	1.500	2.600
30	4.500	19.000	1.500	2.600
31	4.645	29.000	1.500	2.600
32	4.680	29.000	1.500	2.600
33	4.685	10.000	1.500	2.600
34	4.725	50.000	1.500	2.600
35	4.740	14.000	1.500	2.600
36	4.715	15.000	1.500	2.600
37	4.720	10.000	1.500	2.600
38	4.710	35.000	1.500	2.600

39	4.720	14.000	1.500	2.600
40	4.835	40.000	1.500	2.600
41	4.935	10.000	1.500	2.600
42	4.965	9.000	1.500	2.600
43	4.890	15.000	1.500	2.600
44	4.845	20.000	1.500	2.600
45	4.815	29.000	1.500	2.600
46	4.775	10.000	1.500	2.600
47	4.775	10.000	1.500	2.600
48	4.750	29.000	1.500	2.600

=====
Input Information from Internal Weir R0370-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.765	18.000	1.500	2.600
2	4.810	15.000	1.500	2.600
3	4.895	25.000	1.500	2.600
4	4.940	5.000	1.500	2.600
5	4.885	4.000	1.500	2.600
6	4.730	10.000	1.500	2.600
7	4.835	15.000	1.500	2.600
8	4.805	15.000	1.500	2.600
9	4.655	5.000	1.500	2.600
10	4.840	5.000	1.500	2.600
11	4.930	5.000	1.500	2.600
12	4.890	15.000	1.500	2.600
13	4.825	15.000	1.500	2.600
14	4.855	10.000	1.500	2.600
15	4.905	14.000	1.500	2.600
16	4.975	28.000	1.500	2.600
17	4.990	9.000	1.500	2.600
18	4.930	4.000	1.500	2.600
19	4.975	10.000	1.500	2.600
20	5.025	5.000	1.500	2.600
21	4.960	19.000	1.500	2.600
22	5.140	15.000	1.500	2.600
23	5.245	5.000	1.500	2.600
24	4.955	5.000	1.500	2.600
25	4.895	5.000	1.500	2.600
26	5.035	5.000	1.500	2.600
27	5.170	19.000	1.500	2.600
28	5.255	5.000	1.500	2.600
29	5.350	9.000	1.500	2.600
30	5.315	5.000	1.500	2.600
31	4.980	5.000	1.500	2.600
32	4.550	4.000	1.500	2.600

33	4.670	9.000	1.500	2.600
34	4.940	5.000	1.500	2.600
35	4.525	13.000	1.500	2.600
36	4.095	5.000	1.500	2.600
37	4.280	10.000	1.500	2.600
38	4.265	22.000	1.500	2.600
39	4.230	20.000	1.500	2.600
40	4.230	35.000	1.500	2.600
41	3.975	5.000	1.500	2.600
42	4.060	24.000	1.500	2.600
43	4.130	15.000	1.500	2.600
44	3.920	5.000	1.500	2.600
45	3.885	10.000	1.500	2.600
46	3.860	5.000	1.500	2.600
47	3.905	10.000	1.500	2.600
48	4.015	10.000	1.500	2.600
49	4.195	15.000	1.500	2.600
50	4.230	20.000	1.500	2.600
51	4.240	15.000	1.500	2.600
52	4.410	5.000	1.500	2.600
53	4.260	5.000	1.500	2.600
54	4.085	10.000	1.500	2.600
55	4.160	10.000	1.500	2.600
56	4.595	10.000	1.500	2.600
57	4.880	4.000	1.500	2.600
58	4.945	8.000	1.500	2.600
59	4.875	11.000	1.500	2.600
60	4.890	38.000	1.500	2.600
61	5.175	35.000	1.500	2.600
62	5.085	40.000	1.500	2.600
63	4.925	50.000	1.500	2.600
64	5.090	25.000	1.500	2.600
65	5.210	20.000	1.500	2.600
66	5.070	25.000	1.500	2.600
67	4.975	10.000	1.500	2.600

=====
Input Information from Internal Weir R0380-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.110	8.000	1.500	2.600
2	8.570	9.000	1.500	2.600
3	8.600	9.000	1.500	2.600
4	8.565	5.000	1.500	2.600
5	8.575	5.000	1.500	2.600
6	8.590	10.000	1.500	2.600
7	8.525	19.000	1.500	2.600

8	7.790	15.000	1.500	2.600
9	6.840	15.000	1.500	2.600
10	6.675	5.000	1.500	2.600
11	7.055	10.000	1.500	2.600
12	7.320	5.000	1.500	2.600
13	6.925	5.000	1.500	2.600
14	6.590	5.000	1.500	2.600
15	6.925	10.000	1.500	2.600
16	7.285	5.000	1.500	2.600
17	7.100	5.000	1.500	2.600
18	6.865	9.000	1.500	2.600
19	6.925	15.000	1.500	2.600
20	6.635	30.000	1.500	2.600
21	6.585	40.000	1.500	2.600
22	7.010	9.000	1.500	2.600
23	6.855	10.000	1.500	2.600
24	7.015	10.000	1.500	2.600
25	7.455	5.000	1.500	2.600
26	7.720	5.000	1.500	2.600
27	7.975	5.000	1.500	2.600
28	7.550	15.000	1.500	2.600
29	7.060	5.000	1.500	2.600
30	7.175	10.000	1.500	2.600
31	7.245	5.000	1.500	2.600
32	6.770	9.000	1.500	2.600
33	6.300	5.000	1.500	2.600
34	6.360	10.000	1.500	2.600
35	5.970	30.000	1.500	2.600
36	5.440	5.000	1.500	2.600
37	5.450	4.000	1.500	2.600
38	5.880	10.000	1.500	2.600
39	6.350	5.000	1.500	2.600
40	6.220	10.000	1.500	2.600
41	6.240	10.000	1.500	2.600
42	6.500	5.000	1.500	2.600
43	6.330	14.000	1.500	2.600
44	6.435	10.000	1.500	2.600
45	6.710	5.000	1.500	2.600
46	6.430	9.000	1.500	2.600
47	5.905	29.000	1.500	2.600
48	5.145	10.000	1.500	2.600
49	4.545	5.000	1.500	2.600
50	4.870	14.000	1.500	2.600
51	5.900	15.000	1.500	2.600
52	6.640	9.000	1.500	2.600
53	6.570	10.000	1.500	2.600
54	6.280	14.000	1.500	2.600
55	6.325	10.000	1.500	2.600
56	6.180	10.000	1.500	2.600
57	5.960	10.000	1.500	2.600

58	5.840	10.000	1.500	2.600
59	5.990	14.000	1.500	2.600
60	6.305	15.000	1.500	2.600
61	6.130	15.000	1.500	2.600
62	6.070	30.000	1.500	2.600
63	6.025	19.000	1.500	2.600
64	5.935	15.000	1.500	2.600
65	5.950	10.000	1.500	2.600
66	5.985	10.000	1.500	2.600
67	6.305	5.000	1.500	2.600
68	6.600	5.000	1.500	2.600
69	6.500	5.000	1.500	2.600
70	6.260	5.000	1.500	2.600
71	6.365	4.000	1.500	2.600
72	6.830	5.000	1.500	2.600
73	7.120	10.000	1.500	2.600
74	7.400	10.000	1.500	2.600
75	7.960	25.000	1.500	2.600
76	8.135	34.000	1.500	2.600
77	8.110	5.000	1.500	2.600
78	8.565	10.000	1.500	2.600
79	8.500	15.000	1.500	2.600
80	8.050	10.000	1.500	2.600
81	7.765	14.000	1.500	2.600
82	7.615	15.000	1.500	2.600
83	7.505	25.000	1.500	2.600
84	7.940	19.000	1.500	2.600
85	8.575	5.000	1.500	2.600
86	8.300	10.000	1.500	2.600
87	8.160	10.000	1.500	2.600
88	8.180	10.000	1.500	2.600
89	8.175	11.000	1.500	2.600

=====
Input Information from Internal Weir R0380-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.565	29.000	1.500	2.600
2	7.570	10.000	1.500	2.600
3	7.380	4.000	1.500	2.600
4	7.880	34.000	1.500	2.600
5	7.995	24.000	1.500	2.600
6	7.610	10.000	1.500	2.600
7	7.715	10.000	1.500	2.600
8	7.595	9.000	1.500	2.600
9	7.340	4.000	1.500	2.600
10	7.635	24.000	1.500	2.600

11	7.825	14.000	1.500	2.600
12	7.260	20.000	1.500	2.600
13	6.940	15.000	1.500	2.600
14	6.785	39.000	1.500	2.600
15	6.575	5.000	1.500	2.600
16	6.890	4.000	1.500	2.600
17	7.235	5.000	1.500	2.600
18	7.075	10.000	1.500	2.600
19	7.115	35.000	1.500	2.600
20	7.175	14.000	1.500	2.600
21	6.865	25.000	1.500	2.600
22	6.980	15.000	1.500	2.600
23	7.480	5.000	1.500	2.600
24	7.840	5.000	1.500	2.600
25	7.710	15.000	1.500	2.600
26	7.640	5.000	1.500	2.600
27	8.015	35.000	1.500	2.600
28	8.170	10.000	1.500	2.600
29	7.795	5.000	1.500	2.600
30	7.385	5.000	1.500	2.600
31	7.285	10.000	1.500	2.600
32	7.115	25.000	1.500	2.600
33	6.700	10.000	1.500	2.600
34	6.520	5.000	1.500	2.600
35	6.440	5.000	1.500	2.600
36	6.370	5.000	1.500	2.600
37	6.555	5.000	1.500	2.600
38	6.765	15.000	1.500	2.600
39	7.045	20.000	1.500	2.600
40	7.475	10.000	1.500	2.600
41	7.600	10.000	1.500	2.600
42	7.770	15.000	1.500	2.600
43	7.955	10.000	1.500	2.600
44	8.035	9.000	1.500	2.600
45	7.770	25.000	1.500	2.600
46	7.530	10.000	1.500	2.600
47	7.520	30.000	1.500	2.600
48	7.350	10.000	1.500	2.600
49	8.080	35.000	1.500	2.600
50	8.830	5.000	1.500	2.600
51	8.550	10.000	1.500	2.600
52	8.185	5.000	1.500	2.600
53	8.215	20.000	1.500	2.600
54	8.005	15.000	1.500	2.600
55	7.830	20.000	1.500	2.600
56	7.705	20.000	1.500	2.600
57	7.480	5.000	1.500	2.600
58	7.845	14.000	1.500	2.600
59	8.060	10.000	1.500	2.600
60	7.980	20.000	1.500	2.600

61	7.780	10.000	1.500	2.600
62	7.665	10.000	1.500	2.600
63	7.735	5.000	1.500	2.600
64	7.460	5.000	1.500	2.600
65	7.235	5.000	1.500	2.600
66	7.750	9.000	1.500	2.600
67	8.450	5.000	1.500	2.600
68	8.555	15.000	1.500	2.600
69	8.310	10.000	1.500	2.600
70	8.145	10.000	1.500	2.600
71	7.905	15.000	1.500	2.600
72	7.975	14.000	1.500	2.600
73	8.170	35.000	1.500	2.600

=====
Input Information from Internal Weir R0380-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.780	30.000	1.500	2.600
2	8.935	9.000	1.500	2.600
3	8.975	10.000	1.500	2.600
4	8.945	25.000	1.500	2.600
5	8.885	15.000	1.500	2.600
6	8.865	19.000	1.500	2.600
7	8.850	15.000	1.500	2.600
8	8.835	18.000	1.500	2.600
9	8.815	12.000	1.500	2.600
10	8.810	8.000	1.500	2.600
11	8.760	38.000	1.500	2.600
12	8.755	18.000	1.500	2.600
13	8.750	44.000	1.500	2.600
14	8.675	9.000	1.500	2.600
15	8.790	64.000	1.500	2.600
16	8.735	17.000	1.500	2.600
17	8.735	5.000	1.500	2.600
18	8.690	26.000	1.500	2.600
19	8.640	12.000	1.500	2.600
20	8.540	74.000	1.500	2.600
21	8.350	5.000	1.500	2.600
22	8.490	9.000	1.500	2.600
23	8.575	5.000	1.500	2.600
24	8.560	10.000	1.500	2.600
25	8.475	5.000	1.500	2.600
26	8.505	15.000	1.500	2.600
27	8.545	17.000	1.500	2.600
28	8.490	50.000	1.500	2.600
29	8.620	4.000	1.500	2.600

30	8.615	10.000	1.500	2.600
31	8.625	10.000	1.500	2.600
32	8.620	10.000	1.500	2.600
33	8.535	20.000	1.500	2.600
34	8.700	29.000	1.500	2.600
35	8.745	65.000	1.500	2.600
36	8.775	54.000	1.500	2.600
37	8.830	15.000	1.500	2.600
38	8.740	48.000	1.500	2.600
39	8.830	9.000	1.500	2.600
40	8.870	37.000	1.500	2.600
41	8.895	15.000	1.500	2.600
42	8.805	15.000	1.500	2.600
43	8.750	55.000	1.500	2.600
44	8.700	20.000	1.500	2.600

=====
Input Information from Internal Weir R0390-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.005	20.000	1.500	2.600
2	4.140	15.000	1.500	2.600
3	3.960	25.000	1.500	2.600
4	3.675	30.000	1.500	2.600
5	3.645	25.000	1.500	2.600
6	3.630	40.000	1.500	2.600
7	3.935	24.000	1.500	2.600
8	4.415	10.000	1.500	2.600
9	3.915	20.000	1.500	2.600
10	3.725	10.000	1.500	2.600
11	4.400	10.000	1.500	2.600
12	5.000	10.000	1.500	2.600
13	4.965	30.000	1.500	2.600
14	4.535	15.000	1.500	2.600
15	4.265	5.000	1.500	2.600
16	4.430	15.000	1.500	2.600
17	4.570	10.000	1.500	2.600
18	4.720	15.000	1.500	2.600
19	5.165	10.000	1.500	2.600
20	5.470	5.000	1.500	2.600
21	5.465	5.000	1.500	2.600
22	4.940	15.000	1.500	2.600
23	4.415	5.000	1.500	2.600
24	4.420	5.000	1.500	2.600
25	4.945	10.000	1.500	2.600
26	5.550	5.000	1.500	2.600
27	5.835	10.000	1.500	2.600

28	5.455	15.000	1.500	2.600
29	5.045	10.000	1.500	2.600
30	5.095	5.000	1.500	2.600
31	4.880	5.000	1.500	2.600
32	4.230	10.000	1.500	2.600
33	3.670	5.000	1.500	2.600
34	3.805	35.000	1.500	2.600
35	3.605	9.000	1.500	2.600
36	3.010	10.000	1.500	2.600
37	2.930	10.000	1.500	2.600
38	3.080	20.000	1.500	2.600
39	3.375	10.000	1.500	2.600
40	3.445	19.000	1.500	2.600
41	3.725	14.000	1.500	2.600
42	4.235	5.000	1.500	2.600
43	3.830	9.000	1.500	2.600
44	3.265	5.000	1.500	2.600
45	3.135	10.000	1.500	2.600
46	3.605	9.000	1.500	2.600
47	4.575	5.000	1.500	2.600
48	5.385	5.000	1.500	2.600
49	5.865	4.000	1.500	2.600
50	5.830	5.000	1.500	2.600
51	5.635	4.000	1.500	2.600
52	5.850	10.000	1.500	2.600
53	5.855	5.000	1.500	2.600
54	5.580	14.000	1.500	2.600
55	5.385	25.000	1.500	2.600
56	4.985	15.000	1.500	2.600
57	4.715	5.000	1.500	2.600
58	4.520	10.000	1.500	2.600
59	4.245	9.000	1.500	2.600
60	4.770	40.000	1.500	2.600
61	5.000	10.000	1.500	2.600
62	4.685	14.000	1.500	2.600
63	4.725	5.000	1.500	2.600
64	4.450	10.000	1.500	2.600
65	4.225	5.000	1.500	2.600
66	4.495	5.000	1.500	2.600
67	5.400	10.000	1.500	2.600
68	5.590	15.000	1.500	2.600
69	4.775	10.000	1.500	2.600
70	4.005	19.000	1.500	2.600
71	3.655	5.000	1.500	2.600
72	4.085	5.000	1.500	2.600
73	4.300	10.000	1.500	2.600
74	4.105	15.000	1.500	2.600
75	3.810	10.000	1.500	2.600
76	3.630	5.000	1.500	2.600
77	4.335	18.000	1.500	2.600

78	4.975	17.000	1.500	2.600
79	4.685	10.000	1.500	2.600
80	4.385	4.000	1.500	2.600
81	4.370	14.000	1.500	2.600
82	4.570	14.000	1.500	2.600

=====
Input Information from Internal Weir R0390-W2
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.380	18.000	1.500	2.600
2	3.260	14.000	1.500	2.600
3	3.035	17.000	1.500	2.600
4	3.305	22.000	1.500	2.600
5	3.640	4.000	1.500	2.600
6	3.560	12.000	1.500	2.600
7	3.475	9.000	1.500	2.600
8	3.765	14.000	1.500	2.600
9	3.865	39.000	1.500	2.600
10	3.775	39.000	1.500	2.600
11	3.720	29.000	1.500	2.600
12	3.815	10.000	1.500	2.600
13	4.090	5.000	1.500	2.600
14	4.130	15.000	1.500	2.600
15	4.020	5.000	1.500	2.600
16	4.005	30.000	1.500	2.600
17	3.820	30.000	1.500	2.600
18	3.700	20.000	1.500	2.600
19	3.810	25.000	1.500	2.600
20	3.845	9.000	1.500	2.600
21	3.625	25.000	1.500	2.600
22	3.360	20.000	1.500	2.600
23	3.155	50.000	1.500	2.600
24	2.835	10.000	1.500	2.600
25	2.875	10.000	1.500	2.600
26	2.745	25.000	1.500	2.600
27	3.075	49.000	1.500	2.600
28	3.635	5.000	1.500	2.600
29	3.815	10.000	1.500	2.600
30	3.930	5.000	1.500	2.600
31	3.625	5.000	1.500	2.600
32	3.300	5.000	1.500	2.600
33	3.225	5.000	1.500	2.600
34	3.585	15.000	1.500	2.600
35	3.935	5.000	1.500	2.600
36	3.705	25.000	1.500	2.600
37	3.670	20.000	1.500	2.600

38	3.695	30.000	1.500	2.600
39	3.495	15.000	1.500	2.600
40	3.590	5.000	1.500	2.600
41	3.815	15.000	1.500	2.600
42	3.835	10.000	1.500	2.600
43	3.750	10.000	1.500	2.600
44	3.540	14.000	1.500	2.600
45	3.535	10.000	1.500	2.600
46	3.755	15.000	1.500	2.600
47	3.335	65.000	1.500	2.600
48	2.960	10.000	1.500	2.600
49	3.055	45.000	1.500	2.600
50	2.940	24.000	1.500	2.600
51	2.860	5.000	1.500	2.600
52	2.940	20.000	1.500	2.600
53	3.030	5.000	1.500	2.600
54	3.175	20.000	1.500	2.600
55	3.180	18.000	1.500	2.600
56	3.205	9.000	1.500	2.600

=====
Input Information from Internal Weir R0400-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.180	24.000	1.500	2.600
2	4.230	19.000	1.500	2.600
3	4.530	58.000	1.500	2.600
4	4.635	24.000	1.500	2.600
5	4.660	20.000	1.500	2.600
6	4.640	5.000	1.500	2.600
7	4.720	15.000	1.500	2.600
8	4.790	15.000	1.500	2.600
9	4.750	5.000	1.500	2.600
10	4.745	19.000	1.500	2.600
11	4.730	15.000	1.500	2.600
12	4.695	25.000	1.500	2.600
13	4.680	10.000	1.500	2.600
14	4.725	49.000	1.500	2.600
15	4.485	20.000	1.500	2.600
16	4.325	15.000	1.500	2.600
17	4.140	35.000	1.500	2.600
18	3.985	94.000	1.500	2.600
19	3.925	59.000	1.500	2.600
20	3.875	40.000	1.500	2.600
21	3.850	5.000	1.500	2.600
22	3.770	30.000	1.500	2.600
23	3.915	9.000	1.500	2.600

24	4.060	10.000	1.500	2.600
25	4.065	30.000	1.500	2.600
26	4.155	30.000	1.500	2.600
27	4.200	5.000	1.500	2.600
28	4.235	15.000	1.500	2.600
29	4.260	5.000	1.500	2.600
30	4.210	24.000	1.500	2.600

=====
Input Information from Internal Weir R0410-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.070	30.000	1.500	2.600
2	5.010	45.000	1.500	2.600
3	4.980	79.000	1.500	2.600
4	4.915	35.000	1.500	2.600
5	4.875	20.000	1.500	2.600
6	4.915	35.000	1.500	2.600
7	4.965	15.000	1.500	2.600
8	4.980	20.000	1.500	2.600
9	4.965	64.000	1.500	2.600
10	4.935	65.000	1.500	2.600
11	4.715	10.000	1.500	2.600
12	4.590	55.000	1.500	2.600
13	4.595	29.000	1.500	2.600
14	4.760	70.000	1.500	2.600
15	4.865	15.000	1.500	2.600
16	4.885	10.000	1.500	2.600
17	4.900	20.000	1.500	2.600
18	4.750	5.000	1.500	2.600
19	4.795	40.000	1.500	2.600
20	5.050	25.000	1.500	2.600
21	5.120	5.000	1.500	2.600
22	5.205	14.000	1.500	2.600
23	5.250	10.000	1.500	2.600
24	5.245	10.000	1.500	2.600
25	5.435	35.000	1.500	2.600
26	5.435	15.000	1.500	2.600
27	5.425	5.000	1.500	2.600
28	5.560	45.000	1.500	2.600
29	5.510	10.000	1.500	2.600
30	5.485	20.000	1.500	2.600
31	5.455	15.000	1.500	2.600
32	5.485	34.000	1.500	2.600
33	5.700	90.000	1.500	2.600
34	5.760	5.000	1.500	2.600

=====
 Input Information from Internal Weir R0420-W1.1
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.945	10.000	1.500	2.600
2	4.905	10.000	1.500	2.600
3	4.755	15.000	1.500	2.600
4	4.860	15.000	1.500	2.600
5	4.895	5.000	1.500	2.600
6	4.670	15.000	1.500	2.600
7	4.620	10.000	1.500	2.600
8	4.590	5.000	1.500	2.600
9	4.615	10.000	1.500	2.600
10	4.605	5.000	1.500	2.600
11	4.720	14.000	1.500	2.600
12	5.000	15.000	1.500	2.600
13	5.165	10.000	1.500	2.600
14	5.230	10.000	1.500	2.600
15	5.415	10.000	1.500	2.600
16	5.750	10.000	1.500	2.600
17	5.645	10.000	1.500	2.600
18	5.520	10.000	1.500	2.600
19	5.500	5.000	1.500	2.600
20	5.335	25.000	1.500	2.600
21	5.350	10.000	1.500	2.600
22	5.340	10.000	1.500	2.600
23	5.240	15.000	1.500	2.600
24	5.025	20.000	1.500	2.600
25	4.840	10.000	1.500	2.600
26	4.810	5.000	1.500	2.600
27	4.885	10.000	1.500	2.600
28	5.515	10.000	1.500	2.600
29	5.795	14.000	1.500	2.600
30	5.695	5.000	1.500	2.600
31	6.130	5.000	1.500	2.600
32	6.955	5.000	1.500	2.600
33	7.485	5.000	1.500	2.600
34	7.275	10.000	1.500	2.600
35	7.010	5.000	1.500	2.600
36	7.185	10.000	1.500	2.600
37	7.320	15.000	1.500	2.600
38	7.505	10.000	1.500	2.600
39	7.515	10.000	1.500	2.600
40	7.240	10.000	1.500	2.600
41	7.465	15.000	1.500	2.600
42	7.635	15.000	1.500	2.600
43	7.780	5.000	1.500	2.600

44	7.965	5.000	1.500	2.600
45	7.340	10.000	1.500	2.600
46	6.360	24.000	1.500	2.600
47	5.410	10.000	1.500	2.600
48	4.750	5.000	1.500	2.600
49	4.695	15.000	1.500	2.600
50	4.615	15.000	1.500	2.600
51	5.050	39.000	1.500	2.600
52	5.365	30.000	1.500	2.600
53	5.365	15.000	1.500	2.600
54	5.480	10.000	1.500	2.600
55	5.230	14.000	1.500	2.600
56	5.170	5.000	1.500	2.600
57	5.890	25.000	1.500	2.600
58	6.205	10.000	1.500	2.600
59	5.780	5.000	1.500	2.600
60	5.670	20.000	1.500	2.600
61	5.720	10.000	1.500	2.600
62	6.025	9.000	1.500	2.600
63	6.100	15.000	1.500	2.600
64	5.735	15.000	1.500	2.600
65	5.625	40.000	1.500	2.600
66	5.880	14.000	1.500	2.600
67	6.005	10.000	1.500	2.600
68	5.690	19.000	1.500	2.600
69	5.470	15.000	1.500	2.600
70	5.250	19.000	1.500	2.600
71	5.045	14.000	1.500	2.600
72	5.485	15.000	1.500	2.600
73	5.735	6.000	1.500	2.600
74	5.630	22.000	1.500	2.600
75	5.695	29.000	1.500	2.600
76	5.740	24.000	1.500	2.600
77	5.785	19.000	1.500	2.600

=====
Input Information from Internal Weir R0420-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.870	43.000	1.500	2.600
2	5.710	20.000	1.500	2.600
3	5.655	19.000	1.500	2.600
4	5.500	29.000	1.500	2.600
5	5.295	5.000	1.500	2.600
6	5.210	5.000	1.500	2.600
7	5.190	14.000	1.500	2.600
8	5.240	20.000	1.500	2.600

9	5.285	15.000	1.500	2.600
10	5.325	10.000	1.500	2.600
11	5.495	39.000	1.500	2.600
12	5.740	49.000	1.500	2.600
13	5.885	19.000	1.500	2.600
14	5.925	28.000	1.500	2.600
15	5.940	13.000	1.500	2.600
16	6.015	25.000	1.500	2.600
17	5.800	32.000	1.500	2.600
18	5.690	14.000	1.500	2.600
19	5.705	4.000	1.500	2.600
20	5.590	39.000	1.500	2.600
21	5.555	20.000	1.500	2.600
22	5.725	20.000	1.500	2.600
23	5.765	83.000	1.500	2.600
24	5.730	5.000	1.500	2.600
25	5.710	14.000	1.500	2.600
26	5.700	5.000	1.500	2.600
27	5.720	20.000	1.500	2.600
28	5.725	9.000	1.500	2.600
29	5.915	39.000	1.500	2.600
30	5.950	9.000	1.500	2.600

=====
Input Information from Internal Weir R0430-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.220	15.000	1.500	2.600
2	6.135	10.000	1.500	2.600
3	6.020	10.000	1.500	2.600
4	5.885	5.000	1.500	2.600
5	5.940	9.000	1.500	2.600
6	5.945	10.000	1.500	2.600
7	6.010	15.000	1.500	2.600
8	6.115	40.000	1.500	2.600
9	6.195	10.000	1.500	2.600
10	6.185	29.000	1.500	2.600
11	6.160	10.000	1.500	2.600
12	6.180	10.000	1.500	2.600
13	6.280	10.000	1.500	2.600
14	6.575	74.000	1.500	2.600
15	6.980	64.000	1.500	2.600
16	7.285	40.000	1.500	2.600
17	7.155	30.000	1.500	2.600
18	7.180	39.000	1.500	2.600
19	7.300	5.000	1.500	2.600

=====
 Input Information from Internal Weir R0430-W2.1
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.475	24.000	1.500	2.600
2	7.705	5.000	1.500	2.600
3	8.730	10.000	1.500	2.600
4	9.840	5.000	1.500	2.600
5	9.915	5.000	1.500	2.600
6	9.040	10.000	1.500	2.600
7	8.195	5.000	1.500	2.600
8	7.940	4.000	1.500	2.600
9	8.170	10.000	1.500	2.600
10	8.435	5.000	1.500	2.600
11	7.940	10.000	1.500	2.600
12	7.280	15.000	1.500	2.600
13	7.060	9.000	1.500	2.600
14	7.145	20.000	1.500	2.600
15	8.000	15.000	1.500	2.600
16	8.840	5.000	1.500	2.600
17	8.905	4.000	1.500	2.600
18	8.535	10.000	1.500	2.600
19	7.255	20.000	1.500	2.600
20	6.180	10.000	1.500	2.600
21	7.000	34.000	1.500	2.600
22	7.940	34.000	1.500	2.600
23	8.295	20.000	1.500	2.600
24	8.755	10.000	1.500	2.600
25	8.715	10.000	1.500	2.600
26	8.205	15.000	1.500	2.600
27	7.635	19.000	1.500	2.600
28	7.505	20.000	1.500	2.600
29	7.725	10.000	1.500	2.600
30	7.820	5.000	1.500	2.600
31	7.600	5.000	1.500	2.600
32	7.295	9.000	1.500	2.600
33	6.715	15.000	1.500	2.600
34	6.390	5.000	1.500	2.600
35	6.965	10.000	1.500	2.600
36	7.375	10.000	1.500	2.600
37	7.105	10.000	1.500	2.600
38	6.915	5.000	1.500	2.600
39	7.440	24.000	1.500	2.600
40	7.680	5.000	1.500	2.600
41	6.555	10.000	1.500	2.600
42	5.410	5.000	1.500	2.600
43	4.930	5.000	1.500	2.600

44	4.645	5.000	1.500	2.600
45	4.635	5.000	1.500	2.600
46	5.200	10.000	1.500	2.600
47	5.490	10.000	1.500	2.600
48	5.255	10.000	1.500	2.600
49	5.600	10.000	1.500	2.600
50	6.020	10.000	1.500	2.600
51	6.435	15.000	1.500	2.600
52	6.810	4.000	1.500	2.600
53	6.600	10.000	1.500	2.600
54	6.360	5.000	1.500	2.600
55	6.445	10.000	1.500	2.600
56	7.005	14.000	1.500	2.600
57	7.410	5.000	1.500	2.600
58	7.140	5.000	1.500	2.600
59	6.800	19.000	1.500	2.600
60	6.660	5.000	1.500	2.600
61	6.245	15.000	1.500	2.600
62	5.990	4.000	1.500	2.600
63	6.600	10.000	1.500	2.600
64	7.195	5.000	1.500	2.600
65	6.955	14.000	1.500	2.600
66	6.650	14.000	1.500	2.600
67	6.475	24.000	1.500	2.600
68	6.310	15.000	1.500	2.600
69	6.585	15.000	1.500	2.600
70	6.720	9.000	1.500	2.600
71	6.735	10.000	1.500	2.600
72	6.675	20.000	1.500	2.600
73	6.305	10.000	1.500	2.600
74	6.080	5.000	1.500	2.600
75	6.280	10.000	1.500	2.600
76	6.605	14.000	1.500	2.600
77	6.665	45.000	1.500	2.600
78	6.525	5.000	1.500	2.600
79	6.640	14.000	1.500	2.600
80	6.715	10.000	1.500	2.600
81	6.625	5.000	1.500	2.600
82	6.570	10.000	1.500	2.600
83	6.670	10.000	1.500	2.600
84	7.285	39.000	1.500	2.600
85	7.695	10.000	1.500	2.600
86	7.345	10.000	1.500	2.600

=====
Input Information from Internal Weir R0440-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----------	-----------------	-----------------	-----------------	-----------------

1	4.630	5.000	1.500	2.600
2	4.985	10.000	1.500	2.600
3	5.405	24.000	1.500	2.600
4	5.200	14.000	1.500	2.600
5	4.580	15.000	1.500	2.600
6	4.395	10.000	1.500	2.600
7	4.640	14.000	1.500	2.600
8	4.770	10.000	1.500	2.600
9	4.640	10.000	1.500	2.600
10	4.490	5.000	1.500	2.600
11	4.375	5.000	1.500	2.600
12	4.165	9.000	1.500	2.600
13	4.210	20.000	1.500	2.600
14	4.745	10.000	1.500	2.600
15	4.910	20.000	1.500	2.600
16	4.675	10.000	1.500	2.600
17	4.985	15.000	1.500	2.600
18	5.445	5.000	1.500	2.600
19	4.990	10.000	1.500	2.600
20	4.505	5.000	1.500	2.600
21	4.605	5.000	1.500	2.600
22	4.395	25.000	1.500	2.600
23	4.460	25.000	1.500	2.600
24	4.455	10.000	1.500	2.600
25	4.490	20.000	1.500	2.600
26	4.980	5.000	1.500	2.600
27	4.955	25.000	1.500	2.600
28	4.995	10.000	1.500	2.600
29	4.760	9.000	1.500	2.600
30	4.415	10.000	1.500	2.600
31	4.545	25.000	1.500	2.600
32	4.650	10.000	1.500	2.600
33	4.765	5.000	1.500	2.600
34	4.620	10.000	1.500	2.600
35	4.275	9.000	1.500	2.600
36	4.065	8.000	1.500	2.600
37	4.490	10.000	1.500	2.600
38	5.200	5.000	1.500	2.600
39	5.285	5.000	1.500	2.600
40	4.835	10.000	1.500	2.600
41	4.215	10.000	1.500	2.600
42	3.720	5.000	1.500	2.600
43	2.505	10.000	1.500	2.600
44	1.375	5.000	1.500	2.600
45	2.200	9.000	1.500	2.600
46	3.960	5.000	1.500	2.600
47	4.940	5.000	1.500	2.600
48	5.290	5.000	1.500	2.600
49	5.205	5.000	1.500	2.600

50	4.550	5.000	1.500	2.600
51	3.825	5.000	1.500	2.600
52	3.830	20.000	1.500	2.600
53	4.095	5.000	1.500	2.600
54	3.665	15.000	1.500	2.600
55	3.450	25.000	1.500	2.600
56	4.260	15.000	1.500	2.600
57	4.965	5.000	1.500	2.600
58	4.625	10.000	1.500	2.600
59	4.050	5.000	1.500	2.600
60	3.875	5.000	1.500	2.600
61	4.005	15.000	1.500	2.600
62	3.905	20.000	1.500	2.600
63	3.700	5.000	1.500	2.600
64	4.185	5.000	1.500	2.600
65	4.765	5.000	1.500	2.600
66	4.555	10.000	1.500	2.600
67	3.085	15.000	1.500	2.600
68	1.840	5.000	1.500	2.600
69	1.865	5.000	1.500	2.600
70	2.760	10.000	1.500	2.600
71	3.740	10.000	1.500	2.600
72	4.030	5.000	1.500	2.600
73	3.745	20.000	1.500	2.600
74	3.580	5.000	1.500	2.600
75	3.635	15.000	1.500	2.600
76	3.815	5.000	1.500	2.600
77	4.255	5.000	1.500	2.600
78	3.990	10.000	1.500	2.600
79	3.445	20.000	1.500	2.600
80	3.330	24.000	1.500	2.600
81	3.575	10.000	1.500	2.600
82	3.805	25.000	1.500	2.600
83	3.915	10.000	1.500	2.600
84	3.825	35.000	1.500	2.600
85	3.700	15.000	1.500	2.600
86	3.585	10.000	1.500	2.600
87	3.135	30.000	1.500	2.600
88	2.885	10.000	1.500	2.600

=====
Input Information from Internal Weir R0450-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.320	15.000	1.500	2.600
2	6.380	9.000	1.500	2.600
3	6.680	5.000	1.500	2.600

4	6.665	18.000	1.500	2.600
5	6.205	43.000	1.500	2.600
6	5.920	15.000	1.500	2.600
7	5.985	4.000	1.500	2.600
8	5.915	10.000	1.500	2.600
9	5.855	5.000	1.500	2.600
10	5.815	15.000	1.500	2.600
11	5.695	29.000	1.500	2.600
12	5.785	10.000	1.500	2.600
13	5.815	5.000	1.500	2.600
14	5.915	10.000	1.500	2.600
15	5.930	29.000	1.500	2.600
16	5.555	19.000	1.500	2.600
17	4.975	18.000	1.500	2.600
18	4.565	17.000	1.500	2.600
19	4.515	27.000	1.500	2.600
20	4.885	41.000	1.500	2.600
21	5.110	15.000	1.500	2.600
22	5.055	9.000	1.500	2.600
23	5.080	20.000	1.500	2.600
24	5.100	10.000	1.500	2.600
25	4.700	58.000	1.500	2.600
26	4.250	10.000	1.500	2.600
27	4.160	5.000	1.500	2.600
28	4.040	10.000	1.500	2.600
29	3.935	5.000	1.500	2.600
30	3.880	19.000	1.500	2.600
31	4.265	20.000	1.500	2.600
32	4.885	34.000	1.500	2.600
33	5.230	35.000	1.500	2.600
34	5.470	20.000	1.500	2.600
35	5.675	15.000	1.500	2.600
36	5.880	14.000	1.500	2.600
37	6.235	55.000	1.500	2.600
38	6.365	14.000	1.500	2.600
39	6.360	10.000	1.500	2.600
40	6.305	10.000	1.500	2.600
41	6.270	14.000	1.500	2.600
42	6.260	14.000	1.500	2.600
43	6.220	10.000	1.500	2.600
44	6.045	19.000	1.500	2.600
45	5.770	28.000	1.500	2.600
46	5.535	24.000	1.500	2.600
47	5.385	14.000	1.500	2.600
48	5.220	48.000	1.500	2.600
49	5.090	4.000	1.500	2.600
50	5.080	21.000	1.500	2.600
51	5.045	15.000	1.500	2.600
52	4.925	28.000	1.500	2.600
53	4.720	29.000	1.500	2.600

=====
 Input Information from Internal Weir R0450-W2.1
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.050	19.000	1.500	2.600
2	3.040	10.000	1.500	2.600
3	3.035	9.000	1.500	2.600
4	3.110	10.000	1.500	2.600
5	3.255	10.000	1.500	2.600
6	3.470	10.000	1.500	2.600
7	3.465	5.000	1.500	2.600
8	3.515	5.000	1.500	2.600
9	3.880	5.000	1.500	2.600
10	4.205	5.000	1.500	2.600
11	3.785	30.000	1.500	2.600
12	3.530	10.000	1.500	2.600
13	3.710	10.000	1.500	2.600
14	4.155	15.000	1.500	2.600
15	4.540	10.000	1.500	2.600
16	4.240	5.000	1.500	2.600
17	3.820	15.000	1.500	2.600
18	3.785	15.000	1.500	2.600
19	3.820	5.000	1.500	2.600
20	3.600	10.000	1.500	2.600
21	3.850	10.000	1.500	2.600
22	4.375	15.000	1.500	2.600
23	4.880	5.000	1.500	2.600
24	5.290	5.000	1.500	2.600
25	5.420	5.000	1.500	2.600
26	5.035	10.000	1.500	2.600
27	4.360	10.000	1.500	2.600
28	3.785	15.000	1.500	2.600
29	3.385	10.000	1.500	2.600
30	3.300	4.000	1.500	2.600
31	3.710	10.000	1.500	2.600
32	4.285	15.000	1.500	2.600
33	4.450	5.000	1.500	2.600
34	3.890	20.000	1.500	2.600
35	3.515	15.000	1.500	2.600
36	3.545	10.000	1.500	2.600
37	3.510	5.000	1.500	2.600
38	4.160	15.000	1.500	2.600
39	4.785	5.000	1.500	2.600
40	4.575	15.000	1.500	2.600
41	4.000	10.000	1.500	2.600
42	3.660	5.000	1.500	2.600

43	3.805	10.000	1.500	2.600
44	3.990	5.000	1.500	2.600
45	4.075	5.000	1.500	2.600
46	4.385	5.000	1.500	2.600
47	4.670	5.000	1.500	2.600
48	4.650	5.000	1.500	2.600
49	3.985	20.000	1.500	2.600
50	3.155	5.000	1.500	2.600
51	2.455	5.000	1.500	2.600
52	1.435	15.000	1.500	2.600
53	0.920	5.000	1.500	2.600
54	1.525	5.000	1.500	2.600
55	2.870	5.000	1.500	2.600
56	4.350	5.000	1.500	2.600
57	5.350	5.000	1.500	2.600
58	5.720	10.000	1.500	2.600

=====
Input Information from Internal Weir R0460-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.465	5.000	1.500	2.600
2	5.685	9.000	1.500	2.600
3	5.930	5.000	1.500	2.600
4	5.780	5.000	1.500	2.600
5	5.375	21.000	1.500	2.600
6	5.225	8.000	1.500	2.600
7	5.655	15.000	1.500	2.600
8	5.835	5.000	1.500	2.600
9	5.060	10.000	1.500	2.600
10	4.480	15.000	1.500	2.600
11	4.460	10.000	1.500	2.600
12	4.470	10.000	1.500	2.600
13	4.750	10.000	1.500	2.600
14	4.860	10.000	1.500	2.600
15	4.880	10.000	1.500	2.600
16	4.890	10.000	1.500	2.600
17	4.525	10.000	1.500	2.600
18	4.040	15.000	1.500	2.600
19	3.685	15.000	1.500	2.600
20	3.635	15.000	1.500	2.600
21	3.680	4.000	1.500	2.600
22	3.505	5.000	1.500	2.600
23	3.510	5.000	1.500	2.600
24	3.795	10.000	1.500	2.600
25	3.945	25.000	1.500	2.600
26	4.360	20.000	1.500	2.600

27	5.075	10.000	1.500	2.600
28	4.810	15.000	1.500	2.600
29	4.325	15.000	1.500	2.600
30	4.235	15.000	1.500	2.600
31	4.100	25.000	1.500	2.600
32	4.040	5.000	1.500	2.600
33	3.660	4.000	1.500	2.600
34	3.280	5.000	1.500	2.600
35	3.200	10.000	1.500	2.600
36	3.790	15.000	1.500	2.600
37	4.540	10.000	1.500	2.600
38	4.180	15.000	1.500	2.600
39	3.560	10.000	1.500	2.600
40	3.655	10.000	1.500	2.600
41	4.020	5.000	1.500	2.600
42	4.320	10.000	1.500	2.600
43	4.780	9.000	1.500	2.600
44	5.180	5.000	1.500	2.600
45	5.160	10.000	1.500	2.600
46	3.745	10.000	1.500	2.600
47	2.220	5.000	1.500	2.600
48	1.975	10.000	1.500	2.600
49	2.550	10.000	1.500	2.600
50	3.345	5.000	1.500	2.600
51	3.485	5.000	1.500	2.600

=====
Input Information from Internal Weir R0460-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	1.330	0.000	1.500	2.600
2	1.530	30.000	1.500	2.600
3	1.400	45.000	1.500	2.600
4	1.680	70.000	1.500	2.600
5	1.620	79.000	1.500	2.600
6	2.010	139.000	1.500	2.600
7	1.870	228.000	1.500	2.600
8	1.420	318.000	1.500	2.600
9	1.520	388.000	1.500	2.600
10	1.720	408.000	1.500	2.600
11	1.480	443.000	1.500	2.600
12	1.700	528.000	1.500	2.600

=====
Input Information from Internal Weir R0480-W1.1
=====

Point	Data	Data	Data	Data
-------	------	------	------	------

No.	Column # 1	Column # 2	Column # 3	Column # 4
1	5.900	15.000	1.500	2.600
2	5.885	15.000	1.500	2.600
3	5.910	25.000	1.500	2.600
4	5.930	24.000	1.500	2.600
5	5.870	10.000	1.500	2.600
6	5.635	15.000	1.500	2.600
7	5.620	25.000	1.500	2.600
8	5.950	15.000	1.500	2.600
9	6.240	5.000	1.500	2.600
10	6.220	5.000	1.500	2.600
11	5.950	10.000	1.500	2.600
12	5.545	19.000	1.500	2.600
13	5.530	10.000	1.500	2.600
14	5.715	20.000	1.500	2.600
15	6.020	20.000	1.500	2.600
16	6.290	5.000	1.500	2.600
17	6.075	15.000	1.500	2.600
18	5.970	14.000	1.500	2.600
19	5.920	10.000	1.500	2.600
20	5.870	15.000	1.500	2.600
21	5.705	25.000	1.500	2.600
22	5.650	34.000	1.500	2.600
23	5.455	15.000	1.500	2.600
24	4.810	20.000	1.500	2.600
25	4.490	15.000	1.500	2.600
26	4.510	10.000	1.500	2.600
27	4.465	19.000	1.500	2.600
28	4.390	15.000	1.500	2.600
29	4.090	44.000	1.500	2.600
30	3.710	5.000	1.500	2.600
31	3.865	57.000	1.500	2.600
32	3.945	10.000	1.500	2.600
33	3.945	9.000	1.500	2.600

=====
Input Information from Internal Weir R0480-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.225	10.000	1.500	2.600
2	6.030	15.000	1.500	2.600
3	5.675	25.000	1.500	2.600
4	5.620	20.000	1.500	2.600
5	5.070	25.000	1.500	2.600
6	4.050	15.000	1.500	2.600

7	3.705	20.000	1.500	2.600
8	3.595	15.000	1.500	2.600
9	3.630	20.000	1.500	2.600
10	4.060	15.000	1.500	2.600
11	4.275	15.000	1.500	2.600
12	4.355	10.000	1.500	2.600
13	4.385	15.000	1.500	2.600
14	4.370	20.000	1.500	2.600
15	4.885	30.000	1.500	2.600
16	5.355	5.000	1.500	2.600
17	5.140	10.000	1.500	2.600
18	4.450	10.000	1.500	2.600
19	3.940	5.000	1.500	2.600
20	4.180	30.000	1.500	2.600
21	4.335	10.000	1.500	2.600
22	4.175	10.000	1.500	2.600
23	4.355	10.000	1.500	2.600
24	4.035	25.000	1.500	2.600
25	3.470	5.000	1.500	2.600
26	3.620	15.000	1.500	2.600
27	3.755	10.000	1.500	2.600
28	3.190	20.000	1.500	2.600
29	2.665	20.000	1.500	2.600
30	2.200	20.000	1.500	2.600
31	1.770	5.000	1.500	2.600
32	1.925	5.000	1.500	2.600
33	2.000	5.000	1.500	2.600
34	1.770	5.000	1.500	2.600
35	1.750	15.000	1.500	2.600
36	1.910	15.000	1.500	2.600
37	2.140	10.000	1.500	2.600
38	2.350	17.000	1.500	2.600
39	2.560	9.000	1.500	2.600
40	3.135	10.000	1.500	2.600
41	3.730	20.000	1.500	2.600
42	4.300	10.000	1.500	2.600
43	4.470	10.000	1.500	2.600
44	4.345	5.000	1.500	2.600
45	4.925	20.000	1.500	2.600
46	5.970	10.000	1.500	2.600
47	6.570	5.000	1.500	2.600
48	6.275	15.000	1.500	2.600
49	5.840	5.000	1.500	2.600
50	6.070	10.000	1.500	2.600
51	6.210	15.000	1.500	2.600
52	6.070	10.000	1.500	2.600
53	6.130	5.000	1.500	2.600
54	5.810	15.000	1.500	2.600
55	5.465	15.000	1.500	2.600
56	5.665	10.000	1.500	2.600

57	5.510	10.000	1.500	2.600
58	5.075	4.000	1.500	2.600
59	5.590	30.000	1.500	2.600
60	6.170	5.000	1.500	2.600
61	5.790	5.000	1.500	2.600
62	5.360	5.000	1.500	2.600
63	5.335	15.000	1.500	2.600
64	5.705	15.000	1.500	2.600
65	5.995	15.000	1.500	2.600
66	5.870	10.000	1.500	2.600
67	5.725	10.000	1.500	2.600
68	5.340	15.000	1.500	2.600
69	4.960	5.000	1.500	2.600
70	5.095	10.000	1.500	2.600
71	5.100	15.000	1.500	2.600
72	5.085	24.000	1.500	2.600
73	5.075	18.000	1.500	2.600
74	5.205	29.000	1.500	2.600
75	5.405	9.000	1.500	2.600

=====
Input Information from Internal Weir R0480-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.085	25.000	1.500	2.600
2	5.935	25.000	1.500	2.600
3	5.915	15.000	1.500	2.600
4	5.845	5.000	1.500	2.600
5	5.980	30.000	1.500	2.600
6	6.065	25.000	1.500	2.600
7	6.120	10.000	1.500	2.600
8	6.175	5.000	1.500	2.600
9	6.360	20.000	1.500	2.600
10	6.560	20.000	1.500	2.600
11	6.700	20.000	1.500	2.600
12	6.825	30.000	1.500	2.600
13	6.870	25.000	1.500	2.600
14	7.150	15.000	1.500	2.600
15	7.300	5.000	1.500	2.600
16	7.415	30.000	1.500	2.600
17	7.365	25.000	1.500	2.600
18	7.095	15.000	1.500	2.600
19	7.205	35.000	1.500	2.600
20	7.285	10.000	1.500	2.600
21	7.220	15.000	1.500	2.600
22	7.070	25.000	1.500	2.600
23	6.820	30.000	1.500	2.600

24	6.870	10.000	1.500	2.600
25	6.990	25.000	1.500	2.600
26	6.915	9.000	1.500	2.600
27	6.880	12.000	1.500	2.600
28	6.805	5.000	1.500	2.600
29	6.755	10.000	1.500	2.600
30	7.020	9.000	1.500	2.600
31	7.325	20.000	1.500	2.600
32	7.715	30.000	1.500	2.600
33	7.805	54.000	1.500	2.600
34	7.455	20.000	1.500	2.600
35	7.360	24.000	1.500	2.600
36	7.540	10.000	1.500	2.600
37	7.635	20.000	1.500	2.600
38	7.510	10.000	1.500	2.600
39	7.530	39.000	1.500	2.600
40	7.760	44.000	1.500	2.600
41	8.070	10.000	1.500	2.600
42	7.920	15.000	1.500	2.600
43	7.805	20.000	1.500	2.600
44	7.875	10.000	1.500	2.600
45	7.900	25.000	1.500	2.600
46	7.975	15.000	1.500	2.600
47	8.030	10.000	1.500	2.600
48	8.170	5.000	1.500	2.600
49	8.270	9.000	1.500	2.600
50	8.220	5.000	1.500	2.600
51	7.980	5.000	1.500	2.600
52	7.875	40.000	1.500	2.600
53	7.650	20.000	1.500	2.600

=====
Input Information from Internal Weir R0490-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.470	10.000	1.500	2.600
2	6.570	10.000	1.500	2.600
3	6.665	9.000	1.500	2.600
4	6.635	28.000	1.500	2.600
5	6.830	15.000	1.500	2.600
6	6.920	9.000	1.500	2.600
7	6.845	26.000	1.500	2.600
8	6.985	9.000	1.500	2.600
9	7.030	9.000	1.500	2.600
10	7.060	20.000	1.500	2.600
11	7.000	15.000	1.500	2.600
12	6.980	15.000	1.500	2.600

13	6.925	15.000	1.500	2.600
14	6.790	5.000	1.500	2.600
15	6.810	9.000	1.500	2.600
16	6.860	15.000	1.500	2.600
17	7.205	10.000	1.500	2.600
18	7.500	25.000	1.500	2.600
19	7.785	10.000	1.500	2.600
20	7.845	15.000	1.500	2.600
21	7.370	14.000	1.500	2.600
22	7.250	10.000	1.500	2.600
23	7.410	5.000	1.500	2.600
24	7.100	5.000	1.500	2.600
25	6.825	5.000	1.500	2.600
26	7.100	10.000	1.500	2.600
27	6.875	10.000	1.500	2.600
28	6.405	5.000	1.500	2.600
29	6.985	14.000	1.500	2.600
30	7.480	10.000	1.500	2.600
31	7.585	10.000	1.500	2.600
32	7.800	10.000	1.500	2.600
33	7.990	5.000	1.500	2.600
34	8.395	5.000	1.500	2.600
35	8.785	5.000	1.500	2.600
36	8.925	9.000	1.500	2.600
37	9.045	5.000	1.500	2.600
38	9.130	4.000	1.500	2.600
39	8.650	30.000	1.500	2.600
40	8.445	16.000	1.500	2.600
41	8.290	5.000	1.500	2.600
42	7.340	5.000	1.500	2.600
43	6.650	4.000	1.500	2.600
44	6.440	5.000	1.500	2.600
45	5.645	10.000	1.500	2.600
46	4.740	5.000	1.500	2.600
47	4.585	5.000	1.500	2.600
48	4.865	9.000	1.500	2.600
49	5.185	5.000	1.500	2.600
50	5.430	5.000	1.500	2.600
51	6.580	10.000	1.500	2.600
52	7.680	4.000	1.500	2.600
53	7.815	10.000	1.500	2.600
54	7.395	14.000	1.500	2.600
55	6.930	5.000	1.500	2.600
56	7.455	20.000	1.500	2.600
57	7.980	9.000	1.500	2.600
58	7.455	19.000	1.500	2.600
59	7.180	15.000	1.500	2.600
60	7.360	10.000	1.500	2.600
61	6.720	25.000	1.500	2.600
62	6.135	9.000	1.500	2.600

63	6.370	5.000	1.500	2.600
64	6.790	20.000	1.500	2.600
65	7.325	35.000	1.500	2.600
66	7.570	5.000	1.500	2.600
67	6.970	14.000	1.500	2.600
68	6.315	5.000	1.500	2.600
69	6.125	10.000	1.500	2.600
70	6.085	9.000	1.500	2.600
71	6.015	10.000	1.500	2.600
72	6.000	5.000	1.500	2.600
73	7.105	24.000	1.500	2.600
74	8.175	10.000	1.500	2.600
75	7.850	24.000	1.500	2.600
76	7.570	10.000	1.500	2.600
77	7.435	9.000	1.500	2.600
78	7.305	10.000	1.500	2.600
79	7.305	4.000	1.500	2.600
80	6.630	15.000	1.500	2.600
81	5.660	28.000	1.500	2.600
82	5.420	5.000	1.500	2.600
83	6.180	10.000	1.500	2.600
84	6.880	36.000	1.500	2.600
85	6.930	4.000	1.500	2.600
86	6.545	10.000	1.500	2.600
87	6.125	9.000	1.500	2.600

=====
Input Information from Internal Weir R0490-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.715	5.000	1.500	2.600
2	6.905	5.000	1.500	2.600
3	6.825	9.000	1.500	2.600
4	7.060	15.000	1.500	2.600
5	7.300	5.000	1.500	2.600
6	7.425	19.000	1.500	2.600
7	7.325	15.000	1.500	2.600
8	6.965	9.000	1.500	2.600
9	6.750	10.000	1.500	2.600
10	6.495	24.000	1.500	2.600
11	6.260	15.000	1.500	2.600
12	6.445	14.000	1.500	2.600
13	6.735	5.000	1.500	2.600
14	6.730	5.000	1.500	2.600
15	6.990	5.000	1.500	2.600
16	7.090	10.000	1.500	2.600
17	6.820	5.000	1.500	2.600

18	6.375	5.000	1.500	2.600
19	6.105	5.000	1.500	2.600
20	6.425	15.000	1.500	2.600
21	6.745	4.000	1.500	2.600
22	6.645	5.000	1.500	2.600
23	7.005	10.000	1.500	2.600
24	7.365	10.000	1.500	2.600
25	6.225	20.000	1.500	2.600
26	5.115	5.000	1.500	2.600
27	5.200	19.000	1.500	2.600
28	5.365	10.000	1.500	2.600
29	5.060	15.000	1.500	2.600
30	5.420	20.000	1.500	2.600
31	6.080	9.000	1.500	2.600
32	6.410	10.000	1.500	2.600
33	6.705	25.000	1.500	2.600
34	6.920	15.000	1.500	2.600
35	6.960	19.000	1.500	2.600
36	6.735	20.000	1.500	2.600
37	6.640	10.000	1.500	2.600
38	6.825	20.000	1.500	2.600
39	7.000	5.000	1.500	2.600
40	6.050	10.000	1.500	2.600
41	4.885	5.000	1.500	2.600
42	4.780	15.000	1.500	2.600
43	4.860	5.000	1.500	2.600
44	4.230	10.000	1.500	2.600
45	3.555	5.000	1.500	2.600
46	3.555	5.000	1.500	2.600
47	5.195	15.000	1.500	2.600
48	6.975	5.000	1.500	2.600
49	7.360	5.000	1.500	2.600
50	7.390	15.000	1.500	2.600

=====
Input Information from Internal Weir R0500-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.400	9.000	1.500	2.600
2	3.110	10.000	1.500	2.600
3	3.100	37.000	1.500	2.600
4	3.350	14.000	1.500	2.600
5	3.410	15.000	1.500	2.600
6	3.145	10.000	1.500	2.600
7	3.005	30.000	1.500	2.600
8	3.140	5.000	1.500	2.600
9	3.085	5.000	1.500	2.600

10	3.115	19.000	1.500	2.600
11	3.210	10.000	1.500	2.600
12	3.080	15.000	1.500	2.600
13	3.190	15.000	1.500	2.600
14	3.145	15.000	1.500	2.600
15	3.125	15.000	1.500	2.600
16	3.275	15.000	1.500	2.600
17	3.165	10.000	1.500	2.600
18	3.225	60.000	1.500	2.600
19	3.285	4.000	1.500	2.600
20	3.180	5.000	1.500	2.600
21	3.225	5.000	1.500	2.600
22	3.470	5.000	1.500	2.600
23	3.460	15.000	1.500	2.600
24	3.300	25.000	1.500	2.600
25	3.275	15.000	1.500	2.600
26	3.275	5.000	1.500	2.600
27	3.295	10.000	1.500	2.600
28	3.320	5.000	1.500	2.600
29	3.280	10.000	1.500	2.600
30	3.020	4.000	1.500	2.600
31	3.055	10.000	1.500	2.600
32	3.075	15.000	1.500	2.600
33	3.020	20.000	1.500	2.600
34	2.930	30.000	1.500	2.600
35	2.830	5.000	1.500	2.600
36	2.930	14.000	1.500	2.600
37	2.825	10.000	1.500	2.600
38	2.805	10.000	1.500	2.600
39	2.845	5.000	1.500	2.600
40	2.960	5.000	1.500	2.600
41	3.125	24.000	1.500	2.600
42	3.235	5.000	1.500	2.600
43	3.190	15.000	1.500	2.600
44	3.090	29.000	1.500	2.600
45	3.310	35.000	1.500	2.600
46	3.380	29.000	1.500	2.600
47	3.380	5.000	1.500	2.600
48	3.390	15.000	1.500	2.600
49	3.460	5.000	1.500	2.600
50	3.510	10.000	1.500	2.600
51	3.535	10.000	1.500	2.600
52	3.595	10.000	1.500	2.600
53	3.560	20.000	1.500	2.600
54	3.425	15.000	1.500	2.600
55	3.415	10.000	1.500	2.600
56	3.485	10.000	1.500	2.600
57	3.445	10.000	1.500	2.600
58	3.380	10.000	1.500	2.600
59	3.400	15.000	1.500	2.600

60	3.450	20.000	1.500	2.600
61	3.440	10.000	1.500	2.600
62	3.580	19.000	1.500	2.600
63	3.515	5.000	1.500	2.600
64	3.455	20.000	1.500	2.600
65	3.480	29.000	1.500	2.600
66	3.550	15.000	1.500	2.600
67	3.540	10.000	1.500	2.600
68	3.475	10.000	1.500	2.600
69	3.425	14.000	1.500	2.600
70	3.410	10.000	1.500	2.600
71	3.425	10.000	1.500	2.600
72	3.400	5.000	1.500	2.600

=====
Input Information from Internal Weir R0510-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	2.760	8.000	1.500	2.600
2	2.980	5.000	1.500	2.600
3	4.435	45.000	1.500	2.600
4	5.695	5.000	1.500	2.600
5	4.295	30.000	1.500	2.600
6	3.070	20.000	1.500	2.600
7	3.670	15.000	1.500	2.600
8	4.245	5.000	1.500	2.600
9	4.320	10.000	1.500	2.600
10	4.605	15.000	1.500	2.600
11	4.855	10.000	1.500	2.600
12	4.370	19.000	1.500	2.600
13	3.830	10.000	1.500	2.600
14	3.945	10.000	1.500	2.600
15	4.220	10.000	1.500	2.600
16	4.490	15.000	1.500	2.600
17	4.715	5.000	1.500	2.600
18	4.630	5.000	1.500	2.600
19	4.575	10.000	1.500	2.600
20	4.005	25.000	1.500	2.600
21	3.200	10.000	1.500	2.600
22	3.055	20.000	1.500	2.600
23	2.975	15.000	1.500	2.600
24	2.940	15.000	1.500	2.600
25	2.820	15.000	1.500	2.600
26	2.590	5.000	1.500	2.600
27	2.935	20.000	1.500	2.600
28	3.160	25.000	1.500	2.600
29	3.245	9.000	1.500	2.600

30	3.600	25.000	1.500	2.600
31	3.560	10.000	1.500	2.600
32	2.855	15.000	1.500	2.600
33	2.215	10.000	1.500	2.600
34	2.120	35.000	1.500	2.600
35	2.510	25.000	1.500	2.600
36	2.920	5.000	1.500	2.600
37	2.815	10.000	1.500	2.600
38	2.830	10.000	1.500	2.600
39	3.025	15.000	1.500	2.600
40	3.195	10.000	1.500	2.600
41	3.335	5.000	1.500	2.600
42	3.080	10.000	1.500	2.600
43	2.855	19.000	1.500	2.600
44	3.125	10.000	1.500	2.600
45	3.195	10.000	1.500	2.600
46	3.100	10.000	1.500	2.600
47	2.885	20.000	1.500	2.600
48	2.605	10.000	1.500	2.600
49	2.900	15.000	1.500	2.600
50	3.025	10.000	1.500	2.600
51	2.935	5.000	1.500	2.600
52	3.280	4.000	1.500	2.600
53	3.815	10.000	1.500	2.600
54	3.915	5.000	1.500	2.600
55	3.360	10.000	1.500	2.600
56	3.015	10.000	1.500	2.600
57	3.375	20.000	1.500	2.600
58	3.695	5.000	1.500	2.600
59	3.575	5.000	1.500	2.600
60	3.040	10.000	1.500	2.600
61	2.660	20.000	1.500	2.600
62	2.770	4.000	1.500	2.600
63	3.035	5.000	1.500	2.600
64	3.360	15.000	1.500	2.600
65	3.400	15.000	1.500	2.600
66	2.960	15.000	1.500	2.600
67	2.720	30.000	1.500	2.600
68	2.645	29.000	1.500	2.600
69	2.495	15.000	1.500	2.600
70	2.660	5.000	1.500	2.600
71	3.070	5.000	1.500	2.600
72	3.570	15.000	1.500	2.600
73	3.715	25.000	1.500	2.600
74	3.410	18.000	1.500	2.600

=====
Input Information from Internal Weir R0520-W1.1
=====

Point	Data	Data	Data	Data
-------	------	------	------	------

No.	Column # 1	Column # 2	Column # 3	Column # 4
1	5.855	5.000	1.500	2.600
2	5.485	5.000	1.500	2.600
3	5.040	10.000	1.500	2.600
4	5.430	15.000	1.500	2.600
5	5.870	5.000	1.500	2.600
6	6.055	15.000	1.500	2.600
7	5.415	10.000	1.500	2.600
8	4.405	5.000	1.500	2.600
9	4.475	15.000	1.500	2.600
10	4.500	15.000	1.500	2.600
11	4.425	5.000	1.500	2.600
12	4.900	5.000	1.500	2.600
13	5.490	5.000	1.500	2.600
14	5.440	5.000	1.500	2.600
15	5.090	5.000	1.500	2.600
16	5.150	5.000	1.500	2.600
17	5.250	5.000	1.500	2.600
18	5.285	5.000	1.500	2.600
19	5.785	5.000	1.500	2.600
20	6.370	5.000	1.500	2.600
21	6.225	5.000	1.500	2.600
22	5.705	5.000	1.500	2.600
23	5.655	5.000	1.500	2.600
24	5.780	5.000	1.500	2.600
25	5.895	5.000	1.500	2.600
26	5.695	5.000	1.500	2.600
27	5.150	5.000	1.500	2.600
28	5.160	10.000	1.500	2.600
29	5.710	5.000	1.500	2.600
30	6.065	5.000	1.500	2.600
31	6.055	5.000	1.500	2.600
32	5.840	5.000	1.500	2.600
33	5.340	5.000	1.500	2.600
34	5.175	5.000	1.500	2.600
35	5.900	10.000	1.500	2.600
36	6.630	5.000	1.500	2.600
37	6.550	5.000	1.500	2.600
38	6.195	5.000	1.500	2.600
39	6.060	5.000	1.500	2.600
40	5.525	10.000	1.500	2.600
41	5.400	10.000	1.500	2.600
42	5.810	10.000	1.500	2.600
43	6.040	10.000	1.500	2.600
44	6.260	10.000	1.500	2.600
45	6.620	10.000	1.500	2.600
46	7.105	10.000	1.500	2.600
47	6.810	5.000	1.500	2.600

48	5.990	10.000	1.500	2.600
49	5.450	15.000	1.500	2.600
50	5.145	5.000	1.500	2.600
51	5.130	9.000	1.500	2.600
52	5.095	5.000	1.500	2.600
53	4.805	10.000	1.500	2.600
54	4.995	10.000	1.500	2.600
55	5.005	10.000	1.500	2.600
56	4.715	5.000	1.500	2.600
57	4.490	10.000	1.500	2.600
58	4.310	5.000	1.500	2.600
59	3.940	20.000	1.500	2.600
60	3.585	10.000	1.500	2.600
61	3.430	10.000	1.500	2.600
62	3.170	10.000	1.500	2.600
63	3.265	5.000	1.500	2.600
64	3.710	5.000	1.500	2.600
65	4.050	5.000	1.500	2.600
66	3.870	5.000	1.500	2.600
67	3.635	5.000	1.500	2.600
68	3.755	5.000	1.500	2.600
69	4.185	5.000	1.500	2.600
70	4.600	5.000	1.500	2.600
71	4.570	10.000	1.500	2.600
72	4.440	5.000	1.500	2.600
73	4.780	10.000	1.500	2.600
74	4.925	15.000	1.500	2.600
75	4.655	25.000	1.500	2.600
76	4.695	24.000	1.500	2.600
77	4.650	40.000	1.500	2.600
78	4.495	20.000	1.500	2.600
79	4.760	14.000	1.500	2.600
80	5.055	79.000	1.500	2.600
81	5.025	10.000	1.500	2.600
82	5.030	15.000	1.500	2.600
83	5.060	15.000	1.500	2.600
84	5.170	10.000	1.500	2.600
85	5.375	10.000	1.500	2.600
86	5.660	10.000	1.500	2.600
87	5.685	19.000	1.500	2.600
88	5.585	10.000	1.500	2.600
89	5.835	5.000	1.500	2.600
90	6.055	25.000	1.500	2.600
91	5.475	34.000	1.500	2.600
92	4.675	14.000	1.500	2.600
93	4.685	19.000	1.500	2.600
94	5.115	24.000	1.500	2.600
95	5.615	10.000	1.500	2.600
96	5.850	9.000	1.500	2.600
97	5.825	5.000	1.500	2.600

=====
 Input Information from Internal Weir R0520-W2.1
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.600	50.000	1.500	2.600
2	6.010	50.000	1.500	2.600
3	6.045	50.000	1.500	2.600
4	5.835	50.000	1.500	2.600
5	5.715	50.000	1.500	2.600
6	5.840	50.000	1.500	2.600
7	5.945	50.000	1.500	2.600
8	5.135	50.000	1.500	2.600
9	4.585	50.000	1.500	2.600
10	4.670	50.000	1.500	2.600
11	4.265	50.000	1.500	2.600
12	4.525	50.000	1.500	2.600
13	6.010	50.000	1.500	2.600
14	6.970	50.000	1.500	2.600
15	7.055	50.000	1.500	2.600
16	5.695	50.000	1.500	2.600
17	4.310	50.000	1.500	2.600
18	3.695	50.000	1.500	2.600
19	3.305	50.000	1.500	2.600
20	3.975	50.000	1.500	2.600
21	5.070	50.000	1.500	2.600
22	5.315	50.000	1.500	2.600
23	5.025	50.000	1.500	2.600
24	5.295	50.000	1.500	2.600
25	6.350	50.000	1.500	2.600
26	6.640	50.000	1.500	2.600
27	6.215	50.000	1.500	2.600
28	6.315	50.000	1.500	2.600
29	6.405	50.000	1.500	2.600
30	6.630	50.000	1.500	2.600
31	6.965	50.000	1.500	2.600
32	6.060	50.000	1.500	2.600
33	5.100	50.000	1.500	2.600
34	5.505	50.000	1.500	2.600
35	5.825	50.000	1.500	2.600
36	5.610	50.000	1.500	2.600
37	5.420	50.000	1.500	2.600
38	5.330	50.000	1.500	2.600
39	5.085	50.000	1.500	2.600
40	6.010	50.000	1.500	2.600
41	6.565	50.000	1.500	2.600
42	5.745	50.000	1.500	2.600

43	5.730	50.000	1.500	2.600
44	6.220	50.000	1.500	2.600
45	6.215	50.000	1.500	2.600
46	5.890	50.000	1.500	2.600
47	5.815	50.000	1.500	2.600
48	5.870	50.000	1.500	2.600
49	5.915	50.000	1.500	2.600
50	5.760	50.000	1.500	2.600
51	5.700	50.000	1.500	2.600
52	6.070	50.000	1.500	2.600
53	6.695	50.000	1.500	2.600
54	7.420	50.000	1.500	2.600
55	8.035	50.000	1.500	2.600

=====
Input Information from Internal Weir R0530-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.660	24.000	1.500	2.600
2	4.900	10.000	1.500	2.600
3	4.290	9.000	1.500	2.600
4	4.085	5.000	1.500	2.600
5	4.435	10.000	1.500	2.600
6	4.860	14.000	1.500	2.600

=====
Input Information from Internal Weir R0530-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	4.350	25.000	1.500	2.600
2	4.490	10.000	1.500	2.600
3	4.545	10.000	1.500	2.600
4	4.505	5.000	1.500	2.600
5	4.465	5.000	1.500	2.600
6	4.450	10.000	1.500	2.600
7	4.490	10.000	1.500	2.600
8	4.570	5.000	1.500	2.600
9	4.470	10.000	1.500	2.600
10	4.245	5.000	1.500	2.600
11	4.435	10.000	1.500	2.600
12	4.475	5.000	1.500	2.600
13	4.415	15.000	1.500	2.600
14	4.420	10.000	1.500	2.600
15	4.425	10.000	1.500	2.600

16	4.450	15.000	1.500	2.600
17	4.580	15.000	1.500	2.600
18	4.535	9.000	1.500	2.600
19	4.370	10.000	1.500	2.600
20	4.375	10.000	1.500	2.600
21	4.405	20.000	1.500	2.600
22	4.440	10.000	1.500	2.600
23	4.470	5.000	1.500	2.600
24	4.490	15.000	1.500	2.600
25	4.490	5.000	1.500	2.600
26	4.510	5.000	1.500	2.600
27	4.400	25.000	1.500	2.600
28	4.485	10.000	1.500	2.600
29	4.520	5.000	1.500	2.600
30	4.485	5.000	1.500	2.600
31	4.480	15.000	1.500	2.600
32	4.525	10.000	1.500	2.600
33	4.690	20.000	1.500	2.600
34	4.615	15.000	1.500	2.600
35	4.460	10.000	1.500	2.600
36	4.595	10.000	1.500	2.600
37	4.610	10.000	1.500	2.600
38	4.580	15.000	1.500	2.600
39	4.580	15.000	1.500	2.600
40	4.580	15.000	1.500	2.600
41	4.680	35.000	1.500	2.600
42	4.825	50.000	1.500	2.600
43	4.925	10.000	1.500	2.600
44	4.930	20.000	1.500	2.600
45	4.900	24.000	1.500	2.600
46	4.905	5.000	1.500	2.600
47	4.875	40.000	1.500	2.600
48	4.845	15.000	1.500	2.600
49	4.610	50.000	1.500	2.600
50	4.400	20.000	1.500	2.600
51	4.390	15.000	1.500	2.600
52	4.390	10.000	1.500	2.600
53	4.465	40.000	1.500	2.600
54	4.355	20.000	1.500	2.600
55	4.375	10.000	1.500	2.600

=====
Input Information from Internal Weir R0530-W3
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
----- 1	----- 4.840	----- 10.000	----- 1.500	----- 2.600
2	5.165	9.000	1.500	2.600

3	5.085	15.000	1.500	2.600
4	4.940	24.000	1.500	2.600
5	5.085	10.000	1.500	2.600
6	4.865	10.000	1.500	2.600
7	4.460	19.000	1.500	2.600
8	4.195	29.000	1.500	2.600
9	4.225	15.000	1.500	2.600
10	3.995	29.000	1.500	2.600
11	3.785	10.000	1.500	2.600
12	3.835	10.000	1.500	2.600
13	4.090	25.000	1.500	2.600
14	4.185	20.000	1.500	2.600
15	3.980	10.000	1.500	2.600
16	3.695	10.000	1.500	2.600
17	3.410	5.000	1.500	2.600
18	3.585	5.000	1.500	2.600
19	3.785	5.000	1.500	2.600
20	3.615	10.000	1.500	2.600
21	3.400	5.000	1.500	2.600
22	3.680	10.000	1.500	2.600
23	3.825	24.000	1.500	2.600
24	3.965	10.000	1.500	2.600
25	4.245	5.000	1.500	2.600
26	3.705	20.000	1.500	2.600
27	3.065	10.000	1.500	2.600
28	2.970	5.000	1.500	2.600
29	3.300	15.000	1.500	2.600
30	3.705	10.000	1.500	2.600
31	3.570	30.000	1.500	2.600
32	3.890	25.000	1.500	2.600
33	4.300	10.000	1.500	2.600
34	3.920	10.000	1.500	2.600
35	3.705	15.000	1.500	2.600
36	3.795	30.000	1.500	2.600
37	3.965	25.000	1.500	2.600
38	4.170	5.000	1.500	2.600
39	4.685	10.000	1.500	2.600
40	5.235	5.000	1.500	2.600
41	5.125	4.000	1.500	2.600
42	4.750	10.000	1.500	2.600
43	4.610	20.000	1.500	2.600
44	4.730	5.000	1.500	2.600
45	5.070	5.000	1.500	2.600
46	5.190	5.000	1.500	2.600
47	4.825	5.000	1.500	2.600
48	4.415	10.000	1.500	2.600
49	4.545	20.000	1.500	2.600
50	5.010	5.000	1.500	2.600
51	5.500	5.000	1.500	2.600
52	5.940	5.000	1.500	2.600

53	6.320	20.000	1.500	2.600
54	6.425	5.000	1.500	2.600
55	5.605	15.000	1.500	2.600
56	4.620	5.000	1.500	2.600
57	4.220	5.000	1.500	2.600
58	4.210	5.000	1.500	2.600
59	4.295	5.000	1.500	2.600
60	3.965	5.000	1.500	2.600
61	3.175	5.000	1.500	2.600
62	2.645	5.000	1.500	2.600
63	3.460	15.000	1.500	2.600
64	4.505	5.000	1.500	2.600
65	4.510	5.000	1.500	2.600

=====
Input Information from Internal Weir R0540-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.420	5.000	1.500	2.600
2	7.360	5.000	1.500	2.600
3	7.135	10.000	1.500	2.600
4	7.110	5.000	1.500	2.600
5	7.450	10.000	1.500	2.600
6	7.460	15.000	1.500	2.600
7	6.765	10.000	1.500	2.600
8	6.250	5.000	1.500	2.600
9	5.870	5.000	1.500	2.600
10	5.590	19.000	1.500	2.600
11	5.320	15.000	1.500	2.600
12	5.080	5.000	1.500	2.600
13	5.290	10.000	1.500	2.600
14	5.365	10.000	1.500	2.600
15	5.470	20.000	1.500	2.600
16	5.885	5.000	1.500	2.600
17	7.010	10.000	1.500	2.600
18	8.245	5.000	1.500	2.600
19	8.400	10.000	1.500	2.600
20	7.575	10.000	1.500	2.600
21	6.700	4.000	1.500	2.600
22	6.465	5.000	1.500	2.600
23	6.440	5.000	1.500	2.600
24	6.635	5.000	1.500	2.600
25	7.250	5.000	1.500	2.600
26	7.700	5.000	1.500	2.600
27	7.365	5.000	1.500	2.600
28	6.825	5.000	1.500	2.600
29	6.345	20.000	1.500	2.600

30	6.155	19.000	1.500	2.600
31	6.120	10.000	1.500	2.600
32	5.925	15.000	1.500	2.600
33	5.980	10.000	1.500	2.600
34	6.050	14.000	1.500	2.600
35	6.280	15.000	1.500	2.600
36	6.545	5.000	1.500	2.600
37	6.360	10.000	1.500	2.600
38	6.275	15.000	1.500	2.600
39	5.990	24.000	1.500	2.600
40	5.730	10.000	1.500	2.600
41	5.825	5.000	1.500	2.600
42	5.530	10.000	1.500	2.600
43	5.285	19.000	1.500	2.600
44	5.375	5.000	1.500	2.600
45	5.745	9.000	1.500	2.600
46	5.995	4.000	1.500	2.600
47	5.435	10.000	1.500	2.600
48	4.550	10.000	1.500	2.600
49	3.825	20.000	1.500	2.600
50	2.930	10.000	1.500	2.600
51	2.240	5.000	1.500	2.600
52	2.195	15.000	1.500	2.600
53	2.865	10.000	1.500	2.600
54	3.580	5.000	1.500	2.600
55	3.720	5.000	1.500	2.600
56	3.550	10.000	1.500	2.600
57	3.355	20.000	1.500	2.600
58	3.750	20.000	1.500	2.600
59	4.195	10.000	1.500	2.600
60	4.110	10.000	1.500	2.600
61	4.245	15.000	1.500	2.600
62	4.770	10.000	1.500	2.600
63	4.670	15.000	1.500	2.600
64	4.395	20.000	1.500	2.600
65	4.700	15.000	1.500	2.600
66	4.895	10.000	1.500	2.600
67	4.980	5.000	1.500	2.600
68	4.880	25.000	1.500	2.600
69	4.765	10.000	1.500	2.600
70	5.190	25.000	1.500	2.600
71	6.280	22.000	1.500	2.600
72	7.070	4.000	1.500	2.600
73	7.085	4.000	1.500	2.600
74	6.650	20.000	1.500	2.600
75	6.230	5.000	1.500	2.600
76	6.575	29.000	1.500	2.600
77	6.595	15.000	1.500	2.600
78	6.185	9.000	1.500	2.600
79	6.200	5.000	1.500	2.600

80	6.545	5.000	1.500	2.600
81	7.045	15.000	1.500	2.600
82	7.855	14.000	1.500	2.600
83	8.520	5.000	1.500	2.600
84	8.450	10.000	1.500	2.600
85	8.470	19.000	1.500	2.600
86	8.440	10.000	1.500	2.600
87	7.945	5.000	1.500	2.600
88	7.420	9.000	1.500	2.600
89	7.225	5.000	1.500	2.600
90	7.620	9.000	1.500	2.600
91	7.980	5.000	1.500	2.600
92	7.585	10.000	1.500	2.600
93	7.165	4.000	1.500	2.600
94	7.235	5.000	1.500	2.600

=====
Input Information from Internal Weir R0540-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.480	5.000	1.500	2.600
2	5.485	20.000	1.500	2.600
3	4.485	30.000	1.500	2.600
4	3.595	15.000	1.500	2.600
5	4.045	15.000	1.500	2.600
6	4.595	5.000	1.500	2.600
7	4.245	15.000	1.500	2.600
8	4.075	10.000	1.500	2.600
9	4.100	10.000	1.500	2.600
10	3.965	10.000	1.500	2.600
11	3.845	20.000	1.500	2.600
12	3.990	20.000	1.500	2.600
13	4.085	5.000	1.500	2.600
14	3.875	5.000	1.500	2.600
15	4.050	5.000	1.500	2.600
16	4.550	5.000	1.500	2.600
17	5.030	5.000	1.500	2.600
18	4.645	15.000	1.500	2.600
19	3.915	10.000	1.500	2.600
20	3.930	10.000	1.500	2.600
21	3.735	15.000	1.500	2.600
22	3.210	15.000	1.500	2.600
23	3.155	10.000	1.500	2.600
24	3.435	10.000	1.500	2.600
25	3.520	20.000	1.500	2.600
26	3.695	10.000	1.500	2.600
27	3.820	10.000	1.500	2.600

28	3.635	5.000	1.500	2.600
29	3.950	19.000	1.500	2.600
30	4.280	10.000	1.500	2.600
31	4.645	10.000	1.500	2.600
32	5.115	10.000	1.500	2.600
33	4.950	22.000	1.500	2.600
34	4.655	4.000	1.500	2.600
35	4.945	5.000	1.500	2.600
36	5.175	15.000	1.500	2.600
37	5.245	5.000	1.500	2.600
38	5.285	19.000	1.500	2.600
39	4.645	30.000	1.500	2.600
40	3.850	10.000	1.500	2.600
41	3.220	10.000	1.500	2.600
42	2.800	5.000	1.500	2.600
43	4.060	15.000	1.500	2.600
44	5.895	5.000	1.500	2.600
45	7.165	10.000	1.500	2.600
46	8.320	4.000	1.500	2.600
47	9.005	5.000	1.500	2.600
48	9.160	10.000	1.500	2.600
49	9.120	10.000	1.500	2.600
50	9.125	30.000	1.500	2.600
51	8.970	10.000	1.500	2.600
52	8.360	94.000	1.500	2.600
53	7.780	74.000	1.500	2.600
54	7.605	59.000	1.500	2.600
55	7.125	15.000	1.500	2.600
56	6.575	20.000	1.500	2.600
57	6.530	45.000	1.500	2.600
58	6.565	19.000	1.500	2.600
59	6.120	28.000	1.500	2.600
60	5.740	24.000	1.500	2.600
61	5.805	19.000	1.500	2.600

=====
Input Information from Internal Weir R0550-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	8.965	4.000	1.500	2.600
2	8.430	9.000	1.500	2.600
3	7.850	9.000	1.500	2.600
4	7.840	5.000	1.500	2.600
5	8.800	13.000	1.500	2.600
6	9.885	3.000	1.500	2.600
7	10.230	2.000	1.500	2.600
8	9.660	15.000	1.500	2.600

9	8.960	10.000	1.500	2.600
10	9.170	14.000	1.500	2.600
11	9.020	15.000	1.500	2.600
12	8.590	5.000	1.500	2.600
13	8.555	9.000	1.500	2.600
14	8.985	15.000	1.500	2.600
15	9.410	24.000	1.500	2.600
16	9.235	19.000	1.500	2.600
17	8.895	4.000	1.500	2.600
18	8.115	10.000	1.500	2.600
19	7.220	10.000	1.500	2.600
20	6.915	5.000	1.500	2.600
21	7.045	4.000	1.500	2.600
22	7.360	15.000	1.500	2.600
23	7.520	64.000	1.500	2.600
24	7.630	4.000	1.500	2.600
25	7.940	5.000	1.500	2.600
26	8.690	5.000	1.500	2.600
27	9.585	5.000	1.500	2.600
28	9.450	5.000	1.500	2.600
29	8.615	5.000	1.500	2.600
30	8.105	4.000	1.500	2.600
31	7.880	5.000	1.500	2.600
32	8.125	33.000	1.500	2.600
33	8.590	9.000	1.500	2.600
34	8.685	31.000	1.500	2.600
35	8.735	19.000	1.500	2.600
36	8.780	20.000	1.500	2.600
37	8.845	10.000	1.500	2.600
38	8.920	14.000	1.500	2.600
39	8.905	11.000	1.500	2.600
40	8.870	4.000	1.500	2.600
41	8.595	3.000	1.500	2.600
42	7.430	9.000	1.500	2.600
43	6.105	5.000	1.500	2.600
44	5.670	5.000	1.500	2.600
45	5.600	10.000	1.500	2.600
46	5.790	4.000	1.500	2.600
47	6.755	10.000	1.500	2.600
48	7.645	5.000	1.500	2.600
49	7.300	10.000	1.500	2.600
50	7.080	4.000	1.500	2.600
51	7.660	5.000	1.500	2.600
52	8.250	32.000	1.500	2.600
53	8.515	24.000	1.500	2.600
54	8.400	15.000	1.500	2.600
55	8.380	10.000	1.500	2.600
56	8.450	10.000	1.500	2.600
57	8.465	10.000	1.500	2.600
58	8.415	10.000	1.500	2.600

59	8.365	54.000	1.500	2.600
60	8.350	20.000	1.500	2.600
61	8.405	20.000	1.500	2.600
62	8.485	20.000	1.500	2.600
63	8.325	10.000	1.500	2.600
64	8.335	29.000	1.500	2.600
65	8.440	55.000	1.500	2.600
66	8.335	20.000	1.500	2.600
67	8.265	94.000	1.500	2.600
68	8.365	25.000	1.500	2.600

=====
Input Information from Internal Weir R0550-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.785	20.000	1.500	2.600
2	4.695	39.000	1.500	2.600
3	4.545	10.000	1.500	2.600
4	4.800	10.000	1.500	2.600
5	4.935	5.000	1.500	2.600
6	4.075	30.000	1.500	2.600
7	3.305	10.000	1.500	2.600
8	3.280	5.000	1.500	2.600
9	3.520	19.000	1.500	2.600
10	3.910	20.000	1.500	2.600
11	3.945	5.000	1.500	2.600
12	4.015	5.000	1.500	2.600
13	4.030	10.000	1.500	2.600
14	3.985	20.000	1.500	2.600
15	4.165	10.000	1.500	2.600
16	4.240	10.000	1.500	2.600
17	4.495	24.000	1.500	2.600
18	4.525	20.000	1.500	2.600
19	4.440	24.000	1.500	2.600
20	4.440	20.000	1.500	2.600
21	4.610	24.000	1.500	2.600
22	4.690	5.000	1.500	2.600
23	4.310	5.000	1.500	2.600
24	4.065	20.000	1.500	2.600
25	4.085	14.000	1.500	2.600
26	4.145	10.000	1.500	2.600
27	4.155	10.000	1.500	2.600
28	4.065	10.000	1.500	2.600
29	3.895	9.000	1.500	2.600
30	3.700	20.000	1.500	2.600
31	3.735	10.000	1.500	2.600
32	3.970	4.000	1.500	2.600

33	3.330	20.000	1.500	2.600
34	2.635	5.000	1.500	2.600
35	2.695	10.000	1.500	2.600
36	3.395	14.000	1.500	2.600
37	4.120	15.000	1.500	2.600
38	4.050	10.000	1.500	2.600
39	3.830	19.000	1.500	2.600
40	4.110	20.000	1.500	2.600
41	4.490	14.000	1.500	2.600
42	4.490	15.000	1.500	2.600
43	4.525	5.000	1.500	2.600
44	4.690	5.000	1.500	2.600
45	4.595	10.000	1.500	2.600
46	4.610	10.000	1.500	2.600
47	4.650	10.000	1.500	2.600
48	4.555	19.000	1.500	2.600
49	4.545	15.000	1.500	2.600
50	4.300	15.000	1.500	2.600
51	4.000	10.000	1.500	2.600
52	4.205	25.000	1.500	2.600
53	4.335	20.000	1.500	2.600
54	4.185	19.000	1.500	2.600
55	4.410	15.000	1.500	2.600
56	4.385	10.000	1.500	2.600
57	4.110	5.000	1.500	2.600
58	4.200	10.000	1.500	2.600
59	4.230	15.000	1.500	2.600
60	4.310	10.000	1.500	2.600
61	4.475	10.000	1.500	2.600
62	4.540	54.000	1.500	2.600
63	4.725	15.000	1.500	2.600
64	4.860	20.000	1.500	2.600
65	5.065	10.000	1.500	2.600
66	5.205	39.000	1.500	2.600
67	5.240	25.000	1.500	2.600

=====
Input Information from Internal Weir R0560-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.020	4.000	1.500	2.600
2	6.090	34.000	1.500	2.600
3	6.145	14.000	1.500	2.600
4	6.040	30.000	1.500	2.600
5	5.725	9.000	1.500	2.600
6	5.845	10.000	1.500	2.600
7	6.120	10.000	1.500	2.600

8	6.025	10.000	1.500	2.600
9	5.975	25.000	1.500	2.600
10	5.370	30.000	1.500	2.600
11	4.605	10.000	1.500	2.600
12	4.655	35.000	1.500	2.600
13	4.745	10.000	1.500	2.600
14	4.720	20.000	1.500	2.600
15	4.655	10.000	1.500	2.600
16	4.715	34.000	1.500	2.600
17	4.745	35.000	1.500	2.600
18	4.765	25.000	1.500	2.600
19	4.855	10.000	1.500	2.600
20	4.820	15.000	1.500	2.600
21	4.745	15.000	1.500	2.600
22	4.750	20.000	1.500	2.600
23	4.780	25.000	1.500	2.600
24	4.855	5.000	1.500	2.600
25	4.920	15.000	1.500	2.600
26	4.605	15.000	1.500	2.600
27	4.465	5.000	1.500	2.600
28	4.485	10.000	1.500	2.600
29	4.310	4.000	1.500	2.600
30	4.385	29.000	1.500	2.600
31	4.780	9.000	1.500	2.600
32	5.385	28.000	1.500	2.600
33	5.585	15.000	1.500	2.600
34	5.845	24.000	1.500	2.600
35	6.345	28.000	1.500	2.600
36	6.310	8.000	1.500	2.600
37	6.485	14.000	1.500	2.600
38	6.490	18.000	1.500	2.600
39	6.460	36.000	1.500	2.600
40	6.570	15.000	1.500	2.600
41	6.555	15.000	1.500	2.600
42	6.520	10.000	1.500	2.600
43	6.375	14.000	1.500	2.600
44	6.470	15.000	1.500	2.600
45	6.740	10.000	1.500	2.600
46	6.865	15.000	1.500	2.600
47	7.055	27.000	1.500	2.600
48	7.190	5.000	1.500	2.600
49	7.050	14.000	1.500	2.600
50	7.485	27.000	1.500	2.600
51	7.850	10.000	1.500	2.600
52	7.850	9.000	1.500	2.600
53	7.985	15.000	1.500	2.600
54	7.995	4.000	1.500	2.600
55	7.960	10.000	1.500	2.600
56	7.740	10.000	1.500	2.600
57	7.550	24.000	1.500	2.600

58	7.425	15.000	1.500	2.600
59	7.305	10.000	1.500	2.600

=====
Input Information from Internal Weir R0560-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.445	30.000	1.500	2.600
2	4.970	10.000	1.500	2.600
3	4.570	15.000	1.500	2.600
4	4.340	15.000	1.500	2.600
5	4.360	19.000	1.500	2.600
6	4.395	15.000	1.500	2.600
7	3.970	10.000	1.500	2.600
8	3.495	5.000	1.500	2.600
9	3.525	15.000	1.500	2.600
10	3.610	30.000	1.500	2.600
11	3.780	20.000	1.500	2.600
12	3.950	20.000	1.500	2.600
13	4.035	19.000	1.500	2.600
14	4.480	10.000	1.500	2.600
15	4.840	5.000	1.500	2.600
16	4.565	15.000	1.500	2.600
17	4.630	40.000	1.500	2.600
18	4.960	5.000	1.500	2.600
19	4.660	10.000	1.500	2.600
20	4.495	25.000	1.500	2.600
21	4.385	15.000	1.500	2.600
22	4.375	9.000	1.500	2.600
23	4.770	25.000	1.500	2.600
24	5.190	10.000	1.500	2.600
25	5.410	5.000	1.500	2.600
26	5.200	15.000	1.500	2.600
27	4.950	15.000	1.500	2.600
28	4.680	25.000	1.500	2.600
29	4.200	15.000	1.500	2.600
30	3.930	10.000	1.500	2.600
31	3.540	20.000	1.500	2.600
32	3.490	15.000	1.500	2.600
33	3.880	20.000	1.500	2.600
34	4.130	15.000	1.500	2.600
35	4.100	5.000	1.500	2.600
36	3.835	5.000	1.500	2.600
37	3.860	10.000	1.500	2.600
38	3.895	9.000	1.500	2.600
39	4.030	15.000	1.500	2.600
40	4.210	15.000	1.500	2.600

41	4.710	15.000	1.500	2.600
42	5.380	10.000	1.500	2.600
43	5.570	10.000	1.500	2.600
44	5.480	10.000	1.500	2.600
45	5.625	15.000	1.500	2.600
46	5.885	5.000	1.500	2.600
47	5.660	15.000	1.500	2.600
48	5.495	15.000	1.500	2.600
49	5.660	5.000	1.500	2.600
50	5.610	10.000	1.500	2.600
51	5.515	5.000	1.500	2.600
52	5.355	20.000	1.500	2.600
53	5.175	10.000	1.500	2.600
54	5.460	15.000	1.500	2.600
55	6.260	15.000	1.500	2.600
56	6.760	10.000	1.500	2.600
57	6.210	15.000	1.500	2.600
58	5.745	10.000	1.500	2.600
59	5.855	5.000	1.500	2.600
60	6.300	10.000	1.500	2.600
61	6.695	15.000	1.500	2.600
62	6.870	5.000	1.500	2.600
63	6.980	5.000	1.500	2.600
64	6.705	14.000	1.500	2.600
65	6.670	10.000	1.500	2.600
66	6.565	15.000	1.500	2.600
67	6.355	15.000	1.500	2.600
68	6.435	10.000	1.500	2.600
69	6.255	5.000	1.500	2.600
70	5.560	10.000	1.500	2.600
71	5.235	5.000	1.500	2.600
72	5.950	20.000	1.500	2.600
73	6.265	10.000	1.500	2.600
74	6.735	20.000	1.500	2.600
75	7.485	5.000	1.500	2.600
76	7.490	5.000	1.500	2.600

=====
Input Information from Internal Weir R0560-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	9.250	64.000	1.500	2.600
2	8.640	63.000	1.500	2.600
3	8.555	84.000	1.500	2.600
4	8.635	10.000	1.500	2.600
5	8.660	14.000	1.500	2.600

=====
Input Information from Internal Weir R0560-W5.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	8.780	5.000	1.500	2.600
2	8.795	5.000	1.500	2.600
3	8.675	5.000	1.500	2.600
4	8.090	9.000	1.500	2.600
5	6.995	10.000	1.500	2.600
6	6.215	5.000	1.500	2.600
7	5.945	10.000	1.500	2.600
8	6.245	23.000	1.500	2.600
9	6.605	14.000	1.500	2.600
10	6.665	10.000	1.500	2.600
11	6.475	30.000	1.500	2.600
12	6.190	10.000	1.500	2.600
13	6.040	20.000	1.500	2.600
14	5.925	29.000	1.500	2.600
15	5.885	10.000	1.500	2.600
16	5.900	35.000	1.500	2.600
17	5.900	10.000	1.500	2.600
18	5.855	15.000	1.500	2.600
19	6.035	10.000	1.500	2.600
20	6.050	19.000	1.500	2.600
21	6.020	5.000	1.500	2.600
22	6.145	24.000	1.500	2.600
23	6.120	44.000	1.500	2.600
24	5.925	20.000	1.500	2.600
25	5.805	5.000	1.500	2.600
26	6.005	10.000	1.500	2.600
27	6.140	20.000	1.500	2.600
28	5.905	23.000	1.500	2.600
29	5.805	28.000	1.500	2.600

=====
Input Information from Internal Weir R0570-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.330	10.000	1.500	2.600
2	5.305	35.000	1.500	2.600
3	5.280	60.000	1.500	2.600
4	5.255	25.000	1.500	2.600
5	5.260	9.000	1.500	2.600
6	5.315	60.000	1.500	2.600

7	5.340	10.000	1.500	2.600
8	5.295	10.000	1.500	2.600
9	5.465	15.000	1.500	2.600
10	5.495	25.000	1.500	2.600
11	5.490	15.000	1.500	2.600
12	5.740	15.000	1.500	2.600
13	5.610	10.000	1.500	2.600
14	5.695	10.000	1.500	2.600
15	5.840	20.000	1.500	2.600
16	5.650	10.000	1.500	2.600
17	5.700	10.000	1.500	2.600
18	5.825	9.000	1.500	2.600
19	5.460	15.000	1.500	2.600
20	5.255	10.000	1.500	2.600
21	5.305	15.000	1.500	2.600
22	5.345	15.000	1.500	2.600
23	5.330	25.000	1.500	2.600
24	5.265	5.000	1.500	2.600
25	5.300	10.000	1.500	2.600
26	5.140	15.000	1.500	2.600
27	5.055	44.000	1.500	2.600
28	5.015	15.000	1.500	2.600
29	5.080	25.000	1.500	2.600
30	5.180	20.000	1.500	2.600
31	5.210	10.000	1.500	2.600
32	5.205	15.000	1.500	2.600
33	5.260	39.000	1.500	2.600
34	5.405	40.000	1.500	2.600
35	5.300	30.000	1.500	2.600
36	5.460	25.000	1.500	2.600
37	5.720	29.000	1.500	2.600
38	5.775	10.000	1.500	2.600
39	6.475	44.000	1.500	2.600
40	7.340	4.000	1.500	2.600
41	7.700	17.000	1.500	2.600

=====
Input Information from Internal Weir R0570-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	10.565	79.000	1.500	2.600
2	10.495	10.000	1.500	2.600
3	10.470	10.000	1.500	2.600
4	10.390	35.000	1.500	2.600
5	10.315	25.000	1.500	2.600
6	10.290	15.000	1.500	2.600
7	10.285	10.000	1.500	2.600

8	10.285	74.000	1.500	2.600
9	10.285	5.000	1.500	2.600
10	10.260	10.000	1.500	2.600
11	10.280	10.000	1.500	2.600
12	10.365	15.000	1.500	2.600
13	10.430	20.000	1.500	2.600
14	10.375	15.000	1.500	2.600
15	10.275	39.000	1.500	2.600
16	10.235	20.000	1.500	2.600
17	10.195	10.000	1.500	2.600
18	10.165	30.000	1.500	2.600
19	10.145	10.000	1.500	2.600
20	10.150	39.000	1.500	2.600
21	10.030	5.000	1.500	2.600
22	10.035	5.000	1.500	2.600
23	10.040	5.000	1.500	2.600
24	9.965	30.000	1.500	2.600
25	9.730	15.000	1.500	2.600
26	9.530	20.000	1.500	2.600
27	9.440	15.000	1.500	2.600
28	9.435	14.000	1.500	2.600
29	9.435	35.000	1.500	2.600
30	9.430	10.000	1.500	2.600
31	9.520	15.000	1.500	2.600
32	9.390	15.000	1.500	2.600
33	9.380	10.000	1.500	2.600
34	9.410	10.000	1.500	2.600
35	9.395	24.000	1.500	2.600
36	9.340	105.000	1.500	2.600
37	9.270	5.000	1.500	2.600

=====
Input Information from Internal Weir R0570-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.940	4.000	1.500	2.600
2	5.915	4.000	1.500	2.600
3	6.630	77.000	1.500	2.600
4	7.500	5.000	1.500	2.600
5	8.010	20.000	1.500	2.600
6	8.270	39.000	1.500	2.600
7	8.385	49.000	1.500	2.600
8	8.530	10.000	1.500	2.600
9	8.925	64.000	1.500	2.600
10	9.520	14.000	1.500	2.600

Input Information from Internal Weir R0570-W5.1

```

=====
Point      Data      Data      Data      Data
No.        Column    Column    Column    Column
           # 1      # 2      # 3      # 4
-----
  1         9.175    14.000    1.500    2.600
  2         8.675    14.000    1.500    2.600
  3         8.340     5.000    1.500    2.600
  4         8.500     4.000    1.500    2.600
  5         8.870     5.000    1.500    2.600
  6         9.340    14.000    1.500    2.600
  7         9.565    15.000    1.500    2.600
  8         9.480     5.000    1.500    2.600
  9         9.465    23.000    1.500    2.600
 10         9.490    19.000    1.500    2.600
 11         8.715    38.000    1.500    2.600
 12         7.845    14.000    1.500    2.600
 13         7.920    15.000    1.500    2.600
 14         8.165    10.000    1.500    2.600
 15         8.355     4.000    1.500    2.600
 16         8.820     5.000    1.500    2.600
 17         9.250     5.000    1.500    2.600
=====

```

Input Information from Internal Weir R0640-W1.1

```

=====
Point      Data      Data      Data      Data
No.        Column    Column    Column    Column
           # 1      # 2      # 3      # 4
-----
  1         7.860     5.000    1.500    2.600
  2         7.835     4.000    1.500    2.600
  3         7.770     5.000    1.500    2.600
  4         7.575    20.000    1.500    2.600
  5         7.665    10.000    1.500    2.600
  6         7.635    10.000    1.500    2.600
  7         7.610    10.000    1.500    2.600
  8         7.555    10.000    1.500    2.600
  9         7.475     5.000    1.500    2.600
 10         7.730    10.000    1.500    2.600
 11         7.795     5.000    1.500    2.600
 12         7.500    10.000    1.500    2.600
 13         7.260     5.000    1.500    2.600
 14         7.615    10.000    1.500    2.600
 15         8.490    10.000    1.500    2.600
 16         9.050    10.000    1.500    2.600
 17         9.905    14.000    1.500    2.600
 18        10.780    10.000    1.500    2.600
 19        11.040     5.000    1.500    2.600
=====

```

20	11.210	15.000	1.500	2.600
21	10.820	15.000	1.500	2.600
22	9.655	15.000	1.500	2.600
23	8.700	5.000	1.500	2.600
24	8.510	5.000	1.500	2.600
25	8.690	20.000	1.500	2.600
26	8.830	10.000	1.500	2.600
27	8.600	5.000	1.500	2.600
28	8.765	10.000	1.500	2.600
29	9.265	35.000	1.500	2.600
30	9.500	20.000	1.500	2.600
31	9.430	15.000	1.500	2.600
32	9.520	43.000	1.500	2.600
33	9.870	10.000	1.500	2.600
34	10.900	20.000	1.500	2.600
35	11.885	4.000	1.500	2.600
36	11.780	10.000	1.500	2.600
37	11.360	5.000	1.500	2.600
38	11.110	5.000	1.500	2.600
39	11.200	5.000	1.500	2.600
40	11.340	5.000	1.500	2.600
41	11.600	10.000	1.500	2.600
42	11.775	10.000	1.500	2.600
43	12.185	15.000	1.500	2.600
44	12.420	5.000	1.500	2.600
45	11.955	15.000	1.500	2.600
46	12.335	10.000	1.500	2.600
47	12.325	10.000	1.500	2.600
48	11.645	5.000	1.500	2.600
49	12.035	10.000	1.500	2.600
50	12.280	5.000	1.500	2.600
51	12.040	10.000	1.500	2.600
52	11.850	10.000	1.500	2.600
53	11.895	10.000	1.500	2.600
54	12.130	5.000	1.500	2.600
55	11.885	4.000	1.500	2.600
56	11.565	5.000	1.500	2.600
57	11.830	10.000	1.500	2.600
58	12.500	5.000	1.500	2.600

=====
Input Information from Internal Weir R0650-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	9.595	15.000	1.500	2.600
2	9.845	19.000	1.500	2.600
3	9.735	10.000	1.500	2.600

4	9.545	10.000	1.500	2.600
5	9.195	10.000	1.500	2.600
6	8.715	15.000	1.500	2.600
7	8.530	14.000	1.500	2.600
8	8.640	10.000	1.500	2.600
9	8.690	10.000	1.500	2.600
10	8.690	15.000	1.500	2.600
11	8.665	5.000	1.500	2.600
12	8.745	10.000	1.500	2.600
13	8.785	10.000	1.500	2.600
14	8.730	10.000	1.500	2.600
15	8.660	10.000	1.500	2.600
16	8.435	15.000	1.500	2.600
17	8.055	10.000	1.500	2.600
18	7.090	10.000	1.500	2.600
19	6.220	5.000	1.500	2.600
20	5.985	5.000	1.500	2.600
21	6.220	10.000	1.500	2.600
22	7.370	25.000	1.500	2.600
23	8.350	5.000	1.500	2.600
24	9.015	84.000	1.500	2.600
25	9.575	45.000	1.500	2.600
26	9.940	25.000	1.500	2.600
27	9.825	10.000	1.500	2.600
28	9.205	5.000	1.500	2.600
29	9.045	10.000	1.500	2.600
30	9.090	5.000	1.500	2.600
31	9.595	10.000	1.500	2.600
32	8.535	20.000	1.500	2.600
33	6.760	5.000	1.500	2.600
34	5.850	15.000	1.500	2.600
35	5.115	5.000	1.500	2.600
36	5.455	15.000	1.500	2.600
37	6.475	10.000	1.500	2.600
38	6.890	10.000	1.500	2.600
39	6.855	5.000	1.500	2.600
40	7.275	5.000	1.500	2.600
41	8.030	15.000	1.500	2.600
42	8.710	15.000	1.500	2.600
43	8.730	5.000	1.500	2.600
44	8.185	5.000	1.500	2.600
45	7.690	5.000	1.500	2.600
46	7.495	4.000	1.500	2.600
47	7.655	20.000	1.500	2.600
48	7.810	15.000	1.500	2.600
49	7.960	10.000	1.500	2.600
50	8.080	10.000	1.500	2.600
51	8.100	5.000	1.500	2.600
52	8.105	10.000	1.500	2.600
53	8.190	10.000	1.500	2.600

54	8.860	15.000	1.500	2.600
55	9.405	5.000	1.500	2.600
56	9.455	5.000	1.500	2.600
57	9.400	20.000	1.500	2.600
58	9.285	5.000	1.500	2.600
59	9.095	5.000	1.500	2.600
60	9.405	15.000	1.500	2.600
61	9.725	10.000	1.500	2.600
62	9.135	15.000	1.500	2.600
63	8.355	20.000	1.500	2.600
64	7.740	10.000	1.500	2.600
65	7.510	5.000	1.500	2.600
66	7.795	5.000	1.500	2.600
67	8.150	25.000	1.500	2.600
68	7.875	10.000	1.500	2.600
69	7.435	10.000	1.500	2.600
70	6.455	14.000	1.500	2.600
71	5.245	5.000	1.500	2.600
72	4.825	5.000	1.500	2.600
73	4.735	10.000	1.500	2.600
74	5.025	5.000	1.500	2.600
75	6.015	10.000	1.500	2.600
76	6.750	15.000	1.500	2.600
77	6.625	5.000	1.500	2.600
78	6.590	5.000	1.500	2.600
79	6.990	10.000	1.500	2.600
80	7.030	35.000	1.500	2.600
81	6.850	10.000	1.500	2.600
82	7.240	10.000	1.500	2.600
83	7.555	5.000	1.500	2.600
84	7.360	5.000	1.500	2.600

=====
Input Information from Internal Weir R0660-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.080	15.000	1.500	2.600
2	5.080	14.000	1.500	2.600
3	4.895	10.000	1.500	2.600
4	4.850	15.000	1.500	2.600
5	5.090	10.000	1.500	2.600
6	5.015	10.000	1.500	2.600
7	4.715	14.000	1.500	2.600
8	4.670	15.000	1.500	2.600
9	4.920	20.000	1.500	2.600
10	5.125	24.000	1.500	2.600
11	5.245	15.000	1.500	2.600

12	5.155	15.000	1.500	2.600
13	5.045	5.000	1.500	2.600
14	5.135	5.000	1.500	2.600
15	4.780	20.000	1.500	2.600
16	4.375	15.000	1.500	2.600
17	4.350	5.000	1.500	2.600
18	4.555	5.000	1.500	2.600
19	4.825	15.000	1.500	2.600
20	4.820	5.000	1.500	2.600
21	4.905	15.000	1.500	2.600
22	5.025	5.000	1.500	2.600
23	5.005	4.000	1.500	2.600
24	4.845	4.000	1.500	2.600
25	4.440	13.000	1.500	2.600

=====
Input Information from Internal Weir R0660-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	4.865	10.000	1.500	2.600
2	4.915	10.000	1.500	2.600
3	4.880	15.000	1.500	2.600
4	4.865	20.000	1.500	2.600
5	4.880	15.000	1.500	2.600
6	4.980	25.000	1.500	2.600
7	4.825	90.000	1.500	2.600
8	4.765	28.000	1.500	2.600
9	4.970	7.000	1.500	2.600
10	4.890	13.000	1.500	2.600
11	4.770	10.000	1.500	2.600
12	4.755	24.000	1.500	2.600
13	4.800	25.000	1.500	2.600
14	4.895	24.000	1.500	2.600
15	5.030	49.000	1.500	2.600
16	5.085	25.000	1.500	2.600
17	5.045	10.000	1.500	2.600
18	5.040	15.000	1.500	2.600
19	5.045	4.000	1.500	2.600
20	5.235	35.000	1.500	2.600
21	5.335	24.000	1.500	2.600
22	5.310	5.000	1.500	2.600
23	5.150	4.000	1.500	2.600
24	4.540	9.000	1.500	2.600
25	4.030	4.000	1.500	2.600
26	4.145	4.000	1.500	2.600
27	4.715	5.000	1.500	2.600
28	7.610	14.000	1.500	2.600

29	11.450	12.000	1.500	2.600
30	13.460	10.000	1.500	2.600
31	14.515	15.000	1.500	2.600
32	15.105	10.000	1.500	2.600
33	15.365	10.000	1.500	2.600
34	16.550	39.000	1.500	2.600
35	18.135	25.000	1.500	2.600
36	18.630	10.000	1.500	2.600
37	18.820	10.000	1.500	2.600
38	19.160	5.000	1.500	2.600
39	19.595	20.000	1.500	2.600
40	19.565	20.000	1.500	2.600
41	18.570	30.000	1.500	2.600
42	17.635	30.000	1.500	2.600
43	17.480	15.000	1.500	2.600
44	17.480	30.000	1.500	2.600
45	17.230	10.000	1.500	2.600
46	16.820	40.000	1.500	2.600
47	15.790	20.000	1.500	2.600
48	14.210	13.000	1.500	2.600
49	12.990	10.000	1.500	2.600
50	12.240	4.000	1.500	2.600
51	9.885	24.000	1.500	2.600
52	7.180	10.000	1.500	2.600
53	5.875	14.000	1.500	2.600
54	5.090	9.000	1.500	2.600
55	5.065	9.000	1.500	2.600
56	5.130	5.000	1.500	2.600
57	5.190	9.000	1.500	2.600
58	5.245	9.000	1.500	2.600

=====
Input Information from Internal Weir R0690-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.380	9.000	1.500	2.600
2	5.385	18.000	1.500	2.600
3	5.425	4.000	1.500	2.600
4	5.505	5.000	1.500	2.600
5	5.155	9.000	1.500	2.600
6	4.810	5.000	1.500	2.600
7	4.970	10.000	1.500	2.600
8	5.170	14.000	1.500	2.600
9	4.980	15.000	1.500	2.600
10	4.530	25.000	1.500	2.600
11	4.255	25.000	1.500	2.600
12	4.260	10.000	1.500	2.600

13	4.595	15.000	1.500	2.600
14	4.710	10.000	1.500	2.600
15	4.770	19.000	1.500	2.600
16	5.025	10.000	1.500	2.600
17	4.965	5.000	1.500	2.600
18	4.945	10.000	1.500	2.600
19	5.260	10.000	1.500	2.600
20	5.095	10.000	1.500	2.600
21	4.780	5.000	1.500	2.600
22	5.105	5.000	1.500	2.600
23	5.325	10.000	1.500	2.600
24	5.560	10.000	1.500	2.600
25	5.620	15.000	1.500	2.600
26	5.535	10.000	1.500	2.600
27	5.410	9.000	1.500	2.600
28	5.110	10.000	1.500	2.600
29	4.830	10.000	1.500	2.600
30	4.410	25.000	1.500	2.600
31	4.300	15.000	1.500	2.600
32	4.725	15.000	1.500	2.600
33	5.065	20.000	1.500	2.600
34	4.610	15.000	1.500	2.600
35	4.025	9.000	1.500	2.600
36	3.980	5.000	1.500	2.600
37	4.365	10.000	1.500	2.600
38	4.655	5.000	1.500	2.600
39	4.300	10.000	1.500	2.600
40	3.990	5.000	1.500	2.600
41	4.300	10.000	1.500	2.600
42	4.630	5.000	1.500	2.600
43	4.530	10.000	1.500	2.600
44	4.415	10.000	1.500	2.600
45	4.320	4.000	1.500	2.600
46	4.150	14.000	1.500	2.600
47	4.290	4.000	1.500	2.600
48	5.300	9.000	1.500	2.600
49	5.780	4.000	1.500	2.600
50	5.315	5.000	1.500	2.600
51	5.310	5.000	1.500	2.600
52	5.700	5.000	1.500	2.600
53	6.105	4.000	1.500	2.600
54	6.130	5.000	1.500	2.600
55	5.740	5.000	1.500	2.600
56	5.275	9.000	1.500	2.600
57	4.710	10.000	1.500	2.600
58	4.295	4.000	1.500	2.600
59	4.285	5.000	1.500	2.600
60	4.640	10.000	1.500	2.600
61	5.520	18.000	1.500	2.600
62	6.125	5.000	1.500	2.600

63	5.970	13.000	1.500	2.600
64	5.865	20.000	1.500	2.600
65	5.795	15.000	1.500	2.600
66	5.585	15.000	1.500	2.600
67	5.665	35.000	1.500	2.600
68	5.720	5.000	1.500	2.600
69	5.665	19.000	1.500	2.600
70	5.770	15.000	1.500	2.600
71	5.520	48.000	1.500	2.600
72	5.190	10.000	1.500	2.600
73	5.360	15.000	1.500	2.600

=====
Input Information from Internal Weir R0720-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	1.785	5.000	1.500	2.600
2	1.685	14.000	1.500	2.600
3	1.635	19.000	1.500	2.600
4	1.570	14.000	1.500	2.600
5	1.680	44.000	1.500	2.600
6	1.800	66.000	1.500	2.600
7	1.645	13.000	1.500	2.600
8	1.425	15.000	1.500	2.600
9	1.685	25.000	1.500	2.600
10	2.045	29.000	1.500	2.600
11	2.145	10.000	1.500	2.600
12	2.280	5.000	1.500	2.600
13	2.275	5.000	1.500	2.600
14	2.070	10.000	1.500	2.600
15	1.765	5.000	1.500	2.600
16	1.925	10.000	1.500	2.600
17	1.970	9.000	1.500	2.600
18	2.010	20.000	1.500	2.600
19	2.095	10.000	1.500	2.600
20	1.965	14.000	1.500	2.600
21	2.045	10.000	1.500	2.600
22	2.140	29.000	1.500	2.600
23	2.315	29.000	1.500	2.600
24	2.425	24.000	1.500	2.600
25	2.235	5.000	1.500	2.600
26	2.255	10.000	1.500	2.600
27	2.395	5.000	1.500	2.600
28	2.565	5.000	1.500	2.600
29	2.460	15.000	1.500	2.600
30	1.760	15.000	1.500	2.600
31	1.285	5.000	1.500	2.600

32	1.580	15.000	1.500	2.600
33	2.015	15.000	1.500	2.600
34	1.885	10.000	1.500	2.600
35	1.545	15.000	1.500	2.600
36	1.610	15.000	1.500	2.600
37	1.645	15.000	1.500	2.600
38	1.625	20.000	1.500	2.600
39	1.665	10.000	1.500	2.600
40	1.680	5.000	1.500	2.600
41	1.875	30.000	1.500	2.600
42	2.065	5.000	1.500	2.600
43	2.060	10.000	1.500	2.600
44	2.045	30.000	1.500	2.600
45	2.210	5.000	1.500	2.600
46	2.055	15.000	1.500	2.600
47	1.815	25.000	1.500	2.600
48	1.935	5.000	1.500	2.600
49	2.070	15.000	1.500	2.600
50	1.950	14.000	1.500	2.600
51	2.125	10.000	1.500	2.600
52	2.330	30.000	1.500	2.600
53	2.480	15.000	1.500	2.600
54	2.740	10.000	1.500	2.600
55	2.585	34.000	1.500	2.600
56	2.545	10.000	1.500	2.600
57	2.645	10.000	1.500	2.600
58	2.840	10.000	1.500	2.600
59	2.945	20.000	1.500	2.600
60	2.445	10.000	1.500	2.600
61	2.500	20.000	1.500	2.600
62	2.760	53.000	1.500	2.600

=====
Input Information from Internal Weir R0730-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.160	10.000	1.500	2.600
2	5.540	43.000	1.500	2.600
3	6.040	10.000	1.500	2.600
4	6.145	10.000	1.500	2.600
5	6.155	29.000	1.500	2.600
6	6.180	19.000	1.500	2.600
7	6.320	44.000	1.500	2.600
8	5.920	20.000	1.500	2.600
9	5.305	35.000	1.500	2.600
10	5.185	35.000	1.500	2.600
11	5.215	29.000	1.500	2.600

12	5.035	15.000	1.500	2.600
13	4.810	5.000	1.500	2.600
14	4.720	30.000	1.500	2.600
15	4.655	10.000	1.500	2.600
16	4.590	5.000	1.500	2.600
17	4.785	5.000	1.500	2.600
18	4.770	10.000	1.500	2.600
19	4.780	19.000	1.500	2.600
20	4.855	10.000	1.500	2.600
21	4.795	44.000	1.500	2.600
22	4.620	19.000	1.500	2.600
23	4.485	15.000	1.500	2.600
24	4.255	10.000	1.500	2.600
25	3.860	5.000	1.500	2.600
26	3.825	9.000	1.500	2.600
27	3.695	10.000	1.500	2.600
28	3.510	5.000	1.500	2.600
29	3.850	10.000	1.500	2.600
30	4.160	10.000	1.500	2.600
31	3.945	9.000	1.500	2.600
32	3.815	10.000	1.500	2.600
33	4.650	38.000	1.500	2.600
34	5.580	14.000	1.500	2.600
35	6.140	9.000	1.500	2.600
36	6.955	24.000	1.500	2.600
37	7.405	25.000	1.500	2.600
38	8.140	39.000	1.500	2.600
39	8.700	15.000	1.500	2.600
40	8.710	10.000	1.500	2.600
41	8.855	15.000	1.500	2.600
42	9.050	10.000	1.500	2.600
43	9.430	5.000	1.500	2.600
44	9.685	5.000	1.500	2.600
45	9.605	10.000	1.500	2.600
46	9.140	10.000	1.500	2.600
47	8.635	10.000	1.500	2.600
48	8.305	35.000	1.500	2.600
49	8.240	5.000	1.500	2.600
50	8.385	64.000	1.500	2.600
51	8.280	20.000	1.500	2.600
52	7.985	5.000	1.500	2.600
53	7.715	14.000	1.500	2.600
54	7.325	15.000	1.500	2.600
55	7.015	29.000	1.500	2.600
56	6.735	25.000	1.500	2.600

=====
Input Information from Internal Weir R0740-W2.1
=====

Point	Data	Data	Data	Data
-------	------	------	------	------

No.	Column # 1	Column # 2	Column # 3	Column # 4
1	4.435	35.000	1.500	2.600
2	4.050	139.000	1.500	2.600
3	3.575	10.000	1.500	2.600
4	3.460	30.000	1.500	2.600
5	3.255	25.000	1.500	2.600
6	3.285	4.000	1.500	2.600
7	3.290	25.000	1.500	2.600
8	3.305	15.000	1.500	2.600
9	3.400	60.000	1.500	2.600
10	3.340	20.000	1.500	2.600
11	3.295	30.000	1.500	2.600
12	3.240	10.000	1.500	2.600
13	3.225	15.000	1.500	2.600
14	3.215	34.000	1.500	2.600
15	3.300	35.000	1.500	2.600
16	3.385	15.000	1.500	2.600
17	3.410	10.000	1.500	2.600
18	3.440	5.000	1.500	2.600
19	3.545	15.000	1.500	2.600
20	3.620	5.000	1.500	2.600
21	3.730	15.000	1.500	2.600
22	3.980	10.000	1.500	2.600
23	3.920	10.000	1.500	2.600
24	3.885	15.000	1.500	2.600
25	3.880	5.000	1.500	2.600
26	3.845	35.000	1.500	2.600
27	3.805	15.000	1.500	2.600
28	3.820	74.000	1.500	2.600
29	3.850	10.000	1.500	2.600
30	3.990	70.000	1.500	2.600
31	4.020	10.000	1.500	2.600
32	3.920	10.000	1.500	2.600
33	4.170	10.000	1.500	2.600
34	4.460	30.000	1.500	2.600
35	4.515	10.000	1.500	2.600
36	4.555	10.000	1.500	2.600
37	4.555	14.000	1.500	2.600
38	4.535	30.000	1.500	2.600
39	4.425	15.000	1.500	2.600
40	4.325	15.000	1.500	2.600
41	4.175	20.000	1.500	2.600
42	4.005	10.000	1.500	2.600
43	3.915	20.000	1.500	2.600

=====
Input Information from Internal Weir R0740-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.025	42.000	1.500	2.600
2	3.880	19.000	1.500	2.600
3	3.805	20.000	1.500	2.600
4	4.030	20.000	1.500	2.600
5	4.240	9.000	1.500	2.600
6	4.450	25.000	1.500	2.600
7	4.490	65.000	1.500	2.600
8	4.305	5.000	1.500	2.600
9	4.105	5.000	1.500	2.600
10	3.875	5.000	1.500	2.600
11	4.130	15.000	1.500	2.600
12	4.355	25.000	1.500	2.600
13	4.195	5.000	1.500	2.600
14	3.915	5.000	1.500	2.600
15	3.610	9.000	1.500	2.600
16	3.705	15.000	1.500	2.600
17	3.745	10.000	1.500	2.600
18	3.620	5.000	1.500	2.600
19	4.255	45.000	1.500	2.600
20	4.765	10.000	1.500	2.600
21	4.795	15.000	1.500	2.600
22	4.805	25.000	1.500	2.600
23	4.775	10.000	1.500	2.600
24	5.000	54.000	1.500	2.600
25	5.130	15.000	1.500	2.600
26	5.035	10.000	1.500	2.600
27	4.995	25.000	1.500	2.600
28	4.800	20.000	1.500	2.600
29	4.585	10.000	1.500	2.600
30	4.845	15.000	1.500	2.600
31	5.075	15.000	1.500	2.600

=====
Input Information from Internal Weir R0775-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.510	24.000	1.500	2.600
2	3.280	24.000	1.500	2.600
3	2.915	24.000	1.500	2.600
4	3.090	24.000	1.500	2.600
5	2.985	24.000	1.500	2.600
6	2.870	19.000	1.500	2.600
7	2.935	24.000	1.500	2.600

8	2.825	24.000	1.500	2.600
9	3.035	25.000	1.500	2.600
10	3.335	24.000	1.500	2.600
11	3.395	23.000	1.500	2.600
12	3.430	24.000	1.500	2.600
13	3.645	23.000	1.500	2.600
14	3.595	25.000	1.500	2.600
15	2.845	24.000	1.500	2.600
16	2.400	24.000	1.500	2.600
17	2.785	23.000	1.500	2.600
18	3.010	24.000	1.500	2.600
19	2.940	24.000	1.500	2.600
20	2.340	24.000	1.500	2.600
21	2.090	25.000	1.500	2.600
22	2.310	24.000	1.500	2.600
23	3.030	24.000	1.500	2.600
24	3.965	24.000	1.500	2.600
25	3.760	24.000	1.500	2.600
26	3.450	24.000	1.500	2.600
27	3.205	24.000	1.500	2.600
28	3.025	24.000	1.500	2.600
29	2.935	24.000	1.500	2.600

=====
Input Information from Internal Weir R0780-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.660	25.000	1.500	2.600
2	7.660	59.000	1.500	2.600
3	7.940	44.000	1.500	2.600
4	8.140	25.000	1.500	2.600
5	8.315	20.000	1.500	2.600
6	8.445	5.000	1.500	2.600
7	8.620	54.000	1.500	2.600
8	8.695	20.000	1.500	2.600
9	8.535	20.000	1.500	2.600
10	8.360	14.000	1.500	2.600
11	8.235	20.000	1.500	2.600
12	8.110	15.000	1.500	2.600
13	7.970	10.000	1.500	2.600
14	7.380	88.000	1.500	2.600
15	6.745	35.000	1.500	2.600
16	6.515	39.000	1.500	2.600
17	6.375	10.000	1.500	2.600
18	6.380	10.000	1.500	2.600
19	6.370	5.000	1.500	2.600
20	6.345	5.000	1.500	2.600

21	6.290	30.000	1.500	2.600
22	6.430	5.000	1.500	2.600
23	6.390	5.000	1.500	2.600
24	6.250	10.000	1.500	2.600
25	6.170	10.000	1.500	2.600
26	6.325	24.000	1.500	2.600
27	6.640	65.000	1.500	2.600
28	7.025	35.000	1.500	2.600
29	7.485	30.000	1.500	2.600
30	7.960	54.000	1.500	2.600
31	8.295	25.000	1.500	2.600
32	8.360	10.000	1.500	2.600
33	8.315	25.000	1.500	2.600
34	8.280	10.000	1.500	2.600
35	8.185	64.000	1.500	2.600
36	7.975	25.000	1.500	2.600
37	7.905	40.000	1.500	2.600
38	7.895	10.000	1.500	2.600

=====
Input Information from Internal Weir R0790-W1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.260	19.000	1.500	2.600
2	5.290	39.000	1.500	2.600
3	5.250	15.000	1.500	2.600
4	5.235	5.000	1.500	2.600
5	5.065	34.000	1.500	2.600
6	4.890	5.000	1.500	2.600
7	4.915	29.000	1.500	2.600
8	5.145	10.000	1.500	2.600
9	5.225	14.000	1.500	2.600
10	5.270	10.000	1.500	2.600
11	5.220	15.000	1.500	2.600
12	5.270	35.000	1.500	2.600
13	5.360	9.000	1.500	2.600
14	5.320	10.000	1.500	2.600
15	5.310	15.000	1.500	2.600
16	5.360	34.000	1.500	2.600
17	5.385	10.000	1.500	2.600
18	5.375	15.000	1.500	2.600
19	5.230	20.000	1.500	2.600
20	4.990	14.000	1.500	2.600
21	5.240	15.000	1.500	2.600
22	5.700	20.000	1.500	2.600
23	5.915	20.000	1.500	2.600
24	5.875	10.000	1.500	2.600

25	5.860	5.000	1.500	2.600
26	5.775	10.000	1.500	2.600
27	5.545	44.000	1.500	2.600
28	5.170	10.000	1.500	2.600
29	4.870	20.000	1.500	2.600
30	5.040	19.000	1.500	2.600
31	5.305	30.000	1.500	2.600
32	5.345	39.000	1.500	2.600
33	5.190	35.000	1.500	2.600
34	5.205	25.000	1.500	2.600
35	5.225	24.000	1.500	2.600
36	5.345	39.000	1.500	2.600
37	5.505	35.000	1.500	2.600
38	5.365	15.000	1.500	2.600
39	5.460	49.000	1.500	2.600
40	5.510	10.000	1.500	2.600
41	5.475	10.000	1.500	2.600
42	5.600	60.000	1.500	2.600
43	5.585	15.000	1.500	2.600
44	5.635	34.000	1.500	2.600
45	5.670	10.000	1.500	2.600
46	5.660	40.000	1.500	2.600

=====
Input Information from Internal Weir R0800-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.575	17.000	1.500	2.600
2	4.045	14.000	1.500	2.600
3	4.460	18.000	1.500	2.600
4	4.475	11.000	1.500	2.600
5	4.450	8.000	1.500	2.600
6	4.325	24.000	1.500	2.600
7	3.790	22.000	1.500	2.600
8	3.395	28.000	1.500	2.600
9	3.155	18.000	1.500	2.600
10	3.020	5.000	1.500	2.600
11	2.975	35.000	1.500	2.600
12	2.620	34.000	1.500	2.600
13	2.345	29.000	1.500	2.600
14	2.340	9.000	1.500	2.600
15	2.665	10.000	1.500	2.600
16	3.030	4.000	1.500	2.600
17	2.935	25.000	1.500	2.600
18	2.865	10.000	1.500	2.600
19	2.850	19.000	1.500	2.600
20	3.020	19.000	1.500	2.600

21	3.265	10.000	1.500	2.600
22	3.405	15.000	1.500	2.600
23	3.370	5.000	1.500	2.600
24	3.170	5.000	1.500	2.600
25	3.425	9.000	1.500	2.600
26	3.400	15.000	1.500	2.600
27	3.080	24.000	1.500	2.600
28	3.125	49.000	1.500	2.600
29	3.145	54.000	1.500	2.600
30	3.170	5.000	1.500	2.600
31	3.225	24.000	1.500	2.600
32	3.135	60.000	1.500	2.600
33	3.135	20.000	1.500	2.600
34	3.125	34.000	1.500	2.600
35	3.135	35.000	1.500	2.600
36	3.140	40.000	1.500	2.600
37	3.105	15.000	1.500	2.600
38	3.080	14.000	1.500	2.600
39	3.105	10.000	1.500	2.600
40	3.155	20.000	1.500	2.600
41	2.920	10.000	1.500	2.600
42	2.725	85.000	1.500	2.600
43	2.640	14.000	1.500	2.600
44	2.635	10.000	1.500	2.600
45	2.695	19.000	1.500	2.600

=====
Input Information from Internal Weir R0800-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	2.730	5.000	1.500	2.600
2	2.500	31.000	1.500	2.600
3	2.255	42.000	1.500	2.600
4	2.350	14.000	1.500	2.600
5	2.360	14.000	1.500	2.600
6	2.535	23.000	1.500	2.600
7	2.675	5.000	1.500	2.600
8	2.540	14.000	1.500	2.600
9	2.575	4.000	1.500	2.600
10	2.555	19.000	1.500	2.600
11	2.565	5.000	1.500	2.600
12	2.570	9.000	1.500	2.600
13	2.565	5.000	1.500	2.600
14	2.320	33.000	1.500	2.600
15	2.120	49.000	1.500	2.600
16	2.170	24.000	1.500	2.600
17	1.960	10.000	1.500	2.600

18	1.935	20.000	1.500	2.600
19	1.945	29.000	1.500	2.600
20	1.935	10.000	1.500	2.600
21	2.000	5.000	1.500	2.600
22	1.780	9.000	1.500	2.600
23	1.020	10.000	1.500	2.600
24	0.530	5.000	1.500	2.600
25	0.410	5.000	1.500	2.600
26	0.210	5.000	1.500	2.600
27	0.670	9.000	1.500	2.600
28	1.300	20.000	1.500	2.600
29	1.310	8.000	1.500	2.600
30	1.340	10.000	1.500	2.600
31	1.245	11.000	1.500	2.600
32	1.020	4.000	1.500	2.600
33	1.160	15.000	1.500	2.600
34	0.995	15.000	1.500	2.600
35	0.570	4.000	1.500	2.600
36	0.515	13.000	1.500	2.600
37	0.955	9.000	1.500	2.600
38	1.235	10.000	1.500	2.600
39	1.350	9.000	1.500	2.600
40	1.565	23.000	1.500	2.600
41	1.495	14.000	1.500	2.600
42	1.385	5.000	1.500	2.600
43	1.515	5.000	1.500	2.600
44	1.445	13.000	1.500	2.600
45	1.320	14.000	1.500	2.600
46	1.225	4.000	1.500	2.600
47	1.055	4.000	1.500	2.600
48	1.195	5.000	1.500	2.600
49	1.300	10.000	1.500	2.600
50	1.305	24.000	1.500	2.600
51	1.435	34.000	1.500	2.600
52	1.375	5.000	1.500	2.600
53	1.365	9.000	1.500	2.600
54	1.320	29.000	1.500	2.600
55	1.065	19.000	1.500	2.600
56	1.045	5.000	1.500	2.600
57	1.095	9.000	1.500	2.600
58	1.245	14.000	1.500	2.600
59	1.345	14.000	1.500	2.600
60	1.365	14.000	1.500	2.600
61	1.200	9.000	1.500	2.600
62	1.015	5.000	1.500	2.600
63	1.275	5.000	1.500	2.600
64	1.425	10.000	1.500	2.600
65	1.515	5.000	1.500	2.600
66	1.610	4.000	1.500	2.600
67	1.675	5.000	1.500	2.600

68	2.035	24.000	1.500	2.600
69	1.985	10.000	1.500	2.600
70	1.455	14.000	1.500	2.600
71	1.270	9.000	1.500	2.600
72	1.140	14.000	1.500	2.600
73	1.005	4.000	1.500	2.600
74	0.840	10.000	1.500	2.600
75	0.820	15.000	1.500	2.600
76	1.155	5.000	1.500	2.600
77	1.630	5.000	1.500	2.600
78	2.060	15.000	1.500	2.600
79	1.970	9.000	1.500	2.600
80	1.880	9.000	1.500	2.600

=====
Input Information from Internal Weir R0810-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.810	44.000	1.500	2.600
2	4.160	10.000	1.500	2.600
3	4.370	5.000	1.500	2.600
4	4.100	5.000	1.500	2.600
5	4.070	15.000	1.500	2.600
6	3.905	25.000	1.500	2.600
7	3.465	24.000	1.500	2.600
8	3.195	15.000	1.500	2.600
9	3.045	15.000	1.500	2.600
10	2.855	40.000	1.500	2.600
11	2.710	14.000	1.500	2.600
12	2.935	10.000	1.500	2.600
13	3.090	40.000	1.500	2.600
14	3.215	69.000	1.500	2.600
15	3.295	5.000	1.500	2.600
16	3.280	20.000	1.500	2.600
17	3.485	10.000	1.500	2.600
18	3.540	10.000	1.500	2.600
19	3.515	5.000	1.500	2.600
20	3.515	15.000	1.500	2.600
21	3.495	39.000	1.500	2.600
22	3.455	10.000	1.500	2.600
23	3.415	5.000	1.500	2.600
24	3.205	10.000	1.500	2.600
25	2.790	55.000	1.500	2.600
26	2.820	10.000	1.500	2.600
27	2.945	29.000	1.500	2.600
28	3.065	30.000	1.500	2.600
29	3.370	45.000	1.500	2.600

30	3.590	44.000	1.500	2.600
31	3.815	20.000	1.500	2.600
32	3.885	39.000	1.500	2.600
33	3.870	15.000	1.500	2.600
34	3.820	15.000	1.500	2.600
35	3.845	15.000	1.500	2.600
36	3.840	29.000	1.500	2.600
37	3.840	15.000	1.500	2.600
38	3.935	25.000	1.500	2.600
39	4.000	30.000	1.500	2.600
40	4.240	15.000	1.500	2.600
41	4.495	94.000	1.500	2.600
42	4.700	15.000	1.500	2.600

=====
Input Information from Internal Weir R0830-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.430	5.000	1.500	2.600
2	5.525	14.000	1.500	2.600
3	5.595	15.000	1.500	2.600
4	5.825	14.000	1.500	2.600
5	6.345	10.000	1.500	2.600
6	6.870	19.000	1.500	2.600
7	7.225	14.000	1.500	2.600
8	7.320	10.000	1.500	2.600
9	7.040	22.000	1.500	2.600
10	6.685	13.000	1.500	2.600

=====
Input Information from Internal Weir R0850-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	9.420	5.000	1.500	2.600
2	9.170	5.000	1.500	2.600
3	8.170	10.000	1.500	2.600
4	7.170	5.000	1.500	2.600
5	6.855	5.000	1.500	2.600
6	6.850	19.000	1.500	2.600
7	7.500	15.000	1.500	2.600
8	8.035	5.000	1.500	2.600
9	7.645	10.000	1.500	2.600
10	7.225	20.000	1.500	2.600
11	7.175	5.000	1.500	2.600

12	7.330	5.000	1.500	2.600
13	7.560	14.000	1.500	2.600
14	7.635	15.000	1.500	2.600
15	7.435	15.000	1.500	2.600
16	7.375	5.000	1.500	2.600
17	7.535	20.000	1.500	2.600
18	7.950	24.000	1.500	2.600
19	8.210	10.000	1.500	2.600
20	7.870	5.000	1.500	2.600
21	7.565	5.000	1.500	2.600
22	7.580	20.000	1.500	2.600
23	7.430	5.000	1.500	2.600
24	6.515	5.000	1.500	2.600
25	4.315	9.000	1.500	2.600
26	2.930	5.000	1.500	2.600
27	5.325	20.000	1.500	2.600
28	7.840	5.000	1.500	2.600
29	8.165	10.000	1.500	2.600
30	8.135	5.000	1.500	2.600

=====
Input Information from Internal Weir R0870-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.280	4.000	1.500	2.600
2	5.975	12.000	1.500	2.600
3	5.580	4.000	1.500	2.600
4	5.620	28.000	1.500	2.600
5	5.605	10.000	1.500	2.600
6	5.545	9.000	1.500	2.600
7	5.460	10.000	1.500	2.600
8	5.440	30.000	1.500	2.600
9	5.625	25.000	1.500	2.600
10	5.660	15.000	1.500	2.600
11	5.675	10.000	1.500	2.600
12	5.705	35.000	1.500	2.600
13	5.580	10.000	1.500	2.600
14	5.565	5.000	1.500	2.600
15	5.635	45.000	1.500	2.600
16	5.495	20.000	1.500	2.600
17	5.445	10.000	1.500	2.600
18	5.380	10.000	1.500	2.600
19	5.115	34.000	1.500	2.600
20	5.050	30.000	1.500	2.600
21	5.215	5.000	1.500	2.600
22	5.225	15.000	1.500	2.600
23	5.070	25.000	1.500	2.600

24	5.160	20.000	1.500	2.600
25	5.120	20.000	1.500	2.600
26	5.200	30.000	1.500	2.600
27	5.325	55.000	1.500	2.600
28	5.250	5.000	1.500	2.600
29	5.105	9.000	1.500	2.600
30	4.725	5.000	1.500	2.600
31	4.395	10.000	1.500	2.600
32	4.435	10.000	1.500	2.600
33	4.860	45.000	1.500	2.600
34	5.095	10.000	1.500	2.600
35	4.975	10.000	1.500	2.600
36	5.000	20.000	1.500	2.600
37	5.100	40.000	1.500	2.600
38	5.275	19.000	1.500	2.600
39	5.425	30.000	1.500	2.600
40	5.480	10.000	1.500	2.600
41	5.520	10.000	1.500	2.600
42	5.465	25.000	1.500	2.600
43	5.400	5.000	1.500	2.600
44	5.500	10.000	1.500	2.600
45	5.840	30.000	1.500	2.600
46	8.820	-183.000	1.500	2.600
47	11.750	5.000	1.500	2.600
48	11.455	15.000	1.500	2.600
49	11.020	5.000	1.500	2.600
50	11.250	10.000	1.500	2.600
51	11.390	15.000	1.500	2.600
52	11.250	10.000	1.500	2.600
53	11.310	5.000	1.500	2.600
54	10.990	15.000	1.500	2.600
55	10.645	15.000	1.500	2.600
56	10.845	10.000	1.500	2.600
57	10.690	10.000	1.500	2.600
58	10.255	4.000	1.500	2.600
59	10.770	30.000	1.500	2.600
60	11.350	5.000	1.500	2.600
61	10.970	5.000	1.500	2.600
62	10.540	5.000	1.500	2.600
63	10.515	15.000	1.500	2.600
64	10.885	15.000	1.500	2.600
65	11.175	15.000	1.500	2.600
66	11.050	10.000	1.500	2.600
67	10.905	10.000	1.500	2.600
68	10.520	15.000	1.500	2.600
69	10.140	5.000	1.500	2.600
70	10.275	10.000	1.500	2.600
71	10.280	15.000	1.500	2.600
72	10.265	24.000	1.500	2.600
73	10.255	18.000	1.500	2.600

74	10.385	29.000	1.500	2.600
75	10.585	9.000	1.500	2.600

=====
Input Information from Internal Weir R0885-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	9.120	17.000	1.500	2.600
2	7.260	11.000	1.500	2.600
3	7.635	26.000	1.500	2.600
4	9.185	12.000	1.500	2.600

=====
Input Information from Internal Weir R0910-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	7.370	34.000	1.500	2.600
2	7.560	15.000	1.500	2.600
3	7.440	19.000	1.500	2.600
4	7.415	35.000	1.500	2.600
5	7.405	10.000	1.500	2.600
6	7.405	10.000	1.500	2.600
7	7.450	15.000	1.500	2.600
8	7.425	35.000	1.500	2.600
9	7.435	24.000	1.500	2.600
10	7.570	25.000	1.500	2.600
11	7.760	25.000	1.500	2.600
12	7.970	25.000	1.500	2.600
13	8.080	10.000	1.500	2.600
14	8.050	10.000	1.500	2.600
15	8.185	10.000	1.500	2.600
16	8.185	25.000	1.500	2.600
17	7.995	25.000	1.500	2.600
18	8.245	25.000	1.500	2.600
19	8.195	20.000	1.500	2.600
20	8.090	19.000	1.500	2.600
21	8.125	10.000	1.500	2.600
22	7.710	10.000	1.500	2.600
23	7.215	15.000	1.500	2.600
24	7.050	5.000	1.500	2.600
25	7.395	15.000	1.500	2.600
26	7.635	5.000	1.500	2.600
27	7.450	20.000	1.500	2.600
28	7.180	10.000	1.500	2.600

29	7.250	15.000	1.500	2.600
30	7.425	10.000	1.500	2.600
31	7.910	15.000	1.500	2.600
32	8.530	5.000	1.500	2.600
33	8.645	10.000	1.500	2.600
34	8.570	9.000	1.500	2.600
35	8.565	15.000	1.500	2.600
36	8.660	5.000	1.500	2.600
37	8.755	10.000	1.500	2.600
38	8.720	10.000	1.500	2.600
39	8.705	25.000	1.500	2.600
40	8.790	5.000	1.500	2.600
41	8.975	10.000	1.500	2.600
42	9.115	10.000	1.500	2.600
43	9.045	15.000	1.500	2.600
44	9.140	15.000	1.500	2.600

=====
Input Information from Internal Weir R0930-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.645	18.000	1.500	2.600
2	7.115	32.000	1.500	2.600
3	7.590	14.000	1.500	2.600
4	7.945	18.000	1.500	2.600
5	8.265	19.000	1.500	2.600
6	8.550	10.000	1.500	2.600
7	9.575	15.000	1.500	2.600
8	9.965	10.000	1.500	2.600
9	9.575	5.000	1.500	2.600
10	9.790	14.000	1.500	2.600
11	9.835	27.000	1.500	2.600
12	9.410	15.000	1.500	2.600
13	9.015	28.000	1.500	2.600
14	8.540	15.000	1.500	2.600
15	8.015	19.000	1.500	2.600
16	7.825	9.000	1.500	2.600
17	7.930	5.000	1.500	2.600
18	7.655	15.000	1.500	2.600
19	7.090	13.000	1.500	2.600
20	6.840	27.000	1.500	2.600
21	6.590	15.000	1.500	2.600
22	6.360	9.000	1.500	2.600
23	6.435	15.000	1.500	2.600
24	6.915	19.000	1.500	2.600
25	7.320	10.000	1.500	2.600
26	7.325	14.000	1.500	2.600

27	7.020	14.000	1.500	2.600
28	6.635	27.000	1.500	2.600
29	6.375	28.000	1.500	2.600
30	6.245	9.000	1.500	2.600
31	6.160	14.000	1.500	2.600
32	6.300	33.000	1.500	2.600
33	6.485	10.000	1.500	2.600
34	6.595	14.000	1.500	2.600
35	6.545	14.000	1.500	2.600
36	6.545	23.000	1.500	2.600
37	6.985	10.000	1.500	2.600
38	7.285	9.000	1.500	2.600
39	7.040	14.000	1.500	2.600
40	6.855	10.000	1.500	2.600
41	6.920	5.000	1.500	2.600
42	6.880	5.000	1.500	2.600
43	7.045	4.000	1.500	2.600
44	6.795	15.000	1.500	2.600
45	6.830	20.000	1.500	2.600
46	7.080	10.000	1.500	2.600
47	6.960	5.000	1.500	2.600
48	7.525	14.000	1.500	2.600
49	8.070	5.000	1.500	2.600
50	7.935	15.000	1.500	2.600
51	7.875	10.000	1.500	2.600
52	7.660	10.000	1.500	2.600
53	7.065	15.000	1.500	2.600
54	6.795	5.000	1.500	2.600
55	7.200	15.000	1.500	2.600
56	7.630	5.000	1.500	2.600
57	7.570	7.000	1.500	2.600
58	7.490	5.000	1.500	2.600
59	7.950	11.000	1.500	2.600
60	8.380	9.000	1.500	2.600
61	8.555	10.000	1.500	2.600
62	8.745	4.000	1.500	2.600
63	8.690	20.000	1.500	2.600
64	7.970	14.000	1.500	2.600
65	7.280	5.000	1.500	2.600
66	7.400	15.000	1.500	2.600
67	7.815	12.000	1.500	2.600
68	8.025	4.000	1.500	2.600
69	8.065	24.000	1.500	2.600
70	8.430	15.000	1.500	2.600
71	8.590	14.000	1.500	2.600
72	8.590	20.000	1.500	2.600
73	8.905	14.000	1.500	2.600

=====

Input Information from Internal Weir R0940-W1.1

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.790	50.000	1.500	2.600
2	4.845	50.000	1.500	2.600
3	4.560	50.000	1.500	2.600
4	4.745	50.000	1.500	2.600
5	4.465	50.000	1.500	2.600
6	4.425	50.000	1.500	2.600
7	4.720	50.000	1.500	2.600
8	4.705	50.000	1.500	2.600
9	4.475	50.000	1.500	2.600
10	4.510	50.000	1.500	2.600
11	4.310	50.000	1.500	2.600
12	4.060	50.000	1.500	2.600
13	4.570	49.000	1.500	2.600
14	4.700	49.000	1.500	2.600
15	4.735	50.000	1.500	2.600
16	4.750	49.000	1.500	2.600
17	4.800	50.000	1.500	2.600
18	4.950	50.000	1.500	2.600
19	4.970	47.000	1.500	2.600
20	4.585	50.000	1.500	2.600
21	4.150	50.000	1.500	2.600
22	4.240	50.000	1.500	2.600
23	4.675	50.000	1.500	2.600
24	4.965	50.000	1.500	2.600
25	4.705	50.000	1.500	2.600
26	5.240	50.000	1.500	2.600
27	4.765	50.000	1.500	2.600
28	4.785	50.000	1.500	2.600
29	5.745	49.000	1.500	2.600
30	5.865	50.000	1.500	2.600
31	5.885	50.000	1.500	2.600
32	5.885	50.000	1.500	2.600
33	5.325	50.000	1.500	2.600
34	4.535	50.000	1.500	2.600
35	4.725	50.000	1.500	2.600
36	4.045	50.000	1.500	2.600
37	4.165	50.000	1.500	2.600
38	5.065	50.000	1.500	2.600
39	4.930	47.000	1.500	2.600
40	5.100	50.000	1.500	2.600
41	4.585	50.000	1.500	2.600
42	4.240	50.000	1.500	2.600
43	4.955	50.000	1.500	2.600
44	5.060	50.000	1.500	2.600
45	4.745	50.000	1.500	2.600

46	4.775	50.000	1.500	2.600
47	4.815	50.000	1.500	2.600
48	4.895	50.000	1.500	2.600
49	4.705	50.000	1.500	2.600
50	4.490	50.000	1.500	2.600
51	4.815	49.000	1.500	2.600
52	4.595	50.000	1.500	2.600
53	4.830	50.000	1.500	2.600
54	5.485	50.000	1.500	2.600
55	5.460	50.000	1.500	2.600
56	5.420	50.000	1.500	2.600
57	5.455	50.000	1.500	2.600
58	4.910	50.000	1.500	2.600
59	4.660	42.000	1.500	2.600

=====
Input Information from Internal Weir R0940-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.615	25.000	1.500	2.600
2	3.460	45.000	1.500	2.600
3	3.700	24.000	1.500	2.600
4	3.750	10.000	1.500	2.600
5	3.555	20.000	1.500	2.600
6	3.620	10.000	1.500	2.600
7	3.630	10.000	1.500	2.600
8	3.665	30.000	1.500	2.600
9	3.660	10.000	1.500	2.600
10	3.650	20.000	1.500	2.600
11	3.700	10.000	1.500	2.600
12	3.745	15.000	1.500	2.600
13	3.690	10.000	1.500	2.600
14	3.620	10.000	1.500	2.600
15	3.600	19.000	1.500	2.600
16	3.580	15.000	1.500	2.600
17	3.510	10.000	1.500	2.600
18	3.435	25.000	1.500	2.600
19	3.405	20.000	1.500	2.600
20	3.450	20.000	1.500	2.600
21	3.500	10.000	1.500	2.600
22	3.405	15.000	1.500	2.600
23	3.275	15.000	1.500	2.600
24	3.205	10.000	1.500	2.600
25	3.185	10.000	1.500	2.600
26	3.260	19.000	1.500	2.600
27	3.300	15.000	1.500	2.600
28	3.250	10.000	1.500	2.600

29	3.300	10.000	1.500	2.600
30	3.040	10.000	1.500	2.600
31	2.425	9.000	1.500	2.600
32	1.960	5.000	1.500	2.600
33	1.875	9.000	1.500	2.600
34	2.320	10.000	1.500	2.600
35	3.015	14.000	1.500	2.600
36	3.990	20.000	1.500	2.600
37	4.805	10.000	1.500	2.600
38	4.795	4.000	1.500	2.600
39	4.295	10.000	1.500	2.600
40	3.775	5.000	1.500	2.600
41	3.615	5.000	1.500	2.600
42	3.905	15.000	1.500	2.600
43	3.555	29.000	1.500	2.600
44	2.785	10.000	1.500	2.600
45	2.800	5.000	1.500	2.600
46	3.275	9.000	1.500	2.600
47	3.710	29.000	1.500	2.600
48	3.955	14.000	1.500	2.600
49	4.425	15.000	1.500	2.600
50	4.595	14.000	1.500	2.600
51	4.940	14.000	1.500	2.600
52	5.330	5.000	1.500	2.600
53	5.285	9.000	1.500	2.600
54	5.565	10.000	1.500	2.600
55	5.660	10.000	1.500	2.600
56	5.285	5.000	1.500	2.600
57	4.955	5.000	1.500	2.600
58	5.085	9.000	1.500	2.600
59	4.745	15.000	1.500	2.600
60	4.385	14.000	1.500	2.600
61	4.435	10.000	1.500	2.600
62	4.125	15.000	1.500	2.600
63	4.045	5.000	1.500	2.600
64	4.285	5.000	1.500	2.600
65	4.485	10.000	1.500	2.600
66	4.900	23.000	1.500	2.600
67	5.345	8.000	1.500	2.600
68	5.095	19.000	1.500	2.600
69	4.585	10.000	1.500	2.600
70	4.415	4.000	1.500	2.600
71	4.610	5.000	1.500	2.600
72	4.815	10.000	1.500	2.600
73	4.600	19.000	1.500	2.600
74	4.310	9.000	1.500	2.600
75	3.870	15.000	1.500	2.600
76	3.435	14.000	1.500	2.600

=====

Input Information from Internal Weir R0945-W1.1

```

=====
Point      Data      Data      Data      Data
No.        Column   Column   Column   Column
          # 1     # 2     # 3     # 4
-----
  1      4.865   50.000   1.500   2.600
  2      4.715   50.000   1.500   2.600
  3      4.180   50.000   1.500   2.600
  4      3.995   50.000   1.500   2.600
  5      4.020   50.000   1.500   2.600
  6      4.185   50.000   1.500   2.600
  7      4.625   50.000   1.500   2.600
  8      5.220   46.000   1.500   2.600
  9      4.280   50.000   1.500   2.600
 10      3.215   50.000   1.500   2.600
 11      3.160   50.000   1.500   2.600
 12      3.045   50.000   1.500   2.600
 13      3.585   50.000   1.500   2.600
 14      4.140   50.000   1.500   2.600
 15      4.110   50.000   1.500   2.600
 16      3.775   50.000   1.500   2.600
 17      3.760   50.000   1.500   2.600
 18      3.670   50.000   1.500   2.600
 19      3.690   50.000   1.500   2.600
 20      3.440   50.000   1.500   2.600
 21      3.660   50.000   1.500   2.600
 22      4.460   50.000   1.500   2.600
 23      4.210   50.000   1.500   2.600
 24      5.085   50.000   1.500   2.600
 25      6.030   50.000   1.500   2.600
 26      4.870   50.000   1.500   2.600
 27      4.585   50.000   1.500   2.600
 28      4.505   50.000   1.500   2.600
 29      3.590   49.000   1.500   2.600
 30      3.835   47.000   1.500   2.600
 31      4.195   50.000   1.500   2.600
 32      4.220   50.000   1.500   2.600
 33      4.890   50.000   1.500   2.600
 34      4.735   50.000   1.500   2.600
 35      5.005   50.000   1.500   2.600
 36      5.685   50.000   1.500   2.600
 37      5.330   50.000   1.500   2.600
 38      4.905   50.000   1.500   2.600
 39      4.030   50.000   1.500   2.600
 40      3.435   50.000   1.500   2.600
 41      3.920   50.000   1.500   2.600
 42      3.805   50.000   1.500   2.600
 43      3.535   50.000   1.500   2.600
 44      5.085   50.000   1.500   2.600

```

45	5.625	50.000	1.500	2.600
46	5.195	50.000	1.500	2.600
47	5.220	50.000	1.500	2.600
48	5.120	50.000	1.500	2.600
49	5.500	50.000	1.500	2.600
50	5.210	48.000	1.500	2.600
51	3.820	47.000	1.500	2.600
52	4.130	50.000	1.500	2.600
53	4.565	49.000	1.500	2.600
54	4.830	50.000	1.500	2.600
55	5.830	50.000	1.500	2.600
56	4.700	50.000	1.500	2.600
57	3.345	50.000	1.500	2.600
58	3.375	50.000	1.500	2.600
59	5.040	50.000	1.500	2.600
60	6.970	49.000	1.500	2.600
61	6.940	50.000	1.500	2.600
62	5.585	50.000	1.500	2.600
63	4.785	50.000	1.500	2.600
64	5.115	50.000	1.500	2.600
65	5.425	50.000	1.500	2.600
66	5.885	50.000	1.500	2.600
67	7.145	50.000	1.500	2.600
68	7.355	50.000	1.500	2.600
69	7.700	50.000	1.500	2.600
70	8.310	50.000	1.500	2.600
71	7.760	50.000	1.500	2.600
72	6.690	50.000	1.500	2.600
73	5.195	50.000	1.500	2.600
74	4.320	44.000	1.500	2.600
75	4.320	46.000	1.500	2.600
76	5.295	43.000	1.500	2.600
77	5.270	50.000	1.500	2.600
78	4.965	50.000	1.500	2.600
79	5.260	50.000	1.500	2.600
80	5.055	50.000	1.500	2.600
81	4.975	50.000	1.500	2.600
82	4.615	50.000	1.500	2.600
83	4.465	50.000	1.500	2.600
84	4.285	50.000	1.500	2.600
85	4.080	50.000	1.500	2.600
86	3.870	46.000	1.500	2.600
87	3.945	50.000	1.500	2.600
88	3.965	49.000	1.500	2.600
89	4.215	47.000	1.500	2.600
90	4.870	50.000	1.500	2.600
91	4.920	50.000	1.500	2.600
92	5.100	50.000	1.500	2.600
93	5.310	50.000	1.500	2.600
94	5.445	50.000	1.500	2.600

95	5.365	50.000	1.500	2.600
96	5.305	50.000	1.500	2.600
97	5.385	50.000	1.500	2.600
98	5.180	50.000	1.500	2.600
99	5.130	50.000	1.500	2.600
100	5.340	50.000	1.500	2.600
101	5.540	50.000	1.500	2.600
102	5.475	50.000	1.500	2.600
103	5.415	50.000	1.500	2.600
104	5.445	50.000	1.500	2.600
105	5.655	50.000	1.500	2.600
106	6.115	50.000	1.500	2.600
107	6.155	50.000	1.500	2.600
108	5.880	50.000	1.500	2.600
109	5.815	50.000	1.500	2.600
110	5.880	50.000	1.500	2.600
111	5.590	50.000	1.500	2.600
112	5.405	50.000	1.500	2.600
113	5.255	48.000	1.500	2.600
114	4.820	49.000	1.500	2.600
115	4.595	50.000	1.500	2.600
116	4.705	50.000	1.500	2.600
117	4.625	14.000	1.500	2.600

=====
Input Information from Internal Weir R0950-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.155	5.000	1.500	2.600
2	3.230	30.000	1.500	2.600
3	3.325	45.000	1.500	2.600
4	3.380	20.000	1.500	2.600
5	3.455	25.000	1.500	2.600
6	3.415	15.000	1.500	2.600
7	3.405	15.000	1.500	2.600
8	3.415	10.000	1.500	2.600
9	3.295	20.000	1.500	2.600
10	3.370	20.000	1.500	2.600
11	3.575	30.000	1.500	2.600
12	3.555	34.000	1.500	2.600
13	3.405	15.000	1.500	2.600
14	3.160	15.000	1.500	2.600
15	3.215	35.000	1.500	2.600
16	3.050	20.000	1.500	2.600
17	2.845	10.000	1.500	2.600
18	2.675	35.000	1.500	2.600
19	2.565	10.000	1.500	2.600

20	2.775	25.000	1.500	2.600
21	2.775	28.000	1.500	2.600
22	2.875	13.000	1.500	2.600
23	2.850	30.000	1.500	2.600
24	2.900	15.000	1.500	2.600
25	2.995	5.000	1.500	2.600
26	2.820	4.000	1.500	2.600
27	3.535	15.000	1.500	2.600
28	4.365	19.000	1.500	2.600
29	4.205	14.000	1.500	2.600
30	4.140	20.000	1.500	2.600
31	4.065	23.000	1.500	2.600
32	3.550	9.000	1.500	2.600
33	3.360	13.000	1.500	2.600
34	3.355	5.000	1.500	2.600
35	3.380	5.000	1.500	2.600
36	3.785	10.000	1.500	2.600
37	3.955	10.000	1.500	2.600
38	3.815	5.000	1.500	2.600
39	4.170	15.000	1.500	2.600
40	4.535	5.000	1.500	2.600
41	4.390	9.000	1.500	2.600
42	4.095	15.000	1.500	2.600
43	4.070	10.000	1.500	2.600
44	4.130	15.000	1.500	2.600
45	4.270	15.000	1.500	2.600
46	4.175	19.000	1.500	2.600
47	3.925	5.000	1.500	2.600
48	4.375	10.000	1.500	2.600
49	4.810	5.000	1.500	2.600
50	4.700	5.000	1.500	2.600
51	4.595	5.000	1.500	2.600
52	4.225	14.000	1.500	2.600
53	3.780	10.000	1.500	2.600
54	3.930	14.000	1.500	2.600
55	4.035	20.000	1.500	2.600
56	3.720	19.000	1.500	2.600
57	3.440	25.000	1.500	2.600
58	3.515	5.000	1.500	2.600
59	3.755	24.000	1.500	2.600
60	4.000	10.000	1.500	2.600
61	3.960	5.000	1.500	2.600
62	3.720	5.000	1.500	2.600
63	3.810	10.000	1.500	2.600
64	3.855	4.000	1.500	2.600
65	3.795	25.000	1.500	2.600

=====
Input Information from Internal Weir R0960-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.550	9.000	1.500	2.600
2	4.595	14.000	1.500	2.600
3	4.665	59.000	1.500	2.600
4	4.525	29.000	1.500	2.600
5	4.445	10.000	1.500	2.600
6	4.360	55.000	1.500	2.600
7	4.210	30.000	1.500	2.600
8	4.300	20.000	1.500	2.600
9	4.325	10.000	1.500	2.600
10	4.295	50.000	1.500	2.600
11	4.250	10.000	1.500	2.600
12	4.150	20.000	1.500	2.600
13	4.200	10.000	1.500	2.600
14	4.225	45.000	1.500	2.600
15	4.280	20.000	1.500	2.600
16	4.260	30.000	1.500	2.600
17	4.210	15.000	1.500	2.600
18	4.195	35.000	1.500	2.600
19	4.210	10.000	1.500	2.600
20	4.205	25.000	1.500	2.600
21	4.200	10.000	1.500	2.600
22	4.300	35.000	1.500	2.600
23	4.205	30.000	1.500	2.600
24	4.185	35.000	1.500	2.600
25	4.200	29.000	1.500	2.600
26	4.210	20.000	1.500	2.600
27	4.215	10.000	1.500	2.600
28	4.220	60.000	1.500	2.600
29	4.200	30.000	1.500	2.600
30	4.225	30.000	1.500	2.600
31	4.255	25.000	1.500	2.600
32	4.225	75.000	1.500	2.600
33	4.365	10.000	1.500	2.600
34	4.375	10.000	1.500	2.600
35	4.335	35.000	1.500	2.600
36	4.290	10.000	1.500	2.600
37	4.285	10.000	1.500	2.600
38	4.335	30.000	1.500	2.600

=====
Input Information from Internal Weir R0960-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----

1	2.205	10.000	1.500	2.600
2	1.955	10.000	1.500	2.600
3	1.995	14.000	1.500	2.600
4	2.920	15.000	1.500	2.600
5	3.405	5.000	1.500	2.600
6	3.045	5.000	1.500	2.600
7	2.665	10.000	1.500	2.600
8	2.750	25.000	1.500	2.600
9	2.855	9.000	1.500	2.600
10	2.510	10.000	1.500	2.600
11	2.285	5.000	1.500	2.600
12	2.540	15.000	1.500	2.600
13	2.730	10.000	1.500	2.600
14	2.750	10.000	1.500	2.600
15	2.755	8.000	1.500	2.600
16	2.490	9.000	1.500	2.600
17	2.310	14.000	1.500	2.600
18	2.100	10.000	1.500	2.600
19	1.965	14.000	1.500	2.600
20	2.260	9.000	1.500	2.600
21	2.480	5.000	1.500	2.600
22	2.270	35.000	1.500	2.600
23	1.880	10.000	1.500	2.600
24	1.750	5.000	1.500	2.600
25	1.725	5.000	1.500	2.600
26	1.895	5.000	1.500	2.600
27	2.235	10.000	1.500	2.600
28	2.325	20.000	1.500	2.600
29	2.110	10.000	1.500	2.600
30	1.955	5.000	1.500	2.600
31	2.375	14.000	1.500	2.600
32	2.360	20.000	1.500	2.600
33	2.075	40.000	1.500	2.600
34	1.985	15.000	1.500	2.600
35	1.895	15.000	1.500	2.600
36	2.145	5.000	1.500	2.600
37	2.330	5.000	1.500	2.600
38	2.330	15.000	1.500	2.600
39	2.520	5.000	1.500	2.600
40	3.100	5.000	1.500	2.600
41	3.575	5.000	1.500	2.600
42	3.680	10.000	1.500	2.600
43	2.840	14.000	1.500	2.600
44	1.880	10.000	1.500	2.600
45	2.030	15.000	1.500	2.600
46	2.280	5.000	1.500	2.600
47	2.360	5.000	1.500	2.600
48	2.780	5.000	1.500	2.600
49	3.055	14.000	1.500	2.600
50	2.860	15.000	1.500	2.600

51	2.700	5.000	1.500	2.600
52	2.920	10.000	1.500	2.600
53	2.950	15.000	1.500	2.600
54	3.040	19.000	1.500	2.600
55	3.230	5.000	1.500	2.600
56	2.770	85.000	1.500	2.600
57	2.725	23.000	1.500	2.600
58	3.205	24.000	1.500	2.600
59	3.365	24.000	1.500	2.600
60	3.325	34.000	1.500	2.600
61	3.020	19.000	1.500	2.600
62	2.775	21.000	1.500	2.600
63	2.585	10.000	1.500	2.600
64	2.435	9.000	1.500	2.600
65	2.320	14.000	1.500	2.600

=====
Input Information from Internal Weir R0960-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	2.510	5.000	1.500	2.600
2	2.490	10.000	1.500	2.600
3	2.480	14.000	1.500	2.600
4	2.665	10.000	1.500	2.600
5	3.250	5.000	1.500	2.600
6	3.635	5.000	1.500	2.600
7	3.360	10.000	1.500	2.600
8	2.890	9.000	1.500	2.600
9	2.460	5.000	1.500	2.600
10	1.840	10.000	1.500	2.600
11	1.525	10.000	1.500	2.600
12	1.715	10.000	1.500	2.600
13	1.830	5.000	1.500	2.600
14	1.885	4.000	1.500	2.600
15	1.985	5.000	1.500	2.600
16	1.855	5.000	1.500	2.600
17	1.635	10.000	1.500	2.600
18	1.640	29.000	1.500	2.600
19	1.830	15.000	1.500	2.600
20	2.205	10.000	1.500	2.600
21	2.190	10.000	1.500	2.600
22	2.195	29.000	1.500	2.600
23	2.640	15.000	1.500	2.600
24	2.540	15.000	1.500	2.600
25	2.035	10.000	1.500	2.600
26	1.770	5.000	1.500	2.600
27	1.935	10.000	1.500	2.600

28	1.990	15.000	1.500	2.600
29	2.195	29.000	1.500	2.600
30	2.010	30.000	1.500	2.600
31	1.705	10.000	1.500	2.600
32	2.590	15.000	1.500	2.600
33	2.905	10.000	1.500	2.600
34	2.485	5.000	1.500	2.600
35	2.645	10.000	1.500	2.600
36	2.840	5.000	1.500	2.600
37	2.715	5.000	1.500	2.600
38	2.350	35.000	1.500	2.600
39	1.915	15.000	1.500	2.600
40	1.505	10.000	1.500	2.600
41	1.375	15.000	1.500	2.600
42	1.365	15.000	1.500	2.600
43	1.320	5.000	1.500	2.600
44	1.870	10.000	1.500	2.600
45	2.525	5.000	1.500	2.600
46	2.920	10.000	1.500	2.600
47	3.185	5.000	1.500	2.600
48	3.175	5.000	1.500	2.600
49	2.665	15.000	1.500	2.600
50	2.115	10.000	1.500	2.600
51	2.250	35.000	1.500	2.600
52	2.560	5.000	1.500	2.600
53	3.130	15.000	1.500	2.600
54	3.400	9.000	1.500	2.600
55	2.670	15.000	1.500	2.600
56	2.060	10.000	1.500	2.600
57	2.050	35.000	1.500	2.600
58	2.205	5.000	1.500	2.600
59	2.700	14.000	1.500	2.600
60	3.365	24.000	1.500	2.600
61	3.540	10.000	1.500	2.600

=====
Input Information from Internal Weir R0980-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.630	4.000	1.500	2.600
2	5.480	17.000	1.500	2.600
3	5.525	19.000	1.500	2.600
4	5.515	15.000	1.500	2.600
5	5.460	10.000	1.500	2.600
6	5.395	45.000	1.500	2.600
7	5.355	30.000	1.500	2.600
8	5.170	10.000	1.500	2.600

9	4.830	29.000	1.500	2.600
10	4.860	29.000	1.500	2.600
11	4.760	10.000	1.500	2.600
12	4.500	10.000	1.500	2.600
13	4.635	14.000	1.500	2.600
14	4.680	5.000	1.500	2.600
15	4.735	10.000	1.500	2.600
16	4.515	5.000	1.500	2.600
17	4.020	5.000	1.500	2.600
18	4.230	15.000	1.500	2.600
19	4.465	5.000	1.500	2.600
20	4.535	5.000	1.500	2.600
21	4.865	15.000	1.500	2.600
22	4.900	10.000	1.500	2.600
23	4.390	10.000	1.500	2.600
24	4.105	5.000	1.500	2.600
25	4.500	5.000	1.500	2.600
26	4.835	10.000	1.500	2.600
27	4.985	10.000	1.500	2.600
28	5.055	5.000	1.500	2.600
29	4.775	5.000	1.500	2.600
30	4.470	15.000	1.500	2.600
31	4.065	10.000	1.500	2.600
32	3.740	5.000	1.500	2.600
33	4.075	9.000	1.500	2.600
34	4.360	5.000	1.500	2.600
35	4.080	5.000	1.500	2.600
36	3.840	10.000	1.500	2.600
37	3.910	5.000	1.500	2.600
38	3.950	5.000	1.500	2.600
39	3.960	10.000	1.500	2.600
40	3.805	20.000	1.500	2.600
41	3.405	30.000	1.500	2.600
42	3.365	10.000	1.500	2.600
43	3.855	10.000	1.500	2.600
44	3.995	10.000	1.500	2.600
45	3.900	10.000	1.500	2.600
46	3.925	30.000	1.500	2.600
47	3.975	10.000	1.500	2.600
48	4.495	15.000	1.500	2.600
49	4.510	5.000	1.500	2.600
50	3.835	10.000	1.500	2.600
51	3.525	10.000	1.500	2.600
52	3.640	5.000	1.500	2.600
53	4.030	5.000	1.500	2.600
54	4.750	5.000	1.500	2.600
55	5.285	5.000	1.500	2.600
56	5.115	5.000	1.500	2.600
57	4.865	5.000	1.500	2.600
58	5.030	5.000	1.500	2.600

59	5.040	5.000	1.500	2.600
60	4.945	10.000	1.500	2.600
61	4.820	5.000	1.500	2.600
62	4.745	5.000	1.500	2.600
63	4.505	15.000	1.500	2.600
64	4.100	10.000	1.500	2.600
65	4.280	15.000	1.500	2.600
66	4.490	5.000	1.500	2.600
67	4.585	15.000	1.500	2.600
68	4.720	10.000	1.500	2.600
69	4.475	10.000	1.500	2.600
70	4.330	10.000	1.500	2.600
71	4.270	5.000	1.500	2.600
72	3.830	4.000	1.500	2.600
73	3.425	5.000	1.500	2.600
74	3.655	25.000	1.500	2.600
75	3.725	19.000	1.500	2.600
76	3.465	15.000	1.500	2.600
77	3.735	10.000	1.500	2.600
78	3.955	5.000	1.500	2.600
79	3.800	5.000	1.500	2.600
80	3.730	14.000	1.500	2.600
81	3.570	20.000	1.500	2.600
82	3.425	5.000	1.500	2.600
83	3.500	9.000	1.500	2.600
84	3.680	5.000	1.500	2.600
85	3.885	5.000	1.500	2.600
86	3.730	5.000	1.500	2.600
87	3.570	5.000	1.500	2.600
88	3.755	5.000	1.500	2.600
89	3.850	10.000	1.500	2.600
90	3.810	9.000	1.500	2.600
91	4.110	15.000	1.500	2.600
92	3.980	10.000	1.500	2.600
93	3.610	5.000	1.500	2.600
94	3.860	4.000	1.500	2.600
95	4.185	5.000	1.500	2.600
96	3.945	10.000	1.500	2.600

=====
Input Information from Internal Weir R0990-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	3.865	15.000	1.500	2.600
2	3.735	25.000	1.500	2.600
3	3.730	10.000	1.500	2.600
4	4.005	5.000	1.500	2.600

5	3.690	10.000	1.500	2.600
6	3.360	15.000	1.500	2.600
7	3.180	5.000	1.500	2.600
8	2.900	5.000	1.500	2.600
9	2.825	5.000	1.500	2.600
10	3.035	10.000	1.500	2.600
11	2.935	5.000	1.500	2.600
12	2.550	5.000	1.500	2.600
13	2.545	5.000	1.500	2.600
14	2.385	10.000	1.500	2.600
15	2.305	10.000	1.500	2.600
16	2.555	15.000	1.500	2.600
17	2.580	10.000	1.500	2.600
18	2.755	10.000	1.500	2.600
19	2.605	10.000	1.500	2.600
20	2.010	9.000	1.500	2.600
21	1.800	15.000	1.500	2.600
22	2.000	10.000	1.500	2.600
23	2.215	5.000	1.500	2.600
24	2.030	15.000	1.500	2.600
25	1.870	5.000	1.500	2.600
26	2.095	5.000	1.500	2.600
27	2.385	14.000	1.500	2.600
28	2.760	10.000	1.500	2.600
29	3.055	5.000	1.500	2.600
30	2.630	25.000	1.500	2.600
31	2.435	29.000	1.500	2.600
32	2.625	15.000	1.500	2.600
33	2.795	5.000	1.500	2.600
34	2.760	15.000	1.500	2.600
35	2.510	15.000	1.500	2.600
36	2.425	9.000	1.500	2.600
37	2.515	15.000	1.500	2.600
38	2.660	5.000	1.500	2.600
39	2.200	10.000	1.500	2.600
40	1.675	5.000	1.500	2.600
41	1.500	10.000	1.500	2.600
42	1.520	14.000	1.500	2.600
43	1.165	20.000	1.500	2.600
44	0.585	30.000	1.500	2.600
45	0.760	24.000	1.500	2.600
46	1.275	5.000	1.500	2.600
47	1.630	10.000	1.500	2.600
48	1.815	10.000	1.500	2.600
49	1.695	5.000	1.500	2.600
50	1.540	5.000	1.500	2.600
51	1.590	34.000	1.500	2.600
52	1.550	20.000	1.500	2.600
53	1.845	14.000	1.500	2.600
54	2.550	25.000	1.500	2.600

55	2.885	5.000	1.500	2.600
56	2.780	15.000	1.500	2.600
57	2.690	5.000	1.500	2.600
58	3.030	9.000	1.500	2.600
59	3.185	15.000	1.500	2.600
60	3.030	30.000	1.500	2.600
61	3.345	14.000	1.500	2.600
62	3.540	10.000	1.500	2.600
63	3.470	20.000	1.500	2.600
64	3.200	10.000	1.500	2.600
65	2.925	14.000	1.500	2.600
66	2.650	10.000	1.500	2.600
67	2.330	5.000	1.500	2.600
68	2.530	5.000	1.500	2.600
69	2.680	10.000	1.500	2.600
70	2.885	5.000	1.500	2.600
71	3.170	5.000	1.500	2.600
72	2.610	39.000	1.500	2.600
73	2.085	5.000	1.500	2.600
74	2.475	5.000	1.500	2.600
75	2.885	5.000	1.500	2.600
76	2.695	5.000	1.500	2.600
77	2.250	5.000	1.500	2.600
78	2.455	44.000	1.500	2.600
79	2.400	14.000	1.500	2.600
80	1.905	5.000	1.500	2.600
81	1.875	19.000	1.500	2.600
82	1.860	15.000	1.500	2.600

=====
Input Information from Internal Weir R0990-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	7.350	15.000	1.500	2.600
2	7.325	19.000	1.500	2.600
3	7.345	10.000	1.500	2.600
4	7.335	15.000	1.500	2.600
5	7.305	10.000	1.500	2.600
6	7.325	15.000	1.500	2.600
7	7.420	14.000	1.500	2.600
8	7.445	25.000	1.500	2.600
9	7.475	25.000	1.500	2.600
10	7.610	15.000	1.500	2.600
11	7.690	4.000	1.500	2.600
12	7.775	45.000	1.500	2.600
13	7.730	15.000	1.500	2.600
14	7.535	10.000	1.500	2.600

15	7.430	15.000	1.500	2.600
16	7.270	15.000	1.500	2.600
17	7.230	20.000	1.500	2.600
18	7.335	40.000	1.500	2.600
19	7.475	20.000	1.500	2.600
20	7.730	20.000	1.500	2.600
21	7.755	20.000	1.500	2.600
22	7.445	14.000	1.500	2.600
23	7.265	15.000	1.500	2.600
24	7.400	25.000	1.500	2.600
25	7.330	5.000	1.500	2.600
26	7.245	35.000	1.500	2.600
27	7.135	20.000	1.500	2.600
28	7.085	35.000	1.500	2.600
29	7.110	10.000	1.500	2.600
30	7.150	10.000	1.500	2.600
31	7.130	10.000	1.500	2.600
32	7.145	50.000	1.500	2.600
33	7.215	15.000	1.500	2.600
34	7.230	10.000	1.500	2.600
35	7.210	25.000	1.500	2.600
36	7.195	10.000	1.500	2.600
37	7.150	5.000	1.500	2.600
38	7.025	5.000	1.500	2.600
39	7.105	15.000	1.500	2.600
40	7.090	5.000	1.500	2.600
41	7.040	10.000	1.500	2.600
42	7.005	10.000	1.500	2.600
43	7.045	10.000	1.500	2.600
44	7.145	20.000	1.500	2.600
45	7.200	15.000	1.500	2.600
46	7.200	29.000	1.500	2.600
47	7.190	30.000	1.500	2.600
48	7.160	15.000	1.500	2.600
49	7.210	20.000	1.500	2.600
50	7.270	45.000	1.500	2.600
51	7.265	15.000	1.500	2.600
52	7.265	20.000	1.500	2.600
53	7.250	25.000	1.500	2.600
54	7.210	10.000	1.500	2.600
55	7.190	10.000	1.500	2.600
56	7.240	10.000	1.500	2.600

=====
Input Information from Internal Weir R1000-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----

1	5.450	54.000	1.500	2.600
2	5.350	40.000	1.500	2.600
3	5.230	20.000	1.500	2.600
4	5.155	10.000	1.500	2.600
5	5.195	14.000	1.500	2.600
6	5.225	10.000	1.500	2.600
7	5.285	30.000	1.500	2.600
8	5.040	25.000	1.500	2.600
9	4.985	10.000	1.500	2.600
10	5.120	14.000	1.500	2.600
11	5.175	55.000	1.500	2.600
12	5.200	19.000	1.500	2.600
13	5.240	30.000	1.500	2.600
14	5.305	15.000	1.500	2.600
15	5.325	15.000	1.500	2.600
16	5.300	10.000	1.500	2.600
17	5.290	14.000	1.500	2.600
18	5.305	15.000	1.500	2.600
19	5.345	40.000	1.500	2.600
20	5.435	25.000	1.500	2.600
21	5.335	20.000	1.500	2.600
22	4.955	10.000	1.500	2.600
23	4.600	5.000	1.500	2.600
24	4.625	20.000	1.500	2.600
25	4.925	10.000	1.500	2.600
26	5.070	10.000	1.500	2.600
27	5.165	25.000	1.500	2.600
28	5.330	25.000	1.500	2.600
29	5.190	40.000	1.500	2.600
30	4.870	20.000	1.500	2.600
31	4.755	10.000	1.500	2.600
32	5.140	20.000	1.500	2.600
33	5.390	55.000	1.500	2.600
34	5.105	10.000	1.500	2.600
35	4.920	10.000	1.500	2.600
36	4.825	5.000	1.500	2.600
37	4.740	10.000	1.500	2.600
38	4.950	10.000	1.500	2.600
39	5.190	25.000	1.500	2.600
40	5.280	25.000	1.500	2.600
41	5.210	15.000	1.500	2.600
42	5.175	10.000	1.500	2.600
43	5.230	45.000	1.500	2.600
44	5.255	100.000	1.500	2.600

=====
Input Information from Internal Weir R1020-W1.1
=====

Point No.	Data Column	Data Column	Data Column	Data Column
--------------	----------------	----------------	----------------	----------------

	# 1	# 2	# 3	# 4
1	5.090	5.000	1.500	2.600
2	4.865	10.000	1.500	2.600
3	4.655	5.000	1.500	2.600
4	5.030	20.000	1.500	2.600
5	5.390	5.000	1.500	2.600
6	4.905	9.000	1.500	2.600
7	4.595	15.000	1.500	2.600
8	5.325	15.000	1.500	2.600
9	6.120	9.000	1.500	2.600
10	6.295	5.000	1.500	2.600
11	6.030	5.000	1.500	2.600
12	5.705	5.000	1.500	2.600
13	5.695	10.000	1.500	2.600
14	5.620	9.000	1.500	2.600
15	5.475	5.000	1.500	2.600
16	6.090	10.000	1.500	2.600
17	6.730	5.000	1.500	2.600
18	6.545	19.000	1.500	2.600
19	6.370	10.000	1.500	2.600
20	5.965	20.000	1.500	2.600
21	5.470	4.000	1.500	2.600
22	5.565	10.000	1.500	2.600
23	5.615	5.000	1.500	2.600
24	4.995	10.000	1.500	2.600
25	4.125	14.000	1.500	2.600
26	4.200	14.000	1.500	2.600
27	4.645	5.000	1.500	2.600
28	4.590	10.000	1.500	2.600
29	4.645	9.000	1.500	2.600
30	4.785	5.000	1.500	2.600
31	4.180	14.000	1.500	2.600
32	3.605	5.000	1.500	2.600
33	3.400	9.000	1.500	2.600
34	3.295	25.000	1.500	2.600
35	3.165	10.000	1.500	2.600
36	2.960	10.000	1.500	2.600
37	3.365	20.000	1.500	2.600
38	3.640	5.000	1.500	2.600
39	3.205	10.000	1.500	2.600
40	3.120	10.000	1.500	2.600
41	3.430	5.000	1.500	2.600
42	3.430	10.000	1.500	2.600
43	3.525	15.000	1.500	2.600
44	3.560	10.000	1.500	2.600
45	3.570	10.000	1.500	2.600
46	3.525	10.000	1.500	2.600
47	3.365	15.000	1.500	2.600
48	3.235	10.000	1.500	2.600

49	3.340	35.000	1.500	2.600
50	3.440	15.000	1.500	2.600
51	3.580	20.000	1.500	2.600
52	3.805	5.000	1.500	2.600
53	3.830	20.000	1.500	2.600
54	3.840	5.000	1.500	2.600
55	3.805	5.000	1.500	2.600
56	4.280	20.000	1.500	2.600
57	4.640	20.000	1.500	2.600
58	4.745	15.000	1.500	2.600
59	5.135	10.000	1.500	2.600
60	5.700	10.000	1.500	2.600
61	6.100	5.000	1.500	2.600
62	5.440	30.000	1.500	2.600
63	4.600	5.000	1.500	2.600
64	4.225	5.000	1.500	2.600
65	2.815	15.000	1.500	2.600
66	2.635	15.000	1.500	2.600
67	3.900	5.000	1.500	2.600
68	4.215	5.000	1.500	2.600
69	4.050	15.000	1.500	2.600
70	4.230	15.000	1.500	2.600
71	4.465	24.000	1.500	2.600
72	4.340	5.000	1.500	2.600
73	4.725	15.000	1.500	2.600
74	5.120	5.000	1.500	2.600
75	4.825	14.000	1.500	2.600
76	4.455	5.000	1.500	2.600
77	4.545	20.000	1.500	2.600
78	4.585	19.000	1.500	2.600
79	4.625	35.000	1.500	2.600
80	4.710	49.000	1.500	2.600
81	4.750	9.000	1.500	2.600
82	4.745	20.000	1.500	2.600

=====
Input Information from Internal Weir R1030-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.235	45.000	1.500	2.600
2	6.900	34.000	1.500	2.600
3	7.225	9.000	1.500	2.600
4	7.330	18.000	1.500	2.600
5	7.450	4.000	1.500	2.600

=====
Input Information from Internal Weir R1030-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.315	15.000	1.500	2.600
2	5.665	19.000	1.500	2.600
3	5.905	10.000	1.500	2.600
4	5.990	15.000	1.500	2.600
5	6.165	19.000	1.500	2.600
6	6.150	15.000	1.500	2.600
7	6.365	9.000	1.500	2.600
8	6.215	10.000	1.500	2.600
9	5.910	20.000	1.500	2.600
10	5.845	14.000	1.500	2.600
11	5.915	15.000	1.500	2.600
12	6.440	10.000	1.500	2.600
13	6.700	5.000	1.500	2.600
14	5.945	14.000	1.500	2.600
15	5.115	10.000	1.500	2.600
16	5.120	29.000	1.500	2.600
17	5.170	15.000	1.500	2.600
18	5.140	25.000	1.500	2.600
19	5.055	20.000	1.500	2.600
20	4.875	24.000	1.500	2.600
21	5.050	48.000	1.500	2.600
22	5.095	23.000	1.500	2.600
23	5.025	19.000	1.500	2.600
24	5.305	15.000	1.500	2.600
25	5.350	14.000	1.500	2.600
26	5.265	5.000	1.500	2.600
27	5.630	8.000	1.500	2.600
28	5.555	5.000	1.500	2.600
29	4.975	5.000	1.500	2.600
30	4.685	15.000	1.500	2.600
31	4.605	10.000	1.500	2.600
32	4.570	5.000	1.500	2.600
33	4.215	9.000	1.500	2.600
34	3.870	5.000	1.500	2.600
35	3.950	14.000	1.500	2.600
36	3.960	10.000	1.500	2.600
37	3.985	10.000	1.500	2.600
38	4.695	28.000	1.500	2.600
39	5.415	4.000	1.500	2.600
40	5.860	5.000	1.500	2.600
41	5.790	10.000	1.500	2.600
42	5.385	30.000	1.500	2.600
43	5.575	39.000	1.500	2.600
44	5.785	5.000	1.500	2.600
45	5.920	10.000	1.500	2.600

46	6.040	9.000	1.500	2.600
47	6.080	10.000	1.500	2.600
48	5.835	25.000	1.500	2.600
49	5.570	29.000	1.500	2.600
50	5.770	20.000	1.500	2.600
51	5.895	14.000	1.500	2.600
52	5.840	10.000	1.500	2.600
53	5.605	10.000	1.500	2.600
54	5.260	15.000	1.500	2.600
55	5.175	14.000	1.500	2.600
56	5.185	10.000	1.500	2.600
57	5.210	10.000	1.500	2.600
58	5.110	15.000	1.500	2.600
59	5.135	9.000	1.500	2.600
60	5.325	30.000	1.500	2.600
61	5.515	14.000	1.500	2.600
62	5.595	49.000	1.500	2.600
63	5.590	19.000	1.500	2.600
64	5.645	24.000	1.500	2.600

=====
Input Information from Internal Weir R2002-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	2.365	50.000	1.500	2.600
2	2.735	50.000	1.500	2.600
3	2.655	50.000	1.500	2.600
4	2.475	50.000	1.500	2.600
5	1.985	50.000	1.500	2.600
6	1.730	50.000	1.500	2.600
7	1.870	50.000	1.500	2.600
8	2.035	50.000	1.500	2.600
9	1.970	50.000	1.500	2.600
10	2.050	49.000	1.500	2.600
11	2.140	48.000	1.500	2.600
12	2.170	50.000	1.500	2.600
13	2.240	50.000	1.500	2.600
14	2.370	49.000	1.500	2.600
15	2.375	50.000	1.500	2.600
16	2.370	50.000	1.500	2.600
17	2.480	50.000	1.500	2.600
18	2.375	50.000	1.500	2.600
19	2.305	50.000	1.500	2.600
20	2.295	50.000	1.500	2.600
21	2.190	50.000	1.500	2.600
22	2.170	50.000	1.500	2.600
23	1.895	50.000	1.500	2.600

24	1.890	50.000	1.500	2.600
25	2.325	50.000	1.500	2.600
26	2.455	50.000	1.500	2.600
27	2.545	50.000	1.500	2.600
28	2.510	50.000	1.500	2.600
29	2.230	50.000	1.500	2.600
30	2.060	50.000	1.500	2.600
31	2.035	50.000	1.500	2.600
32	1.855	50.000	1.500	2.600
33	2.015	50.000	1.500	2.600
34	2.320	50.000	1.500	2.600
35	2.335	50.000	1.500	2.600
36	2.475	50.000	1.500	2.600
37	2.410	50.000	1.500	2.600
38	2.290	50.000	1.500	2.600
39	2.315	50.000	1.500	2.600
40	2.305	50.000	1.500	2.600
41	2.490	50.000	1.500	2.600
42	2.390	50.000	1.500	2.600
43	2.000	50.000	1.500	2.600
44	2.030	50.000	1.500	2.600
45	2.090	47.000	1.500	2.600
46	2.015	50.000	1.500	2.600
47	2.090	45.000	1.500	2.600
48	2.075	50.000	1.500	2.600
49	1.980	50.000	1.500	2.600
50	1.795	50.000	1.500	2.600
51	1.775	50.000	1.500	2.600
52	1.875	49.000	1.500	2.600
53	1.850	50.000	1.500	2.600
54	1.835	50.000	1.500	2.600
55	2.010	50.000	1.500	2.600
56	2.425	50.000	1.500	2.600
57	2.685	50.000	1.500	2.600
58	2.230	50.000	1.500	2.600
59	1.835	50.000	1.500	2.600
60	1.905	50.000	1.500	2.600
61	1.985	50.000	1.500	2.600
62	2.210	50.000	1.500	2.600
63	2.280	50.000	1.500	2.600
64	2.360	50.000	1.500	2.600
65	2.325	50.000	1.500	2.600
66	2.235	50.000	1.500	2.600
67	2.330	50.000	1.500	2.600
68	2.475	50.000	1.500	2.600
69	2.190	50.000	1.500	2.600
70	2.065	50.000	1.500	2.600
71	2.350	50.000	1.500	2.600
72	2.360	50.000	1.500	2.600
73	2.315	50.000	1.500	2.600

74	2.100	50.000	1.500	2.600
75	1.965	50.000	1.500	2.600
76	2.090	50.000	1.500	2.600
77	2.015	50.000	1.500	2.600
78	1.990	50.000	1.500	2.600
79	2.025	50.000	1.500	2.600
80	1.925	50.000	1.500	2.600
81	2.210	50.000	1.500	2.600
82	2.435	50.000	1.500	2.600
83	2.120	50.000	1.500	2.600
84	1.805	50.000	1.500	2.600
85	1.845	50.000	1.500	2.600
86	1.830	50.000	1.500	2.600
87	1.865	50.000	1.500	2.600
88	2.235	50.000	1.500	2.600
89	2.470	50.000	1.500	2.600
90	2.180	50.000	1.500	2.600
91	1.960	50.000	1.500	2.600
92	2.270	50.000	1.500	2.600
93	2.540	50.000	1.500	2.600
94	2.405	50.000	1.500	2.600
95	2.305	50.000	1.500	2.600
96	2.465	50.000	1.500	2.600
97	2.515	50.000	1.500	2.600
98	2.490	50.000	1.500	2.600
99	2.435	50.000	1.500	2.600
100	2.205	50.000	1.500	2.600
101	2.180	50.000	1.500	2.600
102	2.710	50.000	1.500	2.600
103	3.010	50.000	1.500	2.600
104	2.780	50.000	1.500	2.600
105	2.600	50.000	1.500	2.600
106	2.660	50.000	1.500	2.600
107	2.250	50.000	1.500	2.600
108	1.675	50.000	1.500	2.600
109	1.650	50.000	1.500	2.600
110	2.075	50.000	1.500	2.600
111	2.400	50.000	1.500	2.600
112	1.995	50.000	1.500	2.600
113	1.820	50.000	1.500	2.600
114	2.220	49.000	1.500	2.600
115	2.330	50.000	1.500	2.600
116	2.310	50.000	1.500	2.600
117	2.395	50.000	1.500	2.600
118	2.135	50.000	1.500	2.600
119	2.070	50.000	1.500	2.600
120	2.410	50.000	1.500	2.600
121	2.415	50.000	1.500	2.600
122	2.095	50.000	1.500	2.600
123	2.065	50.000	1.500	2.600

124	2.065	50.000	1.500	2.600
125	1.795	50.000	1.500	2.600
126	1.700	50.000	1.500	2.600
127	1.965	50.000	1.500	2.600
128	2.180	50.000	1.500	2.600
129	2.175	50.000	1.500	2.600
130	2.155	50.000	1.500	2.600
131	2.090	50.000	1.500	2.600
132	2.265	50.000	1.500	2.600
133	2.465	50.000	1.500	2.600
134	2.490	50.000	1.500	2.600
135	2.545	50.000	1.500	2.600
136	2.420	50.000	1.500	2.600
137	2.185	50.000	1.500	2.600
138	1.870	50.000	1.500	2.600
139	1.635	50.000	1.500	2.600
140	1.805	50.000	1.500	2.600
141	2.015	50.000	1.500	2.600
142	2.160	50.000	1.500	2.600
143	1.960	50.000	1.500	2.600
144	1.875	50.000	1.500	2.600
145	2.345	50.000	1.500	2.600
146	2.465	50.000	1.500	2.600
147	2.375	50.000	1.500	2.600
148	2.135	49.000	1.500	2.600
149	1.690	50.000	1.500	2.600
150	1.500	50.000	1.500	2.600
151	2.090	50.000	1.500	2.600
152	2.555	50.000	1.500	2.600
153	2.390	50.000	1.500	2.600
154	2.255	50.000	1.500	2.600
155	2.735	50.000	1.500	2.600
156	2.960	50.000	1.500	2.600
157	2.380	49.000	1.500	2.600
158	2.790	50.000	1.500	2.600
159	3.560	50.000	1.500	2.600
160	3.220	50.000	1.500	2.600
161	2.290	50.000	1.500	2.600
162	2.665	50.000	1.500	2.600
163	3.415	50.000	1.500	2.600
164	3.025	50.000	1.500	2.600
165	3.620	50.000	1.500	2.600

=====
Input Information from Internal Weir R02040-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----

1	4.450	50.000	1.500	2.600
2	4.395	50.000	1.500	2.600
3	4.305	50.000	1.500	2.600
4	4.150	150.000	1.500	2.600
5	4.105	50.000	1.500	2.600
6	3.935	100.000	1.500	2.600
7	3.705	50.000	1.500	2.600
8	4.085	50.000	1.500	2.600
9	4.575	150.000	1.500	2.600
10	4.530	50.000	1.500	2.600
11	4.455	50.000	1.500	2.600
12	4.545	50.000	1.500	2.600
13	4.620	50.000	1.500	2.600
14	4.555	50.000	1.500	2.600
15	4.355	50.000	1.500	2.600
16	4.670	100.000	1.500	2.600
17	4.910	200.000	1.500	2.600
18	4.700	50.000	1.500	2.600
19	4.640	150.000	1.500	2.600
20	4.625	50.000	1.500	2.600
21	4.545	50.000	1.500	2.600
22	4.435	50.000	1.500	2.600
23	4.335	100.000	1.500	2.600
24	4.260	49.000	1.500	2.600
25	4.310	49.000	1.500	2.600
26	4.725	49.000	1.500	2.600
27	4.705	100.000	1.500	2.600
28	4.575	100.000	1.500	2.600
29	4.720	50.000	1.500	2.600
30	4.440	99.000	1.500	2.600
31	4.120	50.000	1.500	2.600
32	4.215	50.000	1.500	2.600
33	4.290	50.000	1.500	2.600
34	4.240	100.000	1.500	2.600
35	4.060	50.000	1.500	2.600
36	3.680	100.000	1.500	2.600
37	3.580	50.000	1.500	2.600
38	3.520	50.000	1.500	2.600
39	3.560	100.000	1.500	2.600
40	3.685	50.000	1.500	2.600
41	3.855	50.000	1.500	2.600
42	3.740	200.000	1.500	2.600
43	3.595	50.000	1.500	2.600
44	3.735	99.000	1.500	2.600
45	3.725	100.000	1.500	2.600
46	3.900	50.000	1.500	2.600
47	4.175	200.000	1.500	2.600
48	4.465	50.000	1.500	2.600
49	4.480	50.000	1.500	2.600
50	4.115	50.000	1.500	2.600

51	3.975	50.000	1.500	2.600
52	3.900	50.000	1.500	2.600
53	3.695	50.000	1.500	2.600
54	3.765	50.000	1.500	2.600
55	3.840	50.000	1.500	2.600
56	3.600	100.000	1.500	2.600
57	3.795	200.000	1.500	2.600
58	3.940	100.000	1.500	2.600
59	3.725	149.000	1.500	2.600
60	3.835	49.000	1.500	2.600
61	4.195	49.000	1.500	2.600
62	4.620	50.000	1.500	2.600
63	4.720	50.000	1.500	2.600
64	4.530	50.000	1.500	2.600
65	4.060	49.000	1.500	2.600
66	3.415	246.000	1.500	2.600
67	3.190	100.000	1.500	2.600
68	3.215	100.000	1.500	2.600
69	3.305	50.000	1.500	2.600
70	3.520	50.000	1.500	2.600
71	3.530	100.000	1.500	2.600
72	4.150	100.000	1.500	2.600
73	4.960	100.000	1.500	2.600
74	5.000	200.000	1.500	2.600
75	4.760	50.000	1.500	2.600
76	4.875	100.000	1.500	2.600
77	4.910	50.000	1.500	2.600
78	4.730	50.000	1.500	2.600
79	4.895	50.000	1.500	2.600
80	5.005	200.000	1.500	2.600
81	4.755	50.000	1.500	2.600
82	4.310	99.000	1.500	2.600
83	3.830	50.000	1.500	2.600
84	3.595	199.000	1.500	2.600
85	3.435	50.000	1.500	2.600
86	3.245	100.000	1.500	2.600
87	3.360	49.000	1.500	2.600
88	3.885	50.000	1.500	2.600
89	4.450	50.000	1.500	2.600
90	4.680	150.000	1.500	2.600
91	4.565	49.000	1.500	2.600
92	4.695	50.000	1.500	2.600
93	4.830	100.000	1.500	2.600
94	4.485	50.000	1.500	2.600
95	4.440	50.000	1.500	2.600
96	5.065	100.000	1.500	2.600
97	5.200	50.000	1.500	2.600
98	4.785	50.000	1.500	2.600
99	4.550	50.000	1.500	2.600
100	4.165	99.000	1.500	2.600

101	4.200	100.000	1.500	2.600
102	4.215	50.000	1.500	2.600
103	4.115	50.000	1.500	2.600
104	4.015	50.000	1.500	2.600
105	3.715	50.000	1.500	2.600
106	3.730	100.000	1.500	2.600
107	4.035	50.000	1.500	2.600
108	4.095	100.000	1.500	2.600
109	4.000	50.000	1.500	2.600
110	4.290	50.000	1.500	2.600
111	4.580	100.000	1.500	2.600
112	4.485	50.000	1.500	2.600
113	4.280	150.000	1.500	2.600
114	4.105	99.000	1.500	2.600
115	3.715	100.000	1.500	2.600
116	3.415	100.000	1.500	2.600
117	3.550	100.000	1.500	2.600
118	3.615	50.000	1.500	2.600
119	3.695	50.000	1.500	2.600
120	3.725	50.000	1.500	2.600
121	3.835	50.000	1.500	2.600
122	4.335	99.000	1.500	2.600
123	4.310	50.000	1.500	2.600
124	3.510	50.000	1.500	2.600
125	3.465	100.000	1.500	2.600
126	4.045	100.000	1.500	2.600
127	3.800	50.000	1.500	2.600
128	3.435	50.000	1.500	2.600
129	3.600	100.000	1.500	2.600
130	3.760	50.000	1.500	2.600
131	3.900	50.000	1.500	2.600
132	4.065	50.000	1.500	2.600
133	3.890	100.000	1.500	2.600
134	3.410	99.000	1.500	2.600
135	3.105	99.000	1.500	2.600
136	2.975	49.000	1.500	2.600
137	2.945	50.000	1.500	2.600
138	3.295	50.000	1.500	2.600
139	3.730	100.000	1.500	2.600
140	3.945	150.000	1.500	2.600
141	3.770	50.000	1.500	2.600
142	3.530	49.000	1.500	2.600
143	3.650	50.000	1.500	2.600
144	3.660	249.000	1.500	2.600
145	3.540	50.000	1.500	2.600
146	3.290	50.000	1.500	2.600
147	2.965	100.000	1.500	2.600
148	2.955	50.000	1.500	2.600
149	3.175	50.000	1.500	2.600
150	3.305	100.000	1.500	2.600

151	3.345	50.000	1.500	2.600
152	3.425	150.000	1.500	2.600
153	3.535	50.000	1.500	2.600
154	3.705	99.000	1.500	2.600
155	3.910	100.000	1.500	2.600
156	3.825	150.000	1.500	2.600
157	3.560	50.000	1.500	2.600
158	3.595	100.000	1.500	2.600
159	3.920	100.000	1.500	2.600
160	4.255	149.000	1.500	2.600
161	4.165	150.000	1.500	2.600
162	4.295	50.000	1.500	2.600
163	4.575	50.000	1.500	2.600
164	4.720	50.000	1.500	2.600
165	4.600	50.000	1.500	2.600
166	4.080	150.000	1.500	2.600
167	3.545	50.000	1.500	2.600
168	3.170	48.000	1.500	2.600
169	3.110	50.000	1.500	2.600
170	3.355	50.000	1.500	2.600
171	3.365	48.000	1.500	2.600
172	3.385	50.000	1.500	2.600
173	3.960	50.000	1.500	2.600
174	4.295	50.000	1.500	2.600
175	4.085	31.000	1.500	2.600

=====
Input Information from Internal Weir R2090-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	5.650	50.000	1.500	2.600
2	4.630	99.000	1.500	2.600
3	4.655	50.000	1.500	2.600
4	4.750	100.000	1.500	2.600
5	4.425	50.000	1.500	2.600
6	4.225	50.000	1.500	2.600
7	3.820	45.000	1.500	2.600
8	3.570	100.000	1.500	2.600
9	4.375	50.000	1.500	2.600
10	4.490	50.000	1.500	2.600
11	4.690	50.000	1.500	2.600
12	5.280	50.000	1.500	2.600
13	5.265	50.000	1.500	2.600
14	5.470	50.000	1.500	2.600
15	5.650	50.000	1.500	2.600
16	5.195	100.000	1.500	2.600
17	4.980	100.000	1.500	2.600

18	5.585	50.000	1.500	2.600
19	5.845	49.000	1.500	2.600
20	5.500	50.000	1.500	2.600
21	5.145	50.000	1.500	2.600
22	5.320	50.000	1.500	2.600
23	5.755	50.000	1.500	2.600
24	5.845	50.000	1.500	2.600
25	5.880	50.000	1.500	2.600
26	5.810	50.000	1.500	2.600
27	6.210	50.000	1.500	2.600
28	6.145	50.000	1.500	2.600
29	5.340	50.000	1.500	2.600
30	5.275	50.000	1.500	2.600
31	5.265	50.000	1.500	2.600
32	5.770	50.000	1.500	2.600
33	4.530	50.000	1.500	2.600
34	4.835	50.000	1.500	2.600
35	6.515	50.000	1.500	2.600
36	5.915	50.000	1.500	2.600
37	6.090	100.000	1.500	2.600
38	6.380	50.000	1.500	2.600
39	7.085	50.000	1.500	2.600
40	6.655	50.000	1.500	2.600
41	5.350	100.000	1.500	2.600
42	4.750	50.000	1.500	2.600
43	4.615	50.000	1.500	2.600
44	4.355	50.000	1.500	2.600
45	2.925	50.000	1.500	2.600
46	3.485	50.000	1.500	2.600
47	4.880	50.000	1.500	2.600
48	4.005	50.000	1.500	2.600
49	3.940	50.000	1.500	2.600
50	5.305	50.000	1.500	2.600
51	5.775	50.000	1.500	2.600
52	6.125	50.000	1.500	2.600
53	5.960	50.000	1.500	2.600
54	5.775	50.000	1.500	2.600
55	6.015	50.000	1.500	2.600
56	5.415	49.000	1.500	2.600
57	4.365	50.000	1.500	2.600
58	4.270	50.000	1.500	2.600
59	4.975	50.000	1.500	2.600
60	5.160	50.000	1.500	2.600
61	5.410	50.000	1.500	2.600
62	5.315	50.000	1.500	2.600
63	5.585	50.000	1.500	2.600
64	4.595	50.000	1.500	2.600
65	4.390	50.000	1.500	2.600
66	4.395	50.000	1.500	2.600
67	2.675	50.000	1.500	2.600

68	2.405	50.000	1.500	2.600
69	3.625	50.000	1.500	2.600
70	4.565	50.000	1.500	2.600
71	4.525	50.000	1.500	2.600
72	4.025	49.000	1.500	2.600
73	2.845	50.000	1.500	2.600
74	4.110	50.000	1.500	2.600
75	5.355	50.000	1.500	2.600
76	3.865	50.000	1.500	2.600
77	3.540	50.000	1.500	2.600
78	3.960	50.000	1.500	2.600
79	4.545	50.000	1.500	2.600
80	5.320	50.000	1.500	2.600
81	5.585	50.000	1.500	2.600
82	4.120	50.000	1.500	2.600
83	2.465	50.000	1.500	2.600
84	2.230	50.000	1.500	2.600
85	3.900	50.000	1.500	2.600
86	5.900	50.000	1.500	2.600
87	5.200	50.000	1.500	2.600
88	5.240	50.000	1.500	2.600
89	5.895	50.000	1.500	2.600
90	6.055	50.000	1.500	2.600
91	5.800	50.000	1.500	2.600
92	5.380	50.000	1.500	2.600
93	5.805	50.000	1.500	2.600
94	5.610	50.000	1.500	2.600
95	5.790	50.000	1.500	2.600
96	6.590	50.000	1.500	2.600
97	5.875	50.000	1.500	2.600
98	5.785	50.000	1.500	2.600
99	6.325	50.000	1.500	2.600
100	6.545	50.000	1.500	2.600
101	6.600	50.000	1.500	2.600
102	6.385	149.000	1.500	2.600
103	6.330	50.000	1.500	2.600
104	6.955	50.000	1.500	2.600
105	7.485	50.000	1.500	2.600
106	6.700	50.000	1.500	2.600
107	6.415	100.000	1.500	2.600
108	6.910	50.000	1.500	2.600
109	7.125	50.000	1.500	2.600
110	6.605	50.000	1.500	2.600
111	6.090	50.000	1.500	2.600
112	5.560	100.000	1.500	2.600
113	5.315	248.000	1.500	2.600
114	5.920	48.000	1.500	2.600
115	6.365	100.000	1.500	2.600
116	6.320	50.000	1.500	2.600
117	6.450	50.000	1.500	2.600

118	6.815	50.000	1.500	2.600
119	6.925	250.000	1.500	2.600
120	6.715	50.000	1.500	2.600
121	6.515	50.000	1.500	2.600
122	7.675	49.000	1.500	2.600
123	8.705	49.000	1.500	2.600
124	8.850	50.000	1.500	2.600
125	9.220	50.000	1.500	2.600
126	9.205	150.000	1.500	2.600
127	9.165	150.000	1.500	2.600
128	9.025	250.000	1.500	2.600
129	9.040	50.000	1.500	2.600
130	8.980	137.000	1.500	2.600

=====
Input Information from Internal Weir R2370-W4.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	4.510	150.000	1.500	2.600
2	4.460	50.000	1.500	2.600
3	3.905	99.000	1.500	2.600
4	4.370	50.000	1.500	2.600
5	4.660	50.000	1.500	2.600
6	4.640	50.000	1.500	2.600
7	4.115	50.000	1.500	2.600
8	4.345	50.000	1.500	2.600
9	5.030	50.000	1.500	2.600
10	4.865	50.000	1.500	2.600
11	4.375	50.000	1.500	2.600
12	4.150	50.000	1.500	2.600
13	4.240	50.000	1.500	2.600
14	3.685	100.000	1.500	2.600
15	3.490	50.000	1.500	2.600
16	4.610	50.000	1.500	2.600
17	5.465	50.000	1.500	2.600
18	5.315	50.000	1.500	2.600
19	5.085	99.000	1.500	2.600
20	5.380	100.000	1.500	2.600
21	6.500	100.000	1.500	2.600
22	7.255	100.000	1.500	2.600
23	7.390	50.000	1.500	2.600
24	7.540	50.000	1.500	2.600
25	7.530	50.000	1.500	2.600
26	7.470	50.000	1.500	2.600
27	7.525	50.000	1.500	2.600
28	7.740	50.000	1.500	2.600
29	7.995	50.000	1.500	2.600

30	8.180	100.000	1.500	2.600
31	7.965	100.000	1.500	2.600
32	7.690	100.000	1.500	2.600
33	7.650	150.000	1.500	2.600
34	7.320	100.000	1.500	2.600
35	6.965	50.000	1.500	2.600
36	6.820	50.000	1.500	2.600
37	6.780	50.000	1.500	2.600
38	7.545	100.000	1.500	2.600
39	7.880	100.000	1.500	2.600
40	7.710	50.000	1.500	2.600
41	7.700	50.000	1.500	2.600
42	7.175	50.000	1.500	2.600
43	6.990	49.000	1.500	2.600
44	7.210	50.000	1.500	2.600
45	7.685	50.000	1.500	2.600
46	8.355	50.000	1.500	2.600
47	8.635	50.000	1.500	2.600
48	8.485	100.000	1.500	2.600
49	8.440	50.000	1.500	2.600
50	8.435	50.000	1.500	2.600
51	8.150	100.000	1.500	2.600
52	8.185	50.000	1.500	2.600
53	8.125	50.000	1.500	2.600
54	8.620	100.000	1.500	2.600
55	9.390	50.000	1.500	2.600
56	8.960	50.000	1.500	2.600
57	8.845	50.000	1.500	2.600
58	9.345	50.000	1.500	2.600
59	9.040	50.000	1.500	2.600
60	9.280	50.000	1.500	2.600
61	9.215	100.000	1.500	2.600
62	8.650	100.000	1.500	2.600
63	9.355	50.000	1.500	2.600
64	9.595	50.000	1.500	2.600
65	9.340	50.000	1.500	2.600
66	8.990	50.000	1.500	2.600
67	8.845	50.000	1.500	2.600
68	8.635	50.000	1.500	2.600
69	8.510	100.000	1.500	2.600
70	8.755	50.000	1.500	2.600
71	8.260	50.000	1.500	2.600
72	8.100	50.000	1.500	2.600
73	8.355	50.000	1.500	2.600
74	7.705	50.000	1.500	2.600
75	7.145	50.000	1.500	2.600
76	6.435	100.000	1.500	2.600
77	5.845	50.000	1.500	2.600
78	6.070	50.000	1.500	2.600
79	6.215	50.000	1.500	2.600

80	6.150	50.000	1.500	2.600
81	6.080	50.000	1.500	2.600
82	6.125	50.000	1.500	2.600
83	6.450	149.000	1.500	2.600
84	6.835	50.000	1.500	2.600
85	6.890	50.000	1.500	2.600
86	7.255	50.000	1.500	2.600
87	7.550	50.000	1.500	2.600
88	7.510	150.000	1.500	2.600
89	7.225	50.000	1.500	2.600
90	7.040	50.000	1.500	2.600
91	6.825	50.000	1.500	2.600
92	6.610	100.000	1.500	2.600
93	6.800	50.000	1.500	2.600
94	6.690	50.000	1.500	2.600
95	6.565	50.000	1.500	2.600
96	6.300	100.000	1.500	2.600
97	6.440	100.000	1.500	2.600
98	6.920	50.000	1.500	2.600
99	7.150	50.000	1.500	2.600
100	7.550	50.000	1.500	2.600
101	7.375	50.000	1.500	2.600
102	7.055	50.000	1.500	2.600
103	6.760	50.000	1.500	2.600
104	6.675	50.000	1.500	2.600
105	6.730	50.000	1.500	2.600
106	6.680	50.000	1.500	2.600
107	6.710	50.000	1.500	2.600
108	6.455	50.000	1.500	2.600
109	6.560	50.000	1.500	2.600
110	6.995	100.000	1.500	2.600
111	7.030	50.000	1.500	2.600
112	7.095	50.000	1.500	2.600
113	7.100	100.000	1.500	2.600
114	7.200	50.000	1.500	2.600
115	7.210	50.000	1.500	2.600
116	7.220	50.000	1.500	2.600
117	7.480	50.000	1.500	2.600
118	7.390	50.000	1.500	2.600
119	7.430	50.000	1.500	2.600
120	7.440	100.000	1.500	2.600
121	7.330	100.000	1.500	2.600
122	7.265	50.000	1.500	2.600
123	7.410	150.000	1.500	2.600
124	7.365	50.000	1.500	2.600
125	7.220	50.000	1.500	2.600
126	7.155	150.000	1.500	2.600
127	6.635	50.000	1.500	2.600
128	6.430	50.000	1.500	2.600
129	6.430	50.000	1.500	2.600

130	6.320	50.000	1.500	2.600
131	6.625	50.000	1.500	2.600
132	6.770	50.000	1.500	2.600
133	6.520	100.000	1.500	2.600
134	6.530	99.000	1.500	2.600
135	6.480	50.000	1.500	2.600
136	6.745	50.000	1.500	2.600
137	6.825	50.000	1.500	2.600
138	6.695	50.000	1.500	2.600
139	6.735	50.000	1.500	2.600
140	6.510	100.000	1.500	2.600
141	6.760	50.000	1.500	2.600
142	7.170	100.000	1.500	2.600
143	7.280	50.000	1.500	2.600
144	7.125	50.000	1.500	2.600
145	7.380	50.000	1.500	2.600
146	7.225	50.000	1.500	2.600
147	6.830	50.000	1.500	2.600
148	7.005	100.000	1.500	2.600
149	7.215	50.000	1.500	2.600
150	7.230	200.000	1.500	2.600
151	7.090	50.000	1.500	2.600
152	7.055	50.000	1.500	2.600
153	6.715	50.000	1.500	2.600
154	6.505	50.000	1.500	2.600
155	6.345	100.000	1.500	2.600
156	6.750	50.000	1.500	2.600
157	7.390	100.000	1.500	2.600
158	7.965	50.000	1.500	2.600
159	8.680	50.000	1.500	2.600
160	8.380	50.000	1.500	2.600
161	7.880	50.000	1.500	2.600
162	7.605	50.000	1.500	2.600
163	7.540	200.000	1.500	2.600
164	7.895	100.000	1.500	2.600
165	7.740	49.000	1.500	2.600
166	7.535	50.000	1.500	2.600
167	7.440	49.000	1.500	2.600
168	7.470	50.000	1.500	2.600
169	7.390	50.000	1.500	2.600
170	7.645	200.000	1.500	2.600
171	8.085	49.000	1.500	2.600
172	7.935	50.000	1.500	2.600
173	7.725	100.000	1.500	2.600
174	7.710	50.000	1.500	2.600
175	7.865	100.000	1.500	2.600
176	8.140	50.000	1.500	2.600
177	8.065	50.000	1.500	2.600
178	7.700	50.000	1.500	2.600
179	8.250	50.000	1.500	2.600

180	8.200	50.000	1.500	2.600
181	7.460	50.000	1.500	2.600
182	7.190	100.000	1.500	2.600
183	7.485	50.000	1.500	2.600
184	7.850	150.000	1.500	2.600
185	7.310	50.000	1.500	2.600
186	7.010	50.000	1.500	2.600
187	7.160	50.000	1.500	2.600
188	6.870	50.000	1.500	2.600
189	6.680	50.000	1.500	2.600
190	7.255	100.000	1.500	2.600
191	7.855	99.000	1.500	2.600
192	7.650	50.000	1.500	2.600
193	7.675	100.000	1.500	2.600
194	6.790	48.000	1.500	2.600
195	5.845	49.000	1.500	2.600
196	6.215	48.000	1.500	2.600
197	6.230	50.000	1.500	2.600
198	6.355	100.000	1.500	2.600
199	6.360	100.000	1.500	2.600
200	5.605	50.000	1.500	2.600
201	5.985	50.000	1.500	2.600
202	7.130	50.000	1.500	2.600
203	6.200	50.000	1.500	2.600
204	6.140	50.000	1.500	2.600
205	7.015	50.000	1.500	2.600
206	7.590	100.000	1.500	2.600
207	8.130	50.000	1.500	2.600
208	7.330	50.000	1.500	2.600
209	7.625	50.000	1.500	2.600
210	7.775	50.000	1.500	2.600
211	7.105	50.000	1.500	2.600
212	6.560	50.000	1.500	2.600
213	6.605	50.000	1.500	2.600
214	7.190	50.000	1.500	2.600
215	6.950	50.000	1.500	2.600
216	6.655	50.000	1.500	2.600
217	6.145	50.000	1.500	2.600
218	5.715	50.000	1.500	2.600
219	5.905	50.000	1.500	2.600
220	6.405	50.000	1.500	2.600
221	6.875	50.000	1.500	2.600
222	6.225	50.000	1.500	2.600
223	5.745	50.000	1.500	2.600
224	6.305	100.000	1.500	2.600
225	6.000	50.000	1.500	2.600
226	5.485	50.000	1.500	2.600
227	5.805	50.000	1.500	2.600
228	5.795	100.000	1.500	2.600
229	5.640	50.000	1.500	2.600

230	5.645	50.000	1.500	2.600
231	5.670	100.000	1.500	2.600
232	5.495	50.000	1.500	2.600
233	5.120	50.000	1.500	2.600
234	5.110	50.000	1.500	2.600
235	5.450	50.000	1.500	2.600
236	5.690	50.000	1.500	2.600
237	5.905	50.000	1.500	2.600
238	7.010	50.000	1.500	2.600
239	7.235	50.000	1.500	2.600
240	6.465	50.000	1.500	2.600
241	6.195	100.000	1.500	2.600
242	5.970	50.000	1.500	2.600
243	5.965	50.000	1.500	2.600
244	6.450	50.000	1.500	2.600
245	7.690	50.000	1.500	2.600
246	7.950	50.000	1.500	2.600
247	7.480	50.000	1.500	2.600
248	7.290	50.000	1.500	2.600
249	7.095	50.000	1.500	2.600
250	7.235	50.000	1.500	2.600
251	7.335	50.000	1.500	2.600
252	7.170	50.000	1.500	2.600
253	7.370	50.000	1.500	2.600
254	7.405	100.000	1.500	2.600
255	6.470	50.000	1.500	2.600
256	5.990	48.000	1.500	2.600
257	5.650	148.000	1.500	2.600
258	5.415	50.000	1.500	2.600
259	6.700	50.000	1.500	2.600
260	6.890	50.000	1.500	2.600
261	6.560	50.000	1.500	2.600
262	6.255	49.000	1.500	2.600
263	5.210	99.000	1.500	2.600
264	5.220	50.000	1.500	2.600
265	5.280	100.000	1.500	2.600
266	5.590	100.000	1.500	2.600
267	6.005	50.000	1.500	2.600
268	5.995	50.000	1.500	2.600
269	6.080	50.000	1.500	2.600
270	6.790	50.000	1.500	2.600
271	6.965	100.000	1.500	2.600
272	6.385	100.000	1.500	2.600
273	6.420	49.000	1.500	2.600
274	6.420	50.000	1.500	2.600
275	6.265	100.000	1.500	2.600
276	6.630	50.000	1.500	2.600
277	6.970	50.000	1.500	2.600
278	6.910	50.000	1.500	2.600
279	6.565	50.000	1.500	2.600

280	6.405	50.000	1.500	2.600
281	6.390	49.000	1.500	2.600
282	6.395	50.000	1.500	2.600
283	6.350	50.000	1.500	2.600
284	6.275	200.000	1.500	2.600
285	7.050	49.000	1.500	2.600
286	7.475	49.000	1.500	2.600
287	7.095	50.000	1.500	2.600
288	6.965	50.000	1.500	2.600
289	7.105	50.000	1.500	2.600
290	7.115	50.000	1.500	2.600
291	6.830	100.000	1.500	2.600
292	5.825	49.000	1.500	2.600
293	5.875	50.000	1.500	2.600
294	7.060	147.000	1.500	2.600
295	7.215	50.000	1.500	2.600
296	7.295	50.000	1.500	2.600
297	7.460	50.000	1.500	2.600
298	7.435	50.000	1.500	2.600
299	7.010	50.000	1.500	2.600
300	6.575	50.000	1.500	2.600
301	6.665	50.000	1.500	2.600
302	7.260	50.000	1.500	2.600
303	7.390	50.000	1.500	2.600
304	7.590	50.000	1.500	2.600
305	7.810	50.000	1.500	2.600
306	7.555	50.000	1.500	2.600
307	7.410	50.000	1.500	2.600
308	7.825	50.000	1.500	2.600
309	7.980	50.000	1.500	2.600
310	7.330	50.000	1.500	2.600
311	7.765	50.000	1.500	2.600
312	7.390	50.000	1.500	2.600
313	6.535	50.000	1.500	2.600
314	6.990	49.000	1.500	2.600
315	6.790	100.000	1.500	2.600
316	6.550	50.000	1.500	2.600
317	6.970	50.000	1.500	2.600
318	6.870	50.000	1.500	2.600
319	6.770	100.000	1.500	2.600
320	7.185	50.000	1.500	2.600
321	7.325	50.000	1.500	2.600
322	7.390	100.000	1.500	2.600
323	7.775	150.000	1.500	2.600
324	7.835	100.000	1.500	2.600
325	7.360	50.000	1.500	2.600
326	7.155	50.000	1.500	2.600
327	7.215	50.000	1.500	2.600
328	7.280	50.000	1.500	2.600
329	7.455	49.000	1.500	2.600

330	6.940	50.000	1.500	2.600
331	5.865	100.000	1.500	2.600
332	6.030	50.000	1.500	2.600
333	6.890	50.000	1.500	2.600
334	7.040	50.000	1.500	2.600
335	7.235	50.000	1.500	2.600
336	7.310	50.000	1.500	2.600
337	7.270	50.000	1.500	2.600
338	7.780	50.000	1.500	2.600
339	7.830	50.000	1.500	2.600
340	7.330	50.000	1.500	2.600
341	8.755	72.000	1.500	2.600

=====
Input Information from Internal Weir R2380-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	9.340	50.000	1.500	2.600
2	10.475	50.000	1.500	2.600
3	10.280	50.000	1.500	2.600
4	9.040	50.000	1.500	2.600
5	9.775	50.000	1.500	2.600
6	11.290	50.000	1.500	2.600
7	9.375	50.000	1.500	2.600
8	9.435	50.000	1.500	2.600
9	10.630	50.000	1.500	2.600
10	11.300	50.000	1.500	2.600
11	11.475	100.000	1.500	2.600
12	10.055	50.000	1.500	2.600
13	10.250	50.000	1.500	2.600
14	10.645	50.000	1.500	2.600
15	11.060	49.000	1.500	2.600
16	11.575	50.000	1.500	2.600
17	9.145	50.000	1.500	2.600
18	6.670	50.000	1.500	2.600
19	6.090	50.000	1.500	2.600
20	6.500	50.000	1.500	2.600
21	6.120	50.000	1.500	2.600
22	5.585	50.000	1.500	2.600
23	5.765	50.000	1.500	2.600
24	5.655	50.000	1.500	2.600
25	6.580	50.000	1.500	2.600
26	6.975	50.000	1.500	2.600
27	6.105	50.000	1.500	2.600
28	6.380	50.000	1.500	2.600
29	6.905	50.000	1.500	2.600
30	7.125	50.000	1.500	2.600

31	5.600	50.000	1.500	2.600
32	5.485	50.000	1.500	2.600
33	6.690	50.000	1.500	2.600
34	6.220	50.000	1.500	2.600
35	6.165	50.000	1.500	2.600
36	5.455	50.000	1.500	2.600
37	5.940	50.000	1.500	2.600
38	7.115	100.000	1.500	2.600
39	5.615	100.000	1.500	2.600
40	5.095	50.000	1.500	2.600
41	6.695	50.000	1.500	2.600
42	6.680	50.000	1.500	2.600
43	5.895	50.000	1.500	2.600
44	5.725	100.000	1.500	2.600
45	6.850	48.000	1.500	2.600
46	13.275	50.000	1.500	2.600
47	20.075	44.000	1.500	2.600
48	21.505	50.000	1.500	2.600
49	20.675	50.000	1.500	2.600
50	14.810	200.000	1.500	2.600
51	9.045	50.000	1.500	2.600
52	8.180	50.000	1.500	2.600
53	8.095	47.000	1.500	2.600
54	8.025	149.000	1.500	2.600
55	8.020	100.000	1.500	2.600
56	8.160	150.000	1.500	2.600
57	8.075	200.000	1.500	2.600
58	7.955	100.000	1.500	2.600
59	8.045	50.000	1.500	2.600
60	8.030	418.000	1.500	2.600

=====
Input Information from Internal Weir R2380-W3.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
-----	-----	-----	-----	-----
1	6.640	50.000	1.500	2.600
2	3.300	50.000	1.500	2.600
3	2.600	50.000	1.500	2.600
4	3.180	50.000	1.500	2.600
5	4.725	50.000	1.500	2.600
6	4.385	49.000	1.500	2.600
7	3.915	50.000	1.500	2.600
8	4.535	50.000	1.500	2.600
9	4.510	50.000	1.500	2.600
10	5.430	50.000	1.500	2.600
11	6.555	50.000	1.500	2.600
12	8.400	50.000	1.500	2.600

13	8.120	50.000	1.500	2.600
14	4.950	50.000	1.500	2.600
15	4.065	50.000	1.500	2.600
16	3.995	100.000	1.500	2.600
17	3.340	50.000	1.500	2.600
18	3.300	50.000	1.500	2.600
19	3.565	98.000	1.500	2.600
20	2.900	50.000	1.500	2.600
21	2.575	50.000	1.500	2.600
22	4.630	50.000	1.500	2.600
23	7.145	35.000	1.500	2.600

=====
Input Information from Internal Weir R0440-W2.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	5.205	33.000	1.500	2.600
2	5.570	14.000	1.500	2.600
3	5.930	4.000	1.500	2.600
4	6.340	14.000	1.500	2.600
5	6.410	14.000	1.500	2.600
6	5.765	14.000	1.500	2.600
7	5.490	15.000	1.500	2.600
8	6.150	10.000	1.500	2.600
9	6.620	5.000	1.500	2.600
10	6.505	20.000	1.500	2.600
11	6.035	14.000	1.500	2.600
12	5.935	5.000	1.500	2.600
13	6.275	5.000	1.500	2.600
14	6.320	20.000	1.500	2.600
15	6.075	10.000	1.500	2.600
16	5.940	10.000	1.500	2.600
17	5.635	15.000	1.500	2.600
18	5.250	5.000	1.500	2.600
19	5.340	10.000	1.500	2.600
20	5.755	10.000	1.500	2.600
21	5.980	15.000	1.500	2.600
22	6.155	14.000	1.500	2.600
23	6.480	20.000	1.500	2.600
24	6.535	15.000	1.500	2.600
25	6.255	10.000	1.500	2.600
26	5.880	10.000	1.500	2.600
27	5.805	10.000	1.500	2.600
28	5.515	15.000	1.500	2.600
29	5.095	10.000	1.500	2.600
30	5.125	10.000	1.500	2.600
31	5.295	10.000	1.500	2.600

32	5.640	15.000	1.500	2.600
33	6.245	29.000	1.500	2.600
34	6.305	10.000	1.500	2.600
35	5.725	5.000	1.500	2.600
36	5.135	5.000	1.500	2.600
37	4.600	10.000	1.500	2.600
38	3.375	15.000	1.500	2.600
39	2.275	5.000	1.500	2.600
40	1.930	25.000	1.500	2.600
41	1.795	5.000	1.500	2.600
42	2.320	20.000	1.500	2.600
43	3.430	9.000	1.500	2.600
44	4.755	15.000	1.500	2.600
45	5.615	5.000	1.500	2.600
46	5.520	5.000	1.500	2.600
47	5.735	20.000	1.500	2.600
48	5.875	10.000	1.500	2.600
49	5.635	5.000	1.500	2.600
50	6.150	10.000	1.500	2.600
51	6.505	5.000	1.500	2.600
52	6.055	10.000	1.500	2.600
53	5.590	5.000	1.500	2.600
54	5.500	5.000	1.500	2.600
55	5.730	10.000	1.500	2.600
56	6.005	20.000	1.500	2.600
57	6.195	9.000	1.500	2.600
58	6.300	5.000	1.500	2.600
59	5.810	10.000	1.500	2.600
60	5.250	5.000	1.500	2.600
61	5.110	5.000	1.500	2.600
62	5.455	15.000	1.500	2.600
63	5.855	5.000	1.500	2.600
64	5.645	5.000	1.500	2.600
65	5.255	5.000	1.500	2.600
66	5.060	5.000	1.500	2.600
67	5.085	26.000	1.500	2.600
68	4.855	17.000	1.500	2.600
69	4.555	20.000	1.500	2.600
70	4.740	10.000	1.500	2.600
71	4.950	20.000	1.500	2.600
72	5.245	10.000	1.500	2.600
73	5.240	10.000	1.500	2.600
74	5.210	10.000	1.500	2.600
75	5.795	25.000	1.500	2.600
76	6.040	20.000	1.500	2.600
77	5.570	14.000	1.500	2.600
78	5.135	10.000	1.500	2.600
79	5.180	30.000	1.500	2.600
80	5.435	15.000	1.500	2.600
81	5.120	10.000	1.500	2.600

82	4.695	5.000	1.500	2.600
83	5.155	10.000	1.500	2.600
84	5.655	5.000	1.500	2.600

=====
Input Information from Internal Weir R015-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.440	2670.000	1.500	2.600
2	3.690	12.000	1.500	2.600
3	4.190	12.000	1.500	2.600
4	4.690	12.000	1.500	2.600
5	5.190	12.000	1.500	2.600
6	5.690	12.000	1.500	2.600
7	6.190	12.000	1.500	2.600
8	6.690	12.000	1.500	2.600

=====
Input Information from Internal Weir R020-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	0.370	14.000	1.500	2.600
2	0.620	10.000	1.500	2.600
3	1.120	10.000	1.500	2.600
4	1.620	10.000	1.500	2.600
5	2.120	10.000	1.500	2.600
6	2.620	10.000	1.500	2.600
7	3.120	10.000	1.500	2.600
8	3.620	10.000	1.500	2.600

=====
Input Information from Internal Weir R021-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.170	550.000	1.500	2.600
2	3.420	12.000	1.500	2.600
3	3.920	12.000	1.500	2.600
4	4.420	12.000	1.500	2.600
5	4.920	12.000	1.500	2.600
6	5.420	12.000	1.500	2.600
7	5.920	12.000	1.500	2.600

8 6.420 12.000 1.500 2.600

=====
 Input Information from Internal Weir R030-W1.1
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	2.570	250.000	1.500	2.600
2	2.820	12.000	1.500	2.600
3	3.320	12.000	1.500	2.600
4	3.820	12.000	1.500	2.600
5	4.320	12.000	1.500	2.600
6	4.820	12.000	1.500	2.600
7	5.320	12.000	1.500	2.600
8	5.820	12.000	1.500	2.600

=====
 Input Information from Internal Weir R031-W1.1
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.350	550.000	1.500	2.600
2	3.600	12.000	1.500	2.600
3	4.100	12.000	1.500	2.600
4	4.600	12.000	1.500	2.600
5	5.100	12.000	1.500	2.600
6	5.600	12.000	1.500	2.600
7	6.100	12.000	1.500	2.600
8	6.600	12.000	1.500	2.600

=====
 Input Information from Internal Weir R042-W1.1
 =====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.130	910.000	1.500	3.200
2	3.380	12.000	1.500	3.200
3	3.880	12.000	1.500	3.200
4	4.380	12.000	1.500	3.200
5	4.880	12.000	1.500	3.200
6	5.380	12.000	1.500	3.200
7	5.880	12.000	1.500	3.200
8	6.380	12.000	1.500	3.200

=====
Input Information from Internal Weir R043-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	3.660	700.000	1.500	2.600
2	3.910	12.000	1.500	2.600
3	4.410	12.000	1.500	2.600
4	4.910	12.000	1.500	2.600
5	5.410	12.000	1.500	2.600
6	5.910	12.000	1.500	2.600
7	6.410	12.000	1.500	2.600
8	6.910	12.000	1.500	2.600

=====
Input Information from Internal Weir R0850-W1.1
=====

Point No.	Data Column # 1	Data Column # 2	Data Column # 3	Data Column # 4
1	6.440	5.000	1.500	2.600
2	6.435	5.000	1.500	2.600
3	6.350	5.000	1.500	2.600
4	6.025	10.000	1.500	2.600
5	5.275	15.000	1.500	2.600
6	4.565	21.000	1.500	2.600
7	4.330	14.000	1.500	2.600
8	4.440	24.000	1.500	2.600
9	4.470	20.000	1.500	2.600
10	4.575	29.000	1.500	2.600
11	4.665	54.000	1.500	2.600
12	4.565	46.000	1.500	2.600
13	4.725	31.000	1.500	2.600
14	5.065	14.000	1.500	2.600
15	5.180	10.000	1.500	2.600
16	4.990	58.000	1.500	2.600
17	4.770	15.000	1.500	2.600
18	4.740	25.000	1.500	2.600
19	4.720	14.000	1.500	2.600
20	4.870	50.000	1.500	2.600
21	5.060	10.000	1.500	2.600
22	5.080	30.000	1.500	2.600
23	5.025	30.000	1.500	2.600
24	4.915	15.000	1.500	2.600
25	4.875	5.000	1.500	2.600
26	4.890	19.000	1.500	2.600

=====

| Table E1 - Conduit Data |

=====

Inp Depth Num (ft)	Trapezoid Side Slopes	Hazen Conduit Williams Name c-factor	Length (ft)	Conduit Class	Area (ft^2)	Manning Coef.	Max Width (ft)
1 4.0000		R0870	31.0000	H Ellipse	20.5000	0.0110	6.3333
2 4.0000		R0770-P2	200.0000	Circular	12.5664	0.0120	4.0000
3 4.0000		R0900	169.0000	H Ellipse	20.5000	0.0120	6.3333
4 2.0000		R0370	115.0000	H Ellipse	5.1000	0.0120	3.1667
5 2.0000		R0280	51.0000	Circular	3.1416	0.0120	2.0000
6 5.0000		R0202	94.0000	Circular	19.6350	0.0120	5.0000
7 2.0000		RN-002	60.0000	Circular	3.1416	0.0130	2.0000
8 2.0000		RN-003	70.0000	Circular	3.1416	0.0120	2.0000
9 3.0000		RN-006	60.0000	Circular	7.0686	0.0120	3.0000
10 2.5000		RN-007	75.0000	Circular	4.9087	0.0120	2.5000
11 3.0000		RN-009	280.0000	Circular	7.0686	0.0120	3.0000
12 2.5000		RN-009MH	152.0000	Circular	4.9087	0.0120	2.5000
13 3.5000		RN-011	310.0000	Circular	9.6211	0.0120	3.5000
14 3.5000		RN-014	15.0000	Circular	9.6211	0.0120	3.5000
15 4.0000		RN-012	655.0000	Circular	12.5664	0.0120	4.0000
16 1.5000		RN-023	110.0000	Circular	1.7671	0.0120	1.5000
17 1.2500		RN-021	70.0000	Circular	1.2272	0.0120	1.2500
18 2.5000		RN-041	90.0000	Circular	4.9087	0.0120	2.5000
19 3.0000		RN-020	80.0000	Circular	7.0686	0.0120	3.0000

20	RN-022	70.0000	Circular	8.7265	0.0120	3.3333
3.3333						
21	RN-024	85.0000	Circular	4.9087	0.0120	2.5000
2.5000						
22	RN-026	50.0000	Circular	1.7671	0.0120	1.5000
1.5000						
23	RN-027	50.0000	Circular	1.7671	0.0120	1.5000
1.5000						
24	RN-028	78.0000	Circular	1.7671	0.0120	1.5000
1.5000						
25	R0742-P3	243.0000	Circular	3.1416	0.0130	2.0000
2.0000						
26	R0655-P2	93.0000	Circular	4.9087	0.0110	2.5000
2.5000						
27	R0655-P3	93.0000	Circular	4.9087	0.0110	2.5000
2.5000						
28	R0655-P4	93.0000	Circular	4.9087	0.0110	2.5000
2.5000						
29	R0120-P2	156.0000	Circular	4.9087	0.0120	2.5000
2.5000						
30	R1010-P2	54.0000	Circular	1.7671	0.0240	1.5000
1.5000						
31	RN-025-P1	83.0000	Circular	7.0686	0.0120	3.0000
3.0000						
32	RN-025-P2	83.0000	Circular	7.0686	0.0120	3.0000
3.0000						
33	R0155-P1	42.0000	Circular	9.6211	0.0240	3.5000
3.5000						
34	R0386	33.0000	Natural	194.6050	0.0350	79.0000
6.0700						
35	R0388	33.0000	Natural	194.6050	0.0350	79.0000
6.0700						
36	R0385	33.0000	Natural	194.6050	0.0350	79.0000
6.0700						
37	R0375	33.0000	Natural	200.9050	0.0350	69.0000
5.4300						
38	R0335	33.0000	Natural	228.5800	0.0350	76.0000
6.8800						
39	R-0001B-P1	506.0000	Circular	7.0686	0.0140	3.0000
3.0000						
40	R0540-P1	66.0000	Circular	3.1416	0.0110	2.0000
2.0000						
41	R0540-P2	66.0000	Circular	3.1416	0.0110	2.0000
2.0000						
42	R0540-P3	66.0000	Circular	3.1416	0.0110	2.0000
2.0000						
43	R0290-P1	79.0000	Circular	4.9087	0.0120	2.5000
2.5000						
44	R0285.1	53.0000	Circular	4.9087	0.0120	2.5000
2.5000						

45	R0250.1	88.0000	Circular	3.1416	0.0120	2.0000
2.0000						
46	R0230.1	42.0000	Circular	3.1416	0.0240	2.0000
2.0000						
47	R0220.1	164.0000	H Ellipse	20.5000	0.0120	6.3333
4.0000						
48	R0200.1	66.0000	H Ellipse	7.4000	0.0120	3.7500
2.4167						
49	R0190.1	91.0000	Circular	3.1416	0.0240	2.0000
2.0000						
50	R0170.1	74.0000	Circular	12.5664	0.0120	4.0000
4.0000						
51	R0180-P1	182.0000	Circular	7.0686	0.0120	3.0000
3.0000						
52	R0180-P2	184.0000	Circular	7.0686	0.0120	3.0000
3.0000						
53	R0140.1	22.0000	Circular	3.1416	0.0240	2.0000
2.0000						
54	R0140-P3.1	22.0000	Circular	3.1416	0.0240	2.0000
2.0000						
55	R0150-P1	67.0000	Circular	3.1416	0.0110	2.0000
2.0000						
56	R0150-P2	68.0000	Circular	0.7854	0.0110	1.0000
1.0000						
57	R0150-P3	68.0000	Circular	1.7671	0.0120	1.5000
1.5000						
58	R0150-P4	68.0000	Circular	3.1416	0.0110	2.0000
2.0000						
59	R0150-P5	68.0000	Circular	1.2272	0.0110	1.2500
1.2500						
60	R0110.1	268.0000	Circular	3.1416	0.0240	2.0000
2.0000						
61	R0130-P1	62.0000	Circular	15.9043	0.0120	4.5000
4.5000						
62	R0130-P2	65.0000	Circular	15.9043	0.0120	4.5000
4.5000						
63	R0100-P1	63.0000	Circular	7.0686	0.0120	3.0000
3.0000						
64	R0100-P2	64.0000	Circular	7.0686	0.0120	3.0000
3.0000						
65	R0310.1	88.0000	Circular	4.9087	0.0120	2.5000
2.5000						
66	R0430-P1	151.0000	Circular	3.1416	0.0120	2.0000
2.0000						
67	R0430-P2	151.0000	Circular	3.1416	0.0120	2.0000
2.0000						
68	R0430-P3	151.0000	Circular	3.1416	0.0120	2.0000
2.0000						
69	R0430-P4	152.0000	Circular	3.1416	0.0120	2.0000
2.0000						

70	R0340-P1	39.0000	Circular	9.6211	0.0110	3.5000
3.5000						
71	R0340-P2	39.0000	Circular	9.6211	0.0110	3.5000
3.5000						
72	R0350-P1	61.0000	Circular	9.6211	0.0110	3.5000
3.5000						
73	R0350-P2	61.0000	Circular	9.6211	0.0110	3.5000
3.5000						
74	R0330-P1	75.0000	Circular	9.6211	0.0110	3.5000
3.5000						
75	R0330-P2	75.0000	Circular	9.6211	0.0110	3.5000
3.5000						
76	R0450-P1	22.0000	Circular	4.9087	0.0240	2.5000
2.5000						
77	R0450-P2	22.0000	Circular	4.9087	0.0240	2.5000
2.5000						
78	P0360-P1	21.0000	Circular	1.7671	0.0240	1.5000
1.5000						
79	P0360-P2	21.0000	Circular	1.7671	0.0240	1.5000
1.5000						
80	R0550-P1	48.0000	Circular	12.5664	0.0120	4.0000
4.0000						
81	R0550-P2	48.0000	Circular	12.5664	0.0120	4.0000
4.0000						
82	R0560-P1	116.0000	Circular	12.5664	0.0140	4.0000
4.0000						
83	R0560-P2	116.0000	Circular	12.5664	0.0110	4.0000
4.0000						
84	R0560-P3	116.0000	Circular	12.5664	0.0110	4.0000
4.0000						
85	R0780.1	142.0000	H Ellipse	10.2000	0.0120	4.4167
2.8333						
86	R0740.1	25.0000	Circular	3.1416	0.0240	2.0000
2.0000						
87	R0730.1	22.0000	H Ellipse	1.8000	0.0240	1.9167
1.1667						
88	R0880.1	48.0000	Circular	9.6211	0.0120	3.5000
3.5000						
89	R0950.1	46.0000	Circular	3.1416	0.0120	2.0000
2.0000						
90	R0920.1	30.0000	Circular	7.0686	0.0120	3.0000
3.0000						
91	R0960.1	54.0000	Circular	4.9087	0.0120	2.5000
2.5000						
92	R0990.1	35.0000	Circular	3.1416	0.0120	2.0000
2.0000						
93	R1010-P3	124.0000	Circular	4.9087	0.0120	2.5000
2.5000						
94	R1010-P4	125.0000	Circular	4.9087	0.0120	2.5000
2.5000						

95	R1010-P5	127.0000	Circular	4.9087	0.0120	2.5000
2.5000						
96	R0980-P1.1	54.0000	Circular	4.9087	0.0120	2.5000
2.5000						
97	R0980-P2.1	58.0000	Circular	4.9087	0.0240	2.5000
2.5000						
98	R0850-P1	153.0000	Circular	4.9087	0.0240	2.5000
2.5000						
99	R0850-P2	149.0000	Circular	4.9087	0.0240	2.5000
2.5000						
100	R0850-P3	148.0000	Circular	4.9087	0.0240	2.5000
2.5000						
101	R0570-P1	135.0000	Circular	12.5664	0.0120	4.0000
4.0000						
102	R0570-P2	135.0000	Circular	12.5664	0.0120	4.0000
4.0000						
103	R0570-P3	135.0000	Circular	12.5664	0.0120	4.0000
4.0000						
104	R0770-P1.1	21.0000	Circular	7.0686	0.0240	3.0000
3.0000						
105	R0770-P3	243.0000	Circular	12.5664	0.0120	4.0000
4.0000						
106	R0770-P4	242.0000	Circular	12.5664	0.0120	4.0000
4.0000						
107	R0790-P1	267.0000	H Ellipse	20.5000	0.0120	6.3333
4.0000						
108	R0790-P2	246.0000	Circular	12.5664	0.0120	4.0000
4.0000						
109	R0530-P1	38.0000	Circular	3.1416	0.0110	2.0000
2.0000						
110	R0530-P2	39.0000	Circular	3.1416	0.0110	2.0000
2.0000						
111	R0530-P3	39.0000	Circular	3.1416	0.0110	2.0000
2.0000						
112	R0910-P1	33.0000	Circular	17.7205	0.0240	4.7500
4.7500						
113	R0910-P2	84.0000	Circular	17.7205	0.0240	4.7500
4.7500						
114	R0380-P1	25.0000	Circular	9.6211	0.0120	3.5000
3.5000						
115	R0380-P2	25.0000	Circular	9.6211	0.0120	3.5000
3.5000						
116	R0300-P1	40.0000	Circular	3.1416	0.0240	2.0000
2.0000						
117	R0300-P2	40.0000	Circular	3.1416	0.0240	2.0000
2.0000						
118	R0290-P2.1	121.0000	Circular	3.1416	0.0120	2.0000
2.0000						
119	RN-004-P1	67.0000	Circular	4.9087	0.0120	2.5000
2.5000						

120	RN-004-P2	65.0000	Circular	4.9087	0.0120	2.5000
2.5000						
121	RN-004-P3	67.0000	Circular	4.9087	0.0120	2.5000
2.5000						
122	RN-001-P1	38.0000	Circular	4.9087	0.0240	2.5000
2.5000						
123	RN-001-P2	38.0000	Circular	4.9087	0.0240	2.5000
2.5000						
124	RN-001-P3	38.0000	Circular	4.9087	0.0240	2.5000
2.5000						
125	RN-005-P1	92.0000	Circular	4.9087	0.0120	2.5000
2.5000						
126	RN-005-P2	33.0000	Circular	4.9087	0.0120	2.5000
2.5000						
127	RN-005-P3	92.0000	Circular	4.9087	0.0120	2.5000
2.5000						
128	RN-008-P1.1	80.0000	Circular	7.0686	0.0120	3.0000
3.0000						
129	RN-008-P2	80.0000	Circular	7.0686	0.0120	3.0000
3.0000						
130	RN-008-P3	80.0000	Circular	7.0686	0.0120	3.0000
3.0000						
131	RN-010-P1	106.0000	Circular	7.0686	0.0120	3.0000
3.0000						
132	RN-010-P2	106.0000	Circular	7.0686	0.0120	3.0000
3.0000						
133	RN-010-P3	105.0000	Circular	7.0686	0.0120	3.0000
3.0000						
134	RN-013-P1	160.0000	Circular	7.0686	0.0120	3.0000
3.0000						
135	RN-013-P2	160.0000	Circular	7.0686	0.0120	3.0000
3.0000						
136	RN-013-P3	160.0000	Circular	7.0686	0.0120	3.0000
3.0000						
137	RN-015-P1	90.0000	Circular	7.0686	0.0110	3.0000
3.0000						
138	RN-015-P2	90.0000	Circular	7.0686	0.0110	3.0000
3.0000						
139	RN-015-P3	90.0000	Circular	7.0686	0.0110	3.0000
3.0000						
140	RN-029-P1	75.0000	Circular	7.0686	0.0120	3.0000
3.0000						
141	RN-029-P2	75.0000	Circular	7.0686	0.0120	3.0000
3.0000						
142	R0742-P1	90.0000	Circular	7.0686	0.0130	3.0000
3.0000						
143	R0742-P2	90.0000	Circular	7.0686	0.0130	3.0000
3.0000						
144	R0655-P1.1	93.0000	Circular	4.9087	0.0110	2.5000
2.5000						

145	R0490-P8	89.0000	Circular	1.2272	0.0110	1.2500
1.2500						
146	R0490-P7	89.0000	Circular	1.2272	0.0110	1.2500
1.2500						
147	R0140-P2.1	86.0000	Circular	7.0686	0.0110	3.0000
3.0000						
148	R0140-P1.1	83.0000	Circular	7.0686	0.0110	3.0000
3.0000						
149	R0120-P1.1	157.0000	Circular	4.9087	0.0120	2.5000
2.5000						
150	R0160-P1.1	29.0000	Circular	4.9087	0.0240	2.5000
2.5000						
151	R0325-P1.1	49.0000	Circular	4.9087	0.0120	2.5000
2.5000						
152	R0400-P1.1	39.0000	Circular	9.6211	0.0120	3.5000
3.5000						
153	R0880-P2.1	55.0000	Circular	7.0686	0.0120	3.0000
3.0000						
154	R1010-P1.1	54.0000	Circular	1.7671	0.0240	1.5000
1.5000						
155	R-0410-P4	68.0000	Circular	1.7671	0.0110	1.5000
1.5000						
156	R-0410-P5	68.0000	Circular	1.7671	0.0110	1.5000
1.5000						
157	R-0410-P6	67.0000	Circular	1.7671	0.0110	1.5000
1.5000						
158	R-0410-P7	68.0000	Circular	1.7671	0.0110	1.5000
1.5000						
159	R0410-P1	74.0000	Circular	9.6211	0.0120	3.5000
3.5000						
160	R0410-P2	74.0000	Circular	9.6211	0.0120	3.5000
3.5000						
161	R0410-P3	74.0000	Circular	9.6211	0.0120	3.5000
3.5000						
162	498.1	89.0000	Circular	1.7671	0.0110	1.5000
1.5000						
163	R0490-P1.1	90.0000	Circular	1.7671	0.0110	1.5000
1.5000						
164	R0490-P3	91.0000	Circular	1.2272	0.0110	1.2500
1.2500						
165	R0490-P4	92.0000	Circular	1.2272	0.0110	1.2500
1.2500						
166	R0490-P5	91.0000	Circular	1.2272	0.0110	1.2500
1.2500						
167	R0490-P6	91.0000	Circular	1.2272	0.0110	1.2500
1.2500						
168	R0890-ORF-2	10.0000	Circular	0.5450	0.0120	0.8330
0.8330						
169	R0890-ORF-5	10.0000	Circular	0.5450	0.0120	0.8330
0.8330						

170	R0890ORF-3	10.0000	Circular	0.5450	0.0120	0.8330
0.8330						
171	R0890-ORF-4	10.0000	Circular	0.5450	0.0120	0.8330
0.8330						
172	N0140-A-W1.1	200.0000	Trapezoid	72.0000	0.0400	10.0000
4.0000	2.0000 2.0000					
173	R0540-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
174	R0290-P5	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
175	R0285-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
176	R0250-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
177	R0230-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
178	R0220-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
179	R0200-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
180	R0190-W4	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
181	R0170-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
182	R0180-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
183	R0140-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
184	R0150-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
185	R0110-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
186	R0130-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
187	R0100-W4	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
188	R0310-W5.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
189	R0430-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
190	R0340-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
191	R0350-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
192	R0330-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
193	R0360-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
194	R0550-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

195	R0560-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
196	R0780-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
197	R0740-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
198	R0870-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
199	R0950-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
200	R0960-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
201	R0990-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
202	R1010-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
203	R0980-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
204	R0850-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
205	R0770-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
206	R0530-W4	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
207	R0380-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
208	R0300-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
209	R0290-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
210	R0655-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
211	R0140-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
212	R0120-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
213	R0160-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
214	R0400-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
215	R0880-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
216	R1010-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
217	R0490-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
218	R0050-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
219	R0050-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

220	R0060-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
221	R0080-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
222	R0080-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
223	R0090-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
224	R0090-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
225	R0090-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
226	R0090-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
227	R0100-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
228	R0100-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
229	R0100-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
230	R0110-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
231	R0120-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
232	R0130-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
233	R0150-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
234	R0150-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
235	R0170-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
236	R0170-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
237	R0190-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
238	R0190-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
239	R0190-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
240	R0200-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
241	R0200-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
242	R0220-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
243	R0240-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
244	R0240-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

245	R0240-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
246	R0240-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
247	R0240-W5.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
248	R0240-W6.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
249	R0250-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
250	R0250-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
251	R0260-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
252	R0270-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
253	R0270-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
254	R0270-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
255	R0275-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
256	R0280-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
257	R0285-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
258	R0290-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
259	R0290-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
260	R0290-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
261	R0300-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
262	R0310-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
263	R0310-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
264	R0310-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
265	R0310-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
266	R0325-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
267	R0330-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
268	R0330-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
269	R0340-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

270	R0340-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
271	R0350-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
272	R0350-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
273	R0360-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
274	R0360-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
275	R0370-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
276	R0370-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
277	R0370-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
278	R0380-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
279	R0380-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
280	R0380-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
281	R0390-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
282	R0390-W2	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
283	R0400-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
284	R0410-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
285	R0420-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
286	R0420-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
287	R0430-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
288	R0430-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
289	R0440-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
290	R0450-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
291	R0450-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
292	R0460-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
293	R0460-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
294	R0480-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

295	R0480-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
296	R0480-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
297	R0490-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
298	R0490-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
299	R0500-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
300	R0510-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
301	R0520-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
302	R0520-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
303	R0530-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
304	R0530-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
305	R0530-W3	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
306	R0540-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
307	R0540-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
308	R0550-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
309	R0550-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
310	R0560-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
311	R0560-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
312	R0560-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
313	R0560-W5.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
314	R0570-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
315	R0570-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
316	R0570-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
317	R0570-W5.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
318	R0640-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
319	R0650-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

320	R0660-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
321	R0660-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
322	R0690-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
323	R0720-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
324	R0730-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
325	R0740-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
326	R0740-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
327	R0775-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
328	R0780-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
329	R0790-W1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
330	R0800-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
331	R0800-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
332	R0810-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
333	R0830-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
334	R0850-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
335	R0870-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
336	R0885-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
337	R0910-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
338	R0930-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
339	R0940-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
340	R0940-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
341	R0945-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
342	R0950-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
343	R0960-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
344	R0960-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

345	R0960-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
346	R0980-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
347	R0990-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
348	R0990-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
349	R1000-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
350	R1020-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
351	R1030-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
352	R1030-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
353	R2002-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
354	R02040-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
355	R2090-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
356	R2370-W4.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
357	R2380-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
358	R2380-W3.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
359	R0440-W2.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
360	R015-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
361	R020-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
362	R021-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
363	R030-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
364	R031-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
365	R042-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
366	R043-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						
367	R0850-W1.1	1000.0000	Closd Cnd	0.0000	0.0140	0.0000
0.0000						

Total length of all conduits 210845.0000 feet

=====

| If there are messages about (sqrt(g*d)*dt/dx), or |

```

| the sqrt(wave celerity)*time step/conduit length |
| in the output file all it means is that the      |
| program will lower the internal time step to    |
| satisfy this condition (explicit condition).     |
| You control the actual internal time step by    |
| using the minimum courant time step factor in the |
| HYDRAULICS job control. The message put in words |
| states that the smallest conduit with the fastest |
| velocity will control the time step selection.   |
| You have further control by using the modify    |
| conduit option in the HYDRAULICS Job Control.   |
|=====

```

Conduit Name	Courant Ratio	
R0870	21.97	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
R0770-P2	3.40	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
R0900	4.03	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
R0370	4.19	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
R0280	9.44	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
R0202	8.10	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-002	8.02	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-003	6.88	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-006	9.83	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-007	7.18	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-009	2.11	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-009MH	3.54	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-011	2.05	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-014	42.46	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-012	1.04	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-023	3.79	====> Warning ! (sqrt(wave celerity)*time step/conduit length)
RN-021	5.44	====> Warning ! (sqrt(wave celerity)*time step/conduit length)

step/conduit length)	RN-041	5.98	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-020	7.37	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-022	8.88	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-024	6.33	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-026	8.34	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-027	8.34	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-028	5.35	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0742-P3	1.98	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0655-P2	5.79	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0655-P3	5.79	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0655-P4	5.79	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0120-P2	3.45	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R1010-P2	7.72	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-025-P1	7.10	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	RN-025-P2	7.10	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0155-P1	15.17	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0386	16.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0388	16.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0385	16.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0375	17.61	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0335	17.89	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R-0001B-P1	1.17	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0540-P1	7.30	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0540-P2	7.30	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0540-P3	7.30	====> Warning ! (sqrt(wave celerity)*time

step/conduit length)	R0290-P1	6.81	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0285.1	10.16	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0250.1	5.47	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0230.1	11.46	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0220.1	4.15	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0200.1	8.02	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0190.1	5.29	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0170.1	9.20	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0180-P1	3.24	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0180-P2	3.20	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0140.1	21.89	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0140-P3.1	21.89	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0150-P1	7.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0150-P2	5.01	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0150-P3	6.13	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0150-P4	7.08	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0150-P5	5.60	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0110.1	1.80	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0130-P1	11.65	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0130-P2	11.11	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0100-P1	9.36	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0100-P2	9.21	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0310.1	6.12	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0430-P1	3.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0430-P2	3.19	====> Warning ! (sqrt(wave celerity)*time

step/conduit length)	R0430-P3	3.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0430-P4	3.17	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0340-P1	16.33	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0340-P2	16.33	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0350-P1	10.44	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0350-P2	10.44	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0330-P1	8.49	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0330-P2	8.49	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0450-P1	24.47	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0450-P2	24.47	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	P0360-P1	19.86	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	P0360-P2	19.86	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0550-P1	14.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0550-P2	14.19	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0560-P1	5.87	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0560-P2	5.87	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0560-P3	5.87	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0780.1	4.04	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0740.1	19.26	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0730.1	16.72	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0880.1	13.27	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0950.1	10.47	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0920.1	19.66	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0960.1	9.97	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)	R0990.1	13.76	====> Warning ! (sqrt(wave celerity)*time

step/conduit length)			
R1010-P3	4.34	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R1010-P4	4.31	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R1010-P5	4.24	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0980-P1.1	9.97	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0980-P2.1	9.28	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0850-P1	3.52	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0850-P2	3.61	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0850-P3	3.64	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0570-P1	5.04	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0570-P2	5.04	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0570-P3	5.04	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0770-P1.1	28.08	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0770-P3	2.80	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0770-P4	2.81	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0790-P1	2.55	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0790-P2	2.77	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0530-P1	12.67	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0530-P2	12.35	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0530-P3	12.35	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0910-P1	22.49	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0910-P2	8.83	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0380-P1	25.48	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0380-P2	25.48	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0300-P1	12.04	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0300-P2	12.04	====>	Warning ! (sqrt(wave celerity)*time

step/conduit length)			
R0290-P2.1	3.98	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-004-P1	8.03	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-004-P2	8.28	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-004-P3	8.03	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-001-P1	14.17	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-001-P2	14.17	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-001-P3	14.17	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-005-P1	5.85	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-005-P2	16.31	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-005-P3	5.85	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-008-P1.1	7.37	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-008-P2	7.37	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-008-P3	7.37	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-010-P1	5.56	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-010-P2	5.56	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-010-P3	5.62	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-013-P1	3.69	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-013-P2	3.69	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-013-P3	3.69	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-015-P1	6.55	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-015-P2	6.55	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-015-P3	6.55	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-029-P1	7.86	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
RN-029-P2	7.86	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0742-P1	6.55	====>	Warning ! (sqrt(wave celerity)*time

step/conduit length)			
R0742-P2	6.55	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0655-P1.1	5.79	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0490-P8	4.28	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0490-P7	4.28	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0140-P2.1	6.86	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0140-P1.1	7.10	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0120-P1.1	3.43	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0160-P1.1	18.56	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0325-P1.1	10.99	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0400-P1.1	16.33	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0880-P2.1	10.72	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R1010-P1.1	7.72	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R-0410-P4	6.13	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R-0410-P5	6.13	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R-0410-P6	6.22	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R-0410-P7	6.13	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0410-P1	8.61	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0410-P2	8.61	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0410-P3	8.61	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
498.1	4.69	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0490-P1.1	4.63	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0490-P3	4.18	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0490-P4	4.14	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0490-P5	4.18	====>	Warning ! (sqrt(wave celerity)*time
step/conduit length)			
R0490-P6	4.18	====>	Warning ! (sqrt(wave celerity)*time

step/conduit length)		
R0890-ORF-2	31.07	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)		
R0890-ORF-5	31.07	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)		
R0890ORF-3	31.07	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)		
R0890-ORF-4	31.07	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)		
N0140-A-W1.1	2.83	====> Warning ! (sqrt(wave celerity)*time
step/conduit length)		
R0540-W3	0.00	
R0290-P5	0.00	
R0285-W2	0.00	
R0250-W1	0.00	
R0230-W1	0.00	
R0220-W2	0.00	
R0200-W3	0.00	
R0190-W4	0.00	
R0170-W3	0.00	
R0180-W1	0.00	
R0140-W1	0.00	
R0150-W3	0.00	
R0110-W1	0.00	
R0130-W1	0.00	
R0100-W4	0.00	
R0310-W5.1	0.00	
R0430-W3	0.00	
R0340-W3	0.00	
R0350-W1	0.00	
R0330-W1	0.00	
R0360-W1	0.00	
R0550-W2	0.00	
R0560-W1	0.00	
R0780-W1	0.00	
R0740-W3	0.00	
R0870-W1	0.00	
R0950-W1	0.00	
R0960-W2	0.00	
R0990-W2	0.00	
R1010-W2	0.00	
R0980-W2	0.00	
R0850-W2	0.00	
R0770-W2	0.00	
R0530-W4	0.00	
R0380-W3	0.00	
R0300-W2	0.00	
R0290-W1	0.00	
R0655-W2	0.00	
R0140-W2	0.00	

R0120-W2	0.00
R0160-W1	0.00
R0400-W1	0.00
R0880-W2	0.00
R1010-W1	0.00
R0490-W2	0.00
R0050-W1.1	0.00
R0050-W2.1	0.00
R0060-W1.1	0.00
R0080-W1.1	0.00
R0080-W2.1	0.00
R0090-W1.1	0.00
R0090-W2.1	0.00
R0090-W3.1	0.00
R0090-W4.1	0.00
R0100-W1.1	0.00
R0100-W2.1	0.00
R0100-W3.1	0.00
R0110-W2.1	0.00
R0120-W1.1	0.00
R0130-W2.1	0.00
R0150-W1.1	0.00
R0150-W2.1	0.00
R0170-W1.1	0.00
R0170-W2.1	0.00
R0190-W1.1	0.00
R0190-W2.1	0.00
R0190-W3.1	0.00
R0200-W1.1	0.00
R0200-W2.1	0.00
R0220-W1.1	0.00
R0240-W1.1	0.00
R0240-W2.1	0.00
R0240-W3.1	0.00
R0240-W4.1	0.00
R0240-W5.1	0.00
R0240-W6.1	0.00
R0250-W2.1	0.00
R0250-W3.1	0.00
R0260-W1.1	0.00
R0270-W1.1	0.00
R0270-W3	0.00
R0270-W2.1	0.00
R0275-W1.1	0.00
R0280-W1.1	0.00
R0285-W1.1	0.00
R0290-W2.1	0.00
R0290-W3.1	0.00
R0290-W4.1	0.00
R0300-W1.1	0.00

R0310-W1.1	0.00
R0310-W2.1	0.00
R0310-W3.1	0.00
R0310-W4.1	0.00
R0325-W2.1	0.00
R0330-W2.1	0.00
R0330-W3.1	0.00
R0340-W1.1	0.00
R0340-W2.1	0.00
R0350-W2.1	0.00
R0350-W3.1	0.00
R0360-W2.1	0.00
R0360-W3.1	0.00
R0370-W1.1	0.00
R0370-W2.1	0.00
R0370-W3.1	0.00
R0380-W1.1	0.00
R0380-W2.1	0.00
R0380-W4.1	0.00
R0390-W1.1	0.00
R0390-W2	0.00
R0400-W2.1	0.00
R0410-W1.1	0.00
R0420-W1.1	0.00
R0420-W2.1	0.00
R0430-W1.1	0.00
R0430-W2.1	0.00
R0440-W1.1	0.00
R0450-W1.1	0.00
R0450-W2.1	0.00
R0460-W1.1	0.00
R0460-W2.1	0.00
R0480-W1.1	0.00
R0480-W2.1	0.00
R0480-W3.1	0.00
R0490-W1.1	0.00
R0490-W3.1	0.00
R0500-W1.1	0.00
R0510-W2.1	0.00
R0520-W1.1	0.00
R0520-W2.1	0.00
R0530-W1.1	0.00
R0530-W2.1	0.00
R0530-W3	0.00
R0540-W1.1	0.00
R0540-W2.1	0.00
R0550-W1.1	0.00
R0550-W3.1	0.00
R0560-W2.1	0.00
R0560-W3.1	0.00

R0560-W4.1	0.00
R0560-W5.1	0.00
R0570-W1.1	0.00
R0570-W3.1	0.00
R0570-W4.1	0.00
R0570-W5.1	0.00
R0640-W1.1	0.00
R0650-W1.1	0.00
R0660-W1.1	0.00
R0660-W2.1	0.00
R0690-W2.1	0.00
R0720-W1.1	0.00
R0730-W1.1	0.00
R0740-W2.1	0.00
R0740-W4.1	0.00
R0775-W1.1	0.00
R0780-W2.1	0.00
R0790-W1	0.00
R0800-W1.1	0.00
R0800-W2.1	0.00
R0810-W1.1	0.00
R0830-W3.1	0.00
R0850-W3.1	0.00
R0870-W2.1	0.00
R0885-W1.1	0.00
R0910-W2.1	0.00
R0930-W1.1	0.00
R0940-W1.1	0.00
R0940-W2.1	0.00
R0945-W1.1	0.00
R0950-W2.1	0.00
R0960-W1.1	0.00
R0960-W3.1	0.00
R0960-W4.1	0.00
R0980-W1.1	0.00
R0990-W1.1	0.00
R0990-W3.1	0.00
R1000-W1.1	0.00
R1020-W1.1	0.00
R1030-W1.1	0.00
R1030-W2.1	0.00
R2002-W1.1	0.00
R02040-W1.1	0.00
R2090-W1.1	0.00
R2370-W4.1	0.00
R2380-W2.1	0.00
R2380-W3.1	0.00
R0440-W2.1	0.00
R015-W1.1	0.00
R020-W1.1	0.00

R021-W1.1	0.00
R030-W1.1	0.00
R031-W1.1	0.00
R042-W1.1	0.00
R043-W1.1	0.00
R0850-W1.1	0.00

```
*=====*
```

Conduit Volume

```
*=====*
```

Full pipe or full open conduit volume
Input full depth volume..... 1.6086E+05 cubic feet

==> Warning !! The upstream and downstream junctions for the following conduits have been reversed to correspond to the positive flow and decreasing slope convention. A negative flow in the output thus means the flow was from your original upstream junction to your original downstream junction. Any initial flow has been multiplied by -1.

1. Conduit #...R0770-P2 has been changed.
2. Conduit #...R0280 has been changed.
3. Conduit #...R0202 has been changed.
4. Conduit #...RN-021 has been changed.
5. Conduit #...RN-027 has been changed.
6. Conduit #...R0655-P2 has been changed.
7. Conduit #...R0655-P3 has been changed.
8. Conduit #...RN-025-P2 has been changed.
9. Conduit #...R-0001B-P1 has been changed.
10. Conduit #...R0540-P1 has been changed.
11. Conduit #...R0290-P1 has been changed.
12. Conduit #...R0110.1 has been changed.
13. Conduit #...R0130-P1 has been changed.
14. Conduit #...R0130-P2 has been changed.
15. Conduit #...R0100-P1 has been changed.
16. Conduit #...R0100-P2 has been changed.
17. Conduit #...R0310.1 has been changed.
18. Conduit #...R0430-P1 has been changed.
19. Conduit #...R0430-P2 has been changed.
20. Conduit #...R0430-P3 has been changed.
21. Conduit #...R0430-P4 has been changed.
22. Conduit #...R0340-P1 has been changed.
23. Conduit #...R0340-P2 has been changed.
24. Conduit #...R0450-P1 has been changed.
25. Conduit #...R0450-P2 has been changed.
26. Conduit #...R0550-P1 has been changed.
27. Conduit #...R0550-P2 has been changed.
28. Conduit #...R0560-P1 has been changed.
29. Conduit #...R0560-P2 has been changed.

- 30. Conduit #...R0560-P3 has been changed.
- 31. Conduit #...R0780.1 has been changed.
- 32. Conduit #...R0740.1 has been changed.
- 33. Conduit #...R0730.1 has been changed.
- 34. Conduit #...R0920.1 has been changed.
- 35. Conduit #...R1010-P3 has been changed.
- 36. Conduit #...R1010-P4 has been changed.
- 37. Conduit #...R1010-P5 has been changed.
- 38. Conduit #...R0980-P1.1 has been changed.
- 39. Conduit #...R0770-P1.1 has been changed.
- 40. Conduit #...R0790-P1 has been changed.
- 41. Conduit #...R0790-P2 has been changed.
- 42. Conduit #...R0910-P1 has been changed.
- 43. Conduit #...R0380-P1 has been changed.
- 44. Conduit #...R0380-P2 has been changed.
- 45. Conduit #...R0290-P2.1 has been changed.
- 46. Conduit #...RN-005-P3 has been changed.
- 47. Conduit #...RN-008-P1.1 has been changed.
- 48. Conduit #...RN-010-P1 has been changed.
- 49. Conduit #...RN-010-P2 has been changed.
- 50. Conduit #...RN-015-P1 has been changed.
- 51. Conduit #...RN-029-P1 has been changed.
- 52. Conduit #...R0655-P1.1 has been changed.
- 53. Conduit #...R0490-P8 has been changed.
- 54. Conduit #...R0490-P7 has been changed.
- 55. Conduit #...R0160-P1.1 has been changed.
- 56. Conduit #...R0410-P1 has been changed.
- 57. Conduit #...R0410-P2 has been changed.
- 58. Conduit #...R0410-P3 has been changed.
- 59. Conduit #...498.1 has been changed.

=====

| Table E3a - Junction Data |

=====

Inp Interface Num (%)	Junction Name	Ground Elevation	Crown Elevation	Invert Elevation	Qinst cfs	Initial Depth-ft	Flow
1 100.0000	N0335	6.8800	6.8800	0.0000	0.0000	0.3200	
2 100.0000	N0550	26.3900	2.7400	-1.3300	0.0000	1.4000	
3 100.0000	N0690	8.1450	0.6200	0.6200	0.0000	0.0000	
4 100.0000	N0640	14.6900	-2.7800	-2.7800	0.0000	4.2800	

5	N0780	4.9050	-1.5567	-4.3900	0.0000	4.5200
100.0000						
6	N0830	7.7050	-2.0500	-2.0500	0.0000	2.3500
100.0000						
7	N0790	7.2350	1.5100	-2.9800	0.0000	3.1100
100.0000						
8	N0800	8.0250	3.3500	3.3500	0.0000	0.0000
100.0000						
9	N0870	9.0100	4.2700	-2.9200	0.0000	4.3000
100.0000						
10	N0510	6.6700	-1.4300	-1.4300	0.0000	1.3300
100.0000						
11	N0520	8.8700	-2.8300	-2.8300	0.0000	3.1300
100.0000						
12	N0390	19.4200	-1.7000	-1.7000	0.0000	2.5000
100.0000						
13	N0350	6.9650	2.5600	-2.6900	0.0000	3.0100
100.0000						
14	N0450	7.4950	1.8500	-1.3000	0.0000	1.6200
100.0000						
15	N0770	6.9100	1.3600	-3.0500	0.0000	3.1800
100.0000						
16	N0720	7.1600	-0.6500	-0.6500	0.0000	1.2300
100.0000						
17	N0960	7.5550	4.4000	1.9000	0.0000	0.0000
100.0000						
18	N0920	6.6100	2.1500	-1.5700	0.0000	1.7000
100.0000						
19	N0950	7.7300	1.5800	-0.4200	0.0000	0.5500
100.0000						
20	N0970	9.1800	-1.2100	-1.2100	0.0000	1.6100
100.0000						
21	N0915	7.8300	1.7000	-6.0000	0.0000	6.1300
100.0000						
22	N0885	7.4900	3.6370	-6.9100	0.0000	7.0400
100.0000						
23	N0560	7.1600	1.8700	-2.8200	0.0000	2.8900
100.0000						
24	N0810	1002.6000	1002.5000	-1.8500	0.0000	2.2100
100.0000						
25	N0570	27.2050	1.5100	-2.6700	0.0000	4.0500
100.0000						
26	N0990	6.6400	3.5700	1.5700	0.0000	0.0000
100.0000						
27	N1000	15.4500	-1.3600	-1.3600	0.0000	1.7600
100.0000						
28	N1020	8.5550	4.1700	-1.0000	0.0000	1.6000
100.0000						
29	N1030	7.2450	-1.0500	-1.0500	0.0000	1.5500
100.0000						

30	N0890	17.6350	1.5530	-1.5400	0.0000	2.9200
100.0000						
31	N0850	13.8350	4.1500	1.4600	0.0000	0.0000
100.0000						
32	N0930	15.7300	-3.5700	-3.5700	0.0000	4.9500
100.0000						
33	N0980	14.6700	4.7800	1.6200	0.0000	0.0900
100.0000						
34	N1010	8.1200	4.2000	1.0400	0.0000	0.5900
100.0000						
35	N0430	10.3650	1.8700	-0.1300	0.0000	0.4500
100.0000						
36	N0500	13.9500	2.2500	2.2500	0.0000	1.9900
100.0000						
37	N0230	8.4850	5.3100	3.3100	0.0000	0.0000
100.0000						
38	N0220	10.9350	5.1800	1.1800	0.0000	1.0400
100.0000						
39	N0200	11.4850	2.0567	-1.6100	0.0000	1.5300
100.0000						
40	N0190	9.3800	1.0400	-0.9600	0.0000	2.2600
100.0000						
41	N0130	12.6850	4.2600	-0.6000	0.0000	0.0000
100.0000						
42	N0100	10.7050	3.4600	0.4600	0.0000	0.0000
100.0000						
43	N0090	7.4850	2.4900	2.4900	0.0000	0.0000
100.0000						
44	N0120	9.8550	4.0200	-0.2400	0.0000	1.5400
100.0000						
45	N0110	9.6150	2.7700	0.7700	0.0000	0.5300
100.0000						
46	N0170	12.5650	3.2900	-0.7100	0.0000	2.0100
100.0000						
47	N0210	15.0400	3.2800	-0.7200	0.0000	0.5200
100.0000						
48	N0260	13.2900	4.9400	-0.2300	0.0000	2.2300
100.0000						
49	N0250	10.0800	5.0000	2.3000	0.0000	0.7000
100.0000						
50	N0240	7.1200	4.4100	1.4400	0.0000	1.5600
100.0000						
51	N0140	10.3350	4.3100	-1.9000	0.0000	3.3100
100.0000						
52	N0150	14.8550	3.4700	1.4400	0.0000	0.0000
100.0000						
53	N0270	16.9650	1.5700	1.5700	0.0000	1.4300
100.0000						
54	N0290	8.1950	3.8300	1.0100	0.0000	1.1100
100.0000						

55	N0180	9.3650	1.5400	-1.4600	0.0000	2.7600
100.0000						
56	N0370	10.3750	3.7300	0.9800	0.0000	1.1600
100.0000						
57	N0285	14.6250	4.5000	2.0000	0.0000	0.1200
100.0000						
58	N0420	30.4900	3.0800	3.0800	0.0000	0.4200
100.0000						
59	N0490	13.2450	0.4300	-1.2600	0.0000	1.6000
100.0000						
60	N0410	24.4900	6.0700	-2.6100	0.0000	2.4400
100.0000						
61	N0380	28.6750	5.4300	0.0000	0.0000	0.4900
100.0000						
62	N0660	18.3100	-0.8400	-0.8400	0.0000	1.6600
100.0000						
63	N0740	32.2550	3.1000	-1.2400	0.0000	1.3700
100.0000						
64	N0730	10.7750	1.2800	-2.1000	0.0000	3.4800
100.0000						
65	N0940	8.5900	-1.0100	-1.0100	0.0000	1.4100
100.0000						
66	N0530	27.2300	3.7400	1.6600	0.0000	0.0300
100.0000						
67	N0060	21.4200	3.9000	-1.2900	0.0000	0.5700
100.0000						
68	N0050	9.7450	-0.8600	-0.8600	0.0000	2.8600
100.0000						
69	N0325	1001.6000	1001.6000	-4.3700	0.0000	4.7000
100.0000						
70	N0160	9.6700	1.3600	-2.0900	0.0000	1.6700
100.0000						
71	N0470	13.8200	1.8100	1.8100	0.0000	1.6400
100.0000						
72	N0540	11.9400	3.6700	1.3500	0.0000	0.1700
100.0000						
73	N0650	12.7300	3.5800	-0.4900	0.0000	1.9900
100.0000						
74	N0400	1002.6000	1002.6000	-2.9000	0.0000	3.2200
100.0000						
75	N0360	7.1300	1.5600	-1.1800	0.0000	1.5000
100.0000						
76	N0480	16.2750	2.2600	2.2600	0.0000	1.4300
100.0000						
77	N0080	9.9750	0.4800	0.4800	0.0000	0.3200
100.0000						
78	N0310	10.0100	0.9100	-1.5900	0.0000	2.8900
100.0000						
79	N0300	20.5450	-1.8500	-3.8500	0.0000	4.1600
100.0000						

80	N0460	11.0400	-2.1500	-2.1500	0.0000	2.4700
100.0000						
81	N0440	11.0100	-1.3700	-1.3700	0.0000	1.6900
100.0000						
82	N0330	7.5100	1.9500	-3.4300	0.0000	3.7500
100.0000						
83	N0655	11.0200	-0.1400	-2.9100	0.0000	2.7400
100.0000						
84	N0375	5.4300	5.4300	0.0000	0.0000	2.1400
100.0000						
85	N0385	7.0000	6.0700	-1.0900	0.0000	3.2000
100.0000						
86	N0275	16.3500	4.3900	2.3000	0.0000	0.0000
100.0000						
87	N0280	13.7800	4.0900	2.0000	0.0000	0.1200
100.0000						
88	N0202	5.0000	1.7867	-3.5700	0.0000	3.4900
100.0000						
89	N0340	10.5650	6.8800	-1.7900	0.0000	2.1100
100.0000						
90	N0515	7.4000	2.8000	-1.2000	0.0000	1.5000
100.0000						
91	N-001	27.2250	5.3300	0.2300	0.0000	1.0000
100.0000						
92	N-002	9.1150	5.4600	3.0000	0.0000	0.4700
100.0000						
93	N-003	9.7100	4.5600	2.5600	0.0000	0.0000
100.0000						
94	N-004	11.2550	5.4300	2.8800	0.0000	0.0000
100.0000						
95	N-005	8.5650	5.6200	0.8700	0.0000	0.0500
100.0000						
96	N-008	11.9500	4.8800	-0.0400	0.0000	0.4500
100.0000						
97	N-010	11.0900	5.1400	-0.2900	0.0000	0.1400
100.0000						
98	N-013	8.9750	2.8400	-1.1600	0.0000	1.0100
100.0000						
99	N-015	10.6900	2.6300	-1.1900	0.0000	1.0200
100.0000						
100	N-006	10.8300	5.6600	2.6600	0.0000	0.0000
100.0000						
101	N-007	12.1150	4.9600	2.4600	0.0000	0.0000
100.0000						
102	N-009	12.4450	5.6800	2.6800	0.0000	0.0000
100.0000						
103	N-011	12.4950	5.5400	2.0400	0.0000	0.0000
100.0000						
104	N-014	11.0400	5.1100	1.5500	0.0000	0.0600
100.0000						

105	N-012	13.3000	5.4800	1.4800	0.0000	0.0000
100.0000						
106	N-025	10.4350	2.8830	-1.2400	0.0000	1.0700
100.0000						
107	N-023	6.5350	2.4800	0.4500	0.0000	0.0000
100.0000						
108	N-021	10.1550	2.4000	-0.4700	0.0000	1.6200
100.0000						
109	N-019	10.7200	3.1400	-0.2200	0.0000	1.7000
100.0000						
110	N-041	15.2600	3.2800	0.7800	0.0000	0.7000
100.0000						
111	N-020	11.0600	4.3800	1.3800	0.0000	0.0000
100.0000						
112	N-022	10.4600	4.3033	0.9600	0.0000	0.0100
100.0000						
113	N-024	10.7600	4.2833	-0.2700	0.0000	0.1400
100.0000						
114	N-029	7.4700	2.3400	-0.9800	0.0000	0.8100
100.0000						
115	N-026	10.7450	2.5100	1.0100	0.0000	0.0000
100.0000						
116	N-027	11.1500	1.1700	-0.3300	0.0000	0.1900
100.0000						
117	N-028	6.7150	1.3700	-0.3100	0.0000	0.1700
100.0000						
118	N-030	8.1350	-0.0700	-0.0700	0.0000	0.0000
100.0000						
119	N-043	8.4300	-1.1600	-1.1600	0.0000	0.5600
100.0000						
120	N-042	9.0500	-0.6300	-0.6300	0.0000	0.0300
100.0000						
121	N-031	10.3600	-0.8500	-0.8500	0.0000	0.4500
100.0000						
122	N-040	10.8400	-1.4800	-1.4800	0.0000	1.3100
100.0000						
123	N0620	5.0000	-0.6000	-0.6000	0.0000	0.0000
100.0000						
124	N0900	5.0000	1.0100	-3.0000	0.0000	3.1300
100.0000						
125	N-009mh	6.0000	5.4100	0.0000	0.0000	2.4100
100.0000						
126	N0205	4.0000	1.5000	-3.5000	0.0000	3.4200
100.0000						
127	N0386	7.0000	6.0700	-1.0900	0.0000	1.7200
100.0000						
128	N0388	7.0000	6.0700	-1.0900	0.0000	0.9200
100.0000						
129	N0775	6.4600	2.1833	-0.6500	0.0000	0.7800
100.0000						

130	N2040	5.9300	-1.1000	-1.1000	0.0000	1.2100
100.0000						
131	N2380	20.0700	-0.1200	-1.8100	0.0000	2.1200
100.0000						
132	N0155	7.6900	3.3600	-0.1400	0.0000	0.0600
100.0000						
133	N0945	5.8300	-0.8100	-0.8100	0.0000	0.9600
100.0000						
134	N2002	7.9000	2.8630	-1.8000	0.0000	1.5300
100.0000						
135	N2090	8.5300	-1.8900	-1.8900	0.0000	1.3200
100.0000						
136	N0742	6.0000	3.5000	-0.5100	0.0000	1.8900
100.0000						
137	N0910	3.0000	1.1000	-6.0000	0.0000	6.1300
100.0000						
138	N0880	1002.6000	1002.6000	-6.9100	0.0000	0.0000
100.0000						
139	N9004	10.0000	-2.7400	-2.7400	0.0000	0.0000
100.0000						
140	N9004-B	0.0100	-0.2900	-2.7900	0.0000	0.0000
100.0000						
141	N9004-C	0.0100	-0.0400	-2.5400	0.0000	0.0000
100.0000						
142	N9004-D	0.0100	-0.1800	-2.6800	0.0000	0.0000
100.0000						
143	N9004-F	0.0800	0.0800	-1.1700	0.0000	0.0000
100.0000						
144	N9001-B	5.3000	5.3000	-2.0900	0.0000	1.9200
100.0000						
145	N9001-D	1.6000	1.6000	-0.9000	0.0000	0.7300
100.0000						
146	N9001-F	1.6000	-0.9000	-0.9000	0.0000	0.7300
100.0000						
147	N9000	0.5100	-1.9900	-1.9900	0.0000	1.5700
100.0000						
148	N9003	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
149	N9005	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
150	N9005-E	3.4000	0.0000	0.0000	0.0000	0.0000
100.0000						
151	N9005-G	3.4800	3.4800	0.0000	0.0000	0.0000
100.0000						
152	N9004-J	1.6700	1.6700	-1.3300	0.0000	0.0000
100.0000						
153	N9004-G	1.9100	1.9100	-1.0900	0.0000	0.0000
100.0000						
154	N9002	2.1900	2.1900	-1.3100	0.0000	1.1400
100.0000						

155	N2370	12.1300	3.5000	-1.5600	0.0000	2.2900
100.0000						
156	N9000-B	0.5100	-1.9900	-1.9900	0.0000	1.5700
100.0000						
157	N9000-C	0.5100	-1.9900	-1.9900	0.0000	1.5700
100.0000						
158	N9000-E	0.5100	-1.9900	-1.9900	0.0000	1.5700
100.0000						
159	N9000-F	0.5100	0.5100	-1.9900	0.0000	1.5700
100.0000						
160	N9001-E	0.9100	-2.0900	-2.0900	0.0000	1.9200
100.0000						
161	N9001-G	1.6000	1.6000	-0.9000	0.0000	0.7300
100.0000						
162	N9001-H	1.6000	-0.9000	-0.9000	0.0000	0.7300
100.0000						
163	N9001-J	0.0000	-0.1730	-0.1730	0.0000	0.0030
100.0000						
164	N9001-K	0.0000	-0.1730	-0.1730	0.0000	0.0030
100.0000						
165	N9002-A	2.1900	-1.3100	-1.3100	0.0000	1.1400
100.0000						
166	N9002-B	2.1900	-1.3100	-1.3100	0.0000	1.1400
100.0000						
167	N9003-A	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
168	N9003-B	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
169	N9003-C	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
170	N9003-D	1002.6000	1001.5000	0.0000	0.0000	0.0000
100.0000						
171	N9003-E	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
172	N9003-F	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
173	N9003-G	1002.6000	1002.5000	0.0000	0.0000	0.0000
100.0000						
174	N9004-A	0.0100	-0.2400	-2.7400	0.0000	0.0000
100.0000						
175	N9004-E	0.0100	-2.6800	-2.6800	0.0000	0.0000
100.0000						
176	N9004-H	0.0800	-1.1700	-1.1700	0.0000	0.0000
100.0000						
177	N9004-I	0.0800	-1.1700	-1.1700	0.0000	0.0000
100.0000						
178	N9004-K	1.6700	-1.3300	-1.3300	0.0000	0.0000
100.0000						
179	N9005-A	1002.6000	1002.0000	0.0000	0.0000	0.0000
100.0000						

180	N9005-B	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
181	N9005-C	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
182	N9005-D	1002.6000	0.0000	0.0000	0.0000	0.0000
100.0000						
183	N9005-F	3.4000	3.4000	0.0000	0.0000	0.0000
100.0000						
184	N9005-H	3.4800	0.0000	0.0000	0.0000	0.0000
100.0000						
185	N9000-D	5.0000	-2.2500	-2.2500	0.0000	0.0000
100.0000						
186	N-0001A	15.7000	-8.0000	-8.0000	0.0000	8.3800
100.0000						
187	N-0001B	7.0000	2.5500	-0.5000	0.0000	1.2000
100.0000						
188	N0001-C	11.0500	2.1500	2.1500	0.0000	0.0000
100.0000						
189	N-0001-E	6.0000	4.8000	4.8000	0.0000	0.0000
100.0000						
190	N-0001E-OF	5.0000	3.1300	3.1300	0.0000	0.0000
100.0000						
191	N-0001-F	5.0000	3.5000	3.5000	0.0000	0.0000
100.0000						
192	N-0001-G	6.0000	4.0000	4.0000	0.0000	0.0000
100.0000						
193	N-0001F-OF-A	5.0000	3.1300	3.1300	0.0000	0.0000
100.0000						
194	N-0001F-OF-B	5.0000	3.1300	3.1300	0.0000	0.0000
100.0000						
195	N9004-L	10.0000	1.5530	-2.7400	0.0000	0.0000
100.0000						
196	N0001-J	8.5900	1.1900	1.1900	0.0000	0.0000
100.0000						
197	N9005-J	3.4000	0.0000	0.0000	0.0000	0.0000
100.0000						
198	N9005-K	3.4000	0.0000	0.0000	0.0000	0.0000
100.0000						
199	N0001-I	7.8300	1.1300	1.1300	0.0000	0.0000
100.0000						
200	N-0001K	8.5300	2.0300	2.0300	0.0000	0.0000
100.0000						
201	N0140-A	10.3000	5.3000	-2.1000	0.0000	3.4000
100.0000						

=====

| Table E3b - Junction Data |

=====

Inp Maximum Num Capacity	Junction Pavement Name Shape Slope	X Coord.	Y Coord.	Type of Manhole	Type of Inlet
1	N0335 0 0.00	0.0000	0.0000	No Ponding	Normal
2	N0550 0 0.00	0.0000	0.0000	No Ponding	Normal
3	N0690 0 0.00	0.0000	0.0000	No Ponding	Normal
4	N0640 0 0.00	0.0000	0.0000	No Ponding	Normal
5	N0780 0 0.00	0.0000	0.0000	No Ponding	Normal
6	N0830 0 0.00	0.0000	0.0000	No Ponding	Normal
7	N0790 0 0.00	0.0000	0.0000	No Ponding	Normal
8	N0800 0 0.00	0.0000	0.0000	No Ponding	Normal
9	N0870 0 0.00	0.0000	0.0000	No Ponding	Normal
10	N0510 0 0.00	0.0000	0.0000	No Ponding	Normal
11	N0520 0 0.00	0.0000	0.0000	No Ponding	Normal
12	N0390 0 0.00	0.0000	0.0000	No Ponding	Normal
13	N0350 0 0.00	0.0000	0.0000	No Ponding	Normal
14	N0450 0 0.00	0.0000	0.0000	No Ponding	Normal
15	N0770 0 0.00	0.0000	0.0000	No Ponding	Normal
16	N0720 0 0.00	0.0000	0.0000	No Ponding	Normal
17	N0960 0 0.00	0.0000	0.0000	No Ponding	Normal
18	N0920 0 0.00	0.0000	0.0000	No Ponding	Normal
19	N0950 0 0.00	0.0000	0.0000	No Ponding	Normal
20	N0970 0 0.00	0.0000	0.0000	No Ponding	Normal
21	N0915 0 0.00	0.0000	0.0000	No Ponding	Normal
22	N0885 0 0.00	0.0000	0.0000	No Ponding	Normal

23		N0560	0.0000	0.0000	No Ponding	Normal
	0	0.00				
24		N0810	0.0000	0.0000	No Ponding	Normal
	0	0.00				
25		N0570	0.0000	0.0000	No Ponding	Normal
	0	0.00				
26		N0990	0.0000	0.0000	No Ponding	Normal
	0	0.00				
27		N1000	0.0000	0.0000	No Ponding	Normal
	0	0.00				
28		N1020	0.0000	0.0000	No Ponding	Normal
	0	0.00				
29		N1030	0.0000	0.0000	No Ponding	Normal
	0	0.00				
30		N0890	0.0000	0.0000	No Ponding	Normal
	0	0.00				
31		N0850	0.0000	0.0000	No Ponding	Normal
	0	0.00				
32		N0930	0.0000	0.0000	No Ponding	Normal
	0	0.00				
33		N0980	0.0000	0.0000	No Ponding	Normal
	0	0.00				
34		N1010	0.0000	0.0000	No Ponding	Normal
	0	0.00				
35		N0430	0.0000	0.0000	No Ponding	Normal
	0	0.00				
36		N0500	0.0000	0.0000	No Ponding	Normal
	0	0.00				
37		N0230	0.0000	0.0000	No Ponding	Normal
	0	0.00				
38		N0220	0.0000	0.0000	No Ponding	Normal
	0	0.00				
39		N0200	0.0000	0.0000	No Ponding	Normal
	0	0.00				
40		N0190	0.0000	0.0000	No Ponding	Normal
	0	0.00				
41		N0130	0.0000	0.0000	No Ponding	Normal
	0	0.00				
42		N0100	0.0000	0.0000	No Ponding	Normal
	0	0.00				
43		N0090	0.0000	0.0000	No Ponding	Normal
	0	0.00				
44		N0120	0.0000	0.0000	No Ponding	Normal
	0	0.00				
45		N0110	0.0000	0.0000	No Ponding	Normal
	0	0.00				
46		N0170	0.0000	0.0000	No Ponding	Normal
	0	0.00				
47		N0210	0.0000	0.0000	No Ponding	Normal
	0	0.00				

48		N0260	0.0000	0.0000	No Ponding	Normal
	0	0.00				
49		N0250	0.0000	0.0000	No Ponding	Normal
	0	0.00				
50		N0240	0.0000	0.0000	No Ponding	Normal
	0	0.00				
51		N0140	0.0000	0.0000	No Ponding	Normal
	0	0.00				
52		N0150	0.0000	0.0000	No Ponding	Normal
	0	0.00				
53		N0270	0.0000	0.0000	No Ponding	Normal
	0	0.00				
54		N0290	0.0000	0.0000	No Ponding	Normal
	0	0.00				
55		N0180	0.0000	0.0000	No Ponding	Normal
	0	0.00				
56		N0370	0.0000	0.0000	No Ponding	Normal
	0	0.00				
57		N0285	0.0000	0.0000	No Ponding	Normal
	0	0.00				
58		N0420	0.0000	0.0000	No Ponding	Normal
	0	0.00				
59		N0490	0.0000	0.0000	No Ponding	Normal
	0	0.00				
60		N0410	0.0000	0.0000	No Ponding	Normal
	0	0.00				
61		N0380	0.0000	0.0000	No Ponding	Normal
	0	0.00				
62		N0660	0.0000	0.0000	No Ponding	Normal
	0	0.00				
63		N0740	0.0000	0.0000	No Ponding	Normal
	0	0.00				
64		N0730	0.0000	0.0000	No Ponding	Normal
	0	0.00				
65		N0940	0.0000	0.0000	No Ponding	Normal
	0	0.00				
66		N0530	0.0000	0.0000	No Ponding	Normal
	0	0.00				
67		N0060	0.0000	0.0000	No Ponding	Normal
	0	0.00				
68		N0050	0.0000	0.0000	No Ponding	Normal
	0	0.00				
69		N0325	0.0000	0.0000	No Ponding	Normal
	0	0.00				
70		N0160	0.0000	0.0000	No Ponding	Normal
	0	0.00				
71		N0470	0.0000	0.0000	No Ponding	Normal
	0	0.00				
72		N0540	0.0000	0.0000	No Ponding	Normal
	0	0.00				

73		N0650	0.0000	0.0000	No Ponding	Normal
	0	0.00				
74		N0400	0.0000	0.0000	No Ponding	Normal
	0	0.00				
75		N0360	0.0000	0.0000	No Ponding	Normal
	0	0.00				
76		N0480	0.0000	0.0000	No Ponding	Normal
	0	0.00				
77		N0080	0.0000	0.0000	No Ponding	Normal
	0	0.00				
78		N0310	0.0000	0.0000	No Ponding	Normal
	0	0.00				
79		N0300	0.0000	0.0000	No Ponding	Normal
	0	0.00				
80		N0460	0.0000	0.0000	No Ponding	Normal
	0	0.00				
81		N0440	0.0000	0.0000	No Ponding	Normal
	0	0.00				
82		N0330	0.0000	0.0000	No Ponding	Normal
	0	0.00				
83		N0655	0.0000	0.0000	No Ponding	Normal
	0	0.00				
84		N0375	0.0000	0.0000	No Ponding	Normal
	0	0.00				
85		N0385	0.0000	0.0000	No Ponding	Normal
	0	0.00				
86		N0275	0.0000	0.0000	No Ponding	Normal
	0	0.00				
87		N0280	0.0000	0.0000	No Ponding	Normal
	0	0.00				
88		N0202	0.0000	0.0000	No Ponding	Normal
	0	0.00				
89		N0340	0.0000	0.0000	No Ponding	Normal
	0	0.00				
90		N0515	0.0000	0.0000	No Ponding	Normal
	0	0.00				
91		N-001	0.0000	0.0000	No Ponding	Normal
	0	0.00				
92		N-002	0.0000	0.0000	No Ponding	Normal
	0	0.00				
93		N-003	0.0000	0.0000	No Ponding	Normal
	0	0.00				
94		N-004	0.0000	0.0000	No Ponding	Normal
	0	0.00				
95		N-005	0.0000	0.0000	No Ponding	Normal
	0	0.00				
96		N-008	0.0000	0.0000	No Ponding	Normal
	0	0.00				
97		N-010	0.0000	0.0000	No Ponding	Normal
	0	0.00				

98		N-013	0.0000	0.0000	No Ponding	Normal
	0	0.00				
99		N-015	0.0000	0.0000	No Ponding	Normal
	0	0.00				
100		N-006	0.0000	0.0000	No Ponding	Normal
	0	0.00				
101		N-007	0.0000	0.0000	No Ponding	Normal
	0	0.00				
102		N-009	0.0000	0.0000	No Ponding	Normal
	0	0.00				
103		N-011	0.0000	0.0000	No Ponding	Normal
	0	0.00				
104		N-014	0.0000	0.0000	No Ponding	Normal
	0	0.00				
105		N-012	0.0000	0.0000	No Ponding	Normal
	0	0.00				
106		N-025	0.0000	0.0000	No Ponding	Normal
	0	0.00				
107		N-023	0.0000	0.0000	No Ponding	Normal
	0	0.00				
108		N-021	0.0000	0.0000	No Ponding	Normal
	0	0.00				
109		N-019	0.0000	0.0000	No Ponding	Normal
	0	0.00				
110		N-041	0.0000	0.0000	No Ponding	Normal
	0	0.00				
111		N-020	0.0000	0.0000	No Ponding	Normal
	0	0.00				
112		N-022	0.0000	0.0000	No Ponding	Normal
	0	0.00				
113		N-024	0.0000	0.0000	No Ponding	Normal
	0	0.00				
114		N-029	0.0000	0.0000	No Ponding	Normal
	0	0.00				
115		N-026	0.0000	0.0000	No Ponding	Normal
	0	0.00				
116		N-027	0.0000	0.0000	No Ponding	Normal
	0	0.00				
117		N-028	0.0000	0.0000	No Ponding	Normal
	0	0.00				
118		N-030	0.0000	0.0000	No Ponding	Normal
	0	0.00				
119		N-043	0.0000	0.0000	No Ponding	Normal
	0	0.00				
120		N-042	0.0000	0.0000	No Ponding	Normal
	0	0.00				
121		N-031	0.0000	0.0000	No Ponding	Normal
	0	0.00				
122		N-040	0.0000	0.0000	No Ponding	Normal
	0	0.00				

123		N0620	0.0000	0.0000	No Ponding	Normal
	0	0.00				
124		N0900	0.0000	0.0000	No Ponding	Normal
	0	0.00				
125		N-009mh	0.0000	0.0000	No Ponding	Normal
	0	0.00				
126		N0205	0.0000	0.0000	No Ponding	Normal
	0	0.00				
127		N0386	0.0000	0.0000	No Ponding	Normal
	0	0.00				
128		N0388	0.0000	0.0000	No Ponding	Normal
	0	0.00				
129		N0775	0.0000	0.0000	No Ponding	Normal
	0	0.00				
130		N2040	0.0000	0.0000	No Ponding	Normal
	0	0.00				
131		N2380	0.0000	0.0000	No Ponding	Normal
	0	0.00				
132		N0155	0.0000	0.0000	No Ponding	Normal
	0	0.00				
133		N0945	0.0000	0.0000	No Ponding	Normal
	0	0.00				
134		N2002	0.0000	0.0000	No Ponding	Normal
	0	0.00				
135		N2090	0.0000	0.0000	No Ponding	Normal
	0	0.00				
136		N0742	0.0000	0.0000	No Ponding	Normal
	0	0.00				
137		N0910	0.0000	0.0000	No Ponding	Normal
	0	0.00				
138		N0880	0.0000	0.0000	No Ponding	Normal
	0	0.00				
139		N9004	0.0000	0.0000	No Ponding	Normal
	0	0.00				
140		N9004-B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
141		N9004-C	0.0000	0.0000	No Ponding	Normal
	0	0.00				
142		N9004-D	0.0000	0.0000	No Ponding	Normal
	0	0.00				
143		N9004-F	0.0000	0.0000	No Ponding	Normal
	0	0.00				
144		N9001-B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
145		N9001-D	0.0000	0.0000	No Ponding	Normal
	0	0.00				
146		N9001-F	0.0000	0.0000	No Ponding	Normal
	0	0.00				
147		N9000	0.0000	0.0000	No Ponding	Normal
	0	0.00				

148		N9003	0.0000	0.0000	No Ponding	Normal
	0	0.00				
149		N9005	0.0000	0.0000	No Ponding	Normal
	0	0.00				
150		N9005-E	0.0000	0.0000	No Ponding	Normal
	0	0.00				
151		N9005-G	0.0000	0.0000	No Ponding	Normal
	0	0.00				
152		N9004-J	0.0000	0.0000	No Ponding	Normal
	0	0.00				
153		N9004-G	0.0000	0.0000	No Ponding	Normal
	0	0.00				
154		N9002	0.0000	0.0000	No Ponding	Normal
	0	0.00				
155		N2370	0.0000	0.0000	No Ponding	Normal
	0	0.00				
156		N9000-B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
157		N9000-C	0.0000	0.0000	No Ponding	Normal
	0	0.00				
158		N9000-E	0.0000	0.0000	No Ponding	Normal
	0	0.00				
159		N9000-F	0.0000	0.0000	No Ponding	Normal
	0	0.00				
160		N9001-E	0.0000	0.0000	No Ponding	Normal
	0	0.00				
161		N9001-G	0.0000	0.0000	No Ponding	Normal
	0	0.00				
162		N9001-H	0.0000	0.0000	No Ponding	Normal
	0	0.00				
163		N9001-J	0.0000	0.0000	No Ponding	Normal
	0	0.00				
164		N9001-K	0.0000	0.0000	No Ponding	Normal
	0	0.00				
165		N9002-A	0.0000	0.0000	No Ponding	Normal
	0	0.00				
166		N9002-B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
167		N9003-A	0.0000	0.0000	No Ponding	Normal
	0	0.00				
168		N9003-B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
169		N9003-C	0.0000	0.0000	No Ponding	Normal
	0	0.00				
170		N9003-D	0.0000	0.0000	No Ponding	Normal
	0	0.00				
171		N9003-E	0.0000	0.0000	No Ponding	Normal
	0	0.00				
172		N9003-F	0.0000	0.0000	No Ponding	Normal
	0	0.00				

173		N9003-G	0.0000	0.0000	No Ponding	Normal
	0	0.00				
174		N9004-A	0.0000	0.0000	No Ponding	Normal
	0	0.00				
175		N9004-E	0.0000	0.0000	No Ponding	Normal
	0	0.00				
176		N9004-H	0.0000	0.0000	No Ponding	Normal
	0	0.00				
177		N9004-I	0.0000	0.0000	No Ponding	Normal
	0	0.00				
178		N9004-K	0.0000	0.0000	No Ponding	Normal
	0	0.00				
179		N9005-A	0.0000	0.0000	No Ponding	Normal
	0	0.00				
180		N9005-B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
181		N9005-C	0.0000	0.0000	No Ponding	Normal
	0	0.00				
182		N9005-D	0.0000	0.0000	No Ponding	Normal
	0	0.00				
183		N9005-F	0.0000	0.0000	No Ponding	Normal
	0	0.00				
184		N9005-H	0.0000	0.0000	No Ponding	Normal
	0	0.00				
185		N9000-D	0.0000	0.0000	No Ponding	Normal
	0	0.00				
186		N-0001A	0.0000	0.0000	No Ponding	Normal
	0	0.00				
187		N-0001B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
188		N0001-C	0.0000	0.0000	No Ponding	Normal
	0	0.00				
189		N-0001-E	0.0000	0.0000	No Ponding	Normal
	0	0.00				
190		N-0001E-OF	0.0000	0.0000	No Ponding	Normal
	0	0.00				
191		N-0001-F	0.0000	0.0000	No Ponding	Normal
	0	0.00				
192		N-0001-G	0.0000	0.0000	No Ponding	Normal
	0	0.00				
193		N-0001F-OF-A	0.0000	0.0000	No Ponding	Normal
	0	0.00				
194		N-0001F-OF-B	0.0000	0.0000	No Ponding	Normal
	0	0.00				
195		N9004-L	0.0000	0.0000	No Ponding	Normal
	0	0.00				
196		N0001-J	0.0000	0.0000	No Ponding	Normal
	0	0.00				
197		N9005-J	0.0000	0.0000	No Ponding	Normal
	0	0.00				

198		N9005-K	0.0000	0.0000	No Ponding	Normal
	0	0.00				
199		N0001-I	0.0000	0.0000	No Ponding	Normal
	0	0.00				
200		N-0001K	0.0000	0.0000	No Ponding	Normal
	0	0.00				
201		N0140-A	0.0000	0.0000	No Ponding	Normal
	0	0.00				

=====

| Table E4 - Conduit Connectivity |

=====

Input Upstream Number Elevation	Conduit Downstream Elevation	Conduit Name	Upstream Node	Downstream Node
1	-2.9200	R0870 No Design	N0870	N0900
2	-0.3630	R0770-P2 No Design	N0885	N0770
3	-2.9900	R0900 No Design	N0900	N0910
4	0.9800	R0370 No Design	N0370	N0375
5	2.6700	R0280 No Design	N0375	N0280
6	-3.5000	R0202 No Design	N0205	N0202
7	3.4600	RN-002 No Design	N-002	N-001
8	2.5600	RN-003 No Design	N-003	N-001
9	2.6600	RN-006 No Design	N-006	N-005
10	2.4600	RN-007 No Design	N-007	N-008
11	2.6800	RN-009 No Design	N-009	N-009mh
12	2.4100	RN-009MH No Design	N-009mh	N-008
13	2.0400	RN-011 No Design	N-011	N-010
14	1.6100	RN-014 No Design	N-014	N-012
15	1.4800	RN-012 No Design	N-012	N-013

16		RN-023	N-023	N-025
0.4500	0.3600	No Design		
17		RN-021	N-023	N-021
1.2300	1.1500	No Design		
18		RN-041	N-041	N-019
0.7800	0.6400	No Design		
19		RN-020	N-020	N-022
1.3800	0.9900	No Design		
20		RN-022	N-022	N-024
0.9700	0.9500	No Design		
21		RN-024	N-024	N-029
0.0800	-0.1600	No Design		
22		RN-026	N-026	N-024
1.0100	0.9200	No Design		
23		RN-027	N-028	N-027
-0.3100	-0.3300	No Design		
24		RN-028	N-028	N-024
-0.1300	-0.2700	No Design		
25		R0742-P3	N0742	N0730
-0.5100	-0.7200	No Design		
26		R0655-P2	N9004-B	N0655
-2.7900	-2.8900	No Design		
27		R0655-P3	N9004-C	N0655
-2.5400	-2.6500	No Design		
28		R0655-P4	N0655	N9004-D
-2.6400	-2.6800	No Design		
29		R0120-P2	N0120	N9001-G
-0.2400	-0.9000	No Design		
30		R1010-P2	N1010	N9005-G
2.1300	1.9800	No Design		
31		RN-025-P1	N-025	N9004-J
-1.2000	-1.3300	No Design		
32		RN-025-P2	N9004-G	N-025
-1.0900	-1.2400	No Design		
33		R0155-P1	N0155	N9002
-0.1400	-1.3100	No Design		
34		R0386	N0386	N0388
0.0000	0.0000	No Design		
35		R0388	N0388	N0410
0.0000	0.0000	No Design		
36		R0385	N0385	N0386
0.0000	0.0000	No Design		
37		R0375	N0375	N0380
0.0000	0.0000	No Design		
38		R0335	N0335	N0340
0.0000	0.0000	No Design		
39		R-0001B-P1	N0060	N-0001B
-0.3700	-0.4500	No Design		
40		R0540-P1	N0650	N0540
1.5100	1.4700	No Design		

41	R0540-P2	N0540	N0650
1.6000	1.5600 No Design		
42	R0540-P3	N0540	N0650
1.6700	1.5800 No Design		
43	R0290-P1	N0370	N0290
1.2300	1.0100 No Design		
44	R0285.1	N0285	N0380
2.0000	1.6500 No Design		
45	R0250.1	N0250	N0240
3.0000	2.4100 No Design		
46	R0230.1	N0230	N0250
3.3100	2.9100 No Design		
47	R0220.1	N0220	N0260
1.1800	0.9400 No Design		
48	R0200.1	N0200	N0202
-0.3600	-0.6300 No Design		
49	R0190.1	N0190	N0200
-0.9600	-1.6100 No Design		
50	R0170.1	N0170	N0210
-0.7100	-0.7200 No Design		
51	R0180-P1	N0180	N0140
-1.4600	-1.5300 No Design		
52	R0180-P2	N0180	N0140
-1.4600	-1.5300 No Design		
53	R0140.1	N0140	N0120
2.3100	2.0200 No Design		
54	R0140-P3.1	N0140	N0120
2.3100	2.0200 No Design		
55	R0150-P1	N0150	N0155
1.4400	1.0300 No Design		
56	R0150-P2	N0150	N0155
1.9700	0.7000 No Design		
57	R0150-P3	N0150	N0155
1.9700	0.7000 No Design		
58	R0150-P4	N0150	N0155
1.4400	0.7500 No Design		
59	R0150-P5	N0150	N0155
1.8300	1.3300 No Design		
60	R0110.1	N0060	N0110
1.0200	0.7700 No Design		
61	R0130-P1	N0130	N0060
-0.2400	-0.6000 No Design		
62	R0130-P2	N0130	N0060
-0.2400	-0.6000 No Design		
63	R0100-P1	N0130	N0100
0.6800	0.4600 No Design		
64	R0100-P2	N0130	N0100
0.6800	0.4600 No Design		
65	R0310.1	N0160	N0310
-1.1400	-1.5900 No Design		

66	R0430-P1	N0335	N0430
0.0000	-0.1300 No Design		
67	R0430-P2	N0335	N0430
0.0000	-0.1300 No Design		
68	R0430-P3	N0335	N0430
0.0000	-0.1300 No Design		
69	R0430-P4	N0335	N0430
0.0000	-0.1300 No Design		
70	R0340-P1	N0350	N0340
-1.3900	-1.7900 No Design		
71	R0340-P2	N0350	N0340
-0.9400	-1.3800 No Design		
72	R0350-P1	N0350	N0330
-2.6900	-3.4300 No Design		
73	R0350-P2	N0350	N0330
-2.6900	-3.4300 No Design		
74	R0330-P1	N0330	N0325
-3.2000	-4.1000 No Design		
75	R0330-P2	N0330	N0325
-3.2000	-4.1000 No Design		
76	R0450-P1	N0330	N0450
-0.5500	-0.6500 No Design		
77	R0450-P2	N0330	N0450
-0.5500	-0.6500 No Design		
78	P0360-P1	N0360	N0325
0.0600	-0.2000 No Design		
79	P0360-P2	N0360	N0325
-0.3300	-0.3400 No Design		
80	R0550-P1	N0515	N0550
-1.2000	-1.3300 No Design		
81	R0550-P2	N0515	N0550
-1.2000	-1.2600 No Design		
82	R0560-P1	N0515	N0560
-1.2000	-2.2000 No Design		
83	R0560-P2	N0515	N0560
-1.2000	-2.1300 No Design		
84	R0560-P3	N0515	N0560
-1.2000	-2.1700 No Design		
85	R0780.1	N0775	N0780
-0.6500	-4.3900 No Design		
86	R0740.1	N0770	N0740
-0.6400	-0.9700 No Design		
87	R0730.1	N0870	N0730
-1.3000	-1.7300 No Design		
88	R0880.1	N0880	N0810
999.1000	999.0000 No Design		
89	R0950.1	N0950	N0870
-0.4200	-1.0300 No Design		
90	R0920.1	N0870	N0920
-0.4100	-0.8500 No Design		

91		R0960.1	N0960	N0870
1.9000	1.7700	No Design		
92		R0990.1	N0990	N1020
1.5700	1.5100	No Design		
93		R1010-P3	N1020	N1010
1.6300	1.1300	No Design		
94		R1010-P4	N1020	N1010
1.6200	1.0500	No Design		
95		R1010-P5	N1020	N1010
1.6700	1.0400	No Design		
96		R0980-P1.1	N1010	N0980
1.7000	1.6200	No Design		
97		R0980-P2.1	N0980	N0850
2.2800	1.5200	No Design		
98		R0850-P1	N0850	N0870
1.4600	1.3000	No Design		
99		R0850-P2	N0850	N0870
1.5600	1.3500	No Design		
100		R0850-P3	N0850	N0870
1.6500	1.4500	No Design		
101		R0570-P1	N0570	N0560
-2.6700	-2.8100	No Design		
102		R0570-P2	N0570	N0560
-2.6000	-2.8200	No Design		
103		R0570-P3	N0570	N0560
-2.4900	-2.7300	No Design		
104		R0770-P1.1	N0790	N0770
-2.5900	-2.9400	No Design		
105		R0770-P3	N0770	N0910
-2.8300	-2.9000	No Design		
106		R0770-P4	N0770	N0910
-2.8100	-2.9900	No Design		
107		R0790-P1	N0915	N0790
-2.3000	-2.4900	No Design		
108		R0790-P2	N0915	N0790
-2.8900	-2.9800	No Design		
109		R0530-P1	N0530	N0540
1.7000	1.4500	No Design		
110		R0530-P2	N0530	N0540
1.6600	1.4300	No Design		
111		R0530-P3	N0530	N0540
1.7400	1.3500	No Design		
112		R0910-P1	N0880	N0910
-5.7600	-6.0000	No Design		
113		R0910-P2	N0910	N0880
-5.9600	-6.9100	No Design		
114		R0380-P1	N0385	N0380
2.0700	1.6600	No Design		
115		R0380-P2	N0385	N0380
2.0700	1.6600	No Design		

116	R0300-P1	N0300	N0325
-3.8500	-4.3700 No Design		
117	R0300-P2	N0300	N0325
-3.8500	-4.3700 No Design		
118	R0290-P2.1	N0275	N0290
2.3900	1.8300 No Design		
119	RN-004-P1	N-004	N-001
2.8800	2.7200 No Design		
120	RN-004-P2	N-004	N-001
2.8800	2.5700 No Design		
121	RN-004-P3	N-004	N-001
2.9300	2.5900 No Design		
122	RN-001-P1	N-001	N-005
1.2200	1.0000 No Design		
123	RN-001-P2	N-001	N-005
1.3800	1.0700 No Design		
124	RN-001-P3	N-001	N-005
1.2100	1.0000 No Design		
125	RN-005-P1	N-005	N-008
0.9300	0.8400 No Design		
126	RN-005-P2	N-005	N-008
0.9300	0.9000 No Design		
127	RN-005-P3	N-008	N-005
0.8900	0.8700 No Design		
128	RN-008-P1.1	N-010	N-008
0.3900	0.3100 No Design		
129	RN-008-P2	N-008	N-010
0.5200	0.3300 No Design		
130	RN-008-P3	N-008	N-010
0.6200	0.4000 No Design		
131	RN-010-P1	N-013	N-010
-0.1900	-0.2900 No Design		
132	RN-010-P2	N-013	N-010
-0.1800	-0.2200 No Design		
133	RN-010-P3	N-010	N-013
-0.1600	-0.2100 No Design		
134	RN-013-P1	N-013	N-015
-0.2200	-0.3700 No Design		
135	RN-013-P2	N-013	N-015
-0.2200	-0.3700 No Design		
136	RN-013-P3	N-013	N-015
-0.2200	-0.3700 No Design		
137	RN-015-P1	N2002	N-015
-0.1370	-0.9700 No Design		
138	RN-015-P2	N-015	N2002
-1.1900	-1.3700 No Design		
139	RN-015-P3	N-015	N2002
-1.0500	-1.3800 No Design		
140	RN-029-P1	N-025	N-029
-0.1170	-0.9800 No Design		

141	RN-029-P2	N-029	N-025
-0.9700	-1.0100 No Design		
142	R0742-P1	N0742	N0740
0.5000	0.1000 No Design		
143	R0742-P2	N0742	N0740
0.5000	0.1000 No Design		
144	R0655-P1.1	N9004-A	N0655
-2.7400	-2.9100 No Design		
145	R0490-P8	N9004-F	N0490
-1.1700	-1.2600 No Design		
146	R0490-P7	N9004-F	N0490
-1.1700	-1.2600 No Design		
147	R0140-P2.1	N0140	N0140-A
-1.9000	-2.0900 No Design		
148	R0140-P1.1	N0140	N0140-A
-1.9000	-2.0900 No Design		
149	R0120-P1.1	N0120	N9001-D
-0.2400	-0.9000 No Design		
150	R0160-P1.1	N9000-F	N0160
-1.9900	-2.0900 No Design		
151	R0325-P1.1	N0325	N9003-D
999.1000	999.0000 No Design		
152	R0400-P1.1	N0400	N9003-G
999.1000	999.0000 No Design		
153	R0880-P2.1	N0880	N9005-A
999.1000	999.0000 No Design		
154	R1010-P1.1	N1010	N9005-F
2.0300	1.9000 No Design		
155	R-0410-P4	N0410	N2370
-1.1400	-1.2200 No Design		
156	R-0410-P5	N0410	N2370
-1.1400	-1.2200 No Design		
157	R-0410-P6	N0410	N2370
-1.1400	-1.2200 No Design		
158	R-0410-P7	N0410	N2370
-1.0300	-1.4400 No Design		
159	R0410-P1	N2370	N0410
0.0000	-2.6100 No Design		
160	R0410-P2	N2370	N0410
0.0000	-2.6100 No Design		
161	R0410-P3	N2370	N0410
0.0000	-2.6100 No Design		
162	498.1	N2370	N0490
-0.8300	-1.0700 No Design		
163	R0490-P1.1	N0490	N2370
-1.0700	-1.2300 No Design		
164	R0490-P3	N0490	N2380
-0.8200	-1.5100 No Design		
165	R0490-P4	N0490	N2380
-0.8900	-1.7400 No Design		

166	R0490-P5	N0490	N2380
-1.0600	-1.5600 No Design		
167	R0490-P6	N0490	N2380
-1.1200	-1.3700 No Design		
168	R0890-ORF-2	N0890	N9004-L
0.7200	0.7200 No Design		
169	R0890-ORF-5	N0890	N9004-L
0.7200	0.7200 No Design		
170	R0890ORF-3	N0890	N9004-L
0.7200	0.7200 No Design		
171	R0890-ORF-4	N0890	N9004-L
0.7200	0.7200 No Design		
172	N0140-A-W1.1	N0140-A	N9001-B
1.3000	1.3000 No Design		
173	R0540-W3	N0540	N0650
1.3500	-0.4900 No Design		
174	R0290-P5	N0290	N0370
1.0100	0.9800 No Design		
175	R0285-W2	N0285	N0380
2.0000	0.0000 No Design		
176	R0250-W1	N0250	N0240
2.3000	1.4400 No Design		
177	R0230-W1	N0230	N0250
3.3100	2.3000 No Design		
178	R0220-W2	N0220	N0260
1.1800	-0.2300 No Design		
179	R0200-W3	N0200	N0202
-1.6100	-3.5700 No Design		
180	R0190-W4	N0190	N0200
-0.9600	-1.6100 No Design		
181	R0170-W3	N0170	N0210
-0.7100	-0.7200 No Design		
182	R0180-W1	N0180	N0140
-1.4600	-1.9000 No Design		
183	R0140-W1	N0140	N0120
-1.9000	-0.2400 No Design		
184	R0150-W3	N0150	N0155
1.4400	-0.1400 No Design		
185	R0110-W1	N0110	N0060
0.7700	-1.2900 No Design		
186	R0130-W1	N0060	N0130
-1.2900	-0.6000 No Design		
187	R0100-W4	N0100	N0130
0.4600	-0.6000 No Design		
188	R0310-W5.1	N0310	N0160
-1.5900	-2.0900 No Design		
189	R0430-W3	N0430	N0335
-0.1300	0.0000 No Design		
190	R0340-W3	N0340	N0350
-1.7900	-2.6900 No Design		

191	R0350-W1	N0350	N0330
-2.6900	-3.4300 No Design		
192	R0330-W1	N0450	N0330
-1.3000	-3.4300 No Design		
193	R0360-W1	N0360	N0325
-1.1800	-4.3700 No Design		
194	R0550-W2	N0550	N0515
-1.3300	-1.2000 No Design		
195	R0560-W1	N0560	N0515
-2.8200	-1.2000 No Design		
196	R0780-W1	N0780	N0775
-4.3900	-0.6500 No Design		
197	R0740-W3	N0740	N0770
-1.2400	-3.0500 No Design		
198	R0870-W1	N0730	N0870
-2.1000	-2.9200 No Design		
199	R0950-W1	N0950	N0870
-0.4200	-2.9200 No Design		
200	R0960-W2	N0960	N0870
1.9000	-2.9200 No Design		
201	R0990-W2	N0990	N1020
1.5700	-1.0000 No Design		
202	R1010-W2	N1010	N1020
1.0400	-1.0000 No Design		
203	R0980-W2	N0980	N1010
1.6200	1.0400 No Design		
204	R0850-W2	N0980	N0850
1.6200	1.4600 No Design		
205	R0770-W2	N0770	N0790
-3.0500	-2.9800 No Design		
206	R0530-W4	N0530	N0540
1.6600	1.3500 No Design		
207	R0380-W3	N0380	N0385
0.0000	-1.0900 No Design		
208	R0300-W2	N0300	N0325
-3.8500	-4.3700 No Design		
209	R0290-W1	N0290	N0275
1.0100	2.3000 No Design		
210	R0655-W2	N0655	N9004-A
-2.9100	-2.7400 No Design		
211	R0140-W2	N0140	N0140-A
-1.9000	-2.1000 No Design		
212	R0120-W2	N0120	N9001-D
-0.2400	-0.9000 No Design		
213	R0160-W1	N0160	N9000-F
-2.0900	-1.9900 No Design		
214	R0400-W1	N0400	N9003-G
-2.9000	0.0000 No Design		
215	R0880-W2	N0880	N9005-A
-6.9100	0.0000 No Design		

216	R1010-W1	N1010	N9005-F
1.0400	0.0000 No Design		
217	R0490-W2	N0490	N2370
-1.2600	-1.5600 No Design		
218	R0050-W1.1	N0050	N9001-J
-0.8600	-0.1730 No Design		
219	R0050-W2.1	N0050	N0060
-0.8600	-1.2900 No Design		
220	R0060-W1.1	N0060	N9001-K
-1.2900	-0.1730 No Design		
221	R0080-W1.1	N0080	N9001-E
0.4800	-2.0900 No Design		
222	R0080-W2.1	N0080	N0050
0.4800	-0.8600 No Design		
223	R0090-W1.1	N0090	N0060
2.4900	-1.2900 No Design		
224	R0090-W2.1	N0090	N9001-F
2.4900	-0.9000 No Design		
225	R0090-W3.1	N0090	N0110
2.4900	0.7700 No Design		
226	R0090-W4.1	N0090	N0120
2.4900	-0.2400 No Design		
227	R0100-W1.1	N0100	N0080
0.4600	0.4800 No Design		
228	R0100-W2.1	N0100	N0050
0.4600	-0.8600 No Design		
229	R0100-W3.1	N0100	N9001-H
0.4600	-0.9000 No Design		
230	R0110-W2.1	N0110	N0140
0.7700	-1.9000 No Design		
231	R0120-W1.1	N0120	N0110
-0.2400	0.7700 No Design		
232	R0130-W2.1	N0130	N9002-A
-0.6000	-1.3100 No Design		
233	R0150-W1.1	N0150	N0060
1.4400	-1.2900 No Design		
234	R0150-W2.1	N0150	N0110
1.4400	0.7700 No Design		
235	R0170-W1.1	N0170	N0150
-0.7100	1.4400 No Design		
236	R0170-W2.1	N0170	N0140
-0.7100	-1.9000 No Design		
237	R0190-W1.1	N0190	N0210
-0.9600	-0.7200 No Design		
238	R0190-W2.1	N0190	N0170
-0.9600	-0.7100 No Design		
239	R0190-W3.1	N0190	N0140
-0.9600	-1.9000 No Design		
240	R0200-W1.1	N0200	N0210
-1.6100	-0.7200 No Design		

241	R0200-W2.1	N0200	N0230
-1.6100	3.3100 No Design		
242	R0220-W1.1	N0220	N0250
1.1800	2.3000 No Design		
243	R0240-W1.1	N0240	N0190
1.4400	-0.9600 No Design		
244	R0240-W2.1	N0240	N0140
1.4400	-1.9000 No Design		
245	R0240-W3.1	N0240	N0230
1.4400	3.3100 No Design		
246	R0240-W4.1	N0240	N0180
1.4400	-1.4600 No Design		
247	R0240-W5.1	N0240	N0290
1.4400	1.0100 No Design		
248	R0240-W6.1	N0240	N0200
1.4400	-1.6100 No Design		
249	R0250-W2.1	N0250	N0260
2.3000	-0.2300 No Design		
250	R0250-W3.1	N0250	N0270
2.3000	1.5700 No Design		
251	R0260-W1.1	N0260	N0210
-0.2300	-0.7200 No Design		
252	R0270-W1.1	N0270	N0260
1.5700	-0.2300 No Design		
253	R0270-W3	N0270	N0260
1.5700	-0.2300 No Design		
254	R0270-W2.1	N0270	N0275
1.5700	2.3000 No Design		
255	R0275-W1.1	N0275	N0280
2.3000	2.0000 No Design		
256	R0280-W1.1	N0280	N0285
2.0000	2.0000 No Design		
257	R0285-W1.1	N0285	N0260
2.0000	-0.2300 No Design		
258	R0290-W2.1	N0290	N0180
1.0100	-1.4600 No Design		
259	R0290-W3.1	N0290	N0250
1.0100	2.3000 No Design		
260	R0290-W4.1	N0290	N0270
1.0100	1.5700 No Design		
261	R0300-W1.1	N0300	N9000-C
-3.8500	-1.9900 No Design		
262	R0310-W1.1	N0310	N0300
-1.5900	-3.8500 No Design		
263	R0310-W2.1	N0310	N0140
-1.5900	-1.9000 No Design		
264	R0310-W3.1	N0310	N9000-E
-1.5900	-1.9900 No Design		
265	R0310-W4.1	N0310	N0335
-1.5900	0.0000 No Design		

266	R0325-W2.1	N0325	N9000-B
-4.3700	-1.9900 No Design		
267	R0330-W2.1	N0330	N0400
-3.4300	-2.9000 No Design		
268	R0330-W3.1	N0330	N0440
-3.4300	-1.3700 No Design		
269	R0340-W1.1	N0340	N0520
-1.7900	-2.8300 No Design		
270	R0340-W2.1	N0340	N0460
-1.7900	-2.1500 No Design		
271	R0350-W2.1	N0350	N0460
-2.6900	-2.1500 No Design		
272	R0350-W3.1	N0350	N0390
-2.6900	-1.7000 No Design		
273	R0360-W2.1	N0360	N0450
-1.1800	-1.3000 No Design		
274	R0360-W3.1	N0360	N2040
-1.1800	-1.1000 No Design		
275	R0370-W1.1	N0370	N0380
0.9800	0.0000 No Design		
276	R0370-W2.1	N0370	N0430
0.9800	-0.1300 No Design		
277	R0370-W3.1	N0370	N0470
0.9800	1.8100 No Design		
278	R0380-W1.1	N0380	N0470
0.0000	1.8100 No Design		
279	R0380-W2.1	N0380	N0480
0.0000	2.2600 No Design		
280	R0380-W4.1	N0380	N0420
0.0000	3.0800 No Design		
281	R0390-W1.1	N0390	N0460
-1.7000	-2.1500 No Design		
282	R0390-W2	N0390	N0440
-1.7000	-1.3700 No Design		
283	R0400-W2.1	N0400	N0520
-2.9000	-2.8300 No Design		
284	R0410-W1.1	N0410	N9004-H
-2.6100	-1.1700 No Design		
285	R0420-W1.1	N0420	N0410
3.0800	-2.6100 No Design		
286	R0420-W2.1	N0420	N0480
3.0800	2.2600 No Design		
287	R0430-W1.1	N0430	N0180
-0.1300	-1.4600 No Design		
288	R0430-W2.1	N0430	N0500
-0.1300	2.2500 No Design		
289	R0440-W1.1	N0440	N0400
-1.3700	-2.9000 No Design		
290	R0450-W1.1	N0450	N9003-C
-1.3000	0.0000 No Design		

291	R0450-W2.1	N0450	N0400
-1.3000	-2.9000 No Design		
292	R0460-W1.1	N0460	N0400
-2.1500	-2.9000 No Design		
293	R0460-W2.1	N0460	N0520
-2.1500	-2.8300 No Design		
294	R0480-W1.1	N0480	N0410
2.2600	-2.6100 No Design		
295	R0480-W2.1	N0480	N0470
2.2600	1.8100 No Design		
296	R0480-W3.1	N0480	N0490
2.2600	-1.2600 No Design		
297	R0490-W1.1	N0490	N0410
-1.2600	-2.6100 No Design		
298	R0490-W3.1	N0490	N0655
-1.2600	-2.9100 No Design		
299	R0500-W1.1	N0500	N0470
2.2500	1.8100 No Design		
300	R0510-W2.1	N0510	N9003
-1.4300	0.0000 No Design		
301	R0520-W1.1	N0520	N0515
-2.8300	-1.2000 No Design		
302	R0520-W2.1	N0520	N0510
-2.8300	-1.4300 No Design		
303	R0530-W1.1	N0530	N0430
1.6600	-0.1300 No Design		
304	R0530-W2.1	N0530	N0470
1.6600	1.8100 No Design		
305	R0530-W3	N0530	N0500
1.6600	2.2500 No Design		
306	R0540-W1.1	N0540	N0470
1.3500	1.8100 No Design		
307	R0540-W2.1	N0540	N0480
1.3500	2.2600 No Design		
308	R0550-W1.1	N0550	N0335
-1.3300	0.0000 No Design		
309	R0550-W3.1	N0550	N0520
-1.3300	-2.8300 No Design		
310	R0560-W2.1	N0560	N9003-B
-2.8200	0.0000 No Design		
311	R0560-W3.1	N0560	N0810
-2.8200	-1.8500 No Design		
312	R0560-W4.1	N0560	N0770
-2.8200	-3.0500 No Design		
313	R0560-W5.1	N0560	N0885
-2.8200	-6.9100 No Design		
314	R0570-W1.1	N0570	N0720
-2.6700	-0.6500 No Design		
315	R0570-W3.1	N0570	N0850
-2.6700	1.4600 No Design		

316	R0570-W4.1	N0570	N0770
-2.6700	-3.0500 No Design		
317	R0570-W5.1	N0570	N0870
-2.6700	-2.9200 No Design		
318	R0640-W1.1	N0640	N0570
-2.7800	-2.6700 No Design		
319	R0650-W1.1	N0650	N0480
-0.4900	2.2600 No Design		
320	R0660-W1.1	N0660	N0730
-0.8400	-2.1000 No Design		
321	R0660-W2.1	N0660	N0740
-0.8400	-1.2400 No Design		
322	R0690-W2.1	N0690	N0720
0.6200	-0.6500 No Design		
323	R0720-W1.1	N0720	N0770
-0.6500	-3.0500 No Design		
324	R0730-W1.1	N0730	N0570
-2.1000	-2.6700 No Design		
325	R0740-W2.1	N0740	N0730
-1.2400	-2.1000 No Design		
326	R0740-W4.1	N0740	N0790
-1.2400	-2.9800 No Design		
327	R0775-W1.1	N0775	N0770
-0.6500	-3.0500 No Design		
328	R0780-W2.1	N0780	N0740
-4.3900	-1.2400 No Design		
329	R0790-W1	N0790	N0730
-2.9800	-2.1000 No Design		
330	R0800-W1.1	N0800	N0570
3.3500	-2.6700 No Design		
331	R0800-W2.1	N0800	N0730
3.3500	-2.1000 No Design		
332	R0810-W1.1	N0810	N9003-F
-1.8500	0.0000 No Design		
333	R0830-W3.1	N0830	N0970
-2.0500	-1.2100 No Design		
334	R0850-W3.1	N0850	N0930
1.4600	-3.5700 No Design		
335	R0870-W2.1	N0870	N0790
-2.9200	-2.9800 No Design		
336	R0885-W1.1	N0885	N0880
-6.9100	-6.9100 No Design		
337	R0910-W2.1	N0910	N9005-B
-6.0000	0.0000 No Design		
338	R0930-W1.1	N0930	N9004
-3.5700	-2.7400 No Design		
339	R0940-W1.1	N0940	N9005-D
-1.0100	0.0000 No Design		
340	R0940-W2.1	N0940	N0945
-1.0100	-0.8100 No Design		

341	R0945-W1.1	N0945	N9005-H
-0.8100	0.0000 No Design		
342	R0950-W2.1	N0950	N0970
-0.4200	-1.2100 No Design		
343	R0960-W1.1	N0960	N0980
1.9000	1.6200 No Design		
344	R0960-W3.1	N0960	N0920
1.9000	-1.5700 No Design		
345	R0960-W4.1	N0960	N0950
1.9000	-0.4200 No Design		
346	R0980-W1.1	N0980	N9005-E
1.6200	0.0000 No Design		
347	R0990-W1.1	N0990	N0940
1.5700	-1.0100 No Design		
348	R0990-W3.1	N0990	N0980
1.5700	1.6200 No Design		
349	R1000-W1.1	N1000	N0945
-1.3600	-0.8100 No Design		
350	R1020-W1.1	N1020	N9005-C
-1.0000	0.0000 No Design		
351	R1030-W1.1	N1030	N9005
-1.0500	0.0000 No Design		
352	R1030-W2.1	N1030	N1020
-1.0500	-1.0000 No Design		
353	R2002-W1.1	N2002	N9004-K
-1.8000	-1.3300 No Design		
354	R02040-W1.1	N2040	N9003-E
-1.1000	0.0000 No Design		
355	R2090-W1.1	N2090	N9000
-1.8900	-1.9900 No Design		
356	R2370-W4.1	N2370	N9004-E
-1.5600	-2.6800 No Design		
357	R2380-W2.1	N2380	N9004-I
-1.8100	-1.1700 No Design		
358	R2380-W3.1	N2380	N2370
-1.8100	-1.5600 No Design		
359	R0440-W2.1	N0440	N0460
-1.3700	-2.1500 No Design		
360	R015-W1.1	N-015	N-040
-1.1900	-1.4800 No Design		
361	R020-W1.1	N-020	N-021
1.3800	-0.4700 No Design		
362	R021-W1.1	N-021	N-042
-0.4700	-0.6300 No Design		
363	R030-W1.1	N-030	N-023
-0.0700	0.4500 No Design		
364	R031-W1.1	N-031	N-025
-0.8500	-1.2400 No Design		
365	R042-W1.1	N-042	N-040
-0.6300	-1.4800 No Design		

366	R043-W1.1	N-043	N-042
-1.1600	-0.6300 No Design		
367	R0850-W1.1	N0850	N0890
1.4600	-1.5400 No Design		

====> Warning !!! Node: 284 Area decreases between stages 24.395
and 26.680

====> Warning !!! Node: 340 Area decreases between stages 6.650
and 7.480

====> Warning !!! Node: 796 Area decreases between stages 0.900
and 1.000

```

*=====
|           Storage Junction Data           |
*=====

```

DEPTH			MAXIMUM OR	PEAK OR	CROWN
STARTS	STORAGE JUNCTION	JUNCTION	CONSTANT SURFACE	CONSTANT VOLUME	ELEVATION
FROM	NUMBER OR NAME	TYPE	AREA (FT2)	(CUBIC FEET)	(FT)
	-----	-----	-----	-----	-----
N0335		Stage/Area	43.56	348.5	6.880
Node Invert					
N0550		Stage/Area	2.6532E+06	5.5536E+07	26.39
Node Invert					
N0690		Stage/Area	1.6945E+05	2.6799E+05	8.145
Node Invert					
N0640		Stage/Area	6.6516E+05	6.3099E+06	14.69
Node Invert					
N0780		Stage/Area	9.3262E+05	2.1237E+06	4.905
Node Invert					
N0830		Stage/Area	6.2291E+05	2.7086E+06	7.705
Node Invert					
N0790		Stage/Area	5.9925E+06	3.2012E+07	7.235
Node Invert					
N0800		Stage/Area	5.5452E+05	1.1903E+06	8.025
Node Invert					
N0870		Stage/Area	4.3656E+06	2.4774E+07	9.010
Node Invert					
N0510		Stage/Area	2.4941E+07	1.2705E+08	6.670
Node Invert					
N0520		Stage/Area	4.1022E+07	2.7600E+08	8.870
Node Invert					
N0390		Stage/Area	5.9398E+06	1.0791E+08	19.42

Node Invert N0350	Stage/Area	3.3572E+06	1.5319E+07	6.965
Node Invert N0450	Stage/Area	1.6954E+07	1.0307E+08	7.495
Node Invert N0770	Stage/Area	3.0392E+06	1.6176E+07	6.910
Node Invert N0720	Stage/Area	3.6752E+06	2.1079E+07	7.160
Node Invert N0960	Stage/Area	4.5259E+05	1.0757E+06	7.555
Node Invert N0920	Stage/Area	7.1133E+05	2.2531E+06	6.610
Node Invert N0950	Stage/Area	2.1540E+06	9.8970E+06	7.730
Node Invert N0970	Stage/Area	4.4170E+05	2.4805E+06	9.180
Node Invert N0915	Stage/Area	1.5146E+07	9.3078E+07	7.830
Node Invert N0885	Stage/Area	9.1642E+06	5.5509E+07	7.490
Node Invert N0560	Stage/Area	3.4073E+06	1.6915E+07	7.160
Node Invert N0810	Stage/Area	3.4023E+07	3.4064E+10	1003.
Node Invert N0570	Stage/Area	2.6010E+06	5.8029E+07	27.20
Node Invert N0990	Stage/Area	3.8594E+05	6.5552E+05	6.640
Node Invert N1000	Stage/Area	1.2693E+06	1.7869E+07	15.45
Node Invert N1020	Stage/Area	7.0694E+06	3.8493E+07	8.555
Node Invert N1030	Stage/Area	5.7935E+05	1.7976E+06	7.245
Node Invert N0890	Stage/Area	2.3328E+07	2.6470E+08	17.64
Node Invert N0850	Stage/Area	1.2300E+07	7.9629E+07	13.84
Node Invert N0930	Stage/Area	5.2516E+06	5.3657E+07	15.73
Node Invert N0980	Stage/Area	1.6496E+07	1.3110E+08	14.67
Node Invert N1010	Stage/Area	3.5850E+05	1.0315E+06	8.120
Node Invert N0430	Stage/Area	2.4228E+06	1.3039E+07	10.37
Node Invert N0500	Stage/Area	7.4701E+06	5.8288E+07	13.95
Node Invert N0230	Stage/Area	8.4942E+05	1.9403E+06	8.485

Node Invert N0220	Stage/Area	8.0455E+05	2.9837E+06	10.94
Node Invert N0200	Stage/Area	6.2596E+05	3.1117E+06	11.48
Node Invert N0190	Stage/Area	4.8700E+05	1.2355E+06	9.380
Node Invert N0130	Stage/Area	5.7935E+05	4.9482E+06	12.69
Node Invert N0100	Stage/Area	4.2950E+05	2.0847E+06	10.71
Node Invert N0090	Stage/Area	6.6124E+05	1.1423E+06	7.485
Node Invert N0120	Stage/Area	6.6777E+05	2.5652E+06	9.855
Node Invert N0110	Stage/Area	2.2281E+06	6.1304E+06	9.615
Node Invert N0170	Stage/Area	1.1130E+06	6.1353E+06	12.56
Node Invert N0210	Stage/Area	3.6826E+06	4.6909E+07	15.04
Node Invert N0260	Stage/Area	1.6753E+07	1.3098E+08	13.29
Node Invert N0250	Stage/Area	1.0088E+06	4.4960E+06	10.08
Node Invert N0240	Stage/Area	3.1058E+05	7.1289E+05	7.120
Node Invert N0140	Stage/Area	2.4973E+06	9.9979E+06	10.34
Node Invert N0150	Stage/Area	1.6296E+06	1.2696E+07	14.86
Node Invert N0270	Stage/Area	5.8035E+06	6.5435E+07	16.96
Node Invert N0290	Stage/Area	6.1507E+05	1.7262E+06	8.195
Node Invert N0180	Stage/Area	2.7634E+06	1.4224E+07	9.365
Node Invert N0370	Stage/Area	2.4150E+06	1.1010E+07	10.38
Node Invert N0285	Stage/Area	1.0616E+07	6.9567E+07	14.62
Node Invert N0420	Stage/Area	5.0351E+06	8.5395E+07	30.49
Node Invert N0490	Stage/Area	3.7905E+07	3.4588E+08	13.24
Node Invert N0410	Stage/Area	3.9973E+07	7.8291E+08	24.49
Node Invert N0380	Stage/Area	3.8577E+06	8.8143E+07	28.68
Node Invert N0660	Stage/Area	2.6223E+05	4.4869E+06	18.31

Node Invert N0740	Stage/Area	2.9007E+06	8.6093E+07	32.26
Node Invert N0730	Stage/Area	1.1384E+07	8.8376E+07	10.78
Node Invert N0940	Stage/Area	1.0017E+07	6.4944E+07	8.590
Node Invert N0530	Stage/Area	2.3544E+06	4.8493E+07	27.23
Node Invert N0060	Stage/Area	8.0752E+06	1.4549E+08	21.42
Node Invert N0050	Stage/Area	1.7481E+06	9.9083E+06	9.745
Node Invert N0325	Stage/Area	43.56	4.3820E+04	1002.
Node Invert N0160	Stage/Area	1.2807E+06	9.0357E+06	9.670
Node Invert N0470	Stage/Area	4.2825E+07	3.6474E+08	13.82
Node Invert N0540	Stage/Area	2.7639E+06	1.5352E+07	11.94
Node Invert N0650	Stage/Area	1.7132E+06	1.1204E+07	12.73
Node Invert N0400	Stage/Area	2.7841E+07	2.7872E+10	1003.
Node Invert N0360	Stage/Area	9.0866E+05	4.8781E+06	7.130
Node Invert N0480	Stage/Area	3.7165E+07	3.8161E+08	16.27
Node Invert N0080	Stage/Area	1.2981E+06	5.7855E+06	9.975
Node Invert N0310	Stage/Area	1.9998E+06	1.1346E+07	10.01
Node Invert N0300	Stage/Area	4.5215E+06	5.8495E+07	20.55
Node Invert N0460	Stage/Area	2.6889E+07	2.3329E+08	11.04
Node Invert N0440	Stage/Area	1.2927E+07	1.1341E+08	11.01
Node Invert N0330	Stage/Area	1.7524E+06	9.8045E+06	7.510
Node Invert N0655	Stage/Area	4.2615E+06	3.2219E+07	11.02
Node Invert N0375	Stage/Area	43.56	348.5	5.430
Node Invert N0385	Stage/Area	4356.	1.0080E+04	7.000
Node Invert N0275	Stage/Area	5.6236E+05	6.0676E+06	16.35
Node Invert N0280	Stage/Area	2.7417E+06	1.9307E+07	13.78

Node Invert N0202	Stage/Area	43.56	373.3	5.000
Node Invert N0340	Stage/Area	1.5903E+07	8.7837E+07	10.56
Node Invert N0515	Stage/Area	2.3231E+06	1.1641E+07	7.400
Node Invert N-001	Stage/Area	4.5215E+06	9.4181E+07	27.23
Node Invert N-002	Stage/Area	3.3411E+05	9.3079E+05	9.115
Node Invert N-003	Stage/Area	1.9776E+05	5.6139E+05	9.710
Node Invert N-004	Stage/Area	3.9204E+05	1.2036E+06	11.26
Node Invert N-005	Stage/Area	6.1507E+05	1.3889E+06	8.565
Node Invert N-008	Stage/Area	9.2173E+05	4.1528E+06	11.95
Node Invert N-010	Stage/Area	8.2764E+05	4.0145E+06	11.09
Node Invert N-013	Stage/Area	3.5022E+05	1.7655E+06	8.975
Node Invert N-015	Stage/Area	1.7184E+06	1.3853E+07	10.69
Node Invert N-006	Stage/Area	4.3996E+05	1.3660E+06	10.83
Node Invert N-007	Stage/Area	2.9011E+05	8.9287E+05	12.12
Node Invert N-009	Stage/Area	3.2017E+05	9.9376E+05	12.45
Node Invert N-011	Stage/Area	4.1469E+05	1.0525E+06	12.49
Node Invert N-014	Stage/Area	5.6584E+05	3.1548E+06	11.04
Node Invert N-012	Stage/Area	4.5607E+05	1.8573E+06	13.30
Node Invert N-025	Stage/Area	2.3392E+05	1.6828E+06	10.44
Node Invert N-023	Stage/Area	9.8446E+04	3.0458E+05	6.535
Node Invert N-021	Stage/Area	1.1809E+06	6.7927E+06	10.15
Node Invert N-019	Stage/Area	1.0258E+06	5.4177E+06	10.72
Node Invert N-041	Stage/Area	1.2724E+06	8.7026E+06	15.26
Node Invert N-020	Stage/Area	7.6578E+05	5.0756E+06	11.06
Node Invert N-022	Stage/Area	5.8850E+05	3.5281E+06	10.46

Node Invert N-024	Stage/Area	1.3660E+06	8.8844E+06	10.76
Node Invert N-029	Stage/Area	3.4151E+05	1.1812E+06	7.470
Node Invert N-026	Stage/Area	5.0965E+04	8.0612E+04	10.74
Node Invert N-027	Stage/Area	4.3865E+05	2.9186E+06	11.15
Node Invert N-028	Stage/Area	6.2291E+04	1.5446E+05	6.715
Node Invert N-030	Stage/Area	1.1774E+06	7.3073E+06	8.135
Node Invert N-043	Stage/Area	7.4793E+05	4.4364E+06	8.430
Node Invert N-042	Stage/Area	2.6829E+06	1.5640E+07	9.050
Node Invert N-031	Stage/Area	1.0785E+06	1.0235E+07	10.36
Node Invert N-040	Stage/Area	1.4884E+07	1.2512E+08	10.84
Node Invert N0620	Stage/Area	3.0492E+04	1.3740E+05	5.000
Node Invert N0900	Stage/Area	435.6	2205.	5.000
Node Invert N-009mh	Stage/Area	43.56	348.5	6.000
Node Invert N0205	Stage/Area	6.5340E+04	1.7494E+05	4.000
Node Invert N0386	Stage/Area	4356.	1.3409E+04	7.000
Node Invert N0388	Stage/Area	4356.	1.6636E+04	7.000
Node Invert N0775	Stage/Area	1.7550E+06	8.7367E+06	6.460
Node Invert N2040	Stage/Area	1.1670E+07	5.2517E+07	5.930
Node Invert N2380	Stage/Area	2.9862E+06	5.1825E+07	20.07
Node Invert N0155	Stage/Area	5.7281E+05	1.1316E+06	7.690
Node Invert N0945	Stage/Area	6.3737E+06	2.8319E+07	5.830
Node Invert N2002	Stage/Area	4.6696E+06	2.9689E+07	7.900
Node Invert N2090	Stage/Area	5.5424E+06	3.8031E+07	8.530
Node Invert N0742	Stage/Area	871.2	3553.	6.000
Node Invert N0910	Stage/Area	4.3996E+04	1.2595E+05	3.000

Node Invert N0880	Stage/Area	4.3996E+04	4.4413E+07	1003.
Node Invert N2370	Stage/Area	1.1839E+07	1.1434E+08	12.13
Node Invert N-0001A	Stage/Area	1.4609E+08	1.6220E+09	15.70
Node Invert N-0001B	Stage/Area	6.7698E+05	2.0454E+06	7.000
Node Invert N0001-C	Stage/Area	9.8446E+05	4.9742E+06	11.05
Node Invert N-0001-E	Stage/Area	6.3674E+04	5.0634E+04	6.000
Node Invert N-0001-F	Stage/Area	2.8541E+05	4.0306E+05	5.000
Node Invert N-0001-G	Stage/Area	1.1892E+05	1.9826E+05	6.000
Node Invert N0001-J	Stage/Area	1.1196E+06	6.6508E+06	8.590
Node Invert N0001-I	Stage/Area	1.1482E+06	5.9521E+06	7.830
Node Invert N-0001K	Stage/Area	2.0735E+05	1.2063E+06	8.530
Node Invert N0140-A	Stage/Area	1742.	2.1606E+04	10.30

=====

| Variable storage data for node | N0335

=====

Data	Elevation	Depth	Area	Volume	Area
Volume Point ac-ft	ft	ft	ft^2	ft^3	acres
=====	=====	=====	=====	=====	=====
1	0.0000	0.0000	43.5600	0.0000	0.0010
0.0000					
2	8.0000	8.0000	43.5600	348.4800	0.0010
0.0080					

=====

| Variable storage data for node | N0550

=====

Data	Elevation	Depth	Area	Volume	Area
Volume Point ac-ft	ft	ft	ft^2	ft^3	acres
=====	=====	=====	=====	=====	=====
1	-1.3300	0.0000	26.1360	0.0000	0.0006

0.0000					
2	-1.3100	0.0200	435.6000	3.7895	0.0100
0.0001					
3	-1.1100	0.2200	81021.6000	5830.2641	1.8600
0.1338					
4	-0.9100	0.4200	81457.2000	22077.9621	1.8700
0.5068					
5	-0.8100	0.5200	82328.4000	30267.1216	1.8900
0.6948					
6	-0.7100	0.6200	83635.2000	38565.1329	1.9200
0.8853					
7	-0.6100	0.7200	86248.8000	47058.9128	1.9800
1.0803					
8	-0.5100	0.8200	91040.4000	55922.2048	2.0900
1.2838					
9	-0.4100	0.9200	98010.0000	65372.4884	2.2500
1.5007					
10	-0.3100	1.0200	105850.8000	75562.9125	2.4300
1.7347					
11	-0.2100	1.1200	114562.8000	86580.6116	2.6300
1.9876					
12	-0.1100	1.2200	121968.0000	98405.1009	2.8000
2.2591					
13	-0.0100	1.3200	130244.4000	111013.3310	2.9900
2.5485					
14	0.0900	1.4200	135907.2000	124319.7737	3.1200
2.8540					
15	0.3900	1.7200	152024.4000	167486.5100	3.4900
3.8450					
16	0.4900	1.8200	156816.0000	182927.7561	3.6000
4.1994					
17	0.5900	1.9200	162914.4000	198913.1468	3.7400
4.5664					
18	0.6900	2.0200	171190.8000	215616.5310	3.9300
4.9499					
19	0.7900	2.1200	182516.4000	233298.6914	4.1900
5.3558					
20	0.8900	2.2200	193842.0000	252113.5825	4.4500
5.7877					
21	0.9900	2.3200	202554.0000	271931.5885	4.6500
6.2427					
22	1.0900	2.4200	209959.2000	292555.9344	4.8200
6.7162					
23	1.1900	2.5200	217364.4000	313920.8312	4.9900
7.2066					
24	1.2900	2.6200	224769.6000	336026.2765	5.1600
7.7141					
25	1.3900	2.7200	233481.6000	358937.2271	5.3600
8.2401					
26	1.4900	2.8200	241322.4000	382676.1106	5.5400

8.7850					
27	1.5900	2.9200	250034.4000	407242.4176	5.7400
9.3490					
28	1.6900	3.0200	259182.0000	432701.6135	5.9500
9.9335					
29	1.7900	3.1200	270072.0000	459162.1814	6.2000
10.5409					
30	1.8900	3.2200	280090.8000	486668.5258	6.4300
11.1724					
31	1.9900	3.3200	288367.2000	515090.1374	6.6200
11.8248					
32	2.0900	3.4200	296208.0000	544317.7287	6.8000
12.4958					
33	2.1900	3.5200	304920.0000	574372.7759	7.0000
13.1858					
34	2.2900	3.6200	312760.8000	605255.6776	7.1800
13.8948					
35	2.3900	3.7200	322344.0000	637009.3950	7.4000
14.6237					
36	2.7900	4.1200	358063.2000	773026.9269	8.2200
17.7463					
37	2.8900	4.2200	367210.8000	809289.3027	8.4300
18.5787					
38	2.9900	4.3200	378972.0000	846596.5248	8.7000
19.4352					
39	3.0900	4.4200	392040.0000	885144.8934	9.0000
20.3201					
40	3.1900	4.5200	405108.0000	925000.1094	9.3000
21.2351					
41	3.2900	4.6200	418611.6000	966183.8327	9.6100
22.1805					
42	3.3900	4.7200	430808.4000	1.00865E+06	9.8900
23.1555					
43	3.4900	4.8200	441698.4000	1.05228E+06	10.1400
24.1569					
44	3.5900	4.9200	451717.2000	1.09695E+06	10.3700
25.1824					
45	3.6900	5.0200	464349.6000	1.14275E+06	10.6600
26.2339					
46	3.7900	5.1200	478724.4000	1.18990E+06	10.9900
27.3163					
47	3.8900	5.2200	495277.2000	1.23860E+06	11.3700
28.4343					
48	3.9900	5.3200	513572.4000	1.28904E+06	11.7900
29.5922					
49	4.0900	5.4200	533610.0000	1.34139E+06	12.2500
30.7941					
50	4.1900	5.5200	556696.8000	1.39590E+06	12.7800
32.0455					
51	4.2900	5.6200	581526.0000	1.45281E+06	13.3500

33.3519					
52	4.3900	5.7200	610275.6000	1.51239E+06	14.0100
34.7197					
53	4.4900	5.8200	642074.4000	1.57500E+06	14.7400
36.1571					
54	4.5900	5.9200	676486.8000	1.64092E+06	15.5300
37.6704					
55	4.6900	6.0200	715690.8000	1.71052E+06	16.4300
39.2681					
56	4.7900	6.1200	758379.6000	1.78421E+06	17.4100
40.9599					
57	4.8900	6.2200	806731.2000	1.86246E+06	18.5200
42.7561					
58	4.9900	6.3200	859003.2000	1.94573E+06	19.7200
44.6678					
59	5.0900	6.4200	917809.2000	2.03455E+06	21.0700
46.7069					
60	5.1900	6.5200	980535.6000	2.12945E+06	22.5100
48.8854					
61	5.2900	6.6200	1047182.400	2.23082E+06	24.0400
51.2125					
62	5.3900	6.7200	1116878.400	2.33900E+06	25.6400
53.6960					
63	5.4900	6.8200	1188752.400	2.45426E+06	27.2900
56.3421					
64	5.5900	6.9200	1265853.600	2.57697E+06	29.0600
59.1591					
65	5.6900	7.0200	1345132.800	2.70750E+06	30.8800
62.1556					
66	5.7900	7.1200	1425283.200	2.84600E+06	32.7200
65.3351					
67	5.8900	7.2200	1506740.400	2.99258E+06	34.5900
68.7002					
68	5.9900	7.3200	1584277.200	3.14711E+06	36.3700
72.2478					
69	6.0900	7.4200	1652666.400	3.30895E+06	37.9400
75.9629					
70	6.1900	7.5200	1719313.200	3.47753E+06	39.4700
79.8332					
71	6.2900	7.6200	1778554.800	3.65242E+06	40.8300
83.8479					
72	6.3900	7.7200	1833876.000	3.83303E+06	42.1000
87.9942					
73	6.4900	7.8200	1888761.600	4.01915E+06	43.3600
92.2670					
74	6.5900	7.9200	1940598.000	4.21061E+06	44.5500
96.6623					
75	6.6900	8.0200	1993305.600	4.40730E+06	45.7600
101.1777					
76	6.7900	8.1200	2049498.000	4.60943E+06	47.0500

105.8180					
77	6.8900	8.2200	2105254.800	4.81716E+06	48.3300
110.5868					
78	6.9900	8.3200	2155784.400	5.03020E+06	49.4900
115.4776					
79	7.0900	8.4200	2202393.600	5.24811E+06	50.5600
120.4800					
80	7.1900	8.5200	2246824.800	5.47056E+06	51.5800
125.5868					
81	7.2900	8.6200	2289513.600	5.69737E+06	52.5600
130.7937					
82	7.3900	8.7200	2334380.400	5.92856E+06	53.5900
136.1011					
83	7.4900	8.8200	2386652.400	6.16461E+06	54.7900
141.5199					
84	7.5900	8.9200	2449814.400	6.40642E+06	56.2400
147.0712					
85	7.6900	9.0200	2503828.800	6.65410E+06	57.4800
152.7570					
86	7.7900	9.1200	2538676.800	6.90622E+06	58.2800
158.5449					
87	7.8900	9.2200	2553051.600	7.16080E+06	58.6100
164.3893					
88	7.9900	9.3200	2558714.400	7.41639E+06	58.7400
170.2568					
89	8.0900	9.4200	2561328.000	7.67239E+06	58.8000
176.1337					
90	8.1900	9.5200	2563941.600	7.92865E+06	58.8600
182.0167					
91	8.2900	9.6200	2565684.000	8.18512E+06	58.9000
187.9046					
92	8.8900	10.2200	2573524.800	9.72687E+06	59.0800
223.2982					
93	8.9900	10.3200	2574831.600	9.98429E+06	59.1100
229.2077					
94	9.0900	10.4200	2575267.200	10.24179E+06	59.1200
235.1191					
95	14.1900	15.5200	2606194.800	23.45431E+06	59.8300
538.4368					
96	14.2900	15.6200	2607066.000	23.71497E+06	59.8500
544.4207					
97	14.3900	15.7200	2607066.000	23.97567E+06	59.8500
550.4057					
98	26.2900	27.6200	2652804.000	55.27119E+06	60.9000
1268.8520					
99	26.3900	27.7200	2653239.600	55.53649E+06	60.9100
1274.9424					

=====

| Variable storage data for node | N0690

=====						
Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres	
=====	=====	=====	=====	=====	=====	
1	0.6200	0.0000	435.6000	0.0000	0.0100	
0.0000						
2	1.8400	1.2200	435.6000	531.4320	0.0100	
0.0122						
3	1.8500	1.2300	435.6000	535.7880	0.0100	
0.0123						
4	1.9500	1.3300	871.2000	599.8817	0.0200	
0.0138						
5	2.0500	1.4300	1742.4000	728.0692	0.0400	
0.0167						
6	2.1500	1.5300	3049.2000	964.6195	0.0700	
0.0221						
7	2.2500	1.6300	4791.6000	1353.3881	0.1100	
0.0311						
8	2.3500	1.7300	5662.8000	1875.4968	0.1300	
0.0431						
9	2.4500	1.8300	6098.4000	2463.4164	0.1400	
0.0566						
10	2.5500	1.9300	6534.0000	3094.9049	0.1500	
0.0710						
11	2.6500	2.0300	6534.0000	3748.3049	0.1500	
0.0860						
12	2.7500	2.1300	6969.6000	4423.3610	0.1600	
0.1015						
13	2.8500	2.2300	6969.6000	5120.3210	0.1600	
0.1175						
14	2.9500	2.3300	7405.2000	5838.9438	0.1700	
0.1340						
15	3.0500	2.4300	7405.2000	6579.4638	0.1700	
0.1510						
16	3.1500	2.5300	7840.8000	7341.6525	0.1800	
0.1685						
17	3.2500	2.6300	7840.8000	8125.7325	0.1800	
0.1865						
18	3.3500	2.7300	8276.4000	8931.4863	0.1900	
0.2050						
19	3.4500	2.8300	8276.4000	9759.1263	0.1900	
0.2240						
20	3.5500	2.9300	8276.4000	10586.7663	0.1900	
0.2430						
21	3.6500	3.0300	8712.0000	11436.0847	0.2000	
0.2625						
22	3.7500	3.1300	8712.0000	12307.2847	0.2000	

0.2825					
23	3.8500	3.2300	8712.0000	13178.4847	0.2000
0.3025					
24	3.9500	3.3300	8712.0000	14049.6847	0.2000
0.3225					
25	4.0500	3.4300	8712.0000	14920.8847	0.2000
0.3425					
26	4.1500	3.5300	9147.6000	15813.7672	0.2100
0.3630					
27	4.2500	3.6300	9583.2000	16750.2134	0.2200
0.3845					
28	4.3500	3.7300	9583.2000	17708.5334	0.2200
0.4065					
29	4.4500	3.8300	10018.8000	18688.5429	0.2300
0.4290					
30	4.5500	3.9300	10454.4000	19712.1155	0.2400
0.4525					
31	4.6500	4.0300	10890.0000	20779.2507	0.2500
0.4770					
32	4.7500	4.1300	10890.0000	21868.2507	0.2500
0.5020					
33	4.8500	4.2300	11761.2000	23000.5200	0.2700
0.5280					
34	4.9500	4.3300	12632.4000	24219.9285	0.2900
0.5560					
35	5.0500	4.4300	14810.4000	25590.6120	0.3400
0.5875					
36	5.1500	4.5300	16117.2000	27136.5162	0.3700
0.6230					
37	5.2500	4.6300	17424.0000	28813.1350	0.4000
0.6615					
38	5.3500	4.7300	19166.4000	30641.9449	0.4400
0.7034					
39	5.4500	4.8300	20908.8000	32645.0533	0.4800
0.7494					
40	5.5500	4.9300	22651.2000	34822.4504	0.5200
0.7994					
41	5.6500	5.0300	24393.6000	37174.1290	0.5600
0.8534					
42	5.7500	5.1300	27007.2000	39743.0351	0.6200
0.9124					
43	5.8500	5.2300	29620.8000	42573.4010	0.6800
0.9774					
44	5.9500	5.3300	33105.6000	45708.0751	0.7600
1.0493					
45	6.0500	5.4300	36154.8000	49169.9413	0.8300
1.1288					
46	6.1500	5.5300	39639.6000	52958.2875	0.9100
1.2158					
47	6.2500	5.6300	43124.4000	57095.2229	0.9900

1.3107					
48	6.3500	5.7300	47480.4000	61623.6714	1.0900
1.4147					
49	6.4500	5.8300	52707.6000	66630.7470	1.2100
1.5296					
50	6.5500	5.9300	60112.8000	72267.6558	1.3800
1.6590					
51	6.6500	6.0300	67953.6000	78666.9077	1.5600
1.8059					
52	6.7500	6.1300	74923.2000	85807.8414	1.7200
1.9699					
53	6.8500	6.2300	81457.2000	93624.5072	1.8700
2.1493					
54	6.9500	6.3300	87120.0000	102051.6973	2.0000
2.3428					
55	7.0500	6.4300	92782.8000	111045.2616	2.1300
2.5492					
56	7.1500	6.5300	98881.2000	120626.7483	2.2700
2.7692					
57	7.2500	6.6300	107157.6000	130925.8138	2.4600
3.0056					
58	7.3500	6.7300	121532.4000	142352.6624	2.7900
3.2680					
59	7.4500	6.8300	136342.8000	155239.1994	3.1300
3.5638					
60	7.5500	6.9300	152460.0000	169671.6938	3.5000
3.8951					
61	7.6500	7.0300	159865.2000	185286.3343	3.6700
4.2536					
62	7.7500	7.1300	164221.2000	201490.0043	3.7700
4.6256					
63	7.8500	7.2300	168141.6000	218107.5928	3.8600
5.0071					
64	7.9500	7.3300	169012.8000	234965.1254	3.8800
5.3941					
65	8.0500	7.4300	169448.4000	251888.0115	3.8900
5.7826					
66	8.1450	7.5250	169448.4000	267985.6095	3.8900
6.1521					

=====

| Variable storage data for node | N0640

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.7800	0.0000	26.1360	0.0000	0.0006

0.0000					
2	-0.1100	2.6700	435.6000	505.9028	0.0100
0.0116					
3	-0.1000	2.6800	70567.2000	761.0572	1.6200
0.0175					
4	0.0000	2.7800	71002.8000	7839.4752	1.6300
0.1800					
5	0.5000	3.2800	75794.4000	44531.8898	1.7400
1.0223					
6	0.6000	3.3800	78408.0000	52241.5635	1.8000
1.1993					
7	0.7000	3.4800	83635.2000	60342.2370	1.9200
1.3853					
8	0.8000	3.5800	89733.6000	69008.8021	2.0600
1.5842					
9	0.9000	3.6800	95396.4000	78263.7658	2.1900
1.7967					
10	1.0000	3.7800	98881.2000	87977.0277	2.2700
2.0197					
11	1.1000	3.8800	101059.2000	97973.7500	2.3200
2.2492					
12	2.6000	5.3800	118047.6000	262137.3112	2.7100
6.0178					
13	2.7000	5.4800	118918.8000	273985.4860	2.7300
6.2898					
14	2.8000	5.5800	120661.2000	285964.2606	2.7700
6.5648					
15	2.9000	5.6800	121968.0000	298095.5406	2.8000
6.8433					
16	3.0000	5.7800	124146.0000	310400.9569	2.8500
7.1258					
17	3.6000	6.3800	135907.2000	388389.5278	3.1200
8.9162					
18	3.7000	6.4800	137214.0000	402045.3991	3.1500
9.2297					
19	3.8000	6.5800	140263.2000	415918.8411	3.2200
9.5482					
20	4.4000	7.1800	157687.2000	505252.0768	3.6200
11.5990					
21	4.5000	7.2800	161607.6000	521216.2560	3.7100
11.9655					
22	4.6000	7.3800	167706.0000	537680.8301	3.8500
12.3435					
23	4.7000	7.4800	175982.4000	554863.4172	4.0400
12.7379					
24	4.8000	7.5800	184694.4000	572895.3230	4.2400
13.1519					
25	4.9000	7.6800	193842.0000	591820.1113	4.4500
13.5863					
26	5.0000	7.7800	205603.2000	611789.2852	4.7200

14.0447						
27	5.1000	7.8800	218235.6000	632977.8751	5.0100	
14.5312						
28	5.2000	7.9800	231303.6000	655451.4440	5.3100	
15.0471						
29	5.3000	8.0800	245242.8000	679275.1273	5.6300	
15.5940						
30	5.4000	8.1800	258746.4000	704471.3197	5.9400	
16.1724						
31	5.5000	8.2800	274863.6000	731147.4953	6.3100	
16.7848						
32	5.7000	8.4800	304920.0000	789099.2892	7.0000	
18.1152						
33	5.8000	8.5800	320166.0000	820350.1775	7.3500	
18.8326						
34	5.9000	8.6800	336718.8000	853190.6126	7.7300	
19.5866						
35	6.0000	8.7800	356320.8000	887837.6250	8.1800	
20.3819						
36	6.1000	8.8800	375922.8000	924445.0653	8.6300	
21.2223						
37	6.2000	8.9800	402494.4000	963357.9753	9.2400	
22.1157						
38	6.3000	9.0800	425145.6000	1.00473E+06	9.7600	
23.0655						
39	6.4000	9.1800	445183.2000	1.04825E+06	10.2200	
24.0644						
40	6.5000	9.2800	467398.8000	1.09387E+06	10.7300	
25.1118						
41	6.6000	9.3800	490921.2000	1.14178E+06	11.2700	
26.2117						
42	6.7000	9.4800	510087.6000	1.19183E+06	11.7100	
27.3606						
43	6.8000	9.5800	527076.0000	1.24368E+06	12.1000	
28.5510						
44	6.9000	9.6800	542322.0000	1.29715E+06	12.4500	
29.7785						
45	7.0000	9.7800	554083.2000	1.35197E+06	12.7200	
31.0370						
46	7.1000	9.8800	564537.6000	1.40790E+06	12.9600	
32.3209						
47	7.2000	9.9800	574120.8000	1.46483E+06	13.1800	
33.6279						
48	7.3000	10.0800	582397.2000	1.52266E+06	13.3700	
34.9554						
49	7.4000	10.1800	590238.0000	1.58129E+06	13.5500	
36.3013						
50	7.5000	10.2800	596772.0000	1.64064E+06	13.7000	
37.6638						
51	7.6000	10.3800	603741.6000	1.70066E+06	13.8600	

39.0418						
52	7.7000	10.4800	609404.4000	1.76132E+06		13.9900
40.4343						
53	8.0000	10.7800	629006.4000	1.94707E+06		14.4400
44.6986						
54	8.1000	10.8800	635976.0000	2.01032E+06		14.6000
46.1505						
55	8.2000	10.9800	639025.2000	2.07407E+06		14.6700
47.6140						
56	8.3000	11.0800	640332.0000	2.13803E+06		14.7000
49.0825						
57	14.6000	17.3800	665161.2000	6.25005E+06		15.2700
143.4814						
58	14.6900	17.4700	665161.2000	6.30991E+06		15.2700
144.8557						

=====

| Variable storage data for node | N0780

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-4.3900	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-0.2200	4.1700	435.6000	1816.4520	0.0100
0.0417					
3	-0.2100	4.1800	435.6000	1820.8080	0.0100
0.0418					
4	-0.1100	4.2800	871.2000	1884.9017	0.0200
0.0433					
5	-0.0100	4.3800	2613.6000	2051.3588	0.0600
0.0471					
6	0.0900	4.4800	4791.6000	2416.1562	0.1100
0.0555					
7	0.1900	4.5800	9147.6000	3101.4743	0.2100
0.0712					
8	0.2900	4.6800	14374.8000	4267.7800	0.3300
0.0980					
9	0.3900	4.7800	18730.8000	5918.2464	0.4300
0.1359					
10	0.4900	4.8800	22651.2000	7984.2237	0.5200
0.1833					
11	0.5900	4.9800	25264.8000	10378.8109	0.5800
0.2383					
12	0.6900	5.0800	28314.0000	13056.2768	0.6500
0.2997					
13	0.7900	5.1800	31363.2000	16038.8078	0.7200

0.3682					
14	0.8900	5.2800	34848.0000	19347.8052	0.8000
0.4442					
15	0.9900	5.3800	38332.8000	23005.4250	0.8800
0.5281					
16	1.0900	5.4800	42253.2000	27033.0945	0.9700
0.6206					
17	1.1900	5.5800	47916.0000	31538.5428	1.1000
0.7240					
18	1.2900	5.6800	54885.6000	36674.6293	1.2600
0.8419					
19	1.3900	5.7800	65340.0000	42678.2593	1.5000
0.9798					
20	1.4900	5.8800	77972.4000	49834.5105	1.7900
1.1440					
21	1.5900	5.9800	93654.0000	58403.7795	2.1500
1.3408					
22	1.6900	6.0800	114562.8000	68796.9743	2.6300
1.5794					
23	1.7900	6.1800	139827.6000	81495.4057	3.2100
1.8709					
24	1.8900	6.2800	170319.6000	96977.5685	3.9100
2.2263					
25	1.9900	6.3800	206038.8000	115766.9865	4.7300
2.6576					
26	2.0900	6.4800	238273.2000	137962.8507	5.4700
3.1672					
27	2.1900	6.5800	267458.4000	163235.1309	6.1400
3.7474					
28	2.2900	6.6800	295336.8000	191363.0945	6.7800
4.3931					
29	2.3900	6.7800	327571.2000	222494.2732	7.5200
5.1078					
30	2.4900	6.8800	366775.2000	257192.7855	8.4200
5.9043					
31	2.5900	6.9800	409028.4000	295963.3863	9.3900
6.7944					
32	2.6900	7.0800	450410.4000	338918.2825	10.3400
7.7805					
33	2.7900	7.1800	491792.4000	386012.7983	11.2900
8.8616					
34	2.8900	7.2800	534045.6000	437289.6763	12.2600
10.0388					
35	2.9900	7.3800	574992.0000	492728.3996	13.2000
11.3115					
36	3.0900	7.4800	615502.8000	552241.0534	14.1300
12.6777					
37	3.1900	7.5800	659498.4000	615977.8212	15.1400
14.1409					
38	3.2900	7.6800	706107.6000	684244.1780	16.2100

15.7081					
39	3.3900	7.7800	754023.6000	757236.9010	17.3100
17.3838					
40	3.4900	7.8800	798019.2000	834827.8701	18.3200
19.1650					
41	3.5900	7.9800	836352.0000	916538.1198	19.2000
21.0408					
42	3.6900	8.0800	871200.0000	1.00191E+06	20.0000
23.0007					
43	3.7900	8.1800	897336.0000	1.09033E+06	20.6000
25.0306					
44	3.8900	8.2800	913453.2000	1.18087E+06	20.9700
27.1090					
45	3.9900	8.3800	921294.0000	1.27261E+06	21.1500
29.2150					
46	4.0900	8.4800	926085.6000	1.36497E+06	21.2600
31.3355					
47	4.1900	8.5800	928263.6000	1.45769E+06	21.3100
33.4639					
48	4.2900	8.6800	930006.0000	1.55060E+06	21.3500
35.5969					
49	4.3900	8.7800	930877.2000	1.64365E+06	21.3700
37.7329					
50	4.4900	8.8800	931748.4000	1.73678E+06	21.3900
39.8709					
51	4.5900	8.9800	932184.0000	1.82997E+06	21.4000
42.0104					
52	4.6900	9.0800	932184.0000	1.92319E+06	21.4000
44.1504					
53	4.7900	9.1800	932619.6000	2.01643E+06	21.4100
46.2908					
54	4.9050	9.2950	932619.6000	2.12368E+06	21.4100
48.7530					

=====

| Variable storage data for node | N0830

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.0500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.5100	0.5400	871.2000	188.6799	0.0200
0.0043					
3	-1.4100	0.6400	2178.0000	336.2347	0.0500
0.0077					
4	-1.3100	0.7400	4791.6000	676.2345	0.1100

0.0155					
5	-1.2100	0.8400	8712.0000	1341.7143	0.2000
0.0308					
6	-1.1100	0.9400	14374.8000	2484.2884	0.3300
0.0570					
7	-1.0100	1.0400	19602.0000	4176.3698	0.4500
0.0959					
8	-0.9100	1.1400	25700.4000	6434.5948	0.5900
0.1477					
9	-0.5100	1.5400	49222.8000	21166.5382	1.1300
0.4859					
10	-0.4100	1.6400	54885.6000	26369.3374	1.2600
0.6054					
11	-0.3100	1.7400	59241.6000	32074.2544	1.3600
0.7363					
12	-0.2100	1.8400	63597.6000	38214.8653	1.4600
0.8773					
13	-0.1100	1.9400	90169.2000	45864.5747	2.0700
1.0529					
14	-0.0100	2.0400	113256.0000	56013.8280	2.6000
1.2859					
15	0.0900	2.1400	117612.0000	67556.4277	2.7000
1.5509					
16	2.1900	4.2400	193406.4000	390840.6343	4.4400
8.9725					
17	2.2900	4.3400	198198.0000	410420.1699	4.5500
9.4220					
18	2.3900	4.4400	204296.4000	430543.9186	4.6900
9.8839					
19	2.4900	4.5400	211701.6000	451342.5121	4.8600
10.3614					
20	2.5900	4.6400	221720.4000	473011.4652	5.0900
10.8588					
21	2.6900	4.7400	232174.8000	495703.9914	5.3300
11.3798					
22	2.7900	4.8400	242193.6000	519420.4107	5.5600
11.9243					
23	2.8900	4.9400	249598.8000	544008.8556	5.7300
12.4887					
24	2.9900	5.0400	255697.2000	569272.7896	5.8700
13.0687					
25	3.0900	5.1400	261795.6000	595146.5719	6.0100
13.6627					
26	3.1900	5.2400	266151.6000	621543.3684	6.1100
14.2687					
27	3.2900	5.3400	270072.0000	648354.0415	6.2000
14.8842					
28	3.3900	5.4400	274863.6000	675600.1979	6.3100
15.5096					
29	3.4900	5.5400	277912.8000	703238.6013	6.3800

16.1441					
30	3.6900	5.7400	285753.6000	759602.8598	6.5600
17.4381					
31	3.7900	5.8400	290545.2000	788417.1796	6.6700
18.0996					
32	3.8900	5.9400	297079.2000	817797.5004	6.8200
18.7740					
33	3.9900	6.0400	305791.2000	847939.6698	7.0200
19.4660					
34	4.0900	6.1400	313632.0000	878909.6929	7.2000
20.1770					
35	4.1900	6.2400	321908.4000	910685.4970	7.3900
20.9065					
36	4.2900	6.3400	331927.2000	943375.6707	7.6200
21.6569					
37	4.3900	6.4400	341946.0000	977067.7524	7.8500
22.4304					
38	4.4900	6.5400	353707.2000	1.01185E+06	8.1200
23.2288					
39	4.5900	6.6400	365904.0000	1.04783E+06	8.4000
24.0548					
40	4.6900	6.7400	376358.4000	1.08494E+06	8.6400
24.9068					
41	4.7900	6.8400	387684.0000	1.12314E+06	8.9000
25.7837					
42	4.8900	6.9400	399445.2000	1.16249E+06	9.1700
26.6872					
43	4.9900	7.0400	412948.8000	1.20311E+06	9.4800
27.6196					
44	5.0900	7.1400	427759.2000	1.24514E+06	9.8200
28.5846					
45	5.1900	7.2400	445183.2000	1.28879E+06	10.2200
29.5865					
46	5.2900	7.3400	463914.0000	1.33424E+06	10.6500
30.6299					
47	5.3900	7.4400	481773.6000	1.38152E+06	11.0600
31.7153					
48	5.4900	7.5400	498762.0000	1.43054E+06	11.4500
32.8408					
49	5.5900	7.6400	515314.8000	1.48124E+06	11.8300
34.0047					
50	5.6900	7.7400	527076.0000	1.53336E+06	12.1000
35.2012					
51	5.7900	7.8400	534481.2000	1.58644E+06	12.2700
36.4196					
52	5.8900	7.9400	540579.6000	1.64019E+06	12.4100
37.6536					
53	5.9900	8.0400	545806.8000	1.69451E+06	12.5300
38.9006					
54	6.0900	8.1400	552340.8000	1.74942E+06	12.6800

40.1611						
55	6.6900	8.7400	585882.0000	2.09083E+06		13.4500
47.9989						
56	6.7900	8.8400	591544.8000	2.14970E+06		13.5800
49.3503						
57	6.8900	8.9400	596336.4000	2.20909E+06		13.6900
50.7138						
58	6.9900	9.0400	601128.0000	2.26897E+06		13.8000
52.0883						
59	7.0900	9.1400	605048.4000	2.32928E+06		13.8900
53.4728						
60	7.2900	9.3400	613324.8000	2.45111E+06		14.0800
56.2697						
61	7.3900	9.4400	618552.0000	2.51270E+06		14.2000
57.6837						
62	7.4900	9.5400	621601.2000	2.57471E+06		14.2700
59.1072						
63	7.5900	9.6400	622908.0000	2.63694E+06		14.3000
60.5357						
64	7.7050	9.7550	622908.0000	2.70857E+06		14.3000
62.1802						

=====

| Variable storage data for node | N0790

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-2.9800	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-2.6100	0.3700	435.6000	70.1064	0.0100
0.0016					
3	-2.6000	0.3800	9583.2000	110.3125	0.2200
0.0025					
4	-2.5500	0.4300	9583.2000	589.4725	0.2200
0.0135					
5	-1.2500	1.7300	14374.8000	16057.1403	0.3300
0.3686					
6	-1.1500	1.8300	16117.2000	17580.8947	0.3700
0.4036					
7	-1.0500	1.9300	19166.4000	19342.8570	0.4400
0.4441					
8	-0.9500	2.0300	24393.6000	21515.5891	0.5600
0.4939					
9	-0.8500	2.1300	31798.8000	24317.0132	0.7300
0.5582					
10	-0.7500	2.2300	40075.2000	27902.7088	0.9200

0.6406					
11	-0.6500	2.3300	50529.6000	32422.8176	1.1600
0.7443					
12	-0.5500	2.4300	63162.0000	38095.6079	1.4500
0.8746					
13	-0.4500	2.5300	79279.2000	45202.3507	1.8200
1.0377					
14	-0.3500	2.6300	97138.8000	54008.0571	2.2300
1.2399					
15	-0.2500	2.7300	117612.0000	64729.1877	2.7000
1.4860					
16	-0.1500	2.8300	138956.4000	77542.6566	3.1900
1.7801					
17	-0.0500	2.9300	247856.4000	96622.3422	5.6900
2.2181					
18	0.0500	3.0300	286189.2000	123301.3970	6.5700
2.8306					
19	0.1500	3.1300	330184.8000	154093.5863	7.5800
3.5375					
20	0.2500	3.2300	385941.6000	189863.3173	8.8600
4.3587					
21	0.3500	3.3300	459558.0000	232084.3595	10.5500
5.3279					
22	0.4500	3.4300	553212.0000	282650.0283	12.7000
6.4888					
23	0.5500	3.5300	668646.0000	343651.2351	15.3500
7.8891					
24	0.6500	3.6300	800197.2000	416994.2818	18.3700
9.5729					
25	0.7500	3.7300	945252.0000	504165.2400	21.7000
11.5740					
26	0.8500	3.8300	1098583.200	606259.9846	25.2200
13.9178					
27	0.9500	3.9300	1255399.200	723870.7762	28.8200
16.6178					
28	1.0500	4.0300	1420927.200	857600.3626	32.6200
19.6878					
29	1.1500	4.1300	1597345.200	1.00843E+06	36.6700
23.1503					
30	1.2500	4.2300	1781168.400	1.17727E+06	40.8900
27.0263					
31	1.3500	4.3300	1971090.000	1.36480E+06	45.2500
31.3314					
32	1.4500	4.4300	2167110.000	1.57163E+06	49.7500
36.0796					
33	1.5500	4.5300	2359209.600	1.79787E+06	54.1600
41.2735					
34	1.6500	4.6300	2557407.600	2.04364E+06	58.7100
46.9154					
35	1.7500	4.7300	2750378.400	2.30896E+06	63.1400

53.0065					
36	1.8500	4.8300	2940300.000	2.59344E+06	67.5000
59.5372					
37	1.9500	4.9300	3130657.200	2.89694E+06	71.8700
66.5045					
38	2.0500	5.0300	3329290.800	3.21988E+06	76.4300
73.9183					
39	2.1500	5.1300	3534458.400	3.56301E+06	81.1400
81.7955					
40	2.2500	5.2300	3751822.800	3.92727E+06	86.1300
90.1577					
41	2.3500	5.3300	3975721.200	4.31359E+06	91.2700
99.0264					
42	2.4500	5.4300	4204411.200	4.72254E+06	96.5200
108.4146					
43	2.5500	5.5300	4430487.600	5.15423E+06	101.7100
118.3248					
44	2.6500	5.6300	4642189.200	5.60782E+06	106.5700
128.7378					
45	2.7500	5.7300	4836902.400	6.08173E+06	111.0400
139.6174					
46	2.8500	5.8300	5015498.400	6.57432E+06	115.1400
150.9257					
47	2.9500	5.9300	5171878.800	7.08367E+06	118.7300
162.6186					
48	3.0500	6.0300	5301687.600	7.60733E+06	121.7100
174.6402					
49	3.1500	6.1300	5404489.200	8.14262E+06	124.0700
186.9289					
50	3.2500	6.2300	5485510.800	8.68711E+06	125.9300
199.4286					
51	3.3500	6.3300	5549108.400	9.23883E+06	127.3900
212.0944					
52	3.4500	6.4300	5597460.000	9.79615E+06	128.5000
224.8888					
53	3.5500	6.5300	5636228.400	10.35783E+06	129.3900
237.7831					
54	3.6500	6.6300	5667591.600	10.92302E+06	130.1100
250.7580					
55	3.7500	6.7300	5693727.600	11.49108E+06	130.7100
263.7988					
56	3.8500	6.8300	5714636.400	12.06149E+06	131.1900
276.8937					
57	3.9500	6.9300	5734674.000	12.63395E+06	131.6500
290.0355					
58	4.0500	7.0300	5750791.200	13.20822E+06	132.0200
303.2189					
59	4.1500	7.1300	5764730.400	13.78399E+06	132.3400
316.4368					
60	4.2500	7.2300	5779105.200	14.36117E+06	132.6700

329.6871					
61	4.3500	7.3300	5791737.600	14.93971E+06	132.9600
342.9685					
62	4.4500	7.4300	5803934.400	15.51949E+06	133.2400
356.2784					
63	4.5500	7.5300	5814824.400	16.10042E+06	133.4900
369.6147					
64	4.6500	7.6300	5824407.600	16.68237E+06	133.7100
382.9746					
65	5.1500	8.1300	5868403.200	19.60554E+06	134.7200
450.0813					
66	5.2500	8.2300	5877115.200	20.19281E+06	134.9200
463.5631					
67	5.3500	8.3300	5886698.400	20.78099E+06	135.1400
477.0660					
68	5.4500	8.4300	5897152.800	21.37018E+06	135.3800
490.5919					
69	5.5500	8.5300	5909785.200	21.96052E+06	135.6700
504.1442					
70	5.6500	8.6300	5920239.600	22.55202E+06	135.9100
517.7231					
71	5.7500	8.7300	5928516.000	23.14445E+06	136.1000
531.3234					
72	5.8500	8.8300	5934614.400	23.73760E+06	136.2400
544.9403					
73	5.9500	8.9300	5941584.000	24.33140E+06	136.4000
558.5722					
74	6.0500	9.0300	5947682.400	24.92586E+06	136.5400
572.2190					
75	6.1500	9.1300	5953780.800	25.52093E+06	136.6800
585.8799					
76	6.2500	9.2300	5959443.600	26.11658E+06	136.8100
599.5543					
77	6.3500	9.3300	5966848.800	26.71289E+06	136.9800
613.2436					
78	6.4500	9.4300	5974689.600	27.30996E+06	137.1600
626.9505					
79	6.5500	9.5300	5983401.600	27.90786E+06	137.3600
640.6763					
80	6.6500	9.6300	5988628.800	28.50646E+06	137.4800
654.4182					
81	6.7500	9.7300	5992113.600	29.10549E+06	137.5600
668.1701					
82	6.8500	9.8300	5992549.200	29.70472E+06	137.5700
681.9264					
83	7.1500	10.1300	5992549.200	31.50248E+06	137.5700
723.1974					
84	7.2350	10.2150	5992549.200	32.01185E+06	137.5700
734.8909					

=====

| Variable storage data for node | N0800

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	3.3500	0.0000	871.2000	0.0000	0.0200
0.0000					
2	3.4500	0.1000	3484.8000	203.2780	0.0800
0.0047					
3	3.5500	0.2000	6534.0000	696.2917	0.1500
0.0160					
4	3.6500	0.3000	9147.6000	1476.7083	0.2100
0.0339					
5	3.7500	0.4000	13939.2000	2622.6583	0.3200
0.0602					
6	3.8500	0.5000	23522.4000	4474.9448	0.5400
0.1027					
7	3.9500	0.6000	32234.4000	7251.3432	0.7400
0.1665					
8	4.0500	0.7000	37897.2000	10754.0716	0.8700
0.2469					
9	4.1500	0.8000	41382.0000	14716.7148	0.9500
0.3378					
10	4.2500	0.9000	44431.2000	19006.4288	1.0200
0.4363					
11	4.3500	1.0000	47044.8000	23579.5606	1.0800
0.5413					
12	4.4500	1.1000	50094.0000	28435.6542	1.1500
0.6528					
13	4.5500	1.2000	53143.2000	33596.7119	1.2200
0.7713					
14	4.6500	1.3000	57499.2000	39127.3470	1.3200
0.8982					
15	4.7500	1.4000	61419.6000	45072.1502	1.4100
1.0347					
16	4.8500	1.5000	66211.2000	51452.1268	1.5200
1.1812					
17	4.9500	1.6000	70567.2000	58289.8221	1.6200
1.3382					
18	5.0500	1.7000	76230.0000	65627.7876	1.7500
1.5066					
19	5.1500	1.8000	82764.0000	73575.1695	1.9000
1.6891					
20	5.2500	1.9000	90604.8000	82240.5663	2.0800
1.8880					
21	5.3500	2.0000	104108.4000	91968.3155	2.3900

2.1113						
22	5.4500	2.1000	121532.4000	103239.0137		2.7900
2.3700						
23	5.5500	2.2000	142441.2000	116423.7389		3.2700
2.6727						
24	5.6500	2.3000	167270.4000	131892.5498		3.8400
3.0278						
25	5.7500	2.4000	196455.6000	150059.1215		4.5100
3.4449						
26	5.8500	2.5000	229561.2000	171338.2777		5.2700
3.9334						
27	5.9500	2.6000	266151.6000	196101.1321		6.1100
4.5019						
28	6.0500	2.7000	298386.0000	224312.3796		6.8500
5.1495						
29	6.1500	2.8000	328006.8000	255620.0274		7.5300
5.8682						
30	6.2500	2.9000	357192.0000	289869.2610		8.2000
6.6545						
31	6.3500	3.0000	384199.2000	326930.2492		8.8200
7.5053						
32	6.4500	3.1000	407286.0000	366498.5005		9.3500
8.4136						
33	6.5500	3.2000	429501.6000	408332.5464		9.8600
9.3740						
34	6.6500	3.3000	451717.2000	452388.3779		10.3700
10.3854						
35	6.7500	3.4000	475239.6000	498730.7795		10.9100
11.4493						
36	6.8500	3.5000	503118.0000	547641.5491		11.5500
12.5721						
37	6.9500	3.6000	528818.4000	599232.5184		12.1400
13.7565						
38	7.0500	3.7000	541015.2000	652722.5047		12.4200
14.9844						
39	7.1500	3.8000	546242.4000	707084.6317		12.5400
16.2324						
40	7.2500	3.9000	548856.0000	761838.9521		12.6000
17.4894						
41	7.3500	4.0000	551034.0000	816832.8662		12.6500
18.7519						
42	7.4500	4.1000	551905.2000	871979.2690		12.6700
20.0179						
43	7.5500	4.2000	552776.4000	927212.7910		12.6900
21.2859						
44	7.6500	4.3000	553212.0000	982511.6566		12.7000
22.5554						
45	7.7500	4.4000	554083.2000	1.03788E+06		12.7200
23.8264						
46	7.8500	4.5000	554518.8000	1.09331E+06		12.7300

25.0988						
47	7.9500	4.6000	554518.8000	1.14876E+06	12.7300	
26.3718						
48	8.0250	4.6750	554518.8000	1.19035E+06	12.7300	
27.3266						
49	8.0250	4.6750	554518.8000	1.19035E+06	12.7300	
27.3266						

=====

| Variable storage data for node | N0870

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-2.9200	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.1700	2.7500	31798.8000	30008.2309	0.7300
0.6889					
3	-0.0700	2.8500	35719.2000	33382.1986	0.8200
0.7663					
4	0.0300	2.9500	41817.6000	37254.9966	0.9600
0.8553					
5	0.5300	3.4500	71002.8000	65139.7945	1.6300
1.4954					
6	0.6300	3.5500	76665.6000	72521.3304	1.7600
1.6649					
7	0.7300	3.6500	83635.2000	80533.7638	1.9200
1.8488					
8	0.8300	3.7500	90604.8000	89243.3526	2.0800
2.0487					
9	0.9300	3.8500	97138.8000	98628.5432	2.2300
2.2642					
10	1.0300	3.9500	105415.2000	108753.3226	2.4200
2.4966					
11	1.1300	4.0500	114127.2000	119727.4508	2.6200
2.7486					
12	1.2300	4.1500	123274.8000	131594.4937	2.8300
3.0210					
13	1.3300	4.2500	134600.4000	144483.9777	3.0900
3.3169					
14	1.4300	4.3500	148539.6000	158635.1141	3.4100
3.6418					
15	1.5300	4.4500	167270.4000	174416.1904	3.8400
4.0040					
16	1.6300	4.5500	194713.2000	192497.8271	4.4700
4.4191					
17	1.7300	4.6500	230868.0000	213751.0324	5.3000

4.9070					
18	1.8300	4.7500	278784.0000	239195.7536	6.4000
5.4912					
19	1.9300	4.8500	341946.0000	270178.2460	7.8500
6.2024					
20	2.0300	4.9500	351093.6000	304828.8733	8.0600
6.9979					
21	2.1300	5.0500	452152.8000	344884.4150	10.3800
7.9175					
22	2.2300	5.1500	581961.6000	396453.2931	13.3600
9.1013					
23	2.3300	5.2500	745311.6000	462648.1203	17.1100
10.6209					
24	2.4300	5.3500	935233.2000	546495.0854	21.4700
12.5458					
25	2.5300	5.4500	1158260.400	650970.1567	26.5900
14.9442					
26	2.6300	5.5500	1405681.200	778966.5234	32.2700
17.8826					
27	2.7300	5.6500	1669382.550	932529.3805	38.3237
21.4079					
28	2.8300	5.7500	1937439.900	1.11270E+06	44.4775
25.5441					
29	2.9300	5.8500	2189380.050	1.31891E+06	50.2612
30.2781					
30	3.0300	5.9500	2422688.281	1.54942E+06	55.6173
35.5697					
31	3.1300	6.0500	2624034.362	1.80168E+06	60.2395
41.3609					
32	3.2300	6.1500	2786176.444	2.07215E+06	63.9618
47.5700					
33	3.3300	6.2500	2916955.760	2.35728E+06	66.9641
54.1157					
34	3.4300	6.3500	3023776.642	2.65430E+06	69.4164
60.9343					
35	3.5300	6.4500	3110124.323	2.96098E+06	71.3986
67.9747					
36	3.6300	6.5500	3182097.204	3.27558E+06	73.0509
75.1969					
37	3.7300	6.6500	3239695.721	3.59666E+06	74.3732
82.5680					
38	3.8300	6.7500	3290759.802	3.92318E+06	75.5455
90.0638					
39	3.9300	6.8500	3333547.483	4.25439E+06	76.5277
97.6673					
40	4.0300	6.9500	3370019.400	4.58956E+06	77.3650
105.3618					
41	4.1300	7.0500	3402036.000	4.92816E+06	78.1000
113.1350					
42	4.2300	7.1500	3430132.200	5.26976E+06	78.7450

120.9771					
43	4.3300	7.2500	3457357.200	5.61413E+06	79.3700
128.8828					
44	4.4300	7.3500	3483711.000	5.96118E+06	79.9750
136.8499					
45	4.6300	7.5500	3536636.400	6.66320E+06	81.1900
152.9661					
46	4.7300	7.6500	3563425.800	7.01820E+06	81.8050
161.1157					
47	4.8300	7.7500	3588472.800	7.37579E+06	82.3800
169.3249					
48	4.9300	7.8500	3618747.000	7.73615E+06	83.0750
177.5975					
49	5.0300	7.9500	3643760.459	8.09927E+06	83.6492
185.9336					
50	5.1300	8.0500	3674872.318	8.46520E+06	84.3635
194.3342					
51	5.2300	8.1500	3708162.176	8.83434E+06	85.1277
202.8086					
52	5.3300	8.2500	3742071.894	9.20685E+06	85.9061
211.3602					
53	5.4300	8.3500	3778846.553	9.58289E+06	86.7504
219.9929					
54	5.5300	8.4500	3819106.012	9.96278E+06	87.6746
228.7140					
55	5.6300	8.5500	3860236.670	10.34674E+06	88.6188
237.5286					
56	5.7300	8.6500	3903729.588	10.73494E+06	89.6173
246.4402					
57	5.8300	8.7500	3948345.047	11.12753E+06	90.6415
255.4530					
58	5.9300	8.8500	3995138.506	11.52470E+06	91.7158
264.5708					
59	6.0300	8.9500	4040190.000	11.92646E+06	92.7500
273.7939					
60	6.1300	9.0500	4084621.200	12.33270E+06	93.7700
283.1198					
61	6.2300	9.1500	4129052.400	12.74337E+06	94.7900
292.5476					
62	6.3300	9.2500	4167385.200	13.15819E+06	95.6700
302.0705					
63	6.4300	9.3500	4200926.400	13.57660E+06	96.4400
311.6759					
64	6.5300	9.4500	4231418.400	13.99821E+06	97.1400
321.3548					
65	6.6300	9.5500	4257554.400	14.42266E+06	97.7400
331.0986					
66	6.7300	9.6500	4280205.600	14.84954E+06	98.2600
340.8985					
67	6.8300	9.7500	4300678.800	15.27858E+06	98.7300

350.7479						
68	6.9300	9.8500	4318102.800	15.70951E+06		99.1300
360.6408						
69	7.0300	9.9500	4332042.000	16.14202E+06		99.4500
370.5697						
70	7.1300	10.0500	4342496.400	16.57574E+06		99.6900
380.5266						
71	7.2300	10.1500	4349466.000	17.01033E+06		99.8500
390.5035						
72	7.3300	10.2500	4354257.600	17.44551E+06		99.9600
400.4939						
73	7.4300	10.3500	4358178.000	17.88113E+06		100.0500
410.4943						
74	7.5300	10.4500	4360356.000	18.31705E+06		100.1000
420.5017						
75	8.9300	11.8500	4365583.200	24.42515E+06		100.2200
560.7243						
76	9.0100	11.9300	4365583.200	24.77440E+06		100.2200
568.7419						

=====

| Variable storage data for node | N0510

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.4300	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-1.3300	0.1000	435.6000	43.5600	0.0100
0.0010					
3	-1.2300	0.2000	1306.8000	126.7885	0.0300
0.0029					
4	-1.1300	0.3000	3049.2000	338.5254	0.0700
0.0078					
5	-1.0300	0.4000	5227.2000	747.4793	0.1200
0.0172					
6	-0.9300	0.5000	7405.2000	1375.9401	0.1700
0.0316					
7	-0.8300	0.6000	10454.4000	2264.5409	0.2400
0.0520					
8	-0.7300	0.7000	13503.6000	3459.1817	0.3100
0.0794					
9	-0.6300	0.8000	17859.6000	5022.2599	0.4100
0.1153					
10	-0.5300	0.9000	23958.0000	7105.6680	0.5500
0.1631					
11	-0.4300	1.0000	32670.0000	9925.8036	0.7500

0.2279					
12	-0.3300	1.1000	43995.6000	13745.0260	1.0100
0.3155					
13	-0.2300	1.2000	62726.4000	19053.4633	1.4400
0.4374					
14	-0.1300	1.3000	94089.6000	26841.3800	2.1600
0.6162					
15	-0.0300	1.4000	166834.8000	39715.0427	3.8300
0.9117					
16	0.0700	1.5000	313632.0000	63355.2329	7.2000
1.4544					
17	0.1700	1.6000	582832.8000	107488.4629	13.3800
2.4676					
18	0.2700	1.7000	1014948.000	186384.3544	23.3000
4.2788					
19	0.3700	1.8000	1646132.400	318171.4036	37.7900
7.3042					
20	0.4700	1.9000	2590948.800	528245.2922	59.4800
12.1268					
21	0.5700	2.0000	3581503.200	835531.4782	82.2200
19.1812					
22	0.6700	2.1000	4835595.600	1.25482E+06	111.0100
28.8066					
23	0.7700	2.2000	6148058.400	1.80268E+06	141.1400
41.3839					
24	0.8700	2.3000	7438741.200	2.48099E+06	170.7700
56.9557					
25	0.9700	2.4000	8796506.400	3.29180E+06	201.9400
75.5693					
26	1.0700	2.5000	9849351.600	4.22359E+06	226.1100
96.9602					
27	1.1700	2.6000	10961874.00	5.26364E+06	251.6500
120.8366					
28	1.2700	2.7000	11972901.60	6.41000E+06	274.8600
147.1533					
29	1.3700	2.8000	13015292.40	7.65903E+06	298.7900
175.8271					
30	1.4700	2.9000	13872553.20	9.00318E+06	318.4700
206.6846					
31	1.5700	3.0000	14573433.60	10.42532E+06	334.5600
239.3325					
32	1.6700	3.1000	15290431.20	11.91836E+06	351.0200
273.6078					
33	1.7700	3.2000	15969967.20	13.48124E+06	366.6200
309.4867					
34	1.8700	3.3000	16673025.60	15.11325E+06	382.7600
346.9524					
35	1.9700	3.4000	17284608.00	16.81102E+06	396.8000
385.9279					
36	2.0700	3.5000	17867440.80	18.56852E+06	410.1800

426.2746						
37	2.1700	3.6000	18387982.80	20.38121E+06	422.1300	
467.8883						
38	2.2700	3.7000	19006099.20	22.25081E+06	436.3200	
510.8084						
39	2.3700	3.8000	19485259.20	24.17531E+06	447.3200	
554.9888						
40	2.4700	3.9000	20041956.00	26.15159E+06	460.1000	
600.3579						
41	2.5700	4.0000	20522858.40	28.17976E+06	471.1400	
646.9183						
42	2.6700	4.1000	20925352.80	30.25212E+06	480.3800	
694.4931						
43	2.7700	4.2000	21392316.00	32.36794E+06	491.1000	
743.0656						
44	2.8700	4.3000	21742538.40	34.52464E+06	499.1400	
792.5766						
45	2.9700	4.4000	22136756.40	36.71855E+06	508.1900	
842.9419						
46	3.0700	4.5000	22460842.80	38.94839E+06	515.6300	
894.1319						
47	3.1700	4.6000	22724380.80	41.20761E+06	521.6800	
945.9966						
48	3.2700	4.7000	23016232.80	43.49461E+06	528.3800	
998.4987						
49	3.3700	4.8000	23230548.00	45.80691E+06	533.3000	
1051.5820						
50	3.4700	4.9000	23466207.60	48.14172E+06	538.7100	
1105.1818						
51	3.5700	5.0000	23652208.80	50.49761E+06	542.9800	
1159.2656						
52	3.6700	5.1000	23805540.00	52.87047E+06	546.5000	
1213.7389						
53	3.7700	5.2000	23971939.20	55.25931E+06	550.3200	
1268.5793						
54	3.8700	5.3000	24094778.40	57.66262E+06	553.1400	
1323.7517						
55	3.9700	5.4000	24233734.80	60.07902E+06	556.3300	
1379.2245						
56	4.0700	5.5000	24342199.20	62.50779E+06	558.8200	
1434.9814						
57	4.1700	5.6000	24433239.60	64.94654E+06	560.9100	
1490.9673						
58	4.2700	5.7000	24506420.40	67.39349E+06	562.5900	
1547.1418						
59	4.3700	5.8000	24579165.60	69.84775E+06	564.2600	
1603.4837						
60	4.4700	5.9000	24648426.00	72.30910E+06	565.8500	
1659.9886						
61	4.5700	6.0000	24700262.40	74.77651E+06	567.0400	

1716.6325						
62	4.6700	6.1000	24744258.00	77.24871E+06	568.0500	
1773.3864						
63	4.7700	6.2000	24777363.60	79.72477E+06	568.8100	
1830.2289						
64	4.8700	6.3000	24809162.40	82.20407E+06	569.5400	
1887.1458						
65	4.9700	6.4000	24836605.20	84.68633E+06	570.1700	
1944.1307						
66	5.0700	6.5000	24860563.20	87.17117E+06	570.7200	
2001.1746						
67	5.1700	6.6000	24878422.80	89.65809E+06	571.1300	
2058.2666						
68	5.2700	6.7000	24891055.20	92.14654E+06	571.4200	
2115.3935						
69	5.3700	6.8000	24902816.40	94.63621E+06	571.6900	
2172.5484						
70	5.4700	6.9000	24912835.20	97.12697E+06	571.9200	
2229.7284						
71	5.5700	7.0000	24920240.40	99.61860E+06	572.0900	
2286.9283						
72	5.6700	7.1000	24925467.60	102.11086E+06	572.2100	
2344.1427						
73	5.7700	7.2000	24928952.40	104.60355E+06	572.2900	
2401.3671						
74	5.8700	7.3000	24932001.60	107.09658E+06	572.3600	
2458.5991						
75	5.9700	7.4000	24934615.20	109.58988E+06	572.4200	
2515.8375						
76	6.0700	7.5000	24936793.20	112.08343E+06	572.4700	
2573.0814						
77	6.1700	7.6000	24938100.00	114.57715E+06	572.5000	
2630.3294						
78	6.2700	7.7000	24938971.20	117.07098E+06	572.5200	
2687.5798						
79	6.3700	7.8000	24939842.40	119.56489E+06	572.5400	
2744.8322						
80	6.4700	7.9000	24940278.00	122.05887E+06	572.5500	
2802.0861						
81	6.5700	8.0000	24940713.60	124.55290E+06	572.5600	
2859.3411						
82	6.6700	8.1000	24941149.20	127.04696E+06	572.5700	
2916.5970						

=====

| Variable storage data for node | N0520

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	-2.8300	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.8300	1.0000	28314.0000	9733.3617	0.6500
0.2234					
3	-1.7300	1.1000	41382.0000	13197.5256	0.9500
0.3030					
4	-1.6300	1.2000	65340.0000	18488.1739	1.5000
0.4244					
5	-1.5300	1.3000	96267.6000	26518.6906	2.2100
0.6088					
6	-1.3300	1.5000	174675.6000	53226.3023	4.0100
1.2219					
7	-1.2300	1.6000	220849.2000	72957.2716	5.0700
1.6749					
8	-1.1300	1.7000	284446.8000	98154.8490	6.5300
2.2533					
9	-1.0300	1.8000	348480.0000	129746.7489	8.0000
2.9786					
10	-0.9300	1.9000	421660.8000	168195.3244	9.6800
3.8612					
11	-0.8300	2.0000	505296.0000	214479.6894	11.6000
4.9238					
12	-0.7300	2.1000	601999.2000	269773.3838	13.8200
6.1931					
13	-0.6300	2.2000	714819.6000	335532.9673	16.4100
7.7028					
14	-0.5300	2.3000	843321.6000	413350.7840	19.3600
9.4892					
15	-0.4300	2.4000	987940.8000	504817.6661	22.6800
11.5890					
16	-0.3300	2.5000	1155211.200	611865.2357	26.5200
14.0465					
17	-0.2300	2.6000	1347310.800	736867.0205	30.9300
16.9161					
18	-0.1300	2.7000	1571209.200	882648.2124	36.0700
20.2628					
19	-0.0300	2.8000	1849122.000	1.05347E+06	42.4500
24.1844					
20	0.0700	2.9000	2130519.600	1.25229E+06	48.9100
28.7486					
21	0.1700	3.0000	2450250.000	1.48114E+06	56.2500
34.0023					
22	0.2700	3.1000	2818767.600	1.74437E+06	64.7100
40.0453					
23	0.3700	3.2000	3248269.200	2.04747E+06	74.5700
47.0034					
24	0.4700	3.3000	3739626.000	2.39657E+06	85.8500

55.0177						
25	0.5700	3.4000	4291095.600	2.79779E+06	98.5100	
64.2283						
26	0.6700	3.5000	4900064.400	3.25700E+06	112.4900	
74.7705						
27	0.7700	3.6000	5564790.000	3.77989E+06	127.7500	
86.7743						
28	0.8700	3.7000	6283530.000	4.37193E+06	144.2500	
100.3658						
29	0.9700	3.8000	7071966.000	5.03931E+06	162.3500	
115.6867						
30	1.0700	3.9000	7942730.400	5.78962E+06	182.3400	
132.9114						
31	1.1700	4.0000	8894516.400	6.63103E+06	204.1900	
152.2274						
32	1.2700	4.1000	9814068.000	7.56607E+06	225.3000	
173.6930						
33	1.3700	4.2000	11023293.60	8.60734E+06	253.0600	
197.5974						
34	1.4700	4.3000	12203769.60	9.76818E+06	280.1600	
224.2466						
35	1.5700	4.4000	13450892.40	11.05040E+06	308.7900	
253.6822						
36	1.6700	4.5000	14769889.20	12.46091E+06	339.0700	
286.0631						
37	1.7700	4.6000	16003508.40	13.99915E+06	367.3900	
321.3763						
38	1.8700	4.7000	17554244.40	15.67642E+06	402.9900	
359.8812						
39	1.9700	4.8000	19002614.40	17.50377E+06	436.2400	
401.8313						
40	2.0700	4.9000	20456211.60	19.47625E+06	469.6100	
447.1131						
41	2.1700	5.0000	21895869.60	21.59342E+06	502.6600	
495.7167						
42	2.2700	5.1000	23303293.20	23.85299E+06	534.9700	
547.5893						
43	2.3700	5.2000	24537348.00	26.24473E+06	563.3000	
602.4962						
44	2.4700	5.3000	26016210.00	28.77203E+06	597.2500	
660.5148						
45	2.5700	5.4000	27338256.00	31.43945E+06	627.6000	
721.7504						
46	2.6700	5.5000	28627196.40	34.23745E+06	657.1900	
785.9836						
47	2.7700	5.6000	29889129.60	37.16301E+06	686.1600	
853.1452						
48	2.8700	5.7000	30962012.40	40.20538E+06	710.7900	
922.9884						
49	2.9700	5.8000	32162961.60	43.36140E+06	738.3600	

995.4408						
50	3.0700	5.9000	33151773.60	46.62698E+06	761.0600	
1070.4082						
51	3.1700	6.0000	34028200.80	49.98585E+06	781.1800	
1147.5172						
52	3.2700	6.1000	34808796.00	53.42759E+06	799.1000	
1226.5288						
53	3.3700	6.2000	35426912.40	56.93930E+06	813.2900	
1307.1464						
54	3.4700	6.3000	36065937.60	60.51386E+06	827.9600	
1389.2070						
55	3.5700	6.4000	36555987.60	64.14489E+06	839.2100	
1472.5640						
56	3.6700	6.5000	36969807.60	67.82112E+06	848.7100	
1556.9587						
57	3.7700	6.6000	37317416.40	71.53543E+06	856.6900	
1642.2276						
58	3.8700	6.7000	37585310.40	75.28052E+06	862.8400	
1728.2030						
59	3.9700	6.8000	37857996.00	79.05264E+06	869.1000	
1814.7990						
60	4.0700	6.9000	38066212.80	82.84881E+06	873.8800	
1901.9470						
61	4.1700	7.0000	38246986.80	86.66443E+06	878.0300	
1989.5415						
62	4.2700	7.1000	38390734.80	90.49628E+06	881.3300	
2077.5086						
63	4.3700	7.2000	38532304.80	94.34239E+06	884.5800	
2165.8032						
64	4.4700	7.3000	38673439.20	98.20263E+06	887.8200	
2254.4222						
65	4.5700	7.4000	38792358.00	102.07588E+06	890.5500	
2343.3398						
66	4.6700	7.5000	38901693.60	105.96055E+06	893.0600	
2432.5194						
67	4.7700	7.6000	38999703.60	109.85558E+06	895.3100	
2521.9370						
68	4.8700	7.7000	39106425.60	113.76084E+06	897.7600	
2611.5896						
69	4.9700	7.8000	39231878.40	117.67772E+06	900.6400	
2701.5086						
70	5.0700	7.9000	39347748.00	121.60666E+06	903.3000	
2791.7047						
71	5.1700	8.0000	39464053.20	125.54721E+06	905.9700	
2882.1673						
72	5.2700	8.1000	39570339.60	129.49888E+06	908.4100	
2972.8853						
73	5.3700	8.2000	39689694.00	133.46184E+06	911.1500	
3063.8624						
74	5.4700	8.3000	39816453.60	137.43711E+06	914.0600	

3155.1219						
75	5.5700	8.4000	39925353.60	141.42416E+06		916.5600
3246.6520						
76	5.6700	8.5000	40035124.80	145.42214E+06		919.0800
3338.4330						
77	5.7700	8.6000	40134006.00	149.43056E+06		921.3500
3430.4536						
78	5.8700	8.7000	40234629.60	153.44895E+06		923.6600
3522.7031						
79	5.9700	8.8000	40342222.80	157.47775E+06		926.1300
3615.1917						
80	6.0700	8.9000	40431085.20	161.51637E+06		928.1700
3707.9057						
81	6.1700	9.0000	40513413.60	165.56356E+06		930.0600
3800.8163						
82	6.2700	9.1000	40580060.40	169.61819E+06		931.5900
3893.8979						
83	6.3700	9.2000	40645836.00	173.67944E+06		933.1000
3987.1314						
84	6.4700	9.3000	40712482.80	177.74732E+06		934.6300
4080.5170						
85	6.5700	9.4000	40763883.60	181.82110E+06		935.8100
4174.0380						
86	6.6700	9.5000	40807008.00	185.89960E+06		936.8000
4267.6676						
87	6.7700	9.6000	40839242.40	189.98187E+06		937.5400
4361.3836						
88	6.8700	9.7000	40870605.60	194.06732E+06		938.2600
4455.1727						
89	6.9700	9.8000	40901533.20	198.15589E+06		938.9700
4549.0333						
90	7.0700	9.9000	40923313.20	202.24709E+06		939.4700
4642.9543						
91	8.7700	11.6000	41021323.20	271.89932E+06		941.7200
6241.9495						
92	8.8700	11.7000	41021758.80	276.00143E+06		941.7300
6336.1210						

=====

| Variable storage data for node | N0390

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.7000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.5000	0.2000	1742.4000	132.1277	0.0400

0.0030					
3	-1.4000	0.3000	3484.8000	388.5027	0.0800
0.0089					
4	-1.3000	0.4000	7405.2000	920.8282	0.1700
0.0211					
5	-1.2000	0.5000	13939.2000	1970.9594	0.3200
0.0452					
6	-1.1000	0.6000	23522.4000	3823.2459	0.5400
0.0878					
7	-1.0000	0.7000	37461.6000	6845.5087	0.8600
0.1572					
8	-0.9000	0.8000	59677.2000	11659.4928	1.3700
0.2677					
9	-0.8000	0.9000	86684.4000	18935.6115	1.9900
0.4347					
10	-0.7000	1.0000	121096.8000	29276.7434	2.7800
0.6721					
11	-0.6000	1.1000	609840.0000	62699.4013	14.0000
1.4394					
12	-0.5000	1.2000	673437.6000	126836.3586	15.4600
2.9118					
13	-0.4000	1.3000	750103.2000	197978.2550	17.2200
4.5450					
14	-0.3000	1.4000	830253.6000	276961.4086	19.0600
6.3582					
15	-0.2000	1.5000	902998.8000	363597.7082	20.7300
8.3471					
16	-0.1000	1.6000	2783048.400	539306.6127	63.8900
12.3808					
17	0.0000	1.7000	2871910.800	822040.1080	65.9300
18.8714					
18	0.1000	1.8000	2948140.800	1.11303E+06	67.6800
25.5517					
19	0.2000	1.9000	3023499.600	1.41160E+06	69.4100
32.4059					
20	0.3000	2.0000	3094066.800	1.71747E+06	71.0300
39.4277					
21	0.4000	2.1000	3165940.800	2.03046E+06	72.6800
46.6130					
22	0.5000	2.2000	3241299.600	2.35081E+06	74.4100
53.9672					
23	0.6000	2.3000	3318400.800	2.67879E+06	76.1800
61.4965					
24	0.7000	2.4000	3394630.800	3.01443E+06	77.9300
69.2017					
25	0.8000	2.5000	3466069.200	3.35745E+06	79.5700
77.0765					
26	0.9000	2.6000	3533587.200	3.70743E+06	81.1200
85.1108					
27	1.0000	2.7000	3599798.400	4.06409E+06	82.6400

93.2986						
28	1.1000	2.8000	3659911.200	4.42707E+06	84.0200	
101.6314						
29	1.2000	2.9000	3723073.200	4.79621E+06	85.4700	
110.1058						
30	1.3000	3.0000	3786235.200	5.17166E+06	86.9200	
118.7251						
31	1.4000	3.1000	3845912.400	5.55326E+06	88.2900	
127.4854						
32	1.5000	3.2000	3906896.400	5.94090E+06	89.6900	
136.3842						
33	1.6000	3.3000	3967444.800	6.33461E+06	91.0800	
145.4225						
34	1.7000	3.4000	4029300.000	6.73443E+06	92.5000	
154.6013						
35	1.8000	3.5000	4092897.600	7.14054E+06	93.9600	
163.9242						
36	1.9000	3.6000	4158237.600	7.55308E+06	95.4600	
173.3950						
37	2.0000	3.7000	4225320.000	7.97225E+06	97.0000	
183.0178						
38	2.1000	3.8000	4298065.200	8.39841E+06	98.6700	
192.8010						
39	2.2000	3.9000	4375602.000	8.83209E+06	100.4500	
202.7568						
40	2.3000	4.0000	4456188.000	9.27367E+06	102.3000	
212.8941						
41	2.4000	4.1000	4542436.800	9.72359E+06	104.2800	
223.2228						
42	2.5000	4.2000	4622587.200	10.18183E+06	106.1200	
233.7426						
43	2.6000	4.3000	4698817.200	10.64789E+06	107.8700	
244.4418						
44	2.7000	4.4000	4771562.400	11.12140E+06	109.5400	
255.3121						
45	2.8000	4.5000	4842565.200	11.60209E+06	111.1700	
266.3474						
46	2.9000	4.6000	4910954.400	12.08976E+06	112.7400	
277.5427						
47	3.0000	4.7000	4972374.000	12.58392E+06	114.1500	
288.8870						
48	3.1000	4.8000	5030744.400	13.08407E+06	115.4900	
300.3689						
49	3.2000	4.9000	5086501.200	13.58992E+06	116.7700	
311.9817						
50	3.3000	5.0000	5140515.600	14.10127E+06	118.0100	
323.7205						
51	3.4000	5.1000	5194965.600	14.61803E+06	119.2600	
335.5838						
52	3.5000	5.2000	5244624.000	15.14000E+06	120.4000	

347.5667						
53	3.6000	5.3000	5292540.000	15.66686E+06	121.5000	
359.6615						
54	3.7000	5.4000	5338278.000	16.19839E+06	122.5500	
371.8638						
55	3.8000	5.5000	5382273.600	16.73441E+06	123.5600	
384.1692						
56	3.9000	5.6000	5422784.400	17.27466E+06	124.4900	
396.5715						
57	4.0000	5.7000	5457196.800	17.81865E+06	125.2800	
409.0599						
58	4.1000	5.8000	5487688.800	18.36589E+06	125.9800	
421.6227						
59	4.2000	5.9000	5513824.800	18.91596E+06	126.5800	
434.2506						
60	4.3000	6.0000	5537347.200	19.46851E+06	127.1200	
446.9355						
61	4.4000	6.1000	5558691.600	20.02331E+06	127.6100	
459.6718						
62	4.5000	6.2000	5576551.200	20.58006E+06	128.0200	
472.4532						
63	4.6000	6.3000	5593104.000	21.13854E+06	128.4000	
485.2741						
64	4.7000	6.4000	5608350.000	21.69861E+06	128.7500	
498.1314						
65	4.8000	6.5000	5621853.600	22.26011E+06	129.0600	
511.0218						
66	4.9000	6.6000	5634921.600	22.82294E+06	129.3600	
523.9427						
67	5.0000	6.7000	5646247.200	23.38700E+06	129.6200	
536.8915						
68	5.1000	6.8000	5658444.000	23.95222E+06	129.9000	
549.8674						
69	5.2000	6.9000	5668898.400	24.51859E+06	130.1400	
562.8693						
70	5.3000	7.0000	5677610.400	25.08591E+06	130.3400	
575.8931						
71	5.5000	7.2000	5695034.400	26.22316E+06	130.7400	
602.0009						
72	5.6000	7.3000	5703310.800	26.79307E+06	130.9300	
615.0842						
73	5.7000	7.4000	5710716.000	27.36377E+06	131.1000	
628.1856						
74	6.2000	7.9000	5740772.400	30.22661E+06	131.7900	
693.9074						
75	6.3000	8.0000	5745999.600	30.80094E+06	131.9100	
707.0922						
76	6.4000	8.1000	5750355.600	31.37575E+06	132.0100	
720.2881						
77	7.5000	9.2000	5791302.000	37.72359E+06	132.9500	

866.0143						
78	7.6000	9.3000	5795222.400	38.30291E+06	133.0400	
879.3137						
79	7.7000	9.4000	5797836.000	38.88255E+06	133.1000	
892.6206						
80	7.8000	9.5000	5801320.800	39.46250E+06	133.1800	
905.9344						
81	7.9000	9.6000	5805241.200	40.04283E+06	133.2700	
919.2568						
82	8.0000	9.7000	5808290.400	40.62350E+06	133.3400	
932.5872						
83	8.1000	9.8000	5812210.800	41.20452E+06	133.4300	
945.9255						
84	14.5000	16.2000	5913705.600	78.72661E+06	135.7600	
1807.3142						
85	14.6000	16.3000	5914141.200	79.31799E+06	135.7700	
1820.8905						
86	14.7000	16.4000	5915883.600	79.90949E+06	135.8100	
1834.4694						
87	16.8000	18.5000	5935050.000	92.35284E+06	136.2500	
2120.1294						
88	16.9000	18.6000	5935921.200	92.94638E+06	136.2700	
2133.7553						
89	17.0000	18.7000	5935921.200	93.53997E+06	136.2700	
2147.3823						
90	19.3000	21.0000	5939841.600	107.19696E+06	136.3600	
2460.9036						
91	19.4200	21.1200	5939841.600	107.90974E+06	136.3600	
2477.2668						

=====

| Variable storage data for node | N0350

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.6900	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.3200	1.3700	1742.4000	905.0748	0.0400
0.0208					
3	-1.2200	1.4700	2613.6000	1121.4059	0.0600
0.0257					
4	-1.1200	1.5700	4791.6000	1486.2033	0.1100
0.0341					
5	-0.5200	2.1700	29185.2000	10646.5831	0.6700
0.2444					
6	-0.4200	2.2700	33105.6000	13759.0338	0.7600

0.3159					
7	-0.3200	2.3700	38332.8000	17327.7265	0.8800
0.3978					
8	-0.2200	2.4700	43560.0000	21419.5423	1.0000
0.4917					
9	-0.1200	2.5700	48351.6000	26012.9933	1.1100
0.5972					
10	-0.0200	2.6700	54885.6000	31171.3521	1.2600
0.7156					
11	0.0800	2.7700	62290.8000	37026.2097	1.4300
0.8500					
12	0.1800	2.8700	70567.2000	43664.7427	1.6200
1.0024					
13	0.2800	2.9700	79714.8000	51174.1232	1.8300
1.1748					
14	0.3800	3.0700	90169.2000	59662.8720	2.0700
1.3697					
15	0.4800	3.1700	100623.6000	69197.6393	2.3100
1.5886					
16	0.5800	3.2700	111078.0000	79778.3087	2.5500
1.8315					
17	0.6800	3.3700	124146.0000	91533.3365	2.8500
2.1013					
18	0.7800	3.4700	138520.8000	104659.9846	3.1800
2.4027					
19	0.8800	3.5700	155944.8000	119374.5182	3.5800
2.7405					
20	0.9800	3.6700	176853.6000	136003.3141	4.0600
3.1222					
21	1.0800	3.7700	200811.6000	154873.7074	4.6100
3.5554					
22	1.1800	3.8700	233046.0000	176546.3853	5.3500
4.0529					
23	1.2800	3.9700	274863.6000	201912.8715	6.3100
4.6353					
24	1.3800	4.0700	325393.2000	231889.9023	7.4700
5.3235					
25	1.4800	4.1700	393782.4000	267794.0052	9.0400
6.1477					
26	1.5800	4.2700	480031.2000	311413.1329	11.0200
7.1491					
27	1.6800	4.3700	585446.4000	364599.3551	13.4400
8.3700					
28	1.7800	4.4700	713077.2000	429420.0938	16.3700
9.8581					
29	1.8800	4.5700	863359.2000	508121.4675	19.8200
11.6649					
30	1.9800	4.6700	1030629.6000	602696.6147	23.6600
13.8360					
31	2.0800	4.7700	1210096.8000	714611.8384	27.7800

16.4052						
32	2.1800	4.8700	1391306.400	844575.3811	31.9400	
19.3888						
33	2.2800	4.9700	1571209.200	992608.5563	36.0700	
22.7872						
34	2.3800	5.0700	1749369.600	1.15856E+06	40.1600	
26.5968						
35	2.4800	5.1700	1917511.200	1.34183E+06	44.0200	
30.8043						
36	2.5800	5.2700	2076505.200	1.54148E+06	47.6700	
35.3875						
37	2.6800	5.3700	2224173.600	1.75647E+06	51.0600	
40.3230						
38	2.7800	5.4700	2354418.000	1.98537E+06	54.0500	
45.5777						
39	2.8800	5.5700	2473772.400	2.22675E+06	56.7900	
51.1191						
40	2.9800	5.6700	2583543.600	2.47959E+06	59.3100	
56.9236						
41	3.0800	5.7700	2685038.400	2.74300E+06	61.6400	
62.9707						
42	3.1800	5.8700	2774772.000	3.01598E+06	63.7000	
69.2373						
43	3.2800	5.9700	2855793.600	3.29749E+06	65.5600	
75.7000						
44	3.3800	6.0700	2928974.400	3.58672E+06	67.2400	
82.3398						
45	3.4800	6.1700	2992572.000	3.88279E+06	68.7000	
89.1366						
46	3.5800	6.2700	3050942.400	4.18496E+06	70.0400	
96.0734						
47	3.6800	6.3700	3103214.400	4.49266E+06	71.2400	
103.1373						
48	3.7800	6.4700	3148516.800	4.80524E+06	72.2800	
110.3131						
49	3.8800	6.5700	3186414.000	5.12198E+06	73.1500	
117.5845						
50	3.9800	6.6700	3216470.400	5.44212E+06	73.8400	
124.9339						
51	4.0800	6.7700	3238250.400	5.76485E+06	74.3400	
132.3428						
52	4.1800	6.8700	3254803.200	6.08950E+06	74.7200	
139.7957						
53	4.2800	6.9700	3266128.800	6.41555E+06	74.9800	
147.2807						
54	4.3800	7.0700	3275276.400	6.74261E+06	75.1900	
154.7891						
55	4.4800	7.1700	3281374.800	7.07044E+06	75.3300	
162.3150						
56	4.5800	7.2700	3285730.800	7.39879E+06	75.4300	

169.8529						
57	4.6800	7.3700	3288780.000	7.72752E+06		75.5000
177.3994						
58	4.7800	7.4700	3290958.000	8.05650E+06		75.5500
184.9518						
59	5.6800	8.3700	3307510.800	11.02578E+06		75.9300
253.1170						
60	5.7800	8.4700	3309688.800	11.35663E+06		75.9800
260.7124						
61	5.8800	8.5700	3314044.800	11.68782E+06		76.0800
268.3154						
62	5.9800	8.6700	3321885.600	12.01961E+06		76.2600
275.9323						
63	6.0800	8.7700	3331033.200	12.35225E+06		76.4700
283.5687						
64	6.1800	8.8700	3338438.400	12.68572E+06		76.6400
291.2241						
65	6.2800	8.9700	3346279.200	13.01996E+06		76.8200
298.8971						
66	6.3800	9.0700	3353684.400	13.35495E+06		76.9900
306.5875						
67	6.4800	9.1700	3356733.600	13.69047E+06		77.0600
314.2899						
68	6.5800	9.2700	3357169.200	14.02616E+06		77.0700
321.9963						
69	6.8800	9.5700	3357169.200	15.03331E+06		77.0700
345.1173						
70	6.9650	9.6550	3357169.200	15.31867E+06		77.0700
351.6683						

=====

| Variable storage data for node | N0450

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.3000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.1000	0.2000	1742.4000	132.1277	0.0400
0.0030					
3	-1.0000	0.3000	3049.2000	368.6780	0.0700
0.0085					
4	-0.9000	0.4000	5662.8000	797.5857	0.1300
0.0183					
5	-0.8000	0.5000	10018.8000	1571.3722	0.2300
0.0361					
6	-0.7000	0.6000	20037.6000	3045.5282	0.4600

0.0699					
7	-0.6000	0.7000	35719.2000	5795.8299	0.8200
0.1331					
8	-0.5000	0.8000	58806.0000	10474.3314	1.3500
0.2405					
9	-0.4000	0.9000	93218.4000	18009.7089	2.1400
0.4134					
10	-0.3000	1.0000	148539.6000	29990.5784	3.4100
0.6885					
11	-0.2000	1.1000	226947.6000	48626.7905	5.2100
1.1163					
12	-0.1000	1.2000	377665.2000	78539.0201	8.6700
1.8030					
13	0.0000	1.3000	821541.6000	137079.2201	18.8600
3.1469					
14	0.1000	1.4000	1053280.800	230579.7834	24.1800
5.2934					
15	0.2000	1.5000	1340776.800	349992.7192	30.7800
8.0347					
16	0.3000	1.6000	1704502.800	501891.8534	39.1300
11.5219					
17	0.4000	1.7000	2178871.200	695573.9196	50.0200
15.9682					
18	0.5000	1.8000	2789146.800	943345.2440	64.0300
21.6562					
19	0.6000	1.9000	3518341.200	1.25801E+06	80.7700
28.8800					
20	0.7000	2.0000	4349901.600	1.65069E+06	99.8600
37.8945					
21	0.8000	2.1000	5238525.600	2.12941E+06	120.2600
48.8846					
22	0.9000	2.2000	6165482.400	2.69898E+06	141.5400
61.9601					
23	1.0000	2.3000	7061947.200	3.35984E+06	162.1200
77.1313					
24	1.1000	2.4000	7893943.200	4.10724E+06	181.2200
94.2892					
25	1.2000	2.5000	8644917.600	4.93389E+06	198.4600
113.2665					
26	1.3000	2.6000	9312256.800	5.83153E+06	213.7800
133.8736					
27	1.4000	2.7000	9921661.200	6.79306E+06	227.7700
155.9471					
28	1.5000	2.8000	10480971.60	7.81305E+06	240.6100
179.3630					
29	1.6000	2.9000	10990623.60	8.88652E+06	252.3100
204.0064					
30	1.7000	3.0000	11466734.40	10.00929E+06	263.2400
229.7817					
31	1.8000	3.1000	11922372.00	11.17866E+06	273.7000

256.6268						
32	1.9000	3.2000	12352309.20	12.39232E+06	283.5700	
284.4885						
33	2.0000	3.3000	12763951.20	13.64806E+06	293.0200	
313.3165						
34	2.1000	3.4000	13147714.80	14.94359E+06	301.8300	
343.0576						
35	2.2000	3.5000	13512312.00	16.27653E+06	310.2000	
373.6578						
36	2.3000	3.6000	13850773.20	17.64464E+06	317.9700	
405.0652						
37	2.4000	3.7000	14161356.00	19.04520E+06	325.1000	
437.2177						
38	2.5000	3.8000	14447980.80	20.47563E+06	331.6800	
470.0558						
39	2.6000	3.9000	14710647.60	21.93353E+06	337.7100	
503.5245						
40	2.7000	4.0000	14947178.40	23.41639E+06	343.1400	
537.5663						
41	2.8000	4.1000	15161058.00	24.92177E+06	348.0500	
572.1252						
42	2.9000	4.2000	15359691.60	26.44779E+06	352.6100	
607.1576						
43	3.0000	4.3000	15536109.60	27.99255E+06	356.6600	
642.6206						
44	3.1000	4.4000	15695974.80	29.55413E+06	360.3300	
678.4695						
45	3.2000	4.5000	15840158.40	31.13092E+06	363.6400	
714.6676						
46	3.3000	4.6000	15967789.20	32.72130E+06	366.5700	
751.1776						
47	3.4000	4.7000	16084094.40	34.32387E+06	369.2400	
787.9676						
48	3.5000	4.8000	16188638.40	35.93749E+06	371.6400	
825.0112						
49	3.6000	4.9000	16280550.00	37.56093E+06	373.7500	
862.2803						
50	3.7000	5.0000	16367670.00	39.19332E+06	375.7500	
899.7549						
51	3.8000	5.1000	16441722.00	40.83377E+06	377.4500	
937.4145						
52	3.9000	5.2000	16509675.60	42.48133E+06	379.0100	
975.2371						
53	4.0000	5.3000	16567174.80	44.13515E+06	380.3300	
1013.2037						
54	4.1000	5.4000	16615962.00	45.79429E+06	381.4500	
1051.2923						
55	4.2000	5.5000	16656908.40	47.45792E+06	382.3900	
1089.4839						
56	4.3000	5.6000	16692192.00	49.12536E+06	383.2000	

1127.7630					
57	4.4000	5.7000	16721377.20	50.79602E+06	383.8700
1166.1161					
58	4.5000	5.8000	16745770.80	52.46936E+06	384.4300
1204.5307					
59	4.6000	5.9000	16766244.00	54.14494E+06	384.9000
1242.9968					
60	4.7000	6.0000	16785846.00	55.82253E+06	385.3500
1281.5089					
61	4.8000	6.1000	16801963.20	57.50190E+06	385.7200
1320.0620					
62	4.9000	6.2000	16817209.20	59.18284E+06	386.0700
1358.6512					
63	5.0000	6.3000	16829406.00	60.86516E+06	386.3500
1397.2718					
64	5.1000	6.4000	16840731.60	62.54865E+06	386.6100
1435.9194					
65	5.2000	6.5000	16848572.40	64.23310E+06	386.7900
1474.5890					
66	5.3000	6.6000	16854235.20	65.91822E+06	386.9200
1513.2741					
67	5.4000	6.7000	16858591.20	67.60384E+06	387.0200
1551.9707					
68	5.5000	6.8000	16862947.20	69.28990E+06	387.1200
1590.6773					
69	5.6000	6.9000	16866867.60	70.97638E+06	387.2100
1629.3934					
70	5.7000	7.0000	16872966.00	72.66335E+06	387.3500
1668.1211					
71	5.8000	7.1000	16879935.60	74.35098E+06	387.5100
1706.8637					
72	5.9000	7.2000	16888647.60	76.03939E+06	387.7100
1745.6243					
73	6.0000	7.3000	16909992.00	77.72931E+06	388.2000
1784.4194					
74	6.1000	7.4000	16939612.80	79.42177E+06	388.8800
1823.2730					
75	6.2000	7.5000	16951374.00	81.11630E+06	389.1500
1862.1741					
76	6.3000	7.6000	16953116.40	82.81151E+06	389.1900
1901.0907					
77	6.4000	7.7000	16953987.60	84.50685E+06	389.2100
1940.0103					
78	7.4000	8.7000	16953987.60	101.46084E+06	389.2100
2329.2203					
79	7.4950	8.7950	16953987.60	103.07147E+06	389.2100
2366.1953					

=====

| Variable storage data for node | N0770

=====						
Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres	
=====	=====	=====	=====	=====	=====	
1	-3.0500	0.0000	26.1360	0.0000	0.0006	
0.0000						
2	-1.6300	1.4200	26.1360	37.1131	0.0006	
0.0009						
3	-1.6200	1.4300	2178.0000	45.2555	0.0500	
0.0010						
4	-1.3000	1.7500	10454.4000	1901.6805	0.2400	
0.0437						
5	-0.9900	2.0600	32234.4000	8209.7168	0.7400	
0.1885						
6	-0.6700	2.3800	67953.6000	23888.5120	1.5600	
0.5484						
7	-0.3500	2.7000	114998.4000	52832.4330	2.6400	
1.2129						
8	-0.0400	3.0100	220849.2000	104003.9228	5.0700	
2.3876						
9	0.2800	3.3300	301870.8000	187301.3646	6.9300	
4.2998						
10	0.5900	3.6400	614196.0000	326454.5198	14.1000	
7.4944						
11	0.9100	3.9600	1144756.800	603514.8312	26.2800	
13.8548						
12	1.2300	4.2800	1502820.000	1.02583E+06	34.5000	
23.5497						
13	1.5400	4.5900	1777683.600	1.53370E+06	40.8100	
35.2090						
14	1.8600	4.9100	2038608.000	2.14383E+06	46.8000	
49.2155						
15	2.1700	5.2200	2275138.800	2.81212E+06	52.2300	
64.5573						
16	2.4900	5.5400	2471158.800	3.57130E+06	56.7300	
81.9858						
17	2.8000	5.8500	2606194.800	4.35819E+06	59.8300	
100.0502						
18	3.1200	6.1700	2687216.400	5.20509E+06	61.6900	
119.4925						
19	3.4300	6.4800	2737310.400	6.04587E+06	62.8400	
138.7942						
20	3.7500	6.8000	2774772.000	6.92779E+06	63.7000	
159.0402						
21	4.0700	7.1200	2803957.200	7.82038E+06	64.3700	
179.5311						
22	4.3800	7.4300	2830528.800	8.69371E+06	64.9800	

199.5801					
23	4.7000	7.7500	2858407.200	9.60393E+06	65.6200
220.4758					
24	5.0100	8.0600	2890641.600	10.49501E+06	66.3600
240.9324					
25	5.3300	8.3800	2928538.800	11.42607E+06	67.2300
262.3064					
26	5.6400	8.6900	2977761.600	12.34152E+06	68.3600
283.3224					
27	5.9600	9.0100	3007818.000	13.29920E+06	69.0500
305.3077					
28	6.2800	9.3300	3026548.800	14.26469E+06	69.4800
327.4723					
29	6.5900	9.6400	3034389.600	15.20413E+06	69.6600
349.0387					
30	6.9100	9.9600	3039181.200	16.17589E+06	69.7700
371.3473					

=====

| Variable storage data for node | N0720

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-0.6500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.5500	0.1000	435.6000	18.9477	0.0100
0.0004					
3	-0.4500	0.2000	871.2000	83.0414	0.0200
0.0019					
4	-0.3500	0.3000	2613.6000	249.4985	0.0600
0.0057					
5	-0.2500	0.4000	7840.8000	748.8698	0.1800
0.0172					
6	-0.1500	0.5000	15681.6000	1902.5571	0.3600
0.0437					
7	-0.0500	0.6000	184694.4000	10375.5830	4.2400
0.2382					
8	0.0500	0.7000	211701.6000	30179.8333	4.8600
0.6928					
9	0.1500	0.8000	255261.6000	53493.8242	5.8600
1.2280					
10	0.2500	0.9000	321472.8000	82266.7024	7.3800
1.8886					
11	0.3500	1.0000	416869.2000	119080.2890	9.5700
2.7337					
12	0.4500	1.1000	536223.6000	166609.4067	12.3100

3.8248					
13	0.5500	1.2000	676922.4000	227129.6576	15.5400
5.2142					
14	0.6500	1.3000	826333.2000	302167.6287	18.9700
6.9368					
15	0.7500	1.4000	976615.2000	392209.5786	22.4200
9.0039					
16	0.8500	1.5000	1124283.600	497166.8674	25.8100
11.4134					
17	0.9500	1.6000	1278050.400	617200.2646	29.3400
14.1690					
18	1.0500	1.7000	1428332.400	752448.4570	32.7900
17.2738					
19	1.1500	1.8000	1572516.000	902431.6132	36.1000
20.7170					
20	1.2500	1.9000	1716264.000	1.06682E+06	39.4000
24.4907					
21	1.3500	2.0000	1854349.200	1.24530E+06	42.5700
28.5882					
22	1.4500	2.1000	1990256.400	1.43749E+06	45.6900
33.0002					
23	1.5500	2.2000	2121372.000	1.64303E+06	48.7000
37.7189					
24	1.6500	2.3000	2253358.800	1.86173E+06	51.7300
42.7396					
25	1.7500	2.4000	2378811.600	2.09331E+06	54.6100
48.0558					
26	1.8500	2.5000	2508620.400	2.33765E+06	57.5900
53.6651					
27	1.9500	2.6000	2641478.400	2.59513E+06	60.6400
59.5759					
28	2.0500	2.7000	2777385.600	2.86604E+06	63.7600
65.7952					
29	2.1500	2.8000	2909372.400	3.15035E+06	66.7900
72.3221					
30	2.2500	2.9000	3034825.200	3.44753E+06	69.6700
79.1445					
31	2.3500	3.0000	3144596.400	3.75649E+06	72.1900
86.2370					
32	2.4500	3.1000	3239992.800	4.07570E+06	74.3800
93.5652					
33	2.5500	3.2000	3319272.000	4.40365E+06	76.2000
101.0939					
34	2.6500	3.3000	3384612.000	4.73884E+06	77.7000
108.7887					
35	2.7500	3.4000	3435577.200	5.07984E+06	78.8700
116.6171					
36	2.8500	3.5000	3475216.800	5.42537E+06	79.7800
124.5495					
37	2.9500	3.6000	3506580.000	5.77446E+06	80.5000

132.5634						
38	3.0500	3.7000	3530102.400	6.12629E+06	81.0400	
140.6403						
39	3.1500	3.8000	3548397.600	6.48021E+06	81.4600	
148.7652						
40	3.2500	3.9000	3563208.000	6.83579E+06	81.8000	
156.9281						
41	3.3500	4.0000	3574969.200	7.19269E+06	82.0700	
165.1215						
42	3.4500	4.1000	3584116.800	7.55064E+06	82.2800	
173.3389						
43	3.5500	4.2000	3591522.000	7.90942E+06	82.4500	
181.5753						
44	3.6500	4.3000	3598927.200	8.26894E+06	82.6200	
189.8287						
45	3.7500	4.4000	3605025.600	8.62913E+06	82.7600	
198.0977						
46	4.1500	4.8000	3629419.200	10.07601E+06	83.3200	
231.3133						
47	4.2500	4.9000	3634210.800	10.43918E+06	83.4300	
239.6507						
48	4.3500	5.0000	3638131.200	10.80280E+06	83.5200	
247.9981						
49	7.0500	7.7000	3674721.600	20.67501E+06	84.3600	
474.6329						
50	7.1600	7.8100	3675157.200	21.07925E+06	84.3700	
483.9129						
51	7.1600	7.8100	3675157.200	21.07925E+06	84.3700	
483.9129						

=====

| Variable storage data for node | N0960

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.9000	0.0000	435.6000	0.0000	0.0100
0.0000					
2	2.0600	0.1600	435.6000	69.6960	0.0100
0.0016					
3	2.0700	0.1700	435.6000	74.0520	0.0100
0.0017					
4	2.1700	0.2700	871.2000	138.1457	0.0200
0.0032					
5	2.2700	0.3700	2178.0000	285.7005	0.0500
0.0066					
6	2.3700	0.4700	3920.4000	586.3807	0.0900

0.0135					
7	2.4700	0.5700	7405.2000	1143.4976	0.1700
0.0263					
8	2.5700	0.6700	10454.4000	2032.0983	0.2400
0.0467					
9	2.6700	0.7700	15681.6000	3330.0844	0.3600
0.0764					
10	2.7700	0.8700	22651.2000	5236.0566	0.5200
0.1202					
11	2.8700	0.9700	29620.8000	7841.8518	0.6800
0.1800					
12	2.9700	1.0700	36154.8000	11125.1766	0.8300
0.2554					
13	3.0700	1.1700	43995.6000	15126.2493	1.0100
0.3473					
14	3.1700	1.2700	50529.6000	19848.6937	1.1600
0.4557					
15	3.2700	1.3700	55321.2000	25139.3724	1.2700
0.5771					
16	3.3700	1.4700	60548.4000	30930.8284	1.3900
0.7101					
17	3.4700	1.5700	66211.2000	37266.6358	1.5200
0.8555					
18	3.5700	1.6700	71874.0000	44168.8907	1.6500
1.0140					
19	3.6700	1.7700	77536.8000	51637.5668	1.7800
1.1854					
20	3.7700	1.8700	83199.6000	59672.6435	1.9100
1.3699					
21	3.8700	1.9700	89733.6000	68317.1590	2.0600
1.5683					
22	3.9700	2.0700	95396.4000	77572.1226	2.1900
1.7808					
23	4.0700	2.1700	100623.6000	87371.8628	2.3100
2.0058					
24	4.1700	2.2700	105850.8000	97694.3766	2.4300
2.2428					
25	4.2700	2.3700	111513.6000	108561.2584	2.5600
2.4922					
26	4.3700	2.4700	117612.0000	120016.0709	2.7000
2.7552					
27	4.4700	2.5700	123274.8000	132059.1810	2.8300
3.0317					
28	4.5700	2.6700	129808.8000	144711.8285	2.9800
3.3221					
29	4.6700	2.7700	137214.0000	158061.1233	3.1500
3.6286					
30	4.7700	2.8700	145490.4000	172194.1824	3.3400
3.9530					
31	4.8700	2.9700	154202.4000	187176.5616	3.5400

4.2970						
32	4.9700	3.0700	163785.6000	203073.3954		3.7600
4.6619						
33	5.0700	3.1700	174240.0000	219971.8113		4.0000
5.0499						
34	5.1700	3.2700	186872.4000	238023.5671		4.2900
5.4643						
35	5.2700	3.3700	198198.0000	257274.1181		4.5500
5.9062						
36	5.3700	3.4700	211701.6000	277765.1851		4.8600
6.3766						
37	5.4700	3.5700	223898.4000	299542.1208		5.1400
6.8765						
38	5.5700	3.6700	235659.6000	322517.2823		5.4100
7.4040						
39	5.6700	3.7700	247856.4000	346690.2763		5.6900
7.9589						
40	5.7700	3.8700	261795.6000	372169.4439		6.0100
8.5438						
41	5.8700	3.9700	278784.0000	399193.7035		6.4000
9.1642						
42	5.9700	4.0700	301435.2000	428197.0017		6.9200
9.8301						
43	6.0700	4.1700	327135.6000	459616.4670		7.5100
10.5513						
44	6.1700	4.2700	351093.6000	493520.5333		8.0600
11.3297						
45	6.2700	4.3700	368517.6000	529497.2173		8.4600
12.1556						
46	6.3700	4.4700	382456.8000	567043.4055		8.7800
13.0175						
47	6.4700	4.5700	393782.4000	605853.6003		9.0400
13.9085						
48	6.5700	4.6700	403801.2000	645731.3327		9.2700
14.8240						
49	6.6700	4.7700	413820.0000	686610.9608		9.5000
15.7624						
50	6.7700	4.8700	422532.0000	728427.3864		9.7000
16.7224						
51	6.8700	4.9700	428630.4000	770984.7167		9.8400
17.6994						
52	6.9700	5.0700	434293.2000	814130.1555		9.9700
18.6899						
53	7.0700	5.1700	440391.6000	857863.6039		10.1100
19.6938						
54	7.1700	5.2700	445618.8000	902163.4239		10.2300
20.7108						
55	7.2700	5.3700	449539.2000	946920.7332		10.3200
21.7383						
56	7.3700	5.4700	451717.2000	991983.0587		10.3700

22.7728						
57	7.4700	5.5700	452588.4000	1.03720E+06	10.3900	
23.8108						
58	7.5550	5.6550	452588.4000	1.07567E+06	10.3900	
24.6939						

=====

| Variable storage data for node | N0920

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.5700	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-1.4700	0.1000	871.2000	64.0937	0.0200
0.0015					
3	-1.3700	0.2000	871.2000	151.2137	0.0200
0.0035					
4	-1.2700	0.3000	1306.8000	259.3792	0.0300
0.0060					
5	-1.1700	0.4000	1742.4000	411.3165	0.0400
0.0094					
6	-1.0700	0.5000	1742.4000	585.5565	0.0400
0.0134					
7	-0.9700	0.6000	2613.6000	801.8875	0.0600
0.0184					
8	-0.8700	0.7000	3484.8000	1105.7620	0.0800
0.0254					
9	-0.7700	0.8000	4791.6000	1517.8475	0.1100
0.0348					
10	-0.6700	0.9000	5662.8000	2039.9563	0.1300
0.0468					
11	-0.5700	1.0000	7405.2000	2691.4051	0.1700
0.0618					
12	-0.4700	1.1000	9583.2000	3538.4800	0.2200
0.0812					
13	-0.3700	1.2000	12196.8000	4624.8461	0.2800
0.1062					
14	-0.2700	1.3000	15681.6000	6015.1079	0.3600
0.1381					
15	-0.1700	1.4000	19602.0000	7775.6290	0.4500
0.1785					
16	-0.0700	1.5000	23086.8000	9907.6731	0.5300
0.2274					
17	0.0300	1.6000	28314.0000	12473.2461	0.6500
0.2863					
18	0.1300	1.7000	33976.8000	15583.4561	0.7800

0.3577					
19	0.2300	1.8000	40075.2000	19281.8268	0.9200
0.4426					
20	0.3300	1.9000	45738.0000	23569.3265	1.0500
0.5411					
21	0.4300	2.0000	51836.4000	28444.8184	1.1900
0.6530					
22	0.5300	2.1000	57934.8000	33930.4980	1.3300
0.7789					
23	0.6300	2.2000	62726.4000	39961.9114	1.4400
0.9174					
24	0.7300	2.3000	66646.8000	46429.5165	1.5300
1.0659					
25	0.8300	2.4000	70567.2000	53289.2143	1.6200
1.2234					
26	0.9300	2.5000	74052.0000	60519.4021	1.7000
1.3893					
27	1.0300	2.6000	77101.2000	68076.4739	1.7700
1.5628					
28	1.1300	2.7000	80150.4000	75938.4825	1.8400
1.7433					
29	1.2300	2.8000	83199.6000	84105.4265	1.9100
1.9308					
30	1.3300	2.9000	86248.8000	92577.3045	1.9800
2.1253					
31	1.4300	3.0000	88862.4000	101332.4518	2.0400
2.3263					
32	1.5300	3.1000	91476.0000	110348.9660	2.1000
2.5333					
33	1.6300	3.2000	94525.2000	119648.5164	2.1700
2.7468					
34	1.7300	3.3000	97574.4000	129252.9970	2.2400
2.9672					
35	1.8300	3.4000	101059.2000	139184.0682	2.3200
3.1952					
36	1.9300	3.5000	104108.4000	149441.9679	2.3900
3.4307					
37	2.0300	3.6000	107593.2000	160026.4640	2.4700
3.6737					
38	2.1300	3.7000	111078.0000	170959.4519	2.5500
3.9247					
39	2.2300	3.8000	114998.4000	182262.5923	2.6400
4.1842					
40	2.3300	3.9000	119354.4000	193979.4403	2.7400
4.4532					
41	2.4300	4.0000	124581.6000	206175.1848	2.8600
4.7331					
42	2.5300	4.1000	129808.8000	218893.6825	2.9800
5.0251					
43	2.6300	4.2000	135036.0000	232134.9303	3.1000

5.3291					
44	2.7300	4.3000	142005.6000	245985.4104	3.2600
5.6470					
45	2.8300	4.4000	150717.6000	260619.2629	3.4600
5.9830					
46	2.9300	4.5000	162478.8000	276275.2445	3.7300
6.3424					
47	3.0300	4.6000	177724.8000	293279.5579	4.0800
6.7328					
48	3.1300	4.7000	195148.8000	311916.2628	4.4800
7.1606					
49	3.2300	4.8000	213879.6000	332360.3267	4.9100
7.6299					
50	3.3300	4.9000	236966.4000	354892.5431	5.4400
8.1472					
51	3.4300	5.0000	260053.2000	379734.3332	5.9700
8.7175					
52	3.5300	5.1000	284882.4000	406971.4084	6.5400
9.3428					
53	3.6300	5.2000	318859.2000	437142.2398	7.3200
10.0354					
54	3.7300	5.3000	355885.2000	470862.1784	8.1700
10.8095					
55	3.8300	5.4000	392475.6000	508264.9267	9.0100
11.6682					
56	3.9300	5.5000	426888.0000	549220.6478	9.8000
12.6084					
57	4.0300	5.6000	456073.2000	593360.2252	10.4700
13.6217					
58	4.1300	5.7000	481773.6000	640246.2262	11.0600
14.6980					
59	4.2300	5.8000	505731.6000	689616.1480	11.6100
15.8314					
60	4.3300	5.9000	528382.8000	741317.2159	12.1300
17.0183					
61	4.4300	6.0000	548420.4000	795153.7300	12.5900
18.2542					
62	4.5300	6.1000	567151.2000	850929.1313	13.0200
19.5346					
63	4.6300	6.2000	591980.4000	908880.6991	13.5900
20.8650					
64	4.7300	6.3000	612018.0000	969077.2380	14.0500
22.2470					
65	4.8300	6.4000	624650.4000	1.03091E+06	14.3400
23.6664					
66	4.9300	6.5000	636411.6000	1.09396E+06	14.6100
25.1139					
67	5.0300	6.6000	646866.0000	1.15812E+06	14.8500
26.5868					
68	5.1300	6.7000	656013.6000	1.22327E+06	15.0600

28.0823						
69	5.2300	6.8000	663854.4000	1.28926E+06		15.2400
29.5973						
70	5.3300	6.9000	670388.4000	1.35597E+06		15.3900
31.1288						
71	5.4300	7.0000	677793.6000	1.42338E+06		15.5600
32.6763						
72	5.5300	7.1000	685634.4000	1.49155E+06		15.7400
34.2412						
73	5.6300	7.2000	692168.4000	1.56044E+06		15.8900
35.8227						
74	5.7300	7.3000	698266.8000	1.62996E+06		16.0300
37.4187						
75	5.8300	7.4000	702622.8000	1.70000E+06		16.1300
39.0267						
76	5.9300	7.5000	705236.4000	1.77039E+06		16.1900
40.6426						
77	6.0300	7.6000	708285.6000	1.84107E+06		16.2600
42.2651						
78	6.1300	7.7000	709592.4000	1.91196E+06		16.2900
43.8926						
79	6.2300	7.8000	710463.6000	1.98296E+06		16.3100
45.5226						
80	6.3300	7.9000	710899.2000	2.05403E+06		16.3200
47.1541						
81	6.4300	8.0000	710899.2000	2.12512E+06		16.3200
48.7861						
82	6.5300	8.1000	710899.2000	2.19621E+06		16.3200
50.4181						
83	6.6100	8.1800	711334.8000	2.25310E+06		16.3300
51.7241						

=====

| Variable storage data for node | N0950

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.4200	0.0000	435.6000	0.0000	0.0100
0.0000					
2	0.1200	0.5400	435.6000	235.2240	0.0100
0.0054					
3	0.1300	0.5500	435.6000	239.5800	0.0100
0.0055					
4	0.2300	0.6500	435.6000	283.1400	0.0100
0.0065					
5	0.3300	0.7500	1306.8000	366.3685	0.0300

0.0084					
6	0.4300	0.8500	1742.4000	518.3058	0.0400
0.0119					
7	0.5300	0.9500	2613.6000	734.6368	0.0600
0.0169					
8	0.6300	1.0500	3484.8000	1038.5113	0.0800
0.0238					
9	0.7300	1.1500	4791.6000	1450.5968	0.1100
0.0333					
10	0.8300	1.2500	6098.4000	1993.7799	0.1400
0.0458					
11	0.9300	1.3500	8276.4000	2709.7467	0.1900
0.0622					
12	1.0300	1.4500	11325.6000	3685.8601	0.2600
0.0846					
13	1.1300	1.5500	15246.0000	5009.5802	0.3500
0.1150					
14	1.2300	1.6500	21780.0000	6851.1769	0.5000
0.1573					
15	1.3300	1.7500	30927.6000	9473.1996	0.7100
0.2175					
16	1.4300	1.8500	43124.4000	13158.9069	0.9900
0.3021					
17	1.5300	1.9500	57063.6000	18152.0166	1.3100
0.4167					
18	1.6300	2.0500	73180.8000	24647.4872	1.6800
0.5658					
19	1.7300	2.1500	94089.6000	32989.0581	2.1600
0.7573					
20	1.8300	2.2500	119790.0000	43657.1025	2.7500
1.0022					
21	1.9300	2.3500	150282.0000	57131.7870	3.4500
1.3116					
22	2.0300	2.4500	189050.4000	74061.2061	4.3400
1.7002					
23	2.1300	2.5500	233917.2000	95169.6019	5.3700
2.1848					
24	2.2300	2.6500	283575.6000	121004.1818	6.5100
2.7779					
25	2.3300	2.7500	344124.0000	152340.0634	7.9000
3.4972					
26	2.4300	2.8500	419482.8000	190457.8956	9.6300
4.3723					
27	2.5300	2.9500	507038.4000	236714.3888	11.6400
5.4342					
28	2.6300	3.0500	608097.6000	292394.1539	13.9600
6.7124					
29	2.7300	3.1500	715690.8000	358509.9185	16.4300
8.2303					
30	2.8300	3.2500	818928.0000	435182.1512	18.8000

9.9904					
31	2.9300	3.3500	928263.6000	522483.7856	21.3100
11.9946					
32	3.0300	3.4500	1041519.600	620917.6510	23.9100
14.2543					
33	3.1300	3.5500	1158696.000	730875.2908	26.6000
16.7786					
34	3.2300	3.6500	1266289.200	852083.5378	29.0700
19.5611					
35	3.3300	3.7500	1361250.000	983430.5755	31.2500
22.5765					
36	3.4300	3.8500	1447934.400	1.12387E+06	33.2400
25.8004					
37	3.5300	3.9500	1528084.800	1.27265E+06	35.0800
29.2160					
38	3.6300	4.0500	1598216.400	1.42895E+06	36.6900
32.8041					
39	3.7300	4.1500	1666605.600	1.59218E+06	38.2600
36.5513					
40	3.8300	4.2500	1726282.800	1.76181E+06	39.6300
40.4456					
41	3.9300	4.3500	1778554.800	1.93704E+06	40.8300
44.4684					
42	4.0300	4.4500	1829084.400	2.11742E+06	41.9900
48.6092					
43	4.1300	4.5500	1871773.200	2.30245E+06	42.9700
52.8571					
44	4.2300	4.6500	1909670.400	2.49152E+06	43.8400
57.1975					
45	4.3300	4.7500	1944518.400	2.68423E+06	44.6400
61.6214					
46	4.4300	4.8500	1974574.800	2.88018E+06	45.3300
66.1198					
47	4.5300	4.9500	2002017.600	3.07900E+06	45.9600
70.6842					
48	4.6300	5.0500	2027718.000	3.28049E+06	46.5500
75.3096					
49	4.7300	5.1500	2049062.400	3.48432E+06	47.0400
79.9890					
50	4.8300	5.2500	2067357.600	3.69014E+06	47.4600
84.7140					
51	4.9300	5.3500	2082168.000	3.89761E+06	47.8000
89.4769					
52	5.0300	5.4500	2095671.600	4.10650E+06	48.1100
94.2724					
53	5.1300	5.5500	2107868.400	4.31668E+06	48.3900
99.0973					
54	5.2300	5.6500	2117451.600	4.52794E+06	48.6100
103.9473					
55	5.3300	5.7500	2124856.800	4.74006E+06	48.7800

108.8167						
56	5.4300	5.8500	2130519.600	4.95282E+06	48.9100	
113.7012						
57	5.5300	5.9500	2135311.200	5.16611E+06	49.0200	
118.5976						
58	5.6300	6.0500	2138796.000	5.37981E+06	49.1000	
123.5036						
59	5.7300	6.1500	2141845.200	5.59384E+06	49.1700	
128.4170						
60	5.8300	6.2500	2144894.400	5.80818E+06	49.2400	
133.3375						
61	5.9300	6.3500	2146636.800	6.02275E+06	49.2800	
138.2634						
62	6.0300	6.4500	2147943.600	6.23748E+06	49.3100	
143.1929						
63	6.1300	6.5500	2149250.400	6.45234E+06	49.3400	
148.1253						
64	6.2300	6.6500	2150557.200	6.66733E+06	49.3700	
153.0608						
65	6.3300	6.7500	2150992.800	6.88240E+06	49.3800	
157.9982						
66	6.4300	6.8500	2151428.400	7.09752E+06	49.3900	
162.9367						
67	6.5300	6.9500	2152299.600	7.31271E+06	49.4100	
167.8766						
68	6.6300	7.0500	2152735.200	7.52795E+06	49.4200	
172.8181						
69	6.7300	7.1500	2153170.800	7.74325E+06	49.4300	
177.7605						
70	6.8300	7.2500	2153170.800	7.95856E+06	49.4300	
182.7035						
71	6.9300	7.3500	2153606.400	8.17390E+06	49.4400	
187.6470						
72	7.0300	7.4500	2153606.400	8.38926E+06	49.4400	
192.5910						
73	7.1300	7.5500	2153606.400	8.60462E+06	49.4400	
197.5350						
74	7.2300	7.6500	2153606.400	8.81998E+06	49.4400	
202.4790						
75	7.3300	7.7500	2154042.000	9.03536E+06	49.4500	
207.4234						
76	7.4300	7.8500	2154042.000	9.25077E+06	49.4500	
212.3684						
77	7.5300	7.9500	2154042.000	9.46617E+06	49.4500	
217.3134						
78	7.6300	8.0500	2154042.000	9.68158E+06	49.4500	
222.2584						
79	7.7300	8.1500	2154042.000	9.89698E+06	49.4500	
227.2034						

=====

| Variable storage data for node | N0970

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-1.2100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.7100	0.5000	4791.6000	861.9279	0.1100
0.0198					
3	-0.6100	0.6000	7840.8000	1487.3162	0.1800
0.0341					
4	-0.5100	0.7000	12632.4000	2501.4891	0.2900
0.0574					
5	-0.4100	0.8000	20037.6000	4120.8009	0.4600
0.0946					
6	-0.3100	0.9000	30056.4000	6608.6076	0.6900
0.1517					
7	-0.2100	1.0000	42253.2000	10206.7838	0.9700
0.2343					
8	-0.1100	1.1000	54885.6000	15049.9272	1.2600
0.3455					
9	-0.0100	1.2000	62726.4000	20926.1076	1.4400
0.4804					
10	0.0900	1.3000	68389.2000	27479.7830	1.5700
0.6308					
11	0.1900	1.4000	73180.8000	34556.8603	1.6800
0.7933					
12	0.2900	1.5000	76665.6000	42048.4300	1.7600
0.9653					
13	0.3900	1.6000	79714.8000	49866.8763	1.8300
1.1448					
14	0.4900	1.7000	82764.0000	57990.2581	1.9000
1.3313					
15	0.5900	1.8000	84506.4000	66353.5432	1.9400
1.5233					
16	2.0900	3.3000	120661.2000	219425.0283	2.7700
5.0373					
17	2.1900	3.4000	123710.4000	231643.1690	2.8400
5.3178					
18	2.2900	3.5000	127630.8000	244209.5937	2.9300
5.6063					
19	2.3900	3.6000	131551.2000	257168.0700	3.0200
5.9038					
20	2.4900	3.7000	136342.8000	270561.9218	3.1300
6.2112					
21	2.5900	3.8000	141570.0000	284456.6034	3.2500

6.5302					
22	2.6900	3.9000	146797.2000	298874.0296	3.3700
6.8612					
23	2.7900	4.0000	153331.2000	313879.1140	3.5200
7.2057					
24	2.8900	4.1000	158558.4000	329472.7079	3.6400
7.5637					
25	2.9900	4.2000	165528.0000	345675.6167	3.8000
7.9356					
26	3.1900	4.4000	177289.2000	379950.2670	4.0700
8.7225					
27	3.2900	4.5000	182516.4000	397939.7343	4.1900
9.1354					
28	3.3900	4.6000	186436.8000	416386.8627	4.2800
9.5589					
29	3.4900	4.7000	189486.0000	435182.6086	4.3500
9.9904					
30	3.5900	4.8000	192535.2000	454283.2748	4.4200
10.4289					
31	3.6900	4.9000	196891.2000	473753.9940	4.5200
10.8759					
32	3.9900	5.2000	213444.0000	535286.9585	4.9000
12.2885					
33	4.0900	5.3000	219978.0000	556957.0209	5.0500
12.7860					
34	4.1900	5.4000	225640.8000	579237.1384	5.1800
13.2975					
35	4.2900	5.5000	230868.0000	602061.8513	5.3000
13.8214					
36	4.3900	5.6000	237402.0000	625474.3574	5.4500
14.3589					
37	4.4900	5.7000	243936.0000	649540.2776	5.6000
14.9114					
38	4.5900	5.8000	251341.2000	674302.9672	5.7700
15.4799					
39	4.6900	5.9000	258310.8000	699784.5181	5.9300
16.0648					
40	4.7900	6.0000	266151.6000	726006.3990	6.1100
16.6668					
41	4.8900	6.1000	274428.0000	753034.0527	6.3000
17.2873					
42	4.9900	6.2000	286189.2000	781062.5760	6.5700
17.9307					
43	5.0900	6.3000	300564.0000	810397.0075	6.9000
18.6042					
44	5.1900	6.4000	315374.4000	841190.6515	7.2400
19.3111					
45	5.2900	6.5000	331491.6000	873530.2811	7.6100
20.0535					
46	5.3900	6.6000	344559.6000	907330.3979	7.9100

20.8294					
47	5.4900	6.7000	355014.0000	942307.4261	8.1500
21.6324					
48	5.5900	6.8000	363290.4000	978221.4923	8.3400
22.4569					
49	5.6900	6.9000	371131.2000	1.01494E+06	8.5200
23.2999					
50	5.7900	7.0000	377665.2000	1.05238E+06	8.6700
24.1593					
51	5.8900	7.1000	382456.8000	1.09039E+06	8.7800
25.0318					
52	5.9900	7.2000	386812.8000	1.12885E+06	8.8800
25.9148					
53	6.0900	7.3000	390733.2000	1.16773E+06	8.9700
26.8073					
54	6.1900	7.4000	393782.4000	1.20695E+06	9.0400
27.7078					
55	6.2900	7.5000	397702.8000	1.24652E+06	9.1300
28.6163					
56	6.3900	7.6000	400316.4000	1.28643E+06	9.1900
29.5323					
57	7.2900	8.5000	422967.6000	1.65685E+06	9.7100
38.0361					
58	7.3900	8.6000	426016.8000	1.69930E+06	9.7800
39.0106					
59	7.4900	8.7000	427759.2000	1.74199E+06	9.8200
39.9906					
60	7.5900	8.8000	429066.0000	1.78483E+06	9.8500
40.9741					
61	7.6900	8.9000	430808.4000	1.82782E+06	9.8900
41.9611					
62	7.7900	9.0000	431679.6000	1.87095E+06	9.9100
42.9510					
63	8.5900	9.8000	440827.2000	2.21994E+06	10.1200
50.9628					
64	8.6900	9.9000	441698.4000	2.26407E+06	10.1400
51.9758					
65	8.7900	10.0000	441698.4000	2.30824E+06	10.1400
52.9898					
66	9.0900	10.3000	441698.4000	2.44075E+06	10.1400
56.0318					
67	9.1800	10.3900	441698.4000	2.48050E+06	10.1400
56.9444					

=====

| Variable storage data for node | N0915

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	-6.0000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.5700	4.4300	3484.8000	5630.0728	0.0800
0.1292					
3	-1.4700	4.5300	5227.2000	6062.7349	0.1200
0.1392					
4	-1.3700	4.6300	8712.0000	6752.3108	0.2000
0.1550					
5	-1.2700	4.7300	13939.2000	7874.6698	0.3200
0.1808					
6	-1.1700	4.8300	21780.0000	9646.0921	0.5000
0.2214					
7	-1.0700	4.9300	33541.2000	12391.0469	0.7700
0.2845					
8	-0.9700	5.0300	49222.8000	16504.2191	1.1300
0.3789					
9	-0.8700	5.1300	67953.6000	22337.8681	1.5600
0.5128					
10	-0.7700	5.2300	90604.8000	30238.6044	2.0800
0.6942					
11	-0.6700	5.3300	118047.6000	40640.9109	2.7100
0.9330					
12	-0.5700	5.4300	148104.0000	53919.9819	3.4000
1.2378					
13	-0.4700	5.5300	184258.8000	70505.0838	4.2300
1.6186					
14	-0.3700	5.6300	223898.4000	90880.5829	5.1400
2.0863					
15	-0.2700	5.7300	272250.0000	115648.3944	6.2500
2.6549					
16	-0.1700	5.8300	322344.0000	145342.5651	7.4000
3.3366					
17	-0.0700	5.9300	571071.6000	189424.2178	13.1100
4.3486					
18	0.0300	6.0300	696960.0000	252720.7567	16.0000
5.8017					
19	0.1300	6.1300	820670.4000	328517.3427	18.8400
7.5417					
20	0.2300	6.2300	980535.6000	418458.2698	22.5100
9.6065					
21	0.3300	6.3300	1191366.000	526881.3145	27.3500
12.0955					
22	0.4300	6.4300	1447063.200	658594.4677	33.2200
15.1192					
23	0.5300	6.5300	1760259.600	818703.5315	40.4100
18.7948					
24	0.6300	6.6300	2142716.400	1.01354E+06	49.1900

23.2676						
25	0.7300	6.7300	2568297.600	1.24876E+06	58.9600	
28.6677						
26	0.8300	6.8300	3008689.200	1.52732E+06	69.0700	
35.0625						
27	0.9300	6.9300	3476088.000	1.85128E+06	79.8000	
42.4994						
28	1.0300	7.0300	3946100.400	2.22213E+06	90.5900	
51.0132						
29	1.1300	7.1300	4404743.640	2.63946E+06	101.1190	
60.5937						
30	1.2300	7.2300	4893151.428	3.10414E+06	112.3313	
71.2612						
31	1.3300	7.3300	5397680.772	3.61847E+06	123.9137	
83.0686						
32	1.4300	7.4300	5930955.360	4.18468E+06	136.1560	
96.0671						
33	1.5300	7.5300	6483831.948	4.80521E+06	148.8483	
110.3125						
34	1.6300	7.6300	7075045.692	5.48293E+06	162.4207	
125.8708						
35	1.7300	7.7300	7401310.092	6.20668E+06	169.9107	
142.4858						
36	1.8300	7.8300	7727578.848	6.96306E+06	177.4008	
159.8499						
37	1.9300	7.9300	8418462.228	7.77011E+06	193.2613	
178.3772						
38	2.0300	8.0300	9108901.296	8.64624E+06	209.1116	
198.4904						
39	2.1300	8.1300	9794091.384	9.59117E+06	224.8414	
220.1831						
40	2.2300	8.2300	10461426.23	10.60376E+06	240.1613	
243.4288						
41	2.3300	8.3300	11097393.52	11.68153E+06	254.7611	
268.1711						
42	2.4300	8.4300	11707224.80	12.82161E+06	268.7609	
294.3438						
43	2.5300	8.5300	12263041.69	14.02001E+06	281.5207	
321.8551						
44	2.6300	8.6300	12765719.74	15.27135E+06	293.0606	
350.5820						
45	2.7300	8.7300	13211765.42	16.57015E+06	303.3004	
380.3982						
46	2.8300	8.8300	13599005.11	17.91063E+06	312.1902	
411.1714						
47	2.9300	8.9300	13930492.36	19.28705E+06	319.8001	
442.7698						
48	3.0300	9.0300	14214481.78	20.69426E+06	326.3196	
475.0749						
49	3.1300	9.1300	14440074.66	22.12696E+06	331.4985	

507.9652						
50	3.2300	9.2300	14599107.86	23.57890E+06		335.1494
541.2971						
51	3.3300	9.3300	14738255.93	25.04575E+06		338.3438
574.9713						
52	3.4300	9.4300	14850832.39	26.52518E+06		340.9282
608.9345						
53	3.5300	9.5300	14940322.06	28.01473E+06		342.9826
643.1296						
54	3.6300	9.6300	15009334.16	29.51219E+06		344.5669
677.5067						
55	3.7300	9.7300	15061362.23	31.01571E+06		345.7613
712.0228						
56	3.8300	9.8300	15103807.09	32.52395E+06		346.7357
746.6472						
57	3.9300	9.9300	15137104.36	34.03598E+06		347.5001
781.3587						
58	4.0300	10.0300	15137121.78	35.54968E+06		347.5005
816.1084						
59	6.4300	12.4300	15137535.60	71.87891E+06		347.5100
1650.1126						
60	6.5300	12.5300	15137553.02	73.39265E+06		347.5104
1684.8633						
61	6.6300	12.6300	15139731.02	74.90649E+06		347.5604
1719.6165						
62	6.7300	12.7300	15141037.82	76.42052E+06		347.5904
1754.3737						
63	7.7300	13.7300	15145829.42	91.56380E+06		347.7004
2102.0156						
64	7.8300	13.8300	15145829.42	93.07838E+06		347.7004
2136.7856						

=====

| Variable storage data for node | N0885

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-6.9100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.2000	5.7100	1306.8000	2888.7466	0.0300
0.0663					
3	-1.1000	5.8100	2178.0000	3061.1406	0.0500
0.0703					
4	-1.0000	5.9100	3920.4000	3361.8207	0.0900
0.0772					
5	-0.8000	6.1100	10018.8000	4708.9001	0.2300

0.1081					
6	-0.7000	6.2100	13939.2000	5901.4059	0.3200
0.1355					
7	-0.6000	6.3100	20908.8000	7632.0540	0.4800
0.1752					
8	-0.5000	6.4100	35283.6000	10410.4838	0.8100
0.2390					
9	-0.4000	6.5100	57934.8000	15024.7930	1.3300
0.3449					
10	-0.3000	6.6100	87991.2000	22268.8721	2.0200
0.5112					
11	-0.2000	6.7100	138956.4000	33519.5295	3.1900
0.7695					
12	-0.1000	6.8100	255261.6000	52937.7828	5.8600
1.2153					
13	0.0000	6.9100	533174.4000	91515.7941	12.2400
2.1009					
14	0.1000	7.0100	586317.6000	147468.7998	13.4600
3.3854					
15	0.2000	7.1100	653835.6000	209445.1848	15.0100
4.8082					
16	0.3000	7.2100	742698.0000	279223.9994	17.0500
6.4101					
17	0.4000	7.3100	878169.6000	360172.0490	20.1600
8.2684					
18	0.5000	7.4100	1101196.800	458929.2972	25.2800
10.5356					
19	0.6000	7.5100	1464051.600	586760.5622	33.6100
13.4702					
20	0.7000	7.6100	1995919.200	759071.9824	45.8200
17.4259					
21	0.8000	7.7100	2662822.800	991207.0770	61.1300
22.7550					
22	0.9000	7.8100	3402471.600	1.29371E+06	78.1100
29.6996					
23	1.0000	7.9100	4089848.400	1.66780E+06	93.8900
38.2874					
24	1.1000	8.0100	4661791.200	2.10507E+06	107.0200
48.3257					
25	1.2000	8.1100	5133546.000	2.59464E+06	117.8500
59.5647					
26	1.3000	8.2100	5526021.600	3.12749E+06	126.8600
71.7973					
27	1.4000	8.3100	5861869.200	3.69680E+06	134.5700
84.8668					
28	1.5000	8.4100	6164611.200	4.29805E+06	141.5200
98.6697					
29	1.6000	8.5100	6431634.000	4.92781E+06	147.6500
113.1270					
30	1.7000	8.6100	6673827.600	5.58304E+06	153.2100

128.1690					
31	1.8000	8.7100	6899904.000	6.26169E+06	158.4000
143.7486					
32	1.9000	8.8100	7105942.800	6.96195E+06	163.1300
159.8243					
33	2.0000	8.9100	7295428.800	7.68199E+06	167.4800
176.3542					
34	2.1000	9.0100	7467926.400	8.42013E+06	171.4400
193.2996					
35	2.2000	9.1100	7618644.000	9.17444E+06	174.9000
210.6162					
36	2.3000	9.2100	7752373.200	9.94297E+06	177.9700
228.2593					
37	2.4000	9.3100	7878261.600	10.72449E+06	180.8600
246.2004					
38	2.5000	9.4100	7987597.200	11.51777E+06	183.3700
264.4116					
39	2.6000	9.5100	8082122.400	12.32124E+06	185.5400
282.8568					
40	2.7000	9.6100	8162708.400	13.13347E+06	187.3900
301.5030					
41	2.8000	9.7100	8235453.600	13.95337E+06	189.0600
320.3253					
42	2.9000	9.8100	8298180.000	14.78004E+06	190.5000
339.3030					
43	3.0000	9.9100	8353936.800	15.61264E+06	191.7800
358.4168					
44	3.1000	10.0100	8399239.200	16.45029E+06	192.8200
377.6466					
45	3.2000	10.1100	8439314.400	17.29220E+06	193.7400
396.9744					
46	3.3000	10.2100	8475033.600	18.13791E+06	194.5600
416.3892					
47	3.4000	10.3100	8507268.000	18.98702E+06	195.3000
435.8820					
48	3.5000	10.4100	8533839.600	19.83907E+06	195.9100
455.4423					
49	3.6000	10.5100	8559975.600	20.69375E+06	196.5100
475.0631					
50	3.7000	10.6100	8585240.400	21.55100E+06	197.0900
494.7429					
51	3.8000	10.7100	8608762.800	22.41069E+06	197.6300
514.4787					
52	3.9000	10.8100	8633592.000	23.27280E+06	198.2000
534.2700					
53	4.0000	10.9100	8657550.000	24.13735E+06	198.7500
554.1172					
54	4.1000	11.0100	8683686.000	25.00440E+06	199.3500
574.0220					
55	4.2000	11.1100	8708079.600	25.87398E+06	199.9100

593.9848						
56	4.3000	11.2100	8732037.600	26.74598E+06	200.4600	
614.0031						
57	4.4000	11.3100	8754253.200	27.62028E+06	200.9700	
634.0744						
58	4.5000	11.4100	8776033.200	28.49679E+06	201.4700	
654.1962						
59	4.6000	11.5100	8794328.400	29.37530E+06	201.8900	
674.3640						
60	4.7000	11.6100	8809574.400	30.25548E+06	202.2400	
694.5703						
61	4.8000	11.7100	8825256.000	31.13722E+06	202.6000	
714.8121						
62	4.9000	11.8100	8841373.200	32.02054E+06	202.9700	
735.0904						
63	5.0000	11.9100	8861410.800	32.90567E+06	203.4300	
755.4102						
64	5.1000	12.0100	8887546.800	33.79311E+06	204.0300	
775.7830						
65	5.2000	12.1100	8916732.000	34.68331E+06	204.7000	
796.2193						
66	5.3000	12.2100	8945481.600	35.57641E+06	205.3600	
816.7220						
67	5.4000	12.3100	8972053.200	36.47228E+06	205.9700	
837.2883						
68	5.5000	12.4100	8993397.600	37.37054E+06	206.4600	
857.9096						
69	5.6000	12.5100	9011692.800	38.27079E+06	206.8800	
878.5764						
70	5.7000	12.6100	9030859.200	39.17291E+06	207.3200	
899.2862						
71	5.8000	12.7100	9050896.800	40.07699E+06	207.7800	
920.0410						
72	5.9000	12.8100	9067885.200	40.98292E+06	208.1700	
940.8383						
73	6.0000	12.9100	9081824.400	41.89039E+06	208.4900	
961.6711						
74	6.1000	13.0100	9091407.600	42.79904E+06	208.7100	
982.5309						
75	6.3000	13.2100	9109267.200	44.61909E+06	209.1200	
1024.3134						
76	6.4000	13.3100	9117979.200	45.53045E+06	209.3200	
1045.2352						
77	6.5000	13.4100	9127998.000	46.44274E+06	209.5500	
1066.1785						
78	6.6000	13.5100	9141937.200	47.35622E+06	209.8700	
1087.1493						
79	6.7000	13.6100	9152391.600	48.27093E+06	210.1100	
1108.1481						
80	6.8000	13.7100	9157183.200	49.18640E+06	210.2200	

1129.1644						
81	6.9000	13.8100	9160232.400	50.10226E+06	210.2900	
1150.1897						
82	7.0000	13.9100	9162410.400	51.01839E+06	210.3400	
1171.2210						
83	7.1000	14.0100	9163281.600	51.93466E+06	210.3600	
1192.2558						
84	7.4000	14.3100	9164152.800	54.68375E+06	210.3800	
1255.3661						
85	7.4900	14.4000	9164152.800	55.50852E+06	210.3800	
1274.3003						

=====

| Variable storage data for node | N0560

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.8200	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-0.6600	2.1600	435.6000	940.8960	0.0100
0.0216					
3	-0.6500	2.1700	435.6000	945.2520	0.0100
0.0217					
4	-0.5500	2.2700	871.2000	1009.3457	0.0200
0.0232					
5	-0.4500	2.3700	1306.8000	1117.5112	0.0300
0.0257					
6	-0.3500	2.4700	2613.6000	1309.7925	0.0600
0.0301					
7	-0.2500	2.5700	4791.6000	1674.5899	0.1100
0.0384					
8	-0.1500	2.6700	7405.2000	2279.7018	0.1700
0.0523					
9	-0.0500	2.7700	610275.6000	25109.6699	14.0100
0.5764					
10	0.0500	2.8700	625957.2000	86919.0340	14.3700
1.9954					
11	0.1500	2.9700	646430.4000	150535.0325	14.8400
3.4558					
12	0.2500	3.0700	674744.4000	216588.0548	15.4900
4.9722					
13	0.3500	3.1700	713077.2000	285969.6161	16.3700
6.5650					
14	0.4500	3.2700	763606.8000	359788.6650	17.5300
8.2596					
15	0.5500	3.3700	827204.4000	439307.2338	18.9900

10.0851					
16	0.6500	3.4700	899514.0000	525617.0454	20.6500
12.0665					
17	0.7500	3.5700	981842.4000	619653.8881	22.5400
14.2253					
18	0.8500	3.6700	1068962.400	722162.2480	24.5400
16.5786					
19	0.9500	3.7700	1162616.400	833707.3045	26.6900
19.1393					
20	1.0500	3.8700	1265418.000	955071.5232	29.0500
21.9254					
21	1.1500	3.9700	1361685.600	1.08640E+06	31.2600
24.9402					
22	1.2500	4.0700	1458824.400	1.22739E+06	33.4900
28.1770					
23	1.3500	4.1700	1555092.000	1.37806E+06	35.7000
31.6359					
24	1.4500	4.2700	1647003.600	1.53814E+06	37.8100
35.3109					
25	1.5500	4.3700	1728025.200	1.70688E+06	39.6700
39.1845					
26	1.6500	4.4700	1802512.800	1.88339E+06	41.3800
43.2366					
27	1.7500	4.5700	1867417.200	2.06687E+06	42.8700
47.4489					
28	1.8500	4.6700	1925787.600	2.25652E+06	44.2100
51.8027					
29	1.9500	4.7700	1978495.200	2.45173E+06	45.4200
56.2840					
30	2.0500	4.8700	2029024.800	2.65210E+06	46.5800
60.8838					
31	2.1500	4.9700	2076505.200	2.85737E+06	47.6700
65.5962					
32	2.2500	5.0700	2121807.600	3.06728E+06	48.7100
70.4150					
33	2.3500	5.1700	2165803.200	3.28165E+06	49.7200
75.3364					
34	2.4500	5.2700	2207185.200	3.50030E+06	50.6700
80.3558					
35	2.5500	5.3700	2247696.000	3.72304E+06	51.6000
85.4691					
36	2.6500	5.4700	2289513.600	3.94989E+06	52.5600
90.6770					
37	2.7500	5.5700	2330895.600	4.18091E+06	53.5100
95.9804					
38	2.8500	5.6700	2373148.800	4.41610E+06	54.4800
101.3798					
39	2.9500	5.7700	2416273.200	4.65557E+06	55.4700
106.8771					
40	3.0500	5.8700	2457219.600	4.89924E+06	56.4100

112.4710					
41	3.1500	5.9700	2498166.000	5.14700E+06	57.3500
118.1589					
42	3.2500	6.0700	2536934.400	5.39875E+06	58.2400
123.9383					
43	3.3500	6.1700	2571782.400	5.65418E+06	59.0400
129.8022					
44	3.4500	6.2700	2603581.200	5.91295E+06	59.7700
135.7426					
45	3.5500	6.3700	2632330.800	6.17474E+06	60.4300
141.7525					
46	3.6500	6.4700	2661951.600	6.43945E+06	61.1100
147.8294					
47	3.7500	6.5700	2688523.200	6.70697E+06	61.7200
153.9708					
48	3.8500	6.6700	2715094.800	6.97714E+06	62.3300
160.1732					
49	3.9500	6.7700	2739052.800	7.24985E+06	62.8800
166.4336					
50	4.0500	6.8700	2760397.200	7.52482E+06	63.3700
172.7460					
51	4.1500	6.9700	2779128.000	7.80179E+06	63.8000
179.1045					
52	4.2500	7.0700	2796552.000	8.08057E+06	64.2000
185.5044					
53	4.3500	7.1700	2810926.800	8.36094E+06	64.5300
191.9408					
54	4.4500	7.2700	2822688.000	8.64262E+06	64.8000
198.4073					
55	4.5500	7.3700	2833142.400	8.92541E+06	65.0400
204.8992					
56	4.6500	7.4700	2843596.800	9.20924E+06	65.2800
211.4151					
57	4.7500	7.5700	2854486.800	9.49414E+06	65.5300
217.9555					
58	4.8500	7.6700	2865376.800	9.78013E+06	65.7800
224.5210					
59	4.9500	7.7700	2875395.600	10.06717E+06	66.0100
231.1104					
60	5.0500	7.8700	2885850.000	10.35523E+06	66.2500
237.7233					
61	5.1500	7.9700	2895868.800	10.64431E+06	66.4800
244.3598					
62	5.2500	8.0700	2905887.600	10.93440E+06	66.7100
251.0192					
63	5.3500	8.1700	2917213.200	11.22555E+06	66.9700
257.7031					
64	5.4500	8.2700	2929410.000	11.51788E+06	67.2500
264.4141					
65	5.5500	8.3700	2939428.800	11.81132E+06	67.4800

271.1505						
66	5.6500	8.4700	2950318.800	12.10580E+06		67.7300
277.9109						
67	5.7500	8.5700	2962080.000	12.40142E+06		68.0000
284.6973						
68	5.8500	8.6700	2977326.000	12.69838E+06		68.3500
291.5148						
69	5.9500	8.7700	2994314.400	12.99696E+06		68.7400
298.3692						
70	6.0500	8.8700	3016094.400	13.29748E+06		69.2400
305.2681						
71	6.1500	8.9700	3046586.400	13.60061E+06		69.9400
312.2270						
72	6.2500	9.0700	3088404.000	13.90735E+06		70.9000
319.2689						
73	6.3500	9.1700	3141547.200	14.21884E+06		72.1200
326.4197						
74	6.4500	9.2700	3196868.400	14.53576E+06		73.3900
333.6951						
75	6.5500	9.3700	3259594.800	14.85857E+06		74.8300
341.1059						
76	6.6500	9.4700	3318400.800	15.18746E+06		76.1800
348.6562						
77	6.7500	9.5700	3365010.000	15.52163E+06		77.2500
356.3276						
78	6.8500	9.6700	3392888.400	15.85952E+06		77.8900
364.0845						
79	6.9500	9.7700	3403778.400	16.19935E+06		78.1400
371.8859						
80	7.0500	9.8700	3406827.600	16.53988E+06		78.2100
379.7033						
81	7.1600	9.9800	3407263.200	16.91465E+06		78.2200
388.3069						

=====

| Variable storage data for node | N0810

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.8500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.3500	0.5000	8712.0000	1535.8700	0.2000
0.0353					
3	-1.2500	0.6000	12196.8000	2576.4255	0.2800
0.0591					
4	-1.1500	0.7000	17424.0000	4049.7029	0.4000

0.0930					
5	-1.0500	0.8000	24829.2000	6151.4424	0.5700
0.1412					
6	-0.9500	0.9000	36154.8000	9182.9305	0.8300
0.2108					
7	-0.8500	1.0000	288367.2000	23403.7581	6.6200
0.5373					
8	-0.7500	1.1000	322779.6000	53944.6324	7.4100
1.2384					
9	-0.6500	1.2000	377229.6000	88909.3944	8.6600
2.0411					
10	-0.5500	1.3000	464785.2000	130933.6385	10.6700
3.0058					
11	-0.4500	1.4000	582832.8000	183202.8131	13.3800
4.2058					
12	-0.3500	1.5000	737906.4000	249086.8556	16.9400
5.7182					
13	-0.2500	1.6000	952657.2000	333385.9380	21.8700
7.6535					
14	-0.1500	1.7000	1205740.800	441056.6105	27.6800
10.1253					
15	-0.0500	1.8000	3592393.200	670366.2644	82.4700
15.3895					
16	0.0500	1.9000	4032784.800	1.05141E+06	92.5800
24.1370					
17	0.1500	2.0000	4498005.600	1.47773E+06	103.2600
33.9241					
18	0.2500	2.1000	5035971.600	1.95417E+06	115.6100
44.8617					
19	0.3500	2.2000	5654088.000	2.48837E+06	129.8000
57.1252					
20	0.4500	2.3000	6380233.200	3.08972E+06	146.4700
70.9302					
21	0.5500	2.4000	7214407.200	3.76902E+06	165.6200
86.5247					
22	0.6500	2.5000	8187102.000	4.53857E+06	187.9500
104.1913					
23	0.7500	2.6000	9333165.600	5.41395E+06	214.2600
124.2872					
24	0.8500	2.7000	10707483.60	6.41519E+06	245.8100
147.2724					
25	0.9500	2.8000	12276514.80	7.56348E+06	281.8300
173.6336					
26	1.0500	2.9000	13997570.40	8.87623E+06	321.3400
203.7703					
27	1.1500	3.0000	15782223.60	10.36432E+06	362.3100
237.9319					
28	1.2500	3.1000	17500665.60	12.02770E+06	401.7600
276.1181					
29	1.3500	3.2000	19098882.00	13.85708E+06	438.4500

318.1148					
30	1.4500	3.3000	20537233.20	15.83843E+06	471.4700
363.6003					
31	1.5500	3.4000	21793503.60	17.95464E+06	500.3100
412.1817					
32	1.6500	3.5000	22889908.80	20.18856E+06	525.4800
463.4656					
33	1.7500	3.6000	23838210.00	22.52478E+06	547.2500
517.0978					
34	1.8500	3.7000	24674997.60	24.95030E+06	566.4600
572.7800					
35	1.9500	3.8000	25421180.40	27.45499E+06	583.5900
630.2798					
36	2.0500	3.9000	26091133.20	30.03051E+06	598.9700
689.4056					
37	2.1500	4.0000	26712298.80	32.67059E+06	613.2300
750.0136					
38	2.2500	4.1000	27303408.00	35.37130E+06	626.8000
812.0132					
39	2.3500	4.2000	27859233.60	38.12935E+06	639.5600
875.3295					
40	2.4500	4.3000	28387180.80	40.94160E+06	651.6800
939.8899					
41	2.5500	4.4000	28884636.00	43.80513E+06	663.1000
1005.6274					
42	2.6500	4.5000	29342451.60	46.71643E+06	673.6100
1072.4616					
43	2.7500	4.6000	29778051.60	49.67239E+06	683.6100
1140.3213					
44	2.8500	4.7000	30187951.20	52.67064E+06	693.0200
1209.1516					
45	2.9500	4.8000	30577377.60	55.70886E+06	701.9600
1278.8994					
46	3.0500	4.9000	30946766.40	58.78501E+06	710.4400
1349.5182					
47	3.1500	5.0000	31287405.60	61.89668E+06	718.2600
1420.9522					
48	3.2500	5.1000	31603651.20	65.04118E+06	725.5200
1493.1402					
49	3.3500	5.2000	31904215.20	68.21653E+06	732.4200
1566.0361					
50	3.4500	5.3000	32184306.00	71.42092E+06	738.8500
1639.5987					
51	3.5500	5.4000	32438696.40	74.65203E+06	744.6900
1713.7747					
52	3.6500	5.5000	32667822.00	77.90731E+06	749.9500
1788.5058					
53	3.7500	5.6000	32877345.60	81.18453E+06	754.7600
1863.7405					
54	3.8500	5.7000	33064653.60	84.48160E+06	759.0600

1939.4306						
55	3.9500	5.8000	33229310.40	87.79626E+06	762.8400	
2015.5248						
56	4.0500	5.9000	33366088.80	91.12599E+06	765.9800	
2091.9649						
57	4.1500	6.0000	33483265.20	94.46843E+06	768.6700	
2168.6966						
58	4.2500	6.1000	33579532.80	97.82153E+06	770.8800	
2245.6733						
59	4.3500	6.2000	33662296.80	101.18359E+06	772.7800	
2322.8556						
60	4.4500	6.3000	33731121.60	104.55322E+06	774.3600	
2400.2118						
61	4.5500	6.4000	33788620.80	107.92918E+06	775.6800	
2477.7130						
62	4.6500	6.5000	33835665.60	111.31036E+06	776.7600	
2555.3342						
63	4.7500	6.6000	33875740.80	114.69589E+06	777.6800	
2633.0554						
64	4.8500	6.7000	33906668.40	118.08498E+06	778.3900	
2710.8581						
65	4.9500	6.8000	33933675.60	121.47696E+06	779.0100	
2788.7274						
66	5.0500	6.9000	33955891.20	124.87141E+06	779.5200	
2866.6531						
67	5.1500	7.0000	33973750.80	128.26786E+06	779.9300	
2944.6248						
68	5.2500	7.1000	33986383.20	131.66583E+06	780.2200	
3022.6315						
69	5.3500	7.2000	33996402.00	135.06493E+06	780.4500	
3100.6642						
70	5.4500	7.3000	34003371.60	138.46489E+06	780.6100	
3178.7165						
71	5.5500	7.4000	34008598.80	141.86545E+06	780.7300	
3256.7827						
72	5.6500	7.5000	34012083.60	145.26645E+06	780.8100	
3334.8589						
73	5.7500	7.6000	34014261.60	148.66774E+06	780.8600	
3412.9416						
74	8.1500	10.0000	34022973.60	230.31160E+06	781.0600	
5287.2269						
75	8.2650	10.1150	34022973.60	234.22424E+06	781.0600	
5377.0488						
76	1002.6000	1004.4500	34022973.60	34.06446E+09	781.0600	
782012.3439						

```

*=====*
| Variable storage data for node | N0570
*=====*

```

Data	Elevation	Depth	Area	Volume	Area
------	-----------	-------	------	--------	------

Volume Point ac-ft =====	ft =====	ft =====	ft^2 =====	ft^3 =====	acres =====
1 0.0000	-2.6700	0.0000	26.1360	0.0000	0.0006
2 0.0646	-0.8800	1.7900	4356.0000	2815.9702	0.1000
3 0.0780	-0.7800	1.8900	7405.2000	3397.3220	0.1700
4 0.1007	-0.6800	1.9900	12632.4000	4387.6284	0.2900
5 0.1379	-0.5800	2.0900	20037.6000	6006.9402	0.4600
6 0.1936	-0.4800	2.1900	28749.6000	8433.2066	0.6600
7 0.2713	-0.3800	2.2900	39204.0000	11817.3694	0.9000
8 0.3735	-0.2800	2.3900	50094.0000	16271.1164	1.1500
9 0.5013	-0.1800	2.4900	61419.6000	21837.1304	1.4100
10 1.0924	-0.0800	2.5900	530560.8000	47586.8273	12.1800
11 2.3229	0.0200	2.6900	541450.8000	101185.9494	12.4300
12 3.5769	0.1200	2.7900	551034.0000	155808.9426	12.6500
13 4.8529	0.2200	2.8900	560617.2000	211390.2583	12.8700
14 6.1523	0.3200	2.9900	571507.2000	267995.0393	13.1200
15 7.4753	0.4200	3.0900	581090.4000	325623.6790	13.3400
16 8.8188	0.5200	3.1900	589366.8000	384145.4661	13.5300
17 10.1822	0.6200	3.2900	598514.4000	443538.3452	13.7400
18 11.5652	0.7200	3.3900	606355.2000	503780.7975	13.9200
19 14.3871	0.9200	3.5900	622908.0000	626702.1732	14.3000
20 15.8266	1.0200	3.6900	631184.4000	689405.7110	14.4900
21 17.2870	1.1200	3.7900	641203.2000	753023.7974	14.7200
22 20.2799	1.3200	3.9900	662547.6000	883391.7493	15.2100
23	1.4200	4.0900	672566.4000	950146.1552	15.4400

21.8124					
24	1.5200	4.1900	680842.8000	1.01782E+06	15.6300
23.3658					
25	1.6200	4.2900	688683.6000	1.08629E+06	15.8100
24.9378					
26	1.7200	4.3900	698266.8000	1.15564E+06	16.0300
26.5298					
27	2.6200	5.2900	794970.0000	1.82712E+06	18.2500
41.9448					
28	2.7200	5.3900	809344.8000	1.90733E+06	18.5800
43.7863					
29	2.8200	5.4900	821977.2000	1.98890E+06	18.8700
45.6587					
30	2.9200	5.5900	834609.6000	2.07172E+06	19.1600
47.5602					
31	3.0200	5.6900	845064.0000	2.15571E+06	19.4000
49.4882					
32	3.1200	5.7900	854647.2000	2.24069E+06	19.6200
51.4391					
33	3.2200	5.8900	863794.8000	2.32661E+06	19.8300
53.4116					
34	3.3200	5.9900	874249.2000	2.41351E+06	20.0700
55.4066					
35	3.4200	6.0900	882961.2000	2.50137E+06	20.2700
57.4236					
36	3.6200	6.2900	900385.2000	2.67970E+06	20.6700
61.5175					
37	3.7200	6.3900	909097.2000	2.77017E+06	20.8700
63.5944					
38	3.8200	6.4900	919551.6000	2.86160E+06	21.1100
65.6934					
39	3.9200	6.5900	930006.0000	2.95408E+06	21.3500
67.8164					
40	4.0200	6.6900	940024.8000	3.04758E+06	21.5800
69.9628					
41	4.1200	6.7900	951350.4000	3.14215E+06	21.8400
72.1338					
42	4.7200	7.3900	1022353.200	3.73413E+06	23.4700
85.7237					
43	4.8200	7.4900	1035856.800	3.83703E+06	23.7800
88.0862					
44	4.9200	7.5900	1050667.200	3.94136E+06	24.1200
90.4811					
45	5.0200	7.6900	1066348.800	4.04721E+06	24.4800
92.9111					
46	5.1200	7.7900	1086822.000	4.15486E+06	24.9500
95.3825					
47	5.2200	7.8900	1109037.600	4.26465E+06	25.4600
97.9030					
48	5.3200	7.9900	1132124.400	4.37671E+06	25.9900

100.4754					
49	5.4200	8.0900	1158260.400	4.49122E+06	26.5900
103.1043					
50	5.5200	8.1900	1186574.400	4.60846E+06	27.2400
105.7957					
51	5.6200	8.2900	1217502.000	4.72866E+06	27.9500
108.5551					
52	5.7200	8.3900	1251478.800	4.85210E+06	28.7300
111.3890					
53	5.8200	8.4900	1289811.600	4.97916E+06	29.6100
114.3059					
54	5.9200	8.5900	1336856.400	5.11049E+06	30.6900
117.3207					
55	6.0200	8.6900	1393920.000	5.24702E+06	32.0000
120.4549					
56	6.1200	8.7900	1455775.200	5.38949E+06	33.4200
123.7256					
57	6.2200	8.8900	1532876.400	5.53890E+06	35.1900
127.1557					
58	6.3200	8.9900	1619125.200	5.69648E+06	37.1700
130.7732					
59	6.4200	9.0900	1708423.200	5.86284E+06	39.2200
134.5922					
60	6.5200	9.1900	1797721.200	6.03812E+06	41.2700
138.6162					
61	6.6200	9.2900	1880049.600	6.22199E+06	43.1600
142.8373					
62	6.7200	9.3900	1960635.600	6.41401E+06	45.0100
147.2455					
63	6.8200	9.4900	2034687.600	6.61377E+06	46.7100
151.8312					
64	6.9200	9.5900	2100898.800	6.82053E+06	48.2300
156.5779					
65	7.0200	9.6900	2157091.200	7.03343E+06	49.5200
161.4652					
66	7.1200	9.7900	2194117.200	7.25098E+06	50.3700
166.4596					
67	7.2200	9.8900	2221124.400	7.47174E+06	50.9900
171.5275					
68	7.3200	9.9900	2245082.400	7.69505E+06	51.5400
176.6540					
69	7.4200	10.0900	2267298.000	7.92066E+06	52.0500
181.8334					
70	7.5200	10.1900	2288642.400	8.14846E+06	52.5400
187.0628					
71	7.6200	10.2900	2311293.600	8.37845E+06	53.0600
192.3427					
72	7.7200	10.3900	2336994.000	8.61086E+06	53.6500
197.6782					
73	7.8200	10.4900	2367921.600	8.84610E+06	54.3600

203.0786						
74	7.9200	10.5900	2397542.400	9.08437E+06		55.0400
208.5485						
75	8.0200	10.6900	2424985.200	9.32549E+06		55.6700
214.0839						
76	8.1200	10.7900	2447200.800	9.56910E+06		56.1800
219.6763						
77	8.2200	10.8900	2462011.200	9.81456E+06		56.5200
225.3113						
78	8.3200	10.9900	2466802.800	10.06100E+06		56.6300
230.9687						
79	8.4200	11.0900	2469416.400	10.30780E+06		56.6900
236.6346						
80	25.5200	28.1900	2600096.400	53.64690E+06		59.6900
1231.5635						
81	25.6200	28.2900	2600967.600	53.90696E+06		59.7100
1237.5334						
82	27.2050	29.8750	2600967.600	58.02949E+06		59.7100
1332.1738						

=====

| Variable storage data for node | N0990

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.5700	0.0000	435.6000	0.0000	0.0100
0.0000					
2	1.7200	0.1500	435.6000	65.3400	0.0100
0.0015					
3	1.7300	0.1600	435.6000	69.6960	0.0100
0.0016					
4	1.8300	0.2600	1306.8000	152.9245	0.0300
0.0035					
5	1.9300	0.3600	2613.6000	345.2058	0.0600
0.0079					
6	2.0300	0.4600	6098.4000	768.6795	0.1400
0.0176					
7	2.1300	0.5600	10018.8000	1566.4636	0.2300
0.0360					
8	2.2300	0.6600	14810.4000	2800.1324	0.3400
0.0643					
9	2.3300	0.7600	20037.6000	4535.9439	0.4600
0.1041					
10	2.4300	0.8600	24829.2000	6774.9849	0.5700
0.1555					
11	2.5300	0.9600	29185.2000	9472.7457	0.6700

0.2175					
12	2.6300	1.0600	33541.2000	12606.5105	0.7700
0.2894					
13	2.7300	1.1600	37897.2000	16176.1793	0.8700
0.3714					
14	2.8300	1.2600	41382.0000	20138.8226	0.9500
0.4623					
15	2.9300	1.3600	45302.4000	24471.5210	1.0400
0.5618					
16	3.0300	1.4600	48787.2000	29174.8780	1.1200
0.6698					
17	3.1300	1.5600	52707.6000	34248.3049	1.2100
0.7862					
18	3.2300	1.6600	56192.4000	39692.3209	1.2900
0.9112					
19	3.3300	1.7600	60112.8000	45506.4212	1.3800
1.0447					
20	3.4300	1.8600	64904.4000	51755.6877	1.4900
1.1881					
21	3.5300	1.9600	68824.8000	58441.1229	1.5800
1.3416					
22	3.6300	2.0600	72745.2000	65518.6473	1.6700
1.5041					
23	3.7300	2.1600	76665.6000	72988.2552	1.7600
1.6756					
24	3.8300	2.2600	80150.4000	80828.3314	1.8400
1.8556					
25	3.9300	2.3600	84070.8000	89038.5293	1.9300
2.0440					
26	4.0300	2.4600	87555.6000	97619.1737	2.0100
2.2410					
27	4.1300	2.5600	91040.4000	106548.3178	2.0900
2.4460					
28	4.2300	2.6600	94525.2000	115825.9596	2.1700
2.6590					
29	4.3300	2.7600	98010.0000	125452.0977	2.2500
2.8800					
30	4.4300	2.8600	101930.4000	135448.3771	2.3400
3.1095					
31	4.5300	2.9600	105850.8000	145836.7167	2.4300
3.3480					
32	4.6300	3.0600	111078.0000	156681.9985	2.5500
3.5969					
33	4.7300	3.1600	116740.8000	168071.6514	2.6800
3.8584					
34	4.8300	3.2600	124146.0000	180113.9735	2.8500
4.1348					
35	4.9300	3.3600	132422.4000	192940.0398	3.0400
4.4293					
36	5.0300	3.4600	143748.0000	206744.5496	3.3000

4.7462						
37	5.1300	3.5600	155509.2000	221703.4066		3.5700
5.0896						
38	5.2300	3.6600	169012.8000	237924.6599		3.8800
5.4620						
39	5.3300	3.7600	181645.2000	255453.5911		4.1700
5.8644						
40	5.4300	3.8600	194713.2000	274267.5405		4.4700
6.2963						
41	5.5300	3.9600	208216.8000	294410.0668		4.7800
6.7587						
42	5.6300	4.0600	223462.8000	315989.3425		5.1300
7.2541						
43	5.7300	4.1600	244807.2000	339394.4966		5.6200
7.7914						
44	5.8300	4.2600	272685.6000	365256.3534		6.2600
8.3851						
45	5.9300	4.3600	305791.2000	394164.1030		7.0200
9.0488						
46	6.0300	4.4600	338461.2000	426362.5864		7.7700
9.7879						
47	6.1300	4.5600	363290.4000	461442.4924		8.3400
10.5933						
48	6.2300	4.6600	376358.4000	498422.6384		8.6400
11.4422						
49	6.3300	4.7600	381150.0000	536297.4271		8.7500
12.3117						
50	6.4300	4.8600	384199.2000	574564.4032		8.8200
13.1902						
51	6.5300	4.9600	385941.6000	613071.0253		8.8600
14.0742						
52	6.6400	5.0700	385941.6000	655524.6013		8.8600
15.0488						

=====

| Variable storage data for node | N1000

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.3600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.6600	0.7000	6969.6000	1731.9075	0.1600
0.0398					
3	-0.5600	0.8000	9583.2000	2556.0786	0.2200
0.0587					
4	-0.4600	0.9000	13939.2000	3725.4061	0.3200

0.0855					
5	-0.3600	1.0000	18730.8000	5353.0016	0.4300
0.1229					
6	-0.2600	1.1000	24393.6000	7502.9765	0.5600
0.1722					
7	-0.1600	1.2000	31363.2000	10283.5001	0.7200
0.2361					
8	-0.0600	1.3000	703929.6000	39745.7968	16.1600
0.9124					
9	0.0400	1.4000	714819.6000	110681.8509	16.4100
2.5409					
10	0.1400	1.5000	727452.0000	182793.7877	16.7000
4.1964					
11	0.2400	1.6000	739213.2000	256125.5284	16.9700
5.8798					
12	0.3400	1.7000	748360.8000	330503.0159	17.1800
7.5873					
13	0.4400	1.8000	757944.0000	405816.9946	17.4000
9.3163					
14	0.5400	1.9000	768834.0000	482154.4840	17.6500
11.0687					
15	0.6400	2.0000	780159.6000	559602.6994	17.9100
12.8467					
16	0.7400	2.1000	793663.2000	638292.0870	18.2200
14.6532					
17	0.8400	2.2000	808473.6000	718396.9850	18.5600
16.4921					
18	0.9400	2.3000	820234.8000	799830.8829	18.8300
18.3616					
19	1.0400	2.4000	829382.4000	882310.4953	19.0400
20.2551					
20	1.2400	2.6000	848113.2000	1.05005E+06	19.4700
24.1059					
21	1.3400	2.7000	856389.6000	1.13528E+06	19.6600
26.0624					
22	1.4400	2.8000	863794.8000	1.22129E+06	19.8300
28.0369					
23	1.5400	2.9000	870764.4000	1.30801E+06	19.9900
30.0279					
24	1.6400	3.0000	879040.8000	1.39550E+06	20.1800
32.0363					
25	2.3400	3.7000	930877.2000	2.02888E+06	21.3700
46.5767					
26	2.4400	3.8000	936975.6000	2.12227E+06	21.5100
48.7207					
27	2.5400	3.9000	944816.4000	2.21636E+06	21.6900
50.8807					
28	3.0400	4.4000	983149.2000	2.69832E+06	22.5700
61.9448					
29	3.1400	4.5000	991425.6000	2.79704E+06	22.7600

64.2113					
30	3.2400	4.6000	1002315.600	2.89673E+06	23.0100
66.4997					
31	3.3400	4.7000	1013205.600	2.99750E+06	23.2600
68.8132					
32	3.4400	4.8000	1025402.400	3.09943E+06	23.5400
71.1532					
33	3.5400	4.9000	1041084.000	3.20275E+06	23.9000
73.5251					
34	3.6400	5.0000	1058072.400	3.30771E+06	24.2900
75.9346					
35	3.7400	5.1000	1077238.800	3.41447E+06	24.7300
78.3855					
36	3.8400	5.2000	1101632.400	3.52341E+06	25.2900
80.8864					
37	3.9400	5.3000	1124283.600	3.63471E+06	25.8100
83.4414					
38	4.0400	5.4000	1143450.000	3.74809E+06	26.2500
86.0443					
39	4.1400	5.5000	1156082.400	3.86307E+06	26.5400
88.6838					
40	4.2400	5.6000	1164794.400	3.97911E+06	26.7400
91.3477					
41	4.3400	5.7000	1172199.600	4.09596E+06	26.9100
94.0302					
42	4.4400	5.8000	1177862.400	4.21346E+06	27.0400
96.7277					
43	4.5400	5.9000	1182218.400	4.33146E+06	27.1400
99.4367					
44	4.6400	6.0000	1186574.400	4.44990E+06	27.2400
102.1556					
45	4.7400	6.1000	1190930.400	4.56877E+06	27.3400
104.8846					
46	4.8400	6.2000	1193979.600	4.68802E+06	27.4100
107.6221					
47	10.8400	12.2000	1258012.800	12.04308E+06	28.8800
276.4712					
48	10.9400	12.3000	1258012.800	12.16889E+06	28.8800
279.3592					
49	11.0400	12.4000	1258884.000	12.29473E+06	28.9000
282.2482					
50	11.1400	12.5000	1258884.000	12.42062E+06	28.9000
285.1382					
51	15.3400	16.7000	1269338.400	17.72982E+06	29.1400
407.0206					
52	15.4500	16.8100	1269338.400	17.86944E+06	29.1400
410.2260					

=====

| Variable storage data for node | N1020

=====						
Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres	
=====	=====	=====	=====	=====	=====	
1	-1.0000	0.0000	26.1360	0.0000	0.0006	
0.0000						
2	-0.0400	0.9600	10454.4000	3521.0067	0.2400	
0.0808						
3	0.0600	1.0600	13939.2000	4736.5046	0.3200	
0.1087						
4	0.1600	1.1600	18730.8000	6364.1001	0.4300	
0.1461						
5	0.2600	1.2600	26571.6000	8617.8027	0.6100	
0.1978						
6	0.3600	1.3600	36154.8000	11741.8186	0.8300	
0.2696						
7	0.4600	1.4600	46609.2000	15868.9285	1.0700	
0.3643						
8	0.5600	1.5600	58370.4000	21106.8410	1.3400	
0.4845						
9	0.7600	1.7600	81021.6000	34984.1448	1.8600	
0.8031						
10	0.8600	1.8600	92782.8000	43667.6381	2.1300	
1.0025						
11	0.9600	1.9600	106286.4000	53613.3565	2.4400	
1.2308						
12	1.0600	2.0600	119354.4000	64888.9715	2.7400	
1.4896						
13	1.1600	2.1600	134600.4000	77578.9504	3.0900	
1.7810						
14	1.2600	2.2600	149846.4000	91794.3336	3.4400	
2.1073						
15	1.3600	2.3600	166834.8000	107620.6353	3.8300	
2.4706						
16	1.4600	2.4600	186872.4000	125296.3515	4.2900	
2.8764						
17	1.5600	2.5600	210394.8000	145147.8964	4.8300	
3.3321						
18	1.6600	2.6600	238708.8000	167587.9615	5.4800	
3.8473						
19	1.7600	2.7600	273992.4000	193202.5065	6.2900	
4.4353						
20	1.8600	2.8600	316681.2000	222710.1480	7.2700	
5.1127						
21	1.9600	2.9600	368517.6000	256937.0196	8.4600	
5.8985						
22	2.0600	3.0600	434728.8000	297053.3796	9.9800	

6.8194					
23	2.1600	3.1600	516621.6000	344561.5704	11.8600
7.9100					
24	2.2600	3.2600	623779.2000	401496.9463	14.3200
9.2171					
25	2.3600	3.3600	767962.8000	470958.5381	17.6300
10.8117					
26	2.4600	3.4600	964418.4000	557390.4791	22.1400
12.7959					
27	2.5600	3.5600	1229698.800	666826.9790	28.2300
15.3082					
28	2.6600	3.6600	1564675.200	806208.4460	35.9200
18.5080					
29	2.7600	3.7600	1979802.000	983023.9774	45.4500
22.5671					
30	2.8600	3.8600	2455912.800	1.20438E+06	56.3800
27.6488					
31	2.9600	3.9600	2969920.800	1.47526E+06	68.1800
33.8674					
32	3.0600	4.0600	3505273.200	1.79865E+06	80.4700
41.2913					
33	3.1600	4.1600	4027557.600	2.17499E+06	92.4600
49.9308					
34	3.2600	4.2600	4528933.200	2.60256E+06	103.9700
59.7466					
35	3.3600	4.3600	4966711.200	3.07717E+06	114.0200
70.6421					
36	3.4600	4.4600	5346118.800	3.59269E+06	122.7300
82.4768					
37	3.5600	4.5600	5657572.800	4.14280E+06	129.8800
95.1055					
38	3.6600	4.6600	5914576.800	4.72135E+06	135.7800
108.3873					
39	3.7600	4.7600	6119744.400	5.32303E+06	140.4900
122.2000					
40	3.8600	4.8600	6286579.200	5.94332E+06	144.3200
136.4399					
41	3.9600	4.9600	6415516.800	6.57841E+06	147.2800
151.0195					
42	4.0600	5.0600	6516576.000	7.22500E+06	149.6000
165.8632					
43	4.1600	5.1600	6593241.600	7.88048E+06	151.3600
180.9110					
44	4.2600	5.2600	6652918.800	8.54278E+06	152.7300
196.1153					
45	4.3600	5.3600	6699528.000	9.21039E+06	153.8000
211.4416					
46	4.4600	5.4600	6735682.800	9.88215E+06	154.6300
226.8629					
47	4.5600	5.5600	6762690.000	10.55706E+06	155.2500

242.3567						
48	4.6600	5.6600	6783163.200	11.23434E+06	155.7200	
257.9051						
49	4.7600	5.7600	6801022.800	11.91355E+06	156.1300	
273.4974						
50	4.8600	5.8600	6817140.000	12.59445E+06	156.5000	
289.1288						
51	4.9600	5.9600	6832386.000	13.27692E+06	156.8500	
304.7961						
52	5.0600	6.0600	6845454.000	13.96080E+06	157.1500	
320.4959						
53	5.1600	6.1600	6859828.800	14.64606E+06	157.4800	
336.2273						
54	5.2600	6.2600	6873332.400	15.33271E+06	157.7900	
351.9906						
55	5.3600	6.3600	6886400.400	16.02069E+06	158.0900	
367.7845						
56	5.4600	6.4600	6897726.000	16.70989E+06	158.3500	
383.6063						
57	5.5600	6.5600	6910358.400	17.40029E+06	158.6400	
399.4556						
58	5.6600	6.6600	6921684.000	18.09188E+06	158.9000	
415.3325						
59	5.7600	6.7600	6933880.800	18.78465E+06	159.1800	
431.2363						
60	5.8600	6.8600	6948255.600	19.47875E+06	159.5100	
447.1706						
61	5.9600	6.9600	6965679.600	20.17444E+06	159.9100	
463.1415						
62	6.0600	7.0600	6987459.600	20.87209E+06	160.4100	
479.1573						
63	6.1600	7.1600	7014466.800	21.57218E+06	161.0300	
495.2291						
64	6.2600	7.2600	7041909.600	22.27499E+06	161.6600	
511.3635						
65	6.3600	7.3600	7059333.600	22.98005E+06	162.0600	
527.5493						
66	6.4600	7.4600	7065432.000	23.68628E+06	162.2000	
543.7621						
67	6.5600	7.5600	7066303.200	24.39286E+06	162.2200	
559.9830						
68	8.4600	9.4600	7069352.400	37.82160E+06	162.2900	
868.2644						
69	8.5550	9.5550	7069352.400	38.49319E+06	162.2900	
883.6819						

```

*=====*
| Variable storage data for node | N1030
*=====*

```

Data	Elevation	Depth	Area	Volume	Area
------	-----------	-------	------	--------	------

Volume Point ac-ft =====	ft =====	ft =====	ft^2 =====	ft^3 =====	acres =====
1 0.0000	-1.0500	0.0000	435.6000	0.0000	0.0100
2 0.0015	-0.9500	0.1000	871.2000	64.0937	0.0200
3 0.0044	-0.8500	0.2000	1742.4000	192.2812	0.0400
4 0.0098	-0.7500	0.3000	3049.2000	428.8315	0.0700
5 0.0183	-0.6500	0.4000	4356.0000	797.1508	0.1000
6 0.0293	-0.5500	0.5000	5227.2000	1275.6447	0.1200
7 0.0423	-0.4500	0.6000	6098.4000	1841.3597	0.1400
8 0.0573	-0.3500	0.7000	6969.6000	2494.2687	0.1600
9 0.0743	-0.2500	0.8000	7840.8000	3234.3538	0.1800
10 0.0927	-0.1500	0.9000	8276.4000	4040.1076	0.1900
11 0.1425	-0.0500	1.0000	38768.4000	6205.3341	0.8900
12 0.2325	0.0500	1.1000	39639.6000	10125.6142	0.9100
13 0.3240	0.1500	1.2000	40075.2000	14111.2945	0.9200
14 0.4164	0.2500	1.3000	40510.8000	18140.5346	0.9300
15 0.5104	0.3500	1.4000	41382.0000	22235.0564	0.9500
16 0.6074	0.4500	1.5000	43124.4000	26460.0348	0.9900
17 0.7094	0.5500	1.6000	45738.0000	30902.4696	1.0500
18 0.8174	0.6500	1.7000	48351.6000	35606.2975	1.1100
19 0.9309	0.7500	1.8000	50529.6000	40549.9082	1.1600
20 1.0494	0.8500	1.9000	52707.6000	45711.3336	1.2100
21 1.1724	0.9500	2.0000	54450.0000	51068.9239	1.2500
22 1.2994	1.0500	2.1000	56192.4000	56600.7599	1.2900
23	1.1500	2.2000	57063.6000	62263.4475	1.3100

1.4294					
24	1.2500	2.3000	58806.0000	68056.6512	1.3500
1.5624					
25	1.3500	2.4000	60548.4000	74024.0995	1.3900
1.6994					
26	1.4500	2.5000	62726.4000	80187.4572	1.4400
1.8409					
27	1.5500	2.6000	65340.0000	86590.2686	1.5000
1.9878					
28	1.6500	2.7000	68824.8000	93297.6871	1.5800
2.1418					
29	1.7500	2.8000	72745.2000	100375.2115	1.6700
2.3043					
30	1.8500	2.9000	76665.6000	107844.8194	1.7600
2.4758					
31	1.9500	3.0000	81021.6000	115728.0976	1.8600
2.6568					
32	2.0500	3.1000	85813.2000	124068.6072	1.9700
2.8482					
33	2.1500	3.2000	90604.8000	132888.3342	2.0800
3.0507					
34	2.2500	3.3000	95396.4000	142187.2724	2.1900
3.2642					
35	2.3500	3.4000	100623.6000	151987.0126	2.3100
3.4891					
36	2.4500	3.5000	105415.2000	162287.9209	2.4200
3.7256					
37	2.5500	3.6000	110642.4000	173089.6389	2.5400
3.9736					
38	2.6500	3.7000	117176.4000	184478.9030	2.6900
4.2351					
39	2.7500	3.8000	124146.0000	196543.2246	2.8500
4.5120					
40	2.8500	3.9000	131551.2000	209326.1692	3.0200
4.8055					
41	2.9500	4.0000	138956.4000	222849.7243	3.1900
5.1159					
42	3.0500	4.1000	146797.2000	237135.4683	3.3700
5.4439					
43	3.1500	4.2000	155073.6000	252226.9660	3.5600
5.7903					
44	3.2500	4.3000	163785.6000	268167.7827	3.7600
6.1563					
45	3.3500	4.4000	172933.2000	285001.4830	3.9700
6.5427					
46	3.4500	4.5000	182952.0000	302793.2142	4.2000
6.9512					
47	3.5500	4.6000	193406.4000	321608.5256	4.4400
7.3831					
48	3.6500	4.7000	205167.6000	341534.1336	4.7100

7.8405					
49	3.7500	4.8000	215622.0000	362571.2384	4.9500
8.3235					
50	3.8500	4.9000	227818.8000	384740.2606	5.2300
8.8324					
51	3.9500	5.0000	239580.0000	408107.5003	5.5000
9.3689					
52	4.0500	5.1000	250034.4000	432586.1151	5.7400
9.9308					
53	4.1500	5.2000	259182.0000	458045.3110	5.9500
10.5153					
54	4.2500	5.3000	267458.4000	484375.9837	6.1400
11.1197					
55	4.3500	5.4000	276170.4000	511555.9884	6.3400
11.7437					
56	4.4500	5.5000	285318.0000	539628.8857	6.5500
12.3882					
57	4.5500	5.6000	292723.2000	568529.8661	6.7200
13.0516					
58	4.6500	5.7000	300564.0000	598193.0659	6.9000
13.7326					
59	4.7500	5.8000	308840.4000	628662.0444	7.0900
14.4321					
60	4.8500	5.9000	317116.8000	659958.6795	7.2800
15.1506					
61	4.9500	6.0000	326264.4000	692126.3339	7.4900
15.8890					
62	5.0500	6.1000	335847.6000	725230.4470	7.7100
16.6490					
63	5.1500	6.2000	346737.6000	759357.9178	7.9600
17.4325					
64	5.2500	6.3000	357192.0000	794552.7519	8.2000
18.2404					
65	5.3500	6.4000	369388.8000	830879.7223	8.4800
19.0744					
66	5.4500	6.5000	381585.6000	868426.4159	8.7600
19.9363					
67	5.5500	6.6000	394653.6000	907236.1544	9.0600
20.8273					
68	5.6500	6.7000	408157.2000	947374.4001	9.3700
21.7487					
69	5.7500	6.8000	423838.8000	988971.3208	9.7300
22.7037					
70	5.8500	6.9000	440391.6000	1.03218E+06	10.1100
23.6956					
71	5.9500	7.0000	459993.6000	1.07720E+06	10.5600
24.7290					
72	6.0500	7.1000	483516.0000	1.12437E+06	11.1000
25.8119					
73	6.1500	7.2000	510523.2000	1.17406E+06	11.7200

26.9527						
74	6.2500	7.3000	536659.2000	1.22641E+06		12.3200
28.1546						
75	6.3500	7.4000	558874.8000	1.28119E+06		12.8300
29.4120						
76	6.4500	7.5000	571507.2000	1.33770E+06		13.1200
30.7094						
77	6.5500	7.6000	576734.4000	1.39511E+06		13.2400
32.0274						
78	6.6500	7.7000	578912.4000	1.45290E+06		13.2900
33.3539						
79	6.7500	7.8000	579348.0000	1.51081E+06		13.3000
34.6834						
80	6.8500	7.9000	579348.0000	1.56874E+06		13.3000
36.0134						
81	6.9500	8.0000	579348.0000	1.62668E+06		13.3000
37.3434						
82	7.0500	8.1000	579348.0000	1.68461E+06		13.3000
38.6734						
83	7.1500	8.2000	579348.0000	1.74255E+06		13.3000
40.0034						
84	7.2450	8.2950	579348.0000	1.79759E+06		13.3000
41.2669						

=====

| Variable storage data for node | N0890

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.5400	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.1000	1.4400	435.6000	272.8464	0.0100
0.0063					
3	-0.0900	1.4500	917373.6000	3398.8132	21.0600
0.0780					
4	-0.0400	1.5000	917809.2000	49277.9239	21.0700
1.1313					
5	1.2600	2.8000	1005800.400	1.29918E+06	23.0900
29.8250					
6	1.3600	2.9000	1030629.600	1.40099E+06	23.6600
32.1624					
7	1.4600	3.0000	1062428.400	1.50564E+06	24.3900
34.5648					
8	1.5600	3.1000	1101632.400	1.61384E+06	25.2900
37.0486					
9	1.6600	3.2000	1155211.200	1.72667E+06	26.5200

39.6388					
10	2.0600	3.6000	1383901.200	2.23380E+06	31.7700
51.2809					
11	2.1600	3.7000	1441836.000	2.37507E+06	33.1000
54.5242					
12	2.2600	3.8000	1504126.800	2.52236E+06	34.5300
57.9054					
13	2.3600	3.9000	1574258.400	2.67626E+06	36.1400
61.4385					
14	2.4600	4.0000	1650052.800	2.83746E+06	37.8800
65.1392					
15	2.5600	4.1000	1736301.600	3.00676E+06	39.8600
69.0257					
16	2.6600	4.2000	1834311.600	3.18527E+06	42.1100
73.1236					
17	2.7600	4.3000	1945389.600	3.37422E+06	44.6600
77.4615					
18	2.8600	4.4000	2064744.000	3.57470E+06	47.4000
82.0638					
19	2.9600	4.5000	2191503.600	3.78748E+06	50.3100
86.9485					
20	3.0600	4.6000	2326539.600	4.01334E+06	53.4100
92.1337					
21	3.1600	4.7000	2471594.400	4.25321E+06	56.7400
97.6403					
22	3.2600	4.8000	2621440.800	4.50782E+06	60.1800
103.4854					
23	3.3600	4.9000	2776514.400	4.77768E+06	63.7400
109.6804					
24	3.8600	5.4000	3579325.200	6.36238E+06	82.1700
146.0602					
25	3.9600	5.5000	3742239.600	6.72843E+06	85.9100
154.4634					
26	4.0600	5.6000	3899926.800	7.11050E+06	89.5300
163.2347					
27	4.1600	5.7000	4063712.400	7.50865E+06	93.2900
172.3750					
28	4.2600	5.8000	4232289.600	7.92342E+06	97.1600
181.8967					
29	4.3600	5.9000	4404351.600	8.35522E+06	101.1100
191.8095					
30	4.4600	6.0000	4585561.200	8.80468E+06	105.2700
202.1277					
31	4.5600	6.1000	4771562.400	9.27250E+06	109.5400
212.8674					
32	4.6600	6.2000	4965840.000	9.75933E+06	114.0000
224.0435					
33	4.7600	6.3000	5161424.400	10.26566E+06	118.4900
235.6672					
34	4.8600	6.4000	5371819.200	10.79228E+06	123.3200

247.7567					
35	4.9600	6.5000	5590490.400	11.34036E+06	128.3400
260.3388					
36	5.0600	6.6000	5819180.400	11.91080E+06	133.5900
273.4343					
37	5.1600	6.7000	6059196.000	12.50467E+06	139.1000
287.0677					
38	5.2600	6.8000	6314022.000	13.12328E+06	144.9500
301.2691					
39	5.3600	6.9000	6575382.000	13.76770E+06	150.9500
316.0629					
40	5.4600	7.0000	6852859.200	14.43906E+06	157.3200
331.4751					
41	5.5600	7.1000	7140790.800	15.13868E+06	163.9300
347.5363					
42	5.6600	7.2000	7434820.800	15.86741E+06	170.6800
364.2655					
43	5.7600	7.3000	7754986.800	16.62683E+06	178.0300
381.6996					
44	5.8600	7.4000	8096932.800	17.41936E+06	185.8800
399.8935					
45	5.9600	7.5000	8464143.600	18.24734E+06	194.3100
418.9012					
46	6.0600	7.6000	8843551.200	19.11264E+06	203.0200
438.7659					
47	6.1600	7.7000	9246045.600	20.01704E+06	212.2600
459.5280					
48	6.2600	7.8000	9670755.600	20.96279E+06	222.0100
481.2395					
49	6.3600	7.9000	10110711.60	21.95177E+06	232.1100
503.9434					
50	6.4600	8.0000	10561993.20	22.98532E+06	242.4700
527.6703					
51	6.5600	8.1000	11034619.20	24.06505E+06	253.3200
552.4575					
52	6.6600	8.2000	11524669.20	25.19291E+06	264.5700
578.3497					
53	6.7600	8.3000	12052616.40	26.37167E+06	276.6900
605.4102					
54	6.8600	8.4000	12621945.60	27.60527E+06	289.7600
633.7299					
55	6.9600	8.5000	13233528.00	28.89792E+06	303.8000
663.4048					
56	7.0600	8.6000	13887799.20	30.25384E+06	318.8200
694.5325					
57	7.1600	8.7000	14559058.80	31.67603E+06	334.2300
727.1817					
58	7.2600	8.8000	15197212.80	33.16372E+06	348.8800
761.3342					
59	7.3600	8.9000	15768284.40	34.71189E+06	361.9900

796.8753					
60	7.4600	9.0000	16267046.40	36.31358E+06	373.4400
833.6450					
61	7.5600	9.1000	16714407.60	37.96258E+06	383.7100
871.5009					
62	7.6600	9.2000	17133454.80	39.65491E+06	393.3300
910.3516					
63	7.7600	9.3000	17525059.20	41.38779E+06	402.3200
950.1328					
64	7.8600	9.4000	17908387.20	43.15941E+06	411.1200
990.8036					
65	7.9600	9.5000	18277776.00	44.96866E+06	419.6000
1032.3385					
66	8.0600	9.6000	18638017.20	46.81441E+06	427.8700
1074.7109					
67	8.1600	9.7000	18963410.40	48.69443E+06	435.3400
1117.8704					
68	8.2600	9.8000	19251342.00	50.60514E+06	441.9500
1161.7341					
69	8.3600	9.9000	19514880.00	52.54341E+06	448.0000
1206.2308					
70	8.4600	10.0000	19767092.40	54.50748E+06	453.7900
1251.3195					
71	8.5600	10.1000	20012335.20	56.49642E+06	459.4200
1296.9793					
72	8.6600	10.2000	20240589.60	58.50903E+06	464.6600
1343.1826					
73	8.8600	10.4000	20686644.00	62.60163E+06	474.9000
1437.1358					
74	8.9600	10.5000	20907057.60	64.68129E+06	479.9600
1484.8780					
75	9.0600	10.6000	21121372.80	66.78268E+06	484.8800
1533.1194					
76	9.1600	10.7000	21335252.40	68.90548E+06	489.7900
1581.8522					
77	9.2600	10.8000	21550003.20	71.04971E+06	494.7200
1631.0770					
78	9.3600	10.9000	21755606.40	73.21496E+06	499.4400
1680.7843					
79	9.4600	11.0000	21959467.20	75.40069E+06	504.1200
1730.9616					
80	9.5600	11.1000	22154616.00	77.60636E+06	508.6000
1781.5969					
81	9.6600	11.2000	22331905.20	79.83066E+06	512.6700
1832.6598					
82	9.7600	11.3000	22473475.20	82.07090E+06	515.9200
1884.0887					
83	9.8600	11.4000	22588909.20	84.32400E+06	518.5700
1935.8126					
84	9.9600	11.5000	22688661.60	86.58785E+06	520.8600

1987.7835						
85	10.0600	11.6000	22776217.20	88.86107E+06	522.8700	
2039.9695						
86	10.1600	11.7000	22849833.60	91.14235E+06	524.5600	
2092.3404						
87	10.2600	11.8000	22910817.60	93.43036E+06	525.9600	
2144.8659						
88	10.3600	11.9000	22963089.60	95.72403E+06	527.1600	
2197.5214						
89	10.4600	12.0000	23008827.60	98.02260E+06	528.2100	
2250.2893						
90	10.5600	12.1000	23048467.20	100.32544E+06	529.1200	
2303.1553						
91	10.6600	12.2000	23084186.40	102.63205E+06	529.9400	
2356.1078						
92	10.7600	12.3000	23113371.60	104.94191E+06	530.6100	
2409.1347						
93	10.8600	12.4000	23135151.60	107.25431E+06	531.1100	
2462.2202						
94	10.9600	12.5000	23152140.00	109.56865E+06	531.5000	
2515.3502						
95	17.5600	19.1000	23328122.40	262.95162E+06	535.5400	
6036.5385						
96	17.6350	19.1750	23328122.40	264.70123E+06	535.5400	
6076.7040						

=====

| Variable storage data for node | N0850

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	1.4600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.7200	1.2600	3920.4000	1791.9689	0.0900
0.0411					
3	2.8200	1.3600	5662.8000	2268.4620	0.1300
0.0521					
4	2.9200	1.4600	9147.6000	3002.0444	0.2100
0.0689					
5	3.0200	1.5600	15246.0000	4208.8024	0.3500
0.0966					
6	3.1200	1.6600	25700.4000	6233.4839	0.5900
0.1431					
7	3.2200	1.7600	37897.2000	9393.6571	0.8700
0.2156					
8	3.3200	1.8600	54014.4000	13965.4555	1.2400

0.3206					
9	3.4200	1.9600	72745.2000	20280.1802	1.6700
0.4656					
10	3.5200	2.0600	91040.4000	28452.2949	2.0900
0.6532					
11	3.6200	2.1600	111513.6000	38562.6051	2.5600
0.8853					
12	3.7200	2.2600	136778.4000	50955.6020	3.1400
1.1698					
13	3.8200	2.3600	170755.2000	66300.7508	3.9200
1.5221					
14	3.9200	2.4600	212572.8000	85428.8297	4.8800
1.9612					
15	4.0200	2.5600	262666.8000	109146.4471	6.0300
2.5057					
16	4.1200	2.6600	317552.4000	138113.7545	7.2900
3.1707					
17	4.2200	2.7600	378100.8000	172852.0668	8.6800
3.9681					
18	4.3200	2.8600	442569.6000	213842.9080	10.1600
4.9092					
19	4.4200	2.9600	512265.6000	261541.7402	11.7600
6.0042					
20	4.5200	3.0600	587624.4000	316492.6135	13.4900
7.2657					
21	4.6200	3.1600	670388.4000	379347.2007	15.3900
8.7086					
22	4.7200	3.2600	760122.0000	450825.0526	17.4500
10.3495					
23	4.8200	3.3600	858132.0000	531687.4319	19.7000
12.2059					
24	4.9200	3.4600	959626.8000	622527.2018	22.0300
14.2913					
25	5.0200	3.5600	1062864.000	723606.7882	24.4000
16.6117					
26	5.1200	3.6600	1163923.200	834906.7954	26.7200
19.1668					
27	5.2200	3.7600	1271952.000	956659.3934	29.2000
21.9619					
28	5.3200	3.8600	1389999.600	1.08971E+06	31.9100
25.0163					
29	5.4200	3.9600	1511967.600	1.23477E+06	34.7100
28.3463					
30	5.5200	4.0600	1643518.800	1.39249E+06	37.7300
31.9672					
31	5.6200	4.1600	1783782.000	1.56381E+06	40.9500
35.9001					
32	5.7200	4.2600	1937984.400	1.74984E+06	44.4900
40.1708					
33	5.8200	4.3600	2106126.000	1.95199E+06	48.3500

44.8115					
34	5.9200	4.4600	2292127.200	2.17183E+06	52.6200
49.8584					
35	6.0200	4.5600	2495988.000	2.41116E+06	57.3000
55.3527					
36	6.1200	4.6600	2717272.800	2.67175E+06	62.3800
61.3348					
37	6.2200	4.7600	2957288.400	2.95539E+06	67.8900
67.8463					
38	6.3200	4.8600	3209936.400	3.26366E+06	73.6900
74.9233					
39	6.4200	4.9600	3469989.600	3.59757E+06	79.6600
82.5888					
40	6.5200	5.0600	3732220.800	3.95759E+06	85.6800
90.8538					
41	6.6200	5.1600	3990531.600	4.34366E+06	91.6100
99.7166					
42	6.7200	5.2600	4252762.800	4.75575E+06	97.6300
109.1769					
43	6.8200	5.3600	4515865.200	5.19411E+06	103.6700
119.2403					
44	6.9200	5.4600	4784194.800	5.65904E+06	109.8300
129.9137					
45	7.0200	5.5600	5053395.600	6.15085E+06	116.0100
141.2042					
46	7.1200	5.6600	5331308.400	6.67002E+06	122.3900
153.1226					
47	7.2200	5.7600	5611399.200	7.21709E+06	128.8200
165.6816					
48	7.3200	5.8600	5902380.000	7.79271E+06	135.5000
178.8961					
49	7.4200	5.9600	6208606.800	8.39819E+06	142.5300
192.7960					
50	7.5200	6.0600	6517447.200	9.03443E+06	149.6200
207.4019					
51	7.6200	6.1600	6825416.400	9.70150E+06	156.6900
222.7159					
52	7.7200	6.2600	7119446.400	10.39869E+06	163.4400
238.7211					
53	7.8200	6.3600	7403457.600	11.12478E+06	169.9600
255.3898					
54	7.9200	6.4600	7663075.200	11.87806E+06	175.9200
272.6828					
55	8.0200	6.5600	7903962.000	12.65638E+06	181.4500
290.5504					
56	8.1200	6.6600	8138750.400	13.45847E+06	186.8400
308.9641					
57	8.2200	6.7600	8366569.200	14.28371E+06	192.0700
327.9088					
58	8.3200	6.8600	8586982.800	15.13135E+06	197.1300

347.3680					
59	8.4200	6.9600	8813059.200	16.00132E+06	202.3200
367.3398					
60	8.5200	7.0600	9036086.400	16.89375E+06	207.4400
387.8270					
61	8.6200	7.1600	9265212.000	17.80878E+06	212.7000
408.8333					
62	8.7200	7.2600	9498258.000	18.74692E+06	218.0500
430.3700					
63	8.8200	7.3600	9737402.400	19.70867E+06	223.5400
452.4487					
64	8.9200	7.4600	9976546.800	20.69433E+06	229.0300
475.0764					
65	9.0200	7.5600	10214820.00	21.70386E+06	234.5000
498.2522					
66	9.1200	7.6600	10446123.60	22.73688E+06	239.8100
521.9669					
67	9.2200	7.7600	10665230.40	23.79242E+06	244.8400
546.1987					
68	9.3200	7.8600	10869526.80	24.86913E+06	249.5300
570.9166					
69	9.4200	7.9600	11056399.20	25.96540E+06	253.8200
596.0836					
70	9.5200	8.0600	11237173.20	27.08006E+06	257.9700
621.6725					
71	9.6200	8.1600	11404008.00	28.21209E+06	261.8000
647.6605					
72	9.7200	8.2600	11549062.80	29.35973E+06	265.1300
674.0066					
73	9.8200	8.3600	11681049.60	30.52122E+06	268.1600
700.6707					
74	9.9200	8.4600	11795176.80	31.69501E+06	270.7800
727.6173					
75	10.0200	8.5600	11894058.00	32.87946E+06	273.0500
754.8085					
76	10.1200	8.6600	11978564.40	34.07307E+06	274.9900
782.2101					
77	10.2200	8.7600	12044775.60	35.27423E+06	276.5100
809.7848					
78	10.3200	8.8600	12099225.60	36.48141E+06	277.7600
837.4980					
79	10.4200	8.9600	12142350.00	37.69348E+06	278.7500
865.3232					
80	10.5200	9.0600	12176326.80	38.90940E+06	279.5300
893.2369					
81	10.6200	9.1600	12203769.60	40.12839E+06	280.1600
921.2212					
82	10.7200	9.2600	12225114.00	41.34983E+06	280.6500
949.2614					
83	10.8200	9.3600	12242102.40	42.57317E+06	281.0400

977.3456						
84	10.9200	9.4600	12254734.80	43.79800E+06	281.3300	
1005.4638						
85	11.0200	9.5600	12264318.00	45.02394E+06	281.5500	
1033.6075						
86	11.1200	9.6600	12272158.80	46.25076E+06	281.7300	
1061.7712						
87	11.2200	9.7600	12278257.20	47.47826E+06	281.8700	
1089.9510						
88	11.3200	9.8600	12282613.20	48.70630E+06	281.9700	
1118.1427						
89	11.4200	9.9600	12286098.00	49.93472E+06	282.0500	
1146.3434						
90	11.5200	10.0600	12288711.60	51.16345E+06	282.1100	
1174.5511						
91	11.6200	10.1600	12290454.00	52.39239E+06	282.1500	
1202.7638						
92	11.7200	10.2600	12292196.40	53.62151E+06	282.1900	
1230.9805						
93	11.8200	10.3600	12293938.80	54.85081E+06	282.2300	
1259.2013						
94	11.9200	10.4600	12294810.00	56.08023E+06	282.2500	
1287.4250						
95	13.7200	12.2600	12299601.60	78.21498E+06	282.3600	
1795.5689						
96	13.8350	12.3750	12299601.60	79.62944E+06	282.3600	
1828.0403						

=====

| Variable storage data for node | N0930

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-3.5700	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.6900	2.8800	3049.2000	3223.2993	0.0700
0.0740					
3	-0.5900	2.9800	4791.6000	3612.0679	0.1100
0.0829					
4	-0.4900	3.0800	7840.8000	4237.4562	0.1800
0.0973					
5	-0.3900	3.1800	12196.8000	5231.3395	0.2800
0.1201					
6	-0.2900	3.2800	19166.4000	6786.4138	0.4400
0.1558					
7	-0.1900	3.3800	27442.8000	9104.5056	0.6300

0.2090						
8	-0.0900	3.4800	565844.4000	33034.2669	12.9900	
0.7584						
9	0.0100	3.5800	582397.2000	90443.7842	13.3700	
2.0763						
10	0.5100	4.0800	658627.2000	400501.4978	15.1200	
9.1942						
11	0.6100	4.1800	673002.0000	467080.9989	15.4500	
10.7227						
12	0.7100	4.2800	689119.2000	535184.7886	15.8200	
12.2862						
13	0.8100	4.3800	703058.4000	604791.8094	16.1400	
13.8841						
14	0.9100	4.4800	718304.4000	675857.8759	16.4900	
15.5156						
15	1.0100	4.5800	730065.6000	748274.8559	16.7600	
17.1780						
16	1.1100	4.6800	742262.4000	821889.6777	17.0400	
18.8680						
17	1.2100	4.7800	753152.4000	896659.0091	17.2900	
20.5845						
18	1.3100	4.8800	765349.2000	972582.5135	17.5700	
22.3274						
19	1.4100	4.9800	775368.0000	1.04962E+06	17.8000	
24.0959						
20	2.3100	5.8800	854211.6000	1.78263E+06	19.6100	
40.9237						
21	2.4100	5.9800	862052.4000	1.86845E+06	19.7900	
42.8936						
22	2.5100	6.0800	871200.0000	1.95511E+06	20.0000	
44.8831						
23	2.8100	6.3800	898642.8000	2.22057E+06	20.6300	
50.9773						
24	2.9100	6.4800	908226.0000	2.31091E+06	20.8500	
53.0513						
25	3.0100	6.5800	919116.0000	2.40228E+06	21.1000	
55.1487						
26	3.1100	6.6800	930877.2000	2.49478E+06	21.3700	
57.2722						
27	3.2100	6.7800	944380.8000	2.58854E+06	21.6800	
59.4247						
28	3.3100	6.8800	959191.2000	2.68371E+06	22.0200	
61.6096						
29	3.4100	6.9800	974437.2000	2.78039E+06	22.3700	
63.8291						
30	3.5100	7.0800	991861.2000	2.87871E+06	22.7700	
66.0860						
31	3.6100	7.1800	1009720.800	2.97878E+06	23.1800	
68.3835						
32	3.7100	7.2800	1029322.800	3.08073E+06	23.6300	

70.7239					
33	3.8100	7.3800	1050231.600	3.18471E+06	24.1100
73.1108					
34	3.9100	7.4800	1073318.400	3.29088E+06	24.6400
75.5483					
35	4.0100	7.5800	1099454.400	3.39952E+06	25.2400
78.0422					
36	4.1100	7.6800	1127332.800	3.51085E+06	25.8800
80.5981					
37	4.2100	7.7800	1163487.600	3.62539E+06	26.7100
83.2274					
38	4.3100	7.8800	1205305.200	3.74382E+06	27.6700
85.9463					
39	4.4100	7.9800	1254528.000	3.86680E+06	28.8000
88.7696					
40	4.5100	8.0800	1309849.200	3.99501E+06	30.0700
91.7128					
41	4.6100	8.1800	1373011.200	4.12914E+06	31.5200
94.7920					
42	4.7100	8.2800	1435302.000	4.26954E+06	32.9500
98.0152					
43	4.8100	8.3800	1504126.800	4.41650E+06	34.5300
101.3889					
44	4.9100	8.4800	1578178.800	4.57060E+06	36.2300
104.9265					
45	5.0100	8.5800	1657022.400	4.73234E+06	38.0400
108.6396					
46	5.1100	8.6800	1737172.800	4.90203E+06	39.8800
112.5352					
47	5.2100	8.7800	1818630.000	5.07980E+06	41.7500
116.6163					
48	5.3100	8.8800	1900087.200	5.26572E+06	43.6200
120.8844					
49	5.4100	8.9800	1979366.400	5.45968E+06	45.4400
125.3370					
50	5.5100	9.0800	2060823.600	5.66167E+06	47.3100
129.9742					
51	5.6100	9.1800	2136618.000	5.87153E+06	49.0500
134.7919					
52	5.7100	9.2800	2211541.200	6.08893E+06	50.7700
139.7826					
53	5.8100	9.3800	2281672.800	6.31358E+06	52.3800
144.9398					
54	5.9100	9.4800	2351368.800	6.54522E+06	53.9800
150.2576					
55	6.0100	9.5800	2422807.200	6.78392E+06	55.6200
155.7373					
56	6.1100	9.6800	2494681.200	7.02978E+06	57.2700
161.3815					
57	6.2100	9.7800	2572218.000	7.28311E+06	59.0500

167.1972					
58	6.3100	9.8800	2650626.000	7.54424E+06	60.8500
173.1920					
59	6.4100	9.9800	2733825.600	7.81345E+06	62.7600
179.3722					
60	6.5100	10.0800	2822688.000	8.09126E+06	64.8000
185.7498					
61	6.6100	10.1800	2914599.600	8.37811E+06	66.9100
192.3350					
62	6.7100	10.2800	3009560.400	8.67430E+06	69.0900
199.1346					
63	6.8100	10.3800	3108877.200	8.98021E+06	71.3700
206.1572					
64	6.9100	10.4800	3213421.200	9.29631E+06	73.7700
213.4138					
65	7.0100	10.5800	3323192.400	9.62312E+06	76.2900
220.9164					
66	7.1100	10.6800	3436012.800	9.96106E+06	78.8800
228.6745					
67	7.2100	10.7800	3555802.800	10.31063E+06	81.6300
236.6995					
68	7.3100	10.8800	3674721.600	10.67214E+06	84.3600
244.9985					
69	7.4100	10.9800	3799303.200	11.04582E+06	87.2200
253.5771					
70	7.5100	11.0800	3920400.000	11.43178E+06	90.0000
262.4376					
71	7.6100	11.1800	4044981.600	11.83003E+06	92.8600
271.5801					
72	7.7100	11.2800	4168256.400	12.24067E+06	95.6900
281.0072					
73	7.8100	11.3800	4289788.800	12.66356E+06	98.4800
290.7153					
74	7.9100	11.4800	4405658.400	13.09831E+06	101.1400
300.6959					
75	8.0100	11.5800	4515429.600	13.54435E+06	103.6600
310.9355					
76	8.1100	11.6800	4613439.600	14.00078E+06	105.9100
321.4137					
77	8.2100	11.7800	4703173.200	14.46660E+06	107.9700
332.1074					
78	8.3100	11.8800	4786372.800	14.94107E+06	109.8800
342.9997					
79	8.4100	11.9800	4860424.800	15.42340E+06	111.5800
354.0725					
80	8.5100	12.0800	4925329.200	15.91268E+06	113.0700
365.3048					
81	8.6100	12.1800	4984570.800	16.40816E+06	114.4300
376.6796					
82	8.7100	12.2800	5034229.200	16.90910E+06	115.5700

388.1794					
83	8.8100	12.3800	5077353.600	17.41467E+06	116.5600
399.7858					
84	8.9100	12.4800	5115250.800	17.92429E+06	117.4300
411.4851					
85	9.0100	12.5800	5146178.400	18.43736E+06	118.1400
423.2635					
86	9.1100	12.6800	5169265.200	18.95312E+06	118.6700
435.1039					
87	9.2100	12.7800	5186689.200	19.47092E+06	119.0700
446.9907					
88	9.3100	12.8800	5201499.600	19.99032E+06	119.4100
458.9146					
89	9.4100	12.9800	5212389.600	20.51101E+06	119.6600
470.8680					
90	9.5100	13.0800	5220230.400	21.03264E+06	119.8400
482.8429					
91	9.6100	13.1800	5227200.000	21.55500E+06	120.0000
494.8347					
92	9.7100	13.2800	5232862.800	22.07800E+06	120.1300
506.8411					
93	9.8100	13.3800	5237218.800	22.60150E+06	120.2300
518.8590					
94	9.9100	13.4800	5240268.000	23.12537E+06	120.3000
530.8854					
95	15.6100	19.1800	5251593.600	53.02687E+06	120.5600
1217.3294					
96	15.7300	19.3000	5251593.600	53.65706E+06	120.5600
1231.7966					

=====

| Variable storage data for node | N0980

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.6200	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.5700	0.9500	7405.2000	2492.5440	0.1700
0.0572					
3	2.6700	1.0500	10454.4000	3381.1448	0.2400
0.0776					
4	2.7700	1.1500	15681.6000	4679.1309	0.3600
0.1074					
5	2.8700	1.2500	25264.8000	6707.4768	0.5800
0.1540					
6	2.9700	1.3500	41382.0000	10006.8143	0.9500

0.2297					
7	3.0700	1.4500	66211.2000	15338.0193	1.5200
0.3521					
8	3.1700	1.5500	102801.6000	23721.7697	2.3600
0.5446					
9	3.2700	1.6500	149846.4000	36280.3995	3.4400
0.8329					
10	3.3700	1.7500	214750.8000	54413.0191	4.9300
1.2492					
11	3.4700	1.8500	289674.0000	79540.7532	6.6500
1.8260					
12	3.5700	1.9500	385070.4000	113164.6756	8.8400
2.5979					
13	3.6700	2.0500	485258.4000	156584.2512	11.1400
3.5947					
14	3.7700	2.1500	599821.2000	210736.6110	13.7700
4.8378					
15	3.8700	2.2500	717868.8000	276532.1463	16.4800
6.3483					
16	3.9700	2.3500	847242.0000	354697.6345	19.4500
8.1427					
17	4.0700	2.4500	995781.6000	446747.9678	22.8600
10.2559					
18	4.1700	2.5500	1158260.400	554346.7150	26.5900
12.7260					
19	4.2700	2.6500	1348617.600	679568.7338	30.9600
15.6008					
20	4.3700	2.7500	1577307.600	825714.3510	36.2100
18.9558					
21	4.4700	2.8500	1828648.800	995855.6950	41.9800
22.8617					
22	4.5700	2.9500	2106561.600	1.19245E+06	48.3600
27.3749					
23	4.6700	3.0500	2413659.600	1.41829E+06	55.4100
32.5593					
24	4.7700	3.1500	2739488.400	1.67577E+06	62.8900
38.4703					
25	4.8700	3.2500	3084919.200	1.96681E+06	70.8200
45.1519					
26	4.9700	3.3500	3434270.400	2.29261E+06	78.8400
52.6312					
27	5.0700	3.4500	3779265.600	2.65315E+06	86.7600
60.9080					
28	5.1700	3.5500	4110321.600	3.04751E+06	94.3600
69.9612					
29	5.2700	3.6500	4438328.400	3.47483E+06	101.8900
79.7712					
30	5.3700	3.7500	4747604.400	3.93404E+06	108.9900
90.3131					
31	5.4700	3.8500	5065592.400	4.42461E+06	116.2900

101.5750					
32	5.5700	3.9500	5390985.600	4.94735E+06	123.7600
113.5755					
33	5.6700	4.0500	5726833.200	5.50315E+06	131.4700
126.3349					
34	5.7700	4.1500	6082282.800	6.09351E+06	139.6300
139.8877					
35	5.8700	4.2500	6463868.400	6.72071E+06	148.3900
154.2863					
36	5.9700	4.3500	6852423.600	7.38643E+06	157.3100
169.5690					
37	6.0700	4.4500	7239236.400	8.09091E+06	166.1900
185.7418					
38	6.1700	4.5500	7614288.000	8.83350E+06	174.8000
202.7893					
39	6.2700	4.6500	7973222.400	9.61280E+06	183.0400
220.6796					
40	6.3700	4.7500	8313861.600	10.42709E+06	190.8600
239.3730					
41	6.4700	4.8500	8640126.000	11.27473E+06	198.3500
258.8321					
42	6.5700	4.9500	8951580.000	12.15426E+06	205.5000
279.0234					
43	6.6700	5.0500	9253015.200	13.06444E+06	212.4200
299.9182					
44	6.7700	5.1500	9537462.000	14.00392E+06	218.9500
321.4857					
45	6.8700	5.2500	9814068.000	14.97145E+06	225.3000
343.6972					
46	6.9700	5.3500	10070636.400	15.96565E+06	231.1900
366.5208					
47	7.0700	5.4500	10308474.000	16.98457E+06	236.6500
389.9121					
48	7.1700	5.5500	10532808.000	18.02660E+06	241.8000
413.8339					
49	7.2700	5.6500	10742331.600	19.09033E+06	246.6100
438.2537					
50	7.3700	5.7500	10938787.200	20.17436E+06	251.1200
463.1396					
51	7.4700	5.8500	11121303.600	21.27734E+06	255.3100
488.4606					
52	7.5700	5.9500	11282911.200	22.39753E+06	259.0200
514.1766					
53	7.6700	6.0500	11434064.400	23.53336E+06	262.4900
540.2517					
54	7.7700	6.1500	11579119.200	24.68400E+06	265.8200
566.6667					
55	7.8700	6.2500	11726352.000	25.84926E+06	269.2000
593.4173					
56	7.9700	6.3500	11877505.200	27.02943E+06	272.6700

620.5103					
57	8.0700	6.4500	12035192.40	28.22504E+06	276.2900
647.9579					
58	8.1700	6.5500	12196364.40	29.43660E+06	279.9900
675.7714					
59	8.2700	6.6500	12365377.20	30.66467E+06	283.8700
703.9639					
60	8.3700	6.7500	12541359.60	31.90998E+06	287.9100
732.5523					
61	8.4700	6.8500	12723004.80	33.17317E+06	292.0800
761.5513					
62	8.5700	6.9500	12907263.60	34.45466E+06	296.3100
790.9703					
63	8.6700	7.0500	13091522.40	35.75458E+06	300.5400
820.8122					
64	8.7700	7.1500	13269247.20	37.07260E+06	304.6200
851.0697					
65	8.8700	7.2500	13451328.00	38.40860E+06	308.8000
881.7401					
66	8.9700	7.3500	13636893.60	39.76299E+06	313.0600
912.8326					
67	9.2700	7.6500	14186620.80	43.93620E+06	325.6800
1008.6364					
68	9.3700	7.7500	14369137.20	45.36396E+06	329.8700
1041.4133					
69	9.4700	7.8500	14549911.20	46.80989E+06	334.0200
1074.6073					
70	9.5700	7.9500	14733734.40	48.27405E+06	338.2400
1108.2197					
71	9.6700	8.0500	14915379.60	49.75648E+06	342.4100
1142.2517					
72	9.7700	8.1500	15083956.80	51.25643E+06	346.2800
1176.6856					
73	9.8700	8.2500	15239901.60	52.77260E+06	349.8600
1211.4921					
74	9.9700	8.3500	15385392.00	54.30384E+06	353.2000
1246.6447					
75	10.0700	8.4500	15522170.40	55.84920E+06	356.3400
1282.1212					
76	10.1700	8.5500	15645009.60	57.40754E+06	359.1600
1317.8957					
77	10.2700	8.6500	15758701.20	58.97770E+06	361.7700
1353.9418					
78	10.3700	8.7500	15864116.40	60.55883E+06	364.1900
1390.2394					
79	10.4700	8.8500	15957770.40	62.14990E+06	366.3400
1426.7655					
80	10.5700	8.9500	16044454.80	63.75000E+06	368.3300
1463.4985					
81	10.6700	9.0500	16121556.00	65.35828E+06	370.1000

1500.4196						
82	10.7700	9.1500	16187331.60	66.97371E+06	371.6100	
1537.5047						
83	10.8700	9.2500	16242217.20	68.59517E+06	372.8700	
1574.7284						
84	10.9700	9.3500	16288390.80	70.22168E+06	373.9300	
1612.0680						
85	11.0700	9.4500	16324545.60	71.85231E+06	374.7600	
1649.5021						
86	11.1700	9.5500	16353730.80	73.48621E+06	375.4300	
1687.0112						
87	11.2700	9.6500	16377253.20	75.12274E+06	375.9700	
1724.5808						
88	11.3700	9.7500	16396419.60	76.76141E+06	376.4100	
1762.1994						
89	11.4700	9.8500	16412536.80	78.40184E+06	376.7800	
1799.8586						
90	11.5700	9.9500	16424298.00	80.04366E+06	377.0500	
1837.5497						
91	11.6700	10.0500	16434316.80	81.68658E+06	377.2800	
1875.2658						
92	11.7700	10.1500	16442593.20	83.33041E+06	377.4700	
1913.0029						
93	11.8700	10.2500	16449127.20	84.97498E+06	377.6200	
1950.7571						
94	11.9700	10.3500	16453483.20	86.62009E+06	377.7200	
1988.5237						
95	14.5700	12.9500	16496172.00	129.45420E+06	378.7000	
2971.8596						
96	14.6700	13.0500	16496172.00	131.10382E+06	378.7000	
3009.7296						

=====

| Variable storage data for node | N1010

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.0400	0.0000	435.6000	0.0000	0.0100
0.0000					
2	2.6200	1.5800	435.6000	688.2480	0.0100
0.0158					
3	2.6300	1.5900	435.6000	692.6040	0.0100
0.0159					
4	2.7300	1.6900	871.2000	756.6977	0.0200
0.0174					
5	2.8300	1.7900	2178.0000	904.2525	0.0500

0.0208					
6	2.9300	1.8900	3484.8000	1184.8423	0.0800
0.0272					
7	3.0300	1.9900	5662.8000	1637.8333	0.1300
0.0376					
8	3.1300	2.0900	8276.4000	2330.6661	0.1900
0.0535					
9	3.2300	2.1900	13068.0000	3388.7957	0.3000
0.0778					
10	3.3300	2.2900	18730.8000	4970.2485	0.4300
0.1141					
11	3.4300	2.3900	25264.8000	7161.8749	0.5800
0.1644					
12	3.5300	2.4900	32234.4000	10029.7401	0.7400
0.2303					
13	3.6300	2.5900	38332.8000	13553.6648	0.8800
0.3111					
14	3.7300	2.6900	44431.2000	17688.0737	1.0200
0.4061					
15	3.8300	2.7900	50965.2000	22454.1122	1.1700
0.5155					
16	3.9300	2.8900	57063.6000	27852.6271	1.3100
0.6394					
17	4.0300	2.9900	62726.4000	33839.8352	1.4400
0.7769					
18	4.1300	3.0900	68824.8000	40414.9723	1.5800
0.9278					
19	4.2300	3.1900	74487.6000	47578.6552	1.7100
1.0923					
20	4.3300	3.2900	79714.8000	55287.2211	1.8300
1.2692					
21	4.4300	3.3900	86248.8000	63583.1736	1.9800
1.4597					
22	4.5300	3.4900	93654.0000	72575.6825	2.1500
1.6661					
23	4.6300	3.5900	101059.2000	82308.8974	2.3200
1.8896					
24	4.7300	3.6900	108900.0000	92804.3115	2.5000
2.1305					
25	4.8300	3.7900	116305.2000	104062.4292	2.6700
2.3889					
26	4.9300	3.8900	125452.8000	116147.3230	2.8800
2.6664					
27	5.0300	3.9900	136342.8000	129233.1955	3.1300
2.9668					
28	5.1300	4.0900	147232.8000	143408.3475	3.3800
3.2922					
29	5.2300	4.1900	158558.4000	158694.2579	3.6400
3.6431					
30	5.3300	4.2900	169448.4000	175091.4201	3.8900

4.0195					
31	5.4300	4.3900	179902.8000	192556.1978	4.1300
4.4205					
32	5.5300	4.4900	190357.2000	211066.5523	4.3700
4.8454					
33	5.6300	4.5900	201247.2000	230644.0524	4.6200
5.2949					
34	5.7300	4.6900	213008.4000	251353.8421	4.8900
5.7703					
35	5.8300	4.7900	226947.6000	273347.7410	5.2100
6.2752					
36	5.9300	4.8900	244807.2000	296929.6087	5.6200
6.8166					
37	6.0300	4.9900	263102.4000	322319.3414	6.0400
7.3994					
38	6.1300	5.0900	281833.2000	349560.4822	6.4700
8.0248					
39	6.2300	5.1900	300128.4000	378653.4771	6.8900
8.6927					
40	6.3300	5.2900	311889.6000	409252.1875	7.1600
9.3951					
41	6.4300	5.3900	320166.0000	440853.7483	7.3500
10.1206					
42	6.5300	5.4900	327135.6000	473217.8793	7.5100
10.8636					
43	6.6300	5.5900	332362.8000	506192.1243	7.6300
11.6206					
44	6.7300	5.6900	337590.0000	539689.0895	7.7500
12.3896					
45	6.8300	5.7900	341946.0000	573665.3170	7.8500
13.1695					
46	6.9300	5.8900	345866.4000	608055.4069	7.9400
13.9590					
47	7.0300	5.9900	348915.6000	642794.0480	8.0100
14.7565					
48	7.1300	6.0900	351529.2000	677815.8565	8.0700
15.5605					
49	7.2300	6.1900	354142.8000	713099.0230	8.1300
16.3705					
50	7.3300	6.2900	355885.2000	748600.0323	8.1700
17.1855					
51	7.4300	6.3900	357192.0000	784253.5158	8.2000
18.0040					
52	7.5300	6.4900	358063.2000	820015.9094	8.2200
18.8250					
53	7.6300	6.5900	358498.8000	855843.6489	8.2300
19.6475					
54	7.7300	6.6900	358498.8000	891693.5289	8.2300
20.4705					
55	7.8300	6.7900	358498.8000	927543.4089	8.2300

21.2935						
56	7.9300	6.8900	358498.8000	963393.2889		8.2300
22.1165						
57	8.0300	6.9900	358498.8000	999243.1689		8.2300
22.9395						
58	8.1200	7.0800	358498.8000	1.03151E+06		8.2300
23.6802						

=====

| Variable storage data for node | N0430

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.1300	0.0000	26.1360	0.0000	0.0006
0.0000					
2	1.1500	1.2800	1306.8000	647.5649	0.0300
0.0149					
3	1.2500	1.3800	2178.0000	819.9589	0.0500
0.0188					
4	1.3500	1.4800	5227.2000	1179.2667	0.1200
0.0271					
5	1.4500	1.5800	9583.2000	1908.8615	0.2200
0.0438					
6	1.5500	1.6800	17859.6000	3259.6917	0.4100
0.0748					
7	1.6500	1.7800	28749.6000	5568.6278	0.6600
0.1278					
8	1.7500	1.8800	42253.2000	9097.1340	0.9700
0.2088					
9	1.8500	1.9800	56192.4000	14002.8343	1.2900
0.3215					
10	1.9500	2.0800	68824.8000	20242.9675	1.5800
0.4647					
11	2.0500	2.1800	79714.8000	27663.2111	1.8300
0.6351					
12	2.2500	2.3800	101494.8000	45740.2018	2.3300
1.0501					
13	2.3500	2.4800	112384.8000	56429.4513	2.5800
1.2954					
14	2.4500	2.5800	120661.2000	68079.1846	2.7700
1.5629					
15	2.8500	2.9800	154202.4000	122914.4118	3.5400
2.8217					
16	2.9500	3.0800	164221.2000	138832.8050	3.7700
3.1872					
17	3.0500	3.1800	176418.0000	155860.9543	4.0500

3.5781					
18	3.1500	3.2800	190357.2000	174195.1147	4.3700
3.9990					
19	3.2500	3.3800	206910.0000	194052.5261	4.7500
4.4548					
20	3.3500	3.4800	227383.2000	215758.9218	5.2200
4.9531					
21	3.4500	3.5800	252648.0000	239749.1532	5.8000
5.5039					
22	3.5500	3.6800	284882.4000	266609.2816	6.5400
6.1205					
23	3.6500	3.7800	329313.6000	297291.9548	7.5600
6.8249					
24	3.7500	3.8800	385941.6000	333016.9377	8.8600
7.6450					
25	3.8500	3.9800	452152.8000	374877.5807	10.3800
8.6060					
26	3.9500	4.0800	521413.2000	423514.2818	11.9700
9.7226					
27	4.0500	4.1800	597207.6000	479401.9170	13.7100
11.0056					
28	4.1500	4.2800	679100.4000	543172.8462	15.5900
12.4695					
29	4.2500	4.3800	762300.0000	615202.0925	17.5000
14.1231					
30	4.3500	4.4800	844628.4000	695512.5366	19.3900
15.9668					
31	4.4500	4.5800	926085.6000	784016.1081	21.2600
17.9985					
32	4.5500	4.6800	1000573.200	880324.0777	22.9700
20.2095					
33	4.6500	4.7800	1072447.200	983953.2888	24.6200
22.5885					
34	4.7500	4.8800	1141272.000	1.09462E+06	26.2000
25.1290					
35	4.8500	4.9800	1207483.200	1.21204E+06	27.7200
27.8246					
36	4.9500	5.0800	1271952.000	1.33600E+06	29.2000
30.6703					
37	5.0500	5.1800	1331193.600	1.46614E+06	30.5600
33.6580					
38	5.1500	5.2800	1386950.400	1.60204E+06	31.8400
36.7778					
39	5.2500	5.3800	1439658.000	1.74336E+06	33.0500
40.0220					
40	5.3500	5.4800	1491058.800	1.88989E+06	34.2300
43.3858					
41	5.4500	5.5800	1538539.200	2.04136E+06	35.3200
46.8631					
42	5.5500	5.6800	1586890.800	2.19762E+06	36.4300

50.4505					
43	5.6500	5.7800	1634371.200	2.35868E+06	37.5200
54.1478					
44	5.7500	5.8800	1682722.800	2.52453E+06	38.6300
57.9551					
45	5.8500	5.9800	1728025.200	2.69506E+06	39.6700
61.8700					
46	5.9500	6.0800	1775070.000	2.87020E+06	40.7500
65.8908					
47	6.0500	6.1800	1822986.000	3.05010E+06	41.8500
70.0206					
48	6.1500	6.2800	1874386.800	3.23496E+06	43.0300
74.2645					
49	6.2500	6.3800	1928836.800	3.42511E+06	44.2800
78.6298					
50	6.3500	6.4800	1980673.200	3.62058E+06	45.4700
83.1171					
51	6.4500	6.5800	2028153.600	3.82102E+06	46.5600
87.7184					
52	6.5500	6.6800	2072149.200	4.02602E+06	47.5700
92.4248					
53	6.6500	6.7800	2112660.000	4.23526E+06	48.5000
97.2282					
54	6.7500	6.8800	2149250.400	4.44835E+06	49.3400
102.1201					
55	6.8500	6.9800	2184534.000	4.66504E+06	50.1500
107.0945					
56	6.9500	7.0800	2215026.000	4.88501E+06	50.8500
112.1444					
57	7.0500	7.1800	2245518.000	5.10803E+06	51.5500
117.2643					
58	7.1500	7.2800	2271654.000	5.33389E+06	52.1500
122.4492					
59	7.2500	7.3800	2294740.800	5.56220E+06	52.6800
127.6906					
60	7.3500	7.4800	2315214.000	5.79270E+06	53.1500
132.9821					
61	7.4500	7.5800	2333509.200	6.02513E+06	53.5700
138.3180					
62	7.5500	7.6800	2350062.000	6.25931E+06	53.9500
143.6939					
63	7.6500	7.7800	2361823.200	6.49490E+06	54.2200
149.1024					
64	7.7500	7.8800	2373584.400	6.73167E+06	54.4900
154.5378					
65	7.8500	7.9800	2383167.600	6.96950E+06	54.7100
159.9978					
66	7.9500	8.0800	2389701.600	7.20814E+06	54.8600
165.4762					
67	8.2500	8.3800	2404076.400	7.92720E+06	55.1900

181.9835					
68	8.3500	8.4800	2407996.800	8.16780E+06	55.2800
187.5070					
69	8.4500	8.5800	2411046.000	8.40875E+06	55.3500
193.0384					
70	8.5500	8.6800	2413224.000	8.64996E+06	55.4000
198.5758					
71	10.2500	10.3800	2422807.200	12.76055E+06	55.6200
292.9418					
72	10.3650	10.4950	2422807.200	13.03917E+06	55.6200
299.3381					
73	10.3650	10.4950	2422807.200	13.03917E+06	55.6200
299.3381					

=====

| Variable storage data for node | N0500

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	2.2500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.7500	0.5000	3484.8000	635.4484	0.0800
0.0146					
3	2.8500	0.6000	5662.8000	1088.4394	0.1300
0.0250					
4	2.9500	0.7000	10018.8000	1862.2259	0.2300
0.0428					
5	3.0500	0.8000	18730.8000	3277.1621	0.4300
0.0752					
6	3.1500	0.9000	35719.2000	5954.3349	0.8200
0.1367					
7	3.2500	1.0000	58370.4000	10612.6478	1.3400
0.2436					
8	3.3500	1.1000	86248.8000	17798.3274	1.9800
0.4086					
9	3.4500	1.2000	118483.2000	27992.2667	2.7200
0.6426					
10	3.5500	1.3000	157687.2000	41754.0361	3.6200
0.9585					
11	3.6500	1.4000	206910.0000	59928.0816	4.7500
1.3758					
12	3.7500	1.5000	265716.0000	83497.9341	6.1000
1.9168					
13	3.8500	1.6000	335847.6000	113507.4468	7.7100
2.6058					
14	3.9500	1.7000	416869.2000	151070.0238	9.5700

3.4681					
15	4.0500	1.8000	503989.2000	197043.6447	11.5700
4.5235					
16	4.1500	1.9000	593287.2000	251846.2560	13.6200
5.7816					
17	4.2500	2.0000	693039.6000	316097.3928	15.9100
7.2566					
18	4.3500	2.1000	801939.6000	390779.4122	18.4100
8.9711					
19	4.4500	2.2000	918680.4000	476743.4711	21.0900
10.9445					
20	4.5500	2.3000	1037163.600	574474.8255	23.8100
13.1881					
21	4.6500	2.4000	1152162.000	683889.6390	26.4500
15.6999					
22	4.7500	2.5000	1264111.200	804658.8451	29.0200
18.4724					
23	4.8500	2.6000	1368655.200	936261.2411	31.4200
21.4936					
24	4.9500	2.7000	1471456.800	1.07823E+06	33.7800
24.7529					
25	5.0500	2.8000	1572951.600	1.23043E+06	36.1100
28.2467					
26	5.1500	2.9000	1676188.800	1.39285E+06	38.4800
31.9755					
27	5.2500	3.0000	1782039.600	1.56574E+06	40.9100
35.9443					
28	5.3500	3.1000	1890939.600	1.74936E+06	43.4100
40.1597					
29	5.4500	3.2000	2007680.400	1.94426E+06	46.0900
44.6340					
30	5.5500	3.3000	2137924.800	2.15150E+06	49.0800
49.3916					
31	5.6500	3.4000	2282544.000	2.37248E+06	52.4000
54.4647					
32	5.7500	3.5000	2450250.000	2.60907E+06	56.2500
59.8960					
33	5.8500	3.6000	2643220.800	2.86368E+06	60.6800
65.7410					
34	5.9500	3.7000	2857100.400	3.13862E+06	65.5900
72.0529					
35	6.0500	3.8000	3082741.200	3.43554E+06	70.7700
78.8692					
36	6.1500	3.9000	3326677.200	3.75593E+06	76.3700
86.2243					
37	6.2500	4.0000	3579325.200	4.10115E+06	82.1700
94.1495					
38	6.3500	4.1000	3843734.400	4.47222E+06	88.2400
102.6681					
39	6.4500	4.2000	4115113.200	4.87008E+06	94.4700

111.8017					
40	6.5500	4.3000	4389541.200	5.29524E+06	100.7700
121.5619					
41	6.6500	4.4000	4653950.400	5.74734E+06	106.8400
131.9409					
42	6.7500	4.5000	4918359.600	6.22589E+06	112.9100
142.9268					
43	6.8500	4.6000	5179284.000	6.73071E+06	118.9000
154.5159					
44	6.9500	4.7000	5432367.600	7.26124E+06	124.7100
166.6952					
45	7.0500	4.8000	5676303.600	7.81662E+06	130.3100
179.4450					
46	7.1500	4.9000	5906300.400	8.39571E+06	135.5900
192.7390					
47	7.2500	5.0000	6117130.800	8.99685E+06	140.4300
206.5392					
48	7.3500	5.1000	6311408.400	9.61824E+06	144.8900
220.8044					
49	7.4500	5.2000	6486084.000	10.25809E+06	148.9000
235.4933					
50	7.5500	5.3000	6642900.000	10.91452E+06	152.5000
250.5628					
51	7.6500	5.4000	6779242.800	11.58561E+06	155.6300
265.9689					
52	7.7500	5.5000	6900339.600	12.26957E+06	158.4100
281.6705					
53	7.8500	5.6000	7000963.200	12.96462E+06	160.7200
297.6267					
54	7.9500	5.7000	7086340.800	13.66897E+06	162.6800
313.7965					
55	8.0500	5.8000	7159086.000	14.38124E+06	164.3500
330.1477					
56	8.1500	5.9000	7217020.800	15.10003E+06	165.6800
346.6490					
57	8.2500	6.0000	7264936.800	15.82412E+06	166.7800
363.2718					
58	8.3500	6.1000	7306318.800	16.55268E+06	167.7300
379.9972					
59	8.4500	6.2000	7336810.800	17.28482E+06	168.4300
396.8050					
60	8.5500	6.3000	7362511.200	18.01978E+06	169.0200
413.6773					
61	8.6500	6.4000	7382548.800	18.75703E+06	169.4800
430.6021					
62	8.7500	6.5000	7398230.400	19.49606E+06	169.8400
447.5679					
63	8.8500	6.6000	7410427.200	20.23649E+06	170.1200
464.5658					
64	8.9500	6.7000	7420010.400	20.97800E+06	170.3400

481.5886						
65	9.0500	6.8000	7427851.200	21.72039E+06	170.5200	
498.6314						
66	9.1500	6.9000	7433949.600	22.46347E+06	170.6600	
515.6903						
67	9.2500	7.0000	7439612.400	23.20714E+06	170.7900	
532.7626						
68	9.3500	7.1000	7443968.400	23.95131E+06	170.8900	
549.8464						
69	9.8500	7.6000	7457036.400	27.67652E+06	171.1900	
635.3656						
70	9.9500	7.7000	7459214.400	28.42233E+06	171.2400	
652.4869						
71	10.0500	7.8000	7460521.200	29.16831E+06	171.2700	
669.6122						
72	10.1500	7.9000	7461828.000	29.91442E+06	171.3000	
686.7405						
73	10.2500	8.0000	7463134.800	30.66066E+06	171.3300	
703.8719						
74	10.3500	8.1000	7463570.400	31.40699E+06	171.3400	
721.0052						
75	13.8500	11.6000	7470104.400	57.54066E+06	171.4900	
1320.9517						
76	13.9500	11.7000	7470104.400	58.28767E+06	171.4900	
1338.1007						

=====

| Variable storage data for node | N0230

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	3.3100	0.0000	435.6000	0.0000	0.0100
0.0000					
2	3.8700	0.5600	435.6000	243.9360	0.0100
0.0056					
3	3.8800	0.5700	435.6000	248.2920	0.0100
0.0057					
4	3.9800	0.6700	435.6000	291.8520	0.0100
0.0067					
5	4.0800	0.7700	435.6000	335.4120	0.0100
0.0077					
6	4.1800	0.8700	871.2000	399.5057	0.0200
0.0092					
7	4.2800	0.9700	3484.8000	602.7837	0.0800
0.0138					
8	4.3800	1.0700	10454.4000	1268.6121	0.2400

0.0291					
9	4.4800	1.1700	20037.6000	2767.4458	0.4600
0.0635					
10	4.5800	1.2700	28314.0000	5173.1083	0.6500
0.1188					
11	4.6800	1.3700	34848.0000	8325.5289	0.8000
0.1911					
12	4.7800	1.4700	41382.0000	12132.3150	0.9500
0.2785					
13	4.8800	1.5700	50094.0000	16699.1393	1.1500
0.3834					
14	4.9800	1.6700	62290.8000	22307.2599	1.4300
0.5121					
15	5.0800	1.7700	83635.2000	29577.3297	1.9200
0.6790					
16	5.1800	1.8700	121968.0000	39797.3042	2.8000
0.9136					
17	5.2800	1.9700	167706.0000	54220.2985	3.8500
1.2447					
18	5.3800	2.0700	214315.2000	73273.6016	4.9200
1.6821					
19	5.4800	2.1700	252648.0000	96595.2614	5.8000
2.2175					
20	5.5800	2.2700	280526.4000	123241.5592	6.4400
2.8292					
21	5.6800	2.3700	301870.8000	152354.6070	6.9300
3.4976					
22	5.7800	2.4700	322779.6000	183580.9808	7.4100
4.2144					
23	5.8800	2.5700	344995.2000	216963.2264	7.9200
4.9808					
24	5.9800	2.6700	369388.8000	252675.1260	8.4800
5.8006					
25	6.0800	2.7700	392911.2000	290783.6948	9.0200
6.6755					
26	6.1800	2.8700	415562.4000	331201.6811	9.5400
7.6033					
27	6.2800	2.9700	437342.4000	373841.8591	10.0400
8.5822					
28	6.3800	3.0700	457815.6000	418595.4090	10.5100
9.6096					
29	6.4800	3.1700	481338.0000	465547.7091	11.0500
10.6875					
30	6.5800	3.2700	508345.2000	515025.2316	11.6700
11.8234					
31	6.6800	3.3700	536223.6000	567246.9479	12.3100
13.0222					
32	6.7800	3.4700	568893.6000	622494.2053	13.0600
14.2905					
33	6.8800	3.5700	606355.2000	681246.1043	13.9200

15.6393						
34	6.9800	3.6700	647737.2000	743938.7151		14.8700
17.0785						
35	7.0800	3.7700	686070.0000	810619.2259		15.7500
18.6093						
36	7.1800	3.8700	711770.4000	880506.6090		16.3400
20.2137						
37	7.2800	3.9700	728758.8000	952530.6791		16.7300
21.8671						
38	7.3800	4.0700	744440.4000	1.02619E+06		17.0900
23.5580						
39	7.4800	4.1700	762300.0000	1.10152E+06		17.5000
25.2875						
40	7.5800	4.2700	782773.2000	1.17877E+06		17.9700
27.0609						
41	7.6800	4.3700	818928.0000	1.25885E+06		18.8000
28.8992						
42	7.7800	4.4700	842450.4000	1.34192E+06		19.3400
30.8062						
43	7.8800	4.5700	848113.2000	1.42644E+06		19.4700
32.7466						
44	7.9800	4.6700	849420.0000	1.51132E+06		19.5000
34.6951						
45	8.0800	4.7700	849420.0000	1.59626E+06		19.5000
36.6451						
46	8.1800	4.8700	849420.0000	1.68120E+06		19.5000
38.5951						
47	8.2800	4.9700	849420.0000	1.76615E+06		19.5000
40.5451						
48	8.3800	5.0700	849420.0000	1.85109E+06		19.5000
42.4951						
49	8.4850	5.1750	849420.0000	1.94028E+06		19.5000
44.5426						

=====

| Variable storage data for node | N0220

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.1800	0.0000	26.1360	0.0000	0.0006
0.0000					
2	5.9500	4.7700	22651.2000	37279.9740	0.5200
0.8558					
3	6.0500	4.8700	24829.2000	39653.1373	0.5700
0.9103					
4	6.1500	4.9700	28314.0000	42308.3644	0.6500

0.9713					
5	6.2500	5.0700	37461.6000	45586.4583	0.8600
1.0465					
6	6.3500	5.1700	54885.6000	50176.1280	1.2600
1.1519					
7	6.4500	5.2700	81021.6000	56929.1412	1.8600
1.3069					
8	6.5500	5.3700	116740.8000	66762.9547	2.6800
1.5327					
9	6.6500	5.4700	158122.8000	80453.7815	3.6300
1.8470					
10	6.7500	5.5700	194713.2000	98063.6986	4.4700
2.2512					
11	6.8500	5.6700	226947.6000	119125.9628	5.2100
2.7348					
12	6.9500	5.7700	259182.0000	143414.3686	5.9500
3.2923					
13	7.0500	5.8700	295336.8000	171120.3664	6.7800
3.9284					
14	7.1500	5.9700	331491.6000	202444.0806	7.6100
4.6475					
15	7.2500	6.0700	368517.6000	237427.8590	8.4600
5.4506					
16	7.3500	6.1700	407721.6000	276222.9205	9.3600
6.3412					
17	7.4500	6.2700	447796.8000	318982.7606	10.2800
7.3228					
18	7.5500	6.3700	491792.4000	365944.5744	11.2900
8.4009					
19	7.6500	6.4700	540144.0000	417521.9888	12.4000
9.5850					
20	7.7500	6.5700	599821.2000	474493.6271	13.7700
10.8929					
21	7.8500	6.6700	664290.0000	537671.1386	15.2500
12.3432					
22	7.9500	6.7700	726145.2000	607169.2614	16.6700
13.9387					
23	8.0500	6.8700	762300.0000	681583.4577	17.5000
15.6470					
24	8.1500	6.9700	779724.0000	758682.2460	17.9000
17.4169					
25	8.2500	7.0700	787564.8000	837045.5755	18.0800
19.2159					
26	8.3500	7.1700	791920.8000	916018.9656	18.1800
21.0289					
27	8.4500	7.2700	794534.4000	995340.8965	18.2400
22.8499					
28	8.5500	7.3700	795841.2000	1.07486E+06	18.2700
24.6754					
29	10.8500	9.6700	804553.2000	2.91528E+06	18.4700

66.9257
 30 10.9350 9.7550 804553.2000 2.98367E+06 18.4700
 68.4957

=====

| Variable storage data for node | N0200

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-1.6100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	4.1000	5.7100	30927.6000	60625.8979	0.7100
1.3918					
3	4.2000	5.8100	33541.2000	63848.4223	0.7700
1.4658					
4	4.3000	5.9100	37026.0000	67375.3121	0.8500
1.5467					
5	4.4000	6.0100	40510.8000	71250.8075	0.9300
1.6357					
6	4.5000	6.1100	44866.8000	75517.7916	1.0300
1.7336					
7	4.6000	6.2100	49222.8000	80220.5431	1.1300
1.8416					
8	4.7000	6.3100	54885.6000	85423.3423	1.2600
1.9611					
9	4.8000	6.4100	60984.0000	91214.0878	1.4000
2.0940					
10	4.9000	6.5100	66646.8000	97593.4693	1.5300
2.2404					
11	5.0000	6.6100	74487.6000	104646.4859	1.7100
2.4024					
12	5.1000	6.7100	84506.4000	112590.8402	1.9400
2.5847					
13	5.2000	6.8100	97574.4000	121686.9634	2.2400
2.7935					
14	5.3000	6.9100	112820.4000	132197.3797	2.5900
3.0348					
15	5.4000	7.0100	127195.2000	144190.8589	2.9200
3.3102					
16	5.5000	7.1100	142441.2000	157665.3547	3.2700
3.6195					
17	5.6000	7.2100	159865.2000	172772.1477	3.6700
3.9663					
18	5.7000	7.3100	176418.0000	189579.3458	4.0500
4.3521					
19	5.8000	7.4100	192535.2000	208020.9514	4.4200

4.7755					
20	5.9000	7.5100	212572.8000	228267.8846	4.8800
5.2403					
21	6.0000	7.6100	233917.2000	250583.6536	5.3700
5.7526					
22	6.1000	7.7100	256568.4000	275098.9666	5.8900
6.3154					
23	6.2000	7.8100	278348.4000	301837.1461	6.3900
6.9292					
24	6.3000	7.9100	298821.6000	330689.3038	6.8600
7.5916					
25	6.4000	8.0100	316681.2000	361459.8167	7.2700
8.2980					
26	6.5000	8.1100	332798.4000	393930.1385	7.6400
9.0434					
27	6.6000	8.2100	350658.0000	428098.7270	8.0500
9.8278					
28	6.7000	8.3100	368953.2000	464075.0506	8.4700
10.6537					
29	6.8000	8.4100	384634.8000	501751.3541	8.8300
11.5186					
30	6.9000	8.5100	402058.8000	541082.4245	9.2300
12.4215					
31	7.0000	8.6100	416869.2000	582026.1828	9.5700
13.3615					
32	7.1000	8.7100	428630.4000	624299.3766	9.8400
14.3319					
33	7.3000	8.9100	451717.2000	712323.1639	10.3700
16.3527					
34	7.4000	9.0100	464349.6000	758124.5942	10.6600
17.4041					
35	7.5000	9.1100	480031.2000	805340.9919	11.0200
18.4881					
36	7.6000	9.2100	495277.2000	854103.9381	11.3700
19.6075					
37	7.7000	9.3100	511830.0000	904456.5273	11.7500
20.7635					
38	7.8000	9.4100	524898.0000	956291.0362	12.0500
21.9534					
39	7.9000	9.5100	534916.8000	1.00928E+06	12.2800
23.1699					
40	8.0000	9.6100	541450.8000	1.06310E+06	12.4300
24.4054					
41	8.1000	9.7100	545806.8000	1.11746E+06	12.5300
25.6534					
42	8.2000	9.8100	548420.4000	1.17217E+06	12.5900
26.9093					
43	9.8000	11.4100	586317.6000	2.07978E+06	13.4600
47.7453					
44	9.9000	11.5100	591109.2000	2.13865E+06	13.5700

49.0967						
45	10.0000	11.6100	594594.0000	2.19794E+06		13.6500
50.4577						
46	10.9000	12.5100	622908.0000	2.74576E+06		14.3000
63.0340						
47	11.0000	12.6100	625521.6000	2.80818E+06		14.3600
64.4670						
48	11.1000	12.7100	625957.2000	2.87075E+06		14.3700
65.9034						
49	11.4000	13.0100	625957.2000	3.05854E+06		14.3700
70.2144						
50	11.4850	13.0950	625957.2000	3.11175E+06		14.3700
71.4359						

=====

| Variable storage data for node | N0190

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.9600	0.0000	435.6000	0.0000	0.0100
0.0000					
2	1.5600	2.5200	435.6000	1097.7120	0.0100
0.0252					
3	1.5700	2.5300	435.6000	1102.0680	0.0100
0.0253					
4	1.6700	2.6300	435.6000	1145.6280	0.0100
0.0263					
5	1.7700	2.7300	871.2000	1209.7217	0.0200
0.0278					
6	1.8700	2.8300	1306.8000	1317.8872	0.0300
0.0303					
7	1.9700	2.9300	1742.4000	1469.8245	0.0400
0.0337					
8	2.0700	3.0300	2178.0000	1665.4379	0.0500
0.0382					
9	2.1700	3.1300	2613.6000	1904.6849	0.0600
0.0437					
10	2.2700	3.2300	3049.2000	2187.5424	0.0700
0.0502					
11	2.3700	3.3300	3484.8000	2513.9969	0.0800
0.0577					
12	2.4700	3.4300	4356.0000	2905.2238	0.1000
0.0667					
13	2.5700	3.5300	4791.6000	3362.4262	0.1100
0.0772					
14	2.6700	3.6300	5227.2000	3863.2033	0.1200

0.0887					
15	2.7700	3.7300	5662.8000	4407.5526	0.1300
0.1012					
16	2.8700	3.8300	6534.0000	5016.8673	0.1500
0.1152					
17	2.9700	3.9300	6534.0000	5670.2673	0.1500
0.1302					
18	3.0700	4.0300	6969.6000	6345.3234	0.1600
0.1457					
19	3.1700	4.1300	7405.2000	7063.9462	0.1700
0.1622					
20	3.2700	4.2300	7840.8000	7826.1349	0.1800
0.1797					
21	3.3700	4.3300	7840.8000	8610.2149	0.1800
0.1977					
22	3.4700	4.4300	8276.4000	9415.9687	0.1900
0.2162					
23	3.5700	4.5300	8712.0000	10265.2871	0.2000
0.2357					
24	3.6700	4.6300	9147.6000	11158.1696	0.2100
0.2562					
25	3.7700	4.7300	9583.2000	12094.6158	0.2200
0.2777					
26	3.8700	4.8300	10018.8000	13074.6253	0.2300
0.3002					
27	3.9700	4.9300	10890.0000	14119.7523	0.2500
0.3241					
28	4.0700	5.0300	13939.2000	15358.0675	0.3200
0.3526					
29	4.1700	5.1300	19602.0000	17027.0861	0.4500
0.3909					
30	4.2700	5.2300	26136.0000	19306.1446	0.6000
0.4432					
31	4.3700	5.3300	31363.2000	22177.1077	0.7200
0.5091					
32	4.4700	5.4300	35283.6000	25507.4909	0.8100
0.5856					
33	4.5700	5.5300	37461.6000	29144.1710	0.8600
0.6691					
34	4.6700	5.6300	38768.4000	32955.4462	0.8900
0.7566					
35	4.7700	5.7300	40075.2000	36897.4063	0.9200
0.8470					
36	4.8700	5.8300	41382.0000	40970.0509	0.9500
0.9405					
37	4.9700	5.9300	42688.8000	45173.3795	0.9800
1.0370					
38	5.0700	6.0300	43560.0000	49485.7031	1.0000
1.1360					
39	5.1700	6.1300	44431.2000	53885.1472	1.0200

1.2370					
40	5.2700	6.2300	46173.6000	58415.0626	1.0600
1.3410					
41	5.3700	6.3300	47044.8000	63075.8682	1.0800
1.4480					
42	5.4700	6.4300	48351.6000	67845.4913	1.1100
1.5575					
43	5.5700	6.5300	50094.0000	72767.4651	1.1500
1.6705					
44	5.6700	6.6300	52707.6000	77906.9399	1.2100
1.7885					
45	5.7700	6.7300	55756.8000	83329.3912	1.2800
1.9130					
46	5.8700	6.8300	61855.2000	89207.2955	1.4200
2.0479					
47	5.9700	6.9300	70567.2000	95823.5678	1.6200
2.1998					
48	6.0700	7.0300	80586.0000	103375.6123	1.8500
2.3732					
49	6.1700	7.1300	91911.6000	111994.2028	2.1100
2.5710					
50	6.2700	7.2300	104108.4000	121788.7744	2.3900
2.7959					
51	6.3700	7.3300	118918.8000	132931.8181	2.7300
3.0517					
52	6.4700	7.4300	138085.2000	145769.9617	3.1700
3.3464					
53	6.5700	7.5300	161607.6000	160739.0430	3.7100
3.6901					
54	6.6700	7.6300	183823.2000	177998.4918	4.2200
4.0863					
55	6.7700	7.7300	205167.6000	197438.0701	4.7100
4.5326					
56	6.8700	7.8300	225640.8000	218970.1624	5.1800
5.0269					
57	6.9700	7.9300	244807.2000	242485.8174	5.6200
5.5667					
58	7.0700	8.0300	263102.4000	267875.5500	6.0400
6.1496					
59	7.1700	8.1300	283575.6000	295202.7851	6.5100
6.7769					
60	7.2700	8.2300	303613.2000	324556.2318	6.9700
7.4508					
61	7.3700	8.3300	324522.0000	355956.8762	7.4500
8.1716					
62	7.4700	8.4300	342817.2000	389319.3221	7.8700
8.9375					
63	7.5700	8.5300	360241.2000	424468.2916	8.2700
9.7445					
64	7.6700	8.6300	374616.0000	461208.4407	8.6000

10.5879						
65	7.7700	8.7300	389426.4000	499407.7861		8.9400
11.4648						
66	7.8700	8.8300	402494.4000	539001.6330		9.2400
12.3738						
67	7.9700	8.9300	412513.2000	579750.5791		9.4700
13.3092						
68	8.0700	9.0300	422967.6000	621523.1112		9.7100
14.2682						
69	8.1700	9.1300	430808.4000	664210.8842		9.8900
15.2482						
70	8.2700	9.2300	439520.4000	707726.1623		10.0900
16.2472						
71	8.3700	9.3300	449539.2000	752177.7569		10.3200
17.2676						
72	8.4700	9.4300	458686.8000	797587.8350		10.5300
18.3101						
73	8.5700	9.5300	468270.0000	843934.3859		10.7500
19.3741						
74	8.6700	9.6300	476982.0000	891195.8441		10.9500
20.4590						
75	8.7700	9.7300	481338.0000	939111.2000		11.0500
21.5590						
76	8.8700	9.8300	484822.8000	987418.6522		11.1300
22.6680						
77	8.9700	9.9300	486129.6000	1.03597E+06		11.1600
23.7825						
78	9.0700	10.0300	486565.2000	1.08460E+06		11.1700
24.8990						
79	9.1700	10.1300	486565.2000	1.13326E+06		11.1700
26.0160						
80	9.2700	10.2300	487000.8000	1.18193E+06		11.1800
27.1335						
81	9.3800	10.3400	487000.8000	1.23550E+06		11.1800
28.3633						

=====

| Variable storage data for node | N0130

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.6000	0.0000	4356.0000	0.0000	0.1000
0.0000					
2	-0.5500	0.0500	5227.2000	239.2469	0.1200
0.0055					
3	-0.4500	0.1500	6098.4000	804.9620	0.1400

0.0185					
4	-0.3500	0.2500	6969.6000	1457.8709	0.1600
0.0335					
5	-0.2500	0.3500	7840.8000	2197.9561	0.1800
0.0505					
6	-0.1500	0.4500	8276.4000	3003.7099	0.1900
0.0690					
7	-0.0500	0.5500	38768.4000	5168.9363	0.8900
0.1187					
8	0.0500	0.6500	39639.6000	9089.2165	0.9100
0.2087					
9	0.1500	0.7500	40075.2000	13074.8968	0.9200
0.3002					
10	0.2500	0.8500	40510.8000	17104.1369	0.9300
0.3927					
11	0.3500	0.9500	41382.0000	21198.6587	0.9500
0.4867					
12	0.4500	1.0500	43124.4000	25423.6370	0.9900
0.5836					
13	0.5500	1.1500	45738.0000	29866.0719	1.0500
0.6856					
14	0.6500	1.2500	48351.6000	34569.8997	1.1100
0.7936					
15	0.7500	1.3500	50529.6000	39513.5104	1.1600
0.9071					
16	0.8500	1.4500	52707.6000	44674.9359	1.2100
1.0256					
17	0.9500	1.5500	54450.0000	50032.5262	1.2500
1.1486					
18	1.0500	1.6500	56192.4000	55564.3622	1.2900
1.2756					
19	1.1500	1.7500	57063.6000	61227.0497	1.3100
1.4056					
20	1.2500	1.8500	58806.0000	67020.2534	1.3500
1.5386					
21	1.3500	1.9500	60548.4000	72987.7018	1.3900
1.6756					
22	1.4500	2.0500	62726.4000	79151.0594	1.4400
1.8171					
23	1.5500	2.1500	65340.0000	85553.8709	1.5000
1.9640					
24	1.6500	2.2500	68824.8000	92261.2894	1.5800
2.1180					
25	1.7500	2.3500	72745.2000	99338.8137	1.6700
2.2805					
26	1.8500	2.4500	76665.6000	106808.4217	1.7600
2.4520					
27	1.9500	2.5500	81021.6000	114691.6999	1.8600
2.6330					
28	2.0500	2.6500	85813.2000	123032.2094	1.9700

2.8244					
29	2.1500	2.7500	90604.8000	131851.9365	2.0800
3.0269					
30	2.2500	2.8500	95396.4000	141150.8747	2.1900
3.2404					
31	2.3500	2.9500	100623.6000	150950.6149	2.3100
3.4653					
32	2.4500	3.0500	105415.2000	161251.5232	2.4200
3.7018					
33	2.5500	3.1500	110642.4000	172053.2411	2.5400
3.9498					
34	2.6500	3.2500	117176.4000	183442.5052	2.6900
4.2113					
35	2.7500	3.3500	124146.0000	195506.8268	2.8500
4.4882					
36	2.8500	3.4500	131551.2000	208289.7715	3.0200
4.7817					
37	2.9500	3.5500	138956.4000	221813.3266	3.1900
5.0921					
38	3.0500	3.6500	146797.2000	236099.0705	3.3700
5.4201					
39	3.1500	3.7500	155073.6000	251190.5683	3.5600
5.7665					
40	3.2500	3.8500	163785.6000	267131.3849	3.7600
6.1325					
41	3.3500	3.9500	172933.2000	283965.0853	3.9700
6.5189					
42	3.4500	4.0500	182952.0000	301756.8165	4.2000
6.9274					
43	3.5500	4.1500	193406.4000	320572.1279	4.4400
7.3593					
44	3.6500	4.2500	205167.6000	340497.7359	4.7100
7.8168					
45	3.7500	4.3500	215622.0000	361534.8407	4.9500
8.2997					
46	3.8500	4.4500	227818.8000	383703.8629	5.2300
8.8086					
47	3.9500	4.5500	239580.0000	407071.1026	5.5000
9.3451					
48	4.0500	4.6500	250034.4000	431549.7174	5.7400
9.9070					
49	4.1500	4.7500	259182.0000	457008.9132	5.9500
10.4915					
50	4.2500	4.8500	267458.4000	483339.5860	6.1400
11.0960					
51	4.3500	4.9500	276170.4000	510519.5906	6.3400
11.7199					
52	4.4500	5.0500	285318.0000	538592.4879	6.5500
12.3644					
53	4.5500	5.1500	292723.2000	567493.4683	6.7200

13.0279					
54	4.6500	5.2500	300564.0000	597156.6681	6.9000
13.7088					
55	4.7500	5.3500	308840.4000	627625.6467	7.0900
14.4083					
56	4.8500	5.4500	317116.8000	658922.2817	7.2800
15.1268					
57	4.9500	5.5500	326264.4000	691089.9362	7.4900
15.8652					
58	5.0500	5.6500	335847.6000	724194.0492	7.7100
16.6252					
59	5.1500	5.7500	346737.6000	758321.5200	7.9600
17.4087					
60	5.2500	5.8500	357192.0000	793516.3541	8.2000
18.2166					
61	5.3500	5.9500	369388.8000	829843.3245	8.4800
19.0506					
62	5.4500	6.0500	381585.6000	867390.0182	8.7600
19.9125					
63	5.5500	6.1500	394653.6000	906199.7566	9.0600
20.8035					
64	5.6500	6.2500	408157.2000	946338.0023	9.3700
21.7249					
65	5.7500	6.3500	423838.8000	987934.9230	9.7300
22.6799					
66	5.8500	6.4500	440391.6000	1.03114E+06	10.1100
23.6718					
67	5.9500	6.5500	459993.6000	1.07616E+06	10.5600
24.7052					
68	6.0500	6.6500	483516.0000	1.12333E+06	11.1000
25.7881					
69	6.1500	6.7500	510523.2000	1.17302E+06	11.7200
26.9289					
70	6.2500	6.8500	536659.2000	1.22538E+06	12.3200
28.1308					
71	6.3500	6.9500	558874.8000	1.28015E+06	12.8300
29.3882					
72	6.4500	7.0500	571507.2000	1.33667E+06	13.1200
30.6857					
73	6.5500	7.1500	576734.4000	1.39408E+06	13.2400
32.0036					
74	6.6500	7.2500	578912.4000	1.45186E+06	13.2900
33.3301					
75	6.7500	7.3500	579348.0000	1.50977E+06	13.3000
34.6596					
76	6.8500	7.4500	579348.0000	1.56771E+06	13.3000
35.9896					
77	6.9500	7.5500	579348.0000	1.62564E+06	13.3000
37.3196					
78	7.0500	7.6500	579348.0000	1.68358E+06	13.3000

38.6496						
79	7.1500	7.7500	579348.0000	1.74151E+06	13.3000	
39.9796						
80	7.2450	7.8450	579348.0000	1.79655E+06	13.3000	
41.2431						
81	12.6850	13.2850	579348.0000	4.94820E+06	13.3000	
113.5951						

```

*=====
| Variable storage data for node | N0100
*=====

```

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	0.4600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	3.0200	2.5600	12632.4000	11292.1596	0.2900
0.2592					
3	3.1200	2.6600	13939.2000	12620.1904	0.3200
0.2897					
4	3.2200	2.7600	16988.4000	14164.0437	0.3900
0.3252					
5	3.9200	3.4600	40075.2000	33566.9171	0.9200
0.7706					
6	4.0200	3.5600	43995.6000	37768.8908	1.0100
0.8671					
7	4.1200	3.6600	50094.0000	42470.0265	1.1500
0.9750					
8	4.2200	3.7600	57499.2000	47845.3804	1.3200
1.0984					
9	4.3200	3.8600	64033.2000	53919.0101	1.4700
1.2378					
10	4.4200	3.9600	70567.2000	60646.3181	1.6200
1.3922					
11	4.5200	4.0600	76230.0000	67984.2837	1.7500
1.5607					
12	4.6200	4.1600	83199.6000	75953.1437	1.9100
1.7436					
13	5.4200	4.9600	133293.6000	161766.1913	3.0600
3.7136					
14	5.5200	5.0600	139392.0000	175399.1983	3.2000
4.0266					
15	5.6200	5.1600	146797.2000	189706.9182	3.3700
4.3551					
16	5.7200	5.2600	155509.2000	204819.9944	3.5700
4.7020					
17	5.8200	5.3600	168141.6000	220998.2623	3.8600

5.0734					
18	5.9200	5.4600	184258.8000	238611.9602	4.2300
5.4778					
19	6.0200	5.5600	202118.4000	257923.7440	4.6400
5.9211					
20	6.1200	5.6600	221284.8000	279086.4585	5.0800
6.4069					
21	6.2200	5.7600	243064.8000	302295.1886	5.5800
6.9397					
22	6.3200	5.8600	266151.6000	327747.0270	6.1100
7.5240					
23	6.4200	5.9600	288367.2000	355465.2700	6.6200
8.1604					
24	6.5200	6.0600	308840.4000	385319.5010	7.0900
8.8457					
25	6.6200	6.1600	326700.0000	417092.0201	7.5000
9.5751					
26	6.7200	6.2600	343252.8000	450585.9165	7.8800
10.3440					
27	6.8200	6.3600	358498.8000	485670.3851	8.2300
11.1495					
28	6.9200	6.4600	369824.4000	522084.7132	8.4900
11.9854					
29	7.0200	6.5600	378972.0000	559523.2275	8.7000
12.8449					
30	7.1200	6.6600	386812.8000	597811.4156	8.8800
13.7239					
31	7.2200	6.7600	393346.8000	636818.5495	9.0300
14.6193					
32	7.3200	6.8600	399445.2000	676457.3622	9.1700
15.5293					
33	7.4200	6.9600	402930.0000	716575.5949	9.2500
16.4503					
34	10.6200	10.1600	429501.6000	2.04823E+06	9.8600
47.0208					
35	10.7050	10.2450	429501.6000	2.08473E+06	9.8600
47.8589					

=====

| Variable storage data for node | N0090

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	2.4900	0.0000	871.2000	0.0000	0.0200
0.0000					
2	2.5900	0.1000	2178.0000	147.5548	0.0500

0.0034					
3	2.6900	0.2000	3049.2000	407.6937	0.0700
0.0094					
4	2.7900	0.3000	3484.8000	734.1481	0.0800
0.0169					
5	2.8900	0.4000	4356.0000	1125.3751	0.1000
0.0258					
6	2.9900	0.5000	4791.6000	1582.5775	0.1100
0.0363					
7	3.0900	0.6000	5662.8000	2104.6863	0.1300
0.0483					
8	3.1900	0.7000	6534.0000	2714.0009	0.1500
0.0623					
9	3.2900	0.8000	7840.8000	3431.7417	0.1800
0.0788					
10	3.3900	0.9000	9147.6000	4280.3143	0.2100
0.0983					
11	3.4900	1.0000	10454.4000	5259.6777	0.2400
0.1207					
12	3.5900	1.1000	13503.6000	6454.3185	0.3100
0.1482					
13	3.6900	1.2000	16988.4000	7975.5735	0.3900
0.1831					
14	3.7900	1.3000	22215.6000	9929.9200	0.5100
0.2280					
15	3.8900	1.4000	29620.8000	12512.8530	0.6800
0.2873					
16	3.9900	1.5000	37461.6000	15859.2761	0.8600
0.3641					
17	4.0900	1.6000	45302.4000	19991.2307	1.0400
0.4589					
18	4.1900	1.7000	50529.6000	24780.4051	1.1600
0.5689					
19	4.2900	1.8000	55756.8000	30092.5283	1.2800
0.6908					
20	4.3900	1.9000	62290.8000	35991.8332	1.4300
0.8263					
21	4.4900	2.0000	69696.0000	42587.6422	1.6000
0.9777					
22	4.5900	2.1000	77972.4000	49967.1198	1.7900
1.1471					
23	4.6900	2.2000	89298.0000	58324.1586	2.0500
1.3389					
24	4.7900	2.3000	102801.6000	67921.1226	2.3600
1.5593					
25	4.8900	2.4000	118483.2000	78975.9796	2.7200
1.8130					
26	4.9900	2.5000	135471.6000	91664.1117	3.1100
2.1043					
27	5.0900	2.6000	152895.6000	106073.5462	3.5100

2.4351					
28	5.1900	2.7000	168577.2000	122140.6471	3.8700
2.8040					
29	5.2900	2.8000	185130.0000	139819.3714	4.2500
3.2098					
30	5.3900	2.9000	200376.0000	159089.4522	4.6000
3.6522					
31	5.4900	3.0000	213879.6000	179798.3559	4.9100
4.1276					
32	5.5900	3.1000	231303.6000	202051.6082	5.3100
4.6385					
33	5.6900	3.2000	251341.2000	226176.6716	5.7700
5.1923					
34	5.7900	3.3000	276606.0000	252563.6866	6.3500
5.7981					
35	5.8900	3.4000	304920.0000	281628.2009	7.0000
6.4653					
36	5.9900	3.5000	337590.0000	313739.5277	7.7500
7.2025					
37	6.0900	3.6000	371131.2000	349161.9978	8.5200
8.0157					
38	6.1900	3.7000	403801.2000	387896.7477	9.2700
8.9049					
39	6.2900	3.8000	436906.8000	429920.8596	10.0300
9.8696					
40	6.3900	3.9000	471754.8000	475342.3442	10.8300
10.9124					
41	6.4900	4.0000	509652.0000	524399.9940	11.7000
12.0386					
42	6.5900	4.1000	546242.4000	577183.6164	12.5400
13.2503					
43	6.6900	4.2000	581961.6000	633583.8261	13.3600
14.5451					
44	6.7900	4.3000	609404.4000	693146.2619	13.9900
15.9124					
45	6.8900	4.4000	625957.2000	754911.8759	14.3700
17.3304					
46	6.9900	4.5000	638589.6000	818137.5320	14.6600
18.7819					
47	7.0900	4.6000	648172.8000	882474.4138	14.8800
20.2588					
48	7.1900	4.7000	655578.0000	947660.9515	15.0500
21.7553					
49	7.2900	4.8000	659934.0000	1.01344E+06	15.1500
23.2653					
50	7.3900	4.9000	661240.8000	1.07949E+06	15.1800
24.7818					
51	7.4850	4.9950	661240.8000	1.14231E+06	15.1800
26.2239					

=====

| Variable storage data for node | N0120

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.2400	0.0000	435.6000	0.0000	0.0100
0.0000					
2	0.8500	1.0900	435.6000	474.8040	0.0100
0.0109					
3	0.8600	1.1000	435.6000	479.1600	0.0100
0.0110					
4	0.9600	1.2000	871.2000	543.2537	0.0200
0.0125					
5	1.0600	1.3000	1306.8000	651.4192	0.0300
0.0150					
6	1.1600	1.4000	1306.8000	782.0992	0.0300
0.0180					
7	1.2600	1.5000	1742.4000	934.0365	0.0400
0.0214					
8	1.3600	1.6000	2613.6000	1150.3675	0.0600
0.0264					
9	1.4600	1.7000	3049.2000	1433.2250	0.0700
0.0329					
10	1.5600	1.8000	4356.0000	1801.5444	0.1000
0.0414					
11	1.6600	1.9000	5227.2000	2280.0382	0.1200
0.0523					
12	1.7600	2.0000	6098.4000	2845.7533	0.1400
0.0653					
13	1.8600	2.1000	6969.6000	3498.6622	0.1600
0.0803					
14	1.9600	2.2000	8276.4000	4260.0195	0.1900
0.0978					
15	2.0600	2.3000	9147.6000	5130.8475	0.2100
0.1178					
16	2.1600	2.4000	10890.0000	6131.4525	0.2500
0.1408					
17	2.2600	2.5000	11761.2000	7263.7218	0.2700
0.1668					
18	2.3600	2.6000	13068.0000	8504.5959	0.3000
0.1952					
19	2.4600	2.7000	14374.8000	9876.2033	0.3300
0.2267					
20	2.5600	2.8000	15681.6000	11378.5346	0.3600
0.2612					
21	2.6600	2.9000	16988.4000	13011.5825	0.3900

0.2987					
22	2.7600	3.0000	18295.2000	14775.3414	0.4200
0.3392					
23	2.8600	3.1000	19166.4000	16648.2338	0.4400
0.3822					
24	2.9600	3.2000	20037.6000	18608.2528	0.4600
0.4272					
25	3.0600	3.3000	21344.4000	20676.9882	0.4900
0.4747					
26	3.1600	3.4000	22215.6000	22854.8212	0.5100
0.5247					
27	3.2600	3.5000	23522.4000	25141.3871	0.5400
0.5772					
28	3.3600	3.6000	24829.2000	27558.6485	0.5700
0.6327					
29	3.4600	3.7000	26136.0000	30106.6038	0.6000
0.6912					
30	3.5600	3.8000	27442.8000	32785.2513	0.6300
0.7526					
31	3.6600	3.9000	28749.6000	35594.5900	0.6600
0.8171					
32	3.7600	4.0000	30056.4000	38534.6185	0.6900
0.8846					
33	3.8600	4.1000	31363.2000	41605.3361	0.7200
0.9551					
34	3.9600	4.2000	33541.2000	44849.9144	0.7700
1.0296					
35	4.0600	4.3000	36154.8000	48333.8625	0.8300
1.1096					
36	4.1600	4.4000	39639.6000	52122.2088	0.9100
1.1966					
37	4.2600	4.5000	45738.0000	56387.4115	1.0500
1.2945					
38	4.3600	4.6000	53578.8000	61348.0354	1.2300
1.4084					
39	4.4600	4.7000	63597.6000	67199.6452	1.4600
1.5427					
40	4.5600	4.8000	74052.0000	74075.4302	1.7000
1.7005					
41	4.6600	4.9000	84506.4000	81997.5205	1.9400
1.8824					
42	4.7600	5.0000	92782.8000	90858.6704	2.1300
2.0858					
43	4.8600	5.1000	100623.6000	100526.2438	2.3100
2.3078					
44	4.9600	5.2000	109771.2000	111042.5627	2.5200
2.5492					
45	5.0600	5.3000	118047.6000	122430.8824	2.7100
2.8106					
46	5.1600	5.4000	127630.8000	134711.5633	2.9300

3.0926					
47	5.2600	5.5000	138520.8000	148015.2955	3.1800
3.3980					
48	5.3600	5.6000	151588.8000	162515.7226	3.4800
3.7308					
49	5.4600	5.7000	165092.4000	178344.8237	3.7900
4.0942					
50	5.5600	5.8000	179467.2000	195567.6318	4.1200
4.4896					
51	5.6600	5.9000	197326.8000	214400.0851	4.5300
4.9219					
52	5.7600	6.0000	219542.4000	235233.4639	5.0400
5.4002					
53	5.8600	6.1000	242193.6000	258310.7676	5.5600
5.9300					
54	5.9600	6.2000	266587.2000	283739.8014	6.1200
6.5138					
55	6.0600	6.3000	292287.6000	311673.4080	6.7100
7.1550					
56	6.1600	6.4000	317552.4000	342156.3771	7.2900
7.8548					
57	6.2600	6.5000	348044.4000	375424.2376	7.9900
8.6186					
58	6.3600	6.6000	380278.8000	411828.1390	8.7300
9.4543					
59	6.4600	6.7000	411206.4000	451391.9286	9.4400
10.3625					
60	6.5600	6.8000	440827.2000	493984.5988	10.1200
11.3403					
61	6.6600	6.9000	473061.6000	539669.1043	10.8600
12.3891					
62	6.7600	7.0000	501811.2000	588405.1900	11.5200
13.5079					
63	6.8600	7.1000	519670.8000	639476.1770	11.9300
14.6804					
64	6.9600	7.2000	535352.4000	692224.8670	12.2900
15.8913					
65	7.0600	7.3000	554954.4000	746736.7248	12.7400
17.1427					
66	7.1600	7.4000	579783.6000	803468.5296	13.3100
18.4451					
67	7.2600	7.5000	604177.2000	862661.7889	13.8700
19.8040					
68	7.3600	7.6000	622908.0000	924013.0526	14.3000
21.2124					
69	7.4600	7.7000	634669.2000	986890.3672	14.5700
22.6559					
70	7.5600	7.8000	640767.6000	1.05066E+06	14.7100
24.1199					
71	7.6600	7.9000	644252.4000	1.11491E+06	14.7900

25.5948						
72	7.7600	8.0000	647737.2000	1.17951E+06		14.8700
27.0778						
73	7.8600	8.1000	650350.8000	1.24441E+06		14.9300
28.5678						
74	7.9600	8.2000	653400.0000	1.30960E+06		15.0000
30.0643						
75	8.0600	8.3000	655142.4000	1.37503E+06		15.0400
31.5663						
76	8.1600	8.4000	656449.2000	1.44061E+06		15.0700
33.0718						
77	8.2600	8.5000	657320.4000	1.50629E+06		15.0900
34.5798						
78	8.3600	8.6000	658191.6000	1.57207E+06		15.1100
36.0897						
79	8.4600	8.7000	659062.8000	1.63793E+06		15.1300
37.6017						
80	8.5600	8.8000	659934.0000	1.70388E+06		15.1500
39.1157						
81	8.6600	8.9000	661240.8000	1.76994E+06		15.1800
40.6322						
82	8.7600	9.0000	661676.4000	1.83608E+06		15.1900
42.1507						
83	8.8600	9.1000	662547.6000	1.90229E+06		15.2100
43.6707						
84	8.9600	9.2000	663854.4000	1.96861E+06		15.2400
45.1931						
85	9.0600	9.3000	664725.6000	2.03504E+06		15.2600
46.7181						
86	9.1600	9.4000	665596.8000	2.10156E+06		15.2800
48.2451						
87	9.2600	9.5000	666032.4000	2.16814E+06		15.2900
49.7736						
88	9.3600	9.6000	666903.6000	2.23478E+06		15.3100
51.3036						
89	9.4600	9.7000	667339.2000	2.30150E+06		15.3200
52.8351						
90	9.5600	9.8000	667339.2000	2.36823E+06		15.3200
54.3671						
91	9.6600	9.9000	667774.8000	2.43498E+06		15.3300
55.8996						
92	9.7600	10.0000	667774.8000	2.50176E+06		15.3300
57.4326						
93	9.8550	10.0950	667774.8000	2.56520E+06		15.3300
58.8889						

```

*=====*
| Variable storage data for node | N0110
*=====*

```

Data	Elevation	Depth	Area	Volume	Area
------	-----------	-------	------	--------	------

Volume Point ac-ft =====	ft =====	ft =====	ft^2 =====	ft^3 =====	acres =====
1 0.0000	0.7700	0.0000	435.6000	0.0000	0.0100
2 0.0124	2.0100	1.2400	435.6000	540.1440	0.0100
3 0.0125	2.0200	1.2500	435.6000	544.5000	0.0100
4 0.0135	2.1200	1.3500	435.6000	588.0600	0.0100
5 0.0145	2.2200	1.4500	435.6000	631.6200	0.0100
6 0.0160	2.3200	1.5500	871.2000	695.7137	0.0200
7 0.0185	2.4200	1.6500	1306.8000	803.8792	0.0300
8 0.0224	2.5200	1.7500	2178.0000	976.2732	0.0500
9 0.0284	2.6200	1.8500	3049.2000	1236.4121	0.0700
10 0.0373	2.7200	1.9500	4791.6000	1625.1807	0.1100
11 0.0517	2.8200	2.0500	7840.8000	2250.5690	0.1800
12 0.0731	2.9200	2.1500	10890.0000	3182.9354	0.2500
13 0.1015	3.0200	2.2500	13939.2000	4421.2506	0.3200
14 0.1374	3.1200	2.3500	17424.0000	5986.1583	0.4000
15 0.1823	3.2200	2.4500	21780.0000	7942.2928	0.5000
16 0.2387	3.3200	2.5500	27442.8000	10397.9613	0.6300
17 0.3105	3.4200	2.6500	35283.6000	13526.0503	0.8100
18 0.3999	3.5200	2.7500	42688.8000	17418.7574	0.9800
19 0.5077	3.6200	2.8500	51400.8000	22116.4537	1.1800
20 0.6375	3.7200	2.9500	61855.2000	27771.1381	1.4200
21 0.7938	3.8200	3.0500	74487.6000	34578.4356	1.7100
22 0.9801	3.9200	3.1500	87991.2000	42692.9259	2.0200
23	4.0200	3.2500	101930.4000	52180.3740	2.3400

1.1979						
24	4.1200	3.3500	114562.8000	62998.7780		2.6300
1.4463						
25	4.2200	3.4500	127195.2000	75081.0529		2.9200
1.7236						
26	4.3200	3.5500	138520.8000	88362.6955		3.1800
2.0285						
27	4.4200	3.6500	150717.6000	102820.1830		3.4600
2.3604						
28	4.5200	3.7500	162914.4000	118497.6720		3.7400
2.7203						
29	4.6200	3.8500	175982.4000	135438.1418		4.0400
3.1092						
30	4.7200	3.9500	191664.0000	153814.7015		4.4000
3.5311						
31	4.8200	4.0500	210394.8000	173910.1648		4.8300
3.9924						
32	4.9200	4.1500	233046.0000	196072.3349		5.3500
4.5012						
33	5.0200	4.2500	259617.6000	220693.3173		5.9600
5.0664						
34	5.1200	4.3500	291416.4000	248229.4372		6.6900
5.6986						
35	5.2200	4.4500	327135.6000	279139.5249		7.5100
6.4082						
36	5.3200	4.5500	366339.6000	313794.4544		8.4100
7.2037						
37	5.4200	4.6500	405108.0000	352350.2030		9.3000
8.0888						
38	5.5200	4.7500	445618.8000	394870.0329		10.2300
9.0650						
39	5.6200	4.8500	481338.0000	441205.9353		11.0500
10.1287						
40	5.7200	4.9500	517928.4000	491157.5867		11.8900
11.2754						
41	5.8200	5.0500	551034.0000	544596.6263		12.6500
12.5022						
42	5.9200	5.1500	583704.0000	601325.1191		13.4000
13.8045						
43	6.0200	5.2500	617245.2000	661364.1708		14.1700
15.1828						
44	6.1200	5.3500	648608.4000	724649.7414		14.8900
16.6357						
45	6.2200	5.4500	677793.6000	790963.8262		15.5600
18.1580						
46	6.3200	5.5500	708285.6000	860261.5026		16.2600
19.7489						
47	6.4200	5.6500	743133.6000	932824.7636		17.0600
21.4147						
48	6.5200	5.7500	782337.6000	1.00909E+06		17.9600

23.1655					
49	6.6200	5.8500	821106.0000	1.08925E+06	18.8500
25.0058					
50	6.7200	5.9500	867279.6000	1.17366E+06	19.9100
26.9435					
51	6.8200	6.0500	922165.2000	1.26312E+06	21.1700
28.9972					
52	6.9200	6.1500	987505.2000	1.35858E+06	22.6700
31.1887					
53	7.0200	6.2500	1065913.200	1.46123E+06	24.4700
33.5452					
54	7.1200	6.3500	1153033.200	1.57214E+06	26.4700
36.0915					
55	7.2200	6.4500	1242331.200	1.69188E+06	28.5200
38.8403					
56	7.3200	6.5500	1322481.600	1.82010E+06	30.3600
41.7838					
57	7.4200	6.6500	1386950.400	1.95556E+06	31.8400
44.8935					
58	7.5200	6.7500	1435302.000	2.09666E+06	32.9500
48.1328					
59	7.6200	6.8500	1479733.200	2.24241E+06	33.9700
51.4786					
60	7.7200	6.9500	1525035.600	2.39264E+06	35.0100
54.9275					
61	7.8200	7.0500	1572951.600	2.54753E+06	36.1100
58.4833					
62	7.9200	7.1500	1616947.200	2.70702E+06	37.1200
62.1446					
63	8.0200	7.2500	1660942.800	2.87091E+06	38.1300
65.9070					
64	8.1200	7.3500	1705809.600	3.03924E+06	39.1600
69.7713					
65	8.2200	7.4500	1747191.600	3.21188E+06	40.1100
73.7347					
66	8.3200	7.5500	1787702.400	3.38862E+06	41.0400
77.7921					
67	8.4200	7.6500	1833440.400	3.56967E+06	42.0900
81.9484					
68	8.5200	7.7500	1894424.400	3.75606E+06	43.4900
86.2272					
69	8.6200	7.8500	2001582.000	3.95083E+06	45.9500
90.6986					
70	8.7200	7.9500	2094800.400	4.15563E+06	48.0900
95.4001					
71	8.8200	8.0500	2155784.400	4.36815E+06	49.4900
100.2789					
72	8.9200	8.1500	2195424.000	4.58570E+06	50.4000
105.2733					
73	9.0200	8.2500	2215026.000	4.80622E+06	50.8500

110.3357						
74	9.1200	8.3500	2222866.800	5.02812E+06		51.0300
115.4297						
75	9.2200	8.4500	2226351.600	5.25057E+06		51.1100
120.5366						
76	9.3200	8.5500	2227222.800	5.47325E+06		51.1300
125.6486						
77	9.4200	8.6500	2227658.400	5.69599E+06		51.1400
130.7620						
78	9.5200	8.7500	2228094.000	5.91878E+06		51.1500
135.8764						
79	9.6150	8.8450	2228094.000	6.13045E+06		51.1500
140.7357						

=====

| Variable storage data for node | N0170

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.7100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	4.7600	5.4700	54450.0000	101502.2664	1.2500
2.3302					
3	4.8600	5.5700	56192.4000	107034.1024	1.2900
2.4572					
4	4.9600	5.6700	58806.0000	112783.4698	1.3500
2.5892					
5	5.2600	5.9700	67518.0000	131716.8419	1.5500
3.0238					
6	5.3600	6.0700	70131.6000	138598.8395	1.6100
3.1818					
7	5.4600	6.1700	73616.4000	145785.4635	1.6900
3.3468					
8	5.5600	6.2700	76665.6000	153298.9728	1.7600
3.5193					
9	5.6600	6.3700	79714.8000	161117.4191	1.8300
3.6987					
10	5.7600	6.4700	84070.8000	169305.6516	1.9300
3.8867					
11	5.8600	6.5700	88862.4000	177951.1186	2.0400
4.0852					
12	5.9600	6.6700	94960.8000	187140.5002	2.1800
4.2962					
13	6.0600	6.7700	103237.2000	197047.4198	2.3700
4.5236					
14	6.1600	6.8700	113691.6000	207889.5504	2.6100

4.7725					
15	6.2600	6.9700	127630.8000	219948.8346	2.9300
5.0493					
16	6.3600	7.0700	145054.8000	233573.6909	3.3300
5.3621					
17	6.4600	7.1700	167706.0000	249197.8861	3.8500
5.7208					
18	6.5600	7.2700	196891.2000	267408.0643	4.5200
6.1388					
19	6.6600	7.3700	236966.4000	289069.8138	5.4400
6.6361					
20	6.7600	7.4700	285318.0000	315146.3907	6.5500
7.2348					
21	6.8600	7.5700	355014.0000	347099.2665	8.1500
7.9683					
22	6.9600	7.6700	443876.4000	386960.7618	10.1900
8.8834					
23	7.0600	7.7700	535352.4000	435850.3455	12.2900
10.0057					
24	7.1600	7.8700	609840.0000	493068.9759	14.0000
11.3193					
25	7.2600	7.9700	668210.4000	556948.6300	15.3400
12.7858					
26	7.3600	8.0700	720046.8000	626344.6610	16.5300
14.3789					
27	7.4600	8.1700	771012.0000	700882.3346	17.7000
16.0900					
28	7.5600	8.2700	820670.4000	780452.7451	18.8400
17.9167					
29	7.6600	8.3700	860745.6000	864514.7437	19.7600
19.8465					
30	7.7600	8.4700	895158.0000	952303.4251	20.5500
21.8619					
31	7.8600	8.5700	922600.8000	1.04319E+06	21.1800
23.9483					
32	7.9600	8.6700	944816.4000	1.13655E+06	21.6900
26.0917					
33	8.0600	8.7700	959626.8000	1.23177E+06	22.0300
28.2777					
34	8.1600	8.8700	970081.2000	1.32826E+06	22.2700
30.4926					
35	8.2600	8.9700	977922.0000	1.42566E+06	22.4500
32.7286					
36	8.3600	9.0700	985327.2000	1.52382E+06	22.6200
34.9821					
37	8.4600	9.1700	994039.2000	1.62279E+06	22.8200
37.2540					
38	8.5600	9.2700	1004058.000	1.72269E+06	23.0500
39.5475					
39	8.6600	9.3700	1010156.400	1.82340E+06	23.1900

41.8595						
40	8.7600	9.4700	1051974.000	1.92650E+06		24.1500
44.2263						
41	8.8600	9.5700	1085079.600	2.03334E+06		24.9100
46.6792						
42	8.9600	9.6700	1100325.600	2.14261E+06		25.2600
49.1876						
43	9.0600	9.7700	1102068.000	2.25273E+06		25.3000
51.7156						
44	9.1600	9.8700	1102503.600	2.36296E+06		25.3100
54.2461						
45	12.4600	13.1700	1112958.000	6.01842E+06		25.5500
138.1639						
46	12.5650	13.2750	1112958.000	6.13528E+06		25.5500
140.8467						

=====

| Variable storage data for node | N0210

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.7200	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.3200	0.4000	26.1360	10.4544	0.0006
0.0002					
3	-0.3100	0.4100	1742400.000	5840.9775	40.0000
0.1341					
4	-0.3000	0.4200	1746756.000	23286.5785	40.1000
0.5346					
5	2.2400	2.9600	2004631.200	4.78374E+06	46.0200
109.8197					
6	3.6400	4.3600	2908065.600	8.20305E+06	66.7600
188.3161					
7	5.3400	6.0600	3228231.600	13.41648E+06	74.1100
308.0000					
8	15.0400	15.7600	3682562.400	46.90933E+06	84.5400
1076.8900					

=====

| Variable storage data for node | N0260

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====

=====

1	-0.2300	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.0700	0.3000	4356.0000	471.9503	0.1000
0.0108					
3	0.1700	0.4000	8712.0000	1112.8877	0.2000
0.0255					
4	0.2700	0.5000	16988.4000	2375.0766	0.3900
0.0545					
5	0.3700	0.6000	30927.6000	4736.3141	0.7100
0.1087					
6	0.4700	0.7000	54014.4000	8930.0784	1.2400
0.2050					
7	0.5700	0.8000	87991.2000	15961.5446	2.0200
0.3664					
8	0.6700	0.9000	139392.0000	27232.4945	3.2000
0.6252					
9	0.7700	1.0000	207781.2000	44477.6054	4.7700
1.0211					
10	0.8700	1.1000	303177.6000	69875.5535	6.9600
1.6041					
11	0.9700	1.2000	428194.8000	106264.4075	9.8300
2.4395					
12	1.0700	1.3000	574120.8000	156201.6966	13.1800
3.5859					
13	1.1700	1.4000	739648.8000	221715.0291	16.9800
5.0899					
14	1.2700	1.5000	923036.4000	304679.3859	21.1900
6.9945					
15	1.3700	1.6000	1114700.400	406414.6465	25.5900
9.3300					
16	1.5700	1.8000	1501077.600	667033.3967	34.4600
15.3130					
17	1.6700	1.9000	1692741.600	826626.8249	38.8600
18.9767					
18	1.7700	2.0000	1877871.600	1.00508E+06	43.1100
23.0734					
19	1.8700	2.1000	2063437.200	1.20207E+06	47.3700
27.5956					
20	1.9700	2.2000	2238984.000	1.41713E+06	51.4000
32.5327					
21	2.2700	2.5000	2767366.800	2.16667E+06	63.5300
49.7400					
22	2.3700	2.6000	2945091.600	2.45225E+06	67.6100
56.2958					
23	2.4700	2.7000	3131092.800	2.75601E+06	71.8800
63.2692					
24	2.5700	2.8000	3328855.200	3.07895E+06	76.4200
70.6829					
25	2.6700	2.9000	3538814.400	3.42228E+06	81.2400

78.5646						
26	2.7700	3.0000	3757050.000	3.78701E+06	86.2500	
86.9378						
27	2.8700	3.1000	3980077.200	4.17381E+06	91.3700	
95.8175						
28	2.9700	3.2000	4206153.600	4.58306E+06	96.5600	
105.2127						
29	3.0700	3.3000	4420033.200	5.01433E+06	101.4700	
115.1131						
30	3.1700	3.4000	4619973.600	5.46628E+06	106.0600	
125.4886						
31	3.2700	3.5000	4809024.000	5.93770E+06	110.4000	
136.3108						
32	3.3700	3.6000	4990669.200	6.42765E+06	114.5700	
147.5585						
33	3.4700	3.7000	5163602.400	6.93533E+06	118.5400	
159.2134						
34	3.5700	3.8000	5333922.000	7.46018E+06	122.4500	
171.2622						
35	3.6700	3.9000	5499450.000	8.00182E+06	126.2500	
183.6966						
36	4.2700	4.5000	6513526.800	11.60139E+06	149.5300	
266.3313						
37	4.3700	4.6000	6683410.800	12.26122E+06	153.4300	
281.4788						
38	4.4700	4.7000	6848938.800	12.93781E+06	157.2300	
297.0112						
39	4.6700	4.9000	7185657.600	14.34112E+06	164.9600	
329.2268						
40	4.7700	5.0000	7353799.200	15.06807E+06	168.8200	
345.9153						
41	4.8700	5.1000	7516713.600	15.81157E+06	172.5600	
362.9838						
42	5.4700	5.7000	8463272.400	20.60271E+06	194.2900	
472.9733						
43	5.5700	5.8000	8621395.200	21.45693E+06	197.9200	
492.5833						
44	5.6700	5.9000	8788230.000	22.32739E+06	201.7500	
512.5663						
45	5.7700	6.0000	8954629.200	23.21451E+06	205.5700	
532.9318						
46	5.8700	6.1000	9127998.000	24.11862E+06	209.5500	
553.6872						
47	5.9700	6.2000	9309207.600	25.04045E+06	213.7100	
574.8497						
48	6.1700	6.4000	9676418.400	26.93888E+06	222.1400	
618.4315						
49	6.2700	6.5000	9857192.400	27.91553E+06	226.2900	
640.8525						
50	6.3700	6.6000	10043629.20	28.91055E+06	230.5700	

663.6949					
51	6.4700	6.7000	10220482.80	29.92373E+06	234.6300
686.9544					
52	6.5700	6.8000	10396465.20	30.95456E+06	238.6700
710.6189					
53	6.6700	6.9000	10565478.00	32.00263E+06	242.5500
734.6794					
54	6.7700	7.0000	10729699.20	33.06737E+06	246.3200
759.1224					
55	6.8700	7.1000	10890000.00	34.14834E+06	250.0000
783.9379					
56	6.9700	7.2000	11048994.00	35.24526E+06	253.6500
809.1199					
57	7.0700	7.3000	11204067.60	36.35790E+06	257.2100
834.6625					
58	7.1700	7.4000	11356092.00	37.48589E+06	260.7000
860.5575					
59	7.2700	7.5000	11516392.80	38.62949E+06	264.3800
886.8110					
60	7.5700	7.8000	11992503.60	42.15555E+06	275.3100
967.7582					
61	7.6700	7.9000	12151062.00	43.36270E+06	278.9500
995.4707					
62	7.7700	8.0000	12316590.00	44.58607E+06	282.7500
1023.5552					
63	8.0700	8.3000	12799234.80	48.35317E+06	293.8300
1110.0360					
64	8.1700	8.4000	12958228.80	49.64102E+06	297.4800
1139.6011					
65	8.2700	8.5000	13107639.60	50.94430E+06	300.9100
1169.5201					
66	8.3700	8.6000	13264455.60	52.26288E+06	304.5100
1199.7906					
67	8.4700	8.7000	13426063.20	53.59738E+06	308.2200
1230.4266					
68	8.5700	8.8000	13589413.20	54.94814E+06	311.9700
1261.4356					
69	8.6700	8.9000	13762782.00	56.31572E+06	315.9500
1292.8311					
70	8.7700	9.0000	13941378.00	57.70091E+06	320.0500
1324.6306					
71	8.8700	9.1000	14127379.20	59.10432E+06	324.3200
1356.8485					
72	8.9700	9.2000	14313816.00	60.52636E+06	328.6000
1389.4939					
73	9.0700	9.3000	14508529.20	61.96745E+06	333.0700
1422.5769					
74	9.1700	9.4000	14702806.80	63.42799E+06	337.5300
1456.1063					
75	9.2700	9.5000	14893164.00	64.90776E+06	341.9000

1490.0772					
76	9.3700	9.6000	15073502.40	66.40607E+06	346.0400
1524.4737					
77	9.4700	9.7000	15250791.60	67.92226E+06	350.1100
1559.2806					
78	9.5700	9.8000	15421546.80	69.45586E+06	354.0300
1594.4871					
79	9.6700	9.9000	15584025.60	71.00611E+06	357.7600
1630.0761					
80	9.7700	10.0000	15731694.00	72.57188E+06	361.1500
1666.0211					
81	9.8700	10.1000	15870214.80	74.15195E+06	364.3300
1702.2946					
82	9.9700	10.2000	15996103.20	75.74525E+06	367.2200
1738.8716					
83	10.0700	10.3000	16110230.40	77.35054E+06	369.8400
1775.7242					
84	10.1700	10.4000	16213903.20	78.96673E+06	372.2200
1812.8267					
85	10.2700	10.5000	16303636.80	80.59259E+06	374.2800
1850.1513					
86	10.3700	10.6000	16384658.40	82.22699E+06	376.1400
1887.6719					
87	10.4700	10.7000	16456096.80	83.86901E+06	377.7800
1925.3675					
88	10.5700	10.8000	16516209.60	85.51761E+06	379.1600
1963.2141					
89	10.6700	10.9000	16566739.20	87.17174E+06	380.3200
2001.1877					
90	10.7700	11.0000	16609863.60	88.83055E+06	381.3100
2039.2688					
91	10.8700	11.1000	16644711.60	90.49326E+06	382.1100
2077.4394					
92	10.9700	11.2000	16671718.80	92.15907E+06	382.7300
2115.6810					
93	11.0700	11.3000	16691756.40	93.82722E+06	383.1900
2153.9767					
94	11.1700	11.4000	16706566.80	95.49712E+06	383.5300
2192.3123					
95	11.2700	11.5000	16718763.60	97.16837E+06	383.8100
2230.6789					
96	11.3700	11.6000	16727475.60	98.84067E+06	384.0100
2269.0695					
97	13.1700	13.4000	16752740.40	128.97256E+06	384.5900
2960.8025					
98	13.2900	13.5200	16752740.40	130.98289E+06	384.5900
3006.9533					

=====

| Variable storage data for node | N0250

=====						
Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres	
=====	=====	=====	=====	=====	=====	
1	2.3000	0.0000	435.6000	0.0000	0.0100	
0.0000						
2	2.4000	0.1000	871.2000	64.0937	0.0200	
0.0015						
3	2.5000	0.2000	1306.8000	172.2592	0.0300	
0.0040						
4	2.6000	0.3000	3049.2000	383.9961	0.0700	
0.0088						
5	2.7000	0.4000	5662.8000	812.9038	0.1300	
0.0187						
6	2.8000	0.5000	8712.0000	1526.1846	0.2000	
0.0350						
7	2.9000	0.6000	13503.6000	2628.2387	0.3100	
0.0603						
8	3.0000	0.7000	18730.8000	4232.8318	0.4300	
0.0972						
9	3.1000	0.8000	25264.8000	6424.4582	0.5800	
0.1475						
10	3.2000	0.9000	32670.0000	9313.2491	0.7500	
0.2138						
11	3.3000	1.0000	40946.4000	12986.2537	0.9400	
0.2981						
12	3.4000	1.1000	48351.6000	17445.9828	1.1100	
0.4005						
13	3.5000	1.2000	57063.6000	22710.6799	1.3100	
0.5214						
14	3.6000	1.3000	65775.6000	28847.4231	1.5100	
0.6622						
15	3.7000	1.4000	74052.0000	35834.6473	1.7000	
0.8227						
16	3.8000	1.5000	83199.6000	43692.7105	1.9100	
1.0030						
17	3.9000	1.6000	93654.0000	52530.1477	2.1500	
1.2059						
18	4.0000	1.7000	104979.6000	62456.3427	2.4100	
1.4338						
19	4.1000	1.8000	117612.0000	73579.8325	2.7000	
1.6892						
20	4.2000	1.9000	130244.4000	85967.1598	2.9900	
1.9735						
21	4.3000	2.0000	144619.2000	99703.9334	3.3200	
2.2889						
22	4.4000	2.1000	158994.0000	114878.7669	3.6500	

2.6373						
23	4.5000	2.2000	175111.2000	131577.3771	4.0200	
3.0206						
24	4.6000	2.3000	194713.2000	150059.7480	4.4700	
3.4449						
25	4.7000	2.4000	216493.2000	170610.2424	4.9700	
3.9167						
26	4.8000	2.5000	238708.8000	193361.0745	5.4800	
4.4390						
27	4.9000	2.6000	263538.0000	218462.9283	6.0500	
5.0152						
28	5.0000	2.7000	288802.8000	246070.0568	6.6300	
5.6490						
29	5.1000	2.8000	315374.4000	276268.8717	7.2400	
6.3423						
30	5.2000	2.9000	341074.8000	309082.6154	7.8300	
7.0956						
31	5.3000	3.0000	367646.4000	344510.0163	8.4400	
7.9089						
32	5.4000	3.1000	391168.8000	382444.3191	8.9800	
8.7797						
33	5.5000	3.2000	415562.4000	422774.3277	9.5400	
9.7056						
34	5.6000	3.3000	441698.4000	465630.2974	10.1400	
10.6894						
35	5.7000	3.4000	475239.6000	511466.5112	10.9100	
11.7417						
36	5.8000	3.5000	510087.6000	560722.1049	11.7100	
12.8724						
37	5.9000	3.6000	544500.0000	613441.5976	12.5000	
14.0827						
38	6.0000	3.7000	578912.4000	669602.8695	13.2900	
15.3720						
39	6.1000	3.8000	616809.6000	729378.3600	14.1600	
16.7442						
40	6.2000	3.9000	655142.4000	792965.6949	15.0400	
18.2040						
41	6.3000	4.0000	693039.6000	860365.2418	15.9100	
19.7513						
42	6.4000	4.1000	729194.4000	931468.5704	16.7400	
21.3836						
43	6.5000	4.2000	762735.6000	1.00606E+06	17.5100	
23.0959						
44	6.6000	4.3000	795405.6000	1.08396E+06	18.2600	
24.8843						
45	6.7000	4.4000	825462.0000	1.16500E+06	18.9500	
26.7446						
46	6.8000	4.5000	852904.8000	1.24891E+06	19.5800	
28.6710						
47	6.9000	4.6000	878605.2000	1.33548E+06	20.1700	

30.6584						
48	7.0000	4.7000	906483.6000	1.42473E+06	20.8100	
32.7073						
49	7.1000	4.8000	930006.0000	1.51655E+06	21.3500	
34.8153						
50	7.2000	4.9000	949608.0000	1.61053E+06	21.8000	
36.9727						
51	7.3000	5.0000	965725.2000	1.70630E+06	22.1700	
39.1712						
52	7.4000	5.1000	978357.6000	1.80350E+06	22.4600	
41.4026						
53	7.5000	5.2000	987069.6000	1.90177E+06	22.6600	
43.6586						
54	7.6000	5.3000	992296.8000	2.00074E+06	22.7800	
45.9306						
55	7.7000	5.4000	996652.8000	2.10018E+06	22.8800	
48.2135						
56	7.8000	5.5000	998830.8000	2.19995E+06	22.9300	
50.5040						
57	7.9000	5.6000	1001008.800	2.29995E+06	22.9800	
52.7995						
58	8.0000	5.7000	1002315.600	2.40011E+06	23.0100	
55.0990						
59	8.1000	5.8000	1003622.400	2.50041E+06	23.0400	
57.4014						
60	8.2000	5.9000	1004493.600	2.60081E+06	23.0600	
59.7064						
61	8.3000	6.0000	1005364.800	2.70130E+06	23.0800	
62.0134						
62	8.4000	6.1000	1005800.400	2.80186E+06	23.0900	
64.3219						
63	8.5000	6.2000	1006671.600	2.90248E+06	23.1100	
66.6318						
64	8.6000	6.3000	1007107.200	3.00317E+06	23.1200	
68.9433						
65	8.7000	6.4000	1007542.800	3.10390E+06	23.1300	
71.2558						
66	8.8000	6.5000	1008414.000	3.20470E+06	23.1500	
73.5698						
67	8.9000	6.6000	1008414.000	3.30554E+06	23.1500	
75.8848						
68	9.0000	6.7000	1008849.600	3.40640E+06	23.1600	
78.2003						
69	9.1000	6.8000	1008849.600	3.50729E+06	23.1600	
80.5163						
70	9.2000	6.9000	1008849.600	3.60817E+06	23.1600	
82.8323						
71	9.3000	7.0000	1008849.600	3.70906E+06	23.1600	
85.1483						
72	9.4000	7.1000	1008849.600	3.80994E+06	23.1600	

87.4643					
73	9.5000	7.2000	1008849.600	3.91083E+06	23.1600
89.7803					
74	9.6000	7.3000	1008849.600	4.01171E+06	23.1600
92.0963					
75	9.7000	7.4000	1008849.600	4.11260E+06	23.1600
94.4123					
76	9.8000	7.5000	1008849.600	4.21348E+06	23.1600
96.7283					
77	9.9000	7.6000	1008849.600	4.31437E+06	23.1600
99.0443					
78	10.0000	7.7000	1008849.600	4.41525E+06	23.1600
101.3603					
79	10.0800	7.7800	1008849.600	4.49596E+06	23.1600
103.2131					

=====

| Variable storage data for node | N0240

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.4400	0.0000	435.6000	0.0000	0.0100
0.0000					
2	1.5400	0.1000	435.6000	43.5600	0.0100
0.0010					
3	1.6400	0.2000	1306.8000	126.7885	0.0300
0.0029					
4	1.7400	0.3000	2613.6000	319.0698	0.0600
0.0073					
5	1.8400	0.4000	4356.0000	663.8578	0.1000
0.0152					
6	1.9400	0.5000	6098.4000	1184.1355	0.1400
0.0272					
7	2.0400	0.6000	8712.0000	1920.7742	0.2000
0.0441					
8	2.1400	0.7000	11761.2000	2940.6183	0.2700
0.0675					
9	2.2400	0.8000	15681.6000	4308.0534	0.3600
0.0989					
10	2.3400	0.9000	19166.4000	6047.5248	0.4400
0.1388					
11	2.4400	1.0000	23086.8000	8157.1259	0.5300
0.1873					
12	2.5400	1.1000	27007.2000	10659.2401	0.6200
0.2447					
13	2.6400	1.2000	31798.8000	13596.2518	0.7300

0.3121					
14	2.7400	1.3000	37461.6000	17055.3724	0.8600
0.3915					
15	2.8400	1.4000	41817.6000	21017.2968	0.9600
0.4825					
16	2.9400	1.5000	46173.6000	25415.0147	1.0600
0.5834					
17	3.0400	1.6000	49658.4000	30205.5104	1.1400
0.6934					
18	3.1400	1.7000	53143.2000	35344.5544	1.2200
0.8114					
19	3.2400	1.8000	57063.6000	40853.6767	1.3100
0.9379					
20	3.3400	1.9000	60548.4000	46733.3573	1.3900
1.0729					
21	3.4400	2.0000	63597.6000	52939.9710	1.4600
1.2153					
22	3.5400	2.1000	66646.8000	59451.5309	1.5300
1.3648					
23	3.6400	2.2000	68824.8000	66224.7514	1.5800
1.5203					
24	3.7400	2.3000	71438.4000	73237.4354	1.6400
1.6813					
25	3.8400	2.4000	74487.6000	80533.1314	1.7100
1.8488					
26	3.9400	2.5000	77101.2000	88112.1201	1.7700
2.0228					
27	4.0400	2.6000	80586.0000	95995.7594	1.8500
2.2038					
28	4.1400	2.7000	84942.0000	104271.1212	1.9500
2.3937					
29	4.2400	2.8000	90169.2000	113025.2931	2.0700
2.5947					
30	4.3400	2.9000	94960.8000	122280.6669	2.1800
2.8072					
31	4.4400	3.0000	101059.2000	132079.9874	2.3200
3.0321					
32	4.5400	3.1000	109335.6000	142596.9081	2.5100
3.2736					
33	4.6400	3.2000	116740.8000	153898.5932	2.6800
3.5330					
34	4.7400	3.3000	124146.0000	165940.9153	2.8500
3.8095					
35	4.8400	3.4000	130244.4000	178659.0896	2.9900
4.1014					
36	4.9400	3.5000	136342.8000	191987.1537	3.1300
4.4074					
37	5.0400	3.6000	142441.2000	205925.1025	3.2700
4.7274					
38	5.1400	3.7000	148104.0000	220451.2974	3.4000

5.0609						
39	5.2400	3.8000	154638.0000	235587.0707		3.5500
5.4083						
40	5.3400	3.9000	161607.6000	251397.9124		3.7100
5.7713						
41	5.4400	4.0000	169448.4000	267948.9992		3.8900
6.1513						
42	5.5400	4.1000	177724.8000	285305.8412		4.0800
6.5497						
43	5.6400	4.2000	186436.8000	303512.0020		4.2800
6.9677						
44	5.7400	4.3000	197762.4000	322718.9872		4.5400
7.4086						
45	5.8400	4.4000	214315.2000	343317.1180		4.9200
7.8815						
46	5.9400	4.5000	236530.8000	365850.0648		5.4300
8.3988						
47	6.0400	4.6000	255261.6000	390433.4918		5.8600
8.9631						
48	6.1400	4.7000	272250.0000	416804.2477		6.2500
9.5685						
49	6.2400	4.8000	284882.4000	444658.2020		6.5400
10.2079						
50	6.3400	4.9000	294465.6000	473623.9912		6.7600
10.8729						
51	6.4400	5.0000	300564.0000	503374.6528		6.9000
11.5559						
52	6.5400	5.1000	304920.0000	533648.2889		7.0000
12.2509						
53	6.6400	5.2000	307533.6000	564270.5698		7.0600
12.9539						
54	6.7400	5.3000	308840.4000	595088.9385		7.0900
13.6614						
55	6.8400	5.4000	309711.6000	626016.2190		7.1100
14.3714						
56	6.9400	5.5000	310147.2000	657008.8465		7.1200
15.0828						
57	7.0400	5.6000	310582.8000	688045.0336		7.1300
15.7953						
58	7.1200	5.6800	310582.8000	712891.6576		7.1300
16.3657						

=====

| Variable storage data for node | N0140

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====

=====

1	-1.9000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.6600	2.5600	1306.8000	1295.1298	0.0300
0.0297					
3	0.7600	2.6600	2613.6000	1487.4110	0.0600
0.0341					
4	0.8600	2.7600	5662.8000	1891.5242	0.1300
0.0434					
5	0.9600	2.8600	9147.6000	2625.1066	0.2100
0.0603					
6	1.0600	2.9600	12196.8000	3688.6673	0.2800
0.0847					
7	1.1600	3.0600	16117.2000	5099.8077	0.3700
0.1171					
8	1.2600	3.1600	20473.2000	6924.9726	0.4700
0.1590					
9	1.3600	3.2600	48787.2000	10287.0948	1.1200
0.2362					
10	1.4600	3.3600	53143.2000	15382.0118	1.2200
0.3531					
11	2.1600	4.0600	78408.0000	61138.7712	1.8000
1.4036					
12	2.2600	4.1600	81892.8000	69153.0996	1.8800
1.5875					
13	2.3600	4.2600	87120.0000	77602.3076	2.0000
1.7815					
14	2.5600	4.4600	97138.8000	96018.9174	2.2300
2.2043					
15	2.6600	4.5600	102366.0000	105992.9162	2.3500
2.4333					
16	2.7600	4.6600	108464.4000	116532.8605	2.4900
2.6752					
17	3.0600	4.9600	130680.0000	152352.4569	3.0000
3.4975					
18	3.1600	5.0600	139392.0000	165853.5793	3.2000
3.8075					
19	3.2600	5.1600	149846.4000	180312.2048	3.4400
4.1394					
20	3.3600	5.2600	160736.4000	195838.0066	3.6900
4.4958					
21	3.4600	5.3600	172933.2000	212517.6032	3.9700
4.8787					
22	3.5600	5.4600	186001.2000	230460.1777	4.2700
5.2906					
23	3.6600	5.5600	197326.8000	249623.5969	4.5300
5.7306					
24	3.7600	5.6600	209088.0000	269941.2969	4.8000
6.1970					
25	3.8600	5.7600	220849.2000	291435.2603	5.0700

6.6904						
26	3.9600	5.8600	234788.4000	314213.3580		5.3900
7.2133						
27	4.0600	5.9600	248727.6000	338385.5669		5.7100
7.7683						
28	4.1600	6.0600	263102.4000	363973.4460		6.0400
8.3557						
29	4.2600	6.1600	278348.4000	391042.1372		6.3900
8.9771						
30	4.3600	6.2600	295772.4000	419743.4825		6.7900
9.6360						
31	4.4600	6.3600	317552.4000	450402.9685		7.2900
10.3398						
32	4.5600	6.4600	340639.2000	483305.4691		7.8200
11.0952						
33	4.6600	6.5600	366775.2000	518667.7859		8.4200
11.9070						
34	4.7600	6.6600	393782.4000	556687.2914		9.0400
12.7798						
35	4.8600	6.7600	423403.2000	597537.2127		9.7200
13.7176						
36	4.9600	6.8600	457380.0000	641565.0060		10.5000
14.7283						
37	5.0600	6.9600	494406.0000	689141.8226		11.3500
15.8205						
38	5.1600	7.0600	528382.8000	740271.3429		12.1300
16.9943						
39	5.2600	7.1600	561488.4000	794755.9760		12.8900
18.2451						
40	5.3600	7.2600	598514.4000	852745.6850		13.7400
19.5763						
41	5.4600	7.3600	636847.2000	914503.2330		14.6200
20.9941						
42	5.5600	7.4600	676486.8000	980159.3040		15.5300
22.5014						
43	5.6600	7.5600	722660.4000	1.05010E+06		16.5900
24.1071						
44	5.7600	7.6600	776239.2000	1.12503E+06		17.8200
25.8272						
45	5.8600	7.7600	831560.4000	1.20540E+06		19.0900
27.6723						
46	5.9600	7.8600	890802.0000	1.29151E+06		20.4500
29.6489						
47	6.0600	7.9600	949172.4000	1.38349E+06		21.7900
31.7605						
48	6.1600	8.0600	1007542.800	1.48131E+06		23.1300
34.0061						
49	6.2600	8.1600	1065913.200	1.58497E+06		24.4700
36.3858						
50	6.3600	8.2600	1122105.600	1.69435E+06		25.7600

38.8970					
51	6.4600	8.3600	1180476.000	1.80947E+06	27.1000
41.5397					
52	6.5600	8.4600	1245380.400	1.93075E+06	28.5900
44.3238					
53	6.6600	8.5600	1315947.600	2.05880E+06	30.2100
47.2634					
54	6.7600	8.6600	1387386.000	2.19394E+06	31.8500
50.3660					
55	6.8600	8.7600	1453597.200	2.33598E+06	33.3700
53.6267					
56	6.9600	8.8600	1521550.800	2.48472E+06	34.9300
57.0414					
57	7.0600	8.9600	1580792.400	2.63983E+06	36.2900
60.6021					
58	7.1600	9.0600	1640034.000	2.80086E+06	37.6500
64.2989					
59	7.2600	9.1600	1694048.400	2.96755E+06	38.8900
68.1257					
60	7.3600	9.2600	1750240.800	3.13976E+06	40.1800
72.0790					
61	7.4600	9.3600	1805997.600	3.31756E+06	41.4600
76.1608					
62	7.5600	9.4600	1861318.800	3.50092E+06	42.7300
80.3701					
63	7.6600	9.5600	1915333.200	3.68974E+06	43.9700
84.7049					
64	7.7600	9.6600	1968912.000	3.88395E+06	45.2000
89.1632					
65	7.8600	9.7600	2017699.200	4.08327E+06	46.3200
93.7390					
66	7.9600	9.8600	2061259.200	4.28721E+06	47.3200
98.4209					
67	8.0600	9.9600	2103512.400	4.49545E+06	48.2900
103.2013					
68	8.1600	10.0600	2145765.600	4.70790E+06	49.2600
108.0786					
69	8.2600	10.1600	2191068.000	4.92474E+06	50.3000
113.0565					
70	8.3600	10.2600	2246824.800	5.14663E+06	51.5800
118.1503					
71	8.4600	10.3600	2295612.000	5.37374E+06	52.7000
123.3641					
72	8.5600	10.4600	2337429.600	5.60539E+06	53.6600
128.6820					
73	8.6600	10.5600	2376633.600	5.84109E+06	54.5600
134.0929					
74	8.7600	10.6600	2415402.000	6.08068E+06	55.4500
139.5933					
75	8.8600	10.7600	2451121.200	6.32401E+06	56.2700

145.1792						
76	8.9600	10.8600	2466802.800	6.56990E+06		56.6300
150.8241						
77	9.0600	10.9600	2477257.200	6.81710E+06		56.8700
156.4991						
78	9.1600	11.0600	2485098.000	7.06521E+06		57.0500
162.1950						
79	9.2600	11.1600	2489889.600	7.31396E+06		57.1600
167.9054						
80	9.3600	11.2600	2494245.600	7.56317E+06		57.2600
173.6264						
81	9.4600	11.3600	2497294.800	7.81274E+06		57.3300
179.3558						
82	9.5600	11.4600	2497294.800	8.06247E+06		57.3300
185.0888						
83	10.2600	12.1600	2497294.800	9.81058E+06		57.3300
225.2198						
84	10.3350	12.2350	2497294.800	9.99787E+06		57.3300
229.5196						
85	10.3350	12.2350	2497294.800	9.99787E+06		57.3300
229.5196						

=====

| Variable storage data for node | N0150

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	1.4400	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.7700	1.3300	7840.8000	3688.3301	0.1800
0.0847					
3	2.8700	1.4300	10454.4000	4599.9535	0.2400
0.1056					
4	2.9700	1.5300	11761.2000	5710.0813	0.2700
0.1311					
5	3.0700	1.6300	14374.8000	7014.6848	0.3300
0.1610					
6	3.3700	1.9300	21780.0000	12399.5265	0.5000
0.2847					
7	3.4700	2.0300	24393.6000	14706.9496	0.5600
0.3376					
8	3.5700	2.1300	27878.4000	17318.5853	0.6400
0.3976					
9	4.9700	3.5300	78408.0000	88736.4903	1.8000
2.0371					
10	5.0700	3.6300	84070.8000	96858.7038	1.9300

2.2236					
11	5.1700	3.7300	91040.4000	105611.8637	2.0900
2.4245					
12	5.2700	3.8300	99752.4000	115148.0916	2.2900
2.6434					
13	5.3700	3.9300	108900.0000	125577.2637	2.5000
2.8829					
14	5.4700	4.0300	121096.8000	137071.5949	2.7800
3.1467					
15	5.5700	4.1300	133729.2000	149807.5458	3.0700
3.4391					
16	5.6700	4.2300	149410.8000	163957.1611	3.4300
3.7639					
17	5.7700	4.3300	168141.6000	179825.4075	3.8600
4.1282					
18	5.8700	4.4300	189050.4000	197674.6208	4.3400
4.5380					
19	5.9700	4.5300	215186.4000	217872.1622	4.9400
5.0017					
20	6.0700	4.6300	243936.0000	240813.0359	5.6000
5.5283					
21	6.1700	4.7300	285753.6000	267269.6967	6.5600
6.1357					
22	6.2700	4.8300	336283.2000	298336.9640	7.7200
6.8489					
23	6.3700	4.9300	395089.2000	334865.7524	9.0700
7.6875					
24	6.4700	5.0300	465656.4000	377854.3098	10.6900
8.6743					
25	6.5700	5.1300	543193.2000	428246.5522	12.4700
9.8312					
26	6.6700	5.2300	615938.4000	486164.4707	14.1400
11.1608					
27	6.7700	5.3300	679971.6000	550932.9403	15.6100
12.6477					
28	6.8700	5.4300	743569.2000	622085.5797	17.0700
14.2811					
29	6.9700	5.5300	808473.6000	699664.3156	18.5600
16.0621					
30	7.0700	5.6300	869022.0000	783520.0389	19.9500
17.9871					
31	7.1700	5.7300	926085.6000	873259.4013	21.2600
20.0473					
32	7.2700	5.8300	988376.4000	968964.6502	22.6900
22.2444					
33	7.3700	5.9300	1048924.800	1.07081E+06	24.0800
24.5825					
34	7.4700	6.0300	1107295.200	1.17861E+06	25.4200
27.0572					
35	7.5700	6.1300	1164794.400	1.29220E+06	26.7400

29.6649					
36	7.6700	6.2300	1219680.000	1.41141E+06	28.0000
32.4016					
37	7.7700	6.3300	1268031.600	1.53579E+06	29.1100
35.2569					
38	7.8700	6.4300	1312027.200	1.66479E+06	30.1200
38.2182					
39	7.9700	6.5300	1350360.000	1.79790E+06	31.0000
41.2741					
40	8.0700	6.6300	1378674.000	1.93435E+06	31.6500
44.4065					
41	8.1700	6.7300	1400018.400	2.07328E+06	32.1400
47.5959					
42	8.2700	6.8300	1415700.000	2.21406E+06	32.5000
50.8279					
43	8.3700	6.9300	1427896.800	2.35624E+06	32.7800
54.0918					
44	8.4700	7.0300	1438786.800	2.49957E+06	33.0300
57.3823					
45	8.5700	7.1300	1458388.800	2.64443E+06	33.4800
60.7077					
46	8.6700	7.2300	1494543.600	2.79207E+06	34.3100
64.0971					
47	8.7700	7.3300	1543330.800	2.94396E+06	35.4300
67.5839					
48	8.8700	7.4300	1559012.400	3.09907E+06	35.7900
71.1449					
49	8.9700	7.5300	1569902.400	3.25552E+06	36.0400
74.7363					
50	9.0700	7.6300	1575565.200	3.41279E+06	36.1700
78.3468					
51	9.1700	7.7300	1578178.800	3.57047E+06	36.2300
81.9668					
52	9.2700	7.8300	1579485.600	3.72835E+06	36.2600
85.5912					
53	11.3700	9.9300	1599523.200	7.06626E+06	36.7200
162.2190					
54	11.4700	10.0300	1600394.400	7.22625E+06	36.7400
165.8919					
55	11.5700	10.1300	1602572.400	7.38640E+06	36.7900
169.5684					
56	14.7700	13.3300	1629579.600	12.55773E+06	37.4100
288.2858					
57	14.8550	13.4150	1629579.600	12.69624E+06	37.4100
291.4657					
58	14.8550	13.4150	1629579.600	12.69624E+06	37.4100
291.4657					

=====

| Variable storage data for node | N0270

=====						
Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres	
=====	=====	=====	=====	=====	=====	
1	1.5700	0.0000	26.1360	0.0000	0.0006	
0.0000						
2	1.8700	0.3000	2613.6000	290.1067	0.0600	
0.0067						
3	1.9700	0.4000	3920.4000	614.6032	0.0900	
0.0141						
4	2.0700	0.5000	6534.0000	1131.7852	0.1500	
0.0260						
5	2.1700	0.6000	10018.8000	1953.2340	0.2300	
0.0448						
6	2.2700	0.7000	16988.4000	3288.3341	0.3900	
0.0755						
7	2.3700	0.8000	25700.4000	5407.7790	0.5900	
0.1241						
8	2.4700	0.9000	38768.4000	8608.8811	0.8900	
0.1976						
9	2.5700	1.0000	54450.0000	13247.6134	1.2500	
0.3041						
10	2.6700	1.1000	72745.2000	19585.2662	1.6700	
0.4496						
11	2.7700	1.2000	93654.0000	27883.1621	2.1500	
0.6401						
12	2.8700	1.3000	119354.4000	38507.5406	2.7400	
0.8840						
13	2.9700	1.4000	149846.4000	51938.5718	3.4400	
1.1923						
14	3.0700	1.5000	184258.8000	68614.0494	4.2300	
1.5752						
15	3.1700	1.6000	224769.6000	89031.7473	5.1600	
2.0439						
16	3.2700	1.7000	269636.4000	113717.8002	6.1900	
2.6106						
17	3.3700	1.8000	321908.4000	143256.1775	7.3900	
3.2887						
18	3.4700	1.9000	378100.8000	178218.6373	8.6800	
4.0913						
19	3.5700	2.0000	447361.2000	219442.8121	10.2700	
5.0377						
20	3.6700	2.1000	519235.2000	267727.5509	11.9200	
6.1462						
21	3.7700	2.2000	602870.4000	323780.2507	13.8400	
7.4330						
22	3.8700	2.3000	690861.6000	388416.2749	15.8600	

8.9168						
23	3.9700	2.4000	788000.4000	462305.4074	18.0900	
10.6131						
24	4.0700	2.5000	892108.8000	546256.2169	20.4800	
12.5403						
25	4.1700	2.6000	997959.6000	640709.2533	22.9100	
14.7087						
26	4.2700	2.7000	1099454.400	745537.9529	25.2400	
17.1152						
27	4.3700	2.8000	1206176.400	860777.1526	27.6900	
19.7607						
28	4.4700	2.9000	1315512.000	986820.7887	30.2000	
22.6543						
29	4.5700	3.0000	1427896.800	1.12395E+06	32.7800	
25.8024						
30	4.6700	3.1000	1549429.200	1.27277E+06	35.5700	
29.2189						
31	4.7700	3.2000	1674882.000	1.43395E+06	38.4500	
32.9189						
32	4.8700	3.3000	1808175.600	1.60806E+06	41.5100	
36.9159						
33	4.9700	3.4000	1940162.400	1.79543E+06	44.5400	
41.2175						
34	5.0700	3.5000	2071278.000	1.99597E+06	47.5500	
45.8211						
35	5.1700	3.6000	2196730.800	2.20933E+06	50.4300	
50.7194						
36	5.2700	3.7000	2323926.000	2.43534E+06	53.3500	
55.9076						
37	5.3700	3.8000	2455477.200	2.67427E+06	56.3700	
61.3929						
38	5.4700	3.9000	2587464.000	2.92639E+06	59.4000	
67.1806						
39	5.5700	4.0000	2724242.400	3.19194E+06	62.5400	
73.2769						
40	5.6700	4.1000	2859278.400	3.47109E+06	65.6400	
79.6852						
41	5.7700	4.2000	2993443.200	3.76370E+06	68.7200	
86.4026						
42	5.8700	4.3000	3132399.600	4.06996E+06	71.9100	
93.4334						
43	5.9700	4.4000	3272227.200	4.39016E+06	75.1200	
100.7842						
44	6.0700	4.5000	3418153.200	4.72465E+06	78.4700	
108.4631						
45	6.1700	4.6000	3573226.800	5.07419E+06	82.0300	
116.4873						
46	6.2700	4.7000	3734398.800	5.43954E+06	85.7300	
124.8745						
47	6.3700	4.8000	3891650.400	5.82081E+06	89.3400	

133.6273					
48	6.4700	4.9000	4043239.200	6.21752E+06	92.8200
142.7347					
49	6.5700	5.0000	4190036.400	6.62916E+06	96.1900
152.1846					
50	6.6700	5.1000	4325072.400	7.05489E+06	99.2900
161.9581					
51	6.7700	5.2000	4456623.600	7.49396E+06	102.3100
172.0376					
52	6.8700	5.3000	4584690.000	7.94600E+06	105.2500
182.4152					
53	6.9700	5.4000	4701430.800	8.41029E+06	107.9300
193.0738					
54	7.0700	5.5000	4811637.600	8.88593E+06	110.4600
203.9929					
55	7.1700	5.6000	4910954.400	9.37205E+06	112.7400
215.1526					
56	7.2700	5.7000	5004172.800	9.86779E+06	114.8800
226.5333					
57	7.3700	5.8000	5086501.200	10.37232E+06	116.7700
238.1156					
58	7.4700	5.9000	5160553.200	10.88466E+06	118.4700
249.8774					
59	7.5700	6.0000	5225457.600	11.40395E+06	119.9600
261.7987					
60	7.6700	6.1000	5284263.600	11.92943E+06	121.3100
273.8620					
61	7.7700	6.2000	5336971.200	12.46048E+06	122.5200
286.0533					
62	7.8700	6.3000	5383580.400	12.99650E+06	123.5900
298.3587					
63	7.9700	6.4000	5427140.400	13.53703E+06	124.5900
310.7675					
64	8.0700	6.5000	5469393.600	14.08185E+06	125.5600
323.2748					
65	8.1700	6.6000	5510775.600	14.63085E+06	126.5100
335.8782					
66	8.2700	6.7000	5548237.200	15.18380E+06	127.3700
348.5720					
67	8.3700	6.8000	5582649.600	15.74034E+06	128.1600
361.3484					
68	8.4700	6.9000	5613141.600	16.30012E+06	128.8600
374.1992					
69	8.5700	7.0000	5640148.800	16.86278E+06	129.4800
387.1161					
70	8.6700	7.1000	5664542.400	17.42801E+06	130.0400
400.0920					
71	8.7700	7.2000	5686322.400	17.99554E+06	130.5400
413.1208					
72	8.8700	7.3000	5705053.200	18.56511E+06	130.9700

426.1962						
73	8.9700	7.4000	5720734.800	19.13639E+06	131.3300	
439.3111						
74	9.0700	7.5000	5735545.200	19.70920E+06	131.6700	
452.4609						
75	9.1700	7.6000	5747742.000	20.28336E+06	131.9500	
465.6418						
76	9.2700	7.7000	5758196.400	20.85865E+06	132.1900	
478.8487						
77	9.3700	7.8000	5766037.200	21.43485E+06	132.3700	
492.0765						
78	9.4700	7.9000	5773006.800	22.01180E+06	132.5300	
505.3214						
79	9.5700	8.0000	5778234.000	22.58936E+06	132.6500	
518.5803						
80	9.6700	8.1000	5782154.400	23.16737E+06	132.7400	
531.8496						
81	9.7700	8.2000	5784768.000	23.74571E+06	132.8000	
545.1265						
82	16.8700	15.3000	5803498.800	64.88363E+06	133.2300	
1489.5231						
83	16.9650	15.3950	5803498.800	65.43496E+06	133.2300	
1502.1800						

=====

| Variable storage data for node | N0290

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.0100	0.0000	435.6000	0.0000	0.0100
0.0000					
2	1.2900	0.2800	435.6000	121.9680	0.0100
0.0028					
3	1.3000	0.2900	435.6000	126.3240	0.0100
0.0029					
4	1.4000	0.3900	435.6000	169.8840	0.0100
0.0039					
5	1.5000	0.4900	871.2000	233.9777	0.0200
0.0054					
6	1.6000	0.5900	1306.8000	342.1432	0.0300
0.0079					
7	1.7000	0.6900	2178.0000	514.5372	0.0500
0.0118					
8	1.8000	0.7900	3920.4000	815.2174	0.0900
0.0187					
9	1.9000	0.8900	5662.8000	1291.7104	0.1300

0.0297					
10	2.0000	0.9900	8712.0000	2004.9912	0.2000
0.0460					
11	2.1000	1.0900	12196.8000	3045.5467	0.2800
0.0699					
12	2.2000	1.1900	15246.0000	4414.8410	0.3500
0.1014					
13	2.3000	1.2900	19166.4000	6131.7097	0.4400
0.1408					
14	2.4000	1.3900	23086.8000	8241.3108	0.5300
0.1892					
15	2.5000	1.4900	27442.8000	10764.6305	0.6300
0.2471					
16	2.6000	1.5900	31798.8000	13724.0081	0.7300
0.3151					
17	2.7000	1.6900	34412.4000	17033.6750	0.7900
0.3910					
18	2.8000	1.7900	37026.0000	20604.7622	0.8500
0.4730					
19	2.9000	1.8900	38768.4000	24394.1104	0.8900
0.5600					
20	3.0000	1.9900	40510.8000	28357.7116	0.9300
0.6510					
21	3.1000	2.0900	42253.2000	32495.5645	0.9700
0.7460					
22	3.2000	2.1900	43560.0000	36786.0158	1.0000
0.8445					
23	3.3000	2.2900	44866.8000	41207.1506	1.0300
0.9460					
24	3.4000	2.3900	46609.2000	45780.6283	1.0700
1.0510					
25	3.5000	2.4900	47916.0000	50506.6905	1.1000
1.1595					
26	3.6000	2.5900	49222.8000	55363.4354	1.1300
1.2710					
27	3.7000	2.6900	51400.8000	60394.1722	1.1800
1.3865					
28	3.8000	2.7900	52707.6000	65599.4034	1.2100
1.5060					
29	3.9000	2.8900	54450.0000	70956.9937	1.2500
1.6289					
30	4.0000	2.9900	56192.4000	76488.8297	1.2900
1.7559					
31	4.1000	3.0900	58370.4000	82216.5674	1.3400
1.8874					
32	4.2000	3.1900	60984.0000	88183.7507	1.4000
2.0244					
33	4.3000	3.2900	62726.4000	94369.0043	1.4400
2.1664					
34	4.4000	3.3900	64904.4000	100750.1708	1.4900

2.3129					
35	4.5000	3.4900	67082.4000	107349.1453	1.5400
2.4644					
36	4.6000	3.5900	69260.4000	114165.9271	1.5900
2.6209					
37	4.7000	3.6900	73616.4000	121308.5888	1.6900
2.7849					
38	4.8000	3.7900	79714.8000	128973.0501	1.8300
2.9608					
39	4.9000	3.8900	88426.8000	137376.2818	2.0300
3.1537					
40	5.0000	3.9900	102801.6000	146928.5888	2.3600
3.3730					
41	5.1000	4.0900	122839.2000	158195.6585	2.8200
3.6317					
42	5.2000	4.1900	149846.4000	171807.4571	3.4400
3.9442					
43	5.3000	4.2900	181645.2000	188356.3934	4.1700
4.3241					
44	5.4000	4.3900	216928.8000	208258.8143	4.9800
4.7810					
45	5.5000	4.4900	261360.0000	232138.5452	6.0000
5.3292					
46	5.6000	4.5900	312760.8000	260805.8723	7.1800
5.9873					
47	5.7000	4.6900	367210.8000	294767.7193	8.4300
6.7669					
48	5.8000	4.7900	413384.4000	333774.3089	9.4900
7.6624					
49	5.9000	4.8900	449974.8000	376928.9086	10.3300
8.6531					
50	6.0000	4.9900	478724.4000	423355.9859	10.9900
9.7189					
51	6.1000	5.0900	505296.0000	472550.5335	11.6000
10.8483					
52	6.2000	5.1900	530125.2000	524316.1135	12.1700
12.0366					
53	6.3000	5.2900	551905.2000	578413.4388	12.6700
13.2785					
54	6.4000	5.3900	570200.4000	634515.6718	13.0900
14.5665					
55	6.5000	5.4900	585446.4000	692295.7578	13.4400
15.8929					
56	6.6000	5.5900	595029.6000	751318.3193	13.6600
17.2479					
57	6.7000	5.6900	599821.2000	811060.1017	13.7700
18.6194					
58	6.8000	5.7900	603741.6000	871237.5335	13.8600
20.0009					
59	6.9000	5.8900	606790.8000	931763.4842	13.9300

21.3903						
60	7.0000	5.9900	609404.4000	992572.5893	13.9900	
22.7863						
61	7.1000	6.0900	611146.8000	1.05360E+06	14.0300	
24.1873						
62	7.2000	6.1900	612453.6000	1.11478E+06	14.0600	
25.5918						
63	7.3000	6.2900	612889.2000	1.17605E+06	14.0700	
26.9983						
64	7.4000	6.3900	613760.4000	1.23738E+06	14.0900	
28.4063						
65	7.5000	6.4900	614631.6000	1.29880E+06	14.1100	
29.8163						
66	7.6000	6.5900	614631.6000	1.36026E+06	14.1100	
31.2273						
67	7.7000	6.6900	615067.2000	1.42174E+06	14.1200	
32.6387						
68	7.8000	6.7900	615067.2000	1.48325E+06	14.1200	
34.0507						
69	7.9000	6.8900	615067.2000	1.54476E+06	14.1200	
35.4627						
70	8.0000	6.9900	615067.2000	1.60626E+06	14.1200	
36.8747						
71	8.1000	7.0900	615067.2000	1.66777E+06	14.1200	
38.2867						
72	8.1950	7.1850	615067.2000	1.72620E+06	14.1200	
39.6281						
73	8.1950	7.1850	615067.2000	1.72620E+06	14.1200	
39.6281						

=====

| Variable storage data for node | N0180

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.4600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.1700	1.6300	435.6000	308.8470	0.0100
0.0071					
3	0.1800	1.6400	84506.4000	612.2080	1.9400
0.0141					
4	0.2800	1.7400	85813.2000	9128.0193	1.9700
0.2096					
5	0.3800	1.8400	87555.6000	17796.2267	2.0100
0.4085					
6	0.4800	1.9400	88862.4000	26616.9578	2.0400

0.6110					
7	0.5800	2.0400	91476.0000	35633.4720	2.1000
0.8180					
8	0.6800	2.1400	93218.4000	44867.9626	2.1400
1.0300					
9	0.7800	2.2400	95832.0000	54320.0870	2.2000
1.2470					
10	0.8800	2.3400	98010.0000	64011.8861	2.2500
1.4695					
11	0.9800	2.4400	99316.8000	73878.0553	2.2800
1.6960					
12	1.0800	2.5400	101494.8000	83918.3381	2.3300
1.9265					
13	1.1800	2.6400	103237.2000	94154.7121	2.3700
2.1615					
14	1.2800	2.7400	105415.2000	104587.0384	2.4200
2.4010					
15	1.3800	2.8400	108464.4000	115280.5491	2.4900
2.6465					
16	1.4800	2.9400	111513.6000	126278.9869	2.5600
2.8990					
17	1.5800	3.0400	115434.0000	137625.6891	2.6500
3.1595					
18	1.6800	3.1400	119354.4000	149364.4461	2.7400
3.4289					
19	1.7800	3.2400	124146.0000	161538.5586	2.8500
3.7084					
20	1.8800	3.3400	130244.4000	174256.7329	2.9900
4.0004					
21	1.9800	3.4400	138956.4000	187714.2882	3.1900
4.3093					
22	2.0800	3.5400	150717.6000	202193.8624	3.4600
4.6417					
23	2.1800	3.6400	167706.0000	218107.3249	3.8500
5.0071					
24	2.2800	3.7400	188179.2000	235891.5842	4.3200
5.4153					
25	2.3800	3.8400	215622.0000	256065.8824	4.9500
5.8785					
26	2.4800	3.9400	250905.6000	279369.7599	5.7600
6.4134					
27	2.5800	4.0400	295336.8000	306651.4402	6.7800
7.0397					
28	2.6800	4.1400	344124.0000	338593.0974	7.9000
7.7730					
29	2.7800	4.2400	397702.8000	375651.7766	9.1300
8.6238					
30	2.8800	4.3400	458686.8000	418434.5936	10.5300
9.6059					
31	2.9800	4.4400	525333.6000	467597.4627	12.0600

10.7346						
32	3.0800	4.5400	599385.6000	523792.1865	13.7600	
12.0246						
33	3.1800	4.6400	676051.2000	587524.9518	15.5200	
13.4877						
34	3.2800	4.7400	750538.8000	658821.3060	17.2300	
15.1245						
35	3.3800	4.8400	820670.4000	737354.8814	18.8400	
16.9273						
36	3.4800	4.9400	885574.8000	822645.7067	20.3300	
18.8853						
37	3.5800	5.0400	948736.8000	914342.2402	21.7800	
20.9904						
38	3.6800	5.1400	1009720.800	1.01225E+06	23.1800	
23.2380						
39	3.7800	5.2400	1074189.600	1.11643E+06	24.6600	
25.6296						
40	3.8800	5.3400	1140400.800	1.22714E+06	26.1800	
28.1712						
41	3.9800	5.4400	1206612.000	1.34447E+06	27.7000	
30.8648						
42	4.0800	5.5400	1270645.200	1.46832E+06	29.1700	
33.7080						
43	4.1800	5.6400	1335114.000	1.59859E+06	30.6500	
36.6986						
44	4.2800	5.7400	1401325.200	1.73540E+06	32.1700	
39.8393						
45	4.3800	5.8400	1468407.600	1.87887E+06	33.7100	
43.1330						
46	4.4800	5.9400	1533312.000	2.02895E+06	35.2000	
46.5782						
47	4.5800	6.0400	1596474.000	2.18542E+06	36.6500	
50.1704						
48	4.6800	6.1400	1656151.200	2.34804E+06	38.0200	
53.9036						
49	4.7800	6.2400	1714521.600	2.51657E+06	39.3600	
57.7724						
50	4.8800	6.3400	1773327.600	2.69095E+06	40.7100	
61.7757						
51	4.9800	6.4400	1832133.600	2.87121E+06	42.0600	
65.9140						
52	5.0800	6.5400	1894424.400	3.05753E+06	43.4900	
70.1912						
53	5.1800	6.6400	1958457.600	3.25016E+06	44.9600	
74.6135						
54	5.2800	6.7400	2023362.000	3.44924E+06	46.4500	
79.1837						
55	5.3800	6.8400	2087395.200	3.65477E+06	47.9200	
83.9020						
56	5.4800	6.9400	2154477.600	3.86685E+06	49.4600	

88.7707					
57	5.5800	7.0400	2217639.600	4.08545E+06	50.9100
93.7890					
58	5.6800	7.1400	2283850.800	4.31051E+06	52.4300
98.9558					
59	5.7800	7.2400	2343963.600	4.54190E+06	53.8100
104.2676					
60	5.8800	7.3400	2399284.800	4.77905E+06	55.0800
109.7119					
61	5.9800	7.4400	2455477.200	5.02178E+06	56.3700
115.2842					
62	6.0800	7.5400	2516461.200	5.27037E+06	57.7700
120.9910					
63	6.1800	7.6400	2574396.000	5.52490E+06	59.1000
126.8343					
64	6.2800	7.7400	2616649.200	5.78445E+06	60.0700
132.7927					
65	6.3800	7.8400	2643656.400	6.04746E+06	60.6900
138.8306					
66	6.4800	7.9400	2661951.600	6.31274E+06	61.1100
144.9205					
67	6.5800	8.0400	2675890.800	6.57963E+06	61.4300
151.0475					
68	6.6800	8.1400	2688958.800	6.84787E+06	61.7300
157.2054					
69	6.7800	8.2400	2699848.800	7.11730E+06	61.9800
163.3908					
70	6.8800	8.3400	2710303.200	7.38781E+06	62.2200
169.6008					
71	6.9800	8.4400	2719450.800	7.65929E+06	62.4300
175.8332					
72	7.0800	8.5400	2727291.600	7.93163E+06	62.6100
182.0851					
73	7.1800	8.6400	2733390.000	8.20466E+06	62.7500
188.3531					
74	7.2800	8.7400	2738617.200	8.47826E+06	62.8700
194.6340					
75	7.3800	8.8400	2743408.800	8.75236E+06	62.9800
200.9265					
76	7.4800	8.9400	2746458.000	9.02685E+06	63.0500
207.2279					
77	7.5800	9.0400	2749942.800	9.30166E+06	63.1300
213.5368					
78	7.6800	9.1400	2752556.400	9.57679E+06	63.1900
219.8528					
79	9.2800	10.7400	2763446.400	13.98954E+06	63.4400
321.1557					
80	9.3650	10.8250	2763446.400	14.22443E+06	63.4400
326.5481					

=====

| Variable storage data for node | N0370

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	0.9800	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.5000	1.5200	6098.4000	3305.3437	0.1400
0.0759					
3	2.6000	1.6200	8712.0000	4041.9824	0.2000
0.0928					
4	2.7000	1.7200	12632.4000	5103.1397	0.2900
0.1172					
5	3.4000	2.4200	38332.8000	22129.4303	0.8800
0.5080					
6	3.5000	2.5200	42688.8000	26178.5167	0.9800
0.6010					
7	3.6000	2.6200	89298.0000	32636.0653	2.0500
0.7492					
8	3.7000	2.7200	94960.8000	41847.4626	2.1800
0.9607					
9	3.8000	2.8200	102801.6000	51732.8921	2.3600
1.1876					
10	3.9000	2.9200	114127.2000	62574.2929	2.6200
1.4365					
11	4.0000	3.0200	128937.6000	74719.8842	2.9600
1.7153					
12	4.1000	3.1200	148104.0000	88560.7627	3.4000
2.0331					
13	4.2000	3.2200	170755.2000	104490.1373	3.9200
2.3988					
14	4.3000	3.3200	196020.0000	122814.1941	4.5000
2.8194					
15	4.4000	3.4200	225205.2000	143858.3722	5.1700
3.3025					
16	4.5000	3.5200	254390.4000	167823.0986	5.8400
3.8527					
17	4.6000	3.6200	285318.0000	194793.4677	6.5500
4.4718					
18	4.7000	3.7200	321472.8000	225114.7366	7.3800
5.1679					
19	4.8000	3.8200	363726.0000	259352.6004	8.3500
5.9539					
20	4.9000	3.9200	419918.4000	298500.8076	9.6400
6.8526					
21	5.0000	4.0200	488743.2000	343889.9296	11.2200

7.8946					
22	5.1000	4.1200	567151.2000	396635.5353	13.0200
9.1055					
23	5.2000	4.2200	652093.2000	457547.7718	14.9700
10.5039					
24	5.3000	4.3200	742262.4000	527216.2126	17.0400
12.1032					
25	5.4000	4.4200	836352.0000	606099.3689	19.2000
13.9141					
26	5.5000	4.5200	931312.8000	694439.1832	21.3800
15.9421					
27	5.6000	4.6200	1023660.000	792150.4740	23.5000
18.1853					
28	5.7000	4.7200	1112522.400	898927.7082	25.5400
20.6365					
29	5.8000	4.8200	1197464.400	1.01440E+06	27.4900
23.2874					
30	5.9000	4.9200	1283713.200	1.13843E+06	29.4700
26.1348					
31	6.0000	5.0200	1366912.800	1.27094E+06	31.3800
29.1768					
32	6.1000	5.1200	1449676.800	1.41175E+06	33.2800
32.4093					
33	6.2000	5.2200	1532005.200	1.56081E+06	35.1700
35.8313					
34	6.3000	5.3200	1607364.000	1.71776E+06	36.9000
39.4344					
35	6.4000	5.4200	1673139.600	1.88178E+06	38.4100
43.1996					
36	6.5000	5.5200	1735866.000	2.05222E+06	39.8500
47.1124					
37	6.6000	5.6200	1793800.800	2.22869E+06	41.1800
51.1637					
38	6.7000	5.7200	1854784.800	2.41111E+06	42.5800
55.3514					
39	6.8000	5.8200	1914897.600	2.59958E+06	43.9600
59.6782					
40	6.9000	5.9200	1979802.000	2.79431E+06	45.4500
64.1484					
41	7.0000	6.0200	2055160.800	2.99604E+06	47.1800
68.7796					
42	7.1000	6.1200	2117451.600	3.20466E+06	48.6100
73.5689					
43	7.2000	6.2200	2179306.800	3.41949E+06	50.0300
78.5007					
44	7.3000	6.3200	2238112.800	3.64035E+06	51.3800
83.5710					
45	7.4000	6.4200	2286464.400	3.86657E+06	52.4900
88.7643					
46	7.5000	6.5200	2329588.800	4.09737E+06	53.4800

94.0627						
47	7.6000	6.6200	2359209.600	4.33181E+06		54.1600
99.4446						
48	7.7000	6.7200	2377940.400	4.56866E+06		54.5900
104.8820						
49	7.8000	6.8200	2389701.600	4.80704E+06		54.8600
110.3545						
50	7.9000	6.9200	2396235.600	5.04634E+06		55.0100
115.8479						
51	8.0000	7.0200	2400591.600	5.28617E+06		55.1100
121.3539						
52	8.1000	7.1200	2404076.400	5.52641E+06		55.1900
126.8688						
53	8.2000	7.2200	2406254.400	5.76692E+06		55.2400
132.3903						
54	10.3000	9.3200	2414966.400	10.82915E+06		55.4400
248.6030						
55	10.3750	9.3950	2414966.400	11.01027E+06		55.4400
252.7610						

=====

| Variable storage data for node | N0285

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	2.0000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.6200	0.6200	2613.6000	599.5538	0.0600
0.0138					
3	2.7200	0.7200	3484.8000	903.4283	0.0800
0.0207					
4	2.8200	0.8200	5662.8000	1356.4193	0.1300
0.0311					
5	3.1200	1.1200	16117.2000	4489.7334	0.3700
0.1031					
6	3.2200	1.2200	20908.8000	6335.8257	0.4800
0.1455					
7	3.3200	1.3200	26571.6000	8704.1737	0.6100
0.1998					
8	3.4200	1.4200	32670.0000	11660.9787	0.7500
0.2677					
9	3.5200	1.5200	39204.0000	15249.6825	0.9000
0.3501					
10	3.6200	1.6200	48351.6000	19619.4327	1.1100
0.4504					
11	3.7200	1.7200	57934.8000	24926.4844	1.3300

0.5722					
12	3.8200	1.8200	70131.6000	31320.0384	1.6100
0.7190					
13	3.9200	1.9200	82328.4000	38934.8180	1.8900
0.8938					
14	4.0200	2.0200	96267.6000	47855.4488	2.2100
1.0986					
15	4.1200	2.1200	112820.4000	58298.8070	2.5900
1.3384					
16	4.2200	2.2200	131551.2000	70505.2832	3.0200
1.6186					
17	4.4200	2.4200	167270.4000	100315.7283	3.8400
2.3029					
18	4.5200	2.5200	184694.4000	117906.5999	4.2400
2.7068					
19	4.6200	2.6200	203860.8000	137326.2823	4.6800
3.1526					
20	4.7200	2.7200	222591.6000	158641.8300	5.1100
3.6419					
21	4.8200	2.8200	243500.4000	181938.3767	5.5900
4.1767					
22	4.9200	2.9200	270072.0000	207605.2759	6.2000
4.7660					
23	5.0200	3.0200	305791.2000	236379.6673	7.0200
5.4265					
24	5.1200	3.1200	352836.0000	269282.6596	8.1000
6.1819					
25	5.2200	3.2200	422967.6000	308019.5122	9.7100
7.0712					
26	5.3200	3.3200	526204.8000	355383.8081	12.0800
8.1585					
27	5.4200	3.4200	673437.6000	415214.1754	15.4600
9.5320					
28	5.5200	3.5200	851162.4000	491270.1773	19.5400
11.2780					
29	5.6200	3.6200	1053716.400	586333.1694	24.1900
13.4604					
30	5.7200	3.7200	1264111.200	702063.9125	29.0200
16.1172					
31	5.8200	3.8200	1470585.600	838667.2910	33.7600
19.2532					
32	5.9200	3.9200	1676188.800	995892.3719	38.4800
22.8625					
33	6.0200	4.0200	1871773.200	1.17320E+06	42.9700
26.9329					
34	6.1200	4.1200	2055160.800	1.36947E+06	47.1800
31.4388					
35	6.2200	4.2200	2218510.800	1.58310E+06	50.9300
36.3430					
36	6.3200	4.3200	2362258.800	1.81210E+06	54.2300

41.6001					
37	6.4200	4.4200	2493374.400	2.05485E+06	57.2400
47.1729					
38	6.5200	4.5200	2612293.200	2.31011E+06	59.9700
53.0328					
39	6.6200	4.6200	2726856.000	2.57704E+06	62.6000
59.1607					
40	6.7200	4.7200	2839240.800	2.85533E+06	65.1800
65.5492					
41	6.8200	4.8200	2953803.600	3.14496E+06	67.8100
72.1982					
42	6.9200	4.9200	3058783.200	3.44557E+06	70.2200
79.0993					
43	7.0200	5.0200	3163327.200	3.75665E+06	72.6200
86.2409					
44	7.1200	5.1200	3264386.400	4.07802E+06	74.9400
93.6185					
45	7.2200	5.2200	3368494.800	4.40965E+06	77.3300
101.2316					
46	7.3200	5.3200	3475652.400	4.75184E+06	79.7900
109.0872					
47	7.4200	5.4200	3587601.600	5.10498E+06	82.3600
117.1943					
48	7.5200	5.5200	3703906.800	5.46954E+06	85.0300
125.5634					
49	7.6200	5.6200	3830230.800	5.84623E+06	87.9300
134.2109					
50	7.7200	5.7200	3962653.200	6.23585E+06	90.9700
143.1554					
51	7.8200	5.8200	4112064.000	6.63956E+06	94.4000
152.4233					
52	7.9200	5.9200	4274107.200	7.05884E+06	98.1200
162.0486					
53	8.0200	6.0200	4447911.600	7.49490E+06	102.1100
172.0593					
54	8.1200	6.1200	4636962.000	7.94911E+06	106.4500
182.4864					
55	8.2200	6.2200	4833417.600	8.42259E+06	110.9600
193.3561					
56	8.3200	6.3200	5045554.800	8.91650E+06	115.8300
204.6946					
57	8.4200	6.4200	5275551.600	9.43250E+06	121.1100
216.5405					
58	8.5200	6.5200	5522536.800	9.97235E+06	126.7800
228.9338					
59	8.6200	6.6200	5784332.400	10.53764E+06	132.7900
241.9110					
60	8.7200	6.7200	6057889.200	11.12969E+06	139.0700
255.5026					
61	8.8200	6.8200	6335366.400	11.74930E+06	145.4400

269.7268					
62	8.9200	6.9200	6614150.400	12.39672E+06	151.8400
284.5895					
63	9.0200	7.0200	6897290.400	13.07223E+06	158.3400
300.0972					
64	9.1200	7.1200	7179123.600	13.77600E+06	164.8100
316.2535					
65	9.2200	7.2200	7451809.200	14.50750E+06	171.0700
333.0463					
66	9.3200	7.3200	7728415.200	15.26646E+06	177.4200
350.4697					
67	9.4200	7.4200	7996744.800	16.05267E+06	183.5800
368.5186					
68	9.5200	7.5200	8252442.000	16.86509E+06	189.4500
387.1692					
69	9.6200	7.6200	8496813.600	17.70251E+06	195.0600
406.3938					
70	9.7200	7.7200	8736393.600	18.56414E+06	200.5600
426.1740					
71	9.8200	7.8200	8971617.600	19.44950E+06	205.9600
446.4992					
72	9.9200	7.9200	9188546.400	20.35748E+06	210.9400
467.3435					
73	10.0200	8.0200	9389793.600	21.28637E+06	215.5600
488.6678					
74	10.1200	8.1200	9575794.800	22.23463E+06	219.8300
510.4368					
75	10.2200	8.2200	9747856.800	23.20079E+06	223.7800
532.6168					
76	10.3200	8.3200	9894654.000	24.18289E+06	227.1500
555.1628					
77	10.4200	8.4200	10021413.60	25.17868E+06	230.0600
578.0229					
78	10.5200	8.5200	10129442.40	26.18621E+06	232.5400
601.1526					
79	10.6200	8.6200	10224838.80	27.20391E+06	234.7300
624.5158					
80	10.7200	8.7200	10301940.00	28.23023E+06	236.5000
648.0770					
81	10.8200	8.8200	10365973.20	29.26362E+06	237.9700
671.8002					
82	10.9200	8.9200	10416938.40	30.30275E+06	239.1400
695.6554					
83	11.0200	9.0200	10461369.60	31.34666E+06	240.1600
719.6202					
84	11.1200	9.1200	10497524.40	32.39459E+06	240.9900
743.6774					
85	11.2200	9.2200	10526274.00	33.44577E+06	241.6500
767.8092					
86	11.3200	9.3200	10549360.80	34.49954E+06	242.1800

792.0004						
87	11.4200	9.4200	10568091.60	35.55540E+06	242.6100	
816.2397						
88	11.5200	9.5200	10582030.80	36.61290E+06	242.9300	
840.5164						
89	11.6200	9.6200	10591178.40	37.67155E+06	243.1400	
864.8197						
90	11.7200	9.7200	10599019.20	38.73105E+06	243.3200	
889.1425						
91	11.8200	9.8200	10604246.40	39.79120E+06	243.4400	
913.4802						
92	11.9200	9.9200	10607731.20	40.85179E+06	243.5200	
937.8280						
93	12.0200	10.0200	10610780.40	41.91270E+06	243.5900	
962.1832						
94	12.1200	10.1200	10612522.80	42.97386E+06	243.6300	
986.5440						
95	12.4200	10.4200	10615572.00	46.15804E+06	243.7000	
1059.6428						
96	12.5200	10.5200	10616443.20	47.21963E+06	243.7200	
1084.0135						
97	12.6200	10.6200	10616443.20	48.28127E+06	243.7200	
1108.3855						
98	14.5200	12.5200	10616443.20	68.45251E+06	243.7200	
1571.4535						
99	14.6250	12.6250	10616443.20	69.56724E+06	243.7200	
1597.0441						

=====

| Variable storage data for node | N0420

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	3.0800	0.0000	26.1360	0.0000	0.0006
0.0000					
2	3.1800	0.1000	435.6000	18.9477	0.0100
0.0004					
3	3.2800	0.2000	126324.0000	4491.4896	2.9000
0.1031					
4	3.3800	0.3000	128502.0000	17232.5071	2.9500
0.3956					
5	3.4800	0.4000	408592.8000	42773.4009	9.3800
0.9819					
6	3.5800	0.5000	413820.0000	83893.3529	9.5000
1.9259					
7	5.6800	2.6000	529254.0000	1.07163E+06	12.1500

24.6012						
8	5.7800	2.7000	541015.2000	1.12514E+06	12.4200	
25.8297						
9	5.8800	2.8000	555825.6000	1.17998E+06	12.7600	
27.0886						
10	5.9800	2.9000	573685.2000	1.23645E+06	13.1700	
28.3851						
11	6.0800	3.0000	594158.4000	1.29484E+06	13.6400	
29.7255						
12	6.1800	3.1000	619858.8000	1.35554E+06	14.2300	
31.1189						
13	6.2800	3.2000	648608.4000	1.41896E+06	14.8900	
32.5747						
14	6.3800	3.3000	682149.6000	1.48549E+06	15.6600	
34.1021						
15	6.4800	3.4000	720482.4000	1.55561E+06	16.5400	
35.7118						
16	6.5800	3.5000	769705.2000	1.63010E+06	17.6700	
37.4220						
17	6.6800	3.6000	834174.0000	1.71027E+06	19.1500	
39.2625						
18	6.7800	3.7000	909097.2000	1.79741E+06	20.8700	
41.2629						
19	6.8800	3.8000	993603.6000	1.89251E+06	22.8100	
43.4461						
20	6.9800	3.9000	1072882.800	1.99581E+06	24.6300	
45.8175						
21	7.0800	4.0000	1140400.800	2.10646E+06	26.1800	
48.3576						
22	7.1800	4.1000	1195286.400	2.22323E+06	27.4400	
51.0383						
23	7.2800	4.2000	1243638.000	2.34517E+06	28.5500	
53.8376						
24	7.3800	4.3000	1285020.000	2.47159E+06	29.5000	
56.7399						
25	7.4800	4.4000	1317690.000	2.60172E+06	30.2500	
59.7273						
26	7.5800	4.5000	1342519.200	2.73473E+06	30.8200	
62.7808						
27	7.6800	4.6000	1364734.800	2.87009E+06	31.3300	
65.8882						
28	7.8800	4.8000	1413086.400	3.14786E+06	32.4400	
72.2648						
29	7.9800	4.9000	1437044.400	3.29036E+06	32.9900	
75.5362						
30	8.0800	5.0000	1463616.000	3.43539E+06	33.6000	
78.8657						
31	8.1800	5.1000	1491494.400	3.58314E+06	34.2400	
82.2576						
32	8.2800	5.2000	1520679.600	3.73374E+06	34.9100	

85.7150					
33	8.3800	5.3000	1555092.000	3.88753E+06	35.7000
89.2454					
34	8.4800	5.4000	1595167.200	4.04504E+06	36.6200
92.8612					
35	8.5800	5.5000	1641776.400	4.20688E+06	37.6900
96.5766					
36	8.6800	5.6000	1697533.200	4.37383E+06	38.9700
100.4094					
37	8.7800	5.7000	1758517.200	4.54662E+06	40.3700
104.3761					
38	8.8800	5.8000	1824728.400	4.72577E+06	41.8900
108.4888					
39	8.9800	5.9000	1887019.200	4.91135E+06	43.3200
112.7491					
40	9.0800	6.0000	1943211.600	5.10285E+06	44.6100
117.1454					
41	9.1800	6.1000	1988949.600	5.29946E+06	45.6600
121.6588					
42	9.2800	6.2000	2025975.600	5.50020E+06	46.5100
126.2671					
43	9.3800	6.3000	2056467.600	5.70431E+06	47.2100
130.9530					
44	9.4800	6.4000	2077812.000	5.91103E+06	47.7000
135.6985					
45	9.5800	6.5000	2094800.400	6.11965E+06	48.0900
140.4879					
46	9.6800	6.6000	2107868.400	6.32978E+06	48.3900
145.3119					
47	14.9800	11.9000	2504264.400	18.53674E+06	57.4900
425.5450					
48	15.0800	12.0000	2519946.000	18.78795E+06	57.8500
431.3119					
49	15.1800	12.1000	2542161.600	19.04105E+06	58.3600
437.1223					
50	15.2800	12.2000	2568733.200	19.29659E+06	58.9700
442.9888					
51	15.3800	12.3000	2603581.200	19.55520E+06	59.7700
448.9257					
52	15.4800	12.4000	2644527.600	19.81760E+06	60.7100
454.9495					
53	15.5800	12.5000	2694621.600	20.08455E+06	61.8600
461.0779					
54	15.6800	12.6000	2752120.800	20.35688E+06	63.1800
467.3297					
55	15.7800	12.7000	2819638.800	20.63546E+06	64.7300
473.7250					
56	15.8800	12.8000	2893255.200	20.92109E+06	66.4200
480.2822					
57	15.9800	12.9000	2961644.400	21.21383E+06	67.9900

487.0025					
58	16.0800	13.0000	3024806.400	21.51314E+06	69.4400
493.8738					
59	16.2800	13.2000	3145903.200	22.13017E+06	72.2200
508.0388					
60	16.3800	13.3000	3203402.400	22.44763E+06	73.5400
515.3266					
61	16.4800	13.4000	3257852.400	22.77068E+06	74.7900
522.7429					
62	16.5800	13.5000	3313173.600	23.09923E+06	76.0600
530.2853					
63	16.6800	13.6000	3364574.400	23.43311E+06	77.2400
537.9501					
64	16.7800	13.7000	3416410.800	23.77215E+06	78.4300
545.7335					
65	16.8800	13.8000	3464762.400	24.11620E+06	79.5400
553.6318					
66	16.9800	13.9000	3510064.800	24.46494E+06	80.5800
561.6377					
67	17.0800	14.0000	3555802.800	24.81822E+06	81.6300
569.7480					
68	17.1800	14.1000	3598927.200	25.17596E+06	82.6200
577.9604					
69	17.2800	14.2000	3641180.400	25.53796E+06	83.5900
586.2708					
70	17.3800	14.3000	3682562.400	25.90414E+06	84.5400
594.6772					
71	17.4800	14.4000	3720895.200	26.27430E+06	85.4200
603.1750					
72	17.5800	14.5000	3757485.600	26.64822E+06	86.2600
611.7589					
73	17.6800	14.6000	3793640.400	27.02577E+06	87.0900
620.4263					
74	17.7800	14.7000	3825439.200	27.40672E+06	87.8200
629.1717					
75	18.8800	15.8000	4135150.800	31.78389E+06	94.9300
729.6578					
76	18.9800	15.9000	4160851.200	32.19869E+06	95.5200
739.1802					
77	19.0800	16.0000	4182195.600	32.61584E+06	96.0100
748.7566					
78	19.1800	16.1000	4200926.400	33.03499E+06	96.4400
758.3790					
79	29.9800	26.9000	5032486.800	82.82738E+06	115.5300
1901.4551					
80	30.0800	27.0000	5035100.400	83.33076E+06	115.5900
1913.0110					
81	30.4900	27.4100	5035100.400	85.39515E+06	115.5900
1960.4029					

=====

| Variable storage data for node | N0490

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.2600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.3500	1.6100	15681.6000	8773.3039	0.3600
0.2014					
3	0.4500	1.7100	23522.4000	10720.2830	0.5400
0.2461					
4	0.5500	1.8100	36590.4000	13701.9328	0.8400
0.3146					
5	0.6500	1.9100	57063.6000	18346.8336	1.3100
0.4212					
6	0.7500	2.0100	91040.4000	25686.1267	2.0900
0.5897					
7	0.8500	2.1100	137649.6000	37040.5119	3.1600
0.8503					
8	0.9500	2.2100	203860.8000	54007.8638	4.6800
1.2398					
9	1.0500	2.3100	292287.6000	78682.6438	6.7100
1.8063					
10	1.1500	2.4100	413384.4000	113791.4253	9.4900
2.6123					
11	1.2500	2.5100	579783.6000	163215.3510	13.3100
3.7469					
12	1.3500	2.6100	791920.8000	231524.8375	18.1800
5.3151					
13	1.4500	2.7100	1070704.800	324305.5008	24.5800
7.4450					
14	1.5500	2.8100	1412215.200	448056.9554	32.4200
10.2860					
15	1.6500	2.9100	1815580.800	609023.4337	41.6800
13.9813					
16	1.7500	3.0100	2276445.600	813188.7905	52.2600
18.6682					
17	1.8500	3.1100	2785226.400	1.06584E+06	63.9400
24.4684					
18	1.9500	3.2100	3353684.400	1.37235E+06	76.9900
31.5047					
19	2.0500	3.3100	3955683.600	1.73740E+06	90.8100
39.8851					
20	2.1500	3.4100	4589917.200	2.16428E+06	105.3700
49.6850					
21	2.2500	3.5100	5249851.200	2.65589E+06	120.5200

60.9709					
22	2.3500	3.6100	5935050.000	3.21478E+06	136.2500
73.8013					
23	2.4500	3.7100	6625911.600	3.84251E+06	152.1100
88.2118					
24	2.5500	3.8100	7328098.800	4.53991E+06	168.2300
104.2219					
25	2.6500	3.9100	8028543.600	5.30746E+06	184.3100
121.8426					
26	2.7500	4.0100	8742927.600	6.14578E+06	200.7100
141.0876					
27	2.8500	4.1100	9449470.800	7.05516E+06	216.9300
161.9641					
28	2.9500	4.2100	10169517.60	8.03588E+06	233.4600
184.4784					
29	3.0500	4.3100	10902632.40	9.08926E+06	250.2900
208.6607					
30	3.1500	4.4100	11647508.40	10.21655E+06	267.3900
234.5398					
31	3.2500	4.5100	12411550.80	11.41929E+06	284.9300
262.1509					
32	3.3500	4.6100	13193017.20	12.69931E+06	302.8700
291.5360					
33	3.4500	4.7100	14008024.80	14.05914E+06	321.5800
322.7535					
34	3.5500	4.8100	14846554.80	15.50165E+06	340.8300
355.8690					
35	3.6500	4.9100	15706429.20	17.02909E+06	360.5700
390.9340					
36	3.7500	5.0100	16581549.60	18.64327E+06	380.6600
427.9906					
37	3.8500	5.1100	17473658.40	20.34582E+06	401.1400
467.0758					
38	3.9500	5.2100	18365331.60	22.13757E+06	421.6100
508.2086					
39	4.0500	5.3100	19256133.60	24.01845E+06	442.0600
551.3876					
40	4.1500	5.4100	20152598.40	25.98869E+06	462.6400
596.6183					
41	4.2500	5.5100	21036430.80	28.04797E+06	482.9300
643.8927					
42	4.3500	5.6100	21914164.80	30.19532E+06	503.0800
693.1893					
43	4.4500	5.7100	22774910.40	32.42962E+06	522.8400
744.4816					
44	4.5500	5.8100	23615182.80	34.74897E+06	542.1300
797.7266					
45	4.6500	5.9100	24441516.00	37.15166E+06	561.1000
852.8849					
46	4.7500	6.0100	25229952.00	39.63511E+06	579.2000

909.8969						
47	4.8500	6.1100	25997479.20	42.19636E+06	596.8200	
968.6951						
48	4.9500	6.2100	26741919.60	44.83322E+06	613.9100	
1029.2290						
49	5.0500	6.3100	27467629.20	47.54358E+06	630.5700	
1091.4505						
50	5.1500	6.4100	28168509.60	50.32529E+06	646.6600	
1155.3097						
51	5.2500	6.5100	28828879.20	53.17507E+06	661.8200	
1220.7316						
52	5.3500	6.6100	29458321.20	56.08934E+06	676.2700	
1287.6341						
53	5.4500	6.7100	30065112.00	59.06543E+06	690.2000	
1355.9557						
54	5.5500	6.8100	30638797.20	62.10055E+06	703.3700	
1425.6325						
55	5.6500	6.9100	31192880.40	65.19206E+06	716.0900	
1496.6038						
56	5.7500	7.0100	31714293.60	68.33735E+06	728.0600	
1568.8098						
57	5.8500	7.1100	32210877.60	71.53355E+06	739.4600	
1642.1843						
58	5.9500	7.2100	32683939.20	74.77823E+06	750.3200	
1716.6719						
59	6.0500	7.3100	33138270.00	78.06928E+06	760.7500	
1792.2241						
60	6.1500	7.4100	33579097.20	81.40509E+06	770.8700	
1868.8037						
61	6.2500	7.5100	33985947.60	84.78329E+06	780.2100	
1946.3565						
62	6.3500	7.6100	34349238.00	88.20000E+06	788.5500	
2024.7933						
63	6.4500	7.7100	34673760.00	91.65110E+06	796.0000	
2104.0198						
64	6.5500	7.8100	34965176.40	95.13300E+06	802.6900	
2183.9532						
65	6.6500	7.9100	35229150.00	98.64268E+06	808.7500	
2264.5242						
66	6.7500	8.0100	35470472.40	102.17761E+06	814.2900	
2345.6753						
67	6.8500	8.1100	35694370.80	105.73581E+06	819.4300	
2427.3603						
68	6.9500	8.2100	35897360.40	109.31536E+06	824.0900	
2509.5354						
69	7.0500	8.3100	36093816.00	112.91488E+06	828.6000	
2592.1689						
70	7.1500	8.4100	36281559.60	116.53361E+06	832.9100	
2675.2435						
71	7.2500	8.5100	36459284.40	120.17061E+06	836.9900	

2758.7376						
72	7.3500	8.6100	36621763.20	123.82462E+06		840.7200
2842.6222						
73	7.4500	8.7100	36771174.00	127.49423E+06		844.1500
2926.8648						
74	7.5500	8.8100	36910130.40	131.17826E+06		847.3400
3011.4384						
75	7.6500	8.9100	37035583.20	134.87550E+06		850.2200
3096.3155						
76	7.7500	9.0100	37144483.20	138.58447E+06		852.7200
3181.4616						
77	7.8500	9.1100	37239444.00	142.30363E+06		854.9000
3266.8418						
78	7.9500	9.2100	37323950.40	146.03176E+06		856.8400
3352.4279						
79	8.0500	9.3100	37395388.80	149.76769E+06		858.4800
3438.1930						
80	8.1500	9.4100	37458986.40	153.51037E+06		859.9400
3524.1131						
81	8.2500	9.5100	37513436.40	157.25895E+06		861.1900
3610.1688						
82	8.3500	9.6100	37559610.00	161.01257E+06		862.2500
3696.3399						
83	8.4500	9.7100	37601427.60	164.77058E+06		863.2100
3782.6120						
84	8.5500	9.8100	37637146.80	168.53247E+06		864.0300
3868.9732						
85	13.1500	14.4100	37905476.40	342.27840E+06		870.1900
7857.6309						
86	13.2450	14.5050	37905476.40	345.87942E+06		870.1900
7940.2989						

=====

| Variable storage data for node | N0410

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.6100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.3100	2.3000	134600.4000	104650.5994	3.0900
2.4024					
3	-0.2100	2.4000	164656.8000	119588.0899	3.7800
2.7454					
4	-0.1100	2.5000	597207.6000	155435.9778	13.7100
3.5683					
5	-0.0100	2.6000	646866.0000	217622.5113	14.8500

4.9959					
6	0.0900	2.7000	702187.2000	285055.5842	16.1200
6.5440					
7	0.1900	2.8000	767091.6000	358494.8855	17.6100
8.2299					
8	0.2900	2.9000	839401.2000	438791.5862	19.2700
10.0733					
9	0.3900	3.0000	925650.0000	527008.1220	21.2500
12.0984					
10	0.4900	3.1000	1028451.600	624667.1258	23.6100
14.3404					
11	0.5900	3.2000	1148677.200	733467.1096	26.3700
16.8381					
12	0.6900	3.3000	1283277.600	855001.5061	29.4600
19.6281					
13	0.7900	3.4000	1435737.600	990879.6120	32.9600
22.7475					
14	0.8900	3.5000	1607364.000	1.14295E+06	36.9000
26.2386					
15	0.9900	3.6000	1795978.800	1.31303E+06	41.2300
30.1430					
16	1.0900	3.7000	2002453.200	1.50286E+06	45.9700
34.5008					
17	1.1900	3.8000	2227658.400	1.71426E+06	51.1400
39.3540					
18	1.2900	3.9000	2466367.200	1.94886E+06	56.6200
44.7396					
19	1.3900	4.0000	2712045.600	2.20768E+06	62.2600
50.6813					
20	1.4900	4.1000	2963822.400	2.49138E+06	68.0400
57.1941					
21	1.5900	4.2000	3225618.000	2.80075E+06	74.0500
64.2964					
22	1.9900	4.6000	4288482.000	4.29852E+06	98.4500
98.6805					
23	2.0900	4.7000	4567266.000	4.74123E+06	104.8500
108.8437					
24	2.1900	4.8000	4861296.000	5.21258E+06	111.6000
119.6643					
25	2.2900	4.9000	5165780.400	5.71385E+06	118.5900
131.1719					
26	2.3900	5.0000	5495094.000	6.24680E+06	126.1500
143.4069					
27	2.4900	5.1000	5838782.400	6.81340E+06	134.0400
156.4142					
28	2.5900	5.2000	6192925.200	7.41490E+06	142.1700
170.2226					
29	2.6900	5.3000	6560571.600	8.05248E+06	150.6100
184.8594					
30	2.7900	5.4000	6951740.400	8.72799E+06	159.5900

200.3671					
31	2.8900	5.5000	7369916.400	9.44397E+06	169.1900
216.8036					
32	2.9900	5.6000	7823376.000	10.20351E+06	179.6000
234.2404					
33	3.0900	5.7000	8300358.000	11.00957E+06	190.5500
252.7450					
34	3.1900	5.8000	8811752.400	11.86504E+06	202.2900
272.3838					
35	3.2900	5.9000	9359737.200	12.77347E+06	214.8700
293.2385					
36	3.3900	6.0000	9942134.400	13.73841E+06	228.2400
315.3904					
37	3.4900	6.1000	10552410.00	14.76297E+06	242.2500
338.9112					
38	3.5900	6.2000	11197098.00	15.85028E+06	257.0500
363.8723					
39	3.6900	6.3000	11856596.40	17.00279E+06	272.1900
390.3304					
40	3.7900	6.4000	12543973.20	18.22265E+06	287.9700
418.3344					
41	3.8900	6.5000	13265762.40	19.51295E+06	304.5400
447.9558					
42	3.9900	6.6000	14026755.60	20.87739E+06	322.0100
479.2789					
43	4.0900	6.7000	14802994.80	22.31869E+06	339.8300
512.3666					
44	4.1900	6.8000	15587074.80	23.83801E+06	357.8300
547.2453					
45	4.2900	6.9000	16362442.80	25.43531E+06	375.6300
583.9144					
46	4.3900	7.0000	17135197.20	27.11003E+06	393.3700
622.3606					
47	4.4900	7.1000	17889656.40	28.86112E+06	410.6900
662.5601					
48	4.5900	7.2000	18621028.80	30.68651E+06	427.4800
704.4653					
49	4.6900	7.3000	19336284.00	32.58424E+06	443.9000
748.0313					
50	4.7900	7.4000	20029759.20	34.55243E+06	459.8200
793.2145					
51	4.8900	7.5000	20711908.80	36.58939E+06	475.4800
839.9769					
52	4.9900	7.6000	21383604.00	38.69406E+06	490.9000
888.2933					
53	5.0900	7.7000	22039182.00	40.86509E+06	505.9500
938.1335					
54	5.1900	7.8000	22678207.20	43.10086E+06	520.6200
989.4597					
55	5.2900	7.9000	23292838.80	45.39933E+06	534.7300

1042.2251						
56	5.3900	8.0000	23883948.00	47.75808E+06	548.3000	
1096.3746						
57	5.4900	8.1000	24459811.20	50.17519E+06	561.5200	
1151.8638						
58	5.5900	8.2000	25015636.80	52.64888E+06	574.2800	
1208.6520						
59	5.6900	8.3000	25559265.60	55.17755E+06	586.7600	
1266.7023						
60	5.7900	8.4000	26079807.60	57.75944E+06	598.7100	
1325.9742						
61	6.1900	8.8000	28130176.80	68.59874E+06	645.7800	
1574.8104						
62	6.2900	8.9000	28642006.80	71.43728E+06	657.5300	
1639.9743						
63	6.3900	9.0000	29142075.60	74.32642E+06	669.0100	
1706.2998						
64	6.4900	9.1000	29626898.40	77.26481E+06	680.1400	
1773.7559						
65	6.5900	9.2000	30090812.40	80.25063E+06	690.7900	
1842.3010						
66	6.6900	9.3000	30530332.80	83.28163E+06	700.8800	
1911.8832						
67	6.7900	9.4000	30951558.00	86.35567E+06	710.5500	
1982.4535						
68	6.8900	9.5000	31361022.00	89.47125E+06	719.9500	
2053.9772						
69	6.9900	9.6000	31771792.80	92.62783E+06	729.3800	
2126.4425						
70	7.0900	9.7000	32176465.20	95.82519E+06	738.6700	
2199.8438						
71	7.1900	9.8000	32571554.40	99.06254E+06	747.7400	
2274.1631						
72	7.2900	9.9000	32976662.40	102.33990E+06	757.0400	
2349.4008						
73	7.6900	10.3000	34574007.60	115.84864E+06	793.7100	
2659.5188						
74	7.7900	10.4000	34968661.20	119.32572E+06	802.7700	
2739.3416						
75	7.8900	10.5000	35351553.60	122.84168E+06	811.5600	
2820.0569						
76	8.0900	10.7000	36116467.20	129.98827E+06	829.1200	
2984.1201						
77	8.1900	10.8000	36492825.60	133.61868E+06	837.7600	
3067.4629						
78	8.2900	10.9000	36846968.40	137.28562E+06	845.8900	
3151.6442						
79	8.3900	11.0000	37186300.80	140.98724E+06	853.6800	
3236.6216						
80	8.4900	11.1000	37513872.00	144.72220E+06	861.2000	

3322.3645						
81	8.5900	11.2000	37812258.00	148.48845E+06		868.0500
3408.8259						
82	8.6900	11.3000	38093655.60	152.28370E+06		874.5100
3495.9528						
83	8.7900	11.4000	38351530.80	156.10592E+06		880.4300
3583.6988						
84	8.8900	11.5000	38580220.80	159.95246E+06		885.6800
3672.0032						
85	8.9900	11.6000	38789744.40	163.82092E+06		890.4900
3760.8107						
86	9.0900	11.7000	38979230.40	167.70932E+06		894.8400
3850.0763						
87	9.1900	11.8000	39149985.60	171.61574E+06		898.7600
3939.7553						
88	9.2900	11.9000	39298960.80	175.53815E+06		902.1800
4029.8013						
89	9.3900	12.0000	39427898.40	179.47445E+06		905.1400
4120.1664						
90	9.4900	12.1000	39540283.20	183.42282E+06		907.7200
4210.8085						
91	9.5900	12.2000	39642213.60	187.38190E+06		910.0600
4301.6965						
92	9.6900	12.3000	39734996.40	191.35072E+06		912.1900
4392.8081						
93	9.7900	12.4000	39822987.60	195.32858E+06		914.2100
4484.1272						
94	9.8900	12.5000	39902702.40	199.31482E+06		916.0400
4575.6387						
95	9.9900	12.6000	39972834.00	203.30856E+06		917.6500
4667.3223						
96	24.4900	27.1000	39972834.00	782.91465E+06		917.6500
17973.2473						

=====

| Variable storage data for node | N0380

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	0.0000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.3500	0.3500	1306.8000	177.0685	0.0300
0.0041					
3	0.4500	0.4500	2178.0000	349.4625	0.0500
0.0080					
4	0.5500	0.5500	5227.2000	708.7704	0.1200

0.0163					
5	0.6500	0.6500	33541.2000	2442.4028	0.7700
0.0561					
6	0.7500	0.7500	38768.4000	6054.6937	0.8900
0.1390					
7	0.8500	0.8500	47480.4000	10359.7385	1.0900
0.2378					
8	0.9500	0.9500	57934.8000	15621.7845	1.3300
0.3586					
9	1.0500	1.0500	71438.4000	22078.6022	1.6400
0.5069					
10	1.1500	1.1500	83199.6000	29802.9599	1.9100
0.6842					
11	1.2500	1.2500	95832.0000	38747.0134	2.2000
0.8895					
12	1.3500	1.3500	106286.4000	48848.3231	2.4400
1.1214					
13	1.7500	1.7500	147232.8000	99329.7571	3.3800
2.2803					
14	1.8500	1.8500	158994.0000	114637.1783	3.6500
2.6317					
15	1.9500	1.9500	173804.4000	131271.4368	3.9900
3.0136					
16	2.0500	2.0500	193842.0000	149644.4655	4.4500
3.4354					
17	2.1500	2.1500	219978.0000	170321.4891	5.0500
3.9100					
18	2.2500	2.2500	252212.4000	193912.4143	5.7900
4.4516					
19	2.3500	2.3500	289238.4000	220963.5595	6.6400
5.0726					
20	2.5500	2.5500	365032.8000	286243.1917	8.3800
6.5712					
21	2.6500	2.6500	403801.2000	324668.2063	9.2700
7.4534					
22	2.7500	2.7500	444747.6000	367078.7471	10.2100
8.4270					
23	2.8500	2.8500	487436.4000	413671.1817	11.1900
9.4966					
24	2.9500	2.9500	533174.4000	464684.1220	12.2400
10.6677					
25	3.2500	3.2500	671695.2000	645013.2998	15.4200
14.8075					
26	3.3500	3.3500	716997.6000	714434.9267	16.4600
16.4012					
27	3.4500	3.4500	759686.4000	788258.1024	17.4400
18.0959					
28	3.8500	3.8500	934797.6000	1.12655E+06	21.4600
25.8620					
29	3.9500	3.9500	979228.8000	1.22224E+06	22.4800

28.0587					
30	4.0500	4.0500	1028887.200	1.32263E+06	23.6200
30.3635					
31	4.1500	4.1500	1082901.600	1.42821E+06	24.8600
32.7872					
32	4.2500	4.2500	1141272.000	1.53940E+06	26.2000
35.3399					
33	4.3500	4.3500	1198771.200	1.65639E+06	27.5200
38.0256					
34	4.4500	4.4500	1249736.400	1.77881E+06	28.6900
40.8358					
35	4.6500	4.6500	1350360.000	2.03875E+06	31.0000
46.8033					
36	4.7500	4.7500	1401760.800	2.17635E+06	32.1800
49.9621					
37	4.8500	4.8500	1454904.000	2.31917E+06	33.4000
53.2409					
38	4.9500	4.9500	1511532.000	2.46748E+06	34.7000
56.6456					
39	5.0500	5.0500	1566417.600	2.62137E+06	35.9600
60.1784					
40	5.1500	5.1500	1624788.000	2.78092E+06	37.3000
63.8411					
41	5.2500	5.2500	1682722.800	2.94629E+06	38.6300
67.6374					
42	5.3500	5.3500	1742835.600	3.11755E+06	40.0100
71.5692					
43	5.4500	5.4500	1805562.000	3.29496E+06	41.4500
75.6419					
44	5.5500	5.5500	1871773.200	3.47882E+06	42.9700
79.8627					
45	5.6500	5.6500	1939726.800	3.66938E+06	44.5300
84.2374					
46	5.7500	5.7500	2008551.600	3.86678E+06	46.1100
88.7691					
47	5.8500	5.8500	2079118.800	4.07115E+06	47.7300
93.4608					
48	5.9500	5.9500	2147072.400	4.28245E+06	49.2900
98.3116					
49	6.0500	6.0500	2214154.800	4.50050E+06	50.8300
103.3173					
50	6.1500	6.1500	2278623.600	4.72513E+06	52.3100
108.4741					
51	6.2500	6.2500	2340914.400	4.95610E+06	53.7400
113.7764					
52	6.3500	6.3500	2399720.400	5.19312E+06	55.0900
119.2177					
53	6.4500	6.4500	2451992.400	5.43570E+06	56.2900
124.7865					
54	6.5500	6.5500	2503828.800	5.68348E+06	57.4800

130.4749					
55	6.6500	6.6500	2552180.400	5.93628E+06	58.5900
136.2782					
56	6.7500	6.7500	2597047.200	6.19373E+06	59.6200
142.1886					
57	6.8500	6.8500	2639736.000	6.45557E+06	60.6000
148.1994					
58	6.9500	6.9500	2678940.000	6.72150E+06	61.5000
154.3043					
59	7.0500	7.0500	2715530.400	6.99122E+06	62.3400
160.4962					
60	7.1500	7.1500	2750814.000	7.26453E+06	63.1500
166.7706					
61	7.2500	7.2500	2783919.600	7.54126E+06	63.9100
173.1235					
62	7.3500	7.3500	2816154.000	7.82126E+06	64.6500
179.5514					
63	7.4500	7.4500	2846646.000	8.10440E+06	65.3500
186.0513					
64	7.5500	7.5500	2875831.200	8.39052E+06	66.0200
192.6197					
65	7.6500	7.6500	2908065.600	8.67971E+06	66.7600
199.2586					
66	7.7500	7.7500	2937250.800	8.97197E+06	67.4300
205.9680					
67	8.0500	8.0500	3026113.200	9.86643E+06	69.4700
226.5021					
68	8.1500	8.1500	3053991.600	10.17043E+06	70.1100
233.4810					
69	8.2500	8.2500	3084048.000	10.47733E+06	70.8000
240.5264					
70	8.3500	8.3500	3114975.600	10.78728E+06	71.5100
247.6418					
71	8.4500	8.4500	3148952.400	11.10047E+06	72.2900
254.8317					
72	8.5500	8.5500	3185978.400	11.41721E+06	73.1400
262.1031					
73	8.6500	8.6500	3226053.600	11.73781E+06	74.0600
269.4629					
74	8.7500	8.7500	3269178.000	12.06256E+06	75.0500
276.9183					
75	8.8500	8.8500	3317094.000	12.39187E+06	76.1500
284.4782					
76	9.1500	9.1500	3464762.400	13.40906E+06	79.5400
307.8296					
77	9.2500	9.2500	3513114.000	13.75794E+06	80.6500
315.8389					
78	9.3500	9.3500	3559723.200	14.11158E+06	81.7200
323.9573					
79	9.4500	9.4500	3599798.400	14.46955E+06	82.6400

332.1752					
80	9.5500	9.5500	3638131.200	14.83144E+06	83.5200
340.4830					
81	9.6500	9.6500	3671236.800	15.19691E+06	84.2800
348.8729					
82	9.7500	9.7500	3699550.800	15.56544E+06	84.9300
357.3333					
83	9.8500	9.8500	3726122.400	15.93672E+06	85.5400
365.8567					
84	9.9500	9.9500	3749644.800	16.31050E+06	86.0800
374.4376					
85	10.0500	10.0500	3770118.000	16.68649E+06	86.5500
383.0690					
86	10.1500	10.1500	3786235.200	17.06430E+06	86.9200
391.7424					
87	10.2500	10.2500	3798432.000	17.44353E+06	87.2000
400.4483					
88	10.3500	10.3500	3807579.600	17.82383E+06	87.4100
409.1788					
89	10.4500	10.4500	3813242.400	18.20486E+06	87.5400
417.9262					
90	26.9500	26.9500	3857673.600	81.48893E+06	88.5600
1870.7285					
91	27.0250	27.0250	3857673.600	81.77826E+06	88.5600
1877.3705					
92	28.6750	28.6750	3857673.600	88.14342E+06	88.5600
2023.4945					

=====

| Variable storage data for node | N0660

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.8400	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.3900	0.4500	2178.0000	366.4049	0.0500
0.0084					
3	-0.2900	0.5500	3484.8000	646.9947	0.0800
0.0149					
4	-0.1900	0.6500	6098.4000	1120.0952	0.1400
0.0257					
5	-0.0900	0.7500	169448.4000	8043.1187	3.8900
0.1846					
6	0.0100	0.8500	173804.4000	25205.1264	3.9900
0.5786					
7	0.1100	0.9500	177724.8000	42781.0462	4.0800

0.9821					
8	0.2100	1.0500	179467.2000	60640.3968	4.1200
1.3921					
9	3.4100	4.2500	218671.2000	696623.5427	5.0200
15.9923					
10	3.5100	4.3500	220413.6000	718577.5056	5.0600
16.4963					
11	3.6100	4.4500	223462.8000	740770.9291	5.1300
17.0058					
12	3.7100	4.5500	225640.8000	763225.7965	5.1800
17.5213					
13	3.8100	4.6500	229125.6000	785963.6666	5.2600
18.0432					
14	4.6100	5.4500	246985.2000	976361.4042	5.6700
22.4142					
15	4.7100	5.5500	248292.0000	1.00112E+06	5.7000
22.9827					
16	4.9100	5.7500	248727.6000	1.05083E+06	5.7100
24.1237					
17	5.0100	5.8500	249598.8000	1.07574E+06	5.7300
24.6956					
18	16.6100	17.4500	261795.6000	4.04152E+06	6.0100
92.7805					
19	18.3100	19.1500	262231.2000	4.48694E+06	6.0200
103.0059					

=====

| Variable storage data for node | N0740

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.2400	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.0400	0.2000	1742.4000	132.1277	0.0400
0.0030					
3	-0.9400	0.3000	3049.2000	368.6780	0.0700
0.0085					
4	-0.8400	0.4000	5662.8000	797.5857	0.1300
0.0183					
5	-0.7400	0.5000	8712.0000	1510.8665	0.2000
0.0347					
6	-0.6400	0.6000	12632.4000	2572.0238	0.2900
0.0590					
7	-0.5400	0.7000	17424.0000	4068.4222	0.4000
0.0934					
8	-0.4400	0.8000	22215.6000	6045.5380	0.5100

0.1388					
9	-0.3400	0.9000	28749.6000	8586.7629	0.6600
0.1971					
10	-0.2400	1.0000	35283.6000	11782.8202	0.8100
0.2705					
11	-0.1400	1.1000	42688.8000	15675.5273	0.9800
0.3599					
12	-0.0400	1.2000	52707.6000	20436.5070	1.2100
0.4692					
13	0.0600	1.3000	63162.0000	26222.0527	1.4500
0.6020					
14	0.1600	1.4000	74052.0000	33075.4704	1.7000
0.7593					
15	0.2600	1.5000	87991.2000	41167.5386	2.0200
0.9451					
16	0.3600	1.6000	104544.0000	50782.3214	2.4000
1.1658					
17	0.4600	1.7000	122403.6000	62117.8577	2.8100
1.4260					
18	0.5600	1.8000	145926.0000	75516.9870	3.3500
1.7336					
19	0.6600	1.9000	172062.0000	91398.2965	3.9500
2.0982					
20	0.7600	2.0000	201247.2000	110044.5268	4.6200
2.5263					
21	0.8600	2.1000	233046.0000	131739.5413	5.3500
3.0243					
22	0.9600	2.2000	270507.6000	156893.7130	6.2100
3.6018					
23	1.0600	2.3000	314067.6000	186095.0942	7.2100
4.2722					
24	1.1600	2.4000	359370.0000	219741.2130	8.2500
5.0446					
25	1.2600	2.5000	411206.4000	258240.5566	9.4400
5.9284					
26	1.3600	2.6000	464785.2000	302012.3644	10.6700
6.9332					
27	1.4600	2.7000	526204.8000	351529.6164	12.0800
8.0700					
28	1.5600	2.8000	591980.4000	407406.0468	13.5900
9.3528					
29	1.6600	2.9000	668646.0000	470397.8471	15.3500
10.7988					
30	1.7600	3.0000	750974.4000	541338.3367	17.2400
12.4274					
31	1.8600	3.1000	841143.6000	620900.8510	19.3100
14.2539					
32	1.9600	3.2000	933490.8000	709591.6111	21.4300
16.2900					
33	2.0600	3.3000	1035421.200	807992.2232	23.7700

18.5489					
34	2.1600	3.4000	1141272.000	916782.8746	26.2000
21.0464					
35	2.2600	3.5000	1258448.400	1.03672E+06	28.8900
23.7998					
36	2.3600	3.6000	1380416.400	1.16861E+06	31.6900
26.8277					
37	2.4600	3.7000	1507611.600	1.31297E+06	34.6100
30.1416					
38	2.5600	3.8000	1638727.200	1.47024E+06	37.6200
33.7520					
39	2.6600	3.9000	1768971.600	1.64058E+06	40.6100
37.6625					
40	2.7600	4.0000	1898780.400	1.82393E+06	43.5900
41.8716					
41	2.8600	4.1000	2028153.600	2.02024E+06	46.5600
46.3782					
42	2.9600	4.2000	2150121.600	2.22912E+06	49.3600
51.1735					
43	3.0600	4.3000	2266426.800	2.44992E+06	52.0300
56.2424					
44	3.1600	4.4000	2374020.000	2.68192E+06	54.5000
61.5683					
45	3.2600	4.5000	2467238.400	2.92396E+06	56.6400
67.1250					
46	3.3600	4.6000	2546517.600	3.17464E+06	58.4600
72.8797					
47	3.4600	4.7000	2609244.000	3.43242E+06	59.9000
78.7974					
48	3.5600	4.8000	2657160.000	3.69573E+06	61.0000
84.8423					
49	3.6600	4.9000	2693314.800	3.96325E+06	61.8300
90.9837					
50	3.7600	5.0000	2720322.000	4.23393E+06	62.4500
97.1976					
51	3.8600	5.1000	2742102.000	4.50705E+06	62.9500
103.4675					
52	3.9600	5.2000	2757348.000	4.78201E+06	63.3000
109.7800					
53	4.0600	5.3000	2769544.800	5.05836E+06	63.5800
116.1239					
54	4.1600	5.4000	2779563.600	5.33581E+06	63.8100
122.4933					
55	4.2600	5.5000	2787840.000	5.61418E+06	64.0000
128.8838					
56	4.3600	5.6000	2793938.400	5.89326E+06	64.1400
135.2907					
57	4.5600	5.8000	2805699.600	6.45322E+06	64.4100
148.1456					
58	4.6600	5.9000	2811362.400	6.73407E+06	64.5400

154.5930						
59	4.7600	6.0000	2815718.400	7.01542E+06	64.6400	
161.0519						
60	4.8600	6.1000	2819638.800	7.29719E+06	64.7300	
167.5204						
61	4.9600	6.2000	2824430.400	7.57939E+06	64.8400	
173.9988						
62	5.2600	6.5000	2835756.000	8.42841E+06	65.1000	
193.4896						
63	5.3600	6.6000	2839240.800	8.71215E+06	65.1800	
200.0035						
64	5.4600	6.7000	2841854.400	8.99621E+06	65.2400	
206.5245						
65	5.6600	6.9000	2847517.200	9.56514E+06	65.3700	
219.5853						
66	5.7600	7.0000	2851002.000	9.85006E+06	65.4500	
226.1263						
67	5.8600	7.1000	2853615.600	10.13529E+06	65.5100	
232.6742						
68	5.9600	7.2000	2854922.400	10.42071E+06	65.5400	
239.2266						
69	32.1600	33.4000	2900660.400	85.81730E+06	66.5900	
1970.0941						
70	32.2550	33.4950	2900660.400	86.09286E+06	66.5900	
1976.4201						
71	32.2550	33.4950	2900660.400	86.09286E+06	66.5900	
1976.4201						

=====

| Variable storage data for node | N0730

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-2.1000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.9000	1.2000	24393.6000	10087.1807	0.5600
0.2316					
3	-0.8000	1.3000	27878.4000	12698.8165	0.6400
0.2915					
4	-0.7000	1.4000	33976.8000	15786.5229	0.7800
0.3624					
5	-0.6000	1.5000	38332.8000	19399.7780	0.8800
0.4454					
6	-0.5000	1.6000	43995.6000	23512.9072	1.0100
0.5398					
7	-0.4000	1.7000	49658.4000	28192.7044	1.1400

0.6472					
8	-0.3000	1.8000	57499.2000	33545.7435	1.3200
0.7701					
9	-0.2000	1.9000	65775.6000	39704.7862	1.5100
0.9115					
10	-0.1000	2.0000	829382.4000	77328.5468	19.0400
1.7752					
11	0.0000	2.1000	849855.6000	161287.5270	19.5100
3.7027					
12	0.1000	2.2000	874684.8000	247510.7056	20.0800
5.6821					
13	0.2000	2.3000	904741.2000	336476.8849	20.7700
7.7244					
14	0.3000	2.4000	938282.4000	428622.0563	21.5400
9.8398					
15	0.4000	2.5000	978793.2000	524467.7432	22.4700
12.0401					
16	0.5000	2.6000	1025838.000	624689.0993	23.5500
14.3409					
17	0.6000	2.7000	1079852.400	729961.0183	24.7900
16.7576					
18	0.7000	2.8000	1145192.400	841196.1529	26.2900
19.3112					
19	0.8000	2.9000	1220115.600	959440.5883	28.0100
22.0257					
20	0.9000	3.0000	1305493.200	1.08570E+06	29.9700
24.9241					
21	1.0000	3.1000	1410908.400	1.22148E+06	32.3900
28.0413					
22	1.1000	3.2000	1533312.000	1.36865E+06	35.2000
31.4198					
23	1.2000	3.3000	1671397.200	1.52883E+06	38.3700
35.0971					
24	1.3000	3.4000	1826906.400	1.70369E+06	41.9400
39.1113					
25	1.4000	3.5000	1991127.600	1.89453E+06	45.7100
43.4924					
26	1.5000	3.6000	2150992.800	2.10158E+06	49.3800
48.2457					
27	1.6000	3.7000	2306937.600	2.32443E+06	52.9600
53.3616					
28	1.7000	3.8000	2468980.800	2.56318E+06	56.6800
58.8425					
29	1.8000	3.9000	2637558.000	2.81846E+06	60.5500
64.7028					
30	1.9000	4.0000	2816154.000	3.09109E+06	64.6500
70.9617					
31	2.0000	4.1000	2946398.400	3.37919E+06	67.6400
77.5755					
32	2.1000	4.2000	3167745.055	3.68483E+06	72.7214

84.5920					
33	2.2000	4.3000	3419584.146	4.01411E+06	78.5028
92.1513					
34	2.3000	4.4000	3698866.037	4.36994E+06	84.9143
100.3200					
35	2.4000	4.5000	4014738.328	4.75551E+06	92.1657
109.1714					
36	2.5000	4.6000	4347599.018	5.17351E+06	99.8071
118.7674					
37	2.6000	4.7000	4683070.260	5.62493E+06	107.5085
129.1307					
38	2.7000	4.8000	5026388.400	6.11030E+06	115.3900
140.2732					
39	2.8000	4.9000	5375809.296	6.63031E+06	123.4116
152.2109					
40	2.9000	5.0000	5722185.348	7.18511E+06	131.3633
164.9475					
41	3.0000	5.1000	6068561.400	7.77456E+06	139.3150
178.4793					
42	3.1000	5.2000	6420547.980	8.39892E+06	147.3955
192.8128					
43	3.2000	5.3000	6767742.960	9.05826E+06	155.3660
207.9489					
44	3.3000	5.4000	7097513.940	9.75145E+06	162.9365
223.8624					
45	3.4000	5.5000	7415523.720	10.47703E+06	170.2370
240.5196					
46	3.5000	5.6000	7700863.500	11.23280E+06	176.7875
257.8696					
47	3.6000	5.7000	7955275.680	12.01556E+06	182.6280
275.8394					
48	3.7000	5.8000	8175275.460	12.82206E+06	187.6785
294.3540					
49	3.8000	5.9000	8366090.040	13.64910E+06	192.0590
313.3402					
50	3.9000	6.0000	8532511.020	14.49401E+06	195.8795
332.7367					
51	4.0000	6.1000	8677152.000	15.35447E+06	199.2000
352.4902					
52	4.1000	6.2000	8805240.180	16.22858E+06	202.1405
372.5569					
53	4.2000	6.3000	8917646.760	17.11471E+06	204.7210
392.8996					
54	4.3000	6.4000	9019598.940	18.01155E+06	207.0615
413.4884					
55	4.4000	6.5000	9115452.720	18.91829E+06	209.2620
434.3043					
56	4.5000	6.6000	9208257.300	19.83447E+06	211.3925
455.3367					
57	4.6000	6.7000	9295834.680	20.75966E+06	213.4030

476.5762						
58	4.7000	6.8000	9382976.460	21.69359E+06	215.4035	
498.0162						
59	4.8000	6.9000	9465762.240	22.63601E+06	217.3040	
519.6513						
60	4.9000	7.0000	9551161.620	23.58684E+06	219.2645	
541.4794						
61	5.0000	7.1000	9633947.400	24.54609E+06	221.1650	
563.5006						
62	5.1000	7.2000	9721481.220	25.51385E+06	223.1745	
585.7173						
63	5.2000	7.3000	9803352.240	26.49007E+06	225.0540	
608.1284						
64	5.3000	7.4000	9886530.060	27.47456E+06	226.9635	
630.7290						
65	5.4000	7.5000	9965787.480	28.46716E+06	228.7830	
653.5160						
66	5.5000	7.6000	10051578.90	29.46801E+06	230.7525	
676.4925						
67	5.6000	7.7000	10139983.92	30.47758E+06	232.7820	
699.6689						
68	5.7000	7.8000	10227517.74	31.49594E+06	234.7915	
723.0473						
69	5.8000	7.9000	10317229.56	32.52316E+06	236.8510	
746.6291						
70	5.9000	8.0000	10406070.18	33.55932E+06	238.8905	
770.4159						
71	6.0000	8.1000	10497960.00	34.60450E+06	241.0000	
794.4101						
72	6.1000	8.2000	10587258.00	35.65875E+06	243.0500	
818.6123						
73	6.2000	8.3000	10673506.80	36.72178E+06	245.0300	
843.0160						
74	6.3000	8.4000	10754964.00	37.79319E+06	246.9000	
867.6122						
75	6.4000	8.5000	10830758.40	38.87246E+06	248.6400	
892.3889						
76	6.5000	8.6000	10906988.40	39.95933E+06	250.3900	
917.3401						
77	6.6000	8.7000	10977991.20	41.05357E+06	252.0200	
942.4603						
78	6.7000	8.8000	11040282.00	42.15447E+06	253.4500	
967.7335						
79	6.8000	8.9000	11095603.20	43.26125E+06	254.7200	
993.1417						
80	6.9000	9.0000	11146568.40	44.37335E+06	255.8900	
1018.6719						
81	7.0000	9.1000	11189692.80	45.49015E+06	256.8800	
1044.3102						
82	7.1000	9.2000	11229768.00	46.61111E+06	257.8000	

1070.0439						
83	7.2000	9.3000	11259388.80	47.73556E+06	258.4800	
1095.8576						
84	7.3000	9.4000	11286396.00	48.86284E+06	259.1000	
1121.7363						
85	7.4000	9.5000	11307740.40	49.99253E+06	259.5900	
1147.6706						
86	7.5000	9.6000	11325164.40	51.12416E+06	259.9900	
1173.6493						
87	7.6000	9.7000	11339539.20	52.25739E+06	260.3200	
1199.6646						
88	7.7000	9.8000	11349558.00	53.39183E+06	260.5500	
1225.7078						
89	7.8000	9.9000	11358270.00	54.52721E+06	260.7500	
1251.7725						
90	7.9000	10.0000	11363932.80	55.66331E+06	260.8800	
1277.8538						
91	8.0000	10.1000	11368724.40	56.79993E+06	260.9900	
1303.9470						
92	8.1000	10.2000	11372209.20	57.93697E+06	261.0700	
1330.0498						
93	8.2000	10.3000	11374387.20	59.07429E+06	261.1200	
1356.1590						
94	10.7000	12.8000	11384406.00	87.52249E+06	261.3500	
2009.2399						
95	10.7750	12.8750	11384406.00	88.37632E+06	261.3500	
2028.8412						

=====

| Variable storage data for node | N0940

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.0100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.8100	0.2000	1742.4000	132.1277	0.0400
0.0030					
3	-0.7100	0.3000	3049.2000	368.6780	0.0700
0.0085					
4	-0.6100	0.4000	7405.2000	875.5474	0.1700
0.0201					
5	-0.5100	0.5000	16117.2000	2023.7757	0.3700
0.0465					
6	-0.4100	0.6000	27007.2000	4156.6802	0.6200
0.0954					
7	-0.3100	0.7000	40510.8000	7509.8110	0.9300

0.1724					
8	-0.2100	0.8000	55756.8000	12302.8942	1.2800
0.2824					
9	-0.1100	0.9000	73616.4000	18750.8454	1.6900
0.4305					
10	-0.0100	1.0000	95832.0000	27198.8041	2.2000
0.6244					
11	0.0900	1.1000	120661.2000	37999.5475	2.7700
0.8723					
12	0.1900	1.2000	146361.6000	51329.8928	3.3600
1.1784					
13	0.2900	1.3000	175982.4000	67424.2011	4.0400
1.5478					
14	0.3900	1.4000	213444.0000	86865.2262	4.9000
1.9942					
15	0.4900	1.5000	252212.4000	110120.8696	5.7900
2.5280					
16	0.5900	1.6000	315374.4000	138441.1708	7.2400
3.1782					
17	0.6900	1.7000	389426.4000	173615.8416	8.9400
3.9857					
18	0.7900	1.8000	480466.8000	217030.4488	11.0300
4.9823					
19	0.8900	1.9000	592851.6000	270597.4998	13.6100
6.2121					
20	0.9900	2.0000	733550.4000	336792.2135	16.8400
7.7317					
21	1.0900	2.1000	909968.4000	418809.0678	20.8900
9.6145					
22	1.1900	2.2000	934136.7948	511010.7658	21.4448
11.7312					
23	1.2900	2.3000	958305.1896	605629.3466	21.9997
13.9033					
24	1.3900	2.4000	1307372.378	718461.2394	30.0131
16.4936					
25	1.4900	2.5000	1775793.967	872021.5028	40.7666
20.0189					
26	1.5900	2.6000	2279499.156	1.07426E+06	52.3301
24.6616					
27	1.6900	2.7000	2858127.545	1.33059E+06	65.6136
30.5463					
28	1.7900	2.8000	3422381.134	1.64419E+06	78.5671
37.7455					
29	1.8900	2.9000	4070269.922	2.01835E+06	93.4405
46.3350					
30	1.9900	3.0000	4782191.040	2.46050E+06	109.7840
56.4852					
31	2.0900	3.1000	5357335.500	2.96719E+06	122.9875
68.1174					
32	2.1900	3.2000	6054443.604	3.53742E+06	138.9909

81.2081					
33	2.2900	3.3000	6623925.264	4.17112E+06	152.0644
95.7558					
34	2.3900	3.4000	7060113.324	4.85520E+06	162.0779
111.4601					
35	2.4900	3.5000	7492380.984	5.58271E+06	172.0014
128.1614					
36	2.5900	3.6000	7798324.644	6.34719E+06	179.0249
145.7114					
37	2.6900	3.7000	8126915.148	7.14339E+06	186.5683
163.9896					
38	2.7900	3.8000	8398882.008	7.96963E+06	192.8118
182.9575					
39	2.8900	3.9000	8629902.468	8.82103E+06	198.1153
202.5031					
40	2.9900	4.0000	8887930.128	9.69689E+06	204.0388
222.6099					
41	3.0900	4.1000	9082795.788	10.59540E+06	208.5123
243.2368					
42	3.1900	4.2000	9302926.248	11.51465E+06	213.5658
264.3400					
43	3.2900	4.3000	9336737.520	12.44662E+06	214.3420
285.7352					
44	3.3900	4.4000	9370553.148	13.38198E+06	215.1183
307.2079					
45	3.4900	4.5000	9404368.776	14.32071E+06	215.8946
328.7584					
46	3.5900	4.6000	9494869.032	15.26566E+06	217.9722
350.4514					
47	3.6900	4.7000	9584933.688	16.21964E+06	220.0398
372.3517					
48	3.7900	4.8000	9647991.144	17.18128E+06	221.4874
394.4278					
49	3.8900	4.9000	9691446.600	18.14824E+06	222.4850
416.6262					
50	3.9900	5.0000	9735342.012	19.11957E+06	223.4927
438.9248					
51	4.0900	5.1000	9770956.668	20.09487E+06	224.3103
461.3147					
52	4.1900	5.2000	9802650.924	21.07354E+06	225.0379
483.7819					
53	4.2900	5.3000	9829117.980	22.05512E+06	225.6455
506.3159					
54	4.3900	5.4000	9855585.036	23.03934E+06	226.2531
528.9105					
55	4.4900	5.5000	9876903.300	24.02596E+06	226.7425
551.5601					
56	4.5900	5.6000	9891683.208	25.01438E+06	227.0818
574.2511					
57	4.6900	5.7000	9904720.716	26.00419E+06	227.3811

596.9740						
58	4.7900	5.8000	9912099.780	26.99502E+06	227.5505	
619.7204						
59	4.8900	5.9000	9919474.488	27.98659E+06	227.7198	
642.4836						
60	4.9900	6.0000	9927720.396	28.97894E+06	227.9091	
665.2649						
61	5.0900	6.1000	9930307.860	29.97183E+06	227.9685	
688.0585						
62	5.2900	6.3000	9936075.204	31.95845E+06	228.1009	
733.6650						
63	5.3900	6.4000	9938963.232	32.95219E+06	228.1672	
756.4782						
64	5.4900	6.5000	9952031.232	33.94673E+06	228.4672	
779.3097						
65	5.5900	6.6000	9961178.832	34.94238E+06	228.6772	
802.1666						
66	5.6900	6.7000	9969019.632	35.93888E+06	228.8572	
825.0431						
67	5.7900	6.8000	9974682.432	36.93605E+06	228.9872	
847.9351						
68	5.9900	7.0000	9985136.832	38.93202E+06	229.2272	
893.7561						
69	6.0900	7.1000	9989928.432	39.93076E+06	229.3372	
916.6841						
70	6.1900	7.2000	9993413.232	40.92992E+06	229.4172	
939.6216						
71	6.2900	7.3000	9995591.232	41.92936E+06	229.4672	
962.5656						
72	8.4900	9.5000	10016064.43	63.94195E+06	229.9372	
1467.9053						
73	8.5900	9.6000	10016500.03	64.94357E+06	229.9472	
1490.8993						

=====

| Variable storage data for node | N0530

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.6600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.3300	0.6700	7840.8000	1858.0310	0.1800
0.0427					
3	2.4300	0.7700	10890.0000	2790.3973	0.2500
0.0641					
4	2.5300	0.8700	14810.4000	4070.3917	0.3400

0.0934					
5	2.7300	1.0700	24829.2000	7991.4123	0.5700
0.1835					
6	2.8300	1.1700	30056.4000	10731.5069	0.6900
0.2464					
7	2.9300	1.2700	37461.6000	14100.5845	0.8600
0.3237					
8	3.0300	1.3700	46173.6000	18274.7196	1.0600
0.4195					
9	3.1300	1.4700	54014.4000	23278.9482	1.2400
0.5344					
10	3.2300	1.5700	62726.4000	29110.5044	1.4400
0.6683					
11	3.3300	1.6700	71438.4000	35813.9581	1.6400
0.8222					
12	3.4300	1.7700	81457.2000	43453.1849	1.8700
0.9975					
13	3.6300	1.9700	101059.2000	61669.4539	2.3200
1.4157					
14	3.7300	2.0700	110206.8000	72229.3461	2.5300
1.6582					
15	3.8300	2.1700	120225.6000	83747.2192	2.7600
1.9226					
16	3.9300	2.2700	131115.6000	96310.2197	3.0100
2.2110					
17	4.0300	2.3700	143748.0000	110048.4217	3.3000
2.5264					
18	4.3300	2.6700	181645.2000	158746.1947	4.1700
3.6443					
19	4.4300	2.7700	193842.0000	177517.0646	4.4500
4.0752					
20	4.5300	2.8700	207345.6000	197572.4553	4.7600
4.5356					
21	4.6300	2.9700	223027.2000	219086.1170	5.1200
5.0295					
22	4.7300	3.0700	240015.6000	242232.8297	5.5100
5.5609					
23	4.8300	3.1700	258746.4000	267164.8165	5.9400
6.1333					
24	4.9300	3.2700	281397.6000	294163.8272	6.4600
6.7531					
25	5.0300	3.3700	304920.0000	323471.5469	7.0000
7.4259					
26	5.1300	3.4700	331056.0000	355261.0745	7.6000
8.1557					
27	5.2300	3.5700	360241.2000	389815.3166	8.2700
8.9489					
28	5.3300	3.6700	393346.8000	427482.2145	9.0300
9.8136					
29	5.4300	3.7700	432550.8000	468761.1650	9.9300

10.7613					
30	5.5300	3.8700	478288.8000	514283.5382	10.9800
11.8063					
31	5.6300	3.9700	533610.0000	564852.7499	12.2500
12.9672					
32	5.7300	4.0700	595029.6000	621256.2918	13.6600
14.2621					
33	5.8300	4.1700	663854.4000	684168.4831	15.2400
15.7063					
34	5.9300	4.2700	741826.8000	754415.7704	17.0300
17.3190					
35	6.0300	4.3700	825897.6000	832763.6100	18.9600
19.1176					
36	6.1300	4.4700	917809.2000	919907.6780	21.0700
21.1182					
37	6.2300	4.5700	1020175.200	1.01676E+06	23.4200
23.3416					
38	6.3300	4.6700	1122105.600	1.12383E+06	25.7600
25.7997					
39	6.4300	4.7700	1224907.200	1.24115E+06	28.1200
28.4928					
40	6.5300	4.8700	1324659.600	1.36859E+06	30.4100
31.4185					
41	6.6300	4.9700	1418749.200	1.50573E+06	32.5700
34.5669					
42	6.7300	5.0700	1510225.200	1.65216E+06	34.6700
37.9283					
43	6.8300	5.1700	1595602.800	1.80743E+06	36.6300
41.4928					
44	6.9300	5.2700	1669219.200	1.97065E+06	38.3200
45.2399					
45	7.0300	5.3700	1738479.600	2.14102E+06	39.9100
49.1511					
46	7.1300	5.4700	1799899.200	2.31793E+06	41.3200
53.2124					
47	7.2300	5.5700	1863496.800	2.50109E+06	42.7800
57.4171					
48	7.3300	5.6700	1921431.600	2.69033E+06	44.1100
61.7614					
49	7.4300	5.7700	1971090.000	2.88495E+06	45.2500
66.2292					
50	7.5300	5.8700	2015521.200	3.08427E+06	46.2700
70.8051					
51	7.6300	5.9700	2049933.600	3.28754E+06	47.0600
75.4715					
52	7.7300	6.0700	2078247.600	3.49394E+06	47.7100
80.2099					
53	7.8300	6.1700	2100898.800	3.70290E+06	48.2300
85.0068					
54	7.9300	6.2700	2122243.200	3.91405E+06	48.7200

89.8543						
55	8.0300	6.3700	2140102.800	4.12717E+06		49.1300
94.7467						
56	8.1300	6.4700	2157526.800	4.34205E+06		49.5300
99.6797						
57	8.2300	6.5700	2174079.600	4.55862E+06		49.9100
104.6516						
58	8.3300	6.6700	2191503.600	4.77690E+06		50.3100
109.6625						
59	8.4300	6.7700	2207620.800	4.99685E+06		50.6800
114.7120						
60	8.5300	6.8700	2219382.000	5.21820E+06		50.9500
119.7934						
61	8.6300	6.9700	2228965.200	5.44062E+06		51.1700
124.8994						
62	8.7300	7.0700	2239855.200	5.66405E+06		51.4200
130.0288						
63	8.8300	7.1700	2248131.600	5.88845E+06		51.6100
135.1802						
64	8.9300	7.2700	2255101.200	6.11361E+06		51.7700
140.3492						
65	9.0300	7.3700	2259892.800	6.33936E+06		51.8800
145.5316						
66	9.1300	7.4700	2262942.000	6.56550E+06		51.9500
150.7231						
67	10.7300	9.0700	2285157.600	10.20393E+06		52.4600
234.2499						
68	10.8300	9.1700	2285593.200	10.43246E+06		52.4700
239.4964						
69	10.9300	9.2700	2287335.600	10.66111E+06		52.5100
244.7453						
70	27.1300	25.4700	2354418.000	48.25763E+06		54.0500
1107.8426						
71	27.2300	25.5700	2354418.000	48.49307E+06		54.0500
1113.2476						

=====

| Variable storage data for node | N0060

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.2900	0.0000	43.5600	0.0000	0.0010
0.0000					
2	-1.1900	0.1000	912.5820	38.5170	0.0209
0.0009					
3	-1.0900	0.2000	1799.0280	171.6131	0.0413

0.0039						
4	-0.9900	0.3000	2685.4740	394.3612	0.0617	
0.0091						
5	-0.8900	0.4000	3571.9200	706.1760	0.0820	
0.0162						
6	-0.7900	0.5000	6534.0000	1204.0696	0.1500	
0.0276						
7	-0.6900	0.6000	331665.8400	14029.0084	7.6140	
0.3221						
8	-0.5900	0.7000	334889.2800	47356.3012	7.6880	
1.0872						
9	-0.4900	0.8000	340290.7200	81114.6035	7.8120	
1.8621						
10	-0.3900	0.9000	346998.9600	115478.1982	7.9660	
2.6510						
11	-0.2900	1.0000	356320.8000	150642.8049	8.1800	
3.4583						
12	-0.1900	1.1000	369127.4400	186912.9701	8.4740	
4.2909						
13	-0.0900	1.2000	387161.2800	224723.4440	8.8880	
5.1589						
14	0.0100	1.3000	414778.3200	264812.0951	9.5220	
6.0792						
15	0.1100	1.4000	445444.5600	307813.6960	10.2260	
7.0664						
16	0.2100	1.5000	482644.8000	354205.2694	11.0800	
8.1314						
17	0.3100	1.6000	528121.4400	404726.0167	12.1240	
9.2912						
18	0.4100	1.7000	579260.8800	460074.8884	13.2980	
10.5619						
19	0.5100	1.8000	643032.7200	521161.2117	14.7620	
11.9642						
20	0.6100	1.9000	709418.1600	588755.9088	16.2860	
13.5160						
21	0.7100	2.0000	782337.6000	663313.2300	17.9600	
15.2276						
22	0.8100	2.1000	861355.4400	745465.3867	19.7740	
17.1135						
23	0.9100	2.2000	949085.2800	835951.0704	21.7880	
19.1908						
24	1.0100	2.3000	1047269.520	935727.5477	24.0420	
21.4813						
25	1.1100	2.4000	1153730.160	1.04573E+06	26.4860	
24.0067						
26	1.2100	2.5000	1269774.000	1.16686E+06	29.1500	
26.7874						
27	1.3100	2.6000	1385701.535	1.29959E+06	31.8113	
29.8345						
28	1.4100	2.7000	1513826.305	1.44452E+06	34.7527	

33.1616						
29	1.5100	2.8000	1648049.476	1.60256E+06	37.8340	
36.7898						
30	1.6100	2.9000	1796647.446	1.77474E+06	41.2454	
40.7425						
31	1.7100	3.0000	1955264.216	1.96228E+06	44.8867	
45.0478						
32	1.8100	3.1000	2127820.187	2.16637E+06	48.8480	
49.7331						
33	1.9100	3.2000	2306038.522	2.38800E+06	52.9394	
54.8210						
34	2.0100	3.3000	2495147.292	2.62800E+06	57.2807	
60.3305						
35	2.1100	3.4000	2689047.662	2.88715E+06	61.7320	
66.2797						
36	2.2100	3.5000	2877285.233	3.16541E+06	66.0534	
72.6677						
37	2.3100	3.6000	3067875.043	3.46261E+06	70.4287	
79.4906						
38	2.4100	3.7000	3249317.254	3.77842E+06	74.5941	
86.7407						
39	2.5100	3.8000	3429017.064	4.11230E+06	78.7194	
94.4053						
40	2.6100	3.9000	3597704.035	4.46360E+06	82.5919	
102.4700						
41	2.7100	4.0000	3753323.006	4.83112E+06	86.1644	
110.9071						
42	2.8100	4.1000	3895873.978	5.21355E+06	89.4370	
119.6866						
43	2.9100	4.2000	4028406.149	5.60974E+06	92.4795	
128.7819						
44	3.0100	4.3000	4150919.520	6.01869E+06	95.2920	
138.1701						
45	3.1100	4.4000	4262542.891	6.43934E+06	97.8545	
147.8270						
46	3.2100	4.5000	4368066.120	6.87086E+06	100.2770	
157.7332						
47	3.3100	4.6000	4460130.180	7.31226E+06	102.3905	
167.8663						
48	3.4100	4.7000	4546095.840	7.76256E+06	104.3640	
178.2038						
49	3.5100	4.8000	4635550.656	8.22163E+06	106.4176	
188.7426						
50	3.6100	4.9000	4723406.820	8.68956E+06	108.4345	
199.4849						
51	3.7100	5.0000	4801026.384	9.16578E+06	110.2164	
210.4172						
52	3.8100	5.1000	4875583.680	9.64960E+06	111.9280	
221.5242						
53	3.9100	5.2000	4945584.600	10.14065E+06	113.5350	

232.7972						
54	4.0100	5.3000	5016504.636	10.63874E+06	115.1631	
244.2319						
55	4.1100	5.4000	5082197.472	11.14367E+06	116.6712	
255.8234						
56	4.2100	5.5000	5147890.308	11.65516E+06	118.1793	
267.5657						
57	4.3100	5.6000	5232915.072	12.17419E+06	120.1312	
279.4810						
58	4.4100	5.7000	5319242.280	12.70179E+06	122.1130	
291.5930						
59	4.5100	5.8000	5412543.444	13.23837E+06	124.2549	
303.9111						
60	4.6100	5.9000	5507421.480	13.78435E+06	126.4330	
316.4452						
61	4.7100	6.0000	5600121.516	14.33972E+06	128.5611	
329.1946						
62	4.8100	6.1000	5685873.732	14.90401E+06	130.5297	
342.1489						
63	4.9100	6.2000	5743625.580	15.47547E+06	131.8555	
355.2680						
64	5.0100	6.3000	5821536.996	16.05372E+06	133.6441	
368.5427						
65	5.1100	6.4000	5900049.540	16.63979E+06	135.4465	
381.9970						
66	5.2100	6.5000	5978566.440	17.23371E+06	137.2490	
395.6316						
67	5.3100	6.6000	6049238.184	17.83509E+06	138.8714	
409.4374						
68	5.4100	6.7000	6107281.884	18.44291E+06	140.2039	
423.3909						
69	5.5100	6.8000	6158791.584	19.05620E+06	141.3864	
437.4703						
70	5.6100	6.9000	6202891.728	19.67428E+06	142.3988	
451.6593						
71	5.7100	7.0000	6247867.428	20.29681E+06	143.4313	
465.9507						
72	5.8100	7.1000	6289353.972	20.92367E+06	144.3837	
480.3413						
73	5.9100	7.2000	6329102.472	21.55458E+06	145.2962	
494.8251						
74	6.0100	7.3000	6371464.572	22.18960E+06	146.2687	
509.4032						
75	6.1100	7.4000	7104636.000	22.86307E+06	163.1000	
524.8638						
76	6.2100	7.5000	7168233.600	23.57670E+06	164.5600	
541.2466						
77	6.3100	7.6000	7235751.600	24.29689E+06	166.1100	
557.7799						
78	6.4100	7.7000	7297171.200	25.02353E+06	167.5200	

574.4611						
79	6.5100	7.8000	7353799.200	25.75607E+06		168.8200
591.2779						
80	6.6100	7.9000	7409991.600	26.49425E+06		170.1100
608.2242						
81	6.7100	8.0000	7475331.600	27.23850E+06		171.6100
625.3100						
82	6.8100	8.1000	7550690.400	27.98979E+06		173.3400
642.5572						
83	6.9100	8.2000	7628227.200	28.74873E+06		175.1200
659.9800						
84	7.0100	8.3000	7704892.800	29.51537E+06		176.8800
677.5797						
85	7.1100	8.4000	7767183.600	30.28897E+06		178.3100
695.3390						
86	7.2100	8.5000	7829910.000	31.06881E+06		179.7500
713.2418						
87	7.3100	8.6000	7894378.800	31.85502E+06		181.2300
731.2906						
88	7.4100	8.7000	7952749.200	32.64736E+06		182.5700
749.4803						
89	7.5100	8.8000	7991517.600	33.44457E+06		183.4600
767.7816						
90	7.6100	8.9000	8011119.600	34.24469E+06		183.9100
786.1500						
91	7.7100	9.0000	8021574.000	35.04632E+06		184.1500
804.5528						
92	7.8100	9.1000	8029850.400	35.84888E+06		184.3400
822.9771						
93	7.9100	9.2000	8036384.400	36.65219E+06		184.4900
841.4184						
94	21.3100	22.6000	8075152.800	144.59830E+06		185.3800
3319.5202						
95	21.4200	22.7100	8075152.800	145.48657E+06		185.3800
3339.9120						

=====

| Variable storage data for node | N0050

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.8600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.7400	1.6000	8712.0000	4914.7839	0.2000
0.1128					
3	0.8400	1.7000	10454.4000	5871.7716	0.2400

0.1348						
4	0.9400	1.8000	13503.6000	7066.4124	0.3100	
0.1622						
5	1.0400	1.9000	16552.8000	8566.6329	0.3800	
0.1967						
6	1.1400	2.0000	20908.8000	10435.4589	0.4800	
0.2396						
7	1.2400	2.1000	26571.6000	12803.8069	0.6100	
0.2939						
8	1.3400	2.2000	33105.6000	15781.6575	0.7600	
0.3623						
9	1.4400	2.3000	42253.2000	19540.2722	0.9700	
0.4486						
10	1.5400	2.4000	53578.8000	24320.6312	1.2300	
0.5583						
11	1.6400	2.5000	66646.8000	30319.9791	1.5300	
0.6961						
12	1.7400	2.6000	82328.4000	37754.8706	1.8900	
0.8667						
13	1.8400	2.7000	98881.2000	46802.6334	2.2700	
1.0744						
14	1.9400	2.8000	116740.8000	57571.2772	2.6800	
1.3217						
15	2.0400	2.9000	138520.8000	70318.7151	3.1800	
1.6143						
16	2.1400	3.0000	163350.0000	85395.0569	3.7500	
1.9604						
17	2.2400	3.1000	190357.2000	103063.0307	4.3700	
2.3660						
18	2.3400	3.2000	217800.0000	123455.2932	5.0000	
2.8341						
19	2.4400	3.3000	247856.4000	146721.6967	5.6900	
3.3683						
20	2.5400	3.4000	279655.2000	173081.0248	6.4200	
3.9734						
21	2.6400	3.5000	312325.2000	202664.7127	7.1700	
4.6525						
22	2.7400	3.6000	348480.0000	235688.1455	8.0000	
5.4107						
23	2.8400	3.7000	382892.4000	272242.8994	8.7900	
6.2498						
24	2.9400	3.8000	417740.4000	312261.4934	9.5900	
7.1685						
25	3.0400	3.9000	454766.4000	355873.2977	10.4400	
8.1697						
26	3.1400	4.0000	494406.0000	403317.6419	11.3500	
9.2589						
27	3.2400	4.1000	537530.4000	454898.9215	12.3400	
10.4430						
28	3.3400	4.2000	583704.0000	510944.2287	13.4000	

11.7297					
29	3.4400	4.3000	632926.8000	571758.5581	14.5300
13.1258					
30	3.5400	4.4000	680407.2000	637410.2924	15.6200
14.6329					
31	3.6400	4.5000	728758.8000	707854.0585	16.7300
16.2501					
32	3.7400	4.6000	773625.6000	782961.3592	17.7600
17.9743					
33	3.8400	4.7000	816314.4000	862448.0112	18.7400
19.7991					
34	3.9400	4.8000	857696.4000	946139.1882	19.6900
21.7204					
35	4.0400	4.9000	898207.2000	1.03393E+06	20.6200
23.7357					
36	4.2400	5.1000	978793.2000	1.22157E+06	22.4700
28.0433					
37	4.3400	5.2000	1019304.000	1.32146E+06	23.4000
30.3366					
38	4.4400	5.3000	1058943.600	1.42537E+06	24.3100
32.7220					
39	4.5400	5.4000	1096840.800	1.53315E+06	25.1800
35.1963					
40	4.6400	5.5000	1131253.200	1.64455E+06	25.9700
37.7537					
41	4.7400	5.6000	1166101.200	1.75941E+06	26.7700
40.3905					
42	4.8400	5.7000	1196157.600	1.87752E+06	27.4600
43.1019					
43	4.9400	5.8000	1225342.800	1.99859E+06	28.1300
45.8813					
44	5.0400	5.9000	1255834.800	2.12265E+06	28.8300
48.7292					
45	5.1400	6.0000	1289376.000	2.24990E+06	29.6000
51.6506					
46	5.2400	6.1000	1326837.600	2.38071E+06	30.4600
54.6535					
47	5.3400	6.2000	1365606.000	2.51532E+06	31.3500
57.7439					
48	5.4400	6.3000	1402632.000	2.65373E+06	32.2000
60.9212					
49	5.5400	6.4000	1433559.600	2.79553E+06	32.9100
64.1766					
50	5.6400	6.5000	1464487.200	2.94043E+06	33.6200
67.5030					
51	5.7400	6.6000	1493672.400	3.08834E+06	34.2900
70.8985					
52	5.8400	6.7000	1518937.200	3.23896E+06	34.8700
74.3564					
53	5.9400	6.8000	1542024.000	3.39201E+06	35.4000

77.8698						
54	6.0400	6.9000	1562932.800	3.54725E+06		35.8800
81.4338						
55	6.2400	7.1000	1603879.200	3.86392E+06		36.8200
88.7035						
56	6.3400	7.2000	1624352.400	4.02533E+06		37.2900
92.4089						
57	6.4400	7.3000	1641340.800	4.18861E+06		37.6800
96.1574						
58	6.5400	7.4000	1657022.400	4.35353E+06		38.0400
99.9433						
59	6.6400	7.5000	1670090.400	4.51988E+06		38.3400
103.7623						
60	6.7400	7.6000	1682722.800	4.68752E+06		38.6300
107.6107						
61	6.8400	7.7000	1694484.000	4.85638E+06		38.9000
111.4872						
62	6.9400	7.8000	1704502.800	5.02633E+06		39.1300
115.3886						
63	7.0400	7.9000	1714086.000	5.19726E+06		39.3500
119.3126						
64	7.1400	8.0000	1721491.200	5.36903E+06		39.5200
123.2560						
65	7.2400	8.1000	1726718.400	5.54144E+06		39.6400
127.2140						
66	7.3400	8.2000	1731074.400	5.71433E+06		39.7400
131.1830						
67	7.4400	8.3000	1734559.200	5.88761E+06		39.8200
135.1609						
68	7.5400	8.4000	1737608.400	6.06122E+06		39.8900
139.1464						
69	7.6400	8.5000	1740222.000	6.23511E+06		39.9500
143.1383						
70	7.7400	8.6000	1741964.400	6.40921E+06		39.9900
147.1353						
71	9.6400	10.5000	1748062.800	9.72470E+06		40.1300
223.2485						
72	9.7450	10.6050	1748062.800	9.90825E+06		40.1300
227.4621						

=====

| Variable storage data for node | N0325

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-4.3700	0.0000	43.5600	0.0000	0.0010

0.0000						
2	3.6300	8.0000	43.5600	348.4800	0.0010	
0.0080						
3	1001.6000	1005.9700	43.5600	43820.0532	0.0010	
1.0060						

=====

| Variable storage data for node | N0160

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.0900	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.8200	1.2700	1306.8000	642.5058	0.0300
0.0147					
3	-0.7200	1.3700	2178.0000	814.8998	0.0500
0.0187					
4	-0.6200	1.4700	274863.6000	10865.0988	6.3100
0.2494					
5	-0.5200	1.5700	276170.4000	38416.4974	6.3400
0.8819					
6	-0.4200	1.6700	278784.0000	66163.8374	6.4000
1.5189					
7	-0.3200	1.7700	283140.0000	94259.4750	6.5000
2.1639					
8	-0.2200	1.8700	288802.8000	122855.8618	6.6300
2.8204					
9	-0.1200	1.9700	295772.4000	152083.6371	6.7900
3.4914					
10	-0.0200	2.0700	336718.8000	183685.7679	7.7300
4.2168					
11	0.0800	2.1700	349786.8000	218008.6315	8.0300
5.0048					
12	0.1800	2.2700	362854.8000	253638.3580	8.3300
5.8227					
13	0.2800	2.3700	374616.0000	290509.9662	8.6000
6.6692					
14	0.3800	2.4700	388555.2000	328666.0228	8.9200
7.5451					
15	0.8800	2.9700	459558.0000	540444.0924	10.5500
12.4069					
16	0.9800	3.0700	473932.8000	587116.3209	10.8800
13.4783					
17	1.0800	3.1700	487000.8000	635161.0394	11.1800
14.5813					
18	1.1800	3.2700	500940.0000	684555.9464	11.5000

15.7152					
19	1.2800	3.3700	514443.6000	735323.1221	11.8100
16.8807					
20	1.3800	3.4700	528382.8000	787462.3680	12.1300
18.0776					
21	1.4800	3.5700	541015.2000	840930.4897	12.4200
19.3051					
22	1.5800	3.6700	554954.4000	895726.9443	12.7400
20.5631					
23	2.3800	4.4700	668646.0000	1.38446E+06	15.3500
31.7827					
24	2.4800	4.5700	682585.2000	1.45202E+06	15.6700
33.3337					
25	2.5800	4.6700	697831.2000	1.52103E+06	16.0200
34.9182					
26	2.6800	4.7700	711770.4000	1.59151E+06	16.3400
36.5361					
27	2.7800	4.8700	725709.6000	1.66339E+06	16.6600
38.1861					
28	2.8800	4.9700	740955.6000	1.73672E+06	17.0100
39.8695					
29	2.9800	5.0700	757508.4000	1.81164E+06	17.3900
41.5895					
30	3.0800	5.1700	772318.8000	1.88813E+06	17.7300
43.3454					
31	3.1800	5.2700	788000.4000	1.96614E+06	18.0900
45.1364					
32	3.2800	5.3700	803246.4000	2.04570E+06	18.4400
46.9628					
33	3.3800	5.4700	817185.6000	2.12672E+06	18.7600
48.8228					
34	3.4800	5.5700	830253.6000	2.20909E+06	19.0600
50.7138					
35	3.5800	5.6700	842450.4000	2.29272E+06	19.3400
52.6337					
36	3.6800	5.7700	854647.2000	2.37758E+06	19.6200
54.5817					
37	3.7800	5.8700	865537.2000	2.46359E+06	19.8700
56.5561					
38	3.8800	5.9700	877734.0000	2.55075E+06	20.1500
58.5571					
39	3.9800	6.0700	890366.4000	2.63915E+06	20.4400
60.5866					
40	4.0800	6.1700	902127.6000	2.72877E+06	20.7100
62.6440					
41	4.2800	6.3700	923472.0000	2.91133E+06	21.2000
66.8349					
42	4.3800	6.4700	933055.2000	3.00415E+06	21.4200
68.9659					
43	4.4800	6.5700	941331.6000	3.09787E+06	21.6100

71.1173					
44	4.5800	6.6700	948301.2000	3.19235E+06	21.7700
73.2863					
45	4.6800	6.7700	954399.6000	3.28749E+06	21.9100
75.4703					
46	4.7800	6.8700	960498.0000	3.38323E+06	22.0500
77.6683					
47	4.8800	6.9700	966596.4000	3.47958E+06	22.1900
79.8802					
48	4.9800	7.0700	971823.6000	3.57650E+06	22.3100
82.1052					
49	5.3800	7.4700	994474.8000	3.96975E+06	22.8300
91.1329					
50	5.4800	7.5700	999702.0000	4.06946E+06	22.9500
93.4219					
51	5.5800	7.6700	1005800.400	4.16973E+06	23.0900
95.7239					
52	5.6800	7.7700	1013205.600	4.27068E+06	23.2600
98.0413					
53	5.7800	7.8700	1023224.400	4.37250E+06	23.4900
100.3788					
54	5.8800	7.9700	1037599.200	4.47554E+06	23.8200
102.7443					
55	5.9800	8.0700	1051974.000	4.58002E+06	24.1500
105.1427					
56	6.0800	8.1700	1069398.000	4.68608E+06	24.5500
107.5777					
57	6.1800	8.2700	1085950.800	4.79385E+06	24.9300
110.0516					
58	6.4800	8.5700	1134302.400	5.12686E+06	26.0400
117.6964					
59	6.5800	8.6700	1150419.600	5.24109E+06	26.4100
120.3189					
60	6.6800	8.7700	1163923.200	5.35681E+06	26.7200
122.9754					
61	6.7800	8.8700	1174813.200	5.47374E+06	26.9700
125.6598					
62	6.8800	8.9700	1181782.800	5.59157E+06	27.1300
128.3648					
63	6.9800	9.0700	1187010.000	5.71001E+06	27.2500
131.0838					
64	7.0800	9.1700	1189623.600	5.82884E+06	27.3100
133.8117					
65	7.7800	9.8700	1203562.800	6.66644E+06	27.6300
153.0404					
66	7.8800	9.9700	1206612.000	6.78695E+06	27.7000
155.8069					
67	7.9800	10.0700	1210968.000	6.90783E+06	27.8000
158.5819					
68	8.0800	10.1700	1216630.800	7.02920E+06	27.9300

161.3683						
69	8.1800	10.2700	1222729.200	7.15117E+06		28.0700
164.1683						
70	8.2800	10.3700	1231005.600	7.27386E+06		28.2600
166.9848						
71	8.4800	10.5700	1247994.000	7.52175E+06		28.6500
172.6757						
72	8.5800	10.6700	1255834.800	7.64694E+06		28.8300
175.5496						
73	8.6800	10.7700	1262368.800	7.77285E+06		28.9800
178.4401						
74	8.7800	10.8700	1266724.800	7.89930E+06		29.0800
181.3431						
75	8.8800	10.9700	1269774.000	8.02613E+06		29.1500
184.2545						
76	8.9800	11.0700	1272387.600	8.15323E+06		29.2100
187.1725						
77	9.0800	11.1700	1276308.000	8.28067E+06		29.3000
190.0980						
78	9.1800	11.2700	1278921.600	8.40843E+06		29.3600
193.0310						
79	9.2800	11.3700	1279792.800	8.53636E+06		29.3800
195.9679						
80	9.5800	11.6700	1280664.000	8.92043E+06		29.4000
204.7848						
81	9.6700	11.7600	1280664.000	9.03569E+06		29.4000
207.4308						

=====

| Variable storage data for node | N0470

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	1.8100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	1.9100	0.1000	871.2000	34.9407	0.0200
0.0008					
3	2.0100	0.2000	2613.6000	201.3978	0.0600
0.0046					
4	2.1100	0.3000	6098.4000	624.8716	0.1400
0.0143					
5	2.2100	0.4000	13068.0000	1561.3137	0.3000
0.0358					
6	2.3100	0.5000	25264.8000	3444.7321	0.5800
0.0791					
7	2.4100	0.6000	46609.2000	6984.3557	1.0700

0.1603					
8	2.5100	0.7000	81892.8000	13327.0767	1.8800
0.3059					
9	2.6100	0.8000	133729.2000	24002.6772	3.0700
0.5510					
10	2.7100	0.9000	209523.6000	41023.9348	4.8100
0.9418					
11	2.8100	1.0000	316245.6000	67129.7123	7.2600
1.5411					
12	2.9100	1.1000	457815.6000	105614.7849	10.5100
2.4246					
13	3.0100	1.2000	641203.2000	160308.3698	14.7200
3.6802					
14	3.1100	1.3000	864230.4000	235302.4300	19.8400
5.4018					
15	3.2100	1.4000	1151290.800	335735.0356	26.4300
7.7074					
16	3.3100	1.5000	1508918.400	468341.6929	34.6400
10.7516					
17	3.4100	1.6000	1976317.200	642077.0153	45.3700
14.7401					
18	3.5100	1.7000	2604016.800	870371.1895	59.7800
19.9810					
19	3.6100	1.8000	3447774.000	1.17197E+06	79.1500
26.9048					
20	3.7100	1.9000	4528933.200	1.56958E+06	103.9700
36.0325					
21	3.8100	2.0000	5823972.000	2.08586E+06	133.7000
47.8848					
22	3.9100	2.1000	7288023.600	2.74009E+06	167.3100
62.9038					
23	4.0100	2.2000	8838759.600	3.54517E+06	202.9100
81.3860					
24	4.1100	2.3000	10406919.60	4.50638E+06	238.9100
103.4523					
25	4.2100	2.4000	11948943.60	5.62328E+06	274.3100
129.0927					
26	4.3100	2.5000	13468316.40	6.89337E+06	309.1900
158.2500					
27	4.4100	2.6000	14920171.20	8.31216E+06	342.5200
190.8209					
28	4.5100	2.7000	16244395.20	9.86990E+06	372.9200
226.5818					
29	4.6100	2.8000	17457105.60	11.55460E+06	400.7600
265.2571					
30	4.7100	2.9000	18588358.80	13.35656E+06	426.7300
306.6244					
31	4.8100	3.0000	19640332.80	15.26773E+06	450.8800
350.4989					
32	4.9100	3.1000	20629144.80	17.28098E+06	473.5800

396.7168						
33	5.0100	3.2000	21566120.40	19.39055E+06	495.0900	
445.1458						
34	5.1100	3.3000	22438627.20	21.59062E+06	515.1200	
495.6525						
35	5.2100	3.4000	23258426.40	23.87533E+06	533.9400	
548.1022						
36	5.3100	3.5000	24032487.60	26.23975E+06	551.7100	
602.3817						
37	5.4100	3.6000	24760375.20	28.67928E+06	568.4200	
658.3856						
38	5.5100	3.7000	25476937.20	31.19103E+06	584.8700	
716.0475						
39	5.6100	3.8000	26174332.80	33.77349E+06	600.8800	
775.3326						
40	5.7100	3.9000	26874342.00	36.42582E+06	616.9500	
836.2218						
41	5.8100	4.0000	27578271.60	39.14835E+06	633.1100	
898.7224						
42	5.9100	4.1000	28293091.20	41.94181E+06	649.5200	
962.8515						
43	6.0100	4.2000	29014444.80	44.80708E+06	666.0800	
1028.6291						
44	6.1100	4.3000	29746688.40	47.74504E+06	682.8900	
1096.0752						
45	6.2100	4.4000	30478496.40	50.75619E+06	699.6900	
1165.2018						
46	6.3100	4.5000	31218580.80	53.84094E+06	716.6800	
1236.0179						
47	6.4100	4.6000	31960407.60	56.99978E+06	733.7100	
1308.5350						
48	6.5100	4.7000	32710075.20	60.23320E+06	750.9200	
1382.7641						
49	6.6100	4.8000	33470197.20	63.54211E+06	768.3700	
1458.7262						
50	6.7100	4.9000	34229448.00	66.92699E+06	785.8000	
1536.4323						
51	6.8100	5.0000	34983907.20	70.38755E+06	803.1200	
1615.8759						
52	6.9100	5.1000	35705260.80	73.92192E+06	819.6800	
1697.0137						
53	7.0100	5.2000	36416160.00	77.52789E+06	836.0000	
1779.7955						
54	7.1100	5.3000	37083499.20	81.20279E+06	851.3200	
1864.1595						
55	7.2100	5.4000	37719039.60	84.94283E+06	865.9100	
1950.0191						
56	7.3100	5.5000	38308842.00	88.74415E+06	879.4500	
2037.2854						
57	7.4100	5.6000	38857262.40	92.60238E+06	892.0400	

2125.8582					
58	7.5100	5.7000	39357331.20	96.51305E+06	903.5200
2215.6347					
59	7.6100	5.8000	39815582.40	100.47163E+06	914.0400
2306.5113					
60	7.7100	5.9000	40232016.00	104.47395E+06	923.6000
2398.3920					
61	7.8100	6.0000	40609681.20	108.51598E+06	932.2700
2491.1842					
62	7.9100	6.1000	40948142.40	112.59382E+06	940.0400
2584.7985					
63	8.0100	6.2000	41244350.40	116.70340E+06	946.8400
2679.1414					
64	8.1100	6.3000	41512680.00	120.84120E+06	953.0000
2774.1322					
65	8.2100	6.4000	41743548.00	125.00396E+06	958.3000
2869.6962					
66	8.3100	6.5000	41940439.20	129.18812E+06	962.8200
2965.7511					
67	8.4100	6.6000	42108580.80	133.39052E+06	966.6800
3062.2251					
68	8.5100	6.7000	42248844.00	137.60835E+06	969.9000
3159.0531					
69	8.6100	6.8000	42365149.20	141.83901E+06	972.5700
3256.1756					
70	8.7100	6.9000	42460981.20	146.08027E+06	974.7700
3353.5416					
71	8.8100	7.0000	42537211.20	150.33014E+06	976.5200
3451.1051					
72	8.9100	7.1000	42600373.20	154.58697E+06	977.9700
3548.8286					
73	9.0100	7.2000	42648724.80	158.84939E+06	979.0800
3646.6801					
74	9.1100	7.3000	42688364.40	163.11620E+06	979.9900
3744.6326					
75	9.2100	7.4000	42717985.20	167.38647E+06	980.6700
3842.6646					
76	9.3100	7.5000	42741072.00	171.65938E+06	981.2000
3940.7572					
77	9.4100	7.6000	42758060.40	175.93430E+06	981.5900
4038.8957					
78	9.5100	7.7000	42771999.60	180.21076E+06	981.9100
4137.0697					
79	9.6100	7.8000	42782889.60	184.48846E+06	982.1600
4235.2722					
80	9.7100	7.9000	42791601.60	188.76714E+06	982.3600
4333.4972					
81	9.8100	8.0000	42798571.20	193.04661E+06	982.5200
4431.7403					
82	9.9100	8.1000	42803798.40	197.32668E+06	982.6400

4529.9973						
83	10.0100	8.2000	42807718.80	201.60721E+06	982.7300	
4628.2648						
84	13.7100	11.9000	42824707.20	360.02562E+06	983.1200	
8265.0509						
85	13.8200	12.0100	42824707.20	364.73633E+06	983.1200	
8373.1941						

=====

| Variable storage data for node | N0540

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	1.3500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.7200	1.3700	22651.2000	10707.2462	0.5200
0.2458					
3	2.8200	1.4700	23958.0000	13037.3775	0.5500
0.2993					
4	2.9200	1.5700	26571.6000	15562.7050	0.6100
0.3573					
5	3.0200	1.6700	29185.2000	18349.4956	0.6700
0.4212					
6	3.1200	1.7700	32670.0000	21440.5873	0.7500
0.4922					
7	3.2200	1.8700	37897.2000	24965.6810	0.8700
0.5731					
8	3.3200	1.9700	43995.6000	29056.4903	1.0100
0.6670					
9	3.4200	2.0700	52707.6000	33885.0482	1.2100
0.7779					
10	3.5200	2.1700	64904.4000	39755.0205	1.4900
0.9126					
11	3.6200	2.2700	83635.2000	47162.1647	1.9200
1.0827					
12	3.7200	2.3700	105415.2000	56593.6104	2.4200
1.2992					
13	3.8200	2.4700	127630.8000	68228.1059	2.9300
1.5663					
14	3.9200	2.5700	149410.8000	82065.7565	3.4300
1.8840					
15	4.0200	2.6700	172933.2000	98168.4722	3.9700
2.2536					
16	4.1200	2.7700	196455.6000	116625.2326	4.5100
2.6773					
17	4.2200	2.8700	223462.8000	137606.4529	5.1300

3.1590					
18	4.3200	2.9700	253519.2000	161439.5159	5.8200
3.7061					
19	4.4200	3.0700	287931.6000	188493.5409	6.6100
4.3272					
20	4.5200	3.1700	326700.0000	219204.4156	7.5000
5.0322					
21	4.6200	3.2700	367646.4000	253901.2490	8.4400
5.8288					
22	4.7200	3.3700	411642.0000	292844.5645	9.4500
6.7228					
23	4.8200	3.4700	459558.0000	336382.1510	10.5500
7.7223					
24	4.9200	3.5700	505731.6000	384627.7325	11.6100
8.8298					
25	5.0200	3.6700	555825.6000	437685.3518	12.7600
10.0479					
26	5.1200	3.7700	607226.4000	495818.4308	13.9400
11.3824					
27	5.2200	3.8700	660805.2000	559200.5028	15.1700
12.8375					
28	5.3200	3.9700	714384.0000	627941.8730	16.4000
14.4156					
29	5.4200	4.0700	770576.4000	702171.4246	17.6900
16.1196					
30	5.5200	4.1700	822412.8000	781806.0281	18.8800
17.9478					
31	5.6200	4.2700	876427.2000	866732.8637	20.1200
19.8974					
32	5.7200	4.3700	928699.2000	956975.6647	21.3200
21.9691					
33	5.8200	4.4700	981406.8000	1.05247E+06	22.5300
24.1613					
34	5.9200	4.5700	1034550.000	1.15325E+06	23.7500
26.4750					
35	6.0200	4.6700	1090306.800	1.25948E+06	25.0300
28.9137					
36	6.1200	4.7700	1148677.200	1.37142E+06	26.3700
31.4834					
37	6.2200	4.8700	1208354.400	1.48926E+06	27.7400
34.1886					
38	6.3200	4.9700	1267596.000	1.61304E+06	29.1000
37.0303					
39	6.4200	5.0700	1330322.400	1.74292E+06	30.5400
40.0120					
40	6.5200	5.1700	1400454.000	1.87944E+06	32.1500
43.1461					
41	6.6200	5.2700	1469714.400	2.02294E+06	33.7400
46.4403					
42	6.7200	5.3700	1540281.600	2.17342E+06	35.3600

49.8949					
43	6.8200	5.4700	1609106.400	2.33088E+06	36.9400
53.5096					
44	6.9200	5.5700	1686643.200	2.49565E+06	38.7200
57.2922					
45	7.0200	5.6700	1768100.400	2.66837E+06	40.5900
61.2573					
46	7.1200	5.7700	1845637.200	2.84904E+06	42.3700
65.4049					
47	7.2200	5.8700	1912719.600	3.03694E+06	43.9100
69.7187					
48	7.3200	5.9700	1973268.000	3.23123E+06	45.3000
74.1789					
49	7.4200	6.0700	2029896.000	3.43138E+06	46.6000
78.7737					
50	7.5200	6.1700	2084781.600	3.63711E+06	47.8600
83.4965					
51	7.6200	6.2700	2141409.600	3.84841E+06	49.1600
88.3474					
52	7.7200	6.3700	2197602.000	4.06535E+06	50.4500
93.3277					
53	7.8200	6.4700	2255536.800	4.28800E+06	51.7800
98.4390					
54	7.9200	6.5700	2313036.000	4.51642E+06	53.1000
103.6828					
55	8.0200	6.6700	2370970.800	4.75061E+06	54.4300
109.0591					
56	8.1200	6.7700	2424549.600	4.99038E+06	55.6600
114.5634					
57	8.2200	6.8700	2472030.000	5.23521E+06	56.7500
120.1838					
58	8.3200	6.9700	2514283.200	5.48452E+06	57.7200
125.9071					
59	8.4200	7.0700	2552180.400	5.73783E+06	58.5900
131.7225					
60	8.5200	7.1700	2584414.800	5.99466E+06	59.3300
137.6184					
61	8.6200	7.2700	2614035.600	6.25458E+06	60.0100
143.5853					
62	8.7200	7.3700	2638429.200	6.51720E+06	60.5700
149.6143					
63	8.8200	7.4700	2660644.800	6.78215E+06	61.0800
155.6967					
64	8.9200	7.5700	2678068.800	7.04908E+06	61.4800
161.8246					
65	9.0200	7.6700	2692443.600	7.31760E+06	61.8100
167.9890					
66	9.1200	7.7700	2705511.600	7.58750E+06	62.1100
174.1850					
67	9.2200	7.8700	2715966.000	7.85857E+06	62.3500

180.4079						
68	9.3200	7.9700	2724242.400	8.13058E+06	62.5400	
186.6523						
69	9.4200	8.0700	2730340.800	8.40330E+06	62.6800	
192.9133						
70	9.5200	8.1700	2736874.800	8.67666E+06	62.8300	
199.1887						
71	9.6200	8.2700	2741666.400	8.95058E+06	62.9400	
205.4772						
72	10.4200	9.0700	2760832.800	11.15156E+06	63.3800	
256.0045						
73	10.5200	9.1700	2762575.200	11.42773E+06	63.4200	
262.3445						
74	10.6200	9.2700	2763010.800	11.70400E+06	63.4300	
268.6869						
75	11.8200	10.4700	2763882.000	15.02010E+06	63.4500	
344.8142						
76	11.9400	10.5900	2763882.000	15.35177E+06	63.4500	
352.4282						

=====

| Variable storage data for node | N0650

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.4900	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.2900	0.2000	1306.8000	101.1820	0.0300
0.0023					
3	-0.1900	0.3000	1742.4000	253.1193	0.0400
0.0058					
4	-0.0900	0.4000	8712.0000	731.4653	0.2000
0.0168					
5	0.0100	0.5000	12196.8000	1772.0208	0.2800
0.0407					
6	2.3100	2.8000	73180.8000	90132.1818	1.6800
2.0692					
7	2.4100	2.9000	75358.8000	97558.8214	1.7300
2.2396					
8	2.5100	3.0000	78408.0000	105246.5806	1.8000
2.4161					
9	2.6100	3.1000	81021.6000	113217.6238	1.8600
2.5991					
10	2.7100	3.2000	84506.4000	121493.3296	1.9400
2.7891					
11	2.8100	3.3000	88862.4000	130160.7708	2.0400

2.9881					
12	2.9100	3.4000	94525.2000	139328.6016	2.1700
3.1985					
13	3.0100	3.5000	101494.8000	149127.4379	2.3300
3.4235					
14	3.1100	3.6000	109335.6000	159666.4216	2.5100
3.6654					
15	3.2100	3.7000	119354.4000	171097.1479	2.7400
3.9279					
16	3.3100	3.8000	131986.8000	183658.7881	3.0300
4.2162					
17	3.4100	3.9000	146797.2000	197591.2874	3.3700
4.5361					
18	3.5100	4.0000	162478.8000	213048.3026	3.7300
4.8909					
19	3.6100	4.1000	178160.4000	230074.0732	4.0900
5.2818					
20	3.7100	4.2000	192099.6000	248582.5134	4.4100
5.7067					
21	3.8100	4.3000	204296.4000	268398.9871	4.6900
6.1616					
22	3.9100	4.4000	216057.6000	289413.7342	4.9600
6.6440					
23	4.0100	4.5000	226512.0000	311539.9347	5.2000
7.1520					
24	4.1100	4.6000	237402.0000	334733.2722	5.4500
7.6844					
25	4.2100	4.7000	249163.2000	359058.9195	5.7200
8.2429					
26	4.3100	4.8000	261795.6000	384604.0011	6.0100
8.8293					
27	4.4100	4.9000	275299.2000	411455.6429	6.3200
9.4457					
28	4.5100	5.0000	290109.6000	439722.5668	6.6600
10.0946					
29	4.6100	5.1000	307098.0000	469578.6202	7.0500
10.7800					
30	4.7100	5.2000	324957.6000	501176.8780	7.4600
11.5054					
31	4.9100	5.4000	362419.2000	569879.8184	8.3200
13.0826					
32	5.0100	5.5000	381150.0000	607053.9741	8.7500
13.9360					
33	5.1100	5.6000	401623.2000	646187.7798	9.2200
14.8344					
34	5.2100	5.7000	422967.6000	687412.3026	9.7100
15.7808					
35	5.5100	6.0000	490050.0000	824240.1885	11.2500
18.9220					
36	5.6100	6.1000	512701.2000	874372.9827	11.7700

20.0728					
37	5.7100	6.2000	537094.8000	926857.5337	12.3300
21.2777					
38	5.8100	6.3000	564102.0000	981911.3026	12.9500
22.5416					
39	5.9100	6.4000	595465.2000	1.03988E+06	13.6700
23.8724					
40	6.0100	6.5000	632491.2000	1.10127E+06	14.5200
25.2817					
41	6.1100	6.6000	677358.0000	1.16675E+06	15.5500
26.7849					
42	6.2100	6.7000	733986.0000	1.23730E+06	16.8500
28.4044					
43	6.3100	6.8000	798019.2000	1.31387E+06	18.3200
30.1624					
44	6.4100	6.9000	865101.6000	1.39701E+06	19.8600
32.0709					
45	6.5100	7.0000	921729.6000	1.48633E+06	21.1600
34.1215					
46	6.6100	7.1000	962240.4000	1.58052E+06	22.0900
36.2838					
47	6.7100	7.2000	993168.0000	1.67829E+06	22.8000
38.5282					
48	6.8100	7.3000	1024531.200	1.77917E+06	23.5200
40.8441					
49	6.9100	7.4000	1063299.600	1.88355E+06	24.4100
43.2404					
50	7.0100	7.5000	1109473.200	1.99218E+06	25.4700
45.7342					
51	7.1100	7.6000	1156082.400	2.10545E+06	26.5400
48.3345					
52	7.2100	7.7000	1196157.600	2.22306E+06	27.4600
51.0343					
53	7.3100	7.8000	1232312.400	2.34447E+06	28.2900
53.8217					
54	7.4100	7.9000	1265853.600	2.46938E+06	29.0600
56.6891					
55	7.6100	8.1000	1333371.600	2.72927E+06	30.6100
62.6553					
56	7.7100	8.2000	1366912.800	2.86428E+06	31.3800
65.7547					
57	7.8100	8.3000	1401760.800	3.00271E+06	32.1800
68.9326					
58	7.9100	8.4000	1439658.000	3.14477E+06	33.0500
72.1940					
59	8.0100	8.5000	1473199.200	3.29041E+06	33.8200
75.5374					
60	8.1100	8.6000	1502820.000	3.43921E+06	34.5000
78.9533					
61	8.2100	8.7000	1528956.000	3.59079E+06	35.1000

82.4332					
62	8.3100	8.8000	1552478.400	3.74486E+06	35.6400
85.9701					
63	8.4100	8.9000	1573822.800	3.90117E+06	36.1300
89.5586					
64	8.5100	9.0000	1591682.400	4.05944E+06	36.5400
93.1920					
65	8.6100	9.1000	1606928.400	4.21937E+06	36.8900
96.8635					
66	8.7100	9.2000	1620432.000	4.38074E+06	37.2000
100.5679					
67	8.8100	9.3000	1631757.600	4.54335E+06	37.4600
104.3009					
68	8.9100	9.4000	1641776.400	4.70702E+06	37.6900
108.0583					
69	9.0100	9.5000	1650488.400	4.87163E+06	37.8900
111.8373					
70	9.2100	9.7000	1665734.400	5.20325E+06	38.2400
119.4502					
71	9.3100	9.8000	1672268.400	5.37015E+06	38.3900
123.2817					
72	9.4100	9.9000	1677495.600	5.53764E+06	38.5100
127.1266					
73	9.5100	10.0000	1681851.600	5.70560E+06	38.6100
130.9826					
74	9.6100	10.1000	1685772.000	5.87398E+06	38.7000
134.8480					
75	9.7100	10.2000	1688385.600	6.04269E+06	38.7600
138.7210					
76	10.0100	10.5000	1695790.800	6.55031E+06	38.9300
150.3744					
77	10.1100	10.6000	1698404.400	6.72002E+06	38.9900
154.2703					
78	10.2100	10.7000	1700146.800	6.88994E+06	39.0300
158.1713					
79	10.3100	10.8000	1702760.400	7.06009E+06	39.0900
162.0773					
80	10.4100	10.9000	1705374.000	7.23049E+06	39.1500
165.9892					
81	10.5100	11.0000	1708423.200	7.40118E+06	39.2200
169.9077					
82	10.6100	11.1000	1710165.600	7.57211E+06	39.2600
173.8316					
83	10.7100	11.2000	1711036.800	7.74316E+06	39.2800
177.7586					
84	10.8100	11.3000	1712779.200	7.91435E+06	39.3200
181.6886					
85	10.9100	11.4000	1713214.800	8.08565E+06	39.3300
185.6210					
86	12.7300	13.2200	1713214.800	11.20370E+06	39.3300

257.2016

```

*=====*
| Variable storage data for node | N0400
*=====*

```

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-2.9000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.3000	1.6000	6969.6000	3958.6458	0.1600
0.0909					
3	-1.2000	1.7000	8712.0000	4741.0996	0.2000
0.1088					
4	-1.1000	1.8000	11761.2000	5760.9437	0.2700
0.1323					
5	-1.0000	1.9000	16552.8000	7169.8232	0.3800
0.1646					
6	-0.9000	2.0000	25264.8000	9245.3896	0.5800
0.2122					
7	-0.8000	2.1000	37461.6000	12361.7247	0.8600
0.2838					
8	-0.7000	2.2000	54014.4000	16910.3109	1.2400
0.3882					
9	-0.6000	2.3000	76230.0000	23390.6557	1.7500
0.5370					
10	-0.5000	2.4000	116305.2000	32947.0384	2.6700
0.7564					
11	-0.4000	2.5000	190792.8000	48148.9443	4.3800
1.1053					
12	-0.3000	2.6000	334976.4000	74101.2054	7.6900
1.7011					
13	-0.2000	2.7000	543628.8000	117612.1125	12.4800
2.7000					
14	-0.1000	2.8000	928699.2000	190373.6643	21.3200
4.3704					
15	0.0000	2.9000	1418313.600	306862.5109	32.5600
7.0446					
16	0.1000	3.0000	2066050.800	480066.7331	47.4300
11.0208					
17	0.2000	3.1000	2903709.600	727367.2332	66.6600
16.6981					
18	0.3000	3.2000	3888165.600	1.06576E+06	89.2600
24.4665					
19	0.4000	3.3000	4973245.200	1.50772E+06	114.1700
34.6124					
20	0.5000	3.4000	6131941.200	2.06196E+06	140.7700

47.3361						
21	0.6000	3.5000	7308061.200	2.73309E+06	167.7700	
62.7432						
22	0.7000	3.6000	8431038.000	3.51937E+06	193.5500	
80.7937						
23	0.8000	3.7000	9466459.200	4.41374E+06	217.3200	
101.3255						
24	0.9000	3.8000	10429135.20	5.40812E+06	239.4200	
124.1534						
25	1.0000	3.9000	11329084.80	6.49571E+06	260.0800	
149.1210						
26	1.1000	4.0000	12158467.20	7.66983E+06	279.1200	
176.0751						
27	1.2000	4.1000	12934706.40	8.92428E+06	296.9400	
204.8732						
28	1.3000	4.2000	13681324.80	10.25489E+06	314.0800	
235.4199						
29	1.4000	4.3000	14410519.20	11.65931E+06	330.8200	
267.6610						
30	1.5000	4.4000	15127952.40	13.13608E+06	347.2900	
301.5628						
31	1.6000	4.5000	15845821.20	14.68461E+06	363.7700	
337.1123						
32	1.7000	4.6000	16560640.80	16.30479E+06	380.1800	
374.3064						
33	1.8000	4.7000	17289835.20	17.99716E+06	396.9200	
413.1580						
34	1.9000	4.8000	18011188.80	19.76207E+06	413.4800	
453.6748						
35	2.0000	4.9000	18746046.00	21.59979E+06	430.3500	
495.8630						
36	2.1000	5.0000	19473933.60	23.51066E+06	447.0600	
539.7304						
37	2.2000	5.1000	20170022.40	25.49273E+06	463.0400	
585.2326						
38	2.3000	5.2000	20859141.60	27.54408E+06	478.8600	
632.3250						
39	2.4000	5.3000	21501216.00	29.66199E+06	493.6000	
680.9456						
40	2.5000	5.4000	22111491.60	31.84253E+06	507.6100	
731.0040						
41	2.6000	5.5000	22679949.60	34.08202E+06	520.6600	
782.4156						
42	2.7000	5.6000	23209203.60	36.37641E+06	532.8100	
835.0874						
43	2.8000	5.7000	23699253.60	38.72176E+06	544.0600	
888.9294						
44	2.9000	5.8000	24156633.60	41.11450E+06	554.5600	
943.8590						
45	3.0000	5.9000	24572631.60	43.55091E+06	564.1100	

999.7912						
46	3.1000	6.0000	24959444.40	46.02746E+06	572.9900	
1056.6451						
47	3.2000	6.1000	25309666.80	48.54087E+06	581.0300	
1114.3451						
48	3.3000	6.2000	25633753.20	51.08800E+06	588.4700	
1172.8191						
49	3.4000	6.3000	25920378.00	53.66567E+06	595.0500	
1231.9942						
50	3.5000	6.4000	26180431.20	56.27067E+06	601.0200	
1291.7968						
51	3.6000	6.5000	26422189.20	58.90077E+06	606.5700	
1352.1755						
52	3.7000	6.6000	26632584.00	61.55347E+06	611.4000	
1413.0732						
53	3.8000	6.7000	26819892.00	64.22606E+06	615.7000	
1474.4275						
54	3.9000	6.8000	26984113.20	66.91623E+06	619.4700	
1536.1853						
55	4.0000	6.9000	27126554.40	69.62173E+06	622.7400	
1598.2951						
56	4.1000	7.0000	27246780.00	72.34037E+06	625.5000	
1660.7064						
57	4.2000	7.1000	27353066.40	75.07034E+06	627.9400	
1723.3778						
58	4.3000	7.2000	27444106.80	77.81017E+06	630.0300	
1786.2756						
59	4.4000	7.3000	27520772.40	80.55838E+06	631.7900	
1849.3660						
60	4.5000	7.4000	27580885.20	83.31344E+06	633.1700	
1912.6133						
61	4.6000	7.5000	27633592.80	86.07413E+06	634.3800	
1975.9902						
62	4.7000	7.6000	27676281.60	88.83960E+06	635.3600	
2039.4765						
63	4.8000	7.7000	27711129.60	91.60894E+06	636.1600	
2103.0519						
64	4.9000	7.8000	27738572.40	94.38140E+06	636.7900	
2166.6987						
65	5.0000	7.9000	27760352.40	97.15632E+06	637.2900	
2230.4021						
66	5.1000	8.0000	27776469.60	99.93313E+06	637.6600	
2294.1490						
67	5.2000	8.1000	27790408.80	102.71145E+06	637.9800	
2357.9303						
68	5.3000	8.2000	27799992.00	105.49094E+06	638.2000	
2421.7387						
69	5.4000	8.3000	27808268.40	108.27132E+06	638.3900	
2485.5676						
70	5.5000	8.4000	27814802.40	111.05245E+06	638.5400	

2549.4134						
71	5.6000	8.5000	27819158.40	113.83412E+06	638.6400	
2613.2718						
72	5.7000	8.6000	27823078.80	116.61620E+06	638.7300	
2677.1396						
73	5.8000	8.7000	27826999.20	119.39868E+06	638.8200	
2741.0165						
74	5.9000	8.8000	27829177.20	122.18146E+06	638.8700	
2804.9004						
75	9.2000	12.1000	27841374.00	214.03695E+06	639.1500	
4913.6123						
76	9.3150	12.2150	27841374.00	217.23871E+06	639.1500	
4987.1145						
77	1002.6000	1005.5000	27841374.00	27.87166E+09	639.1500	
639845.2223						

=====

| Variable storage data for node | N0360

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.1800	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-1.0800	0.1000	871.2000	64.0937	0.0200
0.0015					
3	-0.9800	0.2000	1306.8000	172.2592	0.0300
0.0040					
4	-0.8800	0.3000	2178.0000	344.6532	0.0500
0.0079					
5	-0.7800	0.4000	3484.8000	625.2430	0.0800
0.0144					
6	-0.6800	0.5000	6969.6000	1137.9929	0.1600
0.0261					
7	-0.5800	0.6000	23522.4000	2581.1776	0.5400
0.0593					
8	-0.4800	0.7000	50965.2000	6218.1957	1.1700
0.1428					
9	-0.3800	0.8000	74487.6000	12453.6908	1.7100
0.2859					
10	-0.2800	0.9000	87120.0000	20525.7488	2.0000
0.4712					
11	-0.1800	1.0000	95832.0000	29669.7982	2.2000
0.6811					
12	-0.0800	1.1000	176853.6000	43098.6967	4.0600
0.9894					
13	0.0200	1.2000	201682.8000	62011.7412	4.6300

1.4236					
14	0.1200	1.3000	209088.0000	82548.9633	4.8000
1.8951					
15	0.2200	1.4000	217364.4000	103870.0314	4.9900
2.3845					
16	0.3200	1.5000	225640.8000	126018.7813	5.1800
2.8930					
17	0.4200	1.6000	235659.6000	149081.7571	5.4100
3.4224					
18	0.5200	1.7000	250905.6000	173405.7919	5.7600
3.9808					
19	0.6200	1.8000	270507.6000	199470.0481	6.2100
4.5792					
20	0.7200	1.9000	298386.0000	227903.0522	6.8500
5.2319					
21	0.8200	2.0000	330620.4000	259339.2829	7.5900
5.9536					
22	0.9200	2.1000	365032.8000	294107.4007	8.3800
6.7518					
23	1.0200	2.2000	401187.6000	332403.8132	9.2100
7.6309					
24	1.1200	2.3000	435164.4000	374209.4878	9.9900
8.5907					
25	1.2200	2.4000	468270.0000	419370.6434	10.7500
9.6274					
26	1.3200	2.5000	500504.4000	467799.9387	11.4900
10.7392					
27	1.4200	2.6000	530125.2000	519323.8077	12.1700
11.9220					
28	1.5200	2.7000	556696.8000	573658.9498	12.7800
13.1694					
29	1.6200	2.8000	579348.0000	630456.8579	13.3000
14.4733					
30	1.7200	2.9000	601999.2000	689520.0076	13.8200
15.8292					
31	1.8200	3.0000	620294.4000	750631.7943	14.2400
17.2321					
32	1.9200	3.1000	636411.6000	813464.7434	14.6100
18.6746					
33	2.0200	3.2000	649915.2000	877779.2589	14.9200
20.1510					
34	2.1200	3.3000	662547.6000	943400.7294	15.2100
21.6575					
35	2.2200	3.4000	672130.8000	1.01013E+06	15.4300
23.1895					
36	2.3200	3.5000	679971.6000	1.07774E+06	15.6100
24.7414					
37	2.4200	3.6000	688248.0000	1.14615E+06	15.8000
26.3119					
38	2.5200	3.7000	695653.2000	1.21534E+06	15.9700

27.9004					
39	2.6200	3.8000	702187.2000	1.28523E+06	16.1200
29.5049					
40	2.7200	3.9000	707414.4000	1.35571E+06	16.2400
31.1229					
41	2.8200	4.0000	711770.4000	1.42667E+06	16.3400
32.7518					
42	2.9200	4.1000	716997.6000	1.49811E+06	16.4600
34.3918					
43	3.0200	4.2000	721353.6000	1.57002E+06	16.5600
36.0428					
44	3.1200	4.3000	725709.6000	1.64238E+06	16.6600
37.7038					
45	3.2200	4.4000	729630.0000	1.71514E+06	16.7500
39.3743					
46	3.3200	4.5000	733550.4000	1.78830E+06	16.8400
41.0537					
47	3.4200	4.6000	737470.8000	1.86185E+06	16.9300
42.7422					
48	3.5200	4.7000	741826.8000	1.93582E+06	17.0300
44.4402					
49	3.6200	4.8000	745311.6000	2.01017E+06	17.1100
46.1472					
50	3.7200	4.9000	749232.0000	2.08490E+06	17.2000
47.8627					
51	3.8200	5.0000	753588.0000	2.16004E+06	17.3000
49.5876					
52	3.9200	5.1000	756637.2000	2.23555E+06	17.3700
51.3211					
53	4.0200	5.2000	759686.4000	2.31136E+06	17.4400
53.0616					
54	4.1200	5.3000	761864.4000	2.38744E+06	17.4900
54.8081					
55	4.2200	5.4000	764478.0000	2.46376E+06	17.5500
56.5601					
56	4.3200	5.5000	767527.2000	2.54036E+06	17.6200
58.3186					
57	4.4200	5.6000	769705.2000	2.61722E+06	17.6700
60.0830					
58	4.5200	5.7000	771883.2000	2.69430E+06	17.7200
61.8525					
59	4.6200	5.8000	774932.4000	2.77164E+06	17.7900
63.6280					
60	4.7200	5.9000	777110.4000	2.84924E+06	17.8400
65.4095					
61	4.8200	6.0000	780595.2000	2.92712E+06	17.9200
67.1975					
62	4.9200	6.1000	783644.4000	3.00533E+06	17.9900
68.9929					
63	5.0200	6.2000	785386.8000	3.08378E+06	18.0300

70.7939					
64	5.1200	6.3000	787564.8000	3.16243E+06	18.0800
72.5994					
65	5.2200	6.4000	789742.8000	3.24129E+06	18.1300
74.4099					
66	5.3200	6.5000	792792.0000	3.32042E+06	18.2000
76.2264					
67	5.4200	6.6000	796276.8000	3.39987E+06	18.2800
78.0503					
68	5.5200	6.7000	800632.8000	3.47972E+06	18.3800
79.8833					
69	5.6200	6.8000	804117.6000	3.55995E+06	18.4600
81.7253					
70	5.7200	6.9000	808909.2000	3.64060E+06	18.5700
83.5768					
71	5.8200	7.0000	815007.6000	3.72180E+06	18.7100
85.4408					
72	5.9200	7.1000	826333.2000	3.80387E+06	18.9700
87.3247					
73	6.0200	7.2000	846806.4000	3.88752E+06	19.4400
89.2452					
74	6.1200	7.3000	867279.6000	3.97322E+06	19.9100
91.2126					
75	6.2200	7.4000	878605.2000	4.06051E+06	20.1700
93.2166					
76	6.3200	7.5000	885574.8000	4.14872E+06	20.3300
95.2415					
77	6.4200	7.6000	889930.8000	4.23750E+06	20.4300
97.2795					
78	6.5200	7.7000	893415.6000	4.32666E+06	20.5100
99.3265					
79	6.6200	7.8000	897336.0000	4.41620E+06	20.6000
101.3820					
80	6.7200	7.9000	902127.6000	4.50617E+06	20.7100
103.4474					
81	6.8200	8.0000	906048.0000	4.59658E+06	20.8000
105.5229					
82	6.9200	8.1000	908661.6000	4.68731E+06	20.8600
107.6059					
83	7.0200	8.2000	908661.6000	4.77818E+06	20.8600
109.6919					
84	7.1300	8.3100	908661.6000	4.87813E+06	20.8600
111.9865					

=====

| Variable storage data for node | N0480

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	2.2600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.5600	0.3000	6534.0000	697.3313	0.1500
0.0160					
3	2.6600	0.4000	11761.2000	1599.3716	0.2700
0.0367					
4	2.7600	0.5000	21780.0000	3250.8940	0.5000
0.0746					
5	2.8600	0.6000	40075.2000	6297.4978	0.9200
0.1446					
6	2.9600	0.7000	72745.2000	11857.8995	1.6700
0.2722					
7	3.0600	0.8000	132858.0000	21988.2256	3.0500
0.5048					
8	3.1600	0.9000	236095.2000	40190.0734	5.4200
0.9226					
9	3.2600	1.0000	408592.8000	72032.3899	9.3800
1.6536					
10	3.3600	1.1000	666903.6000	125281.9932	15.3100
2.8761					
11	3.4600	1.2000	1019304.000	208970.9499	23.4000
4.7973					
12	3.5600	1.3000	1485396.000	333475.5565	34.1000
7.6555					
13	3.6600	1.4000	2090444.400	511406.4607	47.9900
11.7403					
14	3.7600	1.5000	2828786.400	756436.7903	64.9400
17.3654					
15	3.8600	1.6000	3694759.200	1.08165E+06	84.8200
24.8312					
16	3.9600	1.7000	4646109.600	1.49778E+06	106.6600
34.3843					
17	4.0600	1.8000	5682402.000	2.01333E+06	130.4500
46.2198					
18	4.1600	1.9000	6745266.000	2.63395E+06	154.8500
60.4672					
19	4.2600	2.0000	7820762.400	3.36158E+06	179.5400
77.1713					
20	4.3600	2.1000	8873607.600	4.19574E+06	203.7100
96.3209					
21	4.4600	2.2000	9886377.600	5.13327E+06	226.9600
117.8437					
22	4.5600	2.3000	10831629.60	6.16880E+06	248.6600
141.6162					
23	4.6600	2.4000	11724609.60	7.29631E+06	269.1600
167.5002					
24	4.7600	2.5000	12540924.00	8.50934E+06	287.9000

195.3477						
25	4.8600	2.6000	13301046.00	9.80124E+06	305.3500	
225.0056						
26	4.9600	2.7000	14018043.60	11.16703E+06	321.8100	
256.3597						
27	5.0600	2.8000	14689303.20	12.60225E+06	337.2200	
289.3078						
28	5.1600	2.9000	15323972.40	14.10279E+06	351.7900	
323.7554						
29	5.2600	3.0000	15932070.00	15.66547E+06	365.7500	
359.6298						
30	5.3600	3.1000	16509240.00	17.28744E+06	379.0000	
396.8650						
31	5.4600	3.2000	17079440.40	18.96677E+06	392.0900	
435.4172						
32	5.5600	3.3000	17638315.20	20.70257E+06	404.9200	
475.2656						
33	5.6600	3.4000	18177152.40	22.49326E+06	417.2900	
516.3742						
34	5.7600	3.5000	18708584.40	24.33746E+06	429.4900	
558.7113						
35	5.8600	3.6000	19244808.00	26.23505E+06	441.8000	
602.2739						
36	5.9600	3.7000	19783209.60	28.18637E+06	454.1600	
647.0700						
37	6.0600	3.8000	20309414.40	30.19092E+06	466.2400	
693.0882						
38	6.1600	3.9000	20835619.20	32.24810E+06	478.3200	
740.3145						
39	6.2600	4.0000	21369664.80	34.35829E+06	490.5800	
788.7577						
40	6.3600	4.1000	21911115.60	36.52225E+06	503.0100	
838.4354						
41	6.4600	4.2000	22476524.40	38.74155E+06	515.9900	
889.3835						
42	6.5600	4.3000	23071118.40	41.01884E+06	529.6400	
941.6630						
43	6.6600	4.4000	23684443.20	43.35653E+06	543.7200	
995.3289						
44	6.7600	4.5000	24343941.60	45.75785E+06	558.8600	
1050.4556						
45	6.8600	4.6000	25026526.80	48.22627E+06	574.5300	
1107.1228						
46	6.9600	4.7000	25742217.60	50.76460E+06	590.9600	
1165.3948						
47	7.0600	4.8000	26468362.80	53.37501E+06	607.6300	
1225.3217						
48	7.1600	4.9000	27198864.00	56.05827E+06	624.4000	
1286.9207						
49	7.2600	5.0000	27925009.20	58.81435E+06	641.0700	

1350.1918						
50	7.3600	5.1000	28636779.60	61.64234E+06	657.4100	
1415.1134						
51	7.4600	5.2000	29317622.40	64.53996E+06	673.0400	
1481.6337						
52	7.5600	5.3000	29957083.20	67.50361E+06	687.7200	
1549.6697						
53	7.6600	5.4000	30540351.60	70.52841E+06	701.1100	
1619.1094						
54	7.7600	5.5000	31080495.60	73.60938E+06	713.5100	
1689.8388						
55	7.8600	5.6000	31574466.00	76.74206E+06	724.8500	
1761.7553						
56	7.9600	5.7000	32020520.40	79.92175E+06	735.0900	
1834.7510						
57	8.0600	5.8000	32423450.40	83.14390E+06	744.3400	
1908.7213						
58	8.1600	5.9000	32790661.20	86.40456E+06	752.7700	
1983.5757						
59	8.2600	6.0000	33116054.40	89.69984E+06	760.2400	
2059.2251						
60	8.3600	6.1000	33395274.00	93.02537E+06	766.6500	
2135.5686						
61	8.4600	6.2000	33645308.40	96.37736E+06	772.3900	
2212.5197						
62	8.5600	6.3000	33862672.80	99.75272E+06	777.3800	
2290.0072						
63	8.6600	6.4000	34059128.40	103.14877E+06	781.8900	
2367.9699						
64	8.7600	6.5000	34239031.20	106.56364E+06	786.0200	
2446.3645						
65	8.8600	6.6000	34401510.00	109.99563E+06	789.7500	
2525.1521						
66	8.9600	6.7000	34546564.80	113.44299E+06	793.0800	
2604.2928						
67	9.0600	6.8000	34683343.20	116.90445E+06	796.2200	
2683.7569						
68	9.1600	6.9000	34814894.40	120.37933E+06	799.2400	
2763.5291						
69	9.2600	7.0000	34934684.40	123.86677E+06	801.9900	
2843.5897						
70	9.3600	7.1000	35053167.60	127.36612E+06	804.7100	
2923.9239						
71	9.4600	7.2000	35170779.60	130.87729E+06	807.4100	
3004.5291						
72	9.5600	7.3000	35281422.00	134.39986E+06	809.9500	
3085.3962						
73	9.6600	7.4000	35388144.00	137.93330E+06	812.4000	
3166.5129						
74	9.7600	7.5000	35492688.00	141.47731E+06	814.8000	

3247.8720						
75	9.8600	7.6000	35592876.00	145.03155E+06		817.1000
3329.4662						
76	9.9600	7.7000	35689579.20	148.59563E+06		819.3200
3411.2863						
77	10.0600	7.8000	35782797.60	152.16921E+06		821.4600
3493.3245						
78	10.1600	7.9000	35871224.40	155.75188E+06		823.4900
3575.5712						
79	10.2600	8.0000	35960958.00	159.34345E+06		825.5500
3658.0223						
80	10.3600	8.1000	36045900.00	162.94376E+06		827.5000
3740.6740						
81	10.4600	8.2000	36125614.80	166.55230E+06		829.3300
3823.5146						
82	10.5600	8.3000	36206636.40	170.16887E+06		831.1900
3906.5398						
83	10.6600	8.4000	36284608.80	173.79340E+06		832.9800
3989.7474						
84	10.7600	8.5000	36357354.00	177.42546E+06		834.6500
4073.1281						
85	11.1600	8.9000	36649206.00	192.02659E+06		841.3500
4408.3238						
86	11.2600	9.0000	36719337.60	195.69498E+06		842.9600
4492.5385						
87	11.3600	9.1000	36782499.60	199.37003E+06		844.4100
4576.9061						
88	11.4600	9.2000	36838256.40	203.05103E+06		845.6900
4661.4103						
89	11.5600	9.3000	36888350.40	206.73732E+06		846.8400
4746.0359						
90	11.6600	9.4000	36929732.40	210.42819E+06		847.7900
4830.7666						
91	11.7600	9.5000	36965016.00	214.12289E+06		848.6000
4915.5852						
92	11.8600	9.6000	36992458.80	217.82073E+06		849.2300
5000.4759						
93	11.9600	9.7000	37016416.80	221.52114E+06		849.7800
5085.4255						
94	12.0600	9.8000	37036018.80	225.22372E+06		850.2300
5170.4252						
95	16.1600	13.9000	37164520.80	377.33323E+06		853.1800
8662.3790						
96	16.2750	14.0150	37164520.80	381.60715E+06		853.1800
8760.4947						

```

*=====*
| Variable storage data for node | N0080
*=====*

```

Data	Elevation	Depth	Area	Volume	Area
------	-----------	-------	------	--------	------

Volume Point ac-ft =====	ft =====	ft =====	ft^2 =====	ft^3 =====	acres =====
1 0.0000	0.4800	0.0000	435.6000	0.0000	0.0100
2 0.0019	0.5800	0.1000	1306.8000	83.2285	0.0300
3 0.0054	0.6800	0.2000	1742.4000	235.1658	0.0400
4 0.0104	0.7800	0.3000	2613.6000	451.4968	0.0600
5 0.0169	0.8800	0.4000	3049.2000	734.3543	0.0700
6 0.0258	0.9800	0.5000	4791.6000	1123.1229	0.1100
7 0.0383	1.0800	0.6000	6098.4000	1666.3060	0.1400
8 0.0547	1.1800	0.7000	8276.4000	2382.2728	0.1900
9 0.0771	1.2800	0.8000	11325.6000	3358.3862	0.2600
10 0.1070	1.3800	0.9000	14810.4000	4661.2838	0.3400
11 0.1459	1.4800	1.0000	19166.4000	6355.4337	0.4400
12 0.1958	1.5800	1.1000	24393.6000	8528.1658	0.5600
13 0.2586	1.6800	1.2000	30492.0000	11266.7543	0.7000
14 0.3370	1.7800	1.3000	37897.2000	14679.4785	0.8700
15 0.4338	1.8800	1.4000	46609.2000	18897.2517	1.0700
16 0.5507	1.9800	1.5000	55321.2000	23987.5043	1.2700
17 0.6861	2.0800	1.6000	62726.4000	29885.9504	1.4400
18 0.8370	2.1800	1.7000	68824.8000	36461.0875	1.5800
19 1.0015	2.2800	1.8000	74487.6000	43624.7705	1.7100
20 1.1794	2.3800	1.9000	80586.0000	51376.3737	1.8500
21 1.3724	2.4800	2.0000	87555.6000	59780.9611	2.0100
22 1.5818	2.5800	2.1000	94960.8000	68904.1851	2.1800
23	2.6800	2.2000	101494.8000	78725.0554	2.3300

1.8073						
24	2.7800	2.3000	108028.8000	89199.4323	2.4800	
2.0477						
25	2.8800	2.4000	114127.2000	100305.7259	2.6200	
2.3027						
26	2.9800	2.5000	121532.4000	112086.6484	2.7900	
2.5732						
27	3.0800	2.6000	127630.8000	124543.4398	2.9300	
2.8591						
28	3.1800	2.7000	134164.8000	137631.7298	3.0800	
3.1596						
29	3.2800	2.8000	141570.0000	151416.6743	3.2500	
3.4760						
30	3.3800	2.9000	150282.0000	166006.9608	3.4500	
3.8110						
31	3.4800	3.0000	158994.0000	181468.5607	3.6500	
4.1659						
32	3.5800	3.1000	168577.2000	197844.6201	3.8700	
4.5419						
33	3.6800	3.2000	179031.6000	215222.2656	4.1100	
4.9408						
34	3.7800	3.3000	191228.4000	233731.7314	4.3900	
5.3657						
35	3.8800	3.4000	201682.8000	253374.7765	4.6300	
5.8167						
36	3.9800	3.5000	213444.0000	274128.1316	4.9000	
6.2931						
37	4.0800	3.6000	226512.0000	296122.4763	5.2000	
6.7980						
38	4.1800	3.7000	240015.6000	319445.3652	5.5100	
7.3335						
39	4.2800	3.8000	255261.6000	344205.0658	5.8600	
7.9019						
40	4.3800	3.9000	270943.2000	370511.1474	6.2200	
8.5058						
41	4.4800	4.0000	287060.4000	398407.1683	6.5900	
9.1462						
42	4.5800	4.1000	304920.0000	428001.4012	7.0000	
9.8256						
43	4.6800	4.2000	321908.4000	459338.6703	7.3900	
10.5450						
44	4.7800	4.3000	341946.0000	492526.0172	7.8500	
11.3068						
45	4.8800	4.4000	364161.6000	527825.2182	8.3600	
12.1172						
46	4.9800	4.5000	385506.0000	565303.1581	8.8500	
12.9776						
47	5.0800	4.6000	409464.0000	605045.2424	9.4000	
13.8899						
48	5.1800	4.7000	434293.2000	647226.5906	9.9700	

14.8583					
49	5.2800	4.8000	458686.8000	691869.5901	10.5300
15.8831					
50	5.3800	4.9000	484387.2000	739016.9810	11.1200
16.9655					
51	5.4800	5.0000	510087.6000	788734.6881	11.7100
18.1069					
52	5.5800	5.1000	535352.4000	841001.0766	12.2900
19.3067					
53	5.6800	5.2000	564537.6000	895988.5721	12.9600
20.5691					
54	5.7800	5.3000	596336.4000	954024.4317	13.6900
21.9014					
55	5.8800	5.4000	632491.2000	1.01546E+06	14.5200
23.3117					
56	5.9800	5.5000	673437.6000	1.08074E+06	15.4600
24.8104					
57	6.0800	5.6000	718304.4000	1.15032E+06	16.4900
26.4076					
58	6.1800	5.7000	765784.8000	1.22451E+06	17.5800
28.1108					
59	6.2800	5.8000	813700.8000	1.30347E+06	18.6800
29.9235					
60	6.3800	5.9000	860745.6000	1.38718E+06	19.7600
31.8452					
61	6.4800	6.0000	907790.4000	1.47559E+06	20.8400
33.8750					
62	6.5800	6.1000	953964.0000	1.56867E+06	21.9000
36.0117					
63	6.6800	6.2000	998395.2000	1.66628E+06	22.9200
38.2525					
64	6.7800	6.3000	1042390.8000	1.76831E+06	23.9300
40.5948					
65	6.8800	6.4000	1079852.4000	1.87442E+06	24.7900
43.0307					
66	6.9800	6.5000	1112958.0000	1.98405E+06	25.5500
45.5475					
67	7.0800	6.6000	1142578.8000	2.09682E+06	26.2300
48.1364					
68	7.1800	6.7000	1168714.8000	2.21238E+06	26.8300
50.7894					
69	7.2800	6.8000	1191801.6000	2.33041E+06	27.3600
53.4988					
70	7.3800	6.9000	1211839.2000	2.45059E+06	27.8200
56.2577					
71	7.4800	7.0000	1229263.2000	2.57264E+06	28.2200
59.0597					
72	7.5800	7.1000	1242766.8000	2.69624E+06	28.5300
61.8971					
73	7.6800	7.2000	1254528.0000	2.82110E+06	28.8000

64.7636						
74	7.7800	7.3000	1264111.200	2.94703E+06		29.0200
67.6546						
75	7.8800	7.4000	1271952.000	3.07383E+06		29.2000
70.5655						
76	7.9800	7.5000	1278921.600	3.20138E+06		29.3600
73.4935						
77	8.0800	7.6000	1284584.400	3.32955E+06		29.4900
76.4360						
78	8.1800	7.7000	1288504.800	3.45820E+06		29.5800
79.3894						
79	8.2800	7.8000	1291554.000	3.58721E+06		29.6500
82.3509						
80	8.3800	7.9000	1293296.400	3.71645E+06		29.6900
85.3179						
81	8.4800	8.0000	1294603.200	3.84584E+06		29.7200
88.2883						
82	8.5800	8.1000	1295474.400	3.97534E+06		29.7400
91.2613						
83	8.6800	8.2000	1296345.600	4.10493E+06		29.7600
94.2363						
84	8.7800	8.3000	1296781.200	4.23459E+06		29.7700
97.2128						
85	8.8800	8.4000	1297216.800	4.36429E+06		29.7800
100.1902						
86	8.9800	8.5000	1297652.400	4.49403E+06		29.7900
103.1687						
87	9.0800	8.6000	1297652.400	4.62379E+06		29.7900
106.1477						
88	9.1800	8.7000	1297652.400	4.75356E+06		29.7900
109.1267						
89	9.2800	8.8000	1298088.000	4.88334E+06		29.8000
112.1062						
90	9.3800	8.9000	1298088.000	5.01315E+06		29.8000
115.0862						
91	9.4800	9.0000	1298088.000	5.14296E+06		29.8000
118.0662						
92	9.5800	9.1000	1298088.000	5.27277E+06		29.8000
121.0462						
93	9.6800	9.2000	1298088.000	5.40258E+06		29.8000
124.0262						
94	9.7800	9.3000	1298088.000	5.53239E+06		29.8000
127.0062						
95	9.8800	9.4000	1298088.000	5.66220E+06		29.8000
129.9862						
96	9.9750	9.4950	1298088.000	5.78552E+06		29.8000
132.8172						

=====

| Variable storage data for node | N0310

=====						
Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres	
=====	=====	=====	=====	=====	=====	
1	-1.5900	0.0000	26.1360	0.0000	0.0006	
0.0000						
2	0.0900	1.6800	435.6000	318.3208	0.0100	
0.0073						
3	0.1000	1.6900	435.6000	322.6768	0.0100	
0.0074						
4	0.2000	1.7900	164221.2000	6093.1065	3.7700	
0.1399						
5	0.3000	1.8900	166399.2000	22623.8417	3.8200	
0.5194						
6	0.4000	1.9900	169448.4000	39415.8230	3.8900	
0.9049						
7	1.2000	2.7900	192099.6000	183938.8774	4.4100	
4.2227						
8	1.3000	2.8900	196020.0000	203344.3333	4.5000	
4.6681						
9	1.4000	2.9900	201247.2000	223206.9215	4.6200	
5.1241						
10	1.5000	3.0900	208216.8000	243678.9281	4.7800	
5.5941						
11	1.6000	3.1900	216057.6000	264891.2284	4.9600	
6.0811						
12	1.7000	3.2900	226076.4000	286995.8152	5.1900	
6.5885						
13	1.8000	3.3900	237402.0000	310167.1968	5.4500	
7.1205						
14	1.9000	3.4900	249598.8000	334514.4474	5.7300	
7.6794						
15	2.0000	3.5900	261360.0000	360059.8757	6.0000	
8.2658						
16	2.1000	3.6900	273121.2000	386781.5115	6.2700	
8.8793						
17	2.2000	3.7900	286189.2000	414744.2071	6.5700	
9.5212						
18	2.3000	3.8900	300564.0000	444078.6386	6.9000	
10.1946						
19	2.4000	3.9900	314503.2000	474829.0582	7.2200	
10.9006						
20	2.5000	4.0900	328442.4000	506973.4981	7.5400	
11.6385						
21	2.6000	4.1900	344559.6000	540620.0447	7.9100	
12.4109						
22	2.7000	4.2900	365032.8000	576094.3865	8.3800	

13.2253					
23	2.8000	4.3900	390733.2000	613875.0236	8.9700
14.0926					
24	2.9000	4.4900	420789.6000	654441.4780	9.6600
15.0239					
25	3.0000	4.5900	456508.8000	698293.8353	10.4800
16.0306					
26	3.1000	4.6900	493970.4000	745805.0113	11.3400
17.1213					
27	3.2000	4.7900	532738.8000	797127.7546	12.2300
18.2995					
28	3.3000	4.8900	569329.2000	852220.4771	13.0700
19.5643					
29	3.4000	4.9900	604177.2000	910886.5849	13.8700
20.9111					
30	3.5000	5.0900	641203.2000	973145.8069	14.7200
22.3404					
31	3.6000	5.1900	681714.0000	1.03928E+06	15.6500
23.8586					
32	3.7000	5.2900	718740.0000	1.10929E+06	16.5000
25.4659					
33	3.8000	5.3900	756201.6000	1.18303E+06	17.3600
27.1587					
34	3.9000	5.4900	794098.8000	1.26054E+06	18.2300
28.9380					
35	4.0000	5.5900	827640.0000	1.34162E+06	19.0000
30.7994					
36	4.1000	5.6900	857260.8000	1.42586E+06	19.6800
32.7332					
37	4.2000	5.7900	884268.0000	1.51293E+06	20.3000
34.7321					
38	4.3000	5.8900	911710.8000	1.60273E+06	20.9300
36.7935					
39	4.4000	5.9900	938718.0000	1.69524E+06	21.5500
38.9174					
40	4.5000	6.0900	962676.0000	1.79031E+06	22.1000
41.0999					
41	4.6000	6.1900	986198.4000	1.88775E+06	22.6400
43.3368					
42	4.7000	6.2900	1011463.200	1.98763E+06	23.2200
45.6297					
43	4.8000	6.3900	1035421.200	2.08997E+06	23.7700
47.9791					
44	4.9000	6.4900	1063735.200	2.19492E+06	24.4200
50.3885					
45	5.0000	6.5900	1093356.000	2.30277E+06	25.1000
52.8644					
46	5.1000	6.6900	1121234.400	2.41350E+06	25.7400
55.4063					
47	5.2000	6.7900	1149112.800	2.52701E+06	26.3800

58.0122						
48	5.3000	6.8900	1177862.400	2.64336E+06		27.0400
60.6831						
49	5.4000	6.9900	1211403.600	2.76282E+06		27.8100
63.4255						
50	5.5000	7.0900	1249300.800	2.88584E+06		28.6800
66.2499						
51	5.6000	7.1900	1289811.600	3.01279E+06		29.6100
69.1642						
52	5.7000	7.2900	1337292.000	3.14414E+06		30.7000
72.1795						
53	5.8000	7.3900	1390870.800	3.28054E+06		31.9300
75.3108						
54	5.9000	7.4900	1452726.000	3.42271E+06		33.3500
78.5745						
55	6.0000	7.5900	1522422.000	3.57145E+06		34.9500
81.9892						
56	6.1000	7.6900	1596909.600	3.72740E+06		36.6600
85.5693						
57	6.2000	7.7900	1684465.200	3.89145E+06		38.6700
89.3353						
58	6.3000	7.8900	1778990.400	4.06460E+06		40.8400
93.3103						
59	6.4000	7.9900	1860883.200	4.24657E+06		42.7200
97.4879						
60	6.5000	8.0900	1904443.200	4.43483E+06		43.7200
101.8097						
61	6.6000	8.1900	1921431.600	4.62612E+06		44.1100
106.2012						
62	6.7000	8.2900	1930143.600	4.81870E+06		44.3100
110.6221						
63	6.8000	8.3900	1935806.400	5.01200E+06		44.4400
115.0596						
64	6.9000	8.4900	1938855.600	5.20573E+06		44.5100
119.5070						
65	7.0000	8.5900	1940598.000	5.39970E+06		44.5500
123.9600						
66	8.0000	9.5900	1955844.000	7.34789E+06		44.9000
168.6844						
67	8.1000	9.6900	1958457.600	7.54361E+06		44.9600
173.1774						
68	8.2000	9.7900	1962378.000	7.73965E+06		45.0500
177.6778						
69	8.3000	9.8900	1967605.200	7.93614E+06		45.1700
182.1888						
70	8.6000	10.1900	1985029.200	8.52903E+06		45.5700
195.7996						
71	8.7000	10.2900	1990692.000	8.72782E+06		45.7000
200.3631						
72	8.8000	10.3900	1994612.400	8.92708E+06		45.7900

204.9375					
73	8.9000	10.4900	1998532.800	9.12673E+06	45.8800
209.5210					
74	9.0000	10.5900	1999839.600	9.32665E+06	45.9100
214.1104					
75	9.1000	10.6900	1999839.600	9.52663E+06	45.9100
218.7014					
76	9.9000	11.4900	1999839.600	11.12651E+06	45.9100
255.4294					
77	10.0100	11.6000	1999839.600	11.34649E+06	45.9100
260.4795					

=====

| Variable storage data for node | N0300

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-3.8500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.8400	3.0100	11761.2000	12382.7797	0.2700
0.2843					
3	-0.7400	3.1100	14374.8000	13687.3832	0.3300
0.3142					
4	-0.6400	3.2100	17859.6000	15295.9384	0.4100
0.3511					
5	-0.5400	3.3100	22651.2000	17316.7186	0.5200
0.3975					
6	-0.4400	3.4100	30492.0000	19964.1588	0.7000
0.4583					
7	-0.3400	3.5100	40946.4000	23523.2249	0.9400
0.5400					
8	-0.2400	3.6100	53143.2000	28214.4266	1.2200
0.6477					
9	-0.1400	3.7100	66646.8000	34191.1411	1.5300
0.7849					
10	-0.0400	3.8100	309711.6000	51525.2731	7.1100
1.1829					
11	0.0600	3.9100	324086.4000	83212.1390	7.4400
1.9103					
12	0.1600	4.0100	338025.6000	116314.9622	7.7600
2.6702					
13	0.2600	4.1100	355014.0000	150963.1249	8.1500
3.4656					
14	0.3600	4.2100	374180.4000	187418.2815	8.5900
4.3025					
15	0.4600	4.3100	395960.4000	225919.8025	9.0900

5.1864					
16	0.5600	4.4100	418176.0000	266621.1629	9.6000
6.1208					
17	0.6600	4.5100	438213.6000	309436.3072	10.0600
7.1037					
18	0.7600	4.6100	456944.4000	354190.4932	10.4900
8.1311					
19	0.8600	4.7100	472190.4000	400644.6838	10.8400
9.1975					
20	0.9600	4.8100	487872.0000	448645.1891	11.2000
10.2995					
21	1.0600	4.9100	504424.8000	498257.2318	11.5800
11.4384					
22	1.1600	5.0100	519235.2000	549437.9342	11.9200
12.6134					
23	1.2600	5.1100	535788.0000	602186.4024	12.3000
13.8243					
24	1.3600	5.2100	554518.8000	656698.5155	12.7300
15.0757					
25	1.4600	5.3100	572378.4000	713040.4532	13.1400
16.3692					
26	1.5600	5.4100	591109.2000	771211.7385	13.5700
17.7046					
27	1.6600	5.5100	612018.0000	831364.4687	14.0500
19.0855					
28	1.7600	5.6100	632491.2000	893586.4996	14.5200
20.5139					
29	1.8600	5.7100	653400.0000	957877.5833	15.0000
21.9898					
30	1.9600	5.8100	676486.8000	1.02437E+06	15.5300
23.5163					
31	2.0600	5.9100	701751.6000	1.09328E+06	16.1100
25.0981					
32	2.1600	6.0100	732243.6000	1.16497E+06	16.8100
26.7440					
33	2.2600	6.1100	764478.0000	1.23980E+06	17.5500
28.4619					
34	2.3600	6.2100	800197.2000	1.31802E+06	18.3700
30.2577					
35	2.4600	6.3100	834609.6000	1.39976E+06	19.1600
32.1340					
36	2.5600	6.4100	869457.6000	1.48495E+06	19.9600
34.0899					
37	2.6600	6.5100	903434.4000	1.57359E+06	20.7400
36.1247					
38	2.7600	6.6100	936540.0000	1.66559E+06	21.5000
38.2366					
39	2.8600	6.7100	970081.2000	1.76091E+06	22.2700
40.4250					
40	2.9600	6.8100	1001880.000	1.85950E+06	23.0000

42.6883					
41	3.0600	6.9100	1031936.400	1.96119E+06	23.6900
45.0227					
42	3.1600	7.0100	1061121.600	2.06584E+06	24.3600
47.4251					
43	3.2600	7.1100	1090742.400	2.17343E+06	25.0400
49.8950					
44	3.3600	7.2100	1120363.200	2.28398E+06	25.7200
52.4329					
45	3.4600	7.3100	1146934.800	2.39734E+06	26.3300
55.0353					
46	3.5600	7.4100	1168279.200	2.51310E+06	26.8200
57.6928					
47	3.6600	7.5100	1186574.400	2.63084E+06	27.2400
60.3957					
48	3.7600	7.6100	1203998.400	2.75036E+06	27.6400
63.1397					
49	3.8600	7.7100	1220115.600	2.87157E+06	28.0100
65.9221					
50	3.9600	7.8100	1231876.800	2.99417E+06	28.2800
68.7366					
51	4.0600	7.9100	1243638.000	3.11794E+06	28.5500
71.5780					
52	4.1600	8.0100	1252785.600	3.24276E+06	28.7600
74.4435					
53	4.2600	8.1100	1262804.400	3.36854E+06	28.9900
77.3310					
54	4.3600	8.2100	1274130.000	3.49538E+06	29.2500
80.2429					
55	4.4600	8.3100	1284584.400	3.62332E+06	29.4900
83.1799					
56	4.5600	8.4100	1295038.800	3.75230E+06	29.7300
86.1409					
57	4.6600	8.5100	1303750.800	3.88223E+06	29.9300
89.1238					
58	4.9600	8.8100	1331629.200	4.27753E+06	30.5700
98.1986					
59	5.0600	8.9100	1340341.200	4.41113E+06	30.7700
101.2655					
60	5.1600	9.0100	1348182.000	4.54555E+06	30.9500
104.3515					
61	5.2600	9.1100	1356022.800	4.68076E+06	31.1300
107.4554					
62	5.3600	9.2100	1364299.200	4.81677E+06	31.3200
110.5779					
63	5.4600	9.3100	1373882.400	4.95368E+06	31.5400
113.7209					
64	5.5600	9.4100	1383901.200	5.09157E+06	31.7700
116.8863					
65	5.6600	9.5100	1394791.200	5.23050E+06	32.0200

120.0758					
66	5.7600	9.6100	1406988.000	5.37059E+06	32.3000
123.2918					
67	5.8600	9.7100	1424847.600	5.51218E+06	32.7100
126.5422					
68	5.9600	9.8100	1454904.000	5.65616E+06	33.4000
129.8476					
69	6.0600	9.9100	1485831.600	5.80319E+06	34.1100
133.2230					
70	6.1600	10.0100	1507176.000	5.95284E+06	34.6000
136.6584					
71	6.2600	10.1100	1518937.200	6.10415E+06	34.8700
140.1319					
72	6.3600	10.2100	1526342.400	6.25641E+06	35.0400
143.6274					
73	6.4600	10.3100	1530698.400	6.40926E+06	35.1400
147.1363					
74	6.5600	10.4100	1532876.400	6.56244E+06	35.1900
150.6528					
75	20.4600	24.3100	1587762.000	28.24954E+06	36.4500
648.5201					
76	20.5450	24.3950	1587762.000	28.38450E+06	36.4500
651.6184					
77	20.5450	24.3950	4521528.000	28.38450E+06	103.8000
651.6184					
78	22.8300	26.6800	4492342.800	38.68272E+06	103.1300
888.0331					
79	22.9300	26.7800	4492778.400	39.13198E+06	103.1400
898.3465					
80	26.1300	29.9800	4515865.200	53.54565E+06	103.6700
1229.2389					
81	26.2300	30.0800	4517172.000	53.99729E+06	103.7000
1239.6073					
82	26.3300	30.1800	4517607.600	54.44903E+06	103.7100
1249.9777					
83	26.6300	30.4800	4519785.600	55.80462E+06	103.7600
1281.0978					
84	26.7300	30.5800	4521092.400	56.25666E+06	103.7900
1291.4752					
85	26.8300	30.6800	4521092.400	56.70877E+06	103.7900
1301.8542					
86	27.2250	31.0750	4521528.000	58.49467E+06	103.8000
1342.8529					

=====

| Variable storage data for node | N0460

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	-2.1500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.7500	0.4000	3484.8000	508.3587	0.0800
0.0117					
3	-1.6500	0.5000	5227.2000	941.0208	0.1200
0.0216					
4	-1.5500	0.6000	8276.4000	1610.3813	0.1900
0.0370					
5	-1.4500	0.7000	13068.0000	2668.5109	0.3000
0.0613					
6	-1.3500	0.8000	19166.4000	4270.5127	0.4400
0.0980					
7	-1.2500	0.9000	27007.2000	6567.9931	0.6200
0.1508					
8	-1.1500	1.0000	39204.0000	9859.6354	0.9000
0.2263					
9	-1.0500	1.1000	53143.2000	14459.3148	1.2200
0.3319					
10	-0.9500	1.2000	69260.4000	20561.6715	1.5900
0.4720					
11	-0.8500	1.3000	87120.0000	28363.5604	2.0000
0.6511					
12	-0.7500	1.4000	108900.0000	38144.2333	2.5000
0.8757					
13	-0.6500	1.5000	131551.2000	50148.8519	3.0200
1.1513					
14	-0.5500	1.6000	156380.4000	64527.4124	3.5900
1.4813					
15	-0.4500	1.7000	183823.2000	81518.9449	4.2200
1.8714					
16	-0.3500	1.8000	219106.8000	101639.4466	5.0300
2.3333					
17	-0.2500	1.9000	259617.6000	125546.8085	5.9600
2.8822					
18	-0.1500	2.0000	307098.0000	153849.0972	7.0500
3.5319					
19	-0.0500	2.1000	419918.4000	190052.7679	9.6400
4.3630					
20	0.0500	2.2000	510523.2000	236500.6838	11.7200
5.4293					
21	0.1500	2.3000	622472.4000	293057.4930	14.2900
6.7277					
22	0.2500	2.4000	779724.0000	363019.1881	17.9000
8.3338					
23	0.3500	2.5000	1007542.800	452138.6497	23.1300
10.3797					
24	0.4500	2.6000	1321174.800	568219.7580	30.3300

13.0445						
25	0.5500	2.7000	1732381.200	720432.4661	39.7700	
16.5389						
26	0.6500	2.8000	2255101.200	919231.0945	51.7700	
21.1026						
27	0.7500	2.9000	2920698.000	1.17730E+06	67.0500	
27.0271						
28	0.8500	3.0000	3706956.000	1.50790E+06	85.1000	
34.6167						
29	0.9500	3.1000	4522834.800	1.91871E+06	103.8300	
44.0476						
30	1.0500	3.2000	5275551.600	2.40814E+06	121.1100	
55.2834						
31	1.1500	3.3000	5992549.200	2.97116E+06	137.5700	
68.2085						
32	1.2500	3.4000	6648998.400	3.60295E+06	152.6400	
82.7123						
33	1.3500	3.5000	7227910.800	4.29659E+06	165.9300	
98.6360						
34	1.4500	3.6000	7761956.400	5.04591E+06	178.1900	
115.8382						
35	1.5500	3.7000	8266816.800	5.84721E+06	189.7800	
134.2335						
36	1.6500	3.8000	8769499.200	6.69889E+06	201.3200	
153.7855						
37	1.7500	3.9000	9288734.400	7.60167E+06	213.2400	
174.5104						
38	1.8500	4.0000	9834105.600	8.55768E+06	225.7600	
196.4572						
39	1.9500	4.1000	10414324.80	9.56995E+06	239.0800	
219.6958						
40	2.0500	4.2000	11041153.20	10.64256E+06	253.4700	
244.3195						
41	2.1500	4.3000	11572498.08	11.77313E+06	265.6680	
270.2738						
42	2.2500	4.4000	12300908.40	12.96660E+06	282.3900	
297.6722						
43	2.3500	4.5000	13072007.52	14.23504E+06	300.0920	
326.7915						
44	2.4500	4.6000	13872727.44	15.58206E+06	318.4740	
357.7149						
45	2.5500	4.7000	14696098.56	17.01029E+06	337.3760	
390.5026						
46	2.6500	4.8000	15520340.88	18.52091E+06	356.2980	
425.1816						
47	2.7500	4.9000	16328030.40	20.11314E+06	374.8400	
461.7342						
48	2.8500	5.0000	17063148.96	21.78255E+06	391.7160	
500.0585						
49	2.9500	5.1000	17730923.76	23.52213E+06	407.0460	

539.9938						
50	3.0500	5.2000	18367335.36	25.32693E+06	421.6560	
581.4263						
51	3.1500	5.3000	19246232.41	27.20742E+06	441.8327	
624.5964						
52	3.2500	5.4000	19905142.75	29.16488E+06	456.9592	
669.5334						
53	3.3500	5.5000	20531383.09	31.18660E+06	471.3357	
715.9459						
54	3.4500	5.6000	21133665.43	33.26976E+06	485.1622	
763.7686						
55	3.5500	5.7000	21720266.17	35.41237E+06	498.6287	
812.9561						
56	3.6500	5.8000	22258950.91	37.61125E+06	510.9952	
863.4356						
57	3.7500	5.9000	22765836.85	39.86242E+06	522.6317	
915.1153						
58	3.8500	6.0000	23227855.99	42.16205E+06	533.2382	
967.9074						
59	3.9500	6.1000	23647186.33	44.50574E+06	542.8647	
1021.7113						
60	4.0500	6.2000	24038633.92	46.88998E+06	551.8511	
1076.4459						
61	4.1500	6.3000	24411781.94	49.31246E+06	560.4174	
1132.0582						
62	4.2500	6.4000	24758793.97	51.77094E+06	568.3837	
1188.4972						
63	4.3500	6.5000	25086639.60	54.26317E+06	575.9100	
1245.7109						
64	4.4500	6.6000	25387913.63	56.78686E+06	582.8263	
1303.6468						
65	4.5500	6.7000	25673070.46	59.33987E+06	589.3726	
1362.2559						
66	4.6500	6.8000	25930784.48	61.92002E+06	595.2889	
1421.4881						
67	4.7500	6.9000	26164976.11	64.52478E+06	600.6652	
1481.2850						
68	4.8500	7.0000	26378258.94	67.15190E+06	605.5615	
1541.5956						
69	4.9500	7.1000	26571939.77	69.79938E+06	610.0078	
1602.3733						
70	5.0500	7.2000	26741636.46	72.46503E+06	613.9035	
1663.5682						
71	5.1500	7.3000	26741636.46	75.13919E+06	613.9035	
1724.9585						
72	5.2500	7.4000	26746523.89	77.81357E+06	614.0157	
1786.3539						
73	8.0500	10.2000	26883389.41	152.89462E+06	617.1577	
3509.9775						
74	8.1500	10.3000	26888281.20	155.58318E+06	617.2700	

3571.6983						
75	8.2500	10.4000	26889152.40	158.27202E+06	617.2900	
3633.4257						
76	10.9500	13.1000	26889152.40	230.87273E+06	617.2900	
5300.1087						
77	11.0400	13.1900	26889152.40	233.29276E+06	617.2900	
5355.6648						

=====

| Variable storage data for node | N0440

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.3700	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.6700	0.7000	3920.4000	995.5383	0.0900
0.0229					
3	-0.5700	0.8000	5662.8000	1472.0313	0.1300
0.0338					
4	-0.4700	0.9000	9147.6000	2205.6138	0.2100
0.0506					
5	-0.3700	1.0000	18730.8000	3571.2055	0.4300
0.0820					
6	-0.2700	1.1000	35283.6000	6228.5850	0.8100
0.1430					
7	-0.1700	1.2000	59677.2000	10923.4682	1.3700
0.2508					
8	-0.0700	1.3000	103237.2000	18970.2493	2.3700
0.4355					
9	0.0300	1.4000	173368.8000	32649.7730	3.9800
0.7495					
10	0.1300	1.5000	272250.0000	54745.3393	6.2500
1.2568					
11	0.2300	1.6000	419918.4000	89087.8267	9.6400
2.0452					
12	0.3300	1.7000	649479.6000	142141.6989	14.9100
3.2631					
13	0.4300	1.8000	948736.8000	221580.6060	21.7800
5.0868					
14	0.5300	1.9000	1295910.000	333361.6505	29.7500
7.6529					
15	0.6300	2.0000	1689692.400	482205.5711	38.7900
11.0699					
16	0.7300	2.1000	2123550.000	672453.0918	48.7500
15.4374					
17	0.8300	2.2000	2571346.800	906838.8528	59.0300

20.8182					
18	0.9300	2.3000	2996928.000	1.18498E+06	68.8000
27.2034					
19	1.0300	2.4000	3357169.200	1.50251E+06	77.0700
34.4929					
20	1.1300	2.5000	3648585.600	1.85269E+06	83.7600
42.5320					
21	1.2300	2.6000	3882067.200	2.22916E+06	89.1200
51.1745					
22	1.3300	2.7000	4072424.400	2.62684E+06	93.4900
60.3040					
23	1.4300	2.8000	4244050.800	3.04263E+06	97.4300
69.8493					
24	1.5300	2.9000	4414370.400	3.47552E+06	101.3400
79.7870					
25	1.6300	3.0000	4589481.600	3.92568E+06	105.3600
90.1213					
26	1.7300	3.1000	4778532.000	4.39405E+06	109.7000
100.8734					
27	1.8300	3.2000	4992847.200	4.88257E+06	114.6200
112.0884					
28	1.9300	3.3000	5235912.000	5.39396E+06	120.2000
123.8282					
29	2.0300	3.4000	5502934.800	5.93084E+06	126.3300
136.1533					
30	2.1300	3.5000	5798271.600	6.49583E+06	133.1100
149.1237					
31	2.2300	3.6000	6120615.600	7.09169E+06	140.5100
162.8029					
32	2.3300	3.7000	6459512.400	7.72062E+06	148.2900
177.2410					
33	2.4300	3.8000	6817575.600	8.38439E+06	156.5100
192.4790					
34	2.5300	3.9000	7198290.000	9.08509E+06	165.2500
208.5649					
35	2.6300	4.0000	7579004.400	9.82386E+06	173.9900
225.5248					
36	2.7300	4.1000	7957105.200	10.60058E+06	182.6700
243.3559					
37	2.8300	4.2000	8334770.400	11.41509E+06	191.3400
262.0545					
38	2.9300	4.3000	8709822.000	12.26725E+06	199.9500
281.6172					
39	3.0300	4.4000	9077904.000	13.15656E+06	208.4000
302.0331					
40	3.1300	4.5000	9435096.000	14.08214E+06	216.6000
323.2816					
41	3.2300	4.6000	9783140.400	15.04299E+06	224.5900
345.3396					
42	3.3300	4.7000	10109404.80	16.03757E+06	232.0800

368.1719						
43	3.4300	4.8000	10419987.60	17.06399E+06	239.2100	
391.7352						
44	3.5300	4.9000	10714453.20	18.12066E+06	245.9700	
415.9932						
45	3.6300	5.0000	10989752.40	19.20583E+06	252.2900	
440.9053						
46	3.7300	5.1000	11241093.60	20.31734E+06	258.0600	
466.4220						
47	3.8300	5.2000	11474139.60	21.45307E+06	263.4100	
492.4948						
48	3.9300	5.3000	11689326.00	22.61122E+06	268.3500	
519.0821						
49	4.0300	5.4000	11877505.20	23.78953E+06	272.6700	
546.1326						
50	4.1300	5.5000	12043033.20	24.98554E+06	276.4700	
573.5891						
51	4.2300	5.6000	12190701.60	26.19721E+06	279.8600	
601.4051						
52	4.3300	5.7000	12318768.00	27.42266E+06	282.8000	
629.5377						
53	4.4300	5.8000	12428103.60	28.65999E+06	285.3100	
657.9428						
54	4.5300	5.9000	12519579.60	29.90736E+06	287.4100	
686.5785						
55	4.6300	6.0000	12591889.20	31.16292E+06	289.0700	
715.4022						
56	4.7300	6.1000	12651566.40	32.42508E+06	290.4400	
744.3773						
57	4.8300	6.2000	12700353.60	33.69266E+06	291.5600	
773.4770						
58	4.9300	6.3000	12739993.20	34.96466E+06	292.4700	
802.6782						
59	5.0300	6.4000	12773098.80	36.24031E+06	293.2300	
831.9629						
60	5.1300	6.5000	12799234.80	37.51891E+06	293.8300	
861.3156						
61	5.2300	6.6000	12820579.20	38.79989E+06	294.3200	
890.7228						
62	5.3300	6.7000	12836696.40	40.08274E+06	294.6900	
920.1730						
63	5.4300	6.8000	12849328.80	41.36703E+06	294.9800	
949.6562						
64	5.5300	6.9000	12860218.80	42.65249E+06	295.2300	
979.1664						
65	5.6300	7.0000	12868930.80	43.93894E+06	295.4300	
1008.6992						
66	5.7300	7.1000	12875900.40	45.22616E+06	295.5900	
1038.2499						
67	5.8300	7.2000	12881563.20	46.51402E+06	295.7200	

1067.8151						
68	5.9300	7.3000	12886354.80	47.80241E+06	295.8300	
1097.3923						
69	6.0300	7.4000	12890710.80	49.09125E+06	295.9300	
1126.9800						
70	6.1300	7.5000	12893760.00	50.38046E+06	296.0000	
1156.5762						
71	7.3300	8.7000	12912926.40	65.86431E+06	296.4400	
1512.0366						
72	7.4300	8.8000	12913362.00	67.15562E+06	296.4500	
1541.6808						
73	7.5300	8.9000	12914668.80	68.44700E+06	296.4800	
1571.3270						
74	10.9300	12.3000	12926430.00	112.37643E+06	296.7500	
2579.8079						
75	11.0100	12.3800	12926865.60	113.41055E+06	296.7600	
2603.5480						

=====

| Variable storage data for node | N0330

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-3.4300	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.6800	1.7500	6534.0000	4067.7657	0.1500
0.0934					
3	-1.5800	1.8500	9583.2000	4868.7666	0.2200
0.1118					
4	-1.4800	1.9500	15681.6000	6119.5431	0.3600
0.1405					
5	-1.3800	2.0500	22215.6000	8004.9255	0.5100
0.1838					
6	-1.2800	2.1500	30056.4000	10608.6427	0.6900
0.2435					
7	-1.1800	2.2500	37897.2000	13998.7243	0.8700
0.3214					
8	-1.0800	2.3500	47044.8000	18237.5486	1.0800
0.4187					
9	-0.9800	2.4500	56628.0000	23413.7390	1.3000
0.5375					
10	-0.8800	2.5500	67953.6000	29634.1590	1.5600
0.6803					
11	-0.7800	2.6500	81021.6000	37073.2735	1.8600
0.8511					
12	-0.6800	2.7500	97574.4000	45990.1721	2.2400

1.0558					
13	-0.5800	2.8500	118047.6000	56754.9285	2.7100
1.3029					
14	-0.4800	2.9500	143312.4000	69802.3980	3.2900
1.6024					
15	-0.3800	3.0500	168141.6000	85358.4212	3.8600
1.9596					
16	-0.2800	3.1500	196455.6000	103569.7479	4.5100
2.3776					
17	-0.1800	3.2500	223027.2000	124529.6380	5.1200
2.8588					
18	-0.0800	3.3500	573685.2000	163009.5787	13.1700
3.7422					
19	0.0200	3.4500	610275.6000	222197.6010	14.0100
5.1010					
20	0.1200	3.5500	624214.8000	283920.1921	14.3300
6.5179					
21	0.2200	3.6500	636411.6000	346949.8984	14.6100
7.9649					
22	0.6200	4.0500	684327.6000	611037.1325	15.7100
14.0275					
23	0.7200	4.1500	696524.4000	680078.1443	15.9900
15.6124					
24	0.8200	4.2500	710463.6000	750425.6900	16.3100
17.2274					
25	0.9200	4.3500	725274.0000	822210.5789	16.6500
18.8754					
26	1.0200	4.4500	741391.2000	895541.6296	17.0200
20.5588					
27	1.1200	4.5500	758379.6000	970527.8161	17.4100
22.2803					
28	1.2200	4.6500	775803.6000	1.04723E+06	17.8100
24.0412					
29	1.3200	4.7500	795841.2000	1.12581E+06	18.2700
25.8451					
30	1.4200	4.8500	818056.8000	1.20651E+06	18.7800
27.6976					
31	1.5200	4.9500	840272.4000	1.28942E+06	19.2900
29.6010					
32	1.6200	5.0500	864230.4000	1.37464E+06	19.8400
31.5574					
33	1.7200	5.1500	888624.0000	1.46228E+06	20.4000
33.5693					
34	1.8200	5.2500	912582.0000	1.55234E+06	20.9500
35.6367					
35	1.9200	5.3500	937846.8000	1.64485E+06	21.5300
37.7606					
36	2.0200	5.4500	961804.8000	1.73983E+06	22.0800
39.9411					
37	2.1200	5.5500	988812.0000	1.83736E+06	22.7000

42.1800					
38	2.2200	5.6500	1015383.600	1.93757E+06	23.3100
44.4804					
39	2.3200	5.7500	1043697.600	2.04051E+06	23.9600
46.8438					
40	2.4200	5.8500	1073318.400	2.14636E+06	24.6400
49.2737					
41	2.5200	5.9500	1102068.000	2.25513E+06	25.3000
51.7706					
42	2.6200	6.0500	1131688.800	2.36681E+06	25.9800
54.3345					
43	2.7200	6.1500	1161309.600	2.48146E+06	26.6600
56.9664					
44	2.8200	6.2500	1188752.400	2.59895E+06	27.2900
59.6638					
45	2.9200	6.3500	1214888.400	2.71913E+06	27.8900
62.4227					
46	3.0200	6.4500	1241460.000	2.84195E+06	28.5000
65.2421					
47	3.1200	6.5500	1265418.000	2.96729E+06	29.0500
68.1195					
48	3.2200	6.6500	1286326.800	3.09487E+06	29.5300
71.0485					
49	3.3200	6.7500	1305493.200	3.22446E+06	29.9700
74.0234					
50	3.4200	6.8500	1323352.800	3.35590E+06	30.3800
77.0409					
51	3.5200	6.9500	1341212.400	3.48913E+06	30.7900
80.0993					
52	3.6200	7.0500	1356894.000	3.62403E+06	31.1500
83.1963					
53	3.7200	7.1500	1373446.800	3.76054E+06	31.5300
86.3302					
54	3.8200	7.2500	1388692.800	3.89865E+06	31.8800
89.5007					
55	3.9200	7.3500	1403503.200	4.03826E+06	32.2200
92.7056					
56	4.0200	7.4500	1417006.800	4.17928E+06	32.5300
95.9431					
57	4.1200	7.5500	1429639.200	4.32161E+06	32.8200
99.2105					
58	4.2200	7.6500	1440529.200	4.46512E+06	33.0700
102.5050					
59	4.3200	7.7500	1449676.800	4.60963E+06	33.2800
105.8225					
60	4.4200	7.8500	1457953.200	4.75501E+06	33.4700
109.1599					
61	4.5200	7.9500	1466665.200	4.90124E+06	33.6700
112.5169					
62	4.6200	8.0500	1474070.400	5.04827E+06	33.8400

115.8923					
63	4.7200	8.1500	1481040.000	5.19602E+06	34.0000
119.2843					
64	4.8200	8.2500	1488880.800	5.34452E+06	34.1800
122.6933					
65	5.2200	8.6500	1519372.800	5.94615E+06	34.8800
136.5049					
66	5.3200	8.7500	1526778.000	6.09846E+06	35.0500
140.0014					
67	5.4200	8.8500	1535054.400	6.25155E+06	35.2400
143.5158					
68	5.5200	8.9500	1545073.200	6.40555E+06	35.4700
147.0513					
69	5.6200	9.0500	1557270.000	6.56067E+06	35.7500
150.6122					
70	5.7200	9.1500	1574694.000	6.71726E+06	36.1500
154.2072					
71	5.8200	9.2500	1599958.800	6.87599E+06	36.7300
157.8511					
72	5.9200	9.3500	1636549.200	7.03781E+06	37.5700
161.5660					
73	6.0200	9.4500	1679238.000	7.20360E+06	38.5500
165.3718					
74	6.1200	9.5500	1715828.400	7.37335E+06	39.3900
169.2687					
75	6.2200	9.6500	1735430.400	7.54591E+06	39.8400
173.2302					
76	6.3200	9.7500	1745449.200	7.71995E+06	40.0700
177.2256					
77	6.4200	9.8500	1750240.800	7.89473E+06	40.1800
181.2381					
78	6.5200	9.9500	1751983.200	8.06984E+06	40.2200
185.2580					
79	6.6200	10.0500	1751983.200	8.24504E+06	40.2200
189.2800					
80	7.4200	10.8500	1752418.800	9.64679E+06	40.2300
221.4597					
81	7.5100	10.9400	1752418.800	9.80450E+06	40.2300
225.0804					

=====

| Variable storage data for node | N0655

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.9100	0.0000	26.1360	0.0000	0.0006

0.0000					
2	-0.9000	2.0100	3049.2000	2249.5943	0.0700
0.0516					
3	-0.8000	2.1100	4791.6000	2638.3629	0.1100
0.0606					
4	-0.7000	2.2100	7840.8000	3263.7512	0.1800
0.0749					
5	-0.6000	2.3100	11761.2000	4237.2408	0.2700
0.0973					
6	-0.5000	2.4100	16988.4000	5666.7199	0.3900
0.1301					
7	-0.4000	2.5100	23958.0000	7704.0609	0.5500
0.1769					
8	-0.3000	2.6100	33976.8000	10586.2244	0.7800
0.2430					
9	-0.2000	2.7100	48351.6000	14681.5258	1.1100
0.3370					
10	-0.1000	2.8100	71438.4000	20633.5367	1.6400
0.4737					
11	0.0000	2.9100	94089.6000	28883.9018	2.1600
0.6631					
12	0.1000	3.0100	111949.2000	39172.8139	2.5700
0.8993					
13	0.2000	3.1100	128937.6000	51207.0369	2.9600
1.1756					
14	0.3000	3.2100	147668.4000	65026.6167	3.3900
1.4928					
15	0.4000	3.3100	166834.8000	80741.8769	3.8300
1.8536					
16	0.5000	3.4100	187743.6000	98460.3361	4.3100
2.2603					
17	0.6000	3.5100	211266.0000	118399.0509	4.8500
2.7181					
18	0.7000	3.6100	237837.6000	140840.8939	5.4600
3.2333					
19	0.8000	3.7100	268765.2000	166155.0319	6.1700
3.8144					
20	0.9000	3.8100	303177.6000	194734.6162	6.9600
4.4705					
21	1.0000	3.9100	343688.4000	227056.4303	7.8900
5.2125					
22	1.1000	4.0100	392040.0000	263815.9737	9.0000
6.0564					
23	1.2000	4.1100	446925.6000	305733.8804	10.2600
7.0187					
24	1.3000	4.2100	507909.6000	353442.6721	11.6600
8.1139					
25	1.4000	4.3100	575863.2000	407595.2293	13.2200
9.3571					
26	1.5000	4.4100	648172.8000	468760.7893	14.8800

10.7613					
27	1.6000	4.5100	723531.6000	537310.7971	16.6100
12.3350					
28	1.7000	4.6100	799761.6000	613442.8861	18.3600
14.0827					
29	1.8000	4.7100	876427.2000	697222.2519	20.1200
16.0060					
30	1.9000	4.8100	950479.2000	788541.6348	21.8200
18.1024					
31	2.1000	5.0100	1095969.600	993011.8599	25.1600
22.7964					
32	2.2000	5.1100	1169150.400	1.10625E+06	26.8400
25.3959					
33	2.3000	5.2100	1240588.800	1.22672E+06	28.4800
28.1615					
34	2.4000	5.3100	1309849.200	1.35422E+06	30.0700
31.0886					
35	2.5000	5.4100	1376931.600	1.48854E+06	31.6100
34.1723					
36	2.6000	5.5100	1443142.800	1.62953E+06	33.1300
37.4089					
37	2.7000	5.6100	1509789.600	1.77717E+06	34.6600
40.7981					
38	2.8000	5.7100	1577307.600	1.93151E+06	36.2100
44.3413					
39	2.9000	5.8100	1647874.800	2.09275E+06	37.8300
48.0430					
40	3.0000	5.9100	1718442.000	2.26105E+06	39.4500
51.9066					
41	3.1000	6.0100	1793365.200	2.43663E+06	41.1700
55.9373					
42	3.2000	6.1100	1870466.400	2.61980E+06	42.9400
60.1424					
43	3.3000	6.2100	1948874.400	2.81076E+06	44.7400
64.5261					
44	3.4000	6.3100	2029896.000	3.00968E+06	46.6000
69.0927					
45	3.5000	6.4100	2110046.400	3.21666E+06	48.4400
73.8444					
46	3.6000	6.5100	2194988.400	3.43190E+06	50.3900
78.7855					
47	3.7000	6.6100	2282544.000	3.65576E+06	52.4000
83.9246					
48	3.8000	6.7100	2372277.600	3.88848E+06	54.4600
89.2673					
49	3.9000	6.8100	2470287.600	4.13059E+06	56.7100
94.8253					
50	4.0000	6.9100	2569168.800	4.38254E+06	58.9800
100.6094					
51	4.1000	7.0100	2668050.000	4.64439E+06	61.2500

106.6205					
52	4.2000	7.1100	2764317.600	4.91599E+06	63.4600
112.8556					
53	4.3000	7.2100	2859714.000	5.19717E+06	65.6500
119.3107					
54	4.4000	7.3100	2952496.800	5.48777E+06	67.7800
125.9819					
55	4.5000	7.4100	3045279.600	5.78764E+06	69.9100
132.8660					
56	4.6000	7.5100	3130221.600	6.09641E+06	71.8600
139.9542					
57	4.7000	7.6100	3210807.600	6.41345E+06	73.7100
147.2324					
58	4.8000	7.7100	3287473.200	6.73835E+06	75.4700
154.6912					
59	4.9000	7.8100	3356733.600	7.07055E+06	77.0600
162.3175					
60	5.0000	7.9100	3419460.000	7.40935E+06	78.5000
170.0953					
61	5.1000	8.0100	3476523.600	7.75414E+06	79.8100
178.0106					
62	5.2000	8.1100	3527924.400	8.10436E+06	80.9900
186.0505					
63	5.3000	8.2100	3574969.200	8.45950E+06	82.0700
194.2033					
64	5.4000	8.3100	3618964.800	8.81919E+06	83.0800
202.4607					
65	5.5000	8.4100	3659911.200	9.18313E+06	84.0200
210.8156					
66	5.6000	8.5100	3701293.200	9.55118E+06	84.9700
219.2649					
67	5.7000	8.6100	3742675.200	9.92337E+06	85.9200
227.8093					
68	5.8000	8.7100	3779265.600	10.29947E+06	86.7600
236.4432					
69	5.9000	8.8100	3816727.200	10.67926E+06	87.6200
245.1621					
70	6.0000	8.9100	3858980.400	11.06304E+06	88.5900
253.9724					
71	6.1000	9.0100	3904282.800	11.45120E+06	89.6300
262.8833					
72	6.2000	9.1100	3944793.600	11.84364E+06	90.5600
271.8927					
73	6.3000	9.2100	3984868.800	12.24012E+06	91.4800
280.9945					
74	6.4000	9.3100	4025815.200	12.64065E+06	92.4200
290.1894					
75	6.5000	9.4100	4068068.400	13.04534E+06	93.3900
299.4798					
76	6.6000	9.5100	4108143.600	13.45414E+06	94.3100

308.8646						
77	6.7000	9.6100	4144298.400	13.86676E+06	95.1400	
318.3370						
78	6.8000	9.7100	4175661.600	14.28275E+06	95.8600	
327.8869						
79	6.9000	9.8100	4199619.600	14.70151E+06	96.4100	
337.5003						
80	7.0000	9.9100	4213123.200	15.12215E+06	96.7200	
347.1567						
81	7.1000	10.0100	4221835.200	15.54389E+06	96.9200	
356.8386						
82	7.2000	10.1100	4226626.800	15.96631E+06	97.0300	
366.5360						
83	7.5000	10.4100	4239694.800	17.23624E+06	97.3300	
395.6897						
84	7.6000	10.5100	4244050.800	17.66043E+06	97.4300	
405.4276						
85	7.7000	10.6100	4246664.400	18.08496E+06	97.4900	
415.1735						
86	8.1000	11.0100	4253634.000	19.78500E+06	97.6500	
454.2011						
87	8.2000	11.1100	4254940.800	20.21042E+06	97.6800	
463.9675						
88	8.3000	11.2100	4255376.400	20.63594E+06	97.6900	
473.7359						
89	10.9000	13.8100	4261474.800	31.70773E+06	97.8300	
727.9093						
90	11.0200	13.9300	4261474.800	32.21911E+06	97.8300	
739.6489						

=====

| Variable storage data for node | N0375

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	0.0000	0.0000	43.5600	0.0000	0.0010
0.0000					
2	8.0000	8.0000	43.5600	348.4800	0.0010
0.0080					

=====

| Variable storage data for node | N0385

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	-1.0900	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.1300	3.2200	26.1360	84.1579	0.0006
0.0019					
3	2.1400	3.2300	435.6000	86.0527	0.0100
0.0020					
4	7.0000	8.0900	4356.0000	10079.8755	0.1000
0.2314					

=====

| Variable storage data for node | N0275

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
1	2.3000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	3.1700	0.8700	8712.0000	2672.4137	0.2000
0.0614					
3	3.2700	0.9700	10018.8000	3608.1837	0.2300
0.0828					
4	3.3700	1.0700	13503.6000	4779.9659	0.3100
0.1097					
5	3.4700	1.1700	46609.2000	7619.9537	1.0700
0.1749					
6	3.5700	1.2700	51400.8000	12518.4514	1.1800
0.2874					
7	4.0700	1.7700	75358.8000	44017.6480	1.7300
1.0105					
8	4.1700	1.8700	80150.4000	51791.7996	1.8400
1.1890					
9	4.2700	1.9700	86248.8000	60109.8133	1.9800
1.3799					
10	4.3700	2.0700	94089.6000	69123.8009	2.1600
1.5869					
11	4.4700	2.1700	102801.6000	78965.0485	2.3600
1.8128					
12	4.5700	2.2700	114127.2000	89806.4493	2.6200
2.0617					
13	4.6700	2.3700	128502.0000	101930.6847	2.9500
2.3400					
14	4.7700	2.4700	143312.4000	115514.5391	3.2900
2.6518					
15	4.8700	2.5700	158994.0000	130622.9247	3.6500

2.9987					
16	4.9700	2.6700	175982.4000	147364.3929	4.0400
3.3830					
17	5.0700	2.7700	195148.8000	165912.5134	4.4800
3.8088					
18	5.1700	2.8700	215622.0000	186442.3395	4.9500
4.2801					
19	5.2700	2.9700	240451.2000	209234.4987	5.5200
4.8034					
20	5.3700	3.0700	265716.0000	234532.0903	6.1000
5.3841					
21	5.4700	3.1700	291416.4000	262378.5470	6.6900
6.0234					
22	5.5700	3.2700	315810.0000	292731.3940	7.2500
6.7202					
23	5.6700	3.3700	343252.8000	325674.6779	7.8800
7.4765					
24	5.7700	3.4700	368517.6000	361255.3665	8.4600
8.2933					
25	5.8700	3.5700	392040.0000	399276.8024	9.0000
9.1661					
26	5.9700	3.6700	412513.2000	439499.7180	9.4700
10.0895					
27	6.0700	3.7700	433422.0000	481791.7477	9.9500
11.0604					
28	6.1700	3.8700	453895.2000	526153.2271	10.4200
12.0788					
29	6.2700	3.9700	470012.4000	572345.8020	10.7900
13.1393					
30	6.3700	4.0700	482644.8000	619976.7897	11.0800
14.2327					
31	6.4700	4.1700	492663.6000	668740.8644	11.3100
15.3522					
32	6.5700	4.2700	500504.4000	718398.2520	11.4900
16.4922					
33	6.6700	4.3700	505296.0000	768687.5788	11.6000
17.6466					
34	7.0700	4.7700	520977.6000	973932.2587	11.9600
22.3584					
35	7.1700	4.8700	523591.2000	1.02616E+06	12.0200
23.5574					
36	7.2700	4.9700	528818.4000	1.07878E+06	12.1400
24.7654					
37	7.3700	5.0700	534045.6000	1.13192E+06	12.2600
25.9854					
38	7.4700	5.1700	537094.8000	1.18548E+06	12.3300
27.2148					
39	16.2700	13.9700	562359.6000	6.02260E+06	12.9100
138.2600					
40	16.3500	14.0500	562359.6000	6.06759E+06	12.9100

139.2928

```

*=====*
| Variable storage data for node | N0280
*=====*

```

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	2.0000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.9900	0.9900	3049.2000	1108.0092	0.0700
0.0254					
3	3.0900	1.0900	3484.8000	1434.4636	0.0800
0.0329					
4	3.1900	1.1900	5662.8000	1887.4546	0.1300
0.0433					
5	3.2900	1.2900	10018.8000	2661.2411	0.2300
0.0611					
6	3.3900	1.3900	17859.6000	4036.3920	0.4100
0.0927					
7	3.4900	1.4900	31798.8000	6486.0123	0.7300
0.1489					
8	3.5900	1.5900	58370.4000	10927.6938	1.3400
0.2509					
9	3.6900	1.6900	98010.0000	18661.5138	2.2500
0.4284					
10	3.7900	1.7900	151153.2000	31023.9946	3.4700
0.7122					
11	3.8900	1.8900	209959.2000	48999.0956	4.8200
1.1249					
12	3.9900	1.9900	273556.8000	73104.6413	6.2800
1.6783					
13	4.0900	2.0900	337590.0000	103605.6127	7.7500
2.3785					
14	4.1900	2.1900	393782.4000	140137.8363	9.0400
3.2171					
15	4.2900	2.2900	443876.4000	181995.3709	10.1900
4.1780					
16	4.3900	2.3900	489178.8000	228629.3241	11.2300
5.2486					
17	4.4900	2.4900	526204.8000	279386.7415	12.0800
6.4138					
18	4.5900	2.5900	560181.6000	333696.6610	12.8600
7.6606					
19	4.6900	2.6900	592851.6000	391340.0291	13.6100
8.9839					
20	4.7900	2.7900	619858.8000	451969.9300	14.2300

10.3758					
21	4.8900	2.8900	648608.4000	515387.2251	14.8900
11.8317					
22	4.9900	2.9900	674308.8000	581528.2626	15.4800
13.3501					
23	5.0900	3.0900	697831.2000	650131.2160	16.0200
14.9250					
24	5.1900	3.1900	718740.0000	720956.4958	16.5000
16.5509					
25	5.2900	3.2900	741826.8000	793981.0643	17.0300
18.2273					
26	5.3900	3.3900	764478.0000	869292.7125	17.5500
19.9562					
27	5.4900	3.4900	783644.4000	946696.0810	17.9900
21.7332					
28	5.5900	3.5900	805860.0000	1.02617E+06	18.5000
23.5576					
29	5.6900	3.6900	830689.2000	1.10799E+06	19.0700
25.4360					
30	5.7900	3.7900	858132.0000	1.19243E+06	19.7000
27.3744					
31	5.8900	3.8900	889930.8000	1.27983E+06	20.4300
29.3807					
32	5.9900	3.9900	923907.6000	1.37051E+06	21.2100
31.4626					
33	6.0900	4.0900	957013.2000	1.46455E+06	21.9700
33.6215					
34	6.1900	4.1900	988376.4000	1.56182E+06	22.6900
35.8544					
35	6.2900	4.2900	1019304.000	1.66219E+06	23.4000
38.1587					
36	6.3900	4.3900	1049360.400	1.76562E+06	24.0900
40.5331					
37	6.4900	4.4900	1082030.400	1.87219E+06	24.8400
42.9795					
38	6.5900	4.5900	1117749.600	1.98217E+06	25.6600
45.5044					
39	6.6900	4.6900	1156518.000	2.09588E+06	26.5500
48.1147					
40	6.7900	4.7900	1198771.200	2.21363E+06	27.5200
50.8181					
41	6.8900	4.8900	1243638.000	2.33575E+06	28.5500
53.6214					
42	6.9900	4.9900	1290247.200	2.46243E+06	29.6200
56.5297					
43	7.0900	5.0900	1344697.200	2.59417E+06	30.8700
59.5539					
44	7.1900	5.1900	1403503.200	2.73157E+06	32.2200
62.7082					
45	7.2900	5.2900	1467536.400	2.87511E+06	33.6900

66.0033						
46	7.3900	5.3900	1538103.600	3.02537E+06	35.3100	
69.4530						
47	7.4900	5.4900	1610413.200	3.18278E+06	36.9700	
73.0666						
48	7.5900	5.5900	1688385.600	3.34771E+06	38.7600	
76.8528						
49	7.6900	5.6900	1767664.800	3.52049E+06	40.5800	
80.8194						
50	7.7900	5.7900	1847815.200	3.70125E+06	42.4200	
84.9690						
51	7.8900	5.8900	1929708.000	3.89011E+06	44.3000	
89.3046						
52	7.9900	5.9900	2014650.000	4.08731E+06	46.2500	
93.8317						
53	8.0900	6.0900	2097849.600	4.29292E+06	48.1600	
98.5518						
54	8.1900	6.1900	2174950.800	4.50654E+06	49.9300	
103.4560						
55	8.2900	6.2900	2242468.800	4.72740E+06	51.4800	
108.5263						
56	8.3900	6.3900	2299096.800	4.95447E+06	52.7800	
113.7391						
57	8.4900	6.4900	2345270.400	5.18669E+06	53.8400	
119.0699						
58	8.5900	6.5900	2383167.600	5.42310E+06	54.7100	
124.4973						
59	8.6900	6.6900	2414095.200	5.66296E+06	55.4200	
130.0037						
60	8.7900	6.7900	2441102.400	5.90572E+06	56.0400	
135.5767						
61	8.8900	6.8900	2465496.000	6.15105E+06	56.6000	
141.2086						
62	8.9900	6.9900	2489018.400	6.39877E+06	57.1400	
146.8955						
63	9.0900	7.0900	2511669.600	6.64880E+06	57.6600	
152.6354						
64	9.1900	7.1900	2532578.400	6.90101E+06	58.1400	
158.4253						
65	9.2900	7.2900	2553051.600	7.15529E+06	58.6100	
164.2628						
66	9.3900	7.3900	2571782.400	7.41152E+06	59.0400	
170.1452						
67	9.4900	7.4900	2588335.200	7.66953E+06	59.4200	
176.0681						
68	9.5900	7.5900	2604016.800	7.92914E+06	59.7800	
182.0281						
69	9.6900	7.6900	2618827.200	8.19028E+06	60.1200	
188.0230						
70	9.7900	7.7900	2630588.400	8.45275E+06	60.3900	

194.0484					
71	9.8900	7.8900	2641042.800	8.71633E+06	60.6300
200.0994					
72	10.0900	8.0900	2661951.600	9.24662E+06	61.1100
212.2732					
73	10.1900	8.1900	2671970.400	9.51331E+06	61.3400
218.3956					
74	10.2900	8.2900	2680682.400	9.78094E+06	61.5400
224.5396					
75	10.3900	8.3900	2688087.600	10.04938E+06	61.7100
230.7020					
76	10.4900	8.4900	2695057.200	10.31853E+06	61.8700
236.8810					
77	10.5900	8.5900	2701591.200	10.58836E+06	62.0200
243.0754					
78	10.6900	8.6900	2707254.000	10.85880E+06	62.1500
249.2838					
79	10.7900	8.7900	2713352.400	11.12983E+06	62.2900
255.5058					
80	10.8900	8.8900	2718144.000	11.40140E+06	62.4000
261.7402					
81	10.9900	8.9900	2721628.800	11.67339E+06	62.4800
267.9841					
82	11.2900	9.2900	2730340.800	12.49118E+06	62.6800
286.7579					
83	11.3900	9.3900	2732518.800	12.76432E+06	62.7300
293.0284					
84	11.4900	9.4900	2733390.000	13.03761E+06	62.7500
299.3023					
85	13.6900	11.6900	2741666.400	19.06011E+06	62.9400
437.5599					
86	13.7800	11.7800	2741666.400	19.30686E+06	62.9400
443.2245					

=====

| Variable storage data for node | N0202

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-3.5700	0.0000	43.5600	0.0000	0.0010
0.0000					
2	4.4300	8.0000	43.5600	348.4800	0.0010
0.0080					
3	5.0000	8.5700	43.5600	373.3092	0.0010
0.0086					

=====

| Variable storage data for node | N0340

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.7900	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.0500	1.7400	6098.4000	3783.7488	0.1400
0.0869					
3	0.0500	1.8400	7840.8000	4478.8797	0.1800
0.1028					
4	0.1500	1.9400	10454.4000	5390.5031	0.2400
0.1237					
5	0.2500	2.0400	14374.8000	6626.7597	0.3300
0.1521					
6	0.3500	2.1400	20908.8000	8380.7509	0.4800
0.1924					
7	0.4500	2.2400	29185.2000	10873.9521	0.6700
0.2496					
8	0.5500	2.3400	37461.6000	14197.6607	0.8600
0.3259					
9	0.6500	2.4400	48787.2000	18497.6104	1.1200
0.4246					
10	0.7500	2.5400	95396.4000	25577.6975	2.1900
0.5872					
11	0.8500	2.6400	111949.2000	35933.8443	2.5700
0.8249					
12	0.9500	2.7400	130680.0000	48053.1151	3.0000
1.1031					
13	1.0500	2.8400	153766.8000	62259.6721	3.5300
1.4293					
14	1.1500	2.9400	178160.4000	78840.9068	4.0900
1.8099					
15	1.2500	3.0400	206038.8000	98033.7949	4.7300
2.2505					
16	1.3500	3.1400	239144.4000	120272.1886	5.4900
2.7611					
17	1.4500	3.2400	282268.8000	146312.8148	6.4800
3.3589					
18	1.5500	3.3400	333669.6000	177073.6193	7.6600
4.0651					
19	1.6500	3.4400	389426.4000	213192.1770	8.9400
4.8942					
20	1.7500	3.5400	446054.4000	254933.7779	10.2400
5.8525					
21	1.8500	3.6400	503553.6000	302384.6634	11.5600

6.9418					
22	1.9500	3.7400	563230.8000	355695.5084	12.9300
8.1656					
23	2.0500	3.8400	624650.4000	415062.4927	14.3400
9.5285					
24	2.1500	3.9400	688683.6000	480702.5040	15.8100
11.0354					
25	2.2500	4.0400	754894.8000	552855.3821	17.3300
12.6918					
26	2.3500	4.1400	827204.4000	631931.9961	18.9900
14.5072					
27	2.4500	4.2400	904305.6000	718478.0066	20.7600
16.4940					
28	2.5500	4.3400	987940.8000	813058.5608	22.6800
18.6653					
29	2.6500	4.4400	1076803.200	916262.8435	24.7200
21.0345					
30	2.7500	4.5400	1172635.200	1.02870E+06	26.9200
23.6157					
31	2.8500	4.6400	1272387.600	1.15092E+06	29.2100
26.4214					
32	2.9500	4.7400	1383901.200	1.28369E+06	31.7700
29.4695					
33	3.0500	4.8400	1508047.200	1.42824E+06	34.6200
32.7879					
34	3.1500	4.9400	1653537.600	1.58626E+06	37.9600
36.4156					
35	3.2500	5.0400	1814274.000	1.75959E+06	41.6500
40.3946					
36	3.3500	5.1400	1988078.400	1.94964E+06	45.6400
44.7576					
37	3.4500	5.2400	2178871.200	2.15791E+06	50.0200
49.5388					
38	3.5500	5.3400	2382296.400	2.38589E+06	54.6900
54.7726					
39	3.6500	5.4400	2599225.200	2.63489E+06	59.6700
60.4887					
40	3.7500	5.5400	2827044.000	2.90612E+06	64.9000
66.7153					
41	3.8500	5.6400	3060525.600	3.20042E+06	70.2600
73.4715					
42	3.9500	5.7400	3306639.600	3.51869E+06	75.9100
80.7781					
43	4.0500	5.8400	3565386.000	3.86221E+06	81.8500
88.6641					
44	4.1500	5.9400	3848526.000	4.23281E+06	88.3500
97.1720					
45	4.2500	6.0400	4156495.200	4.63296E+06	95.4200
106.3581					
46	4.3500	6.1400	4496263.200	5.06548E+06	103.2200

116.2874					
47	4.4500	6.2400	4871314.800	5.53373E+06	111.8300
127.0370					
48	4.5500	6.3400	5259870.000	6.04016E+06	120.7500
138.6630					
49	4.6500	6.4400	5661928.800	6.58612E+06	129.9800
151.1965					
50	4.7500	6.5400	6060502.800	7.17212E+06	139.1300
164.6493					
51	4.8500	6.6400	6456027.600	7.79784E+06	148.2100
179.0138					
52	4.9500	6.7400	6851116.800	8.46309E+06	157.2800
194.2859					
53	5.0500	6.8400	7268421.600	9.16896E+06	166.8600
210.4904					
54	5.1500	6.9400	7691389.200	9.91684E+06	176.5700
227.6594					
55	5.2500	7.0400	8119148.400	10.70727E+06	186.3900
245.8050					
56	5.3500	7.1400	8571736.800	11.54170E+06	196.7800
264.9610					
57	5.4500	7.2400	9042184.800	12.42228E+06	207.5800
285.1764					
58	5.5500	7.3400	9520473.600	13.35030E+06	218.5600
306.4808					
59	5.6500	7.4400	9984387.600	14.32544E+06	229.2100
328.8670					
60	5.7500	7.5400	10452222.00	15.34718E+06	239.9500
352.3227					
61	5.8500	7.6400	10910908.80	16.41524E+06	250.4800
376.8420					
62	5.9500	7.7400	11355656.40	17.52848E+06	260.6900
402.3986					
63	6.0500	7.8400	11789078.40	18.68564E+06	270.6400
428.9633					
64	6.1500	7.9400	12207254.40	19.88538E+06	280.2400
456.5056					
65	6.2500	8.0400	12611926.80	21.12628E+06	289.5300
484.9925					
66	6.3500	8.1400	13003095.60	22.40696E+06	298.5100
514.3931					
67	6.4500	8.2400	13371613.20	23.72564E+06	306.9700
544.6658					
68	6.5500	8.3400	13714866.00	25.07992E+06	314.8500
575.7557					
69	6.6500	8.4400	14026320.00	26.46693E+06	322.0000
607.5972					
70	6.7500	8.5400	14314251.60	27.88392E+06	328.6100
640.1268					
71	6.8500	8.6400	14572998.00	29.32825E+06	334.5500

673.2840					
72	6.9500	8.7400	14809093.20	30.79733E+06	339.9700
707.0093					
73	7.0500	8.8400	15018616.80	32.28868E+06	344.7800
741.2462					
74	7.1500	8.9400	15199390.80	33.79956E+06	348.9300
775.9312					
75	7.2500	9.0400	15350979.60	35.32706E+06	352.4100
810.9977					
76	7.3500	9.1400	15473383.20	36.86826E+06	355.2200
846.3787					
77	7.4500	9.2400	15568779.60	38.42035E+06	357.4100
882.0098					
78	7.5500	9.3400	15647623.20	39.98115E+06	359.2200
917.8409					
79	7.6500	9.4400	15707300.40	41.54888E+06	360.5900
953.8310					
80	7.7500	9.5400	15755652.00	43.12201E+06	361.7000
989.9451					
81	7.8500	9.6400	15793549.20	44.69945E+06	362.5700
1026.1583					
82	7.9500	9.7400	15821427.60	46.28019E+06	363.2100
1062.4469					
83	8.0500	9.8400	15843207.60	47.86340E+06	363.7100
1098.7925					
84	8.1500	9.9400	15858889.20	49.44849E+06	364.0700
1135.1812					
85	8.2500	10.0400	15870214.80	51.03493E+06	364.3300
1171.6008					
86	8.3500	10.1400	15878926.80	52.62237E+06	364.5300
1208.0434					
87	8.4500	10.2400	15886332.00	54.21062E+06	364.7000
1244.5046					
88	8.5500	10.3400	15891123.60	55.79948E+06	364.8100
1280.9797					
89	8.6500	10.4400	15895044.00	57.38877E+06	364.9000
1317.4649					
90	8.7500	10.5400	15897657.60	58.97839E+06	364.9600
1353.9575					
91	10.4500	12.2400	15902884.80	86.00858E+06	365.0800
1974.4853					
92	10.5650	12.3550	15902884.80	87.83741E+06	365.0800
2016.4695					

=====

| Variable storage data for node | N0515

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	-1.2000	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-1.1000	0.1000	871.2000	64.0937	0.0200
0.0015					
3	-1.0000	0.2000	1306.8000	172.2592	0.0300
0.0040					
4	-0.9000	0.3000	2178.0000	344.6532	0.0500
0.0079					
5	-0.8000	0.4000	4356.0000	665.1219	0.1000
0.0153					
6	-0.7000	0.5000	7405.2000	1246.4738	0.1700
0.0286					
7	-0.6000	0.6000	10890.0000	2155.6421	0.2500
0.0495					
8	-0.5000	0.7000	16117.2000	3497.4773	0.3700
0.0803					
9	-0.4000	0.8000	22215.6000	5405.9614	0.5100
0.1241					
10	-0.3000	0.9000	29185.2000	7968.0640	0.6700
0.1829					
11	-0.2000	1.0000	38768.4000	11354.3912	0.8900
0.2607					
12	-0.1000	1.1000	844628.4000	46832.4463	19.3900
1.0751					
13	0.0000	1.2000	868150.8000	132467.8578	19.9300
3.0410					
14	0.1000	1.3000	888624.0000	220303.7311	20.4000
5.0575					
15	0.2000	1.4000	908661.6000	310165.2508	20.8600
7.1204					
16	0.3000	1.5000	930441.6000	402117.3417	21.3600
9.2313					
17	0.4000	1.6000	951350.4000	496204.0648	21.8400
11.3913					
18	0.5000	1.7000	973130.4000	592425.0884	22.3400
13.6002					
19	0.6000	1.8000	997959.6000	690975.9964	22.9100
15.8626					
20	0.7000	1.9000	1020610.800	791901.3889	23.4300
18.1796					
21	0.8000	2.0000	1044568.800	895157.0202	23.9800
20.5500					
22	0.9000	2.1000	1068962.400	1.00083E+06	24.5400
22.9759					
23	1.0000	2.2000	1098583.200	1.10920E+06	25.2200
25.4638					
24	1.1000	2.3000	1121670.000	1.22021E+06	25.7500

28.0122						
25	1.2000	2.4000	1146934.800	1.33364E+06	26.3300	
30.6161						
26	1.3000	2.5000	1172199.600	1.44959E+06	26.9100	
33.2781						
27	1.4000	2.6000	1197900.000	1.56809E+06	27.5000	
35.9985						
28	1.5000	2.7000	1223164.800	1.68914E+06	28.0800	
38.7774						
29	1.6000	2.8000	1243638.000	1.81248E+06	28.5500	
41.6088						
30	1.7000	2.9000	1264111.200	1.93787E+06	29.0200	
44.4873						
31	1.8000	3.0000	1284584.400	2.06530E+06	29.4900	
47.4127						
32	1.9000	3.1000	1305057.600	2.19478E+06	29.9600	
50.3852						
33	2.0000	3.2000	1325966.400	2.32633E+06	30.4400	
53.4051						
34	2.1000	3.3000	1343826.000	2.45981E+06	30.8500	
56.4695						
35	2.2000	3.4000	1361250.000	2.59507E+06	31.2500	
59.5745						
36	2.3000	3.5000	1382594.400	2.73225E+06	31.7400	
62.7239						
37	2.4000	3.6000	1398711.600	2.87132E+06	32.1100	
65.9164						
38	2.5000	3.7000	1419184.800	3.01221E+06	32.5800	
69.1508						
39	2.6000	3.8000	1436173.200	3.15498E+06	32.9700	
72.4283						
40	2.7000	3.9000	1453597.200	3.29946E+06	33.3700	
75.7452						
41	2.8000	4.0000	1471892.400	3.44573E+06	33.7900	
79.1032						
42	2.9000	4.1000	1485831.600	3.59362E+06	34.1100	
82.4981						
43	3.0000	4.2000	1500642.000	3.74294E+06	34.4500	
85.9261						
44	3.1000	4.3000	1512838.800	3.89361E+06	34.7300	
89.3850						
45	3.2000	4.4000	1524600.000	4.04548E+06	35.0000	
92.8715						
46	3.3000	4.5000	1538539.200	4.19864E+06	35.3200	
96.3874						
47	3.4000	4.6000	1549429.200	4.35303E+06	35.5700	
99.9319						
48	3.5000	4.7000	1561190.400	4.50856E+06	35.8400	
103.5023						
49	3.6000	4.8000	1569902.400	4.66512E+06	36.0400	

107.0963						
50	3.7000	4.9000	1579485.600	4.82258E+06	36.2600	
110.7113						
51	3.8000	5.0000	1590375.600	4.98107E+06	36.5100	
114.3497						
52	3.9000	5.1000	1599523.200	5.14057E+06	36.7200	
118.0112						
53	4.0000	5.2000	1608235.200	5.30095E+06	36.9200	
121.6931						
54	4.1000	5.3000	1616076.000	5.46217E+06	37.1000	
125.3941						
55	4.2000	5.4000	1622174.400	5.62408E+06	37.2400	
129.1111						
56	4.3000	5.5000	1629144.000	5.78664E+06	37.4000	
132.8430						
57	4.4000	5.6000	1636984.800	5.94995E+06	37.5800	
136.5920						
58	4.5000	5.7000	1643518.800	6.11397E+06	37.7300	
140.3574						
59	4.6000	5.8000	1650488.400	6.27867E+06	37.8900	
144.1384						
60	4.7000	5.9000	1657022.400	6.44404E+06	38.0400	
147.9349						
61	4.8000	6.0000	1664863.200	6.61013E+06	38.2200	
151.7478						
62	4.9000	6.1000	1672268.400	6.77699E+06	38.3900	
155.5783						
63	5.0000	6.2000	1679673.600	6.94458E+06	38.5600	
159.4257						
64	5.1000	6.3000	1686643.200	7.11290E+06	38.7200	
163.2897						
65	5.2000	6.4000	1694919.600	7.28198E+06	38.9100	
167.1711						
66	5.3000	6.5000	1703631.600	7.45190E+06	39.1100	
171.0721						
67	5.4000	6.6000	1711472.400	7.62265E+06	39.2900	
174.9921						
68	5.5000	6.7000	1719313.200	7.79419E+06	39.4700	
178.9300						
69	5.6000	6.8000	1728460.800	7.96658E+06	39.6800	
182.8875						
70	5.7000	6.9000	1739786.400	8.13999E+06	39.9400	
186.8684						
71	5.8000	7.0000	1753290.000	8.31464E+06	40.2500	
190.8779						
72	5.9000	7.1000	1768971.600	8.49075E+06	40.6100	
194.9208						
73	6.0000	7.2000	1786831.200	8.66854E+06	41.0200	
199.0023						
74	6.1000	7.3000	1811224.800	8.84844E+06	41.5800	

203.1322						
75	6.2000	7.4000	1849993.200	9.03149E+06		42.4700
207.3346						
76	6.3000	7.5000	1910977.200	9.21953E+06		43.8700
211.6513						
77	6.4000	7.6000	1981108.800	9.41412E+06		45.4800
216.1186						
78	6.5000	7.7000	2044706.400	9.61540E+06		46.9400
220.7393						
79	6.6000	7.8000	2115273.600	9.82339E+06		48.5600
225.5140						
80	6.7000	7.9000	2175386.400	10.03792E+06		49.9400
230.4388						
81	6.8000	8.0000	2236806.000	10.25852E+06		51.3500
235.5031						
82	6.9000	8.1000	2279494.800	10.48432E+06		52.3300
240.6870						
83	7.0000	8.2000	2305630.800	10.71358E+06		52.9300
245.9499						
84	7.1000	8.3000	2317827.600	10.94475E+06		53.2100
251.2568						
85	7.2000	8.4000	2321312.400	11.17670E+06		53.2900
256.5818						
86	7.3000	8.5000	2322619.200	11.40890E+06		53.3200
261.9122						
87	7.4000	8.6000	2323054.800	11.64118E+06		53.3300
267.2447						

=====

| Variable storage data for node | N-001

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	0.2300	0.0000	435.6000	0.0000	0.0100
0.0000					
2	1.9300	1.7000	47916.0000	29987.8199	1.1000
0.6884					
3	2.0300	1.8000	50965.2000	34931.0467	1.1700
0.8019					
4	2.1300	1.9000	55321.2000	40243.8252	1.2700
0.9239					
5	2.2300	2.0000	58806.0000	45949.2413	1.3500
1.0548					
6	2.3300	2.1000	63597.6000	52067.7964	1.4600
1.1953					
7	2.9300	2.7000	91040.4000	98213.2803	2.0900

2.2547					
8	3.0300	2.8000	95832.0000	107555.7829	2.2000
2.4691					
9	3.1300	2.9000	102801.6000	117485.3251	2.3600
2.6971					
10	3.2300	3.0000	109771.2000	128111.9540	2.5200
2.9410					
11	3.3300	3.1000	117612.0000	139478.7466	2.7000
3.2020					
12	3.4300	3.2000	127630.8000	151737.3518	2.9300
3.4834					
13	3.5300	3.3000	139392.0000	165084.0393	3.2000
3.7898					
14	3.6300	3.4000	151153.2000	179607.1850	3.4700
4.1232					
15	3.7300	3.5000	165092.4000	195414.1845	3.7900
4.4861					
16	3.8300	3.6000	179902.8000	212658.4713	4.1300
4.8820					
17	3.9300	3.7000	201247.2000	231705.8122	4.6200
5.3192					
18	4.0300	3.8000	226947.6000	253102.4721	5.2100
5.8104					
19	4.1300	3.9000	256132.8000	277241.5438	5.8800
6.3646					
20	4.2300	4.0000	286624.8000	304364.8660	6.5800
6.9873					
21	4.3300	4.1000	316245.6000	334495.9494	7.2600
7.6790					
22	4.4300	4.2000	342817.2000	367439.8289	7.8700
8.4353					
23	4.5300	4.3000	369824.4000	403063.0204	8.4900
9.2531					
24	4.6300	4.4000	399445.2000	441516.6077	9.1700
10.1358					
25	4.7300	4.5000	434728.8000	483212.4484	9.9800
11.0930					
26	4.8300	4.6000	473932.8000	528630.9723	10.8800
12.1357					
27	4.9300	4.7000	518364.0000	578228.7292	11.9000
13.2743					
28	5.0300	4.8000	564973.2000	632378.3291	12.9700
14.5174					
29	5.1300	4.9000	618552.0000	691533.7743	14.2000
15.8754					
30	5.2300	5.0000	682585.2000	756563.7074	15.6700
17.3683					
31	5.3300	5.1000	761428.8000	828727.7850	17.4800
19.0250					
32	5.4300	5.2000	859438.8000	909720.9229	19.7300

20.8843					
33	5.5300	5.3000	984456.0000	1.00184E+06	22.6000
22.9992					
34	5.6300	5.4000	1124283.600	1.10720E+06	25.8100
25.4179					
35	5.7300	5.5000	1287633.600	1.22770E+06	29.5600
28.1842					
36	5.8300	5.6000	1456646.400	1.36483E+06	33.4400
31.3322					
37	5.9300	5.7000	1634806.800	1.51932E+06	37.5300
34.8787					
38	6.0300	5.8000	1817323.200	1.69184E+06	41.7200
38.8393					
39	6.1300	5.9000	2011165.200	1.88318E+06	46.1700
43.2319					
40	6.2300	6.0000	2211105.600	2.09421E+06	50.7600
48.0765					
41	6.3300	6.1000	2414530.800	2.32542E+06	55.4300
53.3843					
42	6.4300	6.2000	2617084.800	2.57693E+06	60.0800
59.1581					
43	6.5300	6.3000	2815282.800	2.84848E+06	64.6300
65.3922					
44	6.6300	6.4000	3010867.200	3.13973E+06	69.1200
72.0784					
45	6.7300	6.5000	3204709.200	3.45046E+06	73.5700
79.2116					
46	6.8300	6.6000	3380691.600	3.77969E+06	77.6100
86.7697					
47	6.9300	6.7000	3547526.400	4.12606E+06	81.4400
94.7213					
48	7.0300	6.8000	3703035.600	4.48856E+06	85.0100
103.0431					
49	7.1300	6.9000	3842427.600	4.86581E+06	88.2100
111.7035					
50	7.2300	7.0000	3957861.600	5.25580E+06	90.8600
120.6566					
51	7.3300	7.1000	4052386.800	5.65630E+06	93.0300
129.8508					
52	7.4300	7.2000	4126438.800	6.06523E+06	94.7300
139.2386					
53	7.5300	7.3000	4187858.400	6.48094E+06	96.1400
148.7819					
54	7.6300	7.4000	4237081.200	6.90218E+06	97.2700
158.4522					
55	7.7300	7.5000	4273236.000	7.32769E+06	98.1000
168.2206					
56	7.8300	7.6000	4302856.800	7.75649E+06	98.7800
178.0645					
57	7.9300	7.7000	4325943.600	8.18792E+06	99.3100

187.9689					
58	8.0300	7.8000	4338140.400	8.62112E+06	99.5900
197.9138					
59	8.1300	7.9000	4346852.400	9.05537E+06	99.7900
207.8827					
60	8.2300	8.0000	4354693.200	9.49044E+06	99.9700
217.8706					
61	8.3300	8.1000	4361227.200	9.92623E+06	100.1200
227.8750					
62	8.4300	8.2000	4367761.200	10.36268E+06	100.2700
237.8944					
63	8.5300	8.3000	4372552.800	10.79969E+06	100.3800
247.9268					
64	8.6300	8.4000	4375602.000	11.23709E+06	100.4500
257.9682					
65	8.7300	8.5000	4378651.200	11.67480E+06	100.5200
268.0166					
66	8.8300	8.6000	4380393.600	12.11275E+06	100.5600
278.0705					
67	8.9300	8.7000	4382136.000	12.55087E+06	100.6000
288.1284					
68	9.0300	8.8000	4383878.400	12.98917E+06	100.6400
298.1903					
69	9.1300	8.9000	4384749.600	13.42760E+06	100.6600
308.2552					
70	9.2300	9.0000	4386492.000	13.86615E+06	100.7000
318.3231					
71	10.0300	9.8000	4396946.400	17.37949E+06	100.9400
398.9783					
72	10.1300	9.9000	4398688.800	17.81927E+06	100.9800
409.0742					
73	10.2300	10.0000	4399560.000	18.25918E+06	101.0000
419.1731					
74	15.2300	15.0000	4447911.600	40.37753E+06	102.1100
926.9404					
75	15.3300	15.1000	4449218.400	40.82238E+06	102.1400
937.1528					
76	15.4300	15.2000	4449654.000	41.26732E+06	102.1500
947.3672					
77	26.1300	25.9000	4515865.200	89.23193E+06	103.6700
2048.4832					
78	26.2300	26.0000	4517172.000	89.68358E+06	103.7000
2058.8516					
79	26.3300	26.1000	4517607.600	90.13531E+06	103.7100
2069.2220					
80	26.6300	26.4000	4519785.600	91.49091E+06	103.7600
2100.3422					
81	26.7300	26.5000	4521092.400	91.94295E+06	103.7900
2110.7196					
82	26.8300	26.6000	4521092.400	92.39505E+06	103.7900

2121.0986
 83 27.2250 26.9950 4521528.000 94.18095E+06 103.8000
 2162.0972

=====

| Variable storage data for node | N-002

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1 0.0000	3.0000	0.0000	435.6000	0.0000	0.0100
2 0.0019	3.1000	0.1000	1306.8000	83.2285	0.0300
3 0.0059	3.2000	0.2000	2178.0000	255.6225	0.0500
4 0.0118	3.3000	0.3000	3049.2000	515.7614	0.0700
5 0.0193	3.4000	0.4000	3484.8000	842.2159	0.0800
6 0.0288	3.5000	0.5000	4791.6000	1254.3014	0.1100
7 0.0408	3.6000	0.6000	5662.8000	1776.4102	0.1300
8 0.0548	3.7000	0.7000	6534.0000	2385.7248	0.1500
9 0.0722	3.8000	0.8000	8712.0000	3145.4110	0.2000
10 0.0942	3.9000	0.9000	10454.4000	4102.3987	0.2400
11 0.1206	4.0000	1.0000	12632.4000	5255.0111	0.2900
12 0.1516	4.1000	1.1000	14374.8000	6604.4198	0.3300
13 0.1871	4.2000	1.2000	16552.8000	8149.5046	0.3800
14 0.2276	4.3000	1.3000	18730.8000	9912.5456	0.4300
15 0.2730	4.4000	1.4000	20908.8000	11893.5077	0.4800
16 0.3235	4.5000	1.5000	23086.8000	14092.3667	0.5300
17 0.3785	4.6000	1.6000	24829.2000	16487.6146	0.5700
18 0.4395	4.7000	1.7000	28314.0000	19142.8417	0.6500
19	4.8000	1.8000	32234.4000	22168.1139	0.7400

0.5089					
20	4.9000	1.9000	37461.6000	25649.6075	0.8600
0.5888					
21	5.0000	2.0000	43124.4000	29675.5471	0.9900
0.6813					
22	5.1000	2.1000	47480.4000	34203.9956	1.0900
0.7852					
23	5.2000	2.2000	50965.2000	39125.1981	1.1700
0.8982					
24	5.3000	2.3000	54014.4000	44373.3874	1.2400
1.0187					
25	5.4000	2.4000	56628.0000	49904.9375	1.3000
1.1457					
26	5.5000	2.5000	59241.6000	55697.8682	1.3600
1.2786					
27	5.6000	2.6000	64033.2000	61859.9940	1.4700
1.4201					
28	5.7000	2.7000	70131.6000	68565.8557	1.6100
1.5741					
29	5.8000	2.8000	79714.8000	76052.9883	1.8300
1.7459					
30	5.9000	2.9000	94089.6000	84733.1970	2.1600
1.9452					
31	6.0000	3.0000	113256.0000	95085.5778	2.6000
2.1829					
32	6.1000	3.1000	134164.8000	107441.7434	3.0800
2.4665					
33	6.2000	3.2000	152895.6000	121784.4241	3.5100
2.7958					
34	6.3000	3.3000	168577.2000	137851.5250	3.8700
3.1646					
35	6.4000	3.4000	181209.6000	155336.8872	4.1600
3.5660					
36	6.5000	3.5000	190792.8000	173934.7636	4.3800
3.9930					
37	6.6000	3.6000	198633.6000	193404.5732	4.5600
4.4400					
38	6.7000	3.7000	204732.0000	213571.8831	4.7000
4.9029					
39	6.8000	3.8000	211266.0000	234370.7198	4.8500
5.3804					
40	6.9000	3.9000	219542.4000	255909.5993	5.0400
5.8749					
41	7.0000	4.0000	229125.6000	278341.0690	5.2600
6.3898					
42	7.1000	4.1000	240015.6000	301795.7877	5.5100
6.9283					
43	7.2000	4.2000	252648.0000	326426.0217	5.8000
7.4937					
44	7.3000	4.3000	266587.2000	352384.4031	6.1200

8.0896					
45	7.4000	4.4000	280962.0000	379758.4440	6.4500
8.7181					
46	7.5000	4.5000	293158.8000	408462.0375	6.7300
9.3770					
47	7.6000	4.6000	302306.4000	438233.8286	6.9400
10.0605					
48	7.7000	4.7000	308840.4000	468790.2809	7.0900
10.7619					
49	7.8000	4.8000	312760.8000	499869.8240	7.1800
11.4754					
50	7.9000	4.9000	315810.0000	531297.9265	7.2500
12.1969					
51	8.0000	5.0000	318859.2000	563030.9471	7.3200
12.9254					
52	8.1000	5.1000	322344.0000	595090.6286	7.4000
13.6614					
53	8.2000	5.2000	324957.6000	627455.2971	7.4600
14.4044					
54	8.3000	5.3000	326700.0000	660037.8124	7.5000
15.1524					
55	8.4000	5.4000	328878.0000	692816.3243	7.5500
15.9049					
56	8.5000	5.5000	330184.8000	725769.1132	7.5800
16.6614					
57	8.6000	5.6000	331927.2000	758874.3439	7.6200
17.4214					
58	8.7000	5.7000	333669.6000	792153.8131	7.6600
18.1853					
59	8.8000	5.8000	334105.2000	825542.2169	7.6700
18.9518					
60	8.9000	5.9000	334105.2000	858952.7369	7.6700
19.7188					
61	9.0000	6.0000	334105.2000	892363.2569	7.6700
20.4858					
62	9.1150	6.1150	334105.2000	930785.3549	7.6700
21.3679					

=====

| Variable storage data for node | N-003

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	2.5600	0.0000	435.6000	0.0000	0.0100
0.0000					
2	2.9900	0.4300	435.6000	187.3080	0.0100

0.0043					
3	3.0000	0.4400	435.6000	191.6640	0.0100
0.0044					
4	3.1000	0.5400	871.2000	255.7577	0.0200
0.0059					
5	3.2000	0.6400	2613.6000	422.2148	0.0600
0.0097					
6	3.3000	0.7400	3920.4000	746.7114	0.0900
0.0171					
7	3.4000	0.8400	4791.6000	1181.5792	0.1100
0.0271					
8	3.5000	0.9400	5662.8000	1703.6879	0.1300
0.0391					
9	3.6000	1.0400	6534.0000	2313.0026	0.1500
0.0531					
10	3.7000	1.1400	7405.2000	3009.5014	0.1700
0.0691					
11	3.8000	1.2400	8276.4000	3793.1699	0.1900
0.0871					
12	3.9000	1.3400	9583.2000	4685.3431	0.2200
0.1076					
13	4.0000	1.4400	10454.4000	5686.8973	0.2400
0.1306					
14	4.1000	1.5400	11761.2000	6797.0251	0.2700
0.1560					
15	4.2000	1.6400	13068.0000	8037.8991	0.3000
0.1845					
16	4.3000	1.7400	14374.8000	9409.5065	0.3300
0.2160					
17	4.4000	1.8400	15246.0000	10890.3181	0.3500
0.2500					
18	4.5000	1.9400	16988.4000	12501.2366	0.3900
0.2870					
19	4.6000	2.0400	18295.2000	14264.9955	0.4200
0.3275					
20	4.7000	2.1400	19166.4000	16137.8879	0.4400
0.3705					
21	4.8000	2.2400	20037.6000	18097.9069	0.4600
0.4155					
22	4.9000	2.3400	21780.0000	20188.1608	0.5000
0.4635					
23	5.0000	2.4400	23958.0000	22474.1731	0.5500
0.5159					
24	5.1000	2.5400	25264.8000	24934.9994	0.5800
0.5724					
25	5.2000	2.6400	27007.2000	27548.0891	0.6200
0.6324					
26	5.3000	2.7400	28749.6000	30335.4474	0.6600
0.6964					
27	5.4000	2.8400	30492.0000	33297.0706	0.7000

0.7644					
28	5.5000	2.9400	31798.8000	36411.3510	0.7300
0.8359					
29	5.6000	3.0400	33976.8000	39699.4969	0.7800
0.9114					
30	5.7000	3.1400	35719.2000	43183.8990	0.8200
0.9914					
31	5.8000	3.2400	38332.8000	46885.6930	0.8800
1.0763					
32	5.9000	3.3400	40510.8000	50827.3322	0.9300
1.1668					
33	6.0000	3.4400	43124.4000	55008.3696	0.9900
1.2628					
34	6.1000	3.5400	46609.2000	59493.8765	1.0700
1.3658					
35	6.2000	3.6400	49658.4000	64306.4033	1.1400
1.4763					
36	6.3000	3.7400	53143.2000	69445.4473	1.2200
1.5942					
37	6.4000	3.8400	57499.2000	74976.0823	1.3200
1.7212					
38	6.5000	3.9400	62290.8000	80963.9245	1.4300
1.8587					
39	6.6000	4.0400	65775.6000	87366.3902	1.5100
2.0057					
40	6.7000	4.1400	69696.0000	94138.9568	1.6000
2.1611					
41	6.8000	4.2400	73180.8000	101282.0170	1.6800
2.3251					
42	6.9000	4.3400	79279.2000	108902.9072	1.8200
2.5001					
43	7.0000	4.4400	86684.4000	117198.2494	1.9900
2.6905					
44	7.1000	4.5400	96267.6000	126341.5719	2.2100
2.9004					
45	7.2000	4.6400	105850.8000	136443.6023	2.4300
3.1323					
46	7.3000	4.7400	115434.0000	147504.2716	2.6500
3.3862					
47	7.4000	4.8400	123710.4000	159458.9844	2.8400
3.6607					
48	7.5000	4.9400	133293.6000	172306.0770	3.0600
3.9556					
49	7.6000	5.0400	141570.0000	186047.0424	3.2500
4.2711					
50	7.7000	5.1400	148975.2000	200572.5841	3.4200
4.6045					
51	7.8000	5.2400	156380.4000	215838.7146	3.5900
4.9550					
52	7.9000	5.3400	161172.0000	231715.5733	3.7000

5.3195					
53	8.0000	5.4400	165092.4000	248028.2376	3.7900
5.6939					
54	8.1000	5.5400	167706.0000	264667.8202	3.8500
6.0759					
55	8.2000	5.6400	169884.0000	281547.0343	3.9000
6.4634					
56	8.3000	5.7400	171626.4000	298622.3094	3.9400
6.8554					
57	8.4000	5.8400	173804.4000	315893.5623	3.9900
7.2519					
58	8.5000	5.9400	175982.4000	333382.6144	4.0400
7.6534					
59	8.6000	6.0400	178160.4000	351089.4657	4.0900
8.0599					
60	8.7000	6.1400	180338.4000	369014.1162	4.1400
8.4714					
61	8.8000	6.2400	182516.4000	387156.5658	4.1900
8.8879					
62	8.9000	6.3400	184258.8000	405495.0734	4.2300
9.3089					
63	9.0000	6.4400	186001.2000	424007.8200	4.2700
9.7339					
64	9.1000	6.5400	188179.2000	442716.5472	4.3200
10.1634					
65	9.2000	6.6400	189921.6000	461621.3313	4.3600
10.5974					
66	9.3000	6.7400	192535.2000	480743.8312	4.4200
11.0364					
67	9.4000	6.8400	196020.0000	500171.1365	4.5000
11.4823					
68	9.5000	6.9400	197762.4000	519859.9953	4.5400
11.9343					
69	9.6000	7.0400	197762.4000	539636.2353	4.5400
12.3883					
70	9.7100	7.1500	197762.4000	561390.0993	4.5400
12.8877					

=====

| Variable storage data for node | N-004

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	2.8800	0.0000	435.6000	0.0000	0.0100
0.0000					
2	3.1600	0.2800	435.6000	121.9680	0.0100

0.0028					
3	3.1700	0.2900	435.6000	126.3240	0.0100
0.0029					
4	3.2700	0.3900	871.2000	190.4177	0.0200
0.0044					
5	3.3700	0.4900	1306.8000	298.5832	0.0300
0.0069					
6	3.4700	0.5900	2178.0000	470.9772	0.0500
0.0108					
7	3.5700	0.6900	3049.2000	731.1161	0.0700
0.0168					
8	3.6700	0.7900	4356.0000	1099.4355	0.1000
0.0252					
9	3.7700	0.8900	6098.4000	1619.7132	0.1400
0.0372					
10	3.8700	0.9900	7840.8000	2314.8441	0.1800
0.0531					
11	3.9700	1.0900	9583.2000	3184.5798	0.2200
0.0731					
12	4.0700	1.1900	11325.6000	4228.7972	0.2600
0.0971					
13	4.1700	1.2900	12632.4000	5426.0908	0.2900
0.1246					
14	4.2700	1.3900	13939.2000	6754.1216	0.3200
0.1551					
15	4.3700	1.4900	16117.2000	8255.6097	0.3700
0.1895					
16	4.4700	1.5900	18295.2000	9975.0626	0.4200
0.2290					
17	4.5700	1.6900	20908.8000	11933.7894	0.4800
0.2740					
18	4.6700	1.7900	23522.4000	14154.0449	0.5400
0.3249					
19	4.7700	1.8900	26136.0000	16635.7930	0.6000
0.3819					
20	4.8700	1.9900	28314.0000	19357.5395	0.6500
0.4444					
21	4.9700	2.0900	30927.6000	22318.6285	0.7100
0.5124					
22	5.0700	2.1900	33976.8000	25562.6216	0.7800
0.5868					
23	5.1700	2.2900	37461.6000	29133.0885	0.8600
0.6688					
24	5.2700	2.3900	40946.4000	33052.1580	0.9400
0.7588					
25	5.3700	2.4900	44866.8000	37341.2818	1.0300
0.8572					
26	5.4700	2.5900	47916.0000	41979.5401	1.1000
0.9637					
27	5.5700	2.6900	50965.2000	46922.7669	1.1700

1.0772					
28	5.6700	2.7900	54450.0000	52192.5140	1.2500
1.1982					
29	5.7700	2.8900	58806.0000	57853.8607	1.3500
1.3281					
30	5.8700	2.9900	63162.0000	63950.9029	1.4500
1.4681					
31	5.9700	3.0900	67953.6000	70505.1576	1.5600
1.6186					
32	6.0700	3.1900	72745.2000	77538.6670	1.6700
1.7800					
33	6.1700	3.2900	76665.6000	85008.2750	1.7600
1.9515					
34	6.2700	3.3900	80150.4000	92848.3511	1.8400
2.1315					
35	6.3700	3.4900	83635.2000	101036.9313	1.9200
2.3195					
36	6.4700	3.5900	86248.8000	109530.7113	1.9800
2.5145					
37	6.5700	3.6900	88862.4000	118285.8586	2.0400
2.7155					
38	6.6700	3.7900	91476.0000	127302.3728	2.1000
2.9225					
39	6.7700	3.8900	94089.6000	136580.2532	2.1600
3.1355					
40	6.8700	3.9900	97574.4000	146162.8294	2.2400
3.3554					
41	6.9700	4.0900	103237.2000	156201.9780	2.3700
3.5859					
42	7.0700	4.1900	110642.4000	166893.7138	2.5400
3.8314					
43	7.1700	4.2900	118918.8000	178369.1717	2.7300
4.0948					
44	7.2700	4.3900	126324.0000	190629.3253	2.9000
4.3762					
45	7.3700	4.4900	132858.0000	203586.9228	3.0500
4.6737					
46	7.4700	4.5900	138520.8000	217154.7423	3.1800
4.9852					
47	7.5700	4.6900	145054.8000	231332.1258	3.3300
5.3107					
48	7.6700	4.7900	148975.2000	246033.0431	3.4200
5.6481					
49	7.7700	4.8900	152024.4000	261082.6152	3.4900
5.9936					
50	7.8700	4.9900	153766.8000	276371.9396	3.5300
6.3446					
51	7.9700	5.0900	155509.2000	291835.5032	3.5700
6.6996					
52	8.0700	5.1900	157687.2000	307495.0403	3.6200

7.0591					
53	8.1700	5.2900	159429.6000	323350.6420	3.6600
7.4231					
54	8.2700	5.3900	162914.4000	339467.3669	3.7400
7.7931					
55	8.3700	5.4900	166399.2000	355932.5749	3.8200
8.1711					
56	8.4700	5.5900	169884.0000	372746.2658	3.9000
8.5571					
57	8.5700	5.6900	173804.4000	389930.1413	3.9900
8.9516					
58	8.6700	5.7900	179902.8000	407614.4482	4.1300
9.3575					
59	8.7700	5.8900	186001.2000	425908.6182	4.2700
9.7775					
60	8.8700	5.9900	193406.4000	444877.6040	4.4400
10.2130					
61	8.9700	6.0900	202118.4000	464652.0469	4.6400
10.6669					
62	9.0700	6.1900	213008.4000	485405.7983	4.8900
11.1434					
63	9.1700	6.2900	226076.4000	507356.5770	5.1900
11.6473					
64	9.2700	6.3900	238273.2000	530571.1547	5.4700
12.1802					
65	9.3700	6.4900	252212.4000	555091.8876	5.7900
12.7432					
66	9.4700	6.5900	266587.2000	581028.2885	6.1200
13.3386					
67	9.5700	6.6900	280962.0000	608402.3294	6.4500
13.9670					
68	9.6700	6.7900	295772.4000	637235.5911	6.7900
14.6289					
69	9.7700	6.8900	309276.0000	667485.1968	7.1000
15.3234					
70	9.8700	6.9900	319294.8000	698912.0917	7.3300
16.0448					
71	9.9700	7.0900	326700.0000	731210.8013	7.5000
16.7863					
72	10.0700	7.1900	333669.6000	764228.3381	7.6600
17.5443					
73	10.1700	7.2900	338461.2000	797834.2574	7.7700
18.3158					
74	10.2700	7.3900	343688.4000	831941.0626	7.8900
19.0987					
75	10.3700	7.4900	352400.4000	866744.2458	8.0900
19.8977					
76	10.4700	7.5900	361548.0000	902440.3321	8.3000
20.7172					
77	10.5700	7.6900	371131.2000	939072.8812	8.5200

21.5581					
78	10.6700	7.7900	378536.4000	976555.2768	8.6900
22.4186					
79	10.7700	7.8900	384199.2000	1.01469E+06	8.8200
23.2941					
80	10.8700	7.9900	387684.0000	1.05328E+06	8.9000
24.1801					
81	10.9700	8.0900	389426.4000	1.09214E+06	8.9400
25.0721					
82	11.0700	8.1900	390733.2000	1.13115E+06	8.9700
25.9676					
83	11.1700	8.2900	391604.4000	1.17026E+06	8.9900
26.8656					
84	11.2550	8.3750	392040.0000	1.20357E+06	9.0000
27.6301					

=====

| Variable storage data for node | N-005

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	0.8700	0.0000	217.8000	0.0000	0.0050
0.0000					
2	0.8900	0.0200	435.6000	6.4094	0.0100
0.0001					
3	1.0900	0.2200	2613.6000	280.8198	0.0600
0.0064					
4	1.1900	0.3200	3920.4000	605.3163	0.0900
0.0139					
5	1.2900	0.4200	5227.2000	1061.1280	0.1200
0.0244					
6	1.3900	0.5200	6098.4000	1626.8431	0.1400
0.0373					
7	1.4900	0.6200	7840.8000	2321.9740	0.1800
0.0533					
8	1.5900	0.7200	9583.2000	3191.7097	0.2200
0.0733					
9	1.6900	0.8200	11761.2000	4257.0621	0.2700
0.0977					
10	1.7900	0.9200	13503.6000	5519.2869	0.3100
0.1267					
11	1.8900	1.0200	15681.6000	6977.1760	0.3600
0.1602					
12	1.9900	1.1200	17424.0000	8631.6747	0.4000
0.1982					
13	2.0900	1.2200	19166.4000	10460.4846	0.4400

0.2401					
14	2.1900	1.3200	21344.4000	12485.0278	0.4900
0.2866					
15	2.2900	1.4200	23958.0000	14748.8676	0.5500
0.3386					
16	2.3900	1.5200	27007.2000	17295.5805	0.6200
0.3971					
17	2.4900	1.6200	28749.6000	20082.9388	0.6600
0.4610					
18	2.5900	1.7200	30492.0000	23044.5620	0.7000
0.5290					
19	2.6900	1.8200	31363.2000	26137.1888	0.7200
0.6000					
20	2.7900	1.9200	32670.0000	29338.5945	0.7500
0.6735					
21	2.8900	2.0200	33541.2000	32649.0259	0.7700
0.7495					
22	2.9900	2.1200	34848.0000	36068.2436	0.8000
0.8280					
23	3.0900	2.2200	35719.2000	39596.4787	0.8200
0.9090					
24	3.1900	2.3200	37026.0000	43233.5067	0.8500
0.9925					
25	3.2900	2.4200	38332.8000	47001.2201	0.8800
1.0790					
26	3.3900	2.5200	39639.6000	50899.6186	0.9100
1.1685					
27	3.4900	2.6200	41817.6000	54971.9525	0.9600
1.2620					
28	3.5900	2.7200	43124.4000	59218.8425	0.9900
1.3595					
29	3.6900	2.8200	45302.4000	63639.6912	1.0400
1.4610					
30	3.7900	2.9200	46609.2000	68235.0704	1.0700
1.5665					
31	3.8900	3.0200	48787.2000	73004.4283	1.1200
1.6760					
32	3.9900	3.1200	51836.4000	78034.7878	1.1900
1.7914					
33	4.0900	3.2200	54014.4000	83326.9014	1.2400
1.9129					
34	4.1900	3.3200	57063.6000	88880.0482	1.3100
2.0404					
35	4.2900	3.4200	60112.8000	94738.1482	1.3800
2.1749					
36	4.3900	3.5200	63162.0000	100901.1980	1.4500
2.3164					
37	4.4900	3.6200	66211.2000	107369.1943	1.5200
2.4649					
38	4.5900	3.7200	70131.6000	114185.3266	1.6100

2.6213					
39	4.6900	3.8200	74052.0000	121393.5460	1.7000
2.7868					
40	4.7900	3.9200	78843.6000	129036.9979	1.8100
2.9623					
41	4.8900	4.0200	83199.6000	137138.1009	1.9100
3.1483					
42	4.9900	4.1200	87120.0000	145653.2437	2.0000
3.3437					
43	5.0900	4.2200	91040.4000	154560.4556	2.0900
3.5482					
44	5.1900	4.3200	94960.8000	163859.7340	2.1800
3.7617					
45	5.2900	4.4200	98445.6000	173529.4340	2.2600
3.9837					
46	5.3900	4.5200	104108.4000	183655.7132	2.3900
4.2162					
47	5.4900	4.6200	111513.6000	194434.5854	2.5600
4.4636					
48	5.5900	4.7200	119790.0000	205997.1812	2.7500
4.7290					
49	5.6900	4.8200	130680.0000	218516.6084	3.0000
5.0165					
50	5.7900	4.9200	142876.8000	232189.7777	3.2800
5.3303					
51	5.8900	5.0200	158122.8000	247233.1679	3.6300
5.6757					
52	5.9900	5.1200	177724.8000	264015.8379	4.0800
6.0610					
53	6.0900	5.2200	198198.0000	282802.4915	4.5500
6.4923					
54	6.1900	5.3200	223027.2000	303851.3341	5.1200
6.9755					
55	6.2900	5.4200	247420.8000	327362.9514	5.6800
7.5152					
56	6.3900	5.5200	271378.8000	353293.4474	6.2300
8.1105					
57	6.4900	5.6200	294030.0000	381556.0397	6.7500
8.7593					
58	6.5900	5.7200	316681.2000	412084.2909	7.2700
9.4602					
59	6.6900	5.8200	339768.0000	444899.6545	7.8000
10.2135					
60	6.7900	5.9200	360241.2000	479894.7736	8.2700
11.0169					
61	6.8900	6.0200	377665.2000	516786.2957	8.6700
11.8638					
62	6.9900	6.1200	394218.0000	555377.1113	9.0500
12.7497					
63	7.0900	6.2200	409028.4000	595536.7539	9.3900

13.6716						
64	7.1900	6.3200	424274.4000	637199.1526		9.7400
14.6281						
65	7.2900	6.4200	440827.2000	680451.1605		10.1200
15.6210						
66	7.3900	6.5200	459993.6000	725488.3514		10.5600
16.6549						
67	7.4900	6.6200	480031.2000	772485.5617		11.0200
17.7338						
68	7.5900	6.7200	499633.2000	821465.0231		11.4700
18.8582						
69	7.6900	6.8200	523155.6000	872599.4430		12.0100
20.0321						
70	7.7900	6.9200	547113.6000	926107.8982		12.5600
21.2605						
71	7.8900	7.0200	567151.2000	981817.5781		13.0200
22.5394						
72	7.9900	7.1200	584139.6000	1.03938E+06		13.4100
23.8609						
73	8.0900	7.2200	598078.8000	1.09849E+06		13.7300
25.2178						
74	8.1900	7.3200	608097.6000	1.15880E+06		13.9600
26.6023						
75	8.2900	7.4200	613324.8000	1.21987E+06		14.0800
28.0043						
76	8.3900	7.5200	615067.2000	1.28129E+06		14.1200
29.4143						
77	8.4900	7.6200	615067.2000	1.34279E+06		14.1200
30.8263						
78	8.5650	7.6950	615067.2000	1.38892E+06		14.1200
31.8853						

=====

| Variable storage data for node | N-008

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.0400	0.0000	26.1360	0.0000	0.0006
0.0000					
2	1.2600	1.3000	13503.6000	6120.2587	0.3100
0.1405					
3	1.3600	1.4000	15246.0000	7556.8435	0.3500
0.1735					
4	1.4600	1.5000	18295.2000	9231.5720	0.4200
0.2119					
5	1.5600	1.6000	20908.8000	11190.2988	0.4800

0.2569					
6	1.6600	1.7000	24393.6000	13453.1590	0.5600
0.3088					
7	2.5600	2.6000	51836.4000	46989.6667	1.1900
1.0787					
8	2.6600	2.7000	53578.8000	52260.1340	1.2300
1.1997					
9	2.7600	2.8000	56192.4000	57748.1205	1.2900
1.3257					
10	2.9600	3.0000	60112.8000	69376.3211	1.3800
1.5927					
11	3.0600	3.1000	62290.8000	75496.1169	1.4300
1.7332					
12	3.1600	3.2000	65775.6000	81898.5826	1.5100
1.8801					
13	3.2600	3.3000	67953.6000	88584.6801	1.5600
2.0336					
14	3.3600	3.4000	71438.4000	95553.4843	1.6400
2.1936					
15	4.1600	4.2000	94089.6000	161556.4052	2.1600
3.7088					
16	4.2600	4.3000	97138.8000	171117.3244	2.2300
3.9283					
17	4.3600	4.4000	99316.8000	180939.8049	2.2800
4.1538					
18	4.4600	4.5000	102366.0000	191023.4599	2.3500
4.3853					
19	4.6600	4.7000	111078.0000	212361.7175	2.5500
4.8752					
20	4.7600	4.8000	116305.2000	223729.7623	2.6700
5.1361					
21	4.8600	4.9000	120225.6000	235555.6425	2.7600
5.4076					
22	5.0600	5.1000	126759.6000	260251.0341	2.9100
5.9745					
23	5.1600	5.2000	129808.8000	273079.0238	2.9800
6.2690					
24	5.2600	5.3000	133729.2000	286255.3060	3.0700
6.5715					
25	5.6600	5.7000	148975.2000	342768.1942	3.4200
7.8689					
26	5.7600	5.8000	152895.6000	357861.1589	3.5100
8.2154					
27	5.8600	5.9000	205603.2000	375720.9906	4.7200
8.6254					
28	5.9600	6.0000	213008.4000	396650.2696	4.8900
9.1058					
29	6.0600	6.1000	220413.6000	418320.0984	5.0600
9.6033					
30	6.1600	6.2000	230868.0000	440881.9343	5.3000

10.1213					
31	6.2600	6.3000	245678.4000	464705.1794	5.6400
10.6682					
32	6.3600	6.4000	260488.8000	490009.6744	5.9800
11.2491					
33	6.4600	6.5000	274428.0000	516752.2194	6.3000
11.8630					
34	6.5600	6.6000	285318.0000	544737.4739	6.5500
12.5055					
35	6.6600	6.7000	293158.8000	573660.1390	6.7300
13.1694					
36	6.7600	6.8000	302306.4000	603431.9301	6.9400
13.8529					
37	6.8600	6.9000	313196.4000	634205.1566	7.1900
14.5593					
38	7.1600	7.2000	347608.8000	733280.1135	7.9800
16.8338					
39	7.2600	7.3000	359805.6000	768648.7273	8.2600
17.6457					
40	7.3600	7.4000	373309.2000	805302.0279	8.5700
18.4872					
41	7.4600	7.5000	385941.6000	843262.4366	8.8600
19.3586					
42	7.5600	7.6000	398138.4000	882464.4635	9.1400
20.2586					
43	7.6600	7.7000	412077.6000	922972.8598	9.4600
21.1885					
44	7.8600	7.9000	441262.8000	1.00829E+06	10.1300
23.1471					
45	7.9600	8.0000	456944.4000	1.05320E+06	10.4900
24.1781					
46	8.0600	8.1000	474368.4000	1.09976E+06	10.8900
25.2470					
47	8.1600	8.2000	493099.2000	1.14813E+06	11.3200
26.3574					
48	8.2600	8.3000	516186.0000	1.19859E+06	11.8500
27.5158					
49	8.3600	8.4000	541886.4000	1.25149E+06	12.4400
28.7302					
50	8.4600	8.5000	570200.4000	1.30708E+06	13.0900
30.0065					
51	8.5600	8.6000	601128.0000	1.36564E+06	13.8000
31.3509					
52	8.6600	8.7000	630748.8000	1.42723E+06	14.4800
32.7647					
53	8.7600	8.8000	658627.2000	1.49169E+06	15.1200
34.2446					
54	8.8600	8.9000	684327.6000	1.55884E+06	15.7100
35.7860					
55	8.9600	9.0000	705236.4000	1.62831E+06	16.1900

37.3809					
56	9.0600	9.1000	722660.4000	1.69970E+06	16.5900
39.0198					
57	9.1600	9.2000	739213.2000	1.77280E+06	16.9700
40.6978					
58	9.2600	9.3000	754023.6000	1.84746E+06	17.3100
42.4117					
59	9.3600	9.4000	766656.0000	1.92349E+06	17.6000
44.1572					
60	9.4600	9.5000	777546.0000	2.00070E+06	17.8500
45.9297					
61	9.5600	9.6000	785822.4000	2.07886E+06	18.0400
47.7241					
62	9.6600	9.7000	795405.6000	2.15792E+06	18.2600
49.5391					
63	9.7600	9.8000	802375.2000	2.23781E+06	18.4200
51.3731					
64	10.2600	10.3000	834609.6000	2.64703E+06	19.1600
60.7674					
65	10.3600	10.4000	839836.8000	2.73075E+06	19.2800
62.6894					
66	10.4600	10.5000	844192.8000	2.81495E+06	19.3800
64.6223					
67	10.5600	10.6000	849420.0000	2.89963E+06	19.5000
66.5663					
68	10.6600	10.7000	858567.6000	2.98503E+06	19.7100
68.5268					
69	10.7600	10.8000	873378.0000	3.07162E+06	20.0500
70.5147					
70	10.8600	10.9000	884268.0000	3.15950E+06	20.3000
72.5322					
71	10.9600	11.0000	893415.6000	3.24839E+06	20.5100
74.5727					
72	11.0600	11.1000	899078.4000	3.33801E+06	20.6400
76.6302					
73	11.1600	11.2000	904305.6000	3.42818E+06	20.7600
78.7001					
74	11.2600	11.3000	908661.6000	3.51883E+06	20.8600
80.7811					
75	11.3600	11.4000	912146.4000	3.60986E+06	20.9400
82.8711					
76	11.4600	11.5000	917809.2000	3.70136E+06	21.0700
84.9716					
77	11.5600	11.6000	921729.6000	3.79334E+06	21.1600
87.0830					
78	11.6600	11.7000	921729.6000	3.88551E+06	21.1600
89.1990					
79	11.8600	11.9000	921729.6000	4.06986E+06	21.1600
93.4310					
80	11.9500	11.9900	921729.6000	4.15281E+06	21.1600

95.3354

=====

| Variable storage data for node | N-010

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-0.2900	0.0000	26.1360	0.0000	0.0006
0.0000					
2	2.9700	3.2600	80586.0000	89174.6802	1.8500
2.0472					
3	3.0700	3.3600	84506.4000	97428.4418	1.9400
2.2366					
4	3.1700	3.4600	87555.6000	106031.0054	2.0100
2.4341					
5	3.8700	4.1600	118047.6000	177726.1516	2.7100
4.0800					
6	3.9700	4.2600	124146.0000	189834.4306	2.8500
4.3580					
7	4.0700	4.3600	132422.4000	202660.4970	3.0400
4.6524					
8	4.1700	4.4600	140698.8000	216314.3299	3.2300
4.9659					
9	4.2700	4.5600	150282.0000	230860.5936	3.4500
5.2998					
10	4.3700	4.6600	162043.2000	246473.0055	3.7200
5.6582					
11	4.4700	4.7600	175111.2000	263326.3344	4.0200
6.0451					
12	4.5700	4.8600	190792.8000	281615.7484	4.3800
6.4650					
13	4.6700	4.9600	204732.0000	301387.6956	4.7000
6.9189					
14	4.7700	5.0600	219106.8000	322575.3598	5.0300
7.4053					
15	4.8700	5.1600	233481.6000	345200.7479	5.3600
7.9247					
16	4.9700	5.2600	246114.0000	369177.5149	5.6500
8.4751					
17	5.0700	5.3600	257004.0000	394331.1988	5.9000
9.0526					
18	5.1700	5.4600	268765.2000	420617.2032	6.1700
9.6560					
19	5.4700	5.7600	299692.8000	505842.9535	6.8800
11.6126					
20	5.5700	5.8600	308840.4000	536268.1633	7.0900

12.3110						
21	5.6700	5.9600	318859.2000	567651.4968	7.3200	
13.0315						
22	5.7700	6.0600	329749.2000	600080.0687	7.5700	
13.7759						
23	5.8700	6.1600	342381.6000	633684.2940	7.8600	
14.5474						
24	5.9700	6.2600	354142.8000	668508.5107	8.1300	
15.3468						
25	6.0700	6.3600	368082.0000	704617.1474	8.4500	
16.1758						
26	6.1700	6.4600	385506.0000	742292.8130	8.8500	
17.0407						
27	6.2700	6.5600	405979.2000	781862.2634	9.3200	
17.9491						
28	6.3700	6.6600	427759.2000	823544.0244	9.8200	
18.9060						
29	6.4700	6.7600	450410.4000	867447.1958	10.3400	
19.9138						
30	6.5700	6.8600	470012.4000	913464.3964	10.7900	
20.9703						
31	6.6700	6.9600	490485.6000	961485.1792	11.2600	
22.0727						
32	6.7700	7.0600	511394.4000	1.011158E+06	11.7400	
23.2226						
33	6.8700	7.1600	530560.8000	1.06367E+06	12.1800	
24.4185						
34	6.9700	7.2600	546678.0000	1.11753E+06	12.5500	
25.6549						
35	7.0700	7.3600	562359.6000	1.17298E+06	12.9100	
26.9279						
36	7.1700	7.4600	574992.0000	1.22984E+06	13.2000	
28.2333						
37	7.2700	7.5600	583704.0000	1.28778E+06	13.4000	
29.5633						
38	7.3700	7.6600	591109.2000	1.34652E+06	13.5700	
30.9118						
39	7.4700	7.7600	597207.6000	1.40593E+06	13.7100	
32.2758						
40	7.5700	7.8600	603741.6000	1.46598E+06	13.8600	
33.6542						
41	7.6700	7.9600	611146.8000	1.52672E+06	14.0300	
35.0487						
42	7.7700	8.0600	616809.6000	1.58812E+06	14.1600	
36.4582						
43	7.8700	8.1600	622036.8000	1.65006E+06	14.2800	
37.8802						
44	7.9700	8.2600	628135.2000	1.71257E+06	14.4200	
39.3152						
45	8.0700	8.3600	635104.8000	1.77573E+06	14.5800	

40.7651					
46	8.1700	8.4600	643381.2000	1.83965E+06	14.7700
42.2326					
47	8.2700	8.5600	651657.6000	1.90440E+06	14.9600
43.7191					
48	8.3700	8.6600	658191.6000	1.96990E+06	15.1100
45.2226					
49	8.5700	8.8600	669952.8000	2.10271E+06	15.3800
48.2715					
50	8.6700	8.9600	675180.0000	2.16996E+06	15.5000
49.8155					
51	8.7700	9.0600	681714.0000	2.23781E+06	15.6500
51.3730					
52	8.8700	9.1600	686941.2000	2.30624E+06	15.7700
52.9439					
53	8.9700	9.2600	690861.6000	2.37513E+06	15.8600
54.5254					
54	9.0700	9.3600	695217.6000	2.44443E+06	15.9600
56.1164					
55	9.1700	9.4600	701751.6000	2.51428E+06	16.1100
57.7199					
56	9.2700	9.5600	709156.8000	2.58482E+06	16.2800
59.3394					
57	9.3700	9.6600	718304.4000	2.65619E+06	16.4900
60.9778					
58	9.4700	9.7600	729194.4000	2.72857E+06	16.7400
62.6393					
59	9.5700	9.8600	740084.4000	2.80203E+06	16.9900
64.3258					
60	9.6700	9.9600	751410.0000	2.87660E+06	17.2500
66.0377					
61	9.7700	10.0600	760557.6000	2.95220E+06	17.4600
67.7732					
62	9.8700	10.1600	767962.8000	3.02863E+06	17.6300
69.5277					
63	10.0700	10.3600	783644.4000	3.18378E+06	17.9900
73.0896					
64	10.1700	10.4600	791049.6000	3.26252E+06	18.1600
74.8971					
65	10.2700	10.5600	799761.6000	3.34206E+06	18.3600
76.7230					
66	10.3700	10.6600	808038.0000	3.42244E+06	18.5500
78.5685					
67	10.4700	10.7600	815007.6000	3.50360E+06	18.7100
80.4315					
68	10.5700	10.8600	819363.6000	3.58531E+06	18.8100
82.3075					
69	10.6700	10.9600	822848.4000	3.66742E+06	18.8900
84.1924					
70	10.7700	11.0600	825462.0000	3.74984E+06	18.9500

86.0844						
71	10.8700	11.1600	826768.8000	3.83245E+06	18.9800	
87.9809						
72	10.9700	11.2600	827640.0000	3.91517E+06	19.0000	
89.8799						
73	11.0900	11.3800	827640.0000	4.01448E+06	19.0000	
92.1599						

=====

| Variable storage data for node | N-013

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.1600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.7100	0.4500	2613.6000	435.1600	0.0600
0.0100					
3	-0.6100	0.5500	3920.4000	759.6566	0.0900
0.0174					
4	-0.5100	0.6500	6534.0000	1276.8386	0.1500
0.0293					
5	-0.3100	0.8500	13939.2000	3277.9331	0.3200
0.0753					
6	-0.2100	0.9500	18730.8000	4905.5286	0.4300
0.1126					
7	-0.1100	1.0500	24393.6000	7055.5034	0.5600
0.1620					
8	-0.0100	1.1500	30056.4000	9773.0552	0.6900
0.2244					
9	0.0900	1.2500	33541.2000	12951.3110	0.7700
0.2973					
10	1.0900	2.2500	54885.6000	56728.4889	1.2600
1.3023					
11	1.1900	2.3500	55756.8000	62260.4964	1.2800
1.4293					
12	1.2900	2.4500	57934.8000	67944.6719	1.3300
1.5598					
13	1.4900	2.6500	62290.8000	79964.4804	1.4300
1.8357					
14	1.5900	2.7500	64904.4000	86323.7292	1.4900
1.9817					
15	1.6900	2.8500	68824.8000	93009.1644	1.5800
2.1352					
16	1.7900	2.9500	71874.0000	100043.4833	1.6500
2.2967					
17	2.2900	3.4500	88862.4000	140152.1587	2.0400

3.2175					
18	2.3900	3.5500	91911.6000	149190.3397	2.1100
3.4249					
19	2.4900	3.6500	94089.6000	158490.0941	2.1600
3.6384					
20	3.8900	5.0500	143748.0000	323751.6553	3.3000
7.4323					
21	3.9900	5.1500	149410.8000	338408.5371	3.4300
7.7688					
22	4.0900	5.2500	156816.0000	353718.2315	3.6000
8.1203					
23	4.1900	5.3500	163350.0000	369725.2601	3.7500
8.4877					
24	4.2900	5.4500	169448.4000	386364.0824	3.8900
8.8697					
25	4.3900	5.5500	175546.8000	403612.7715	4.0300
9.2657					
26	4.4900	5.6500	182952.0000	421536.2574	4.2000
9.6771					
27	4.5900	5.7500	191228.4000	440243.5646	4.3900
10.1066					
28	4.6900	5.8500	198633.6000	459735.2975	4.5600
10.5541					
29	4.7900	5.9500	206474.4000	479989.2302	4.7400
11.0190					
30	4.8900	6.0500	213879.6000	501005.6328	4.9100
11.5015					
31	4.9900	6.1500	220413.6000	522719.2564	5.0600
12.0000					
32	5.0900	6.2500	228690.0000	545172.9407	5.2500
12.5154					
33	5.1900	6.3500	236095.2000	568410.9851	5.4200
13.0489					
34	5.2900	6.4500	243064.8000	592367.9007	5.5800
13.5989					
35	5.3900	6.5500	248292.0000	616935.0316	5.7000
14.1629					
36	5.8900	7.0500	271814.4000	746915.9829	6.2400
17.1468					
37	5.9900	7.1500	276170.4000	774314.6604	6.3400
17.7758					
38	6.0900	7.2500	281833.2000	802214.0825	6.4700
18.4163					
39	6.1900	7.3500	288367.2000	830723.1934	6.6200
19.0708					
40	6.2900	7.4500	298821.6000	860080.7886	6.8600
19.7447					
41	6.3900	7.5500	309276.0000	890483.8667	7.1000
20.4427					
42	6.4900	7.6500	319730.4000	921932.4241	7.3400

21.1647						
43	6.5900	7.7500	325828.8000	954209.5813	7.4800	
21.9056						
44	6.6900	7.8500	329313.6000	986966.2192	7.5600	
22.6576						
45	6.7900	7.9500	331491.6000	1.02001E+06	7.6100	
23.4161						
46	8.8900	10.0500	350222.4000	1.73571E+06	8.0400	
39.8464						
47	8.9750	10.1350	350222.4000	1.76548E+06	8.0400	
40.5298						

=====

| Variable storage data for node | N-015

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.1900	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.6300	0.5600	1306.8000	283.3096	0.0300
0.0065					
3	-0.5300	0.6600	2613.6000	475.5909	0.0600
0.0109					
4	-0.4300	0.7600	5227.2000	860.1533	0.1200
0.0197					
5	-0.3300	0.8600	8712.0000	1549.7293	0.2000
0.0356					
6	-0.2300	0.9600	13939.2000	2672.0882	0.3200
0.0613					
7	-0.1300	1.0600	41817.6000	5335.4017	0.9600
0.1225					
8	-0.0300	1.1600	320601.6000	21275.4720	7.3600
0.4884					
9	0.0700	1.2600	333234.0000	53964.8910	7.6500
1.2389					
10	0.3700	1.5600	366775.2000	158925.0199	8.4200
3.6484					
11	0.4700	1.6600	377229.6000	196123.6637	8.6600
4.5024					
12	0.5700	1.7600	388990.8000	234432.7960	8.9300
5.3818					
13	0.6700	1.8600	400752.0000	273918.0815	9.2000
6.2883					
14	0.7700	1.9600	414255.6000	314666.1894	9.5100
7.2237					
15	0.8700	2.0600	429066.0000	356829.6801	9.8500

8.1917					
16	0.9700	2.1600	448232.4000	400690.6717	10.2900
9.1986					
17	1.0700	2.2600	469576.8000	446576.5357	10.7800
10.2520					
18	1.1700	2.3600	493099.2000	494705.0641	11.3200
11.3569					
19	1.2700	2.4600	520977.6000	545402.0091	11.9600
12.5207					
20	1.3700	2.5600	552340.8000	599059.7538	12.6800
13.7525					
21	1.4700	2.6600	589366.8000	656134.5540	13.5300
15.0628					
22	1.5700	2.7600	623779.2000	716783.1113	14.3200
16.4551					
23	1.6700	2.8600	656013.6000	780765.3446	15.0600
17.9239					
24	1.7700	2.9600	688683.6000	847992.9169	15.8100
19.4672					
25	1.8700	3.0600	721789.2000	918509.3756	16.5700
21.0861					
26	1.9700	3.1600	751845.6000	992185.2697	17.2600
22.7774					
27	2.0700	3.2600	781466.4000	1.06885E+06	17.9400
24.5373					
28	2.1700	3.3600	811522.8000	1.14849E+06	18.6300
26.3657					
29	2.2700	3.4600	840272.4000	1.23107E+06	19.2900
28.2616					
30	2.3700	3.5600	867715.2000	1.31647E+06	19.9200
30.2220					
31	2.4700	3.6600	893415.6000	1.40452E+06	20.5100
32.2434					
32	2.5700	3.7600	918680.4000	1.49512E+06	21.0900
34.3233					
33	2.6700	3.8600	945252.0000	1.58831E+06	21.7000
36.4627					
34	2.7700	3.9600	970952.4000	1.68412E+06	22.2900
38.6621					
35	3.1700	4.3600	1073754.000	2.09289E+06	24.6500
48.0461					
36	3.2700	4.4600	1099890.000	2.20156E+06	25.2500
50.5410					
37	3.3700	4.5600	1123848.000	2.31275E+06	25.8000
53.0934					
38	3.4700	4.6600	1148677.200	2.42637E+06	26.3700
55.7018					
39	3.5700	4.7600	1173942.000	2.54250E+06	26.9500
58.3677					
40	3.6700	4.8600	1197900.000	2.66109E+06	27.5000

61.0902					
41	3.7700	4.9600	1221422.400	2.78205E+06	28.0400
63.8671					
42	3.8700	5.0600	1245380.400	2.90539E+06	28.5900
66.6985					
43	3.9700	5.1600	1266289.200	3.03097E+06	29.0700
69.5815					
44	4.0700	5.2600	1287198.000	3.15864E+06	29.5500
72.5124					
45	4.1700	5.3600	1305493.200	3.28827E+06	29.9700
75.4883					
46	4.2700	5.4600	1322046.000	3.41965E+06	30.3500
78.5043					
47	4.3700	5.5600	1338598.800	3.55268E+06	30.7300
81.5582					
48	4.4700	5.6600	1353844.800	3.68730E+06	31.0800
84.6487					
49	4.5700	5.7600	1368219.600	3.82340E+06	31.4100
87.7731					
50	4.6700	5.8600	1383465.600	3.96098E+06	31.7600
90.9316					
51	4.7700	5.9600	1400018.400	4.10015E+06	32.1400
94.1265					
52	4.9700	6.1600	1432688.400	4.38341E+06	32.8900
100.6293					
53	5.0700	6.2600	1450112.400	4.52755E+06	33.2900
103.9383					
54	5.1700	6.3600	1463616.000	4.67324E+06	33.6000
107.2827					
55	5.2700	6.4600	1473634.800	4.82010E+06	33.8300
110.6542					
56	5.6700	6.8600	1511967.600	5.41720E+06	34.7100
124.3617					
57	5.7700	6.9600	1521115.200	5.56885E+06	34.9200
127.8431					
58	5.8700	7.0600	1531569.600	5.72148E+06	35.1600
131.3471					
59	5.9700	7.1600	1543330.800	5.87522E+06	35.4300
134.8766					
60	6.0700	7.2600	1556834.400	6.03023E+06	35.7400
138.4350					
61	6.1700	7.3600	1576436.400	6.18689E+06	36.1900
142.0315					
62	6.2700	7.4600	1601701.200	6.34579E+06	36.7700
145.6794					
63	6.3700	7.5600	1624788.000	6.50712E+06	37.3000
149.3828					
64	6.4700	7.6600	1643954.400	6.67055E+06	37.7400
153.1348					
65	6.5700	7.7600	1659200.400	6.83571E+06	38.0900

156.9262						
66	6.6700	7.8600	1670090.400	7.00217E+06		38.3400
160.7477						
67	6.7700	7.9600	1678366.800	7.16959E+06		38.5300
164.5911						
68	6.8700	8.0600	1684465.200	7.33773E+06		38.6700
168.4511						
69	6.9700	8.1600	1689692.400	7.50643E+06		38.7900
172.3240						
70	7.0700	8.2600	1693612.800	7.67560E+06		38.8800
176.2075						
71	10.5700	11.7600	1718442.000	13.64658E+06		39.4500
313.2824						
72	10.6900	11.8800	1718442.000	13.85279E+06		39.4500
318.0164						

=====

| Variable storage data for node | N-006

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	2.6600	0.0000	435.6000	0.0000	0.0100
0.0000					
2	3.4100	0.7500	435.6000	326.7000	0.0100
0.0075					
3	3.4200	0.7600	435.6000	331.0560	0.0100
0.0076					
4	3.5200	0.8600	871.2000	395.1497	0.0200
0.0091					
5	3.6200	0.9600	1742.4000	523.3372	0.0400
0.0120					
6	3.7200	1.0600	2613.6000	739.6682	0.0600
0.0170					
7	3.8200	1.1600	4356.0000	1084.4562	0.1000
0.0249					
8	3.9200	1.2600	7405.2000	1665.8081	0.1700
0.0382					
9	4.0200	1.3600	9583.2000	2512.8830	0.2200
0.0577					
10	4.1200	1.4600	12196.8000	3599.2491	0.2800
0.0826					
11	4.2200	1.5600	14374.8000	4926.3256	0.3300
0.1131					
12	4.3200	1.6600	15681.6000	6428.6569	0.3600
0.1476					
13	4.4200	1.7600	17424.0000	8083.1556	0.4000

0.1856					
14	4.5200	1.8600	19166.4000	9911.9655	0.4400
0.2275					
15	4.6200	1.9600	20908.8000	11915.0738	0.4800
0.2735					
16	4.7200	2.0600	22651.2000	14092.4710	0.5200
0.3235					
17	4.8200	2.1600	24829.2000	16465.6343	0.5700
0.3780					
18	4.9200	2.2600	27442.8000	19078.1185	0.6300
0.4380					
19	5.0200	2.3600	30492.0000	21973.4912	0.7000
0.5044					
20	5.1200	2.4600	32670.0000	25130.9336	0.7500
0.5769					
21	5.2200	2.5600	34412.4000	28484.6429	0.7900
0.6539					
22	5.3200	2.6600	35719.2000	31990.9849	0.8200
0.7344					
23	5.4200	2.7600	37026.0000	35628.0129	0.8500
0.8179					
24	5.5200	2.8600	37897.2000	39374.0510	0.8700
0.9039					
25	5.6200	2.9600	39204.0000	43228.8878	0.9000
0.9924					
26	5.7200	3.0600	41382.0000	47257.6569	0.9500
1.0849					
27	5.8200	3.1600	43124.4000	51482.6353	0.9900
1.1819					
28	5.9200	3.2600	45302.4000	55903.4839	1.0400
1.2834					
29	6.0200	3.3600	48351.6000	60585.3096	1.1100
1.3908					
30	6.1200	3.4600	51836.4000	65593.6491	1.1900
1.5058					
31	6.2200	3.5600	55321.2000	70950.5309	1.2700
1.6288					
32	6.3200	3.6600	57934.8000	76612.7716	1.3300
1.7588					
33	6.4200	3.7600	61419.6000	82579.5839	1.4100
1.8958					
34	6.5200	3.8600	66211.2000	88959.5605	1.5200
2.0422					
35	6.6200	3.9600	72745.2000	95904.7492	1.6700
2.2017					
36	6.7200	4.0600	79714.8000	103525.0166	1.8300
2.3766					
37	6.8200	4.1600	88426.8000	111928.2483	2.0300
2.5695					
38	6.9200	4.2600	98445.6000	121267.2956	2.2600

2.7839					
39	7.0200	4.3600	110206.8000	131694.2823	2.5300
3.0233					
40	7.1200	4.4600	122839.2000	143340.7555	2.8200
3.2907					
41	7.2200	4.5600	136778.4000	156315.2644	3.1400
3.5885					
42	7.3200	4.6600	151153.2000	170705.7164	3.4700
3.9189					
43	7.4200	4.7600	168577.2000	186684.1579	3.8700
4.2857					
44	7.5200	4.8600	186872.4000	204448.6078	4.2900
4.6935					
45	7.6200	4.9600	199504.8000	223763.8320	4.5800
5.1369					
46	7.7200	5.0600	209088.0000	244191.3944	4.8000
5.6059					
47	7.8200	5.1600	217364.4000	265512.4625	4.9900
6.0953					
48	7.9200	5.2600	226512.0000	287704.4895	5.2000
6.6048					
49	8.0200	5.3600	236530.8000	310854.5913	5.4300
7.1362					
50	8.1200	5.4600	248727.6000	335114.7136	5.7100
7.6932					
51	8.2200	5.5600	260488.8000	360573.0150	5.9800
8.2776					
52	8.3200	5.6600	271814.4000	387185.9006	6.2400
8.8886					
53	8.4200	5.7600	284446.8000	414996.2915	6.5300
9.5270					
54	8.5200	5.8600	297514.8000	444091.6349	6.8300
10.1949					
55	8.6200	5.9600	311454.0000	474537.1112	7.1500
10.8939					
56	8.7200	6.0600	324522.0000	506333.3553	7.4500
11.6238					
57	8.8200	6.1600	336283.2000	539371.5404	7.7200
12.3823					
58	8.9200	6.2600	345866.4000	573477.5574	7.9400
13.1652					
59	9.0200	6.3600	356320.8000	608585.2691	8.1800
13.9712					
60	9.1200	6.4600	368953.2000	644846.7728	8.4700
14.8036					
61	9.2200	6.5600	382892.4000	682436.5232	8.7900
15.6666					
62	9.3200	6.6600	394218.0000	721290.2790	9.0500
16.5585					
63	9.4200	6.7600	403801.2000	761189.8810	9.2700

17.4745						
64	9.5200	6.8600	412513.2000	802004.4180	9.4700	
18.4115						
65	9.6200	6.9600	418611.6000	843559.8696	9.6100	
19.3655						
66	9.7200	7.0600	422967.6000	885638.2209	9.7100	
20.3315						
67	9.8200	7.1600	426016.8000	928086.9251	9.7800	
21.3059						
68	9.9200	7.2600	427759.2000	970775.2686	9.8200	
22.2859						
69	10.0200	7.3600	429066.0000	1.01362E+06	9.8500	
23.2694						
70	10.1200	7.4600	429937.2000	1.05657E+06	9.8700	
24.2554						
71	10.2200	7.5600	431244.0000	1.09962E+06	9.9000	
25.2439						
72	10.3200	7.6600	432550.8000	1.14281E+06	9.9300	
26.2354						
73	10.4200	7.7600	434728.8000	1.18618E+06	9.9800	
27.2309						
74	10.5200	7.8600	437342.4000	1.22978E+06	10.0400	
28.2319						
75	10.6200	7.9600	439520.4000	1.27362E+06	10.0900	
29.2384						
76	10.7200	8.0600	439956.0000	1.31760E+06	10.1000	
30.2478						
77	10.8300	8.1700	439956.0000	1.36599E+06	10.1000	
31.3588						

=====

| Variable storage data for node | N-007

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	2.4600	0.0000	435.6000	0.0000	0.0100
0.0000					
2	3.1200	0.6600	435.6000	287.4960	0.0100
0.0066					
3	3.1300	0.6700	435.6000	291.8520	0.0100
0.0067					
4	3.2300	0.7700	435.6000	335.4120	0.0100
0.0077					
5	3.3300	0.8700	871.2000	399.5057	0.0200
0.0092					
6	3.4300	0.9700	1742.4000	527.6932	0.0400

0.0121					
7	3.5300	1.0700	2613.6000	744.0242	0.0600
0.0171					
8	3.6300	1.1700	3920.4000	1068.5208	0.0900
0.0245					
9	3.7300	1.2700	5227.2000	1524.3325	0.1200
0.0350					
10	3.8300	1.3700	6098.4000	2090.0475	0.1400
0.0480					
11	3.9300	1.4700	7405.2000	2764.1644	0.1700
0.0635					
12	4.0300	1.5700	7840.8000	3526.3531	0.1800
0.0810					
13	4.1300	1.6700	8712.0000	4353.6024	0.2000
0.0999					
14	4.2300	1.7700	9583.2000	5268.0074	0.2200
0.1209					
15	4.3300	1.8700	10018.8000	6248.0169	0.2300
0.1434					
16	4.4300	1.9700	10890.0000	7293.1438	0.2500
0.1674					
17	4.5300	2.0700	11761.2000	8425.4132	0.2700
0.1934					
18	4.6300	2.1700	12632.4000	9644.8216	0.2900
0.2214					
19	4.7300	2.2700	13503.6000	10951.3665	0.3100
0.2514					
20	4.8300	2.3700	13939.2000	12323.4351	0.3200
0.2829					
21	4.9300	2.4700	14810.4000	13760.6807	0.3400
0.3159					
22	5.0300	2.5700	15681.6000	15285.0580	0.3600
0.3509					
23	5.1300	2.6700	16117.2000	16874.9324	0.3700
0.3874					
24	5.2300	2.7700	16988.4000	18530.0047	0.3900
0.4254					
25	5.3300	2.8700	17424.0000	20250.5616	0.4000
0.4649					
26	5.4300	2.9700	17859.6000	22014.6791	0.4100
0.5054					
27	5.5300	3.0700	18295.2000	23822.3573	0.4200
0.5469					
28	5.6300	3.1700	18730.8000	25673.5961	0.4300
0.5894					
29	5.7300	3.2700	20037.6000	27611.6295	0.4600
0.6339					
30	5.8300	3.3700	20908.8000	29658.7746	0.4800
0.6809					
31	5.9300	3.4700	21344.4000	31771.3760	0.4900

0.7294					
32	6.0300	3.5700	22215.6000	33949.2090	0.5100
0.7794					
33	6.1300	3.6700	23086.8000	36214.1667	0.5300
0.8314					
34	6.2300	3.7700	23522.4000	38544.5695	0.5400
0.8849					
35	6.3300	3.8700	23958.0000	40918.5325	0.5500
0.9394					
36	6.4300	3.9700	24829.2000	43357.7384	0.5700
0.9954					
37	6.5300	4.0700	25700.4000	45884.0680	0.5900
1.0534					
38	6.6300	4.1700	27007.2000	48519.1516	0.6200
1.1138					
39	6.7300	4.2700	28749.6000	51306.5098	0.6600
1.1778					
40	6.8300	4.3700	30056.4000	54246.5384	0.6900
1.2453					
41	6.9300	4.4700	31798.8000	57338.8584	0.7300
1.3163					
42	7.0300	4.5700	34412.4000	60648.5252	0.7900
1.3923					
43	7.1300	4.6700	37897.2000	64262.5688	0.8700
1.4753					
44	7.2300	4.7700	43995.6000	68353.3781	1.0100
1.5692					
45	7.3300	4.8700	50965.2000	73097.1022	1.1700
1.6781					
46	7.4300	4.9700	55756.8000	78431.3551	1.2800
1.8005					
47	7.5300	5.0700	58806.0000	84158.7614	1.3500
1.9320					
48	7.6300	5.1700	60984.0000	90147.8715	1.4000
2.0695					
49	7.7300	5.2700	63162.0000	96354.7910	1.4500
2.2120					
50	7.8300	5.3700	65340.0000	102779.5191	1.5000
2.3595					
51	7.9300	5.4700	66646.8000	109378.6853	1.5300
2.5110					
52	8.0300	5.5700	68824.8000	116151.9057	1.5800
2.6665					
53	8.1300	5.6700	71438.4000	123164.5897	1.6400
2.8275					
54	8.2300	5.7700	74923.2000	130481.9050	1.7200
2.9955					
55	8.3300	5.8700	78408.0000	138147.7283	1.8000
3.1714					
56	8.4300	5.9700	82764.0000	146205.2665	1.9000

3.3564					
57	8.5300	6.0700	87991.2000	154741.6073	2.0200
3.5524					
58	8.6300	6.1700	94525.2000	163865.3862	2.1700
3.7618					
59	8.7300	6.2700	101059.2000	173642.6888	2.3200
3.9863					
60	8.8300	6.3700	107593.2000	184073.4990	2.4700
4.2257					
61	8.9300	6.4700	113256.0000	195114.6384	2.6000
4.4792					
62	9.0300	6.5700	119354.4000	206743.7095	2.7400
4.7462					
63	9.1300	6.6700	125888.4000	219004.2759	2.8900
5.0276					
64	9.2300	6.7700	133293.6000	231961.4829	3.0600
5.3251					
65	9.3300	6.8700	140263.2000	245637.7061	3.2200
5.6391					
66	9.4300	6.9700	147232.8000	260010.9542	3.3800
5.9690					
67	9.5300	7.0700	153331.2000	275037.9727	3.5200
6.3140					
68	9.6300	7.1700	159429.6000	290674.8653	3.6600
6.6730					
69	9.7300	7.2700	165092.4000	306899.9795	3.7900
7.0455					
70	9.8300	7.3700	170319.6000	323669.7329	3.9100
7.4304					
71	9.9300	7.4700	176418.0000	341005.5457	4.0500
7.8284					
72	10.0300	7.5700	181645.2000	358907.8907	4.1700
8.2394					
73	10.1300	7.6700	187308.0000	377354.6419	4.3000
8.6629					
74	10.2300	7.7700	192970.8000	396367.6890	4.4300
9.0994					
75	10.3300	7.8700	199504.8000	415990.3662	4.5800
9.5498					
76	10.4300	7.9700	208652.4000	436396.3135	4.7900
10.0183					
77	10.5300	8.0700	219542.4000	457803.5310	5.0400
10.5097					
78	10.6300	8.1700	230868.0000	480321.4523	5.3000
11.0267					
79	10.7300	8.2700	243936.0000	504058.4171	5.6000
11.5716					
80	10.8300	8.3700	255261.6000	529015.9060	5.8600
12.1445					
81	10.9300	8.4700	264844.8000	555019.4944	6.0800

12.7415						
82	11.0300	8.5700	271814.4000	581851.4317	6.2400	
13.3575						
83	11.1300	8.6700	277041.6000	609293.5425	6.3600	
13.9875						
84	11.2300	8.7700	281833.2000	637236.6607	6.4700	
14.6289						
85	11.3300	8.8700	284882.4000	665572.0206	6.5400	
15.2794						
86	11.4300	8.9700	288367.2000	694234.0374	6.6200	
15.9374						
87	11.5300	9.0700	290109.6000	723157.5445	6.6600	
16.6014						
88	11.6300	9.1700	290109.6000	752168.5045	6.6600	
17.2674						
89	11.7300	9.2700	290109.6000	781179.4645	6.6600	
17.9334						
90	11.8300	9.3700	290109.6000	810190.4245	6.6600	
18.5994						
91	11.9300	9.4700	290109.6000	839201.3845	6.6600	
19.2654						
92	12.0300	9.5700	290109.6000	868212.3445	6.6600	
19.9314						
93	12.1150	9.6550	290109.6000	892871.6605	6.6600	
20.4975						
94	12.1150	9.6550	290109.6000	892871.6605	6.6600	
20.4975						

=====

| Variable storage data for node | N-009

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	2.6800	0.0000	435.6000	0.0000	0.0100
0.0000					
2	3.8500	1.1700	435.6000	509.6520	0.0100
0.0117					
3	3.8600	1.1800	435.6000	514.0080	0.0100
0.0118					
4	3.9600	1.2800	871.2000	578.1017	0.0200
0.0133					
5	4.0600	1.3800	1306.8000	686.2672	0.0300
0.0158					
6	4.1600	1.4800	1742.4000	838.2045	0.0400
0.0192					
7	4.2600	1.5800	2613.6000	1054.5355	0.0600

0.0242					
8	4.3600	1.6800	3484.8000	1358.4100	0.0800
0.0312					
9	4.4600	1.7800	4356.0000	1749.6369	0.1000
0.0402					
10	4.5600	1.8800	4791.6000	2206.8394	0.1100
0.0507					
11	4.6600	1.9800	6098.4000	2750.0224	0.1400
0.0631					
12	4.7600	2.0800	6534.0000	3381.5109	0.1500
0.0776					
13	4.8600	2.1800	6969.6000	4056.5670	0.1600
0.0931					
14	4.9600	2.2800	7405.2000	4775.1898	0.1700
0.1096					
15	5.0600	2.3800	8276.4000	5558.8583	0.1900
0.1276					
16	5.1600	2.4800	8712.0000	6408.1767	0.2000
0.1471					
17	5.2600	2.5800	9147.6000	7301.0592	0.2100
0.1676					
18	5.3600	2.6800	10018.8000	8259.0395	0.2300
0.1896					
19	5.4600	2.7800	10890.0000	9304.1664	0.2500
0.2136					
20	5.5600	2.8800	11325.6000	10414.8641	0.2600
0.2391					
21	5.6600	2.9800	11761.2000	11569.1241	0.2700
0.2656					
22	5.7600	3.0800	12632.4000	12788.5325	0.2900
0.2936					
23	5.8600	3.1800	13068.0000	14073.4781	0.3000
0.3231					
24	5.9600	3.2800	13939.2000	15423.5904	0.3200
0.3541					
25	6.0600	3.3800	14810.4000	16860.8360	0.3400
0.3871					
26	6.1600	3.4800	15246.0000	18363.5883	0.3500
0.4216					
27	6.2600	3.5800	15681.6000	19909.9017	0.3600
0.4571					
28	6.3600	3.6800	16552.8000	21521.4094	0.3800
0.4941					
29	6.4600	3.7800	17424.0000	23220.0462	0.4000
0.5331					
30	6.5600	3.8800	18295.2000	25005.8112	0.4200
0.5741					
31	6.6600	3.9800	20037.6000	26921.7717	0.4600
0.6180					
32	6.7600	4.0800	21780.0000	29012.0256	0.5000

0.6660					
33	6.8600	4.1800	23958.0000	31298.0379	0.5500
0.7185					
34	6.9600	4.2800	25700.4000	33780.4235	0.5900
0.7755					
35	7.0600	4.3800	27878.4000	36458.5986	0.6400
0.8370					
36	7.1600	4.4800	30056.4000	39354.6270	0.6900
0.9035					
37	7.2600	4.5800	32234.4000	42468.5011	0.7400
0.9749					
38	7.3600	4.6800	34412.4000	45800.2145	0.7900
1.0514					
39	7.4600	4.7800	36590.4000	49349.7621	0.8400
1.1329					
40	7.5600	4.8800	38768.4000	53117.1398	0.8900
1.2194					
41	7.6600	4.9800	40510.8000	57080.7410	0.9300
1.3104					
42	7.7600	5.0800	42688.8000	61240.2041	0.9800
1.4059					
43	7.8600	5.1800	45302.4000	65639.0731	1.0400
1.5069					
44	7.9600	5.2800	48351.6000	70320.8987	1.1100
1.6143					
45	8.0600	5.3800	51400.8000	75307.6920	1.1800
1.7288					
46	8.1600	5.4800	54885.6000	80621.0065	1.2600
1.8508					
47	8.2600	5.5800	59241.6000	86325.9234	1.3600
1.9818					
48	8.3600	5.6800	63597.6000	92466.5344	1.4600
2.1227					
49	8.4600	5.7800	68824.8000	99085.8680	1.5800
2.2747					
50	8.5600	5.8800	74487.6000	106249.5510	1.7100
2.4392					
51	8.6600	5.9800	81457.2000	114044.1160	1.8700
2.6181					
52	8.7600	6.0800	87991.2000	122514.3509	2.0200
2.8125					
53	8.8600	6.1800	96703.2000	131745.5522	2.2200
3.0245					
54	8.9600	6.2800	106722.0000	141912.5961	2.4500
3.2579					
55	9.0600	6.3800	117612.0000	153124.7760	2.7000
3.5153					
56	9.1600	6.4800	127630.8000	165383.3812	2.9300
3.7967					
57	9.2600	6.5800	136342.8000	178579.5326	3.1300

4.0996					
58	9.3600	6.6800	144619.2000	192625.4600	3.3200
4.4221					
59	9.4600	6.7800	152460.0000	207477.5466	3.5000
4.7630					
60	9.5600	6.8800	160736.4000	223135.3872	3.6900
5.1225					
61	9.6600	6.9800	168141.6000	239577.7331	3.8600
5.4999					
62	9.7600	7.0800	176418.0000	256803.8839	4.0500
5.8954					
63	9.8600	7.1800	184258.8000	274836.1230	4.2300
6.3094					
64	9.9600	7.2800	193406.4000	293717.3475	4.4400
6.7428					
65	10.0600	7.3800	201682.8000	313470.1650	4.6300
7.1963					
66	10.1600	7.4800	210394.8000	334072.3039	4.8300
7.6692					
67	10.2600	7.5800	217800.0000	355480.7625	5.0000
8.1607					
68	10.3600	7.6800	224334.0000	377586.4368	5.1500
8.6682					
69	10.4600	7.7800	229996.8000	400302.1614	5.2800
9.1897					
70	10.5600	7.8800	236966.4000	423649.2210	5.4400
9.7256					
71	10.6600	7.9800	247856.4000	447888.0799	5.6900
10.2821					
72	10.7600	8.0800	261795.6000	473367.2475	6.0100
10.8670					
73	10.8600	8.1800	273121.2000	500110.8216	6.2700
11.4810					
74	10.9600	8.2800	282704.4000	527900.4467	6.4900
12.1189					
75	11.0600	8.3800	290980.8000	556583.4248	6.6800
12.7774					
76	11.1600	8.4800	299257.2000	586094.0625	6.8700
13.4549					
77	11.2600	8.5800	308840.4000	616497.3799	7.0900
14.1528					
78	11.3600	8.6800	314503.2000	647663.8195	7.2200
14.8683					
79	11.4600	8.7800	317116.8000	679244.4136	7.2800
15.5933					
80	11.5600	8.8800	317988.0000	710999.3261	7.3000
16.3223					
81	11.6600	8.9800	318859.2000	742841.3577	7.3200
17.0533					
82	11.7600	9.0800	318859.2000	774727.2777	7.3200

17.7853					
83	11.8600	9.1800	319294.8000	806634.6562	7.3300
18.5178					
84	11.9600	9.2800	319294.8000	838564.1362	7.3300
19.2508					
85	12.0600	9.3800	319730.4000	870515.0742	7.3400
19.9843					
86	12.1600	9.4800	320166.0000	902509.5717	7.3500
20.7188					
87	12.2600	9.5800	320166.0000	934526.1717	7.3500
21.4538					
88	12.3600	9.6800	320166.0000	966542.7717	7.3500
22.1888					
89	12.4450	9.7650	320166.0000	993756.8817	7.3500
22.8135					

=====

| Variable storage data for node | N-011

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	2.0400	0.0000	435.6000	0.0000	0.0100
0.0000					
2	8.2000	6.1600	435.6000	2683.2960	0.0100
0.0616					
3	8.2100	6.1700	435.6000	2687.6520	0.0100
0.0617					
4	8.3100	6.2700	435.6000	2731.2120	0.0100
0.0627					
5	8.4100	6.3700	1306.8000	2814.4405	0.0300
0.0646					
6	8.5100	6.4700	3484.8000	3045.2914	0.0800
0.0699					
7	8.6100	6.5700	6534.0000	3538.3051	0.1500
0.0812					
8	8.7100	6.6700	10454.4000	4380.0743	0.2400
0.1006					
9	8.8100	6.7700	16117.2000	5698.4674	0.3700
0.1308					
10	8.9100	6.8700	22215.6000	7606.9515	0.5100
0.1746					
11	9.0100	6.9700	29185.2000	10169.0541	0.6700
0.2334					
12	9.1100	7.0700	36154.8000	13429.8086	0.8300
0.3083					
13	9.2100	7.1700	45302.4000	17494.0402	1.0400

0.4016					
14	9.3100	7.2700	55756.8000	22537.9131	1.2800
0.5174					
15	9.4100	7.3700	67518.0000	28692.2194	1.5500
0.6587					
16	9.5100	7.4700	82328.4000	36172.2362	1.8900
0.8304					
17	9.6100	7.5700	101059.2000	45325.5401	2.3200
1.0405					
18	9.7100	7.6700	122403.6000	56481.5401	2.8100
1.2966					
19	9.8100	7.7700	147232.8000	69944.1318	3.3800
1.6057					
20	9.9100	7.8700	174240.0000	85998.6703	4.0000
1.9743					
21	10.0100	7.9700	202118.4000	104799.1697	4.6400
2.4059					
22	10.1100	8.0700	232174.8000	126496.2575	5.3300
2.9040					
23	10.2100	8.1700	261795.6000	151179.7157	6.0100
3.4706					
24	10.3100	8.2700	286189.2000	178569.6283	6.5700
4.0994					
25	10.4100	8.3700	317116.8000	208721.4059	7.2800
4.7916					
26	10.5100	8.4700	346302.0000	241881.3098	7.9500
5.5528					
27	10.6100	8.5700	372002.4000	277788.5054	8.5400
6.3771					
28	10.7100	8.6700	390297.6000	315899.4647	8.9600
7.2521					
29	10.8100	8.7700	402494.4000	355537.1046	9.2400
8.1620					
30	10.9100	8.8700	409464.0000	396134.1200	9.4000
9.0940					
31	11.0100	8.9700	412513.2000	437232.4748	9.4700
10.0375					
32	11.1100	9.0700	413384.4000	478526.9342	9.4900
10.9855					
33	11.2100	9.1700	413820.0000	519886.7387	9.5000
11.9350					
34	11.3100	9.2700	414255.6000	561290.1027	9.5100
12.8854					
35	11.4100	9.3700	414255.6000	602715.6627	9.5100
13.8364					
36	11.5100	9.4700	414255.6000	644141.2227	9.5100
14.7874					
37	11.6100	9.5700	414255.6000	685566.7827	9.5100
15.7384					
38	11.7100	9.6700	414691.2000	727013.7063	9.5200

16.6899						
39	11.8100	9.7700	414691.2000	768482.8263		9.5200
17.6419						
40	11.9100	9.8700	414691.2000	809951.9463		9.5200
18.5939						
41	12.0100	9.9700	414691.2000	851421.0663		9.5200
19.5459						
42	12.1100	10.0700	414691.2000	892890.1863		9.5200
20.4979						
43	12.2100	10.1700	414691.2000	934359.3063		9.5200
21.4499						
44	12.3100	10.2700	414691.2000	975828.4263		9.5200
22.4019						
45	12.4100	10.3700	414691.2000	1.01730E+06		9.5200
23.3539						
46	12.4950	10.4550	414691.2000	1.05255E+06		9.5200
24.1631						

=====

| Variable storage data for node | N-014

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	1.5500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	1.6500	0.1000	23522.4000	811.0791	0.5400
0.0186					
3	2.3500	0.8000	31363.2000	19955.1708	0.7200
0.4581					
4	2.4500	0.9000	34412.4000	23242.7394	0.7900
0.5336					
5	2.5500	1.0000	39204.0000	26920.9208	0.9000
0.6180					
6	2.6500	1.1000	42688.8000	31014.2836	0.9800
0.7120					
7	2.7500	1.2000	47044.8000	35499.1556	1.0800
0.8149					
8	2.8500	1.3000	51400.8000	40419.7794	1.1800
0.9279					
9	2.9500	1.4000	57499.2000	45861.8768	1.3200
1.0528					
10	3.0500	1.5000	62726.4000	51871.2019	1.4400
1.1908					
11	3.1500	1.6000	69696.0000	58489.1968	1.6000
1.3427					
12	3.2500	1.7000	77101.2000	65825.8685	1.7700

1.5112					
13	3.3500	1.8000	86248.8000	73989.0146	1.9800
1.6986					
14	3.8500	2.3000	136778.4000	129261.9736	3.1400
2.9674					
15	3.9500	2.4000	147668.4000	143480.6958	3.3900
3.2939					
16	4.0500	2.5000	157251.6000	158724.0328	3.6100
3.6438					
17	4.1500	2.6000	166834.8000	174925.8289	3.8300
4.0157					
18	4.2500	2.7000	175111.2000	192021.2883	4.0200
4.4082					
19	4.6500	3.1000	209959.2000	268929.2609	4.8200
6.1738					
20	4.7500	3.2000	218671.2000	290359.0909	5.0200
6.6657					
21	4.8500	3.3000	228690.0000	312725.0572	5.2500
7.1792					
22	5.0500	3.5000	250470.0000	360624.0697	5.7500
8.2788					
23	5.1500	3.6000	262231.2000	386256.6247	6.0200
8.8672					
24	5.2500	3.7000	275734.8000	413151.8307	6.3300
9.4847					
25	5.4500	3.9000	304484.4000	471149.4140	6.9900
10.8161					
26	5.5500	4.0000	318423.6000	502291.9028	7.3100
11.5310					
27	5.6500	4.1000	330620.4000	534741.8681	7.5900
12.2760					
28	5.7500	4.2000	342381.6000	568389.9187	7.8600
13.0484					
29	5.8500	4.3000	352836.0000	603149.1410	8.1000
13.8464					
30	5.9500	4.4000	363290.4000	638953.8310	8.3400
14.6684					
31	6.0500	4.5000	373309.2000	675782.3071	8.5700
15.5138					
32	6.1500	4.6000	381585.6000	713525.9135	8.7600
16.3803					
33	6.2500	4.7000	388555.2000	752032.0428	8.9200
17.2643					
34	6.3500	4.8000	395960.4000	791256.8480	9.0900
18.1648					
35	6.4500	4.9000	401623.2000	831135.2942	9.2200
19.0802					
36	6.7500	5.2000	417740.4000	954030.6787	9.5900
21.9015					
37	6.8500	5.3000	423403.2000	996087.1204	9.7200

22.8670					
38	6.9500	5.4000	428194.8000	1.03867E+06	9.8300
23.8445					
39	7.0500	5.5000	433857.6000	1.08177E+06	9.9600
24.8340					
40	7.1500	5.6000	440827.2000	1.12550E+06	10.1200
25.8380					
41	7.2500	5.7000	448668.0000	1.16998E+06	10.3000
26.8589					
42	7.3500	5.8000	454766.4000	1.21515E+06	10.4400
27.8959					
43	7.4500	5.9000	459122.4000	1.26084E+06	10.5400
28.9449					
44	7.5500	6.0000	464349.6000	1.30701E+06	10.6600
30.0049					
45	7.6500	6.1000	469576.8000	1.35371E+06	10.7800
31.0769					
46	7.7500	6.2000	476110.8000	1.40099E+06	10.9300
32.1624					
47	7.8500	6.3000	483080.4000	1.44895E+06	11.0900
33.2633					
48	7.9500	6.4000	491356.8000	1.49767E+06	11.2800
34.3818					
49	8.0500	6.5000	498326.4000	1.54715E+06	11.4400
35.5178					
50	8.1500	6.6000	503553.6000	1.59725E+06	11.5600
36.6678					
51	8.6500	7.1000	522720.0000	1.85380E+06	12.0000
42.5574					
52	8.7500	7.2000	524898.0000	1.90618E+06	12.0500
43.7599					
53	8.8500	7.3000	526204.8000	1.95873E+06	12.0800
44.9663					
54	9.9500	8.4000	540579.6000	2.54544E+06	12.4100
58.4353					
55	10.0500	8.5000	542757.6000	2.59961E+06	12.4600
59.6788					
56	10.1500	8.6000	548420.4000	2.65417E+06	12.5900
60.9313					
57	10.2500	8.7000	555390.0000	2.70936E+06	12.7500
62.1982					
58	10.3500	8.8000	561488.4000	2.76520E+06	12.8900
63.4802					
59	10.4500	8.9000	563666.4000	2.82146E+06	12.9400
64.7717					
60	10.9500	9.4000	565844.4000	3.10383E+06	12.9900
71.2541					
61	11.0400	9.4900	565844.4000	3.15476E+06	12.9900
72.4232					

=====

| Variable storage data for node | N-012

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	1.4800	0.0000	435.6000	0.0000	0.0100
0.0000					
2	6.9100	5.4300	435.6000	2365.3080	0.0100
0.0543					
3	6.9200	5.4400	871.2000	2371.7174	0.0200
0.0544					
4	7.0200	5.5400	1742.4000	2499.9049	0.0400
0.0574					
5	7.1200	5.6400	3049.2000	2736.4551	0.0700
0.0628					
6	7.2200	5.7400	4791.6000	3125.2237	0.1100
0.0717					
7	7.3200	5.8400	9147.6000	3810.5417	0.2100
0.0875					
8	7.4200	5.9400	13068.0000	4915.4998	0.3000
0.1128					
9	7.5200	6.0400	17424.0000	6434.8722	0.4000
0.1477					
10	7.6200	6.1400	23086.8000	8453.7630	0.5300
0.1941					
11	7.7200	6.2400	30927.6000	11144.9207	0.7100
0.2559					
12	7.8200	6.3400	41817.6000	14768.4822	0.9600
0.3390					
13	7.9200	6.4400	53143.2000	19505.1782	1.2200
0.4478					
14	8.0200	6.5400	67518.0000	25523.8560	1.5500
0.5859					
15	8.1200	6.6400	84070.8000	33088.1127	1.9300
0.7596					
16	8.2200	6.7400	101494.8000	42352.6361	2.3300
0.9723					
17	8.3200	6.8400	118918.8000	53361.7098	2.7300
1.2250					
18	8.4200	6.9400	136778.4000	66136.0340	3.1400
1.5183					
19	8.5200	7.0400	152460.0000	80590.7192	3.5000
1.8501					
20	8.6200	7.1400	167706.0000	96592.8058	3.8500
2.2175					
21	8.7200	7.2400	180338.4000	113991.0297	4.1400

2.6169					
22	8.8200	7.3400	191228.4000	132566.5236	4.3900
3.0433					
23	8.9200	7.4400	201682.8000	152209.5688	4.6300
3.4943					
24	9.0200	7.5400	213008.4000	172941.3433	4.8900
3.9702					
25	9.1200	7.6400	224334.0000	194805.8002	5.1500
4.4721					
26	9.2200	7.7400	238273.2000	217932.4280	5.4700
5.0030					
27	9.3200	7.8400	253519.2000	242517.8625	5.8200
5.5674					
28	9.4200	7.9400	270943.2000	268735.8951	6.2200
6.1693					
29	9.5200	8.0400	290109.6000	296782.7968	6.6600
6.8132					
30	9.6200	8.1400	303613.2000	326466.0802	6.9700
7.4946					
31	9.7200	8.2400	312760.8000	357283.3407	7.1800
8.2021					
32	9.8200	8.3400	318423.6000	388841.8217	7.3100
8.9266					
33	9.9200	8.4400	324522.0000	420988.2982	7.4500
9.6646					
34	10.0200	8.5400	331491.6000	453788.0331	7.6100
10.4175					
35	10.1200	8.6400	347173.2000	487717.9138	7.9700
11.1965					
36	10.2200	8.7400	355885.2000	522869.5827	8.1700
12.0034					
37	10.3200	8.8400	362419.2000	558783.9482	8.3200
12.8279					
38	10.4200	8.9400	370260.0000	595416.8426	8.5000
13.6689					
39	10.5200	9.0400	383328.0000	633093.9773	8.8000
14.5338					
40	10.6200	9.1400	395089.2000	672012.9671	9.0700
15.4273					
41	10.7200	9.2400	405543.6000	712043.0692	9.3100
16.3463					
42	10.8200	9.3400	412948.8000	752966.7216	9.4800
17.2857					
43	10.9200	9.4400	420354.0000	794630.8966	9.6500
18.2422					
44	11.0200	9.5400	426888.0000	836992.1530	9.8000
19.2147					
45	11.1200	9.6400	432115.2000	879941.6185	9.9200
20.2007					
46	11.2200	9.7400	436035.6000	923348.5769	10.0100

21.1972					
47	11.3200	9.8400	439084.8000	967104.0708	10.0800
22.2017					
48	11.4200	9.9400	441262.8000	1.01112E+06	10.1300
23.2121					
49	11.5200	10.0400	442569.6000	1.05531E+06	10.1600
24.2266					
50	11.6200	10.1400	443876.4000	1.09963E+06	10.1900
25.2441					
51	11.7200	10.2400	444747.6000	1.14406E+06	10.2100
26.2641					
52	11.8200	10.3400	445618.8000	1.18858E+06	10.2300
27.2861					
53	11.9200	10.4400	446490.0000	1.23319E+06	10.2500
28.3101					
54	12.0200	10.5400	447361.2000	1.27788E+06	10.2700
29.3361					
55	12.1200	10.6400	448232.4000	1.32266E+06	10.2900
30.3641					
56	12.2200	10.7400	449103.6000	1.36753E+06	10.3100
31.3941					
57	12.3200	10.8400	449974.8000	1.41248E+06	10.3300
32.4260					
58	12.4200	10.9400	450846.0000	1.45752E+06	10.3500
33.4600					
59	12.5200	11.0400	451717.2000	1.50265E+06	10.3700
34.4960					
60	12.6200	11.1400	452588.4000	1.54786E+06	10.3900
35.5340					
61	12.7200	11.2400	453459.6000	1.59316E+06	10.4100
36.5740					
62	12.8200	11.3400	454766.4000	1.63857E+06	10.4400
37.6165					
63	12.9200	11.4400	455202.0000	1.68407E+06	10.4500
38.6610					
64	13.0200	11.5400	456073.2000	1.72964E+06	10.4700
39.7070					
65	13.1200	11.6400	456073.2000	1.77524E+06	10.4700
40.7540					
66	13.2200	11.7400	456073.2000	1.82085E+06	10.4700
41.8010					
67	13.3000	11.8200	456073.2000	1.85734E+06	10.4700
42.6386					

=====

| Variable storage data for node | N-025

=====

Data Volume Point	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
-------------------------	-----------------	-------------	--------------	----------------	---------------

ac-ft					
1	-1.2400	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.4600	1.7000	4356.0000	2674.3851	0.1000
0.0614					
3	0.5600	1.8000	6969.6000	3235.5646	0.1600
0.0743					
4	0.6600	1.9000	10890.0000	4121.2757	0.2500
0.0946					
5	0.7600	2.0000	15246.0000	5421.9701	0.3500
0.1245					
6	0.8600	2.1000	19602.0000	7159.7974	0.4500
0.1644					
7	0.9600	2.2000	25264.8000	9397.1351	0.5800
0.2157					
8	1.0600	2.3000	29620.8000	12138.5021	0.6800
0.2787					
9	2.0600	3.3000	83635.2000	66480.9252	1.9200
1.5262					
10	2.1600	3.4000	90169.2000	75169.0106	2.0700
1.7256					
11	2.2600	3.5000	97574.4000	84553.6618	2.2400
1.9411					
12	2.3600	3.6000	104544.0000	94657.4774	2.4000
2.1730					
13	2.4600	3.7000	110642.4000	105415.2493	2.5400
2.4200					
14	2.8600	4.1000	135036.0000	154469.5035	3.1000
3.5461					
15	2.9600	4.2000	140698.8000	168255.1364	3.2300
3.8626					
16	3.0600	4.3000	145054.8000	182542.1201	3.3300
4.1906					
17	3.2600	4.5000	152895.6000	212333.4226	3.5100
4.8745					
18	3.3600	4.6000	156380.4000	227796.7408	3.5900
5.2295					
19	3.4600	4.7000	158994.0000	243565.1226	3.6500
5.5915					
20	5.8600	7.1000	195148.8000	667792.0906	4.4800
15.3304					
21	5.9600	7.2000	197326.8000	687415.5736	4.5300
15.7809					
22	6.0600	7.3000	201682.8000	707365.4578	4.6300
16.2389					
23	6.1600	7.4000	206910.0000	727794.3362	4.7500
16.7079					
24	6.2600	7.5000	211701.6000	748724.2499	4.8600

17.1883						
25	6.3600	7.6000	213879.6000	770003.0042	4.9100	
17.6768						
26	10.3600	11.6000	233917.2000	1.66529E+06	5.3700	
38.2298						
27	10.4350	11.6750	233917.2000	1.68283E+06	5.3700	
38.6325						

=====

| Variable storage data for node | N-023

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	0.4500	0.0000	435.6000	0.0000	0.0100
0.0000					
2	0.6300	0.1800	435.6000	78.4080	0.0100
0.0018					
3	0.6400	0.1900	435.6000	82.7640	0.0100
0.0019					
4	0.7400	0.2900	435.6000	126.3240	0.0100
0.0029					
5	0.8400	0.3900	871.2000	190.4177	0.0200
0.0044					
6	0.9400	0.4900	1306.8000	298.5832	0.0300
0.0069					
7	1.0400	0.5900	2613.6000	490.8645	0.0600
0.0113					
8	1.1400	0.6900	3484.8000	794.7389	0.0800
0.0182					
9	1.2400	0.7900	5662.8000	1247.7299	0.1300
0.0286					
10	1.3400	0.8900	6969.6000	1878.2141	0.1600
0.0431					
11	1.4400	0.9900	8712.0000	2660.6679	0.2000
0.0611					
12	1.5400	1.0900	10454.4000	3617.6556	0.2400
0.0830					
13	1.6400	1.1900	12632.4000	4770.2680	0.2900
0.1095					
14	1.7400	1.2900	15246.0000	6162.1277	0.3500
0.1415					
15	1.8400	1.3900	17424.0000	7794.4000	0.4000
0.1789					
16	1.9400	1.4900	20037.6000	9665.9399	0.4600
0.2219					
17	2.0400	1.5900	23086.8000	11820.3394	0.5300

0.2714					
18	2.1400	1.6900	26136.0000	14279.8792	0.6000
0.3278					
19	2.2400	1.7900	29185.2000	17044.5100	0.6700
0.3913					
20	2.3400	1.8900	31798.8000	20092.7456	0.7300
0.4613					
21	2.4400	1.9900	34412.4000	23402.4125	0.7900
0.5372					
22	2.5400	2.0900	36590.4000	26951.9601	0.8400
0.6187					
23	2.6400	2.1900	38332.8000	30697.7449	0.8800
0.7047					
24	2.7400	2.2900	40510.8000	34639.3840	0.9300
0.7952					
25	2.8400	2.3900	43124.4000	38820.4214	0.9900
0.8912					
26	2.9400	2.4900	44866.8000	43219.6499	1.0300
0.9922					
27	3.0400	2.5900	47480.4000	47836.3472	1.0900
1.0982					
28	3.1400	2.6900	49658.4000	52692.8316	1.1400
1.2097					
29	3.2400	2.7900	51836.4000	57767.1313	1.1900
1.3262					
30	3.3400	2.8900	54450.0000	63080.8625	1.2500
1.4481					
31	3.4400	2.9900	57063.6000	68655.9762	1.3100
1.5761					
32	3.5400	3.0900	59241.6000	74470.8382	1.3600
1.7096					
33	3.6400	3.1900	61419.6000	80503.5102	1.4100
1.8481					
34	3.7400	3.2900	63162.0000	86732.3248	1.4500
1.9911					
35	3.8400	3.3900	64468.8000	93113.6895	1.4800
2.1376					
36	3.9400	3.4900	65775.6000	99625.7351	1.5100
2.2871					
37	4.0400	3.5900	66646.8000	106246.7411	1.5300
2.4391					
38	4.1400	3.6900	67953.6000	112976.5881	1.5600
2.5936					
39	4.2400	3.7900	69260.4000	119837.1158	1.5900
2.7511					
40	4.3400	3.8900	70131.6000	126806.6007	1.6100
2.9111					
41	4.4400	3.9900	71438.4000	133884.9294	1.6400
3.0736					
42	4.5400	4.0900	71874.0000	141050.4667	1.6500

3.2381					
43	4.6400	4.1900	72309.6000	148259.5637	1.6600
3.4036					
44	4.7400	4.2900	72745.2000	155512.2202	1.6700
3.5701					
45	4.8400	4.3900	73180.8000	162808.4364	1.6800
3.7376					
46	4.9400	4.4900	74052.0000	170169.9599	1.7000
3.9066					
47	5.0400	4.5900	74487.6000	177596.8550	1.7100
4.0771					
48	5.1400	4.6900	75358.8000	185089.0578	1.7300
4.2491					
49	5.2400	4.7900	76665.6000	192690.1082	1.7600
4.4236					
50	5.3400	4.8900	77536.8000	200400.1101	1.7800
4.6006					
51	5.4400	4.9900	77972.4000	208175.4822	1.7900
4.7791					
52	5.5400	5.0900	79279.2000	216037.8930	1.8200
4.9595					
53	5.6400	5.1900	80150.4000	224009.2536	1.8400
5.1425					
54	5.7400	5.2900	81457.2000	232089.4648	1.8700
5.3280					
55	5.8400	5.3900	82764.0000	240300.3560	1.9000
5.5165					
56	5.9400	5.4900	85377.6000	248707.0134	1.9600
5.7095					
57	6.0400	5.5900	87991.2000	257375.0383	2.0200
5.9085					
58	6.1400	5.6900	92347.2000	266390.9912	2.1200
6.1155					
59	6.2400	5.7900	95832.0000	275799.3193	2.2000
6.3315					
60	6.3400	5.8900	97574.4000	285469.4118	2.2400
6.5535					
61	6.4400	5.9900	98010.0000	295248.5259	2.2500
6.7780					
62	6.5350	6.0850	98445.6000	304580.0660	2.2600
6.9922					

=====

| Variable storage data for node | N-021

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====

=====					
1	-0.4700	0.0000	435.6000	0.0000	0.0100
0.0000					
2	1.7600	2.2300	435.6000	971.3880	0.0100
0.0223					
3	1.7700	2.2400	435.6000	975.7440	0.0100
0.0224					
4	1.8700	2.3400	871.2000	1039.8377	0.0200
0.0239					
5	1.9700	2.4400	1742.4000	1168.0252	0.0400
0.0268					
6	2.0700	2.5400	3484.8000	1424.4002	0.0800
0.0327					
7	2.1700	2.6400	6969.6000	1937.1501	0.1600
0.0445					
8	2.2700	2.7400	13068.0000	2923.1775	0.3000
0.0671					
9	2.3700	2.8400	21344.4000	4626.9457	0.4900
0.1062					
10	2.4700	2.9400	32234.4000	7287.2194	0.7400
0.1673					
11	2.5700	3.0400	47044.8000	11227.8788	1.0800
0.2578					
12	2.6700	3.1400	64468.8000	16780.6755	1.4800
0.3852					
13	2.7700	3.2400	86684.4000	24310.9024	1.9900
0.5581					
14	2.8700	3.3400	110206.8000	34131.8617	2.5300
0.7836					
15	2.9700	3.4400	136342.8000	46436.0651	3.1300
1.0660					
16	3.0700	3.5400	164221.2000	61442.5199	3.7700
1.4105					
17	3.1700	3.6400	192535.2000	79261.4060	4.4200
1.8196					
18	3.2700	3.7400	223462.8000	100041.9105	5.1300
2.2966					
19	3.3700	3.8400	255261.6000	123960.2702	5.8600
2.8457					
20	3.4700	3.9400	287931.6000	151103.2696	6.6100
3.4689					
21	3.5700	4.0400	321472.8000	181557.7894	7.3800
4.1680					
22	3.6700	4.1400	358498.8000	215539.2158	8.2300
4.9481					
23	3.7700	4.2400	395960.4000	253246.2883	9.0900
5.8137					
24	3.8700	4.3400	435164.4000	294786.6940	9.9900
6.7674					
25	3.9700	4.4400	471754.8000	340119.8934	10.8300

7.8081						
26	4.0700	4.5400	505296.0000	388962.3468	11.6000	
8.9293						
27	4.1700	4.6400	541015.2000	441267.2192	12.4200	
10.1301						
28	4.2700	4.7400	574992.0000	497058.3991	13.2000	
11.4109						
29	4.3700	4.8400	607662.0000	556182.9857	13.9500	
12.7682						
30	4.4700	4.9400	639025.2000	618510.1463	14.6700	
14.1990						
31	4.5700	5.0400	667774.8000	683844.2216	15.3300	
15.6989						
32	4.6700	5.1400	697831.2000	752118.3254	16.0200	
17.2663						
33	4.7700	5.2400	726145.2000	823311.7414	16.6700	
18.9006						
34	4.8700	5.3400	756637.2000	897444.8942	17.3700	
20.6025						
35	4.9700	5.4400	789742.8000	974757.2142	18.1300	
22.3773						
36	5.0700	5.5400	823719.6000	1.05542E+06	18.9100	
24.2292						
37	5.1700	5.6400	855518.4000	1.13938E+06	19.6400	
26.1566						
38	5.2700	5.7400	889059.6000	1.22660E+06	20.4100	
28.1589						
39	5.3700	5.8400	921294.0000	1.31711E+06	21.1500	
30.2368						
40	5.4700	5.9400	952221.6000	1.41078E+06	21.8600	
32.3872						
41	5.5700	6.0400	979664.4000	1.50737E+06	22.4900	
34.6046						
42	5.6700	6.1400	1004929.200	1.60660E+06	23.0700	
36.8825						
43	5.7700	6.2400	1026273.600	1.70816E+06	23.5600	
39.2139						
44	5.8700	6.3400	1047182.400	1.81183E+06	24.0400	
41.5939						
45	5.9700	6.4400	1065042.000	1.91744E+06	24.4500	
44.0183						
46	6.0700	6.5400	1082030.400	2.02479E+06	24.8400	
46.4827						
47	6.1700	6.6400	1096840.800	2.13373E+06	25.1800	
48.9837						
48	6.2700	6.7400	1109037.600	2.24402E+06	25.4600	
51.5157						
49	6.3700	6.8400	1118620.800	2.35540E+06	25.6800	
54.0726						
50	6.4700	6.9400	1126461.600	2.46766E+06	25.8600	

56.6496						
51	6.5700	7.0400	1134302.400	2.58069E+06	26.0400	
59.2446						
52	6.6700	7.1400	1141272.000	2.69447E+06	26.2000	
61.8565						
53	6.7700	7.2400	1147370.400	2.80890E+06	26.3400	
64.4835						
54	6.8700	7.3400	1153033.200	2.92392E+06	26.4700	
67.1240						
55	6.9700	7.4400	1157824.800	3.03946E+06	26.5800	
69.7765						
56	7.0700	7.5400	1162180.800	3.15546E+06	26.6800	
72.4394						
57	7.1700	7.6400	1165665.600	3.27185E+06	26.7600	
75.1114						
58	7.2700	7.7400	1169586.000	3.38861E+06	26.8500	
77.7919						
59	7.3700	7.8400	1172635.200	3.50572E+06	26.9200	
80.4803						
60	7.4700	7.9400	1175248.800	3.62312E+06	26.9800	
83.1753						
61	7.5700	8.0400	1176991.200	3.74073E+06	27.0200	
85.8753						
62	7.6700	8.1400	1178298.000	3.85849E+06	27.0500	
88.5788						
63	7.7700	8.2400	1179604.800	3.97638E+06	27.0800	
91.2852						
64	7.8700	8.3400	1180476.000	4.09439E+06	27.1000	
93.9942						
65	7.9700	8.4400	1180911.600	4.21246E+06	27.1100	
96.7047						
66	8.0700	8.5400	1180911.600	4.33055E+06	27.1100	
99.4157						
67	8.1700	8.6400	1180911.600	4.44864E+06	27.1100	
102.1267						
68	8.2700	8.7400	1180911.600	4.56673E+06	27.1100	
104.8377						
69	8.3700	8.8400	1180911.600	4.68482E+06	27.1100	
107.5487						
70	8.4700	8.9400	1180911.600	4.80291E+06	27.1100	
110.2597						
71	8.5700	9.0400	1180911.600	4.92100E+06	27.1100	
112.9707						
72	8.6700	9.1400	1180911.600	5.03909E+06	27.1100	
115.6817						
73	8.7700	9.2400	1180911.600	5.15719E+06	27.1100	
118.3927						
74	8.8700	9.3400	1180911.600	5.27528E+06	27.1100	
121.1037						
75	8.9700	9.4400	1180911.600	5.39337E+06	27.1100	

123.8147						
76	9.0700	9.5400	1180911.600	5.51146E+06		27.1100
126.5257						
77	9.1700	9.6400	1180911.600	5.62955E+06		27.1100
129.2367						
78	9.2700	9.7400	1180911.600	5.74764E+06		27.1100
131.9477						
79	9.3700	9.8400	1180911.600	5.86573E+06		27.1100
134.6587						
80	9.4700	9.9400	1180911.600	5.98382E+06		27.1100
137.3697						
81	9.5700	10.0400	1180911.600	6.10191E+06		27.1100
140.0807						
82	9.6700	10.1400	1180911.600	6.22001E+06		27.1100
142.7917						
83	9.7700	10.2400	1180911.600	6.33810E+06		27.1100
145.5027						
84	9.8700	10.3400	1180911.600	6.45619E+06		27.1100
148.2137						
85	9.9700	10.4400	1180911.600	6.57428E+06		27.1100
150.9247						
86	10.0700	10.5400	1180911.600	6.69237E+06		27.1100
153.6357						
87	10.1550	10.6250	1180911.600	6.79275E+06		27.1100
155.9400						

=====

| Variable storage data for node | N-019

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.2200	0.0000	435.6000	0.0000	0.0100
0.0000					
2	2.1200	2.3400	435.6000	1019.3040	0.0100
0.0234					
3	2.1300	2.3500	435.6000	1023.6600	0.0100
0.0235					
4	2.2300	2.4500	871.2000	1087.7537	0.0200
0.0250					
5	2.3300	2.5500	1306.8000	1195.9192	0.0300
0.0275					
6	2.4300	2.6500	2613.6000	1388.2005	0.0600
0.0319					
7	2.5300	2.7500	3920.4000	1712.6970	0.0900
0.0393					
8	2.6300	2.8500	6098.4000	2209.6386	0.1400

0.0507					
9	2.7300	2.9500	9147.6000	2966.7972	0.2100
0.0681					
10	2.8300	3.0500	13939.2000	4112.7471	0.3200
0.0944					
11	2.9300	3.1500	20037.6000	5802.3740	0.4600
0.1332					
12	3.0300	3.2500	27878.4000	8187.3856	0.6400
0.1880					
13	3.1300	3.3500	37897.2000	11463.3412	0.8700
0.2632					
14	3.2300	3.4500	51400.8000	15911.0816	1.1800
0.3653					
15	3.3300	3.5500	66646.8000	21796.9251	1.5300
0.5004					
16	3.4300	3.6500	84506.4000	29336.8628	1.9400
0.6735					
17	3.5300	3.7500	104544.0000	38771.5401	2.4000
0.8901					
18	3.6300	3.8500	128066.4000	50382.0708	2.9400
1.1566					
19	3.7300	3.9500	154638.0000	64496.2911	3.5500
1.4806					
20	3.8300	4.0500	184258.8000	81419.3458	4.2300
1.8691					
21	3.9300	4.1500	214750.8000	101350.1800	4.9300
2.3267					
22	4.0300	4.2500	244807.2000	124311.4513	5.6200
2.8538					
23	4.1300	4.3500	274863.6000	150280.2330	6.3100
3.4500					
24	4.2300	4.4500	304484.4000	179234.7148	6.9900
4.1147					
25	4.3300	4.5500	333234.0000	211109.5098	7.6500
4.8464					
26	4.4300	4.6500	360241.2000	245774.1549	8.2700
5.6422					
27	4.5300	4.7500	389426.4000	283247.6882	8.9400
6.5025					
28	4.6300	4.8500	415126.8000	323468.1029	9.5300
7.4258					
29	4.7300	4.9500	443005.2000	366366.7245	10.1700
8.4106					
30	4.8300	5.0500	467398.8000	411881.0216	10.7300
9.4555					
31	4.9300	5.1500	491792.4000	459834.9315	11.2900
10.5564					
32	5.0300	5.2500	516186.0000	510228.4274	11.8500
11.7132					
33	5.1300	5.3500	536659.2000	562866.8431	12.3200

12.9216					
34	5.2300	5.4500	557132.4000	617552.6825	12.7900
14.1771					
35	5.3300	5.5500	578041.2000	674307.5853	13.2700
15.4800					
36	5.4300	5.6500	598514.4000	733131.8081	13.7400
16.8304					
37	5.5300	5.7500	619858.8000	794046.7426	14.2300
18.2288					
38	5.6300	5.8500	642510.0000	857161.1642	14.7500
19.6777					
39	5.7300	5.9500	665161.2000	922540.8005	15.2700
21.1786					
40	5.8300	6.0500	686070.0000	990098.9886	15.7500
22.7295					
41	5.9300	6.1500	706543.2000	1.05973E+06	16.2200
24.3280					
42	6.0300	6.2500	725709.6000	1.13134E+06	16.6600
25.9719					
43	6.1300	6.3500	742262.4000	1.20473E+06	17.0400
27.6569					
44	6.2300	6.4500	754894.8000	1.27959E+06	17.3300
29.3753					
45	6.3300	6.5500	765784.8000	1.35562E+06	17.5800
31.1208					
46	6.4300	6.6500	775368.0000	1.43268E+06	17.8000
32.8898					
47	6.5300	6.7500	783208.8000	1.51061E+06	17.9800
34.6787					
48	6.6300	6.8500	789307.2000	1.58923E+06	18.1200
36.4837					
49	6.7300	6.9500	796712.4000	1.66853E+06	18.2900
38.3042					
50	6.8300	7.0500	803682.0000	1.74855E+06	18.4500
40.1412					
51	6.9300	7.1500	811087.2000	1.82929E+06	18.6200
41.9946					
52	7.0300	7.2500	818056.8000	1.91074E+06	18.7800
43.8646					
53	7.1300	7.3500	824155.2000	1.99285E+06	18.9200
45.7496					
54	7.2300	7.4500	831124.8000	2.07561E+06	19.0800
47.6496					
55	7.3300	7.5500	838530.0000	2.15910E+06	19.2500
49.5660					
56	7.4300	7.6500	846806.4000	2.24336E+06	19.4400
51.5005					
57	7.5300	7.7500	857260.8000	2.32856E+06	19.6800
53.4565					
58	7.6300	7.8500	866844.0000	2.41477E+06	19.9000

55.4354						
59	7.7300	7.9500	875991.6000	2.50191E+06	20.1100	
57.4359						
60	7.8300	8.0500	886010.4000	2.59001E+06	20.3400	
59.4584						
61	7.9300	8.1500	898207.2000	2.67922E+06	20.6200	
61.5063						
62	8.0300	8.2500	914760.0000	2.76986E+06	21.0000	
63.5873						
63	8.1300	8.3500	930441.6000	2.86212E+06	21.3600	
65.7053						
64	8.2300	8.4500	940896.0000	2.95569E+06	21.6000	
67.8532						
65	8.3300	8.5500	947865.6000	3.05012E+06	21.7600	
70.0212						
66	8.4300	8.6500	952221.6000	3.14513E+06	21.8600	
72.2022						
67	8.5300	8.7500	955706.4000	3.24052E+06	21.9400	
74.3921						
68	8.6300	8.8500	958755.6000	3.33624E+06	22.0100	
76.5896						
69	8.7300	8.9500	961804.8000	3.43227E+06	22.0800	
78.7941						
70	8.8300	9.0500	964854.0000	3.52860E+06	22.1500	
81.0056						
71	8.9300	9.1500	968774.4000	3.62528E+06	22.2400	
83.2251						
72	9.0300	9.2500	972259.2000	3.72233E+06	22.3200	
85.4530						
73	9.1300	9.3500	975308.4000	3.81971E+06	22.3900	
87.6885						
74	9.2300	9.4500	977922.0000	3.91737E+06	22.4500	
89.9305						
75	9.3300	9.5500	980100.0000	4.01527E+06	22.5000	
92.1780						
76	9.4300	9.6500	982713.6000	4.11341E+06	22.5600	
94.4309						
77	9.5300	9.7500	985762.8000	4.21183E+06	22.6300	
96.6904						
78	9.6300	9.8500	988812.0000	4.31056E+06	22.7000	
98.9569						
79	9.7300	9.9500	994474.8000	4.40973E+06	22.8300	
101.2334						
80	9.8300	10.0500	1001008.800	4.50950E+06	22.9800	
103.5238						
81	9.9300	10.1500	1009720.800	4.61003E+06	23.1800	
105.8318						
82	10.0300	10.2500	1016254.800	4.71133E+06	23.3300	
108.1573						
83	10.1300	10.3500	1020610.800	4.81317E+06	23.4300	

110.4953						
84	10.2300	10.4500	1023224.400	4.91536E+06	23.4900	
112.8412						
85	10.3300	10.5500	1024531.200	5.01775E+06	23.5200	
115.1917						
86	10.4300	10.6500	1025402.400	5.12025E+06	23.5400	
117.5447						
87	10.5300	10.7500	1025838.000	5.22281E+06	23.5500	
119.8992						
88	10.6300	10.8500	1025838.000	5.32539E+06	23.5500	
122.2542						
89	10.7200	10.9400	1025838.000	5.41772E+06	23.5500	
124.3737						
90	10.7200	10.9400	1025838.000	5.41772E+06	23.5500	
124.3737						

=====

| Variable storage data for node | N-041

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	0.7800	0.0000	26.1360	0.0000	0.0006
0.0000					
2	1.2500	0.4700	1306.8000	237.7777	0.0300
0.0055					
3	1.3500	0.5700	1742.4000	389.7150	0.0400
0.0089					
4	1.4500	0.6700	38768.4000	2014.0215	0.8900
0.0462					
5	1.5500	0.7700	39639.6000	5934.3017	0.9100
0.1362					
6	2.0500	1.2700	46609.2000	27472.7812	1.0700
0.6307					
7	2.1500	1.3700	48351.6000	32220.5073	1.1100
0.7397					
8	2.2500	1.4700	51400.8000	37207.3005	1.1800
0.8542					
9	2.3500	1.5700	55321.2000	42542.1466	1.2700
0.9766					
10	2.4500	1.6700	60112.8000	48312.1307	1.3800
1.1091					
11	2.5500	1.7700	67082.4000	54668.6423	1.5400
1.2550					
12	3.8500	3.0700	110642.4000	169014.0886	2.5400
3.8800					
13	3.9500	3.1700	111949.2000	180143.4934	2.5700

4.1355					
14	4.0500	3.2700	114127.2000	191447.0255	2.6200
4.3950					
15	4.1500	3.3700	116740.8000	202990.0635	2.6800
4.6600					
16	4.2500	3.4700	120661.2000	214859.5052	2.7700
4.9325					
17	4.3500	3.5700	123274.8000	227055.9499	2.8300
5.2125					
18	4.8500	4.0700	144183.6000	293851.6707	3.3100
6.7459					
19	4.9500	4.1700	149846.4000	308552.1148	3.4400
7.0834					
20	5.0500	4.2700	156380.4000	323862.1397	3.5900
7.4349					
21	5.1500	4.3700	163350.0000	339847.2337	3.7500
7.8018					
22	5.2500	4.4700	169012.8000	356464.4034	3.8800
8.1833					
23	5.8500	5.0700	197762.4000	466383.0141	4.5400
10.7067					
24	5.9500	5.1700	202118.4000	486376.4587	4.6400
11.1657					
25	6.0500	5.2700	205167.6000	506740.3648	4.7100
11.6332					
26	6.4500	5.6700	213444.0000	590456.3927	4.9000
13.5550					
27	6.5500	5.7700	215622.0000	611909.3860	4.9500
14.0475					
28	6.6500	5.8700	219106.8000	633645.3758	5.0300
14.5465					
29	6.7500	5.9700	223462.8000	655773.2773	5.1300
15.0545					
30	6.8500	6.0700	230432.4000	678466.9185	5.2900
15.5755					
31	6.9500	6.1700	240451.2000	702009.0864	5.5200
16.1159					
32	7.0500	6.2700	256132.8000	726833.9104	5.8800
16.6858					
33	7.1500	6.3700	274863.6000	753377.9572	6.3100
17.2952					
34	7.2500	6.4700	297514.8000	781989.1182	6.8300
17.9520					
35	7.3500	6.5700	321908.4000	812951.9601	7.3900
18.6628					
36	7.4500	6.6700	346302.0000	846354.7227	7.9500
19.4296					
37	7.5500	6.7700	373744.8000	882347.9836	8.5800
20.2559					
38	7.6500	6.8700	400752.0000	921064.5861	9.2000

21.1447					
39	7.7500	6.9700	430372.8000	962611.6106	9.8800
22.0985					
40	7.8500	7.0700	462607.2000	1.00725E+06	10.6200
23.1233					
41	7.9500	7.1700	495277.2000	1.05513E+06	11.3700
24.2226					
42	8.0500	7.2700	530996.4000	1.10644E+06	12.1900
25.4003					
43	8.1500	7.3700	562795.2000	1.16112E+06	12.9200
26.6556					
44	8.2500	7.4700	594594.0000	1.21898E+06	13.6500
27.9839					
45	8.3500	7.5700	629006.4000	1.28015E+06	14.4400
29.3882					
46	8.4500	7.6700	667339.2000	1.34496E+06	15.3200
30.8760					
47	8.5500	7.7700	705236.4000	1.41358E+06	16.1900
32.4513					
48	8.6500	7.8700	736164.0000	1.48564E+06	16.9000
34.1057					
49	8.7500	7.9700	758815.2000	1.56039E+06	17.4200
35.8216					
50	8.8500	8.0700	775368.0000	1.63709E+06	17.8000
37.5825					
51	8.9500	8.1700	791920.8000	1.71546E+06	18.1800
39.3815					
52	9.0500	8.2700	807166.8000	1.79541E+06	18.5300
41.2169					
53	9.1500	8.3700	820670.4000	1.87680E+06	18.8400
43.0854					
54	9.2500	8.4700	833738.4000	1.95952E+06	19.1400
44.9843					
55	9.3500	8.5700	844628.4000	2.04343E+06	19.3900
46.9108					
56	9.4500	8.6700	856825.2000	2.12851E+06	19.6700
48.8638					
57	9.8500	9.0700	902127.6000	2.48025E+06	20.7100
56.9388					
58	9.9500	9.1700	913453.2000	2.57103E+06	20.9700
59.0228					
59	10.0500	9.2700	926085.6000	2.66301E+06	21.2600
61.1342					
60	10.1500	9.3700	938718.0000	2.75625E+06	21.5500
63.2747					
61	10.2500	9.4700	949608.0000	2.85066E+06	21.8000
65.4422					
62	10.6500	9.8700	994039.2000	3.23935E+06	22.8200
74.3653					
63	10.7500	9.9700	1005800.400	3.33934E+06	23.0900

76.6608					
64	10.8500	10.0700	1018432.800	3.44055E+06	23.3800
78.9842					
65	10.9500	10.1700	1030629.600	3.54300E+06	23.6600
81.3362					
66	11.0500	10.2700	1043262.000	3.64670E+06	23.9500
83.7166					
67	11.1500	10.3700	1054587.600	3.75159E+06	24.2100
86.1246					
68	11.2500	10.4700	1065042.000	3.85757E+06	24.4500
88.5576					
69	11.3500	10.5700	1074625.200	3.96455E+06	24.6700
91.0135					
70	11.4500	10.6700	1082466.000	4.07240E+06	24.8500
93.4895					
71	12.0500	11.2700	1126026.000	4.73490E+06	25.8500
108.6984					
72	12.1500	11.3700	1133431.200	4.84787E+06	26.0200
111.2918					
73	12.2500	11.4700	1141707.600	4.96163E+06	26.2100
113.9033					
74	12.3500	11.5700	1149984.000	5.07621E+06	26.4000
116.5338					
75	12.4500	11.6700	1157824.800	5.19160E+06	26.5800
119.1827					
76	12.5500	11.7700	1166536.800	5.30782E+06	26.7800
121.8507					
77	12.6500	11.8700	1175684.400	5.42493E+06	26.9900
124.5392					
78	12.7500	11.9700	1184832.000	5.54295E+06	27.2000
127.2486					
79	12.8500	12.0700	1195722.000	5.66198E+06	27.4500
129.9811					
80	12.9500	12.1700	1207047.600	5.78211E+06	27.7100
132.7391					
81	13.0500	12.2700	1218808.800	5.90340E+06	27.9800
135.5235					
82	13.1500	12.3700	1231876.800	6.02594E+06	28.2800
138.3365					
83	13.2500	12.4700	1244944.800	6.14978E+06	28.5800
141.1794					
84	13.3500	12.5700	1255834.800	6.27481E+06	28.8300
144.0499					
85	13.4500	12.6700	1265418.000	6.40088E+06	29.0500
146.9439					
86	13.5500	12.7700	1270209.600	6.52766E+06	29.1600
149.8543					
87	13.6500	12.8700	1271516.400	6.65474E+06	29.1900
152.7718					
88	15.1500	14.3700	1272387.600	8.56265E+06	29.2100

196.5714
 89 15.2600 14.4800 1272387.600 8.70261E+06 29.2100
 199.7845

=====

| Variable storage data for node | N-020

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	1.3800	0.0000	26.1360	0.0000	0.0006
0.0000					
2	1.9500	0.5700	5227.2000	1068.3507	0.1200
0.0245					
3	2.0500	0.6700	7840.8000	1717.3438	0.1800
0.0394					
4	2.1500	0.7700	12196.8000	2711.2270	0.2800
0.0622					
5	2.2500	0.8700	19166.4000	4266.3014	0.4400
0.0979					
6	2.3500	0.9700	25700.4000	6501.6470	0.5900
0.1493					
7	2.4500	1.0700	33541.2000	9455.0113	0.7700
0.2171					
8	2.5500	1.1700	43124.4000	13278.2313	0.9900
0.3048					
9	2.6500	1.2700	52707.6000	18061.7773	1.2100
0.4146					
10	2.7500	1.3700	65340.0000	23952.8009	1.5000
0.5499					
11	2.8500	1.4700	78843.6000	31151.3467	1.8100
0.7151					
12	2.9500	1.5700	94089.6000	39786.6976	2.1600
0.9134					
13	3.0500	1.6700	108028.8000	49884.4960	2.4800
1.1452					
14	3.2500	1.8700	137214.0000	74350.4384	3.1500
1.7069					
15	3.3500	1.9700	151588.8000	88784.4680	3.4800
2.0382					
16	3.4500	2.0700	167270.4000	104720.8378	3.8400
2.4041					
17	3.5500	2.1700	183387.6000	122247.3860	4.2100
2.8064					
18	3.6500	2.2700	201247.2000	141472.0195	4.6200
3.2478					
19	3.7500	2.3700	220413.6000	162547.5850	5.0600

3.7316					
20	3.8500	2.4700	240015.6000	185561.8573	5.5100
4.2599					
21	3.9500	2.5700	261795.6000	210644.2852	6.0100
4.8357					
22	4.0500	2.6700	283140.0000	237883.8232	6.5000
5.4611					
23	4.1500	2.7700	303613.2000	267215.2351	6.9700
6.1344					
24	4.2500	2.8700	326264.4000	298702.0099	7.4900
6.8573					
25	4.3500	2.9700	348915.6000	332454.3380	8.0100
7.6321					
26	4.4500	3.0700	373744.8000	368579.8857	8.5800
8.4614					
27	4.5500	3.1700	402494.4000	407382.5812	9.2400
9.3522					
28	4.6500	3.2700	432986.4000	449146.9268	9.9400
10.3110					
29	4.7500	3.3700	462171.6000	493896.4477	10.6100
11.3383					
30	4.8500	3.4700	491792.4000	541586.5045	11.2900
12.4331					
31	4.9500	3.5700	521413.2000	592239.0601	11.9700
13.5959					
32	5.0500	3.6700	548856.0000	645746.1202	12.6000
14.8243					
33	5.1500	3.7700	574992.0000	701932.8926	13.2000
16.1142					
34	5.2500	3.8700	599821.2000	760668.5918	13.7700
17.4625					
35	5.3500	3.9700	621165.6000	821714.2117	14.2600
18.8640					
36	5.4500	4.0700	638154.0000	884677.6521	14.6500
20.3094					
37	5.5500	4.1700	652964.4000	949231.5108	14.9900
21.7914					
38	5.6500	4.2700	665161.2000	1.01514E+06	15.2700
23.3043					
39	5.7500	4.3700	676051.2000	1.08220E+06	15.5200
24.8438					
40	5.8500	4.4700	685634.4000	1.15028E+06	15.7400
26.4068					
41	5.9500	4.5700	694346.4000	1.21928E+06	15.9400
27.9907					
42	6.0500	4.6700	701316.0000	1.28906E+06	16.1000
29.5927					
43	6.1500	4.7700	706543.2000	1.35945E+06	16.2200
31.2087					
44	6.5500	5.1700	726145.2000	1.64598E+06	16.6700

37.7864						
45	6.6500	5.2700	730501.2000	1.71881E+06		16.7700
39.4584						
46	6.7500	5.3700	733550.4000	1.79201E+06		16.8400
41.1389						
47	6.8500	5.4700	737470.8000	1.86556E+06		16.9300
42.8274						
48	6.9500	5.5700	742698.0000	1.93957E+06		17.0500
44.5263						
49	7.0500	5.6700	749232.0000	2.01416E+06		17.2000
46.2388						
50	7.1500	5.7700	754894.8000	2.08937E+06		17.3300
47.9653						
51	7.2500	5.8700	758815.2000	2.16505E+06		17.4200
49.7028						
52	7.3500	5.9700	761428.8000	2.24106E+06		17.4800
51.4478						
53	7.4500	6.0700	762300.0000	2.31725E+06		17.5000
53.1967						
54	10.9500	9.5700	765784.8000	4.99137E+06		17.5800
114.5861						
55	11.0600	9.6800	765784.8000	5.07561E+06		17.5800
116.5199						

=====

| Variable storage data for node | N-022

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	0.9600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	1.5600	0.6000	2613.6000	580.2134	0.0600
0.0133					
3	1.6600	0.7000	3920.4000	904.7099	0.0900
0.0208					
4	1.7600	0.8000	6534.0000	1421.8919	0.1500
0.0326					
5	1.8600	0.9000	10018.8000	2243.3407	0.2300
0.0515					
6	1.9600	1.0000	14810.4000	3477.0095	0.3400
0.0798					
7	2.0600	1.1000	20908.8000	5254.2110	0.4800
0.1206					
8	2.1600	1.2000	27878.4000	7685.2067	0.6400
0.1764					
9	2.2600	1.3000	35719.2000	10856.9686	0.8200

0.2492						
10	3.2600	2.3000	129373.2000	88546.5670	2.9700	
2.0327						
11	3.3600	2.4000	139392.0000	101981.5793	3.2000	
2.3412						
12	3.4600	2.5000	151153.2000	116504.7250	3.4700	
2.6746						
13	3.5600	2.6000	163350.0000	132225.7846	3.7500	
3.0355						
14	3.6600	2.7000	175982.4000	149188.3147	4.0400	
3.4249						
15	3.7600	2.8000	191228.4000	167543.3940	4.3900	
3.8463						
16	3.8600	2.9000	205167.6000	187358.9098	4.7100	
4.3012						
17	3.9600	3.0000	219978.0000	208611.6765	5.0500	
4.7891						
18	4.0600	3.1000	234788.4000	231345.7487	5.3900	
5.3110						
19	4.1600	3.2000	250905.6000	255625.7477	5.7600	
5.8684						
20	4.2600	3.3000	267022.8000	281517.7283	6.1300	
6.4628						
21	4.3600	3.4000	282268.8000	308978.5066	6.4800	
7.0932						
22	4.6600	3.7000	329313.6000	400624.3451	7.5600	
9.1971						
23	4.7600	3.8000	344559.6000	434314.7934	7.9100	
9.9705						
24	4.8600	3.9000	358063.2000	469443.4192	8.2200	
10.7769						
25	4.9600	4.0000	370695.6000	505879.1700	8.5100	
11.6134						
26	5.0600	4.1000	382456.8000	543534.8828	8.7800	
12.4778						
27	5.1600	4.2000	392911.2000	582301.7204	9.0200	
13.3678						
28	5.2600	4.3000	401623.2000	622027.2471	9.2200	
14.2798						
29	5.4600	4.5000	418611.6000	704044.0420	9.6100	
16.1626						
30	5.5600	4.6000	426452.4000	746296.2132	9.7900	
17.1326						
31	5.6600	4.7000	435600.0000	789397.5933	10.0000	
18.1221						
32	5.7600	4.8000	446490.0000	833500.5318	10.2500	
19.1345						
33	5.8600	4.9000	460864.8000	878865.9203	10.5800	
20.1760						
34	5.9600	5.0000	480902.4000	925950.2562	11.0400	

21.2569						
35	6.0600	5.1000	504424.8000	975211.4434		11.5800
22.3878						
36	6.1600	5.2000	526640.4000	1.02676E+06		12.0900
23.5712						
37	6.2600	5.3000	541886.4000	1.08018E+06		12.4400
24.7976						
38	6.3600	5.4000	550598.4000	1.13481E+06		12.6400
26.0516						
39	6.4600	5.5000	555825.6000	1.19013E+06		12.7600
27.3216						
40	6.5600	5.6000	561052.8000	1.24597E+06		12.8800
28.6036						
41	6.6600	5.7000	565408.8000	1.30229E+06		12.9800
29.8965						
42	6.7600	5.8000	569764.8000	1.35905E+06		13.0800
31.1995						
43	6.8600	5.9000	572378.4000	1.41616E+06		13.1400
32.5105						
44	7.0600	6.1000	578912.4000	1.53129E+06		13.2900
35.1535						
45	7.1600	6.2000	582832.8000	1.58937E+06		13.3800
36.4870						
46	7.2600	6.3000	585446.4000	1.64779E+06		13.4400
37.8279						
47	7.3600	6.4000	586753.2000	1.70639E+06		13.4700
39.1734						
48	10.3600	9.4000	588495.6000	3.46925E+06		13.5100
79.6430						
49	10.4600	9.5000	588495.6000	3.52810E+06		13.5100
80.9940						

=====

| Variable storage data for node | N-024

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.2700	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.5400	0.8100	871.2000	283.0199	0.0200
0.0065					
3	0.6400	0.9100	1742.4000	411.2074	0.0400
0.0094					
4	0.7400	1.0100	3920.4000	687.0846	0.0900
0.0158					
5	0.8400	1.1100	7405.2000	1244.2015	0.1700

0.0286					
6	0.9400	1.2100	13503.6000	2274.4793	0.3100
0.0522					
7	1.0400	1.3100	22215.6000	4042.4428	0.5100
0.0928					
8	1.1400	1.4100	32234.4000	6749.4213	0.7400
0.1549					
9	1.2400	1.5100	43560.0000	10524.9212	1.0000
0.2416					
10	1.3400	1.6100	57063.6000	15540.8810	1.3100
0.3568					
11	1.4400	1.7100	73180.8000	22036.3516	1.6800
0.5059					
12	1.5400	1.8100	87991.2000	30083.5058	2.0200
0.6906					
13	1.6400	1.9100	102366.0000	39592.2119	2.3500
0.9089					
14	1.7400	2.0100	117612.0000	50582.1859	2.7000
1.1612					
15	1.8400	2.1100	131986.8000	63055.0966	3.0300
1.4475					
16	1.9400	2.2100	149846.4000	77137.1750	3.4400
1.7708					
17	2.0400	2.3100	166834.8000	92963.4767	3.8300
2.1341					
18	2.1400	2.4100	186001.2000	110596.4178	4.2700
2.5389					
19	2.2400	2.5100	206910.0000	130232.5027	4.7500
2.9897					
20	2.3400	2.6100	229125.6000	152024.6264	5.2600
3.4900					
21	2.4400	2.7100	253083.6000	176124.9199	5.8100
4.0433					
22	2.5400	2.8100	275734.8000	202557.4866	6.3300
4.6501					
23	2.6400	2.9100	297950.4000	231234.2881	6.8400
5.3084					
24	2.7400	3.0100	319730.4000	262111.6175	7.3400
6.0173					
25	2.8400	3.1100	342381.6000	295210.4270	7.8600
6.7771					
26	2.9400	3.2100	365468.4000	330596.2966	8.3900
7.5894					
27	3.0400	3.3100	388990.8000	368312.7665	8.9300
8.4553					
28	3.1400	3.4100	415126.8000	408511.1635	9.5300
9.3781					
29	3.2400	3.5100	441262.8000	451323.5669	10.1300
10.3610					
30	3.3400	3.6100	469141.2000	496836.1960	10.7700

11.4058					
31	3.4400	3.7100	495712.8000	545072.3144	11.3800
12.5131					
32	3.5400	3.8100	526204.8000	596160.0999	12.0800
13.6860					
33	3.6400	3.9100	556696.8000	650297.4823	12.7800
14.9288					
34	3.7400	4.0100	588060.0000	707527.5881	13.5000
16.2426					
35	3.8400	4.1100	622036.8000	768023.8716	14.2800
17.6314					
36	3.9400	4.2100	657320.4000	831982.9814	15.0900
19.0997					
37	4.0400	4.3100	692168.4000	899449.2464	15.8900
20.6485					
38	4.1400	4.4100	725709.6000	970335.8246	16.6600
22.2758					
39	4.2400	4.5100	757072.8000	1.04447E+06	17.3800
23.9777					
40	4.3400	4.6100	786693.6000	1.12165E+06	18.0600
25.7496					
41	4.4400	4.7100	814136.4000	1.20169E+06	18.6900
27.5870					
42	4.5400	4.8100	839401.2000	1.28436E+06	19.2700
29.4849					
43	4.6400	4.9100	862923.6000	1.36947E+06	19.8100
31.4388					
44	4.7400	5.0100	882525.6000	1.45674E+06	20.2600
33.4422					
45	4.8400	5.1100	900385.2000	1.54589E+06	20.6700
35.4887					
46	4.9400	5.2100	917809.2000	1.63679E+06	21.0700
37.5756					
47	5.0400	5.3100	933926.4000	1.72938E+06	21.4400
39.7011					
48	5.1400	5.4100	949172.4000	1.82353E+06	21.7900
41.8625					
49	5.2400	5.5100	963547.2000	1.91917E+06	22.1200
44.0580					
50	5.3400	5.6100	976179.6000	2.01615E+06	22.4100
46.2844					
51	5.4400	5.7100	988812.0000	2.11440E+06	22.7000
48.5399					
52	5.5400	5.8100	1002751.200	2.21397E+06	23.0200
50.8259					
53	5.6400	5.9100	1016690.400	2.31495E+06	23.3400
53.1438					
54	5.7400	6.0100	1030194.000	2.41729E+06	23.6500
55.4933					
55	5.8400	6.1100	1044568.800	2.52102E+06	23.9800

57.8747						
56	5.9400	6.2100	1059814.800	2.62624E+06		24.3300
60.2902						
57	6.0400	6.3100	1079852.400	2.73322E+06		24.7900
62.7461						
58	6.1400	6.4100	1105117.200	2.84247E+06		25.3700
65.2541						
59	6.2400	6.5100	1132560.000	2.95435E+06		26.0000
67.8225						
60	6.3400	6.6100	1152162.000	3.06858E+06		26.4500
70.4449						
61	6.4400	6.7100	1165230.000	3.18445E+06		26.7500
73.1049						
62	6.5400	6.8100	1175684.400	3.30149E+06		26.9900
75.7918						
63	6.7400	7.0100	1194415.200	3.53850E+06		27.4200
81.2327						
64	6.8400	7.1100	1203998.400	3.65842E+06		27.6400
83.9857						
65	6.9400	7.2100	1217502.000	3.77949E+06		27.9500
86.7651						
66	7.0400	7.3100	1238410.800	3.90228E+06		28.4300
89.5841						
67	7.1400	7.4100	1265418.000	4.02747E+06		29.0500
92.4580						
68	7.2400	7.5100	1288069.200	4.15514E+06		29.5700
95.3889						
69	7.3400	7.6100	1302444.000	4.28467E+06		29.9000
98.3624						
70	7.4400	7.7100	1309849.200	4.41528E+06		30.0700
101.3609						
71	7.5400	7.8100	1314640.800	4.54650E+06		30.1800
104.3733						
72	7.6400	7.9100	1319868.000	4.67823E+06		30.3000
107.3973						
73	7.7400	8.0100	1327708.800	4.81060E+06		30.4800
110.4363						
74	7.8400	8.1100	1332500.400	4.94361E+06		30.5900
113.4897						
75	7.9400	8.2100	1335549.600	5.07701E+06		30.6600
116.5522						
76	9.0400	9.3100	1345568.400	6.55161E+06		30.8900
150.4043						
77	9.1400	9.4100	1346004.000	6.68619E+06		30.9000
153.4937						
78	9.2400	9.5100	1347310.800	6.82085E+06		30.9300
156.5852						
79	10.4400	10.7100	1363863.600	8.44753E+06		31.3100
193.9286						
80	10.5400	10.8100	1365170.400	8.58398E+06		31.3400

197.0611						
81	10.6400	10.9100	1365606.000	8.72052E+06	31.3500	
200.1955						
82	10.7600	11.0300	1366041.600	8.88441E+06	31.3600	
203.9581						

=====

| Variable storage data for node | N-029

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.9800	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-0.5400	0.4400	435.6000	191.6640	0.0100
0.0044					
3	-0.5300	0.4500	435.6000	196.0200	0.0100
0.0045					
4	-0.4300	0.5500	435.6000	239.5800	0.0100
0.0055					
5	-0.3300	0.6500	871.2000	303.6737	0.0200
0.0070					
6	-0.2300	0.7500	1742.4000	431.8612	0.0400
0.0099					
7	-0.1300	0.8500	2178.0000	627.4747	0.0500
0.0144					
8	-0.0300	0.9500	3484.8000	908.0644	0.0800
0.0208					
9	0.0700	1.0500	4356.0000	1299.2913	0.1000
0.0298					
10	0.1700	1.1500	5227.2000	1777.7852	0.1200
0.0408					
11	0.2700	1.2500	6098.4000	2343.5002	0.1400
0.0538					
12	0.3700	1.3500	7405.2000	3017.6171	0.1700
0.0693					
13	0.4700	1.4500	9583.2000	3864.6921	0.2200
0.0887					
14	0.5700	1.5500	11761.2000	4930.0446	0.2700
0.1132					
15	0.6700	1.6500	14374.8000	6234.6480	0.3300
0.1431					
16	0.7700	1.7500	16988.4000	7800.9742	0.3900
0.1791					
17	0.8700	1.8500	18730.8000	9586.2077	0.4300
0.2201					
18	0.9700	1.9500	21344.4000	11588.5257	0.4900

0.2660					
19	1.0700	2.0500	24393.6000	13873.7069	0.5600
0.3185					
20	1.1700	2.1500	27007.2000	16442.6131	0.6200
0.3775					
21	1.2700	2.2500	30056.4000	19294.4058	0.6900
0.4429					
22	1.3700	2.3500	33541.2000	22472.6616	0.7700
0.5159					
23	1.4700	2.4500	38332.8000	26063.6607	0.8800
0.5983					
24	1.5700	2.5500	44431.2000	30198.0696	1.0200
0.6933					
25	1.6700	2.6500	52707.6000	35049.0741	1.2100
0.8046					
26	1.7700	2.7500	60112.8000	40685.9829	1.3800
0.9340					
27	1.8700	2.8500	66211.2000	46999.6649	1.5200
1.0790					
28	1.9700	2.9500	71874.0000	53901.9198	1.6500
1.2374					
29	2.0700	3.0500	76230.0000	61305.9779	1.7500
1.4074					
30	2.1700	3.1500	81457.2000	69188.8147	1.8700
1.5884					
31	2.2700	3.2500	87120.0000	77616.0048	2.0000
1.7818					
32	2.3700	3.3500	92782.8000	86609.5691	2.1300
1.9883					
33	2.4700	3.4500	98881.2000	96191.0559	2.2700
2.2082					
34	2.5700	3.5500	106722.0000	106468.6204	2.4500
2.4442					
35	2.6700	3.6500	114562.8000	117530.4339	2.6300
2.6981					
36	2.7700	3.7500	121968.0000	129354.9232	2.8000
2.9696					
37	2.8700	3.8500	128066.4000	141855.2785	2.9400
3.2565					
38	2.9700	3.9500	132858.0000	154900.6347	3.0500
3.5560					
39	3.0700	4.0500	135471.6000	168316.7684	3.1100
3.8640					
40	3.1700	4.1500	138085.2000	181994.2635	3.1700
4.1780					
41	3.2700	4.2500	140698.8000	195933.1199	3.2300
4.4980					
42	3.3700	4.3500	143312.4000	210133.3375	3.2900
4.8240					
43	3.4700	4.4500	146361.6000	224616.6251	3.3600

5.1565					
44	3.5700	4.5500	149846.4000	239426.5354	3.4400
5.4965					
45	3.6700	4.6500	152460.0000	254541.5159	3.5000
5.8435					
46	3.7700	4.7500	155073.6000	269917.8571	3.5600
6.1965					
47	3.8700	4.8500	156816.0000	285512.1000	3.6000
6.5545					
48	3.9700	4.9500	159429.6000	301324.0419	3.6600
6.9174					
49	4.0700	5.0500	161607.6000	317375.6182	3.7100
7.2859					
50	4.1700	5.1500	164656.8000	333688.4376	3.7800
7.6604					
51	4.2700	5.2500	167270.4000	350284.4602	3.8400
8.0414					
52	4.3700	5.3500	171190.8000	367206.9725	3.9300
8.4299					
53	4.4700	5.4500	174240.0000	384478.1155	4.0000
8.8264					
54	4.5700	5.5500	177289.2000	402054.1793	4.0700
9.2299					
55	4.6700	5.6500	180338.4000	419935.1638	4.1400
9.6404					
56	4.7700	5.7500	184694.4000	438186.1881	4.2400
10.0594					
57	4.8700	5.8500	188179.2000	456829.4103	4.3200
10.4874					
58	4.9700	5.9500	192535.2000	475864.5246	4.4200
10.9243					
59	5.0700	6.0500	197326.8000	495356.9389	4.5300
11.3718					
60	5.1700	6.1500	203425.2000	515393.5651	4.6700
11.8318					
61	5.2700	6.2500	209959.2000	536061.7178	4.8200
12.3063					
62	5.3700	6.3500	216057.6000	557361.6172	4.9600
12.7953					
63	5.4700	6.4500	223027.2000	579314.7157	5.1200
13.2992					
64	5.5700	6.5500	229996.8000	601964.7956	5.2800
13.8192					
65	5.6700	6.6500	237402.0000	625333.5242	5.4500
14.3557					
66	5.7700	6.7500	243936.0000	649399.4444	5.6000
14.9082					
67	5.8700	6.8500	250470.0000	674118.7775	5.7500
15.4756					
68	5.9700	6.9500	258746.4000	699578.2219	5.9400

16.0601						
69	6.0700	7.0500	270072.0000	726016.8559	6.2000	
16.6671						
70	6.1700	7.1500	285318.0000	753782.5900	6.5500	
17.3045						
71	6.2700	7.2500	299692.8000	783029.8936	6.8800	
17.9759						
72	6.3700	7.3500	309711.6000	813498.4362	7.1100	
18.6754						
73	6.4700	7.4500	319730.4000	844968.8925	7.3400	
19.3978						
74	6.5700	7.5500	327135.6000	877311.1626	7.5100	
20.1403						
75	6.6700	7.6500	331491.6000	910241.9532	7.6100	
20.8963						
76	6.7700	7.7500	334105.2000	943521.3749	7.6700	
21.6603						
77	6.8700	7.8500	336283.2000	977040.4007	7.7200	
22.4298						
78	6.9700	7.9500	338461.2000	1.01078E+06	7.7700	
23.2043						
79	7.0700	8.0500	340203.6000	1.04471E+06	7.8100	
23.9832						
80	7.1700	8.1500	341074.8000	1.07877E+06	7.8300	
24.7652						
81	7.2700	8.2500	341510.4000	1.11290E+06	7.8400	
25.5487						
82	7.3700	8.3500	341510.4000	1.14705E+06	7.8400	
26.3327						
83	7.4700	8.4500	341510.4000	1.18120E+06	7.8400	
27.1167						

=====

| Variable storage data for node | N-026

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	1.0100	0.0000	435.6000	0.0000	0.0100
0.0000					
2	6.8300	5.8200	435.6000	2535.1920	0.0100
0.0582					
3	6.8400	5.8300	435.6000	2539.5480	0.0100
0.0583					
4	6.9400	5.9300	435.6000	2583.1080	0.0100
0.0593					
5	7.0400	6.0300	435.6000	2626.6680	0.0100

0.0603					
6	7.1400	6.1300	871.2000	2690.7617	0.0200
0.0618					
7	7.2400	6.2300	871.2000	2777.8817	0.0200
0.0638					
8	7.3400	6.3300	1742.4000	2906.0692	0.0400
0.0667					
9	7.4400	6.4300	2178.0000	3101.6827	0.0500
0.0712					
10	7.5400	6.5300	3049.2000	3361.8216	0.0700
0.0772					
11	7.6400	6.6300	3484.8000	3688.2760	0.0800
0.0847					
12	7.7400	6.7300	4356.0000	4079.5029	0.1000
0.0937					
13	7.8400	6.8300	5662.8000	4579.0114	0.1300
0.1051					
14	7.9400	6.9300	6534.0000	5188.3261	0.1500
0.1191					
15	8.0400	7.0300	7840.8000	5906.0669	0.1800
0.1356					
16	8.1400	7.1300	8712.0000	6733.3162	0.2000
0.1546					
17	8.2400	7.2300	9583.2000	7647.7212	0.2200
0.1756					
18	8.3400	7.3300	10890.0000	8670.6751	0.2500
0.1991					
19	8.4400	7.4300	11761.2000	9802.9445	0.2700
0.2250					
20	8.5400	7.5300	12632.4000	11022.3529	0.2900
0.2530					
21	8.6400	7.6300	13503.6000	12328.8978	0.3100
0.2830					
22	8.7400	7.7300	14374.8000	13722.5769	0.3300
0.3150					
23	8.8400	7.8300	15246.0000	15203.3885	0.3500
0.3490					
24	8.9400	7.9300	16552.8000	16792.8649	0.3800
0.3855					
25	9.0400	8.0300	17859.6000	18513.0540	0.4100
0.4250					
26	9.1400	8.1300	19166.4000	20363.9510	0.4400
0.4675					
27	9.2400	8.2300	20473.2000	22345.5521	0.4700
0.5130					
28	9.3400	8.3300	22215.6000	24479.3778	0.5100
0.5620					
29	9.4400	8.4300	24393.6000	26808.9660	0.5600
0.6154					
30	9.5400	8.5300	27442.8000	29399.2641	0.6300

0.6749					
31	9.6400	8.6300	30492.0000	32294.6368	0.7000
0.7414					
32	9.7400	8.7300	33541.2000	35495.0541	0.7700
0.8149					
33	9.8400	8.8300	36590.4000	39000.4938	0.8400
0.8953					
34	9.9400	8.9300	39639.6000	42810.9388	0.9100
0.9828					
35	10.0400	9.0300	42253.2000	46904.8426	0.9700
1.0768					
36	10.1400	9.1300	44431.2000	51238.5632	1.0200
1.1763					
37	10.2400	9.2300	46173.6000	55768.4786	1.0600
1.2803					
38	10.3400	9.3300	47480.4000	60450.9798	1.0900
1.3878					
39	10.4400	9.4300	48787.2000	65264.1639	1.1200
1.4983					
40	10.5400	9.5300	50094.0000	70208.0305	1.1500
1.6118					
41	10.6400	9.6300	50965.2000	75260.8774	1.1700
1.7278					
42	10.7450	9.7350	50965.2000	80612.2234	1.1700
1.8506					

=====

| Variable storage data for node | N-027

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.3300	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.6500	0.9800	871.2000	342.4191	0.0200
0.0079					
3	0.7500	1.0800	1742.4000	470.6066	0.0400
0.0108					
4	0.8500	1.1800	3920.4000	746.4838	0.0900
0.0171					
5	1.4500	1.7800	23522.4000	8155.5657	0.5400
0.1872					
6	1.5500	1.8800	27878.4000	10722.4982	0.6400
0.2462					
7	1.6500	1.9800	33105.6000	13767.9271	0.7600
0.3161					
8	1.7500	2.0800	38768.4000	17357.8674	0.8900

0.3985					
9	1.8500	2.1800	44431.2000	21514.5903	1.0200
0.4939					
10	1.9500	2.2800	51400.8000	26301.9128	1.1800
0.6038					
11	2.0500	2.3800	57934.8000	31765.3813	1.3300
0.7292					
12	2.1500	2.4800	65775.6000	37946.6940	1.5100
0.8711					
13	2.2500	2.5800	75358.8000	44997.9146	1.7300
1.0330					
14	2.3500	2.6800	86248.8000	53072.0917	1.9800
1.2184					
15	2.6500	2.9800	118047.6000	83591.7505	2.7100
1.9190					
16	2.7500	3.0800	128502.0000	95915.4115	2.9500
2.2019					
17	2.8500	3.1800	137649.6000	109220.2376	3.1600
2.5074					
18	2.9500	3.2800	145054.8000	123353.6996	3.3300
2.8318					
19	3.0500	3.3800	153331.2000	138270.9370	3.5200
3.1743					
20	3.1500	3.4800	161607.6000	154015.9067	3.7100
3.5357					
21	3.2500	3.5800	171190.8000	170653.3603	3.9300
3.9177					
22	3.4500	3.7800	190357.2000	206790.8528	4.3700
4.7473					
23	3.5500	3.8800	199504.8000	226281.9690	4.5800
5.1947					
24	3.6500	3.9800	207781.2000	246644.6637	4.7700
5.6622					
25	3.7500	4.0800	214750.8000	267770.0944	4.9300
6.1472					
26	3.9500	4.2800	229125.6000	312149.5298	5.2600
7.1660					
27	4.0500	4.3800	236095.2000	335409.4670	5.4200
7.6999					
28	4.1500	4.4800	241758.0000	359301.3289	5.5500
8.2484					
29	4.2500	4.5800	247420.8000	383759.4780	5.6800
8.8099					
30	4.3500	4.6800	254390.4000	408848.9804	5.8400
9.3859					
31	4.4500	4.7800	260488.8000	434592.0810	5.9800
9.9769					
32	4.8500	5.1800	284446.8000	543542.9842	6.5300
12.4780					
33	4.9500	5.2800	290109.6000	572270.0518	6.6600

13.1375					
34	5.0500	5.3800	297079.2000	601628.5088	6.8200
13.8115					
35	5.1500	5.4800	304484.4000	631705.6284	6.9900
14.5020					
36	5.2500	5.5800	309711.6000	662414.7505	7.1100
15.2070					
37	5.3500	5.6800	313632.0000	693581.4134	7.2000
15.9224					
38	5.4500	5.7800	317552.4000	725140.1149	7.2900
16.6469					
39	5.5500	5.8800	321037.2000	757069.1171	7.3700
17.3799					
40	5.6500	5.9800	323650.8000	789303.1065	7.4300
18.1199					
41	5.7500	6.0800	326700.0000	821820.2022	7.5000
18.8664					
42	5.8500	6.1800	330184.8000	854663.9597	7.5800
19.6204					
43	5.9500	6.2800	335847.6000	887964.8454	7.7100
20.3849					
44	6.0500	6.3800	342817.2000	921897.1496	7.8700
21.1638					
45	6.1500	6.4800	350658.0000	956569.8241	8.0500
21.9598					
46	6.2500	6.5800	355449.6000	991874.5801	8.1600
22.7703					
47	6.3500	6.6800	357627.6000	1.02753E+06	8.2100
23.5888					
48	6.4500	6.7800	359370.0000	1.06338E+06	8.2500
24.4118					
49	6.5500	6.8800	361548.0000	1.09942E+06	8.3000
25.2393					
50	6.6500	6.9800	362854.8000	1.13564E+06	8.3300
26.0708					
51	7.6500	7.9800	376358.4000	1.50523E+06	8.6400
34.5552					
52	7.7500	8.0800	378972.0000	1.54299E+06	8.7000
35.4222					
53	7.8500	8.1800	380278.8000	1.58095E+06	8.7300
36.2937					
54	9.2500	9.5800	392475.6000	2.12185E+06	9.0100
48.7111					
55	9.3500	9.6800	393782.4000	2.16117E+06	9.0400
49.6135					
56	9.4500	9.7800	395960.4000	2.20065E+06	9.0900
50.5200					
57	10.4500	10.7800	428630.4000	2.61284E+06	9.8400
59.9825					
58	10.5500	10.8800	432986.4000	2.65592E+06	9.9400

60.9714						
59	10.6500	10.9800	436035.6000	2.69937E+06	10.0100	
61.9689						
60	10.7500	11.0800	438649.2000	2.74310E+06	10.0700	
62.9729						
61	10.8500	11.1800	438649.2000	2.78697E+06	10.0700	
63.9799						
62	11.0500	11.3800	438649.2000	2.87470E+06	10.0700	
65.9939						
63	11.1500	11.4800	438649.2000	2.91856E+06	10.0700	
67.0009						

=====

| Variable storage data for node | N-028

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.3100	0.0000	435.6000	0.0000	0.0100
0.0000					
2	0.8900	1.2000	435.6000	522.7200	0.0100
0.0120					
3	0.9000	1.2100	435.6000	527.0760	0.0100
0.0121					
4	1.0000	1.3100	435.6000	570.6360	0.0100
0.0131					
5	1.1000	1.4100	871.2000	634.7297	0.0200
0.0146					
6	1.2000	1.5100	871.2000	721.8497	0.0200
0.0166					
7	1.3000	1.6100	1306.8000	830.0152	0.0300
0.0191					
8	1.4000	1.7100	1306.8000	960.6952	0.0300
0.0221					
9	1.5000	1.8100	1742.4000	1112.6325	0.0400
0.0255					
10	1.6000	1.9100	2613.6000	1328.9635	0.0600
0.0305					
11	1.7000	2.0100	3484.8000	1632.8380	0.0800
0.0375					
12	1.8000	2.1100	4356.0000	2024.0649	0.1000
0.0465					
13	1.9000	2.2100	5227.2000	2502.5587	0.1200
0.0575					
14	2.0000	2.3100	6534.0000	3089.3991	0.1500
0.0709					
15	2.1000	2.4100	8276.4000	3828.1975	0.1900

0.0879					
16	2.2000	2.5100	10018.8000	4741.5624	0.2300
0.1089					
17	2.3000	2.6100	11325.6000	5808.1044	0.2600
0.1333					
18	2.4000	2.7100	12632.4000	7005.3980	0.2900
0.1608					
19	2.5000	2.8100	13503.6000	8311.9428	0.3100
0.1908					
20	2.6000	2.9100	14810.4000	9727.1258	0.3400
0.2233					
21	2.7000	3.0100	16552.8000	11294.4628	0.3800
0.2593					
22	2.8000	3.1100	17424.0000	12993.0997	0.4000
0.2983					
23	2.9000	3.2100	18730.8000	14800.4278	0.4300
0.3398					
24	3.0000	3.3100	19602.0000	16716.8836	0.4500
0.3838					
25	3.1000	3.4100	20037.6000	18698.8039	0.4600
0.4293					
26	3.2000	3.5100	20908.8000	20745.9490	0.4800
0.4763					
27	3.3000	3.6100	21344.4000	22858.5504	0.4900
0.5248					
28	3.4000	3.7100	22215.6000	25036.3834	0.5100
0.5748					
29	3.5000	3.8100	22651.2000	27279.6658	0.5200
0.6263					
30	3.6000	3.9100	23086.8000	29566.5083	0.5300
0.6788					
31	3.7000	4.0100	23522.4000	31896.9111	0.5400
0.7323					
32	3.8000	4.1100	23958.0000	34270.8740	0.5500
0.7868					
33	3.9000	4.2100	24829.2000	36710.0800	0.5700
0.8427					
34	4.0000	4.3100	25264.8000	39214.7234	0.5800
0.9002					
35	4.1000	4.4100	26571.6000	41806.2429	0.6100
0.9597					
36	4.2000	4.5100	27442.8000	44506.8188	0.6300
1.0217					
37	4.3000	4.6100	28314.0000	47294.5175	0.6500
1.0857					
38	4.4000	4.7100	29185.2000	50169.3387	0.6700
1.1517					
39	4.5000	4.8100	30056.4000	53131.2823	0.6900
1.2197					
40	4.6000	4.9100	30927.6000	56180.3481	0.7100

1.2897					
41	4.7000	5.0100	32234.4000	59338.1912	0.7400
1.3622					
42	4.8000	5.1100	33541.2000	62626.7219	0.7700
1.4377					
43	4.9000	5.2100	35283.6000	66067.5599	0.8100
1.5167					
44	5.0000	5.3100	37026.0000	69682.6538	0.8500
1.5997					
45	5.1000	5.4100	38768.4000	73472.0021	0.8900
1.6867					
46	5.2000	5.5100	40510.8000	77435.6033	0.9300
1.7777					
47	5.3000	5.6100	41817.6000	81551.8092	0.9600
1.8722					
48	5.4000	5.7100	42688.8000	85777.0121	0.9800
1.9692					
49	5.5000	5.8100	43124.4000	90067.6108	0.9900
2.0677					
50	5.6000	5.9100	43560.0000	94401.7692	1.0000
2.1672					
51	5.7000	6.0100	44431.2000	98801.2133	1.0200
2.2682					
52	5.8000	6.1100	45302.4000	103287.7780	1.0400
2.3712					
53	5.9000	6.2100	47044.8000	107904.8178	1.0800
2.4772					
54	6.0000	6.3100	49658.4000	112739.3407	1.1400
2.5881					
55	6.1000	6.4100	53578.8000	117899.9080	1.2300
2.7066					
56	6.2000	6.5100	56628.0000	123409.4898	1.3000
2.8331					
57	6.3000	6.6100	58370.4000	129159.1322	1.3400
2.9651					
58	6.4000	6.7100	60112.8000	135083.0195	1.3800
3.1011					
59	6.5000	6.8100	61419.6000	141159.4616	1.4100
3.2406					
60	6.6000	6.9100	61855.2000	147323.1271	1.4200
3.3821					
61	6.7150	7.0250	62290.8000	154461.4361	1.4300
3.5459					

=====

| Variable storage data for node | N-030

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	-0.0700	0.0000	576734.4000	0.0000	13.2400
0.0000					
2	0.0300	0.1000	577605.6000	57716.4174	13.2600
1.3250					
3	0.1300	0.2000	578912.4000	115541.7268	13.2900
2.6525					
4	0.2300	0.3000	579783.6000	173475.9420	13.3100
3.9825					
5	0.3300	0.4000	580654.8000	231497.2763	13.3300
5.3144					
6	0.4300	0.5000	581961.6000	289627.5028	13.3600
6.6489					
7	0.5300	0.6000	583704.0000	347910.1782	13.4000
7.9869					
8	0.6300	0.7000	585882.0000	406388.8596	13.4500
9.3294					
9	0.7300	0.8000	588931.2000	465128.8663	13.5200
10.6779					
10	0.8300	0.9000	591980.4000	524173.7902	13.5900
12.0334					
11	0.9300	1.0000	595029.6000	583523.6314	13.6600
13.3959					
12	1.0300	1.1000	598950.0000	643221.9072	13.7500
14.7663					
13	1.1300	1.2000	602434.8000	703290.4622	13.8300
16.1453					
14	1.2300	1.3000	606790.8000	763751.0069	13.9300
17.5333					
15	1.3300	1.4000	612018.0000	824690.6506	14.0500
18.9323					
16	1.4300	1.5000	618116.4000	886196.5036	14.1900
20.3443					
17	1.5300	1.6000	624214.8000	948312.1930	14.3300
21.7703					
18	1.6300	1.7000	630313.2000	1.01104E+06	14.4700
23.2102					
19	1.7300	1.8000	637718.4000	1.07444E+06	14.6400
24.6657					
20	1.8300	1.9000	645994.8000	1.13862E+06	14.8300
26.1392					
21	1.9300	2.0000	655142.4000	1.20368E+06	15.0400
27.6327					
22	2.0300	2.1000	665161.2000	1.26969E+06	15.2700
29.1481					
23	2.1300	2.2000	675615.6000	1.33673E+06	15.5100
30.6871					
24	2.2300	2.3000	686941.2000	1.40486E+06	15.7700

32.2511					
25	2.3300	2.4000	699138.0000	1.47416E+06	16.0500
33.8420					
26	2.4300	2.5000	711770.4000	1.54470E+06	16.3400
35.4615					
27	2.5300	2.6000	725274.0000	1.61655E+06	16.6500
37.1109					
28	2.6300	2.7000	738777.6000	1.68975E+06	16.9600
38.7914					
29	2.7300	2.8000	754023.6000	1.76439E+06	17.3100
40.5049					
30	2.8300	2.9000	771012.0000	1.84064E+06	17.7000
42.2553					
31	2.9300	3.0000	786258.0000	1.91850E+06	18.0500
44.0428					
32	3.0300	3.1000	801504.0000	1.99789E+06	18.4000
45.8652					
33	3.1300	3.2000	816314.4000	2.07878E+06	18.7400
47.7222					
34	3.2300	3.3000	830689.2000	2.16113E+06	19.0700
49.6126					
35	3.3300	3.4000	843757.2000	2.24485E+06	19.3700
51.5346					
36	3.4300	3.5000	857696.4000	2.32992E+06	19.6900
53.4875					
37	3.5300	3.6000	871200.0000	2.41636E+06	20.0000
55.4720					
38	3.6300	3.7000	883832.4000	2.50411E+06	20.2900
57.4865					
39	3.7300	3.8000	898207.2000	2.59321E+06	20.6200
59.5319					
40	3.8300	3.9000	911275.2000	2.68368E+06	20.9200
61.6089					
41	3.9300	4.0000	923036.4000	2.77540E+06	21.1900
63.7144					
42	4.0300	4.1000	935233.2000	2.86831E+06	21.4700
65.8473					
43	4.1300	4.2000	946994.4000	2.96242E+06	21.7400
68.0078					
44	4.2300	4.3000	957013.2000	3.05762E+06	21.9700
70.1932					
45	4.3300	4.4000	966160.8000	3.15378E+06	22.1800
72.4007					
46	4.4300	4.5000	974437.2000	3.25080E+06	22.3700
74.6282					
47	4.5300	4.6000	982713.6000	3.34866E+06	22.5600
76.8747					
48	4.6300	4.7000	989683.2000	3.44728E+06	22.7200
79.1386					
49	4.7300	4.8000	996217.2000	3.54657E+06	22.8700

81.4181						
50	4.8300	4.9000	1002751.200	3.64652E+06	23.0200	
83.7126						
51	4.9300	5.0000	1011898.800	3.74725E+06	23.2300	
86.0250						
52	5.0300	5.1000	1020610.800	3.84888E+06	23.4300	
88.3580						
53	5.1300	5.2000	1027144.800	3.95126E+06	23.5800	
90.7085						
54	5.2300	5.3000	1031936.400	4.05421E+06	23.6900	
93.0720						
55	5.3300	5.4000	1035856.800	4.15760E+06	23.7800	
95.4454						
56	5.4300	5.5000	1038906.000	4.26134E+06	23.8500	
97.8269						
57	5.5300	5.6000	1041519.600	4.36536E+06	23.9100	
100.2149						
58	5.6300	5.7000	1044568.800	4.46966E+06	23.9800	
102.6094						
59	5.7300	5.8000	1047182.400	4.57425E+06	24.0400	
105.0103						
60	5.8300	5.9000	1051102.800	4.67916E+06	24.1300	
107.4188						
61	5.9300	6.0000	1055023.200	4.78447E+06	24.2200	
109.8363						
62	6.0300	6.1000	1058943.600	4.89017E+06	24.3100	
112.2628						
63	6.1300	6.2000	1064606.400	4.99634E+06	24.4400	
114.7002						
64	6.2300	6.3000	1072882.800	5.10322E+06	24.6300	
117.1537						
65	6.3300	6.4000	1080288.000	5.21087E+06	24.8000	
119.6252						
66	6.4300	6.5000	1087693.200	5.31927E+06	24.9700	
122.1136						
67	6.5300	6.6000	1100761.200	5.42869E+06	25.2700	
124.6256						
68	6.6300	6.7000	1127768.400	5.54011E+06	25.8900	
127.1835						
69	6.7300	6.8000	1156953.600	5.65435E+06	26.5600	
129.8059						
70	6.8300	6.9000	1174813.200	5.77093E+06	26.9700	
132.4824						
71	6.9300	7.0000	1177426.800	5.88854E+06	27.0300	
135.1823						
72	7.0300	7.1000	1177426.800	6.00629E+06	27.0300	
137.8853						
73	7.1300	7.2000	1177426.800	6.12403E+06	27.0300	
140.5883						
74	7.2300	7.3000	1177426.800	6.24177E+06	27.0300	

143.2913						
75	7.3300	7.4000	1177426.800	6.35951E+06		27.0300
145.9943						
76	7.4300	7.5000	1177426.800	6.47726E+06		27.0300
148.6973						
77	7.5300	7.6000	1177426.800	6.59500E+06		27.0300
151.4003						
78	7.6300	7.7000	1177426.800	6.71274E+06		27.0300
154.1033						
79	7.7300	7.8000	1177426.800	6.83048E+06		27.0300
156.8063						
80	7.8300	7.9000	1177426.800	6.94823E+06		27.0300
159.5093						
81	7.9300	8.0000	1177426.800	7.06597E+06		27.0300
162.2123						
82	8.0300	8.1000	1177426.800	7.18371E+06		27.0300
164.9153						
83	8.1350	8.2050	1177426.800	7.30734E+06		27.0300
167.7535						

=====

| Variable storage data for node | N-043

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.1600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.7600	0.4000	3049.2000	447.6805	0.0700
0.0103					
3	-0.6600	0.5000	4791.6000	836.4491	0.1100
0.0192					
4	-0.5600	0.6000	7840.8000	1461.8373	0.1800
0.0336					
5	-0.4600	0.7000	10890.0000	2394.2037	0.2500
0.0550					
6	-0.3600	0.8000	14810.4000	3674.1980	0.3400
0.0843					
7	-0.2600	0.9000	18730.8000	5347.4096	0.4300
0.1228					
8	-0.1600	1.0000	23086.8000	7434.4771	0.5300
0.1707					
9	-0.0600	1.1000	281833.2000	20287.1374	6.4700
0.4657					
10	0.0400	1.2000	289674.0000	48861.3152	6.6500
1.1217					
11	0.3400	1.5000	311454.0000	139009.8790	7.1500

3.1912					
12	0.4400	1.6000	317988.0000	170481.0990	7.3000
3.9137					
13	0.5400	1.7000	323215.2000	202540.5833	7.4200
4.6497					
14	1.7400	2.9000	365904.0000	615743.2732	8.4000
14.1355					
15	1.8400	3.0000	368517.6000	652463.9084	8.4600
14.9785					
16	1.9400	3.1000	373309.2000	689554.6196	8.5700
15.8300					
17	2.2400	3.4000	385941.6000	803435.8460	8.8600
18.4443					
18	2.3400	3.5000	390297.6000	842247.2142	8.9600
19.3353					
19	2.4400	3.6000	395960.4000	881559.3812	9.0900
20.2378					
20	3.2400	4.4000	443005.2000	1.21697E+06	10.1700
27.9377					
21	3.3400	4.5000	449539.2000	1.26159E+06	10.3200
28.9622					
22	3.4400	4.6000	457815.6000	1.30696E+06	10.5100
30.0037					
23	3.7400	4.9000	479595.6000	1.44756E+06	11.0100
33.2313					
24	3.8400	5.0000	486565.2000	1.49586E+06	11.1700
34.3403					
25	3.9400	5.1000	494841.6000	1.54493E+06	11.3600
35.4668					
26	4.1400	5.3000	513136.8000	1.64572E+06	11.7800
37.7806					
27	4.2400	5.4000	521413.2000	1.69745E+06	11.9700
38.9681					
28	4.3400	5.5000	528382.8000	1.74994E+06	12.1300
40.1731					
29	4.4400	5.6000	533610.0000	1.80304E+06	12.2500
41.3921					
30	4.7400	5.9000	550598.4000	1.96566E+06	12.6400
45.1254					
31	4.8400	6.0000	557132.4000	2.02105E+06	12.7900
46.3969					
32	4.9400	6.1000	565408.8000	2.07717E+06	12.9800
47.6853					
33	5.0400	6.2000	573685.2000	2.13413E+06	13.1700
48.9928					
34	5.1400	6.3000	580219.2000	2.19182E+06	13.3200
50.3173					
35	5.2400	6.4000	585010.8000	2.25008E+06	13.4300
51.6548					
36	5.3400	6.5000	588495.6000	2.30876E+06	13.5100

53.0018						
37	6.0400	7.2000	614631.6000	2.72981E+06		14.1100
62.6679						
38	6.1400	7.3000	619858.8000	2.79154E+06		14.2300
64.0849						
39	6.2400	7.4000	626392.8000	2.85385E+06		14.3800
65.5154						
40	6.3400	7.5000	633362.4000	2.91684E+06		14.5400
66.9613						
41	6.4400	7.6000	644252.4000	2.98072E+06		14.7900
68.4278						
42	6.5400	7.7000	658191.6000	3.04584E+06		15.1100
69.9228						
43	6.6400	7.8000	673002.0000	3.11239E+06		15.4500
71.4507						
44	6.7400	7.9000	693039.6000	3.18069E+06		15.9100
73.0187						
45	6.8400	8.0000	722224.8000	3.25145E+06		16.5800
74.6430						
46	6.9400	8.1000	738777.6000	3.32450E+06		16.9600
76.3200						
47	7.0400	8.2000	741826.8000	3.39853E+06		17.0300
78.0194						
48	7.1400	8.3000	742698.0000	3.47275E+06		17.0500
79.7234						
49	7.4400	8.6000	746182.8000	3.69608E+06		17.1300
84.8504						
50	7.5400	8.7000	747489.6000	3.77077E+06		17.1600
86.5649						
51	7.6400	8.8000	747925.2000	3.84554E+06		17.1700
88.2813						
52	8.3400	9.5000	747925.2000	4.36908E+06		17.1700
100.3003						
53	8.4300	9.5900	747925.2000	4.43640E+06		17.1700
101.8456						

=====

| Variable storage data for node | N-042

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.6300	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.3300	0.3000	2613.6000	290.1067	0.0600
0.0067					
3	-0.2300	0.4000	4356.0000	634.8947	0.1000

0.0146					
4	-0.1300	0.5000	296643.6000	11866.3323	6.8100
0.2724					
5	-0.0300	0.6000	302306.4000	41813.0867	6.9400
0.9599					
6	0.0700	0.7000	308840.4000	72369.5390	7.0900
1.6614					
7	0.1700	0.8000	316681.2000	103644.4871	7.2700
2.3794					
8	0.2700	0.9000	326264.4000	135790.2553	7.4900
3.1173					
9	0.5700	1.2000	357627.6000	238337.0531	8.2100
5.4715					
10	0.6700	1.3000	368517.6000	274642.5890	8.4600
6.3049					
11	0.7700	1.4000	380714.4000	312102.1597	8.7400
7.1649					
12	0.8700	1.5000	392475.6000	350759.7821	9.0100
8.0523					
13	0.9700	1.6000	405543.6000	390658.5597	9.3100
8.9683					
14	1.0700	1.7000	417304.8000	431799.1674	9.5800
9.9127					
15	1.1700	1.8000	430372.8000	474180.9446	9.8800
10.8857					
16	1.2700	1.9000	444747.6000	517934.5593	10.2100
11.8901					
17	1.3700	2.0000	459558.0000	563147.3657	10.5500
12.9281					
18	1.4700	2.1000	476546.4000	609949.5482	10.9400
14.0025					
19	1.5700	2.2000	497019.6000	658623.7733	11.4100
15.1199					
20	1.6700	2.3000	521413.2000	709540.0344	11.9700
16.2888					
21	1.7700	2.4000	552776.4000	763241.3449	12.6900
17.5216					
22	1.8700	2.5000	587624.4000	820251.9387	13.4900
18.8304					
23	1.9700	2.6000	627264.0000	880984.9704	14.4000
20.2246					
24	2.0700	2.7000	670388.4000	945854.9956	15.3900
21.7138					
25	2.1700	2.8000	714384.0000	1.01508E+06	16.4000
23.3031					
26	2.2700	2.9000	756201.6000	1.08860E+06	17.3600
24.9908					
27	2.3700	3.0000	798454.8000	1.16632E+06	18.3300
26.7751					
28	2.4700	3.1000	842014.8000	1.24834E+06	19.3300

28.6578					
29	2.5700	3.2000	889495.2000	1.33490E+06	20.4200
30.6451					
30	2.6700	3.3000	937411.2000	1.42623E+06	21.5200
32.7418					
31	2.7700	3.4000	989683.2000	1.52258E+06	22.7200
34.9535					
32	2.8700	3.5000	1041084.000	1.62410E+06	23.9000
37.2842					
33	2.9700	3.6000	1093791.600	1.73083E+06	25.1100
39.7345					
34	3.0700	3.7000	1151290.800	1.84307E+06	26.4300
42.3112					
35	3.1700	3.8000	1208354.400	1.96104E+06	27.7400
45.0194					
36	3.2700	3.9000	1266289.200	2.08476E+06	29.0700
47.8596					
37	3.3700	4.0000	1327708.800	2.21445E+06	30.4800
50.8368					
38	3.4700	4.1000	1393048.800	2.35047E+06	31.9800
53.9594					
39	3.5700	4.2000	1461873.600	2.49320E+06	33.5600
57.2361					
40	3.6700	4.3000	1529391.600	2.64275E+06	35.1100
60.6693					
41	3.7700	4.4000	1601265.600	2.79927E+06	36.7600
64.2624					
42	3.8700	4.5000	1669219.200	2.96278E+06	38.3200
68.0161					
43	3.9700	4.6000	1735430.400	3.13300E+06	39.8400
71.9238					
44	4.0700	4.7000	1796850.000	3.30960E+06	41.2500
75.9781					
45	4.1700	4.8000	1858705.200	3.49237E+06	42.6700
80.1738					
46	4.2700	4.9000	1916640.000	3.68113E+06	44.0000
84.5071					
47	4.3700	5.0000	1972832.400	3.87560E+06	45.2900
88.9714					
48	4.4700	5.1000	2023362.000	4.07540E+06	46.4500
93.5583					
49	4.5700	5.2000	2070842.400	4.28010E+06	47.5400
98.2576					
50	4.6700	5.3000	2115709.200	4.48942E+06	48.5700
103.0630					
51	4.7700	5.4000	2158833.600	4.70314E+06	49.5600
107.9693					
52	4.8700	5.5000	2199780.000	4.92107E+06	50.5000
112.9722					
53	4.9700	5.6000	2235063.600	5.14281E+06	51.3100

118.0626					
54	5.0700	5.7000	2268169.200	5.36796E+06	52.0700
123.2315					
55	5.1700	5.8000	2297354.400	5.59624E+06	52.7400
128.4719					
56	5.2700	5.9000	2324361.600	5.82732E+06	53.3600
133.7768					
57	5.3700	6.0000	2349626.400	6.06101E+06	53.9400
139.1418					
58	5.4700	6.1000	2372713.200	6.29713E+06	54.4700
144.5622					
59	5.5700	6.2000	2393186.400	6.53542E+06	54.9400
150.0326					
60	5.6700	6.3000	2410174.800	6.77559E+06	55.3300
155.5460					
61	5.7700	6.4000	2427598.800	7.01747E+06	55.7300
161.0990					
62	5.8700	6.5000	2441973.600	7.26095E+06	56.0600
166.6884					
63	5.9700	6.6000	2457219.600	7.50590E+06	56.4100
172.3118					
64	6.0700	6.7000	2471594.400	7.75234E+06	56.7400
177.9693					
65	6.1700	6.8000	2488582.800	8.00035E+06	57.1300
183.6627					
66	6.2700	6.9000	2506878.000	8.25012E+06	57.5500
189.3966					
67	6.3700	7.0000	2524737.600	8.50170E+06	57.9600
195.1721					
68	6.4700	7.1000	2543032.800	8.75508E+06	58.3800
200.9890					
69	6.5700	7.2000	2572218.000	9.01084E+06	59.0500
206.8604					
70	6.6700	7.3000	2613600.000	9.27012E+06	60.0000
212.8128					
71	6.7700	7.4000	2649319.200	9.53327E+06	60.8200
218.8537					
72	6.8700	7.5000	2665436.400	9.79900E+06	61.1900
224.9541					
73	6.9700	7.6000	2671970.400	10.06587E+06	61.3400
231.0805					
74	7.0700	7.7000	2674584.000	10.33319E+06	61.4000
237.2175					
75	7.1700	7.8000	2677197.600	10.60078E+06	61.4600
243.3604					
76	7.2700	7.9000	2678504.400	10.86856E+06	61.4900
249.5079					
77	8.9700	9.6000	2682860.400	15.42568E+06	61.5900
354.1248					
78	9.0500	9.6800	2682860.400	15.64031E+06	61.5900

359.0520
 79 9.0500 9.6800 2682860.400 15.64031E+06 61.5900
 359.0520

=====

| Variable storage data for node | N-031

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-0.8500	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.5500	0.3000	2613.6000	290.1067	0.0600
0.0067					
3	-0.4500	0.4000	3920.4000	614.6032	0.0900
0.0141					
4	-0.3500	0.5000	6534.0000	1131.7852	0.1500
0.0260					
5	-0.2500	0.6000	10454.4000	1973.5544	0.2400
0.0453					
6	-0.1500	0.7000	16117.2000	3291.9475	0.3700
0.0756					
7	-0.0500	0.8000	564973.2000	25842.2101	12.9700
0.5933					
8	0.0500	0.9000	576298.8000	82904.3028	13.2300
1.9032					
9	0.1500	1.0000	589366.8000	141185.7791	13.5300
3.2412					
10	0.2500	1.1000	601563.6000	200730.6627	13.8100
4.6081					
11	0.3500	1.2000	615938.4000	261603.7396	14.1400
6.0056					
12	0.6500	1.5000	660805.2000	453073.9354	15.1700
10.4011					
13	0.7500	1.6000	676486.8000	519936.3343	15.5300
11.9361					
14	0.8500	1.7000	690861.6000	588301.8113	15.8600
13.5056					
15	0.9500	1.8000	706543.2000	658169.8861	16.2200
15.1095					
16	1.0500	1.9000	723531.6000	729671.2292	16.6100
16.7509					
17	1.1500	2.0000	739213.2000	802806.3368	16.9700
18.4299					
18	1.2500	2.1000	755766.0000	877553.0220	17.3500
20.1458					
19	1.6500	2.5000	817621.2000	1.19215E+06	18.7700

27.3679					
20	1.7500	2.6000	832867.2000	1.27467E+06	19.1200
29.2624					
21	1.8500	2.7000	846370.8000	1.35863E+06	19.4300
31.1898					
22	2.4500	3.3000	923907.6000	1.88954E+06	21.2100
43.3778					
23	2.5500	3.4000	935668.8000	1.98251E+06	21.4800
45.5123					
24	2.6500	3.5000	945687.6000	2.07658E+06	21.7100
47.6717					
25	2.7500	3.6000	955706.4000	2.17165E+06	21.9400
49.8542					
26	2.8500	3.7000	965725.2000	2.26772E+06	22.1700
52.0597					
27	2.9500	3.8000	974872.8000	2.36475E+06	22.3800
54.2871					
28	3.1500	4.0000	991425.6000	2.56137E+06	22.7600
58.8010					
29	3.2500	4.1000	999266.4000	2.66091E+06	22.9400
61.0860					
30	3.3500	4.2000	1006236.000	2.76118E+06	23.1000
63.3880					
31	3.4500	4.3000	1013205.600	2.86215E+06	23.2600
65.7060					
32	3.5500	4.4000	1018432.800	2.96373E+06	23.3800
68.0379					
33	4.2500	5.1000	1045440.000	3.68606E+06	24.0000
84.6203					
34	4.3500	5.2000	1048489.200	3.79076E+06	24.0700
87.0238					
35	4.4500	5.3000	1050667.200	3.89571E+06	24.1200
89.4332					
36	4.6500	5.5000	1055894.400	4.10637E+06	24.2400
94.2692					
37	4.7500	5.6000	1058508.000	4.21209E+06	24.3000
96.6962					
38	4.8500	5.7000	1060250.400	4.31802E+06	24.3400
99.1281					
39	5.5500	6.4000	1070269.200	5.06369E+06	24.5700
116.2464					
40	5.6500	6.5000	1071576.000	5.17078E+06	24.6000
118.7049					
41	5.7500	6.6000	1072011.600	5.27796E+06	24.6100
121.1654					
42	10.2500	11.1000	1078545.600	10.11666E+06	24.7600
232.2466					
43	10.3600	11.2100	1078545.600	10.23530E+06	24.7600
234.9702					

=====

| Variable storage data for node | N-040

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.4800	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.3800	0.1000	1742.4000	66.0639	0.0400
0.0015					
3	-1.2800	0.2000	3920.4000	341.9411	0.0900
0.0078					
4	-1.1800	0.3000	7405.2000	899.0580	0.1700
0.0206					
5	-1.0800	0.4000	13068.0000	1909.3957	0.3000
0.0438					
6	-0.9800	0.5000	20908.8000	3592.9341	0.4800
0.0825					
7	-0.8800	0.6000	30492.0000	6147.9277	0.7000
0.1411					
8	-0.7800	0.7000	43124.4000	9810.5120	0.9900
0.2252					
9	-0.6800	0.8000	58806.0000	14886.7563	1.3500
0.3418					
10	-0.5800	0.9000	77101.2000	21661.4312	1.7700
0.4973					
11	-0.4800	1.0000	95832.0000	30291.0486	2.2000
0.6954					
12	-0.3800	1.1000	121532.4000	41133.7483	2.7900
0.9443					
13	-0.2800	1.2000	152460.0000	54804.0464	3.5000
1.2581					
14	-0.1800	1.3000	189050.4000	71846.6317	4.3400
1.6494					
15	-0.0800	1.4000	405979.2000	100915.2897	9.3200
2.3167					
16	0.0200	1.5000	475239.6000	144930.3559	10.9100
3.3271					
17	0.1200	1.6000	551469.6000	196218.0725	12.6600
4.5045					
18	0.2200	1.7000	645559.2000	256007.1883	14.8200
5.8771					
19	0.3200	1.8000	764913.6000	326445.8079	17.5600
7.4942					
20	0.4200	1.9000	921729.6000	410655.3620	21.1600
9.4273					
21	0.5200	2.0000	1115571.600	512365.3607	25.6100

11.7623						
22	0.6200	2.1000	1352973.600	635600.6868	31.0600	
14.5914						
23	0.7200	2.2000	1643083.200	785167.3844	37.7200	
18.0250						
24	0.8200	2.3000	1984593.600	966280.9014	45.5600	
22.1828						
25	0.9200	2.4000	2365308.000	1.18350E+06	54.3000	
27.1693						
26	1.0200	2.5000	2765624.400	1.43978E+06	63.4900	
33.0528						
27	1.1200	2.6000	3170296.800	1.73634E+06	72.7800	
39.8609						
28	1.2200	2.7000	3572355.600	2.07327E+06	82.0100	
47.5958						
29	1.3200	2.8000	3982690.800	2.45083E+06	91.4300	
56.2634						
30	1.4200	2.9000	4382136.000	2.86891E+06	100.6000	
65.8612						
31	1.5200	3.0000	4774611.600	3.32660E+06	109.6100	
76.3683						
32	1.6200	3.1000	5159682.000	3.82319E+06	118.4500	
87.7684						
33	1.7200	3.2000	5528635.200	4.35749E+06	126.9200	
100.0343						
34	1.8200	3.3000	5881035.600	4.92788E+06	135.0100	
113.1286						
35	1.9200	3.4000	6224288.400	5.53306E+06	142.8900	
127.0216						
36	2.0200	3.5000	6554473.200	6.17192E+06	150.4700	
141.6878						
37	2.1200	3.6000	6880302.000	6.84359E+06	157.9500	
157.1071						
38	2.2200	3.7000	7198725.600	7.54747E+06	165.2600	
173.2661						
39	2.3200	3.8000	7517584.800	8.28322E+06	172.5800	
190.1566						
40	2.4200	3.9000	7839493.200	9.05101E+06	179.9700	
207.7826						
41	2.5200	4.0000	8160530.400	9.85095E+06	187.3400	
226.1467						
42	2.6200	4.1000	8481132.000	10.68297E+06	194.7000	
245.2474						
43	2.7200	4.2000	8806089.600	11.54728E+06	202.1600	
265.0890						
44	2.8200	4.3000	9135838.800	12.44431E+06	209.7300	
285.6821						
45	2.9200	4.4000	9469508.400	13.37452E+06	217.3900	
307.0368						
46	3.0200	4.5000	9798822.000	14.33788E+06	224.9500	

329.1525						
47	3.1200	4.6000	10130749.20	15.33430E+06	232.5700	
352.0272						
48	3.2200	4.7000	10472259.60	16.36440E+06	240.4100	
375.6749						
49	3.3200	4.8000	10814641.20	17.42869E+06	248.2700	
400.1076						
50	3.4200	4.9000	11150924.40	18.52691E+06	255.9900	
425.3193						
51	3.5200	5.0000	11479366.80	19.65837E+06	263.5300	
451.2942						
52	3.6200	5.1000	11789514.00	20.82177E+06	270.6500	
478.0021						
53	3.7200	5.2000	12074832.00	22.01495E+06	277.2000	
505.3937						
54	3.8200	5.3000	12334449.60	23.23538E+06	283.1600	
533.4109						
55	3.9200	5.4000	12567060.00	24.48042E+06	288.5000	
561.9932						
56	4.0200	5.5000	12784860.00	25.74799E+06	293.5000	
591.0925						
57	4.1200	5.6000	12979137.60	27.03616E+06	297.9600	
620.6649						
58	4.2200	5.7000	13152070.80	28.34270E+06	301.9300	
650.6589						
59	4.3200	5.8000	13300174.80	29.66529E+06	305.3300	
681.0215						
60	4.4200	5.9000	13431726.00	31.00187E+06	308.3500	
711.7050						
61	4.5200	6.0000	13551516.00	32.35101E+06	311.1000	
742.6771						
62	4.6200	6.1000	13659544.80	33.71155E+06	313.5800	
773.9107						
63	4.7200	6.2000	13760168.40	35.08252E+06	315.8900	
805.3838						
64	4.8200	6.3000	13853822.40	36.46320E+06	318.0400	
837.0800						
65	4.9200	6.4000	13940942.40	37.85292E+06	320.0400	
868.9836						
66	5.0200	6.5000	14024577.60	39.25118E+06	321.9600	
901.0832						
67	5.1200	6.6000	14099500.80	40.65737E+06	323.6800	
933.3649						
68	5.2200	6.7000	14174859.60	42.07108E+06	325.4100	
965.8190						
69	5.3200	6.8000	14246733.60	43.49214E+06	327.0600	
998.4421						
70	5.4200	6.9000	14311638.00	44.92004E+06	328.5500	
1031.2223						
71	5.5200	7.0000	14376542.40	46.35444E+06	330.0400	

1064.1514						
72	5.6200	7.1000	14433606.00	47.79493E+06	331.3500	
1097.2206						
73	5.7200	7.2000	14482393.20	49.24071E+06	332.4700	
1130.4112						
74	5.8200	7.3000	14527260.00	50.69118E+06	333.5000	
1163.7094						
75	5.9200	7.4000	14564721.60	52.14576E+06	334.3600	
1197.1020						
76	6.0200	7.5000	14596084.80	53.60379E+06	335.0800	
1230.5737						
77	6.1200	7.6000	14623963.20	55.06478E+06	335.7200	
1264.1133						
78	6.2200	7.7000	14648356.80	56.52838E+06	336.2800	
1297.7130						
79	6.3200	7.8000	14667958.80	57.99418E+06	336.7300	
1331.3632						
80	6.4200	7.9000	14684947.20	59.46181E+06	337.1200	
1365.0553						
81	6.5200	8.0000	14699757.60	60.93103E+06	337.4600	
1398.7840						
82	6.6200	8.1000	14713696.80	62.40169E+06	337.7800	
1432.5456						
83	6.7200	8.2000	14727636.00	63.87374E+06	338.1000	
1466.3393						
84	6.8200	8.3000	14743753.20	65.34729E+06	338.4700	
1500.1675						
85	6.9200	8.4000	14762919.60	66.82261E+06	338.9100	
1534.0361						
86	7.0200	8.5000	14783392.80	68.29991E+06	339.3800	
1567.9503						
87	7.1200	8.6000	14803430.40	69.77924E+06	339.8400	
1601.9109						
88	7.2200	8.7000	14821290.00	71.26046E+06	340.2500	
1635.9151						
89	7.3200	8.8000	14833051.20	72.74316E+06	340.5200	
1669.9533						
90	7.4200	8.9000	14841327.60	74.22687E+06	340.7100	
1704.0144						
91	7.6200	9.1000	14855702.40	77.19654E+06	341.0400	
1772.1887						
92	7.7200	9.2000	14862672.00	78.68245E+06	341.2000	
1806.3004						
93	7.8200	9.3000	14873562.00	80.16924E+06	341.4500	
1840.4326						
94	7.9200	9.4000	14878789.20	81.65684E+06	341.5700	
1874.5832						
95	8.0200	9.5000	14881402.80	83.14484E+06	341.6300	
1908.7429						
96	8.1200	9.6000	14882709.60	84.63303E+06	341.6600	


```

1942.9070
   97      8.2200   9.7000  14883145.20   86.12131E+06   341.6700
1977.0732
   98     10.7200  12.2000  14884452.00  123.33043E+06   341.7000
2831.2771
   99     10.8400  12.3200  14884452.00  125.11657E+06   341.7000
2872.2811

```

```

*=====
| Variable storage data for node | N0620
*=====

```

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.6000	0.0000	19602.0000	0.0000	0.4500
0.0000					
2	4.7000	5.3000	29185.2000	128445.2176	0.6700
2.9487					
3	5.0000	5.6000	30492.0000	137395.9926	0.7000
3.1542					

```

*=====
| Variable storage data for node | N0900
*=====

```

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-3.0000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.1200	3.1200	26.1360	81.5443	0.0006
0.0019					
3	0.1300	3.1300	435.6000	83.4391	0.0100
0.0019					
4	5.0000	8.0000	435.6000	2204.8111	0.0100
0.0506					

```

*=====
| Variable storage data for node | N-009mh
*=====

```

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====

```

=====
      1      0.0000      0.0000      43.5600      0.0000      0.0010
0.0000
      2      8.0000      8.0000      43.5600      348.4800      0.0010
0.0080

```

```

*=====*
| Variable storage data for node | N0205
*=====*

```

```

      Data      Elevation      Depth      Area      Volume      Area
Volume
Point          ft          ft          ft^2          ft^3          acres
ac-ft
=====

```

```

=====
      1      -3.5000      0.0000      26.1360      0.0000      0.0006
0.0000
      2      -0.2100      3.2900      26.1360      85.9874      0.0006
0.0020
      3      -0.2000      3.3000      21780.0000      161.1887      0.5000
0.0037
      4      4.0000      7.5000      65340.0000      174941.1342      1.5000
4.0161

```

```

*=====*
| Variable storage data for node | N0386
*=====*

```

```

      Data      Elevation      Depth      Area      Volume      Area
Volume
Point          ft          ft          ft^2          ft^3          acres
ac-ft
=====

```

```

=====
      1      -1.0900      0.0000      26.1360      0.0000      0.0006
0.0000
      2      0.4900      1.5800      26.1360      41.2949      0.0006
0.0009
      3      0.5000      1.5900      435.6000      43.1896      0.0100
0.0010
      4      7.0000      8.0900      4356.0000      13409.4136      0.1000
0.3078

```

```

*=====*
| Variable storage data for node | N0388
*=====*

```

```

      Data      Elevation      Depth      Area      Volume      Area
Volume
Point          ft          ft          ft^2          ft^3          acres
ac-ft
=====

```

```

=====
  1      -1.0900   0.0000   435.6000         0.0000         0.0100
0.0000
  2       7.0000   8.0900  4356.0000      16635.8080         0.1000
0.3819

```

```

*=====*
| Variable storage data for node | N0775
*=====*

```

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
1	-0.6500	0.0000	435.6000	0.0000	0.0100
0.0000					
2	-0.4000	0.2500	871.2000	160.2343	0.0200
0.0037					
3	-0.1600	0.4900	453459.6000	38096.3962	10.4100
0.8746					
4	0.0900	0.7400	466963.2000	153143.9682	10.7200
3.5157					
5	0.3300	0.9800	512701.2000	270659.7899	11.7700
6.2135					
6	0.5800	1.2300	592851.6000	408731.2925	13.6100
9.3832					
7	0.8200	1.4700	680842.8000	561451.3732	15.6300
12.8891					
8	1.0700	1.7200	784080.0000	744413.1338	18.0000
17.0894					
9	1.3100	1.9600	887317.2000	944851.1384	20.3700
21.6908					
10	1.5600	2.2100	977922.0000	1.17791E+06	22.4500
27.0411					
11	1.8000	2.4500	1062428.400	1.42268E+06	24.3900
32.6603					
12	2.0500	2.7000	1152597.600	1.69948E+06	26.4600
39.0147					
13	2.2900	2.9400	1243202.400	1.98691E+06	28.5400
45.6131					
14	2.5400	3.1900	1321610.400	2.30745E+06	30.3400
52.9718					
15	2.7800	3.4300	1387386.000	2.63250E+06	31.8500
60.4338					
16	3.0300	3.6800	1440964.800	2.98602E+06	33.0800
68.5495					
17	3.2700	3.9200	1491058.800	3.33784E+06	34.2300
76.6262					
18	3.5200	4.1700	1538974.800	3.71657E+06	35.3300

85.3208						
19	3.7600	4.4100	1589504.400	4.09197E+06		36.4900
93.9387						
20	4.0100	4.6600	1630886.400	4.49451E+06		37.4400
103.1796						
21	4.2500	4.9000	1671832.800	4.89082E+06		38.3800
112.2777						
22	4.5000	5.1500	1704067.200	5.31279E+06		39.1200
121.9650						
23	4.7400	5.3900	1730638.800	5.72495E+06		39.7300
131.4268						
24	4.9900	5.6400	1745884.800	6.15951E+06		40.0800
141.4029						
25	5.2300	5.8800	1751547.600	6.57920E+06		40.2100
151.0376						
26	5.4800	6.1300	1753290.000	7.01730E+06		40.2500
161.0950						
27	5.7200	6.3700	1754161.200	7.43819E+06		40.2700
170.7573						
28	5.9700	6.6200	1754596.800	7.87678E+06		40.2800
180.8260						
29	6.2100	6.8600	1755032.400	8.29793E+06		40.2900
190.4943						
30	6.4600	7.1100	1755032.400	8.73669E+06		40.2900
200.5668						

=====

| Variable storage data for node | N2040

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.1000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.7000	0.4000	1149.9840	179.9297	0.0264
0.0041					
3	-0.6000	0.5000	2325.0150	350.2665	0.0534
0.0080					
4	-0.5000	0.6000	6249.9888	763.1624	0.1435
0.0175					
5	-0.4000	0.7000	14499.9914	1772.1418	0.3329
0.0407					
6	-0.3000	0.8000	34699.9831	4159.8168	0.7966
0.0955					
7	-0.2000	0.9000	79649.9827	9723.8387	1.8285
0.2232					
8	-0.1000	1.0000	158400.0158	21402.8371	3.6364

0.4913					
9	0.0000	1.1000	352375.0045	46303.5733	8.0894
1.0630					
10	0.1000	1.2000	551849.8788	91143.0890	12.6687
2.0924					
11	0.2000	1.3000	822449.8260	159408.9926	18.8808
3.6595					
12	0.3000	1.4000	1158074.834	257956.8216	26.5857
5.9219					
13	0.4000	1.5000	1527049.814	391787.1813	35.0562
8.9942					
14	0.5000	1.6000	1882924.996	561973.8708	43.2260
12.9011					
15	0.6000	1.7000	2228750.014	767312.7488	51.1651
17.6151					
16	0.7000	1.8000	2560999.993	1.00661E+06	58.7925
23.1085					
17	0.8000	1.9000	2909799.724	1.27996E+06	66.7998
29.3838					
18	0.9000	2.0000	3290849.971	1.58979E+06	75.5475
36.4966					
19	1.0000	2.1000	3702624.829	1.93926E+06	85.0006
44.5193					
20	1.1000	2.2000	4128924.769	2.33064E+06	94.7871
53.5041					
21	1.2000	2.3000	4569622.596	2.76538E+06	104.9041
63.4843					
22	1.3000	2.4000	5023922.904	3.24487E+06	115.3334
74.4920					
23	1.4000	2.5000	5496448.716	3.77071E+06	126.1811
86.5635					
24	1.5000	2.6000	5976249.048	4.34417E+06	137.1958
99.7284					
25	1.6000	2.7000	6468472.692	4.96624E+06	148.4957
114.0091					
26	1.7000	2.8000	6978921.840	5.63844E+06	160.2140
129.4407					
27	1.8000	2.9000	7510998.528	6.36276E+06	172.4288
146.0689					
28	1.9000	3.0000	8062472.484	7.14127E+06	185.0889
163.9409					
29	2.0000	3.1000	8620197.300	7.97524E+06	197.8925
183.0862					
30	2.1000	3.2000	9165498.804	8.86437E+06	210.4109
203.4980					
31	2.2000	3.3000	9670398.408	9.80604E+06	222.0018
225.1158					
32	2.3000	3.4000	10103672.30	10.79466E+06	231.9484
247.8113					
33	2.4000	3.5000	10462397.62	11.82290E+06	240.1836

271.4164						
34	2.5000	3.6000	10742449.21	12.88310E+06	246.6127	
295.7553						
35	2.6000	3.7000	10961473.25	13.96827E+06	251.6408	
320.6673						
36	2.7000	3.8000	11123921.56	15.07252E+06	255.3701	
346.0174						
37	2.8000	3.9000	11241646.81	16.19078E+06	258.0727	
371.6891						
38	2.9000	4.0000	11332848.38	17.31949E+06	260.1664	
397.6008						
39	3.0000	4.1000	11401198.38	18.45618E+06	261.7355	
423.6956						
40	3.1000	4.2000	11452324.75	19.59884E+06	262.9092	
449.9275						
41	3.2000	4.3000	11492373.82	20.74606E+06	263.8286	
476.2641						
42	3.3000	4.4000	11526298.34	21.89699E+06	264.6074	
502.6856						
43	3.4000	4.5000	11551946.47	23.05089E+06	265.1962	
529.1756						
44	3.5000	4.6000	11572999.02	24.20712E+06	265.6795	
555.7191						
45	3.6000	4.7000	11590470.94	25.36528E+06	266.0806	
582.3068						
46	3.7000	4.8000	11604549.53	26.52502E+06	266.4038	
608.9308						
47	3.8000	4.9000	11615247.86	27.68600E+06	266.6494	
635.5832						
48	3.9000	5.0000	11624473.87	28.84798E+06	266.8612	
662.2584						
49	4.0000	5.1000	11632898.38	30.01083E+06	267.0546	
688.9539						
50	4.1000	5.2000	11639724.23	31.17445E+06	267.2113	
715.6670						
51	4.2000	5.3000	11645347.82	32.33869E+06	267.3404	
742.3943						
52	4.3000	5.4000	11649873.71	33.50344E+06	267.4443	
769.1332						
53	4.4000	5.5000	11654721.94	34.66866E+06	267.5556	
795.8830						
54	4.5000	5.6000	11658820.93	35.83433E+06	267.6497	
822.6430						
55	4.6000	5.7000	11661748.16	37.00034E+06	267.7169	
849.4110						
56	4.7000	5.8000	11664122.18	38.16663E+06	267.7714	
876.1852						
57	4.8000	5.9000	11665398.49	39.33309E+06	267.8007	
902.9635						
58	5.8000	6.9000	11669497.49	51.00042E+06	267.8948	

1170.8086
 59 5.9300 7.0300 11669523.62 52.51744E+06 267.8954
 1205.6346

=====

| Variable storage data for node | N2380

=====

Data Volume Point ac-ft =====	Elevation ft =====	Depth ft =====	Area ft^2 =====	Volume ft^3 =====	Area acres =====
1	-1.8100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.4100	0.4000	1950.0070	293.5835	0.0448
0.0067					
3	-1.3100	0.5000	3850.0070	578.2474	0.0884
0.0133					
4	-1.2100	0.6000	7075.0152	1116.3790	0.1624
0.0256					
5	-1.1100	0.7000	11425.0039	2032.7260	0.2623
0.0467					
6	-1.0100	0.8000	16525.0087	3422.3921	0.3794
0.0786					
7	-0.9100	0.9000	23274.9792	5402.7623	0.5343
0.1240					
8	-0.8100	1.0000	34124.9911	8255.4858	0.7834
0.1895					
9	-0.7100	1.1000	48250.0181	12353.8610	1.1077
0.2836					
10	-0.6100	1.2000	67875.0178	18132.2164	1.5582
0.4163					
11	-0.5100	1.3000	92674.9890	26127.5205	2.1275
0.5998					
12	-0.4100	1.4000	124100.0006	36927.9975	2.8489
0.8478					
13	-0.3100	1.5000	172174.9946	51676.1588	3.9526
1.1863					
14	-0.2100	1.6000	229499.9982	71691.1815	5.2686
1.6458					
15	-0.1100	1.7000	298925.0114	98035.8282	6.8624
2.2506					
16	-0.0100	1.8000	375775.0009	131697.3091	8.6266
3.0234					
17	0.0900	1.9000	466174.7640	173713.2578	10.7019
3.9879					
18	0.1900	2.0000	547299.6012	224332.2684	12.5643
5.1500					
19	0.2900	2.1000	626799.6504	282991.7340	14.3893

6.4966						
20	0.3900	2.2000	701374.8060	349364.8714	16.1014	
8.0203						
21	0.4900	2.3000	770074.5888	422909.8620	17.6785	
9.7087						
22	0.5900	2.4000	831449.7576	502965.6709	19.0875	
11.5465						
23	0.6900	2.5000	882599.6520	588654.5617	20.2617	
13.5136						
24	0.7900	2.6000	922574.6640	678904.9972	21.1794	
15.5855						
25	0.8900	2.7000	956825.0208	772868.8398	21.9657	
17.7426						
26	0.9900	2.8000	987849.7596	870097.4816	22.6779	
19.9747						
27	1.0900	2.9000	1020899.603	970529.4137	23.4366	
22.2803						
28	1.1900	3.0000	1056924.594	1.07441E+06	24.2637	
24.6652						
29	1.2900	3.1000	1094424.962	1.18198E+06	25.1245	
27.1344						
30	1.3900	3.2000	1133174.632	1.29335E+06	26.0141	
29.6912						
31	1.4900	3.3000	1176324.732	1.40882E+06	27.0047	
32.3420						
32	1.5900	3.4000	1218699.900	1.52856E+06	27.9775	
35.0909						
33	1.6900	3.5000	1264724.960	1.65272E+06	29.0341	
37.9413						
34	1.8900	3.7000	1356899.663	1.91483E+06	31.1501	
43.9584						
35	1.9900	3.8000	1402500.013	2.05279E+06	32.1970	
47.1256						
36	2.0900	3.9000	1450899.965	2.19545E+06	33.3081	
50.4006						
37	2.1900	4.0000	1495699.682	2.34278E+06	34.3365	
53.7827						
38	2.2900	4.1000	1537049.884	2.49441E+06	35.2858	
57.2637						
39	2.3900	4.2000	1575499.860	2.65003E+06	36.1685	
60.8363						
40	2.4900	4.3000	1611074.876	2.80935E+06	36.9852	
64.4939						
41	2.5900	4.4000	1647374.731	2.97227E+06	37.8185	
68.2339						
42	2.6900	4.5000	1681749.670	3.13872E+06	38.6077	
72.0551						
43	2.7900	4.6000	1713899.999	3.30850E+06	39.3457	
75.9527						
44	2.8900	4.7000	1745674.841	3.48147E+06	40.0752	

79.9236						
45	2.9900	4.8000	1776749.674	3.65759E+06	40.7886	
83.9667						
46	3.0900	4.9000	1808749.721	3.83686E+06	41.5232	
88.0822						
47	3.1900	5.0000	1840249.699	4.01931E+06	42.2463	
92.2706						
48	3.2900	5.1000	1875299.818	4.20508E+06	43.0510	
96.5354						
49	3.3900	5.2000	1911774.784	4.39443E+06	43.8883	
100.8822						
50	3.4900	5.3000	1950524.888	4.58754E+06	44.7779	
105.3154						
51	3.5900	5.4000	1990799.593	4.78460E+06	45.7025	
109.8393						
52	3.6900	5.5000	2033924.864	4.98583E+06	46.6925	
114.4589						
53	3.7900	5.6000	2078999.881	5.19147E+06	47.7273	
119.1798						
54	3.8900	5.7000	2125424.822	5.40169E+06	48.7930	
124.0056						
55	3.9900	5.8000	2170649.686	5.61648E+06	49.8313	
128.9367						
56	4.0900	5.9000	2216924.780	5.83586E+06	50.8936	
133.9728						
57	4.1900	6.0000	2260950.001	6.05974E+06	51.9043	
139.1126						
58	4.2900	6.1000	2303524.674	6.28796E+06	52.8817	
144.3517						
59	4.3900	6.2000	2343974.926	6.52033E+06	53.8103	
149.6862						
60	4.4900	6.3000	2379624.865	6.75651E+06	54.6287	
155.1081						
61	4.5900	6.4000	2414149.650	6.99619E+06	55.4213	
160.6104						
62	4.6900	6.5000	2449149.674	7.23935E+06	56.2247	
166.1926						
63	4.7900	6.6000	2482149.859	7.48591E+06	56.9823	
171.8529						
64	4.8900	6.7000	2513274.786	7.73568E+06	57.6968	
177.5868						
65	4.9900	6.8000	2542549.720	7.98847E+06	58.3689	
183.3900						
66	5.0900	6.9000	2570474.729	8.24411E+06	59.0100	
189.2588						
67	5.1900	7.0000	2596024.847	8.50244E+06	59.5965	
195.1891						
68	5.2900	7.1000	2621449.948	8.76331E+06	60.1802	
201.1778						
69	5.3900	7.2000	2644099.841	9.02658E+06	60.7002	

207.2218					
70	5.4900	7.3000	2665324.886	9.29205E+06	61.1874
213.3161					
71	5.5900	7.4000	2685499.700	9.55959E+06	61.6506
219.4579					
72	5.6900	7.5000	2703774.863	9.82905E+06	62.0701
225.6438					
73	5.7900	7.6000	2721624.880	10.10031E+06	62.4799
231.8713					
74	5.8900	7.7000	2739674.837	10.37337E+06	62.8943
238.1399					
75	5.9900	7.8000	2761574.627	10.64843E+06	63.3970
244.4544					
76	6.0900	7.9000	2789624.653	10.92599E+06	64.0410
250.8262					
77	6.1900	8.0000	2816574.790	11.20630E+06	64.6597
257.2611					
78	6.2900	8.1000	2835350.021	11.48889E+06	65.0907
263.7486					
79	6.3900	8.2000	2847099.895	11.77301E+06	65.3604
270.2711					
80	6.4900	8.3000	2855424.647	12.05813E+06	65.5515
276.8166					
81	6.5900	8.4000	2862324.986	12.34402E+06	65.7099
283.3796					
82	6.6900	8.5000	2868474.787	12.63055E+06	65.8511
289.9576					
83	6.7900	8.6000	2873225.005	12.91763E+06	65.9602
296.5481					
84	19.9900	21.8000	2986074.590	51.58623E+06	68.5508
1184.2570					
85	20.0700	21.8800	2986174.778	51.82512E+06	68.5531
1189.7411					

=====

| Variable storage data for node | N0155

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.1400	0.0000	4.3560	0.0000	0.0001
0.0000					
2	-0.0900	0.0500	435.6000	8.0585	0.0100
0.0002					
3	0.0100	0.1500	871.2000	72.1523	0.0200
0.0017					
4	0.1100	0.2500	1306.8000	180.3178	0.0300

0.0041					
5	0.2100	0.3500	1742.4000	332.2550	0.0400
0.0076					
6	0.3100	0.4500	2178.0000	527.8685	0.0500
0.0121					
7	0.4100	0.5500	2613.6000	767.1154	0.0600
0.0176					
8	0.5100	0.6500	3484.8000	1070.9899	0.0800
0.0246					
9	0.6100	0.7500	3920.4000	1441.0324	0.0900
0.0331					
10	0.7100	0.8500	4356.0000	1854.6571	0.1000
0.0426					
11	0.8100	0.9500	4791.6000	2311.8596	0.1100
0.0531					
12	0.9100	1.0500	5662.8000	2833.9683	0.1300
0.0651					
13	1.0100	1.1500	6534.0000	3443.2830	0.1500
0.0790					
14	1.1100	1.2500	7405.2000	4139.7818	0.1700
0.0950					
15	1.2100	1.3500	8276.4000	4923.4504	0.1900
0.1130					
16	1.3100	1.4500	9583.2000	5815.6235	0.2200
0.1335					
17	1.4100	1.5500	10454.4000	6817.1777	0.2400
0.1565					
18	1.5100	1.6500	11325.6000	7905.8763	0.2600
0.1815					
19	1.6100	1.7500	12632.4000	9103.1699	0.2900
0.2090					
20	1.7100	1.8500	13939.2000	10431.2007	0.3200
0.2395					
21	1.8100	1.9500	15246.0000	11889.9583	0.3500
0.2730					
22	1.9100	2.0500	16552.8000	13479.4347	0.3800
0.3094					
23	2.0100	2.1500	17859.6000	15199.6238	0.4100
0.3489					
24	2.1100	2.2500	18730.8000	17028.9526	0.4300
0.3909					
25	2.2100	2.3500	19602.0000	18945.4084	0.4500
0.4349					
26	2.3100	2.4500	20908.8000	20970.5768	0.4800
0.4814					
27	2.4100	2.5500	22215.6000	23126.4451	0.5100
0.5309					
28	2.5100	2.6500	23522.4000	25413.0111	0.5400
0.5834					
29	2.6100	2.7500	24393.6000	27808.6551	0.5600

0.6384					
30	2.7100	2.8500	25700.4000	30313.0459	0.5900
0.6959					
31	2.8100	2.9500	27442.8000	32969.7031	0.6300
0.7569					
32	2.9100	3.0500	29185.2000	35800.6280	0.6700
0.8219					
33	3.0100	3.1500	30927.6000	38805.8170	0.7100
0.8909					
34	3.1100	3.2500	32670.0000	41985.2673	0.7500
0.9638					
35	3.2100	3.3500	34848.0000	45360.5479	0.8000
1.0413					
36	3.3100	3.4500	36154.8000	48910.4519	0.8300
1.1228					
37	3.4100	3.5500	38332.8000	52634.2639	0.8800
1.2083					
38	3.5100	3.6500	40075.2000	56554.3020	0.9200
1.2983					
39	3.6100	3.7500	41382.0000	60626.9465	0.9500
1.3918					
40	3.7100	3.8500	43560.0000	64873.5386	1.0000
1.4893					
41	3.8100	3.9500	45302.4000	69316.3294	1.0400
1.5913					
42	3.9100	4.0500	46609.2000	73911.7087	1.0700
1.6968					
43	4.0100	4.1500	48787.2000	78681.0665	1.1200
1.8063					
44	4.1100	4.2500	50529.6000	83646.6021	1.1600
1.9203					
45	4.2100	4.3500	52272.0000	88786.3846	1.2000
2.0383					
46	4.3100	4.4500	54450.0000	94122.0608	1.2500
2.1607					
47	4.4100	4.5500	57063.6000	99697.1745	1.3100
2.2887					
48	4.5100	4.6500	59677.2000	105533.6685	1.3700
2.4227					
49	4.6100	4.7500	63162.0000	111674.7430	1.4500
2.5637					
50	4.7100	4.8500	66211.2000	118142.7394	1.5200
2.7122					
51	4.8100	4.9500	69696.0000	124937.2867	1.6000
2.8682					
52	4.9100	5.0500	74487.6000	132145.0673	1.7100
3.0336					
53	5.0100	5.1500	78843.6000	139810.5192	1.8100
3.2096					
54	5.1100	5.2500	84070.8000	147954.7597	1.9300

3.3966					
55	5.2100	5.3500	88426.8000	156578.6367	2.0300
3.5946					
56	5.3100	5.4500	97138.8000	165853.4136	2.2300
3.8075					
57	5.4100	5.5500	109335.6000	176171.0211	2.5100
4.0443					
58	5.5100	5.6500	123710.4000	187815.8087	2.8400
4.3117					
59	5.6100	5.7500	139392.0000	200963.0014	3.2000
4.6135					
60	5.7100	5.8500	158122.8000	215828.7560	3.6300
4.9547					
61	5.8100	5.9500	186001.2000	233015.9323	4.2700
5.3493					
62	5.9100	6.0500	226076.4000	253587.0512	5.1900
5.8216					
63	6.0100	6.1500	268329.6000	278276.9570	6.1600
6.3884					
64	6.1100	6.2500	316245.6000	307472.6403	7.2600
7.0586					
65	6.2100	6.3500	358498.8000	341187.4520	8.2300
7.8326					
66	6.3100	6.4500	406414.8000	379407.7122	9.3300
8.7100					
67	6.4100	6.5500	460429.2000	422721.4041	10.5700
9.7043					
68	6.5100	6.6500	506167.2000	471032.6953	11.6200
10.8134					
69	6.6100	6.7500	535352.4000	523101.3381	12.2900
12.0088					
70	6.7100	6.8500	548420.4000	577288.1231	12.5900
13.2527					
71	6.8100	6.9500	554518.8000	632434.2507	12.7300
14.5187					
72	6.9100	7.0500	559310.4000	688124.9820	12.8400
15.7972					
73	7.0100	7.1500	562359.6000	744207.8521	12.9100
17.0847					
74	7.1100	7.2500	565844.4000	800617.3983	12.9900
18.3796					
75	7.2100	7.3500	568458.0000	857331.9009	13.0500
19.6816					
76	7.3100	7.4500	569764.8000	914242.4593	13.0800
20.9881					
77	7.4100	7.5500	571507.2000	971305.4665	13.1200
22.2981					
78	7.5100	7.6500	572378.4000	1.02850E+06	13.1400
23.6111					
79	7.5700	7.7100	572378.4000	1.06284E+06	13.1400

24.3995						
80	7.6300	7.7700	572814.0000	1.09720E+06	13.1500	
25.1882						
81	7.6900	7.8300	572814.0000	1.13157E+06	13.1500	
25.9772						

=====

| Variable storage data for node | N0945

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-0.8100	0.0000	4.3560	0.0000	0.0001
0.0000					
2	-0.7600	0.0500	435.6000	8.0585	0.0100
0.0002					
3	-0.6600	0.1500	871.2000	72.1523	0.0200
0.0017					
4	-0.5600	0.2500	1306.8000	180.3178	0.0300
0.0041					
5	-0.4600	0.3500	3484.8000	411.1686	0.0800
0.0094					
6	-0.3600	0.4500	7840.8000	962.9231	0.1800
0.0221					
7	-0.2600	0.5500	13068.0000	1997.2871	0.3000
0.0459					
8	-0.1600	0.6500	19602.0000	3619.7697	0.4500
0.0831					
9	-0.0600	0.7500	28314.0000	6002.2350	0.6500
0.1378					
10	0.0400	0.8500	40075.2000	9404.6792	0.9200
0.2159					
11	0.1400	0.9500	52707.6000	14029.3734	1.2100
0.3221					
12	0.2400	1.0500	69260.4000	20108.9052	1.5900
0.4616					
13	0.3400	1.1500	86248.8000	27868.7755	1.9800
0.6398					
14	0.4400	1.2500	107157.6000	37520.1069	2.4600
0.8613					
15	0.5400	1.3500	134600.4000	49581.8427	3.0900
1.1382					
16	0.6400	1.4500	165963.6000	64582.5457	3.8100
1.4826					
17	0.7400	1.5500	214750.8000	83565.7610	4.9300
1.9184					
18	0.8400	1.6500	281397.6000	108297.9894	6.4600

2.4862					
19	0.9400	1.7500	359370.0000	140256.6871	8.2500
3.2199					
20	1.0400	1.8500	468705.6000	181539.2236	10.7600
4.1676					
21	1.1400	1.9500	618116.4000	235707.7967	14.1900
5.4111					
22	1.2400	2.0500	780159.6000	305463.8798	17.9100
7.0125					
23	1.3400	2.1500	966596.4000	392634.5082	22.1900
9.0136					
24	1.4400	2.2500	1149112.800	498287.4568	26.3800
11.4391					
25	1.5400	2.3500	1372140.000	624184.1088	31.5000
14.3293					
26	1.6400	2.4500	1636984.800	774444.2183	37.5800
17.7788					
27	1.7400	2.5500	1897473.600	951005.1718	43.5600
21.8321					
28	1.8400	2.6500	2164496.400	1.15396E+06	49.6900
26.4912					
29	1.9400	2.7500	2406254.400	1.38238E+06	55.2400
31.7352					
30	2.0400	2.8500	2697235.200	1.63742E+06	61.9200
37.5899					
31	2.1400	2.9500	2918520.000	1.91813E+06	67.0000
44.0342					
32	2.2400	3.0500	3199046.400	2.22390E+06	73.4400
51.0537					
33	2.3400	3.1500	3413361.600	2.55446E+06	78.3600
58.6423					
34	2.4400	3.2500	3641616.000	2.90714E+06	83.6000
66.7388					
35	2.5400	3.3500	3883374.000	3.28332E+06	89.1500
75.3747					
36	2.6400	3.4500	4078522.800	3.68137E+06	93.6300
84.5127					
37	2.7400	3.5500	4313311.200	4.10091E+06	99.0200
94.1438					
38	2.8400	3.6500	4496698.800	4.54137E+06	103.2300
104.2555					
39	2.9400	3.7500	4686184.800	5.00048E+06	107.5800
114.7951					
40	3.0400	3.8500	4886125.200	5.47905E+06	112.1700
125.7817					
41	3.1400	3.9500	5041634.400	5.97542E+06	115.7400
137.1767					
42	3.2400	4.0500	5210647.200	6.48800E+06	119.6200
148.9440					
43	3.3400	4.1500	5338278.000	7.01543E+06	122.5500

161.0521					
44	3.4400	4.2500	5461988.400	7.55543E+06	125.3900
173.4487					
45	3.5400	4.3500	5585698.800	8.10779E+06	128.2300
186.1293					
46	3.6400	4.4500	5680224.000	8.67108E+06	130.4000
199.0605					
47	3.7400	4.5500	5792173.200	9.24468E+06	132.9700
212.2287					
48	3.8400	4.6500	5882778.000	9.82842E+06	135.0500
225.6294					
49	3.9400	4.7500	5979481.200	10.42152E+06	137.2700
239.2451					
50	4.0400	4.8500	6073570.800	11.02416E+06	139.4300
253.0798					
51	4.1400	4.9500	6145444.800	11.63510E+06	141.0800
267.1051					
52	4.2400	5.0500	6198588.000	12.25229E+06	142.3000
281.2739					
53	4.3400	5.1500	6244761.600	12.87445E+06	143.3600
295.5568					
54	4.4400	5.2500	6278738.400	13.50062E+06	144.1400
309.9316					
55	4.5400	5.3500	6304438.800	14.12977E+06	144.7300
324.3750					
56	4.6400	5.4500	6320120.400	14.76099E+06	145.0900
338.8658					
57	4.7400	5.5500	6331881.600	15.39359E+06	145.3600
353.3882					
58	4.8400	5.6500	6341464.800	16.02725E+06	145.5800
367.9350					
59	4.9400	5.7500	6349305.600	16.66178E+06	145.7600
382.5019					
60	5.0400	5.8500	6356710.800	17.29708E+06	145.9300
397.0862					
61	5.1400	5.9500	6361938.000	17.93300E+06	146.0500
411.6851					
62	5.2400	6.0500	6364987.200	18.56934E+06	146.1200
426.2934					
63	5.3400	6.1500	6368036.400	19.20599E+06	146.1900
440.9088					
64	5.4400	6.2500	6370214.400	19.84289E+06	146.2400
455.5301					
65	5.5400	6.3500	6371521.200	20.47997E+06	146.2700
470.1555					
66	5.6400	6.4500	6372392.400	21.11716E+06	146.2900
484.7833					
67	5.7400	6.5500	6372828.000	21.75442E+06	146.3000
499.4127					
68	5.8400	6.6500	6373699.200	22.39174E+06	146.3200

514.0435						
69	6.6700	7.4800	6372828.000	27.68149E+06	146.3000	
635.4796						
70	6.7700	7.5800	6373699.200	28.31881E+06	146.3200	
650.1105						

=====

| Variable storage data for node | N2002

=====

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	-1.8000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.5000	0.3000	2178.0000	244.2700	0.0500
0.0056					
3	-1.4000	0.4000	3920.4000	544.9501	0.0900
0.0125					
4	-1.3000	0.5000	7405.2000	1102.0670	0.1700
0.0253					
5	-1.2000	0.6000	12632.4000	2092.3734	0.2900
0.0480					
6	-1.1000	0.7000	19602.0000	3691.3693	0.4500
0.0847					
7	-1.0000	0.8000	30492.0000	6176.0774	0.7000
0.1418					
8	-0.9000	0.9000	41817.6000	9776.6472	0.9600
0.2244					
9	-0.8000	1.0000	55321.2000	14617.8193	1.2700
0.3356					
10	-0.7000	1.1000	72309.6000	20980.3677	1.6600
0.4816					
11	-0.6000	1.2000	94960.8000	29318.1248	2.1800
0.6731					
12	-0.5000	1.3000	121532.4000	40115.3961	2.7900
0.9209					
13	-0.4000	1.4000	155944.8000	53953.4150	3.5800
1.2386					
14	-0.3000	1.5000	203860.8000	71890.1023	4.6800
1.6504					
15	-0.2000	1.6000	272250.0000	95613.1157	6.2500
2.1950					
16	-0.1000	1.7000	463042.8000	131957.6484	10.6300
3.0293					
17	0.0000	1.8000	652964.4000	187486.1345	14.9900
4.3041					
18	0.1000	1.9000	869893.2000	263369.4260	19.9700

6.0461						
19	0.2000	2.0000	1105988.400	361926.5863	25.3900	
8.3087						
20	0.3000	2.1000	1337727.600	483927.6196	30.7100	
11.1094						
21	0.4000	2.2000	1549864.800	628175.7491	35.5800	
14.4209						
22	0.5000	2.3000	1734994.800	792330.0712	39.8300	
18.1894						
23	0.6000	2.4000	1898344.800	973934.0042	43.5800	
22.3584						
24	0.7000	2.5000	2038608.000	1.17074E+06	46.8000	
26.8764						
25	0.8000	2.6000	2163189.600	1.38080E+06	49.6600	
31.6987						
26	0.9000	2.7000	2272525.200	1.60256E+06	52.1700	
36.7896						
27	1.0000	2.8000	2378376.000	1.83508E+06	54.6000	
42.1276						
28	1.1000	2.9000	2456784.000	2.07682E+06	56.4000	
47.6773						
29	1.2000	3.0000	2538241.200	2.32656E+06	58.2700	
53.4105						
30	1.3000	3.1000	2614906.800	2.58421E+06	60.0300	
59.3252						
31	1.4000	3.2000	2685474.000	2.84922E+06	61.6500	
65.4090						
32	1.5000	3.3000	2762139.600	3.12158E+06	63.4100	
71.6617						
33	1.6000	3.4000	2820074.400	3.40069E+06	64.7400	
78.0690						
34	1.7000	3.5000	2884543.200	3.68591E+06	66.2200	
84.6168						
35	1.8000	3.6000	2948576.400	3.97756E+06	67.6900	
91.3121						
36	1.9000	3.7000	3012174.000	4.27559E+06	69.1500	
98.1539						
37	2.0000	3.8000	3083612.400	4.58036E+06	70.7900	
105.1507						
38	2.1000	3.9000	3146338.800	4.89185E+06	72.2300	
112.3015						
39	2.2000	4.0000	3214292.400	5.20988E+06	73.7900	
119.6023						
40	2.3000	4.1000	3289215.600	5.53504E+06	75.5100	
127.0671						
41	2.4000	4.2000	3353248.800	5.86716E+06	76.9800	
134.6914						
42	2.5000	4.3000	3433834.800	6.20650E+06	78.8300	
142.4816						
43	2.6000	4.4000	3498303.600	6.55310E+06	80.3100	

150.4384					
44	2.7000	4.5000	3569742.000	6.90649E+06	81.9500
158.5512					
45	2.8000	4.6000	3647278.800	7.26733E+06	83.7300
166.8349					
46	2.9000	4.7000	3712183.200	7.63529E+06	85.2200
175.2823					
47	3.0000	4.8000	3788413.200	8.01031E+06	86.9700
183.8915					
48	3.1000	4.9000	3848090.400	8.39213E+06	88.3400
192.6568					
49	3.2000	5.0000	3909945.600	8.78003E+06	89.7600
201.5617					
50	3.3000	5.1000	3970929.600	9.17406E+06	91.1600
210.6075					
51	3.4000	5.2000	4017538.800	9.57348E+06	92.2300
219.7768					
52	3.5000	5.3000	4068068.400	9.97775E+06	93.3900
229.0577					
53	3.6000	5.4000	4105530.000	10.38643E+06	94.2500
238.4396					
54	3.7000	5.5000	4142991.600	10.79885E+06	95.1100
247.9074					
55	3.8000	5.6000	4182195.600	11.21510E+06	96.0100
257.4633					
56	3.9000	5.7000	4210945.200	11.63475E+06	96.6700
267.0972					
57	4.0000	5.8000	4239259.200	12.05726E+06	97.3200
276.7966					
58	4.1000	5.9000	4266702.000	12.48255E+06	97.9500
286.5599					
59	4.2000	6.0000	4290660.000	12.91041E+06	98.5000
296.3823					
60	4.3000	6.1000	4315053.600	13.34070E+06	99.0600
306.2602					
61	4.4000	6.2000	4334220.000	13.77315E+06	99.5000
316.1881					
62	4.5000	6.3000	4350772.800	14.20740E+06	99.8800
326.1570					
63	4.6000	6.4000	4367761.200	14.64332E+06	100.2700
336.1644					
64	4.7000	6.5000	4383442.800	15.08088E+06	100.6300
346.2093					
65	4.8000	6.6000	4398688.800	15.51998E+06	100.9800
356.2897					
66	4.9000	6.7000	4413063.600	15.96056E+06	101.3100
366.4041					
67	5.0000	6.8000	4430052.000	16.40271E+06	101.7000
376.5545					
68	5.1000	6.9000	4453574.400	16.84689E+06	102.2400

386.7514					
69	5.2000	7.0000	4477968.000	17.29346E+06	102.8000
397.0033					
70	5.3000	7.1000	4498876.800	17.74230E+06	103.2800
407.3071					
71	5.4000	7.2000	4510638.000	18.19277E+06	103.5500
417.6485					
72	5.5000	7.3000	4517607.600	18.64418E+06	103.7100
428.0114					
73	5.6000	7.4000	4523706.000	19.09624E+06	103.8500
438.3893					
74	6.1000	7.9000	4552020.000	21.36514E+06	104.5000
490.4762					
75	6.2000	8.0000	4558118.400	21.82065E+06	104.6400
500.9331					
76	6.3000	8.1000	4565523.600	22.27682E+06	104.8100
511.4055					
77	6.4000	8.2000	4573364.400	22.73376E+06	104.9900
521.8954					
78	6.5000	8.3000	4581640.800	23.19151E+06	105.1800
532.4038					
79	6.6000	8.4000	4591224.000	23.65015E+06	105.4000
542.9327					
80	6.7000	8.5000	4601242.800	24.10977E+06	105.6300
553.4841					
81	6.8000	8.6000	4612568.400	24.57045E+06	105.8900
564.0600					
82	6.9000	8.7000	4622587.200	25.03221E+06	106.1200
574.6604					
83	7.0000	8.8000	4630863.600	25.49487E+06	106.3100
585.2818					
84	7.1000	8.9000	4641318.000	25.95848E+06	106.5500
595.9246					
85	7.2000	9.0000	4651336.800	26.42311E+06	106.7800
606.5910					
86	7.3000	9.1000	4660484.400	26.88869E+06	106.9900
617.2794					
87	7.4000	9.2000	4665276.000	27.35498E+06	107.1000
627.9838					
88	7.5000	9.3000	4666582.800	27.82156E+06	107.1300
638.6952					
89	7.8000	9.6000	4669196.400	29.22192E+06	107.1900
670.8429					
90	7.9000	9.7000	4669632.000	29.68885E+06	107.2000
681.5623					
91	7.9000	9.7000	4669632.000	29.68885E+06	107.2000
681.5623					

=====

| Variable storage data for node | N2090

=====						
Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres	
=====	=====	=====	=====	=====	=====	
1	-1.8900	0.0000	26.1360	0.0000	0.0006	
0.0000						
2	-1.5900	0.3000	499.9817	64.0425	0.0115	
0.0015						
3	-1.4900	0.4000	1449.9817	157.4219	0.0333	
0.0036						
4	-1.3900	0.5000	3625.0196	403.0076	0.0832	
0.0093						
5	-1.2900	0.6000	7224.9923	935.2590	0.1659	
0.0215						
6	-1.1900	0.7000	12775.0154	1922.1579	0.2933	
0.0441						
7	-1.0900	0.8000	20075.0180	3550.9537	0.4609	
0.0815						
8	-0.9900	0.9000	30949.9898	6082.6394	0.7105	
0.1396						
9	-0.8900	1.0000	45174.9870	9866.5024	1.0371	
0.2265						
10	-0.7900	1.1000	62299.9912	15217.3126	1.4302	
0.3493						
11	-0.6900	1.2000	84074.9818	22508.8432	1.9301	
0.5167						
12	-0.5900	1.3000	108425.0218	32107.9762	2.4891	
0.7371						
13	-0.4900	1.4000	138324.9978	44415.0497	3.1755	
1.0196						
14	-0.3900	1.5000	175549.9799	60071.7216	4.0301	
1.3791						
15	-0.2900	1.6000	218550.0161	79737.3101	5.0172	
1.8305						
16	-0.1900	1.7000	273275.0104	104277.4145	6.2735	
2.3939						
17	-0.0900	1.8000	695149.6464	151086.1707	15.9584	
3.4685						
18	0.0100	1.9000	792499.7124	225414.7511	18.1933	
5.1748						
19	0.1100	2.0000	899874.6768	309975.7964	20.6583	
7.1161						
20	0.2100	2.1000	1016324.932	405725.7910	23.3316	
9.3142						
21	0.3100	2.2000	1123049.981	512649.0723	25.7817	
11.7688						
22	0.4100	2.3000	1224324.803	629980.2096	28.1066	

14.4624						
23	0.5100	2.4000	1323349.751	757330.5768	30.3799	
17.3859						
24	0.6100	2.5000	1429099.927	894917.8143	32.8076	
20.5445						
25	0.7100	2.6000	1544749.985	1.04357E+06	35.4626	
23.9571						
26	0.8100	2.7000	1669374.709	1.20424E+06	38.3236	
27.6454						
27	0.9100	2.8000	1808099.806	1.37806E+06	41.5083	
31.6359						
28	1.0100	2.9000	1958049.878	1.56632E+06	44.9506	
35.9577						
29	1.1100	3.0000	2111899.878	1.76976E+06	48.4826	
40.6282						
30	1.2100	3.1000	2276874.666	1.98915E+06	52.2698	
45.6646						
31	1.3100	3.2000	2441874.719	2.22504E+06	56.0577	
51.0798						
32	1.4100	3.3000	2608199.867	2.47749E+06	59.8760	
56.8754						
33	1.5100	3.4000	2772424.987	2.74648E+06	63.6461	
63.0505						
34	1.6100	3.5000	2935274.918	3.03182E+06	67.3846	
69.6011						
35	1.7100	3.6000	3095399.736	3.33332E+06	71.0606	
76.5224						
36	1.8100	3.7000	3254024.783	3.65075E+06	74.7021	
83.8097						
37	1.9100	3.8000	3402849.701	3.98356E+06	78.1187	
91.4501						
38	2.0100	3.9000	3541774.738	4.33077E+06	81.3080	
99.4208						
39	2.1100	4.0000	3673574.665	4.69151E+06	84.3337	
107.7023						
40	2.2100	4.1000	3799424.732	5.06514E+06	87.2228	
116.2797						
41	2.3100	4.2000	3915425.012	5.45087E+06	89.8858	
125.1347						
42	2.4100	4.3000	4025149.603	5.84788E+06	92.4047	
134.2488						
43	2.5100	4.4000	4131824.994	6.25571E+06	94.8537	
143.6114						
44	2.6100	4.5000	4236099.793	6.67409E+06	97.2475	
153.2161						
45	2.7100	4.6000	4334474.826	7.10261E+06	99.5058	
163.0534						
46	2.8100	4.7000	4430147.832	7.54083E+06	101.7022	
173.1135						
47	2.9100	4.8000	4521397.320	7.98839E+06	103.7970	

183.3882						
48	3.0100	4.9000	4609196.856	8.44491E+06	105.8126	
193.8684						
49	3.1100	5.0000	4691547.036	8.90993E+06	107.7031	
204.5440						
50	3.2100	5.1000	4769549.928	9.38298E+06	109.4938	
215.4036						
51	3.3100	5.2000	4840574.508	9.86348E+06	111.1243	
226.4343						
52	3.4100	5.3000	4907521.872	10.35087E+06	112.6612	
237.6233						
53	3.5100	5.4000	4967172.936	10.84460E+06	114.0306	
248.9578						
54	3.6100	5.5000	5022346.032	11.34407E+06	115.2972	
260.4240						
55	3.7100	5.6000	5072670.900	11.84881E+06	116.4525	
272.0113						
56	3.8100	5.7000	5117049.828	12.35829E+06	117.4713	
283.7073						
57	3.9100	5.8000	5155373.916	12.87191E+06	118.3511	
295.4983						
58	4.0100	5.9000	5188823.640	13.38911E+06	119.1190	
307.3717						
59	4.1100	6.0000	5218522.848	13.90947E+06	119.8008	
319.3175						
60	4.2100	6.1000	5243674.392	14.43258E+06	120.3782	
331.3263						
61	4.3100	6.2000	5266674.072	14.95809E+06	120.9062	
343.3904						
62	4.4100	6.3000	5287648.212	15.48580E+06	121.3877	
355.5050						
63	4.5100	6.4000	5305346.640	16.01544E+06	121.7940	
367.6640						
64	4.6100	6.5000	5321672.928	16.54679E+06	122.1688	
379.8620						
65	4.7100	6.6000	5335546.788	17.07964E+06	122.4873	
392.0946						
66	4.8100	6.7000	5347098.900	17.61377E+06	122.7525	
404.3565						
67	4.9100	6.8000	5358498.552	18.14904E+06	123.0142	
416.6447						
68	5.0100	6.9000	5369497.452	18.68544E+06	123.2667	
428.9586						
69	5.1100	7.0000	5379324.588	19.22287E+06	123.4923	
441.2965						
70	5.3100	7.2000	5399749.872	20.30077E+06	123.9612	
466.0416						
71	5.4100	7.3000	5409873.216	20.84125E+06	124.1936	
478.4492						
72	5.5100	7.4000	5419099.224	21.38269E+06	124.4054	

490.8790						
73	5.6100	7.5000	5427597.780	21.92502E+06	124.6005	
503.3292						
74	5.7100	7.6000	5434371.360	22.46811E+06	124.7560	
515.7969						
75	5.8100	7.7000	5440199.688	23.01183E+06	124.8898	
528.2790						
76	5.9100	7.8000	5447374.020	23.55621E+06	125.0545	
540.7761						
77	6.0100	7.9000	5457048.696	24.10142E+06	125.2766	
553.2925						
78	6.1100	8.0000	5467672.980	24.64765E+06	125.5205	
565.8323						
79	6.2100	8.1000	5480797.608	25.19507E+06	125.8218	
578.3993						
80	6.3100	8.2000	5494823.928	25.74385E+06	126.1438	
590.9974						
81	6.4100	8.3000	5506471.872	26.29391E+06	126.4112	
603.6250						
82	6.5100	8.4000	5517597.096	26.84510E+06	126.6666	
616.2788						
83	6.6100	8.5000	5526248.112	27.39729E+06	126.8652	
628.9553						
84	6.7100	8.6000	5531396.904	27.95017E+06	126.9834	
641.6476						
85	6.8100	8.7000	5534171.676	28.50344E+06	127.0471	
654.3490						
86	6.9100	8.8000	5535996.840	29.05694E+06	127.0890	
667.0556						
87	8.4100	10.3000	5542395.804	37.36565E+06	127.2359	
857.7974						
88	8.5300	10.4200	5542421.940	38.03074E+06	127.2365	
873.0656						

=====

| Variable storage data for node | N0742

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.5100	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.4900	1.0000	26.1360	26.1360	0.0006
0.0006					
3	0.5000	1.0100	435.6000	28.0308	0.0100
0.0006					
4	6.0000	6.5100	871.2000	3553.1865	0.0200

0.0816

=====

| Variable storage data for node | N0910

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-6.0000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	0.1200	6.1200	26.1360	159.9523	0.0006
0.0037					
3	0.1300	6.1300	43560.0000	308.7946	1.0000
0.0071					
4	3.0000	9.0000	43995.6000	125949.3059	1.0100
2.8914					

=====

| Variable storage data for node | N0880

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-6.9100	0.0000	43560.0000	0.0000	1.0000
0.0000					
2	-4.0400	2.8700	43995.6000	125640.5113	1.0100
2.8843					
3	-4.0400	2.8700	43995.6000	125640.5113	1.0100
2.8843					
4	1002.6000	1009.5100	43995.6000	44.41337E+06	1.0100
1019.5907					

=====

| Variable storage data for node | N2370

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-1.5600	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-1.2600	0.3000	599.9954	75.1350	0.0138

0.0017					
3	-1.1600	0.4000	1499.9886	176.7560	0.0344
0.0041					
4	-1.0600	0.5000	3500.0024	419.7959	0.0803
0.0096					
5	-0.9600	0.6000	7274.9992	947.1587	0.1670
0.0217					
6	-0.8600	0.7000	14524.9949	2016.4664	0.3334
0.0463					
7	-0.7600	0.8000	25125.0160	3974.8946	0.5768
0.0913					
8	-0.6600	0.9000	39325.0097	7170.9677	0.9028
0.1646					
9	-0.5600	1.0000	59074.9830	12057.5452	1.3562
0.2768					
10	-0.4600	1.1000	86750.0014	19304.5520	1.9915
0.4432					
11	-0.3600	1.2000	124200.0144	29796.1001	2.8512
0.6840					
12	-0.2600	1.3000	173525.0062	44613.6306	3.9836
1.0242					
13	-0.1600	1.4000	239425.0135	65172.7229	5.4964
1.4962					
14	-0.0600	1.5000	538399.8576	103067.6851	12.3600
2.3661					
15	0.0400	1.6000	678274.9380	163766.3660	15.5710
3.7596					
16	0.1400	1.7000	826999.6680	238906.5915	18.9853
5.4845					
17	0.2400	1.8000	995874.8184	329918.7500	22.8621
7.5739					
18	0.3400	1.9000	1184299.697	438790.4252	27.1878
10.0732					
19	0.4400	2.0000	1385399.664	567142.7606	31.8044
13.0198					
20	0.5400	2.1000	1596775.000	716124.9951	36.6569
16.4400					
21	0.6400	2.2000	1818149.969	886749.8214	41.7390
20.3570					
22	0.7400	2.3000	2046449.671	1.07987E+06	46.9800
24.7903					
23	0.8400	2.4000	2288999.592	1.29652E+06	52.5482
29.7641					
24	0.9400	2.5000	2539849.871	1.53785E+06	58.3069
35.3043					
25	1.0400	2.6000	2799174.748	1.80470E+06	64.2602
41.4302					
26	1.1400	2.7000	3063974.681	2.09775E+06	70.3392
48.1578					
27	1.2400	2.8000	3338274.614	2.41776E+06	76.6362

55.5042						
28	1.3400	2.9000	3609149.861	2.76504E+06	82.8547	
63.4767						
29	1.4400	3.0000	3886174.908	3.13972E+06	89.2143	
72.0781						
30	1.5400	3.1000	4161974.612	3.54205E+06	95.5458	
81.3142						
31	1.6400	3.2000	4440197.124	3.97207E+06	101.9329	
91.1863						
32	1.7400	3.3000	4711196.952	4.42957E+06	108.1542	
101.6890						
33	1.8400	3.4000	4971245.796	4.91363E+06	114.1241	
112.8015						
34	1.9400	3.5000	5214998.844	5.42289E+06	119.7199	
124.4924						
35	2.0400	3.6000	5450998.212	5.95614E+06	125.1377	
136.7342						
36	2.1400	3.7000	5680446.156	6.51267E+06	130.4051	
149.5103						
37	2.2400	3.8000	5902697.988	7.09178E+06	135.5073	
162.8050						
38	2.3400	3.9000	6120171.288	7.69289E+06	140.4998	
176.6044						
39	2.4400	4.0000	6338724.876	8.31580E+06	145.5171	
190.9044						
40	2.5400	4.1000	6546972.168	8.96005E+06	150.2978	
205.6944						
41	2.6400	4.2000	6750397.368	9.62488E+06	154.9678	
220.9569						
42	2.7400	4.3000	6949497.060	10.30985E+06	159.5385	
236.6815						
43	2.8400	4.4000	7148823.264	11.01473E+06	164.1144	
252.8634						
44	2.9400	4.5000	7348646.052	11.73957E+06	168.7017	
269.5035						
45	3.0400	4.6000	7550921.268	12.48452E+06	173.3453	
286.6052						
46	3.1400	4.7000	7757273.700	13.24990E+06	178.0825	
304.1759						
47	3.2400	4.8000	7960572.576	14.03576E+06	182.7496	
322.2168						
48	3.3400	4.9000	8168597.712	14.84219E+06	187.5252	
340.7298						
49	3.4400	5.0000	8376596.712	15.66942E+06	192.3002	
359.7204						
50	3.5400	5.1000	8580095.964	16.51723E+06	196.9719	
379.1834						
51	3.6400	5.2000	8784374.940	17.38542E+06	201.6615	
399.1144						
52	3.7400	5.3000	8986549.968	18.27394E+06	206.3028	

419.5119					
53	3.8400	5.4000	9185449.284	19.18251E+06	210.8689
440.3699					
54	3.9400	5.5000	9373746.096	20.11045E+06	215.1916
461.6724					
55	4.0400	5.6000	9553849.272	21.05680E+06	219.3262
483.3977					
56	4.1400	5.7000	9728873.352	22.02092E+06	223.3442
505.5307					
57	4.2400	5.8000	9888324.732	23.00176E+06	227.0047
528.0477					
58	4.3400	5.9000	10037622.28	23.99803E+06	230.4321
550.9191					
59	4.4400	6.0000	10178795.88	25.00884E+06	233.6730
574.1239					
60	4.5400	6.1000	10310146.70	26.03327E+06	236.6884
597.6416					
61	4.6400	6.2000	10428272.71	27.07017E+06	239.4002
621.4456					
62	4.7400	6.3000	10538148.46	28.11848E+06	241.9226
645.5114					
63	4.8400	6.4000	10640671.27	29.17740E+06	244.2762
669.8210					
64	4.9400	6.5000	10734098.76	30.24613E+06	246.4210
694.3556					
65	5.0400	6.6000	10820347.56	31.32384E+06	248.4010
719.0963					
66	5.1400	6.7000	10903246.60	32.41000E+06	250.3041
744.0313					
67	5.2400	6.8000	10976971.90	33.50400E+06	251.9966
769.1460					
68	5.3400	6.9000	11046946.68	34.60518E+06	253.6030
794.4257					
69	5.4400	7.0000	11114499.53	35.71324E+06	255.1538
819.8633					
70	5.5400	7.1000	11173749.84	36.82764E+06	256.5140
845.4464					
71	5.6400	7.2000	11232520.99	37.94794E+06	257.8632
871.1649					
72	5.7400	7.3000	11285424.61	39.07383E+06	259.0777
897.0117					
73	5.8400	7.4000	11335749.48	40.20488E+06	260.2330
922.9770					
74	5.9400	7.5000	11385921.89	41.34095E+06	261.3848
949.0576					
75	6.0400	7.6000	11445398.71	42.48250E+06	262.7502
975.2640					
76	6.1400	7.7000	11522848.39	43.63090E+06	264.5282
1001.6276					
77	6.2400	7.8000	11602397.66	44.78715E+06	266.3544

1028.1714						
78	6.3400	7.9000	11662270.88	45.95037E+06	267.7289	
1054.8753						
79	6.4400	8.0000	11696474.20	47.11829E+06	268.5141	
1081.6872						
80	6.5400	8.1000	11720824.24	48.28915E+06	269.0731	
1108.5663						
81	6.6400	8.2000	11740021.13	49.46218E+06	269.5138	
1135.4953						
82	6.7400	8.3000	11753799.16	50.63686E+06	269.8301	
1162.4623						
83	6.8400	8.4000	11763073.08	51.81269E+06	270.0430	
1189.4556						
84	6.9400	8.5000	11770896.46	52.98937E+06	270.2226	
1216.4687						
85	7.0400	8.6000	11777421.74	54.16678E+06	270.3724	
1243.4981						
86	7.1400	8.7000	11784021.08	55.34484E+06	270.5239	
1270.5427						
87	7.2400	8.8000	11789174.23	56.52349E+06	270.6422	
1297.6007						
88	7.6400	9.2000	11805970.97	61.24247E+06	271.0278	
1405.9336						
89	7.7400	9.3000	11809647.43	62.42324E+06	271.1122	
1433.0404						
90	7.8400	9.4000	11812448.34	63.60433E+06	271.1765	
1460.1545						
91	12.0400	13.6000	11838972.02	113.27181E+06	271.7854	
2600.3629						
92	12.1300	13.6900	11839024.30	114.33731E+06	271.7866	
2624.8234						
93	12.1300	13.6900	11839024.30	114.33731E+06	271.7866	
2624.8234						

=====

| Variable storage data for node | N-0001A

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-8.0000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-7.9000	0.1000	189747.3600	6399.9503	4.3560
0.1469					
3	-0.4000	7.6000	502358.7492	2.50849E+06	11.5326
57.5871					
4	-0.3000	7.7000	566108.3736	2.56188E+06	12.9961

58.8128					
5	-0.2200	7.7800	7412626.980	2.82928E+06	170.1705
64.9512					
6	-0.2000	7.8000	7558849.188	2.97899E+06	173.5273
68.3881					
7	-0.1000	7.9000	8991877.356	3.80548E+06	206.4251
87.3618					
8	0.0000	8.0000	9383782.320	4.72418E+06	215.4220
108.4523					
9	0.1000	8.1000	9888459.768	5.68767E+06	227.0078
130.5710					
10	0.2000	8.2000	10406688.73	6.70231E+06	238.9047
153.8639					
11	0.3000	8.3000	11010295.30	7.77301E+06	252.7616
178.4437					
12	0.4000	8.4000	11693181.06	8.90800E+06	268.4385
204.4995					
13	0.8000	8.8000	14788837.80	14.19225E+06	339.5050
325.8091					
14	0.9000	8.9000	15624745.49	15.71272E+06	358.6948
360.7144					
15	1.0000	9.0000	16603795.69	17.32388E+06	381.1707
397.7016					
16	1.1000	9.1000	17501314.64	19.02892E+06	401.7749
436.8440					
17	1.2000	9.2000	18449716.03	20.82625E+06	423.5472
478.1049					
18	1.3000	9.3000	19436489.42	22.72033E+06	446.2004
521.5869					
19	1.3600	9.3600	19884016.15	23.89990E+06	456.4742
548.6663					
20	1.4000	9.4000	20331538.52	24.70419E+06	466.7479
567.1302					
21	1.5000	9.5000	21281721.52	26.78465E+06	488.5611
614.8910					
22	1.6000	9.6000	22363333.74	28.96666E+06	513.3915
664.9830					
23	1.7000	9.7000	23479793.96	31.25857E+06	539.0219
717.5979					
24	1.8000	9.8000	24627656.59	33.66369E+06	565.3732
772.8119					
25	1.9000	9.9000	25676925.52	36.17871E+06	589.4611
830.5488					
26	2.0000	10.0000	26726194.44	38.79866E+06	613.5490
890.6947					
27	2.1000	10.1000	28378468.80	41.55346E+06	651.4800
953.9361					
28	2.2000	10.2000	29625809.40	44.45342E+06	680.1150
1020.5100					
29	2.8000	10.8000	37948731.48	64.67413E+06	871.1830

1484.7136						
30	2.9000	10.9000	39478776.48	68.54521E+06	906.3080	
1573.5815						
31	3.0000	11.0000	40422503.88	72.54014E+06	927.9730	
1665.2925						
32	3.1000	11.1000	42319045.30	76.67681E+06	971.5116	
1760.2575						
33	3.2000	11.2000	43751315.52	80.98009E+06	1004.3920	
1859.0471						
34	3.3000	11.3000	45175553.28	85.42620E+06	1037.0880	
1961.1157						
35	3.3700	11.3700	45869072.04	88.61270E+06	1053.0090	
2034.2677						
36	3.4000	11.4000	46553661.00	89.99901E+06	1068.7250	
2066.0931						
37	3.5000	11.5000	48003294.24	94.72663E+06	1102.0040	
2174.6242						
38	3.8000	11.8000	52295261.04	109.76667E+06	1200.5340	
2519.8960						
39	3.9000	11.9000	53748553.32	115.06864E+06	1233.8970	
2641.6125						
40	4.0000	12.0000	55799532.36	120.54567E+06	1280.9810	
2767.3478						
41	4.1000	12.1000	57347698.32	126.20280E+06	1316.5220	
2897.2176						
42	4.2000	12.2000	59034428.64	132.02164E+06	1355.2440	
3030.7999						
43	4.3000	12.3000	60805665.36	138.01337E+06	1395.9060	
3168.3510						
44	4.3300	12.3300	61788596.76	139.85224E+06	1418.4710	
3210.5658						
45	4.4000	12.4000	62771833.08	144.21177E+06	1441.0430	
3310.6467						
46	4.5000	12.5000	64877871.96	150.59390E+06	1489.3910	
3457.1603						
47	4.6000	12.6000	66930375.60	157.18398E+06	1536.5100	
3608.4477						
48	4.7000	12.7000	69001218.00	163.98023E+06	1584.0500	
3764.4681						
49	4.8000	12.8000	70998008.40	170.97989E+06	1629.8900	
3925.1581						
50	4.9000	12.9000	72864597.96	178.17274E+06	1672.7410	
4090.2833						
51	5.0000	13.0000	74876198.76	185.55948E+06	1718.9210	
4259.8595						
52	5.1000	13.1000	77008983.48	193.15341E+06	1767.8830	
4434.1922						
53	5.2000	13.2000	79230630.60	200.96505E+06	1818.8850	
4613.5228						
54	5.3000	13.3000	81562484.52	209.00435E+06	1872.4170	

4798.0796						
55	5.4000	13.4000	83894338.44	217.27683E+06	1925.9490	
4987.9897						
56	5.5000	13.5000	86295017.16	225.78593E+06	1981.0610	
5183.3318						
57	5.6000	13.6000	88769660.76	234.53879E+06	2037.8710	
5384.2697						
58	5.9000	13.9000	96102115.56	262.26200E+06	2206.2010	
6020.7071						
59	6.0000	14.0000	98615091.96	271.99749E+06	2263.8910	
6244.2033						
60	6.1000	14.1000	101043082.8	281.98006E+06	2319.6300	
6473.3714						
61	6.4000	14.4000	108192019.3	313.35890E+06	2483.7470	
7193.7305						
62	6.5000	14.5000	110511110.2	324.29374E+06	2536.9860	
7444.7599						
63	6.6000	14.6000	112608480.6	335.44945E+06	2585.1350	
7700.8597						
64	6.7000	14.7000	114607405.4	346.80998E+06	2631.0240	
7961.6616						
65	6.8000	14.8000	116556671.9	358.36793E+06	2675.7730	
8226.9957						
66	6.9000	14.9000	118444518.7	370.11775E+06	2719.1120	
8496.7343						
67	7.0000	15.0000	120253957.6	382.05244E+06	2760.6510	
8770.7171						
68	7.1000	15.1000	122005330.9	394.16518E+06	2800.8570	
9048.7873						
69	7.2000	15.2000	123651724.7	406.44781E+06	2838.6530	
9330.7579						
70	7.3000	15.3000	125174843.6	418.88894E+06	2873.6190	
9616.3669						
71	7.6000	15.6000	129478048.9	457.08467E+06	2972.4070	
10493.2203						
72	7.7000	15.7000	130841738.3	470.10047E+06	3003.7130	
10792.0219						
73	7.8000	15.8000	131516744.0	483.21825E+06	3019.2090	
11093.1647						
74	7.9000	15.9000	133444535.4	496.46607E+06	3063.4650	
11397.2926						
75	8.0000	16.0000	134665783.6	509.87140E+06	3091.5010	
11705.0368						
76	8.1000	16.1000	135741715.6	523.39161E+06	3116.2010	
12015.4180						
77	8.2000	16.2000	136637744.8	537.01042E+06	3136.7710	
12328.0629						
78	8.3000	16.3000	137437506.4	550.71402E+06	3155.1310	
12642.6544						
79	8.7000	16.7000	140172203.2	606.23451E+06	3217.9110	

13917.2294						
80	8.8000	16.8000	140733256.0	620.27964E+06	3230.7910	
14239.6611						
81	8.9000	16.9000	141369232.0	634.38461E+06	3245.3910	
14563.4667						
82	9.0000	17.0000	141769112.8	648.54138E+06	3254.5710	
14888.4614						
83	9.1000	17.1000	142243481.2	662.74186E+06	3265.4610	
15214.4596						
84	9.2000	17.2000	142684744.0	676.98812E+06	3275.5910	
15541.5088						
85	9.3000	17.3000	143130798.4	691.27875E+06	3285.8310	
15869.5765						
86	9.4000	17.4000	143498880.4	705.61009E+06	3294.2810	
16198.5787						
87	9.5000	17.5000	143811641.2	719.97547E+06	3301.4610	
16528.3624						
88	9.6000	17.6000	144124402.0	734.37212E+06	3308.6410	
16858.8642						
89	9.7000	17.7000	144314759.2	748.79394E+06	3313.0110	
17189.9434						
90	9.8000	17.8000	144573941.2	763.23822E+06	3318.9610	
17521.5387						
91	9.9000	17.9000	144848369.2	777.70919E+06	3325.2610	
17853.7464						
92	10.0000	18.0000	145050923.2	792.20401E+06	3329.9110	
18186.5016						
93	15.6000	23.6000	146086344.4	1.60738E+09	3353.6810	
36900.3327						
94	15.7000	23.7000	146086780.0	1.62199E+09	3353.6910	
37235.6979						

=====

| Variable storage data for node | N-0001B

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-0.5000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	-0.4000	0.1000	87.1200	5.3657	0.0020
0.0001					
3	-0.2000	0.3000	261.3600	38.6572	0.0060
0.0009					
4	-0.1000	0.4000	348.4800	69.0446	0.0080
0.0016					
5	0.0000	0.5000	435.6000	108.1673	0.0100

0.0025					
6	0.1000	0.6000	2439.3600	238.3586	0.0560
0.0055					
7	0.2000	0.7000	4443.1200	577.5101	0.1020
0.0133					
8	0.8000	1.3000	16465.6800	6469.8718	0.3780
0.1485					
9	0.9000	1.4000	18469.4400	8215.6518	0.4240
0.1886					
10	1.0000	1.5000	22215.6000	10247.0029	0.5100
0.2352					
11	1.1000	1.6000	27704.1600	12737.9219	0.6360
0.2924					
12	1.8000	2.3000	66124.0800	44617.7223	1.5180
1.0243					
13	1.9000	2.4000	71612.6400	51502.6661	1.6440
1.1823					
14	2.0000	2.5000	77536.8000	58958.1019	1.7800
1.3535					
15	2.1000	2.6000	90546.4732	67353.7778	2.0787
1.5462					
16	2.2000	2.7000	103556.1899	77051.5393	2.3773
1.7689					
17	2.9000	3.4000	194624.0327	179751.4440	4.4680
4.1265					
18	3.0000	3.5000	207633.7494	199860.6247	4.7666
4.5882					
19	3.1000	3.6000	215241.9826	221003.0591	4.9413
5.0735					
20	3.2000	3.7000	222850.2593	242906.3510	5.1159
5.5764					
21	3.3000	3.8000	230458.5360	265570.4999	5.2906
6.0967					
22	3.4000	3.9000	238625.1648	289023.2655	5.4781
6.6351					
23	3.9000	4.4000	279458.3088	418408.5355	6.4155
9.6053					
24	4.0000	4.5000	287624.9376	446761.4342	6.6030
10.2562					
25	4.1000	4.6000	307073.6064	476490.7623	7.0494
10.9387					
26	4.2000	4.7000	326522.2752	508165.2636	7.4959
11.6659					
27	4.3000	4.8000	345970.9440	541784.9002	7.9424
12.4377					
28	4.4000	4.9000	366140.0952	577385.3347	8.4054
13.2549					
29	4.5000	5.0000	388709.4024	615121.8076	8.9235
14.1213					
30	4.6000	5.1000	411726.5064	655137.6862	9.4519

15.0399						
31	4.7000	5.2000	434943.9864	697465.4809	9.9849	
16.0116						
32	4.8000	5.3000	458984.7504	742156.0821	10.5368	
17.0376						
33	4.9000	5.4000	483025.5144	789251.0107	11.0887	
18.1187						
34	5.0000	5.5000	507066.2784	838750.2401	11.6406	
19.2551						
35	5.1000	5.6000	517004.4924	889952.4629	11.8688	
20.4305						
36	5.2000	5.7000	526942.7064	942148.5124	12.0969	
21.6288						
37	5.3000	5.8000	536880.9204	995338.3882	12.3251	
22.8498						
38	5.4000	5.9000	547418.0844	1.04955E+06	12.5670	
24.0944						
39	5.5000	6.0000	557955.2484	1.10482E+06	12.8089	
25.3632						
40	5.6000	6.1000	569777.4324	1.16120E+06	13.0803	
26.6576						
41	5.9000	6.4000	605243.9844	1.33743E+06	13.8945	
30.7031						
42	6.0000	6.5000	617066.6040	1.39854E+06	14.1659	
32.1061						
43	6.1000	6.6000	623057.8464	1.46055E+06	14.3034	
33.5296						
44	6.9000	7.4000	670987.7856	1.97804E+06	15.4038	
45.4096						
45	7.0000	7.5000	676979.0280	2.04544E+06	15.5413	
46.9569						

=====

| Variable storage data for node | N0001-C

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	2.1500	0.0000	142963.9200	0.0000	3.2820
0.0000					
2	2.2500	0.1000	144183.6000	14357.1893	3.3100
0.3296					
3	2.3500	0.2000	145403.2800	28836.3457	3.3380
0.6620					
4	2.4500	0.3000	146622.9600	43437.4692	3.3660
0.9972					
5	2.5500	0.4000	147842.6400	58160.5599	3.3940

1.3352					
6	2.6500	0.5000	149062.3200	73005.6177	3.4220
1.6760					
7	2.7500	0.6000	150282.0000	87972.6426	3.4500
2.0196					
8	2.8500	0.7000	194451.8400	105161.8061	4.4640
2.4142					
9	2.9500	0.8000	281571.8400	128828.7521	6.4640
2.9575					
10	3.0500	0.9000	368691.8400	161243.9046	8.4640
3.7017					
11	3.1500	1.0000	172377.8100	187682.6208	3.9573
4.3086					
12	3.2500	1.1000	174272.6700	205014.8851	4.0008
4.7065					
13	3.3500	1.2000	176167.5300	222536.6345	4.0442
5.1087					
14	3.4500	1.3000	178062.3900	240247.8690	4.0877
5.5153					
15	3.5500	1.4000	179957.2500	258148.5884	4.1312
5.9263					
16	3.6500	1.5000	181852.1100	276238.7928	4.1748
6.3416					
17	3.7500	1.6000	183746.9700	294518.4821	4.2183
6.7612					
18	3.8500	1.7000	185641.8300	312987.6564	4.2618
7.1852					
19	3.9500	1.8000	187536.6900	331646.3157	4.3053
7.6136					
20	4.0500	1.9000	189435.9060	350494.6773	4.3488
8.0463					
21	4.1500	2.0000	191339.4780	369533.1768	4.3925
8.4833					
22	4.2500	2.1000	193243.0500	388762.0324	4.4363
8.9247					
23	4.3500	2.2000	195146.6220	408181.2440	4.4799
9.3706					
24	4.4500	2.3000	197050.1940	427790.8117	4.5236
9.8207					
25	4.5500	2.4000	198953.7660	447590.7355	4.5674
10.2753					
26	4.6500	2.5000	200857.3380	467581.0152	4.6110
10.7342					
27	4.7500	2.6000	202760.9100	487761.6510	4.6547
11.1975					
28	4.8500	2.7000	204664.4820	508132.6428	4.6985
11.6651					
29	4.9500	2.8000	206568.0540	528693.9905	4.7421
12.1371					
30	5.0500	2.9000	208499.9400	549447.1078	4.7865

12.6136					
31	5.1500	3.0000	210460.1400	570394.8259	4.8315
13.0945					
32	5.2500	3.1000	212420.3400	591538.5627	4.8765
13.5799					
33	5.3500	3.2000	214380.5400	612878.3183	4.9215
14.0698					
34	5.4500	3.3000	216340.7400	634414.0926	4.9665
14.5641					
35	5.5500	3.4000	218300.9400	656145.8856	5.0115
15.0630					
36	5.6500	3.5000	220261.1400	678073.6973	5.0565
15.5664					
37	5.7500	3.6000	222221.3400	700197.5277	5.1015
16.0743					
38	5.8500	3.7000	224181.5400	722517.3768	5.1465
16.5867					
39	5.9500	3.8000	226141.7400	745033.2445	5.1915
17.1036					
40	6.0500	3.9000	246257.7480	768645.8413	5.6533
17.6457					
41	6.1500	4.0000	284529.5640	795161.9155	6.5319
18.2544					
42	6.2500	4.1000	322801.3800	825508.0413	7.4105
18.9511					
43	6.3500	4.2000	361073.1960	859683.5659	8.2891
19.7356					
44	6.4500	4.3000	399345.0120	897688.0343	9.1677
20.6081					
45	6.5500	4.4000	437616.8280	939521.1165	10.0463
21.5684					
46	6.6500	4.5000	475888.6440	985182.5658	10.9249
22.6167					
47	6.7500	4.6000	514160.4600	1.03467E+06	11.8035
23.7528					
48	6.8500	4.7000	552432.2760	1.08799E+06	12.6821
24.9768					
49	6.9500	4.8000	590704.0920	1.14514E+06	13.5607
26.2887					
50	7.0500	4.9000	628570.8000	1.20609E+06	14.4300
27.6880					
51	7.1500	5.0000	666032.4000	1.27081E+06	15.2900
29.1738					
52	7.2500	5.1000	703929.6000	1.33930E+06	16.1600
30.7460					
53	7.3500	5.2000	740520.0000	1.41151E+06	17.0000
32.4039					
54	7.4500	5.3000	777546.0000	1.48741E+06	17.8500
34.1462					
55	7.5500	5.4000	816750.0000	1.56711E+06	18.7500

35.9760						
56	7.6500	5.5000	853776.0000	1.65063E+06	19.6000	
37.8933						
57	7.7500	5.6000	890802.0000	1.73785E+06	20.4500	
39.8956						
58	7.8500	5.7000	927828.0000	1.82878E+06	21.3000	
41.9830						
59	7.9500	5.8000	964854.0000	1.92340E+06	22.1500	
44.1553						
60	8.0500	5.9000	984456.0000	2.02087E+06	22.6000	
46.3927						
61	8.1500	6.0000	984456.0000	2.11931E+06	22.6000	
48.6527						
62	8.2500	6.1000	984456.0000	2.21776E+06	22.6000	
50.9127						
63	8.3500	6.2000	984456.0000	2.31620E+06	22.6000	
53.1727						
64	8.4500	6.3000	984456.0000	2.41465E+06	22.6000	
55.4327						
65	8.5500	6.4000	984456.0000	2.51310E+06	22.6000	
57.6927						
66	8.6500	6.5000	984456.0000	2.61154E+06	22.6000	
59.9527						
67	8.7500	6.6000	984456.0000	2.70999E+06	22.6000	
62.2127						
68	8.8500	6.7000	984456.0000	2.80843E+06	22.6000	
64.4727						
69	8.9500	6.8000	984456.0000	2.90688E+06	22.6000	
66.7327						
70	9.0500	6.9000	984456.0000	3.00532E+06	22.6000	
68.9927						
71	9.1500	7.0000	984456.0000	3.10377E+06	22.6000	
71.2527						
72	9.2500	7.1000	984456.0000	3.20221E+06	22.6000	
73.5127						
73	9.3500	7.2000	984456.0000	3.30066E+06	22.6000	
75.7727						
74	9.4500	7.3000	984456.0000	3.39911E+06	22.6000	
78.0327						
75	9.5500	7.4000	984456.0000	3.49755E+06	22.6000	
80.2927						
76	9.6500	7.5000	984456.0000	3.59600E+06	22.6000	
82.5527						
77	9.7500	7.6000	984456.0000	3.69444E+06	22.6000	
84.8127						
78	9.8500	7.7000	984456.0000	3.79289E+06	22.6000	
87.0727						
79	9.9500	7.8000	984456.0000	3.89133E+06	22.6000	
89.3327						
80	10.0500	7.9000	984456.0000	3.98978E+06	22.6000	

91.5927						
81	10.1500	8.0000	984456.0000	4.08822E+06	22.6000	
93.8527						
82	10.2500	8.1000	984456.0000	4.18667E+06	22.6000	
96.1127						
83	10.3500	8.2000	984456.0000	4.28512E+06	22.6000	
98.3727						
84	10.4500	8.3000	984456.0000	4.38356E+06	22.6000	
100.6327						
85	10.5500	8.4000	984456.0000	4.48201E+06	22.6000	
102.8927						
86	10.6500	8.5000	984456.0000	4.58045E+06	22.6000	
105.1527						
87	10.7500	8.6000	984456.0000	4.67890E+06	22.6000	
107.4127						
88	10.8500	8.7000	984456.0000	4.77734E+06	22.6000	
109.6727						
89	10.9500	8.8000	984456.0000	4.87579E+06	22.6000	
111.9327						
90	11.0500	8.9000	984456.0000	4.97424E+06	22.6000	
114.1927						

=====

| Variable storage data for node | N-0001-E

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	4.8000	0.0000	26.1360	0.0000	0.0006
0.0000					
2	5.0000	0.2000	38916.9832	2663.4167	0.8934
0.0611					
3	5.3000	0.5000	40315.9997	14547.6277	0.9255
0.3340					
4	6.0000	1.2000	63673.9607	50633.7400	1.4618
1.1624					
5	6.0000	1.2000	63673.9607	50633.7400	1.4618
1.1624					

=====

| Variable storage data for node | N-0001-F

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====

```

=====
  1      3.5000  0.0000  248684.0400      0.0000      5.7090
0.0000
  2      4.0000  0.5000  264365.6400     128241.1614      6.0690
2.9440
  3      5.0000  1.5000  285405.1200     403056.6710      6.5520
9.2529

```

```

*=====*
| Variable storage data for node | N-0001-G
*=====*

```

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	4.0000	0.0000	57063.6000	0.0000	1.3100
0.0000					
2	4.5000	0.5000	83853.0000	35014.6436	1.9250
0.8038					
3	5.0000	1.0000	110642.4000	83483.5261	2.5400
1.9165					
4	5.5000	1.5000	114780.6000	139835.5470	2.6350
3.2102					
5	6.0000	2.0000	118918.8000	198256.7594	2.7300
4.5513					

```

*=====*
| Variable storage data for node | N0001-J
*=====*

```

Data Volume Point ac-ft	Elevation ft	Depth ft	Area ft^2	Volume ft^3	Area acres
=====	=====	=====	=====	=====	=====
1	1.1900	0.0000	434895.1556	0.0000	9.9838
0.0000					
2	1.2900	0.1000	436921.1748	43590.3414	10.0303
1.0007					
3	1.3900	0.2000	438947.5860	87383.3024	10.0769
2.0060					
4	1.4900	0.3000	440973.9972	131378.9027	10.1234
3.0160					
5	1.5900	0.4000	443000.4084	175577.1423	10.1699
4.0307					
6	1.6900	0.5000	445026.8196	219978.0212	10.2164
5.0500					
7	1.7900	0.6000	447053.2308	264581.5393	10.2629

6.0740					
8	1.8900	0.7000	449079.6420	309387.6967	10.3095
7.1026					
9	1.9900	0.8000	451106.0532	354396.4933	10.3560
8.1358					
10	2.0900	0.9000	453132.4644	399607.9292	10.4025
9.1737					
11	2.1900	1.0000	455158.4400	445021.9827	10.4490
10.2163					
12	2.2900	1.1000	457184.8512	490638.6535	10.4955
11.2635					
13	2.3900	1.2000	459211.2624	536457.9637	10.5420
12.3154					
14	2.4900	1.3000	461237.6736	582479.9131	10.5886
13.3719					
15	2.5900	1.4000	463264.0848	628704.5017	10.6351
14.4331					
16	2.6900	1.5000	465290.4960	675131.7296	10.6816
15.4989					
17	2.7900	1.6000	467316.9072	721761.5968	10.7281
16.5694					
18	2.8900	1.7000	469343.3184	768594.1032	10.7746
17.6445					
19	2.9900	1.8000	471369.7296	815629.2489	10.8212
18.7243					
20	3.0900	1.9000	473396.1408	862867.0338	10.8677
19.8087					
21	3.1900	2.0000	475422.5520	910307.4580	10.9142
20.8978					
22	3.2000	2.0100	822439.3716	916717.9500	18.8806
21.0449					
23	3.2900	2.1000	835175.8800	991309.1564	19.1730
22.7573					
24	3.3900	2.2000	847911.9528	1.07546E+06	19.4654
24.6892					
25	3.4900	2.3000	860648.0256	1.16089E+06	19.7578
26.6503					
26	3.5900	2.4000	873384.0984	1.24759E+06	20.0501
28.6407					
27	3.6900	2.5000	886120.6068	1.33556E+06	20.3425
30.6603					
28	3.7900	2.6000	898856.6796	1.42481E+06	20.6349
32.7091					
29	3.8900	2.7000	911592.7524	1.51533E+06	20.9273
34.7872					
30	3.9900	2.8000	924329.2608	1.60712E+06	21.2197
36.8945					
31	4.0900	2.9000	937065.3336	1.70019E+06	21.5121
39.0310					
32	4.1900	3.0000	949801.4064	1.79453E+06	21.8044

41.1968					
33	4.2000	3.0100	962537.4792	1.80410E+06	22.0968
41.4163					
34	4.2900	3.1000	979990.6644	1.89151E+06	22.4975
43.4230					
35	4.3900	3.2000	997443.4140	1.99038E+06	22.8982
45.6928					
36	4.4900	3.3000	1014896.164	2.09099E+06	23.2988
48.0026					
37	4.5900	3.4000	1032349.349	2.19335E+06	23.6995
50.3524					
38	4.6900	3.5000	1049802.098	2.29746E+06	24.1001
52.7423					
39	4.7900	3.6000	1067254.848	2.40331E+06	24.5008
55.1723					
40	4.8900	3.7000	1084708.033	2.51090E+06	24.9015
57.6424					
41	4.9900	3.8000	1102160.783	2.62024E+06	25.3021
60.1525					
42	5.0000	3.8100	1119613.968	2.63135E+06	25.7028
60.4076					
43	5.0900	3.9000	1119613.968	2.73212E+06	25.7028
62.7208					
44	5.1900	4.0000	1119613.968	2.84408E+06	25.7028
65.2911					
45	5.2900	4.1000	1119613.968	2.95604E+06	25.7028
67.8614					
46	5.3900	4.2000	1119613.968	3.06800E+06	25.7028
70.4316					
47	5.4900	4.3000	1119613.968	3.17996E+06	25.7028
73.0019					
48	5.5900	4.4000	1119613.968	3.29193E+06	25.7028
75.5722					
49	5.6900	4.5000	1119613.968	3.40389E+06	25.7028
78.1425					
50	5.7900	4.6000	1119613.968	3.51585E+06	25.7028
80.7128					
51	5.8900	4.7000	1119613.968	3.62781E+06	25.7028
83.2830					
52	5.9900	4.8000	1119613.968	3.73977E+06	25.7028
85.8533					
53	6.0900	4.9000	1119613.968	3.85173E+06	25.7028
88.4236					
54	6.1900	5.0000	1119613.968	3.96369E+06	25.7028
90.9939					
55	6.2900	5.1000	1119613.968	4.07566E+06	25.7028
93.5642					
56	6.3900	5.2000	1119613.968	4.18762E+06	25.7028
96.1344					
57	6.4900	5.3000	1119613.968	4.29958E+06	25.7028

98.7047						
58	6.5900	5.4000	1119613.968	4.41154E+06	25.7028	
101.2750						
59	6.6900	5.5000	1119613.968	4.52350E+06	25.7028	
103.8453						
60	6.7900	5.6000	1119613.968	4.63546E+06	25.7028	
106.4156						
61	6.8900	5.7000	1119613.968	4.74742E+06	25.7028	
108.9858						
62	6.9900	5.8000	1119613.968	4.85938E+06	25.7028	
111.5561						
63	7.0900	5.9000	1119613.968	4.97135E+06	25.7028	
114.1264						
64	7.1900	6.0000	1119613.968	5.08331E+06	25.7028	
116.6967						
65	7.2900	6.1000	1119613.968	5.19527E+06	25.7028	
119.2670						
66	7.3900	6.2000	1119613.968	5.30723E+06	25.7028	
121.8372						
67	7.4900	6.3000	1119613.968	5.41919E+06	25.7028	
124.4075						
68	7.5900	6.4000	1119613.968	5.53115E+06	25.7028	
126.9778						
69	7.6900	6.5000	1119613.968	5.64311E+06	25.7028	
129.5481						
70	7.7900	6.6000	1119613.968	5.75508E+06	25.7028	
132.1184						
71	7.8900	6.7000	1119613.968	5.86704E+06	25.7028	
134.6886						
72	7.9900	6.8000	1119613.968	5.97900E+06	25.7028	
137.2589						
73	8.0900	6.9000	1119613.968	6.09096E+06	25.7028	
139.8292						
74	8.1900	7.0000	1119613.968	6.20292E+06	25.7028	
142.3995						
75	8.2900	7.1000	1119613.968	6.31488E+06	25.7028	
144.9698						
76	8.3900	7.2000	1119613.968	6.42684E+06	25.7028	
147.5400						
77	8.4900	7.3000	1119613.968	6.53881E+06	25.7028	
150.1103						
78	8.5900	7.4000	1119613.968	6.65077E+06	25.7028	
152.6806						

=====

| Variable storage data for node | N0001-I

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres

ac-ft					
1	1.1300	0.0000	29662.8354	0.0000	0.6810
0.0000					
2	1.2300	0.1000	29996.5050	2982.9216	0.6886
0.0685					
3	1.3300	0.2000	30330.1310	5999.2079	0.6963
0.1377					
4	1.4300	0.3000	30663.7571	9048.8566	0.7039
0.2077					
5	1.5300	0.4000	30997.3831	12131.8677	0.7116
0.2785					
6	1.6300	0.5000	31331.0092	15248.2413	0.7193
0.3501					
7	1.7300	0.6000	678214.8252	43758.5140	15.5697
1.0046					
8	1.8300	0.7000	680806.2096	111708.8450	15.6292
2.5645					
9	1.9300	0.8000	683397.5940	179918.3121	15.6887
4.1304					
10	2.0300	0.9000	685998.1260	248387.3722	15.7484
5.7022					
11	2.1300	1.0000	688619.1312	317117.5061	15.8085
7.2800					
12	2.2300	1.1000	691240.1364	386109.7381	15.8687
8.8639					
13	2.3300	1.2000	693861.1416	455364.0681	15.9289
10.4537					
14	2.4300	1.3000	696482.1468	524880.4962	15.9890
12.0496					
15	2.5300	1.4000	699103.1520	594659.0223	16.0492
13.6515					
16	2.6300	1.5000	701724.1572	664699.6465	16.1094
15.2594					
17	2.7300	1.6000	704345.1624	735002.3687	16.1695
16.8733					
18	2.8300	1.7000	706966.1676	805567.1890	16.2297
18.4933					
19	2.9300	1.8000	709587.1728	876394.1073	16.2899
20.1192					
20	3.0300	1.9000	712219.9392	947483.7114	16.3503
21.7512					
21	3.1300	2.0000	714881.0196	1.01884E+06	16.4114
23.3893					
22	3.2300	2.1000	740979.9936	1.09163E+06	17.0106
25.0603					
23	3.3300	2.2000	745144.7652	1.16593E+06	17.1062
26.7661					
24	3.4300	2.3000	749309.5368	1.24065E+06	17.2018

28.4815						
25	3.5300	2.4000	753474.3084	1.31579E+06		17.2974
30.2064						
26	3.6300	2.5000	757639.0800	1.39135E+06		17.3930
31.9409						
27	3.7300	2.6000	761803.8516	1.46732E+06		17.4886
33.6850						
28	3.8300	2.7000	765968.6232	1.54371E+06		17.5842
35.4386						
29	3.9300	2.8000	770133.3948	1.62051E+06		17.6798
37.2018						
30	4.0300	2.9000	983703.7188	1.70798E+06		22.5827
39.2099						
31	4.1300	3.0000	995737.6044	1.80695E+06		22.8590
41.4820						
32	4.2300	3.1000	1007718.782	1.90713E+06		23.1340
43.7816						
33	4.3300	3.2000	1019577.557	2.00849E+06		23.4063
46.1086						
34	4.4300	3.3000	1031436.331	2.11104E+06		23.6785
48.4628						
35	4.5300	3.4000	1043295.106	2.21477E+06		23.9508
50.8442						
36	4.6300	3.5000	1055153.880	2.31969E+06		24.2230
53.2528						
37	4.7300	3.6000	1067012.654	2.42580E+06		24.4952
55.6887						
38	4.8300	3.7000	1078871.429	2.53309E+06		24.7675
58.1518						
39	4.9300	3.8000	1090730.203	2.64157E+06		25.0397
60.6421						
40	5.0300	3.9000	1102126.806	2.75121E+06		25.3013
63.1591						
41	5.1300	4.0000	1112444.428	2.86194E+06		25.5382
65.7011						
42	5.2300	4.1000	1122762.049	2.97370E+06		25.7751
68.2667						
43	5.3300	4.2000	1133080.106	3.08649E+06		26.0119
70.8560						
44	5.4300	4.3000	1135447.157	3.19991E+06		26.0663
73.4599						
45	5.5300	4.4000	1137814.643	3.31358E+06		26.1206
76.0692						
46	5.6300	4.5000	1140182.129	3.42747E+06		26.1750
78.6840						
47	5.7300	4.6000	1142549.179	3.54161E+06		26.2293
81.3042						
48	5.8300	4.7000	1144916.665	3.65598E+06		26.2837
83.9298						
49	5.9300	4.8000	1146901.694	3.77057E+06		26.3292

86.5604						
50	6.0300	4.9000	1148224.176	3.88533E+06		26.3596
89.1948						
51	6.1300	5.0000	1148224.176	4.00015E+06		26.3596
91.8308						
52	6.2300	5.1000	1148224.176	4.11497E+06		26.3596
94.4668						
53	6.3300	5.2000	1148224.176	4.22979E+06		26.3596
97.1027						
54	6.4300	5.3000	1148224.176	4.34462E+06		26.3596
99.7387						
55	6.5300	5.4000	1148224.176	4.45944E+06		26.3596
102.3746						
56	6.6300	5.5000	1148224.176	4.57426E+06		26.3596
105.0106						
57	6.7300	5.6000	1148224.176	4.68908E+06		26.3596
107.6466						
58	6.8300	5.7000	1148224.176	4.80391E+06		26.3596
110.2825						
59	6.9300	5.8000	1148224.176	4.91873E+06		26.3596
112.9185						
60	7.0300	5.9000	1148224.176	5.03355E+06		26.3596
115.5544						
61	7.1300	6.0000	1148224.176	5.14837E+06		26.3596
118.1904						
62	7.2300	6.1000	1148224.176	5.26320E+06		26.3596
120.8264						
63	7.3300	6.2000	1148224.176	5.37802E+06		26.3596
123.4623						
64	7.4300	6.3000	1148224.176	5.49284E+06		26.3596
126.0983						
65	7.5300	6.4000	1148224.176	5.60766E+06		26.3596
128.7342						
66	7.6300	6.5000	1148224.176	5.72249E+06		26.3596
131.3702						
67	7.7300	6.6000	1148224.176	5.83731E+06		26.3596
134.0062						
68	7.8300	6.7000	1148224.176	5.95213E+06		26.3596
136.6421						

=====

| Variable storage data for node | N-0001K

=====

Data	Elevation	Depth	Area	Volume	Area
Volume	ft	ft	ft^2	ft^3	acres
Point					
ac-ft					
=====	=====	=====	=====	=====	=====
1	2.0300	0.0000	139392.0000	0.0000	3.2000

0.0000					
2	2.1300	0.1000	139392.0000	13939.2000	3.2000
0.3200					
3	2.2300	0.2000	139392.0000	27878.4000	3.2000
0.6400					
4	2.3300	0.3000	139392.0000	41817.6000	3.2000
0.9600					
5	2.4300	0.4000	139392.0000	55756.8000	3.2000
1.2800					
6	2.5300	0.5000	139392.0000	69696.0000	3.2000
1.6000					
7	2.6300	0.6000	139392.0000	83635.2000	3.2000
1.9200					
8	2.7300	0.7000	143421.3000	97775.2452	3.2925
2.2446					
9	2.8300	0.8000	147450.6000	112318.2296	3.3850
2.5785					
10	2.9300	0.9000	151479.9000	127264.1525	3.4775
2.9216					
11	3.0300	1.0000	157053.5762	142689.8329	3.6055
3.2757					
12	3.1300	1.1000	158597.9960	158472.1908	3.6409
3.6380					
13	3.2300	1.2000	160142.3723	174408.9874	3.6764
4.0039					
14	3.3300	1.3000	161686.7921	190500.2230	3.7118
4.3733					
15	3.4300	1.4000	163231.1683	206745.8974	3.7473
4.7462					
16	3.5300	1.5000	164775.5881	223146.0106	3.7827
5.1227					
17	3.6300	1.6000	166319.9644	239700.5626	3.8182
5.5028					
18	3.7300	1.7000	167864.3842	256409.5535	3.8536
5.8864					
19	3.8300	1.8000	169408.7604	273272.9832	3.8891
6.2735					
20	3.9300	1.9000	170953.1802	290290.8516	3.9245
6.6642					
21	4.0300	2.0000	173804.4000	307528.3617	3.9900
7.0599					
22	4.1300	2.1000	175111.2000	324973.9265	4.0200
7.4604					
23	4.2300	2.2000	176418.0000	342550.1702	4.0500
7.8639					
24	4.3300	2.3000	177724.8000	360257.0930	4.0800
8.2704					
25	4.4300	2.4000	179031.6000	378094.6947	4.1100
8.6799					
26	4.5300	2.5000	181645.2000	396128.1966	4.1700

9.0939						
27	4.6300	2.6000	182952.0000	414357.8352	4.2000	
9.5123						
28	4.7300	2.7000	184258.8000	432718.1529	4.2300	
9.9338						
29	4.8300	2.8000	185565.6000	451209.1495	4.2600	
10.3583						
30	4.9300	2.9000	186872.4000	469830.8250	4.2900	
10.7858						
31	5.0300	3.0000	190859.7953	488716.8952	4.3815	
11.2194						
32	5.1300	3.1000	192233.5906	507871.3319	4.4131	
11.6591						
33	5.2300	3.2000	193607.4294	527163.1492	4.4446	
12.1020						
34	5.3300	3.3000	196355.0635	546660.9175	4.5077	
12.5496						
35	5.4300	3.4000	197728.8588	566364.8767	4.5392	
13.0019						
36	5.5300	3.5000	199102.6976	586206.2164	4.5708	
13.4574						
37	5.6300	3.6000	200476.4929	606184.9368	4.6023	
13.9161						
38	5.7300	3.7000	203224.1270	626369.6101	4.6654	
14.3795						
39	5.8300	3.8000	204597.9659	646760.4723	4.6969	
14.8476						
40	5.9300	3.9000	205971.7612	667288.7151	4.7285	
15.3188						
41	6.0300	4.0000	207345.6000	687954.3384	4.7600	
15.7933						
42	6.1300	4.1000	207345.6000	708688.8984	4.7600	
16.2693						
43	6.2300	4.2000	207345.6000	729423.4584	4.7600	
16.7453						
44	6.3300	4.3000	207345.6000	750158.0184	4.7600	
17.2213						
45	6.4300	4.4000	207345.6000	770892.5784	4.7600	
17.6973						
46	6.5300	4.5000	207345.6000	791627.1384	4.7600	
18.1733						
47	6.6300	4.6000	207345.6000	812361.6984	4.7600	
18.6493						
48	6.7300	4.7000	207345.6000	833096.2584	4.7600	
19.1253						
49	6.8300	4.8000	207345.6000	853830.8184	4.7600	
19.6013						
50	6.9300	4.9000	207345.6000	874565.3784	4.7600	
20.0773						
51	7.0300	5.0000	207345.6000	895299.9384	4.7600	

20.5533						
52	7.1300	5.1000	207345.6000	916034.4984		4.7600
21.0293						
53	7.2300	5.2000	207345.6000	936769.0584		4.7600
21.5053						
54	7.3300	5.3000	207345.6000	957503.6184		4.7600
21.9813						
55	7.4300	5.4000	207345.6000	978238.1784		4.7600
22.4573						
56	7.5300	5.5000	207345.6000	998972.7384		4.7600
22.9333						
57	7.6300	5.6000	207345.6000	1.01971E+06		4.7600
23.4093						
58	7.7300	5.7000	207345.6000	1.04044E+06		4.7600
23.8853						
59	7.8300	5.8000	207345.6000	1.06118E+06		4.7600
24.3613						
60	7.9300	5.9000	207345.6000	1.08191E+06		4.7600
24.8373						
61	8.0300	6.0000	207345.6000	1.10265E+06		4.7600
25.3133						
62	8.1300	6.1000	207345.6000	1.12338E+06		4.7600
25.7893						
63	8.2300	6.2000	207345.6000	1.14411E+06		4.7600
26.2653						
64	8.3300	6.3000	207345.6000	1.16485E+06		4.7600
26.7413						
65	8.4300	6.4000	207345.6000	1.18558E+06		4.7600
27.2173						
66	8.5300	6.5000	207345.6000	1.20632E+06		4.7600
27.6933						

=====

| Variable storage data for node | N0140-A

=====

Data	Elevation	Depth	Area	Volume	Area
Volume					
Point	ft	ft	ft^2	ft^3	acres
ac-ft					
=====	=====	=====	=====	=====	=====
1	-2.1000	0.0000	1742.4000	0.0000	0.0400
0.0000					
2	-2.0000	0.1000	1742.4000	174.2400	0.0400
0.0040					
3	-1.9000	0.2000	1742.4000	348.4800	0.0400
0.0080					
4	-1.8000	0.3000	1742.4000	522.7200	0.0400
0.0120					
5	-1.7000	0.4000	1742.4000	696.9600	0.0400

0.0160					
6	-1.6000	0.5000	1742.4000	871.2000	0.0400
0.0200					
7	-1.5000	0.6000	1742.4000	1045.4400	0.0400
0.0240					
8	-1.4000	0.7000	1742.4000	1219.6800	0.0400
0.0280					
9	-1.3000	0.8000	1742.4000	1393.9200	0.0400
0.0320					
10	-1.2000	0.9000	1742.4000	1568.1600	0.0400
0.0360					
11	1.5000	3.6000	1742.4000	6272.6400	0.0400
0.1440					
12	1.6000	3.7000	1742.4000	6446.8800	0.0400
0.1480					
13	1.7000	3.8000	1742.4000	6621.1200	0.0400
0.1520					
14	1.8000	3.9000	1742.4000	6795.3600	0.0400
0.1560					
15	2.9000	5.0000	1742.4000	8712.0000	0.0400
0.2000					
16	3.0000	5.1000	1742.4000	8886.2400	0.0400
0.2040					
17	3.1000	5.2000	1742.4000	9060.4800	0.0400
0.2080					
18	3.2000	5.3000	1742.4000	9234.7200	0.0400
0.2120					
19	3.3000	5.4000	1742.4000	9408.9600	0.0400
0.2160					
20	3.4000	5.5000	1742.4000	9583.2000	0.0400
0.2200					
21	3.5000	5.6000	1742.4000	9757.4400	0.0400
0.2240					
22	3.6000	5.7000	1742.4000	9931.6800	0.0400
0.2280					
23	3.7000	5.8000	1742.4000	10105.9200	0.0400
0.2320					
24	3.8000	5.9000	1742.4000	10280.1600	0.0400
0.2360					
25	3.9000	6.0000	1742.4000	10454.4000	0.0400
0.2400					
26	4.0000	6.1000	1742.4000	10628.6400	0.0400
0.2440					
27	4.1000	6.2000	1742.4000	10802.8800	0.0400
0.2480					
28	4.2000	6.3000	1742.4000	10977.1200	0.0400
0.2520					
29	4.3000	6.4000	1742.4000	11151.3600	0.0400
0.2560					
30	4.4000	6.5000	1742.4000	11325.6000	0.0400

0.2600					
31	4.5000	6.6000	1742.4000	11499.8400	0.0400
0.2640					
32	4.6000	6.7000	1742.4000	11674.0800	0.0400
0.2680					
33	4.7000	6.8000	1742.4000	11848.3200	0.0400
0.2720					
34	4.8000	6.9000	1742.4000	12022.5600	0.0400
0.2760					
35	4.9000	7.0000	1742.4000	12196.8000	0.0400
0.2800					
36	5.0000	7.1000	1742.4000	12371.0400	0.0400
0.2840					
37	5.1000	7.2000	1742.4000	12545.2800	0.0400
0.2880					
38	5.2000	7.3000	1742.4000	12719.5200	0.0400
0.2920					
39	5.3000	7.4000	1742.4000	12893.7600	0.0400
0.2960					
40	5.4000	7.5000	1742.4000	13068.0000	0.0400
0.3000					
41	5.5000	7.6000	1742.4000	13242.2400	0.0400
0.3040					
42	5.6000	7.7000	1742.4000	13416.4800	0.0400
0.3080					
43	5.7000	7.8000	1742.4000	13590.7200	0.0400
0.3120					
44	5.8000	7.9000	1742.4000	13764.9600	0.0400
0.3160					
45	5.9000	8.0000	1742.4000	13939.2000	0.0400
0.3200					
46	6.0000	8.1000	1742.4000	14113.4400	0.0400
0.3240					
47	6.1000	8.2000	1742.4000	14287.6800	0.0400
0.3280					
48	6.2000	8.3000	1742.4000	14461.9200	0.0400
0.3320					
49	6.3000	8.4000	1742.4000	14636.1600	0.0400
0.3360					
50	6.4000	8.5000	1742.4000	14810.4000	0.0400
0.3400					
51	6.5000	8.6000	1742.4000	14984.6400	0.0400
0.3440					
52	6.6000	8.7000	1742.4000	15158.8800	0.0400
0.3480					
53	6.7000	8.8000	1742.4000	15333.1200	0.0400
0.3520					
54	6.8000	8.9000	1742.4000	15507.3600	0.0400
0.3560					
55	6.9000	9.0000	1742.4000	15681.6000	0.0400

0.3600					
56	7.0000	9.1000	1742.4000	15855.8400	0.0400
0.3640					
57	7.1000	9.2000	1742.4000	16030.0800	0.0400
0.3680					
58	7.2000	9.3000	1742.4000	16204.3200	0.0400
0.3720					
59	7.3000	9.4000	1742.4000	16378.5600	0.0400
0.3760					
60	7.4000	9.5000	1742.4000	16552.8000	0.0400
0.3800					
61	7.5000	9.6000	1742.4000	16727.0400	0.0400
0.3840					
62	7.6000	9.7000	1742.4000	16901.2800	0.0400
0.3880					
63	7.7000	9.8000	1742.4000	17075.5200	0.0400
0.3920					
64	7.8000	9.9000	1742.4000	17249.7600	0.0400
0.3960					
65	7.9000	10.0000	1742.4000	17424.0000	0.0400
0.4000					
66	8.0000	10.1000	1742.4000	17598.2400	0.0400
0.4040					
67	8.1000	10.2000	1742.4000	17772.4800	0.0400
0.4080					
68	8.2000	10.3000	1742.4000	17946.7200	0.0400
0.4120					
69	8.3000	10.4000	1742.4000	18120.9600	0.0400
0.4160					
70	8.4000	10.5000	1742.4000	18295.2000	0.0400
0.4200					
71	8.5000	10.6000	1742.4000	18469.4400	0.0400
0.4240					
72	8.6000	10.7000	1742.4000	18643.6800	0.0400
0.4280					
73	8.7000	10.8000	1742.4000	18817.9200	0.0400
0.4320					
74	8.8000	10.9000	1742.4000	18992.1600	0.0400
0.4360					
75	8.9000	11.0000	1742.4000	19166.4000	0.0400
0.4400					
76	9.0000	11.1000	1742.4000	19340.6400	0.0400
0.4440					
77	9.1000	11.2000	1742.4000	19514.8800	0.0400
0.4480					
78	9.2000	11.3000	1742.4000	19689.1200	0.0400
0.4520					
79	9.3000	11.4000	1742.4000	19863.3600	0.0400
0.4560					
80	9.4000	11.5000	1742.4000	20037.6000	0.0400

0.4600						
81	9.5000	11.6000	1742.4000	20211.8400	0.0400	
0.4640						
82	9.6000	11.7000	1742.4000	20386.0800	0.0400	
0.4680						
83	9.7000	11.8000	1742.4000	20560.3200	0.0400	
0.4720						
84	9.8000	11.9000	1742.4000	20734.5600	0.0400	
0.4760						
85	9.9000	12.0000	1742.4000	20908.8000	0.0400	
0.4800						
86	10.0000	12.1000	1742.4000	21083.0400	0.0400	
0.4840						
87	10.1000	12.2000	1742.4000	21257.2800	0.0400	
0.4880						
88	10.2000	12.3000	1742.4000	21431.5200	0.0400	
0.4920						
89	10.3000	12.4000	1742.4000	21605.7600	0.0400	
0.4960						

ERROR !!! The Weir crest of weir R0515-W2.1 is below the invert of Node:
N9003-A

=====

| Weir Data |

=====

Weir Top(ft)	Weir Name	Weir Discharge Coefficient	From Weir Junction Power	Length Power	To Junction	Type	Crest Height(ft)
16.91	R0880-WPump	2.6000	N0880	1.00	N0810	1	11.21
4.07	R0920-P2-W1	3.2000	N0920	1.00	N0870	1	3.57
8.49	R0920-P2-W2	3.2000	N0920	1.00	N0870	1	4.07
16.00	R0910-W1	2.6000	N0910	1.00	N0880	1	9.90
13.68	R0325-DS-W1	3.2000	N0325	1.00	N9003-D	1	5.68
12.90	R0400-WPump	2.6000	N0400	1.00	N9003-G	1	7.10
16.91	R0880-WPump2	2.6000	N0880	1.00	N9005-A	1	10.41
16.26	R0880-DS-W1	3.2000	N0880	1.00	N9005-A	1	8.26

	R0520-DS-W1		N0520		N0515	1	4.24
7.24	4.00	3.2000	1.5000	1.00			
	R0640-P1-W1		N0640		N0570	1	4.58
5.08	1.58	3.2000	1.5000	1.00			
	R0640-P1-W2		N0640		N0570	1	5.58
7.91	3.00	3.2000	1.5000	1.00			
	R0640-P2-W1		N0640		N0570	1	5.22
9.22	1.50	3.2000	1.5000	1.00			
	R0690-P1-W1		N0690		N0720	1	4.01
6.59	4.33	3.2000	1.5000	1.00			
	R0940-DS-W1		N0940		N9005-D	1	2.53
5.53	4.00	3.2000	1.5000	1.00			
	R0945-DS-W1		N0945		N9005-H	1	2.31
5.31	4.00	3.2000	1.5000	1.00			
	R1020-DS-W1		N1020		N9005-C	1	3.29
6.29	4.00	3.2000	1.5000	1.00			
	R0205-W1		N0205		N0210	1	5.70
13.50	20.00	3.2000	1.5000	1.00			
	R0205-W2		N0205		N0210	1	5.77
13.50	20.00	3.2000	1.5000	1.00			
	R0205-W3		N0205		N0210	1	5.98
13.50	20.00	3.2000	1.5000	1.00			
	R0205-W4		N0205		N0210	1	5.63
13.50	20.00	3.2000	1.5000	1.00			
	R0210-W1.1		N0210		N9002-B	1	1.63
10.72	60.00	3.2000	1.5000	1.00			
	R0515-W1.1		N0515		N0510	1	2.20
11.20	330.00	2.6000	1.5000	1.00			
	R0515-W2.1		N0515		N9003-A	1	0.91
11.20	1.67	3.2000	1.5000	1.00			
	R0620-W1		N0620		N0730	1	5.30
10.60	2.00	3.2000	1.5000	1.00			
	R0620-W2		N0620		N0730	1	4.26
10.60	2.00	3.2000	1.5000	1.00			
	R0620-W3		N0620		N0730	1	5.30
10.60	2.00	3.2000	1.5000	1.00			
	R0650-W2.1		N0650		N0655	1	1.99
10.49	20.00	2.6000	1.5000	1.00			
	R0660-W3.1		N0660		N0742	1	4.64
10.84	300.00	2.6000	1.5000	1.00			
	R0742-W1.1		N0742		N0570	1	3.41
10.51	300.00	3.2000	1.5000	1.00			
	R0890-W1.1		N0890		N0930	1	7.04
11.54	330.00	2.6000	1.5000	1.00			
	R0915-W1.1		N0915		N0910	1	7.40
16.00	330.00	2.6000	1.5000	1.00			
	RN-019-P1-W1		N-019		N-021	1	1.92
2.34	0.42	3.2000	1.5000	1.00			
	R019-P1-W2		N-019		N-021	1	3.42
5.42	3.08	3.2000	1.5000	1.00			

	R0830-P1-W1.1		N0830		N0900	1	3.12
3.87	8.00	3.2000	1.5000	1.00			
	R0830-P1-W2		N0830		N0900	1	3.80
8.22	3.33	3.2000	1.5000	1.00			
	R0970-P1-W1		N0970		N0900	1	2.28
3.03	8.00	3.2000	1.5000	1.00			
	R0970-P1-W2		N0970		N0900	1	3.08
7.50	3.33	3.2000	1.5000	1.00			
	R-0001A-W1.1		N-0001A		N9000-D	1	7.78
18.00	8.00	3.2000	1.5000	1.00			
	R-0001A-W2		N-0001A		N9000-D	1	8.30
18.00	28.00	3.2000	1.5000	1.00			
	R0001C-W1.1		N0001-C		N0460	1	1.05
7.85	3.00	3.2000	1.5000	1.00			
	R0001C-W2		N0001-C		N0460	1	0.55
7.85	3.00	3.2000	1.5000	1.00			
	R0001C-W3		N0001-C		N0460	1	0.00
0.18	0.33	3.2000	1.5000	1.00			
	R0001E-W1		N-0001-E		N-0001E-OF	1	0.50
5.20	10.10	3.2000	1.5000	1.00			
	R0001F-W1.1		N-0001-F		N-0001F-OF-A	1	0.30
6.50	3.00	3.2000	1.5000	1.00			
	R0001F-W2		N-0001-F		N-0001F-OF-A	1	0.60
6.50	3.00	3.2000	1.5000	1.00			
	R0001F-W3		N-0001-F		N-0001F-OF-A	1	0.30
6.50	3.00	3.2000	1.5000	1.00			
	R0001F-W4		N-0001-F		N-0001F-OF-A	1	0.35
6.50	3.00	3.2000	1.5000	1.00			
	R0001F-W5		N-0001-F		N-0001F-OF-A	1	0.30
6.50	3.00	3.2000	1.5000	1.00			
	R001G-W1		N-0001-G		N-0001F-OF-B	1	1.30
6.00	10.00	3.2000	1.5000	1.00			
	R0930-W6.1.1		N0890		N9004-L	1	6.28
11.54	2.50	3.2000	1.5000	1.00			
	R0001J-W1.1		N0001-J		N9005-J	1	1.36
8.81	2.50	3.2000	1.5000	1.00			
	R000J-W2		N0001-J		N9005-J	1	1.36
8.81	2.50	3.2000	1.5000	1.00			
	R000J-W3		N0001-J		N9005-J	1	1.36
8.81	2.50	3.2000	1.5000	1.00			
	R000J-W4		N0001-J		N9005-J	1	1.36
8.81	2.50	3.2000	1.5000	1.00			
	R000J-W5		N0001-J		N9005-J	1	0.00
8.81	1.12	3.2000	1.5000	1.00			
	R000J-W6		N0001-J		N9005-J	1	0.00
8.81	1.12	3.2000	1.5000	1.00			
	R000J-W7		N0001-J		N9005-J	1	3.03
8.81	6.58	3.2000	1.5000	1.00			
	R0001J-W8		N0001-J		N9005-K	1	1.36
8.81	2.50	3.2000	1.5000	1.00			

8.81	R0001J-W9		N0001-J		N9005-K	1	1.36
	2.50	3.2000	1.5000	1.00			
8.81	R0001J-W10		N0001-J		N9005-K	1	1.36
	2.50	3.2000	1.5000	1.00			
8.81	R0001J-W11		N0001-J		N9005-K	1	1.36
	2.50	3.2000	1.5000	1.00			
8.81	R0001J-W12		N0001-J		N9005-K	1	0.00
	1.12	3.2000	1.5000	1.00			
8.81	R0001J-W13		N0001-J		N9005-K	1	0.00
	1.12	3.2000	1.5000	1.00			
8.81	R0001J-W14		N0001-J		N9005-K	1	3.03
	6.58	3.2000	1.5000	1.00			
8.87	R0001I-W1.1		N0001-I		N0915	1	3.12
	6.58	3.2000	1.5000	1.00			
8.87	R001I-W2		N0001-I		N0915	1	1.37
	1.00	3.2000	1.5000	1.00			
8.87	R0001I-W3		N0001-I		N0915	1	1.27
	2.00	3.2000	1.5000	1.00			
8.87	R001I-W4		N0001-I		N0915	1	1.28
	3.00	3.2000	1.5000	1.00			
8.87	R001I-W5		N0001-I		N0915	1	1.28
	3.00	3.2000	1.5000	1.00			
8.87	R0001I-W7		N0001-I		N0915	1	0.44
	0.67	3.2000	1.5000	1.00			
8.87	R0001I-W7.1		N0001-I		N0915	1	0.44
	0.67	3.2000	1.5000	1.00			
7.97	R0001K-W1.1		N-0001K		N0870	1	0.67
	0.58	3.2000	1.5000	1.00			
7.97	R0001K-W2		N-0001K		N0870	1	3.77
	3.08	3.2000	1.5000	1.00			
7.97	R0001K-W3		N-0001K		N0870	1	2.12
	1.00	3.2000	1.5000	1.00			

```

*****
|                **WARNING**                |
|  Having weirs in series can occasionally   |
|  lead to large continuity errors for short |
|  duration simulations. Please check your   |
|  continuity errors and make adjustments to |
|  your model as required.                  |
*****

```

```

*****
|                Ordered Pump Data Fields    |
|  Pump Name/Upstream Node/Dnstream Node   |
|                DataPt/Depth/Flow         |
*****

```

```

Pump R0880-PUMP          N0880          N9005-A
1      0.000      34.000

```


2 72.000 34.000

```

*=====
|           Pump Curve Data           |
*=====
  
```

FROM	JUNCTIONS TO	INITIAL DEPTH IN WELL, ft	ON feet	OFF feet
1. N0880	N9005-A	0.00	8.21	8.11

```

*=====
|   Special Force Main Conduits   |
*=====
  
```

Bend	Conduit Loss	Diameter Preissman	Length	Rough	Entrance	Exit	Valve
Loss K	Coefft	Name	Sf*L	SlotWidth	-ness	Loss K	Loss K
=====	=====	=====	=====	=====	=====	=====	=====

Pump Name	Upstream Node	Dnstream Node	Minor Loss
R0880-PUMP	N0880	N9005-A	0.0000

Pt.	Flow Rate,	Original Head,	Modified Head	Force Main
1	34.000	0.000	0.000	0.000
2	34.000	72.000	72.000	72.000

Conduit Name	Maximum # of Pump Iterations	Pump Underrelaxation Parameter(0.25-0.85)
=====	=====	=====

```

*=====
|   FREE OUTFALL DATA (DATA GROUP I1)   |
|   BOUNDARY CONDITION ON DATA GROUP J1   |
*=====
  
```

- Outfall at Junction....N9004 has boundary condition number... 1
- Outfall at Junction....N9004-B has boundary condition number... 2
- Outfall at Junction....N9004-C has boundary condition number... 3
- Outfall at Junction....N9004-D has boundary condition number... 4
- Outfall at Junction....N9004-F has boundary condition number... 5
- Outfall at Junction....N9001-B has boundary condition number... 6
- Outfall at Junction....N9001-D has boundary condition number... 7

Outfall at Junction....N9001-F has boundary condition number...	8
Outfall at Junction....N9000 has boundary condition number...	9
Outfall at Junction....N9003 has boundary condition number...	10
Outfall at Junction....N9005 has boundary condition number...	11
Outfall at Junction....N9005-E has boundary condition number...	12
Outfall at Junction....N9005-G has boundary condition number...	13
Outfall at Junction....N9004-J has boundary condition number...	14
Outfall at Junction....N9004-G has boundary condition number...	15
Outfall at Junction....N9002 has boundary condition number...	16
Outfall at Junction....N9000-B has boundary condition number...	17
Outfall at Junction....N9000-C has boundary condition number...	18
Outfall at Junction....N9000-E has boundary condition number...	19
Outfall at Junction....N9000-F has boundary condition number...	20
Outfall at Junction....N9001-E has boundary condition number...	21
Outfall at Junction....N9001-G has boundary condition number...	22
Outfall at Junction....N9001-H has boundary condition number...	23
Outfall at Junction....N9001-J has boundary condition number...	24
Outfall at Junction....N9001-K has boundary condition number...	25
Outfall at Junction....N9002-A has boundary condition number...	26
Outfall at Junction....N9002-B has boundary condition number...	27
Outfall at Junction....N9003-A has boundary condition number...	28
Outfall at Junction....N9003-B has boundary condition number...	29
Outfall at Junction....N9003-C has boundary condition number...	30
Outfall at Junction....N9003-D has boundary condition number...	31
Outfall at Junction....N9003-E has boundary condition number...	32
Outfall at Junction....N9003-F has boundary condition number...	33
Outfall at Junction....N9003-G has boundary condition number...	34
Outfall at Junction....N9004-A has boundary condition number...	35
Outfall at Junction....N9004-E has boundary condition number...	36
Outfall at Junction....N9004-H has boundary condition number...	37
Outfall at Junction....N9004-I has boundary condition number...	38
Outfall at Junction....N9004-K has boundary condition number...	39
Outfall at Junction....N9005-A has boundary condition number...	40
Outfall at Junction....N9005-B has boundary condition number...	41
Outfall at Junction....N9005-C has boundary condition number...	42
Outfall at Junction....N9005-D has boundary condition number...	43
Outfall at Junction....N9005-F has boundary condition number...	44
Outfall at Junction....N9005-H has boundary condition number...	45
Outfall at Junction....N9000-D has boundary condition number...	46
Outfall at Junction....N-0001E-OF has boundary condition number...	47
Outfall at Junction....N-0001F-OF-A has boundary condition number...	48
Outfall at Junction....N-0001F-OF-B has boundary condition number...	49
Outfall at Junction....N9004-L has boundary condition number...	50
Outfall at Junction....N9005-J has boundary condition number...	51
Outfall at Junction....N9005-K has boundary condition number...	52

==> Warning !! Outfall Junction N9004-F has two or more connecting conduits.

==> Warning !! Outfall Junction N9001-D has two or more connecting conduits.

==> Warning !! Outfall Junction N9000-F has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9003-D has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9003-G has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9004-A has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9005-A has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9005-C has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9005-D has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9005-F has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9005-H has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9000-D has two or more connecting conduits.
 ==> Warning !! Outfall Junction N-0001F-OF-A has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9004-L has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9005-J has two or more connecting conduits.
 ==> Warning !! Outfall Junction N9005-K has two or more connecting conduits.

```

*=====
|                Weir Outfall Data                |
|          Boundary Condition on data group J1          |
*=====
  
```

Weir Outfall at Junction... N9003-D	has boundary condition number...
31	
Weir Outfall at Junction... N9003-G	has boundary condition number...
34	
Weir Outfall at Junction... N9005-A	has boundary condition number...
40	
Weir Outfall at Junction... N9005-A	has boundary condition number...
40	
Weir Outfall at Junction... N9005-D	has boundary condition number...
43	
Weir Outfall at Junction... N9005-H	has boundary condition number...
45	
Weir Outfall at Junction... N9005-C	has boundary condition number...
42	
Weir Outfall at Junction... N9002-B	has boundary condition number...
27	

Weir Outfall at Junction... N9003-A 28	has boundary condition number...
Weir Outfall at Junction... N9000-D 46	has boundary condition number...
Weir Outfall at Junction... N9000-D 46	has boundary condition number...
Weir Outfall at Junction... N-0001E-OF 47	has boundary condition number...
Weir Outfall at Junction... N-0001F-OF-A 48	has boundary condition number...
Weir Outfall at Junction... N-0001F-OF-A 48	has boundary condition number...
Weir Outfall at Junction... N-0001F-OF-A 48	has boundary condition number...
Weir Outfall at Junction... N-0001F-OF-A 48	has boundary condition number...
Weir Outfall at Junction... N-0001F-OF-A 48	has boundary condition number...
Weir Outfall at Junction... N-0001F-OF-B 49	has boundary condition number...
Weir Outfall at Junction... N9004-L 50	has boundary condition number...
Weir Outfall at Junction... N9005-J 51	has boundary condition number...
Weir Outfall at Junction... N9005-J 51	has boundary condition number...
Weir Outfall at Junction... N9005-J 51	has boundary condition number...
Weir Outfall at Junction... N9005-J 51	has boundary condition number...
Weir Outfall at Junction... N9005-J 51	has boundary condition number...
Weir Outfall at Junction... N9005-J 51	has boundary condition number...
Weir Outfall at Junction... N9005-J 51	has boundary condition number...
Weir Outfall at Junction... N9005-K 52	has boundary condition number...
Weir Outfall at Junction... N9005-K 52	has boundary condition number...
Weir Outfall at Junction... N9005-K 52	has boundary condition number...
Weir Outfall at Junction... N9005-K 52	has boundary condition number...
Weir Outfall at Junction... N9005-K 52	has boundary condition number...
Weir Outfall at Junction... N9005-K 52	has boundary condition number...

=====

| INTERNAL CONNECTIVITY INFORMATION |

=====

CONDUIT	JUNCTION	JUNCTION
R0880-WPump	N0880	N0810
R0920-P2-W1	N0920	N0870
R0920-P2-W2	N0920	N0870
R0910-W1	N0910	N0880
R0325-DS-W1	N0325	N9003-D
R0400-WPump	N0400	N9003-G
R0880-WPump2	N0880	N9005-A
R0880-DS-W1	N0880	N9005-A
R0520-DS-W1	N0520	N0515
R0640-P1-W1	N0640	N0570
R0640-P1-W2	N0640	N0570
R0640-P2-W1	N0640	N0570
R0690-P1-W1	N0690	N0720
R0940-DS-W1	N0940	N9005-D
R0945-DS-W1	N0945	N9005-H
R1020-DS-W1	N1020	N9005-C
R0205-W1	N0205	N0210
R0205-W2	N0205	N0210
R0205-W3	N0205	N0210
R0205-W4	N0205	N0210
R0210-W1.1	N0210	N9002-B
R0515-W1.1	N0515	N0510
R0515-W2.1	N0515	N9003-A
R0620-W1	N0620	N0730
R0620-W2	N0620	N0730
R0620-W3	N0620	N0730
R0650-W2.1	N0650	N0655
R0660-W3.1	N0660	N0742
R0742-W1.1	N0742	N0570
R0890-W1.1	N0890	N0930
R0915-W1.1	N0915	N0910
RN-019-P1-W1	N-019	N-021
R019-P1-W2	N-019	N-021
R0830-P1-W1.1	N0830	N0900
R0830-P1-W2	N0830	N0900
R0970-P1-W1	N0970	N0900
R0970-P1-W2	N0970	N0900
R-0001A-W1.1	N-0001A	N9000-D
R-0001A-W2	N-0001A	N9000-D
R0001C-W1.1	N0001-C	N0460
R0001C-W2	N0001-C	N0460
R0001C-W3	N0001-C	N0460

R0001E-W1	N-0001-E	N-0001E-OF
R0001F-W1.1	N-0001-F	N-0001F-OF-A
R0001F-W2	N-0001-F	N-0001F-OF-A
R0001F-W3	N-0001-F	N-0001F-OF-A
R0001F-W4	N-0001-F	N-0001F-OF-A
R0001F-W5	N-0001-F	N-0001F-OF-A
R001G-W1	N-0001-G	N-0001F-OF-B
R0930-W6.1.1	N0890	N9004-L
R0001J-W1.1	N0001-J	N9005-J
R000J-W2	N0001-J	N9005-J
R000J-W3	N0001-J	N9005-J
R000J-W4	N0001-J	N9005-J
R000J-W5	N0001-J	N9005-J
R000J-W6	N0001-J	N9005-J
R000J-W7	N0001-J	N9005-J
R0001J-W8	N0001-J	N9005-K
R0001J-W9	N0001-J	N9005-K
R0001J-W10	N0001-J	N9005-K
R0001J-W11	N0001-J	N9005-K
R0001J-W12	N0001-J	N9005-K
R0001J-W13	N0001-J	N9005-K
R0001J-W14	N0001-J	N9005-K
R0001I-W1.1	N0001-I	N0915
R001I-W2	N0001-I	N0915
R0001I-W3	N0001-I	N0915
R001I-W4	N0001-I	N0915
R001I-W5	N0001-I	N0915
R0001I-W7	N0001-I	N0915
R0001I-W7.1	N0001-I	N0915
R0001K-W1.1	N-0001K	N0870
R0001K-W2	N-0001K	N0870
R0001K-W3	N-0001K	N0870
R0880-PUMP	N0880	N9005-A
FREE# 1	N9004	BOUNDARY
FREE# 2	N9004-B	BOUNDARY
FREE# 3	N9004-C	BOUNDARY
FREE# 4	N9004-D	BOUNDARY
FREE# 5	N9004-F	BOUNDARY
FREE# 6	N9001-B	BOUNDARY
FREE# 7	N9001-D	BOUNDARY
FREE# 8	N9001-F	BOUNDARY
FREE# 9	N9000	BOUNDARY
FREE#10	N9003	BOUNDARY
FREE#11	N9005	BOUNDARY
FREE#12	N9005-E	BOUNDARY
FREE#13	N9005-G	BOUNDARY
FREE#14	N9004-J	BOUNDARY
FREE#15	N9004-G	BOUNDARY
FREE#16	N9002	BOUNDARY
FREE#17	N9000-B	BOUNDARY

FREE#18	N9000-C	BOUNDARY
FREE#19	N9000-E	BOUNDARY
FREE#20	N9000-F	BOUNDARY
FREE#21	N9001-E	BOUNDARY
FREE#22	N9001-G	BOUNDARY
FREE#23	N9001-H	BOUNDARY
FREE#24	N9001-J	BOUNDARY
FREE#25	N9001-K	BOUNDARY
FREE#26	N9002-A	BOUNDARY
FREE#27	N9002-B	BOUNDARY
FREE#28	N9003-A	BOUNDARY
FREE#29	N9003-B	BOUNDARY
FREE#30	N9003-C	BOUNDARY
FREE#31	N9003-D	BOUNDARY
FREE#32	N9003-E	BOUNDARY
FREE#33	N9003-F	BOUNDARY
FREE#34	N9003-G	BOUNDARY
FREE#35	N9004-A	BOUNDARY
FREE#36	N9004-E	BOUNDARY
FREE#37	N9004-H	BOUNDARY
FREE#38	N9004-I	BOUNDARY
FREE#39	N9004-K	BOUNDARY
FREE#40	N9005-A	BOUNDARY
FREE#41	N9005-B	BOUNDARY
FREE#42	N9005-C	BOUNDARY
FREE#43	N9005-D	BOUNDARY
FREE#44	N9005-F	BOUNDARY
FREE#45	N9005-H	BOUNDARY
FREE#46	N9000-D	BOUNDARY
FREE#47	N-0001E-OF	BOUNDARY
FREE#48	N-0001F-OF-A	BOUNDARY
FREE#49	N-0001F-OF-B	BOUNDARY
FREE#50	N9004-L	BOUNDARY
FREE#51	N9005-J	BOUNDARY
FREE#52	N9005-K	BOUNDARY

```

*=====
|           Boundary Condition Information           |
|           Data Groups J1-J4                       |
|=====

```

```

#####
# Header information from interface file: #
#####

```

Title from first computational layer:

Title from immediately preceding computational layer

Name of preceding layer:.....	Runoff Layer
Initial Julian date (IDATEZ).....	2020259
Initial time of day in seconds (TZERO).....	0.0
No. Transferred input locations.....	145
No. Transferred pollutants.....	1
Size of total catchment area (acres).....	20273.45

 # Element numbers of interface inlet locations: #
 #####

N0190	N0230	N0220	N0290
N0370	N0275	N0280	
N0285	N0380	N0385	N0386
N0388	N0420	N0530	
N0430	N0310	N0160	N0300
N0340	N0390	N0001-C	
N0460	N0440	N0360	N2040
N0450	N0400	N0550	
N0640	N0660	N0780	N0775
N0690	N0720	N0770	
N0885	N0960	N0990	N1010
N1030	N1020	N0940	
N1000	N0945	N0980	N0850
N0890	N0930	N0920	
N0950	N0830	N0970	N-0001K
N0870	N0790	N0001-I	
N0915	N0900	N0910	N0880
N0810	N0740	N0742	
N0800	N0620	N0730	N0570
N0560	N0515	N0510	
N0520	N0350	N0330	N0325
N0180	N0090	N-0001B	
N0100	N0130	N0080	N0050
N0170	N0205	N0210	
N0150	N0155	N0060	N0120
N0110	N0140	N0140-A	
N0500	N0470	N0540	N0650
N0490	N2380	N2370	
N0655	N0480	N0410	N0270
N0260	N0250	N0240	
N0200	N-002	N-003	N-004
N-001	N-006	N-005	
N-007	N-009	N-008	N-011

N-010	N-014	N-012	
N-013	N-015	N2002	N-020
N-022	N-026	N-027	
N-028	N-024	N-029	N-030
N-023	N-031	N-025	
N-041	N-019	N-021	N-043
N-042	N-040	N2090	
N-0001A	N-0001-E	N-0001-F	N-0001-G
N0001-J			

Conversion factor to cfs for flow units on interface file. Multiply by:
1.00000

Important Information #####
Interface file start: 2020/09/15 00:00:00
Simulation start: 2020/09/15 00:00:00
Same date/time found in interface file and model

```

*=====
|           XP Note Field Summary           |
*=====

```

```

*=====
|   Conduit Convergence Criteria   |
*=====

```

Conduit Name	Full Flow	Conduit Slope
R0870	150.9904	0.0023
R0770-P2	179.0232	0.0132
R0900	67.2157	0.0005
R0370	35.8092	0.0062
R0280	26.1354	0.0114
R0202	76.9944	0.0007
RN-002	10.5302	0.0022
RN-003	12.7682	0.0027
RN-006	18.6566	0.0007
RN-007	14.5125	0.0011
RN-009	22.4378	0.0010
RN-009MH	11.3974	0.0007
RN-011	39.1518	0.0013
RN-014	48.7436	0.0020
RN-012	98.7936	0.0040
RN-023	3.2550	0.0008
RN-021	2.3658	0.0011
RN-041	17.5255	0.0016

RN-020	50.4504	0.0049
RN-022	16.1753	0.0003
RN-024	23.6115	0.0028
RN-026	4.8280	0.0018
RN-027	2.2759	0.0004
RN-028	4.8211	0.0018
R0742-P3	6.6504	0.0009
R0655-P2	15.8955	0.0011
R0655-P3	16.6714	0.0012
R0655-P4	10.0532	0.0004
R0120-P2	28.9026	0.0042
R1010-P2	2.9988	0.0028
RN-025-P1	28.5963	0.0016
RN-025-P2	30.7174	0.0018
R0155-P1	90.9579	0.0279
R0386	46.9111	0.0000
R0388	46.9111	0.0000
R0385	46.9111	0.0000
R0375	54.3497	0.0000
R0335	62.9940	0.0000
R-0001B-P1	7.7875	0.0002
R0540-P1	6.5818	0.0006
R0540-P2	6.5818	0.0006
R0540-P3	9.8728	0.0014
R0290-P1	23.4491	0.0028
R0285.1	36.1097	0.0066
R0250.1	20.0671	0.0067
R0230.1	11.9585	0.0095
R0220.1	111.4234	0.0015
R0200.1	47.7783	0.0041
R0190.1	10.3564	0.0071
R0170.1	18.0897	0.0001
R0180-P1	14.1707	0.0004
R0180-P2	14.0935	0.0004
R0140.1	14.0688	0.0132
R0140-P3.1	14.0688	0.0132
R0150-P1	20.9143	0.0061
R0150-P2	5.7543	0.0187
R0150-P3	15.5517	0.0187
R0150-P4	26.9314	0.0101
R0150-P5	6.5464	0.0074
R0110.1	3.7426	0.0009
R0130-P1	162.3340	0.0058
R0130-P2	158.5436	0.0055
R0100-P1	42.6991	0.0035
R0100-P2	42.3642	0.0034
R0310.1	31.7755	0.0051
R0430-P1	7.1909	0.0009
R0430-P2	7.1909	0.0009
R0430-P3	7.1909	0.0009

R0430-P4	7.1672	0.0009
R0340-P1	120.4172	0.0103
R0340-P2	126.2946	0.0113
R0350-P1	130.9609	0.0121
R0350-P2	130.9609	0.0121
R0330-P1	130.2511	0.0120
R0330-P2	130.2511	0.0120
R0450-P1	14.9791	0.0045
R0450-P2	14.9791	0.0045
P0360-P1	6.3311	0.0124
P0360-P2	1.2416	0.0005
R0550-P1	80.9839	0.0027
R0550-P2	55.0177	0.0013
R0560-P1	123.8430	0.0086
R0560-P2	152.0017	0.0080
R0560-P3	155.2361	0.0084
R0780.1	187.5288	0.0263
R0740.1	14.0785	0.0132
R0730.1	7.9869	0.0195
R0880.1	49.7487	0.0021
R0950.1	28.2219	0.0133
R0920.1	87.5071	0.0147
R0960.1	21.8023	0.0024
R0990.1	10.1471	0.0017
R1010-P3	28.2164	0.0040
R1010-P4	30.0061	0.0046
R1010-P5	31.2965	0.0050
R0980-P1.1	17.1031	0.0015
R0980-P2.1	25.4326	0.0131
R0850-P1	7.1848	0.0010
R0850-P2	8.3409	0.0014
R0850-P3	8.1674	0.0014
R0570-P1	50.1123	0.0010
R0570-P2	62.8191	0.0016
R0570-P3	65.6124	0.0018
R0770-P1.1	46.6414	0.0167
R0770-P3	26.4115	0.0003
R0770-P4	42.4401	0.0007
R0790-P1	77.6987	0.0007
R0790-P2	29.7647	0.0004
R0530-P1	21.6854	0.0066
R0530-P2	20.5315	0.0059
R0530-P3	26.7356	0.0100
R0910-P1	104.9274	0.0073
R0910-P2	130.8466	0.0113
R0380-P1	139.5803	0.0164
R0380-P2	139.5803	0.0164
R0300-P1	13.9715	0.0130
R0300-P2	13.9715	0.0130
R0290-P2.1	16.6726	0.0046

RN-004-P1	21.7145	0.0024
RN-004-P2	30.6868	0.0048
RN-004-P3	31.6541	0.0051
RN-001-P1	16.9051	0.0058
RN-001-P2	20.0672	0.0082
RN-001-P3	16.5164	0.0055
RN-005-P1	13.8981	0.0010
RN-005-P2	13.3977	0.0009
RN-005-P3	6.5516	0.0002
RN-008-P1.1	22.8495	0.0010
RN-008-P2	35.2135	0.0024
RN-008-P3	37.8917	0.0028
RN-010-P1	22.1934	0.0009
RN-010-P2	14.0364	0.0004
RN-010-P3	15.7677	0.0005
RN-013-P1	22.1240	0.0009
RN-013-P2	22.1240	0.0009
RN-013-P3	22.1240	0.0009
RN-015-P1	75.8346	0.0093
RN-015-P2	35.2518	0.0020
RN-015-P3	47.7311	0.0037
RN-029-P1	77.5090	0.0115
RN-029-P2	16.6869	0.0005
R0742-P1	44.4656	0.0044
R0742-P2	44.4656	0.0044
R0655-P1.1	20.7252	0.0018
R0490-P8	2.4277	0.0010
R0490-P7	2.4277	0.0010
R0140-P2.1	37.0505	0.0022
R0140-P1.1	37.7141	0.0023
R0120-P1.1	28.8104	0.0042
R0160-P1.1	13.0466	0.0034
R0325-P1.1	20.0738	0.0020
R0400-P1.1	55.1912	0.0026
R0880-P2.1	30.8103	0.0018
R1010-P1.1	2.7917	0.0024
R-0410-P4	4.2580	0.0012
R-0410-P5	4.2580	0.0012
R-0410-P6	4.2897	0.0012
R-0410-P7	9.6396	0.0060
R0410-P1	204.6947	0.0353
R0410-P2	204.6947	0.0353
R0410-P3	204.6947	0.0353
498.1	6.4466	0.0027
R0490-P1.1	5.2343	0.0018
R0490-P3	6.6477	0.0076
R0490-P4	7.3381	0.0092
R0490-P5	5.6589	0.0055
R0490-P6	4.0015	0.0027
R0890-ORF-2	0.0750	0.0000

R0890-ORF-5	0.0750	0.0000
R0890ORF-3	0.0750	0.0000
R0890-ORF-4	0.0750	0.0000
N0140-A-W1.1	15.9183	-0.0000
R0540-W3	0.0000	0.0018
R0290-P5	0.0000	0.0000
R0285-W2	0.0000	0.0020
R0250-W1	0.0000	0.0009
R0230-W1	0.0000	0.0010
R0220-W2	0.0000	0.0014
R0200-W3	0.0000	0.0020
R0190-W4	0.0000	0.0007
R0170-W3	0.0000	0.0000
R0180-W1	0.0000	0.0004
R0140-W1	0.0000	-0.0017
R0150-W3	0.0000	0.0016
R0110-W1	0.0000	0.0021
R0130-W1	0.0000	-0.0007
R0100-W4	0.0000	0.0011
R0310-W5.1	0.0000	0.0005
R0430-W3	0.0000	-0.0001
R0340-W3	0.0000	0.0009
R0350-W1	0.0000	0.0007
R0330-W1	0.0000	0.0021
R0360-W1	0.0000	0.0032
R0550-W2	0.0000	-0.0001
R0560-W1	0.0000	-0.0016
R0780-W1	0.0000	-0.0037
R0740-W3	0.0000	0.0018
R0870-W1	0.0000	0.0008
R0950-W1	0.0000	0.0025
R0960-W2	0.0000	0.0048
R0990-W2	0.0000	0.0026
R1010-W2	0.0000	0.0020
R0980-W2	0.0000	0.0006
R0850-W2	0.0000	0.0002
R0770-W2	0.0000	-0.0001
R0530-W4	0.0000	0.0003
R0380-W3	0.0000	0.0011
R0300-W2	0.0000	0.0005
R0290-W1	0.0000	-0.0013
R0655-W2	0.0000	-0.0002
R0140-W2	0.0000	0.0002
R0120-W2	0.0000	0.0007
R0160-W1	0.0000	-0.0001
R0400-W1	0.0000	-0.0029
R0880-W2	0.0000	-0.0069
R1010-W1	0.0000	0.0010
R0490-W2	0.0000	0.0003
R0050-W1.1	0.0000	-0.0007

R0050-W2.1	0.0000	0.0004
R0060-W1.1	0.0000	-0.0011
R0080-W1.1	0.0000	0.0026
R0080-W2.1	0.0000	0.0013
R0090-W1.1	0.0000	0.0038
R0090-W2.1	0.0000	0.0034
R0090-W3.1	0.0000	0.0017
R0090-W4.1	0.0000	0.0027
R0100-W1.1	0.0000	-0.0000
R0100-W2.1	0.0000	0.0013
R0100-W3.1	0.0000	0.0014
R0110-W2.1	0.0000	0.0027
R0120-W1.1	0.0000	-0.0010
R0130-W2.1	0.0000	0.0007
R0150-W1.1	0.0000	0.0027
R0150-W2.1	0.0000	0.0007
R0170-W1.1	0.0000	-0.0022
R0170-W2.1	0.0000	0.0012
R0190-W1.1	0.0000	-0.0002
R0190-W2.1	0.0000	-0.0003
R0190-W3.1	0.0000	0.0009
R0200-W1.1	0.0000	-0.0009
R0200-W2.1	0.0000	-0.0049
R0220-W1.1	0.0000	-0.0011
R0240-W1.1	0.0000	0.0024
R0240-W2.1	0.0000	0.0033
R0240-W3.1	0.0000	-0.0019
R0240-W4.1	0.0000	0.0029
R0240-W5.1	0.0000	0.0004
R0240-W6.1	0.0000	0.0030
R0250-W2.1	0.0000	0.0025
R0250-W3.1	0.0000	0.0007
R0260-W1.1	0.0000	0.0005
R0270-W1.1	0.0000	0.0018
R0270-W3	0.0000	0.0018
R0270-W2.1	0.0000	-0.0007
R0275-W1.1	0.0000	0.0003
R0280-W1.1	0.0000	0.0000
R0285-W1.1	0.0000	0.0022
R0290-W2.1	0.0000	0.0025
R0290-W3.1	0.0000	-0.0013
R0290-W4.1	0.0000	-0.0006
R0300-W1.1	0.0000	-0.0019
R0310-W1.1	0.0000	0.0023
R0310-W2.1	0.0000	0.0003
R0310-W3.1	0.0000	0.0004
R0310-W4.1	0.0000	-0.0016
R0325-W2.1	0.0000	-0.0024
R0330-W2.1	0.0000	-0.0005
R0330-W3.1	0.0000	-0.0021

R0340-W1.1	0.0000	0.0010
R0340-W2.1	0.0000	0.0004
R0350-W2.1	0.0000	-0.0005
R0350-W3.1	0.0000	-0.0010
R0360-W2.1	0.0000	0.0001
R0360-W3.1	0.0000	-0.0001
R0370-W1.1	0.0000	0.0010
R0370-W2.1	0.0000	0.0011
R0370-W3.1	0.0000	-0.0008
R0380-W1.1	0.0000	-0.0018
R0380-W2.1	0.0000	-0.0023
R0380-W4.1	0.0000	-0.0031
R0390-W1.1	0.0000	0.0004
R0390-W2	0.0000	-0.0003
R0400-W2.1	0.0000	-0.0001
R0410-W1.1	0.0000	-0.0014
R0420-W1.1	0.0000	0.0057
R0420-W2.1	0.0000	0.0008
R0430-W1.1	0.0000	0.0013
R0430-W2.1	0.0000	-0.0024
R0440-W1.1	0.0000	0.0015
R0450-W1.1	0.0000	-0.0013
R0450-W2.1	0.0000	0.0016
R0460-W1.1	0.0000	0.0008
R0460-W2.1	0.0000	0.0007
R0480-W1.1	0.0000	0.0049
R0480-W2.1	0.0000	0.0004
R0480-W3.1	0.0000	0.0035
R0490-W1.1	0.0000	0.0013
R0490-W3.1	0.0000	0.0017
R0500-W1.1	0.0000	0.0004
R0510-W2.1	0.0000	-0.0014
R0520-W1.1	0.0000	-0.0016
R0520-W2.1	0.0000	-0.0014
R0530-W1.1	0.0000	0.0018
R0530-W2.1	0.0000	-0.0002
R0530-W3	0.0000	-0.0006
R0540-W1.1	0.0000	-0.0005
R0540-W2.1	0.0000	-0.0009
R0550-W1.1	0.0000	-0.0013
R0550-W3.1	0.0000	0.0015
R0560-W2.1	0.0000	-0.0028
R0560-W3.1	0.0000	-0.0010
R0560-W4.1	0.0000	0.0002
R0560-W5.1	0.0000	0.0041
R0570-W1.1	0.0000	-0.0020
R0570-W3.1	0.0000	-0.0041
R0570-W4.1	0.0000	0.0004
R0570-W5.1	0.0000	0.0003
R0640-W1.1	0.0000	-0.0001

R0650-W1.1	0.0000	-0.0027
R0660-W1.1	0.0000	0.0013
R0660-W2.1	0.0000	0.0004
R0690-W2.1	0.0000	0.0013
R0720-W1.1	0.0000	0.0024
R0730-W1.1	0.0000	0.0006
R0740-W2.1	0.0000	0.0009
R0740-W4.1	0.0000	0.0017
R0775-W1.1	0.0000	0.0024
R0780-W2.1	0.0000	-0.0031
R0790-W1	0.0000	-0.0009
R0800-W1.1	0.0000	0.0060
R0800-W2.1	0.0000	0.0054
R0810-W1.1	0.0000	-0.0019
R0830-W3.1	0.0000	-0.0008
R0850-W3.1	0.0000	0.0050
R0870-W2.1	0.0000	0.0001
R0885-W1.1	0.0000	0.0000
R0910-W2.1	0.0000	-0.0060
R0930-W1.1	0.0000	-0.0008
R0940-W1.1	0.0000	-0.0010
R0940-W2.1	0.0000	-0.0002
R0945-W1.1	0.0000	-0.0008
R0950-W2.1	0.0000	0.0008
R0960-W1.1	0.0000	0.0003
R0960-W3.1	0.0000	0.0035
R0960-W4.1	0.0000	0.0023
R0980-W1.1	0.0000	0.0016
R0990-W1.1	0.0000	0.0026
R0990-W3.1	0.0000	-0.0001
R1000-W1.1	0.0000	-0.0006
R1020-W1.1	0.0000	-0.0010
R1030-W1.1	0.0000	-0.0011
R1030-W2.1	0.0000	-0.0001
R2002-W1.1	0.0000	-0.0005
R02040-W1.1	0.0000	-0.0011
R2090-W1.1	0.0000	0.0001
R2370-W4.1	0.0000	0.0011
R2380-W2.1	0.0000	-0.0006
R2380-W3.1	0.0000	-0.0003
R0440-W2.1	0.0000	0.0008
R015-W1.1	0.0000	0.0003
R020-W1.1	0.0000	0.0018
R021-W1.1	0.0000	0.0002
R030-W1.1	0.0000	-0.0005
R031-W1.1	0.0000	0.0004
R042-W1.1	0.0000	0.0008
R043-W1.1	0.0000	-0.0005
R0850-W1.1	0.0000	0.0030


```

*=====
|   Initial Model Condition   |
| Initial Time =      0.02 hours |
*=====

```

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 0.32 / 0.32		N0550/ 1.40 / 0.07
N0690/ 0.00 / 0.62		
N0640/ 4.28 / 1.50		N0780/ 4.52 / 0.13
N0830/ 2.35 / 0.30		
N0790/ 3.11 / 0.13		N0800/ 0.00 / 3.35
N0870/ 4.30 / 1.38		
N0510/ 1.33 / -0.10		N0520/ 3.13 / 0.30
N0390/ 2.50 / 0.80		
N0350/ 3.01 / 0.32		N0450/ 1.62 / 0.32
N0770/ 3.18 / 0.13		
N0720/ 1.23 / 0.58		N0960/ 0.00 / 1.90
N0920/ 1.70 / 0.13		
N0950/ 0.55 / 0.13		N0970/ 1.61 / 0.40
N0915/ 6.13 / 0.13		
N0885/ 7.04 / 0.13		N0560/ 2.89 / 0.07
N0810/ 2.21 / 0.36		
N0570/ 4.05 / 1.38		N0990/ 0.00 / 1.57
N1000/ 1.76 / 0.40		
N1020/ 1.60 / 0.60		N1030/ 1.55 / 0.50
N0890/ 2.92 / 1.38		
N0850/ 0.00 / 1.46		N0930/ 4.95 / 1.38
N0980/ 0.09 / 1.71		
N1010/ 0.59 / 1.63		N0430/ 0.45 / 0.32
N0500/ 1.99 / 4.24		
N0230/ 0.00 / 3.31		N0220/ 1.04 / 2.22
N0200/ 1.53 / -0.08		
N0190/ 2.26 / 1.30		N0130/ 0.00 / -0.60
N0100/ 0.00 / 0.46		
N0090/ 0.00 / 2.49		N0120/ 1.54 / 1.30
N0110/ 0.53 / 1.30		
N0170/ 2.01 / 1.30		N0210/ 0.52 / -0.20
N0260/ 2.23 / 2.00		
N0250/ 0.70 / 3.00		N0240/ 1.56 / 3.00
N0140/ 3.31 / 1.41		
N0150/ 0.00 / 1.44		N0270/ 1.43 / 3.00
N0290/ 1.11 / 2.12		
N0180/ 2.76 / 1.30		N0370/ 1.16 / 2.14
N0285/ 0.12 / 2.12		
N0420/ 0.42 / 3.50		N0490/ 1.60 / 0.34
N0410/ 2.44 / -0.17		
N0380/ 0.49 / 0.49		N0660/ 1.66 / 0.82
N0740/ 1.37 / 0.13		
N0730/ 3.48 / 1.38		N0940/ 1.41 / 0.40
N0530/ 0.03 / 1.69		

N0060/	0.57	/	-0.72	N0050/	2.86	/	2.00
N0325/	4.70	/	0.33				
N0160/	1.67	/	-0.42	N0470/	1.64	/	3.45
N0540/	0.17	/	1.52				
N0650/	1.99	/	1.50	N0400/	3.22	/	0.32
N0360/	1.50	/	0.32				
N0480/	1.43	/	3.69	N0080/	0.32	/	0.80
N0310/	2.89	/	1.30				
N0300/	4.16	/	0.31	N0460/	2.47	/	0.32
N0440/	1.69	/	0.32				
N0330/	3.75	/	0.32	N0655/	2.74	/	-0.17
N0375/	2.14	/	2.14				
N0385/	3.20	/	2.11	N0275/	0.00	/	2.30
N0280/	0.12	/	2.12				
N0202/	3.49	/	-0.08	N0340/	2.11	/	0.32
N0515/	1.50	/	0.30				
N-001/	1.00	/	1.23	N-002/	0.47	/	3.47
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88	N-005/	0.05	/	0.92
N-008/	0.45	/	0.41				
N-010/	0.14	/	-0.15	N-013/	1.01	/	-0.15
N-015/	1.02	/	-0.17				
N-006/	0.00	/	2.66	N-007/	0.00	/	2.46
N-009/	0.00	/	2.68				
N-011/	0.00	/	2.04	N-014/	0.06	/	1.61
N-012/	0.00	/	1.48				
N-025/	1.07	/	-0.17	N-023/	0.00	/	0.45
N-021/	1.62	/	1.15				
N-019/	1.70	/	1.48	N-041/	0.70	/	1.48
N-020/	0.00	/	1.38				
N-022/	0.01	/	0.97	N-024/	0.14	/	-0.13
N-029/	0.81	/	-0.17				
N-026/	0.00	/	1.01	N-027/	0.19	/	-0.14
N-028/	0.17	/	-0.14				
N-030/	0.00	/	-0.07	N-043/	0.56	/	-0.60
N-042/	0.03	/	-0.60				
N-031/	0.45	/	-0.40	N-040/	1.31	/	-0.17
N0620/	0.00	/	-0.60				
N0900/	3.13	/	0.13	N-009mh/	2.41	/	2.41
N0205/	3.42	/	-0.08				
N0386/	1.72	/	0.63	N0388/	0.92	/	-0.17
N0775/	0.78	/	0.13				
N2040/	1.21	/	0.11	N2380/	2.12	/	0.31
N0155/	0.06	/	-0.08				
N0945/	0.96	/	0.15	N2002/	1.53	/	-0.27
N2090/	1.32	/	-0.57				
N0742/	1.89	/	1.38	N0910/	6.13	/	0.13
N0880/	0.00	/	-6.91				
N9004/	3.94	/	1.20	N9004-B/	3.99	/	1.20
N9004-C/	3.74	/	1.20				

N9004-D/	3.88	/	1.20	N9004-F/	2.37	/	1.20
N9001-B/	2.33	/	0.24	N9001-F/	1.14	/	0.24
N9001-D/	1.14	/	0.24	N9005/	0.24	/	0.24
N9000/	2.23	/	0.24	N9004-J/	2.53	/	1.20
N9003/	0.24	/	0.24	N2370/	2.29	/	0.73
N9005-E/	0.24	/	0.24	N9000-E/	2.23	/	0.24
N9005-G/	0.24	/	0.24	N9001-G/	1.14	/	0.24
N9004-G/	2.29	/	1.20	N9001-K/	0.41	/	0.24
N9002/	1.55	/	0.24	N9003-A/	0.24	/	0.24
N9000-B/	2.23	/	0.24	N9003-D/	0.24	/	0.24
N9000-C/	2.23	/	0.24	N9003-G/	0.24	/	0.24
N9000-F/	2.23	/	0.24	N9004-H/	2.37	/	1.20
N9001-E/	2.33	/	0.24	N9005-A/	0.24	/	0.24
N9001-H/	1.14	/	0.24	N9005-D/	0.24	/	0.24
N9001-J/	0.41	/	0.24	N9000-D/	2.49	/	0.24
N9002-A/	1.55	/	0.24	N0001-C/	0.00	/	2.15
N9002-B/	1.55	/	0.24	N-0001-F/	0.00	/	3.50
N9003-B/	0.24	/	0.24	N-0001F-OF-B/	0.00	/	3.13
N9003-C/	0.24	/	0.24	N9005-J/	0.24	/	0.24
N9003-E/	0.24	/	0.24	N-0001K/	0.00	/	2.03
N9003-F/	0.24	/	0.24				
N9004-A/	3.94	/	1.20				
N9004-E/	3.88	/	1.20				
N9004-I/	2.37	/	1.20				
N9004-K/	2.53	/	1.20				
N9005-B/	0.24	/	0.24				
N9005-C/	0.24	/	0.24				
N9005-F/	0.24	/	0.24				
N9005-H/	0.24	/	0.24				
N-0001A/	8.38	/	0.38				
N-0001B/	1.20	/	0.70				
N-0001-E/	0.00	/	4.80				
N-0001E-OF/	0.00	/	3.13				
N-0001-G/	0.00	/	4.00				
N-0001F-OF-A/	0.00	/	3.13				
N9004-L/	3.94	/	1.20				
N0001-J/	0.00	/	1.19				
N9005-K/	0.24	/	0.24				
N0001-I/	0.00	/	1.13				
N0140-A/	3.40	/	1.30				

	Conduit/	FLOW	====>	"*" Conduit uses the normal flow option.
	R0870/	0.00		R0770-P2/ 0.00
R0900/	0.00			R0280/ 0.00
	R0370/	0.00		RN-003/ 0.00
R0202/	0.00			RN-009/ 0.00
	RN-002/	0.00		
RN-006/	0.00			
	RN-007/	0.00		
RN-009MH/	0.00			

RN-012/	RN-011/ 0.00	0.00	RN-014/	0.00
RN-041/	RN-023/ 0.00	0.00	RN-021/	0.00
RN-024/	RN-020/ 0.00	0.00	RN-022/	0.00
RN-028/	RN-026/ 0.00	0.00	RN-027/	0.00
R0655-P3/	R0742-P3/ 0.00	0.00	R0655-P2/	0.00
R1010-P2/	R0655-P4/ 0.00	0.00	R0120-P2/	0.00
R0155-P1/	RN-025-P1/ 0.00	0.00	RN-025-P2/	0.00
R0385/	R0386/ 0.00	0.00	R0388/	0.00
R-0001B-P1/	R0375/ 0.00	0.00	R0335/	0.00
R0540-P3/	R0540-P1/ 0.00	0.00	R0540-P2/	0.00
R0250.1/	R0290-P1/ 0.00	0.00	R0285.1/	0.00
R0200.1/	R0230.1/ 0.00	0.00	R0220.1/	0.00
R0180-P1/	R0190.1/ 0.00	0.00	R0170.1/	0.00
R0140-P3.1/	R0180-P2/ 0.00	0.00	R0140.1/	0.00
R0150-P3/	R0150-P1/ 0.00	0.00	R0150-P2/	0.00
R0110.1/	R0150-P4/ 0.00	0.00	R0150-P5/	0.00
R0100-P1/	R0130-P1/ 0.00	0.00	R0130-P2/	0.00
R0430-P1/	R0100-P2/ 0.00	0.00	R0310.1/	0.00
R0430-P4/	R0430-P2/ 0.00	0.00	R0430-P3/	0.00
R0350-P1/	R0340-P1/ 0.00	0.00	R0340-P2/	0.00
R0330-P2/	R0350-P2/ 0.00	0.00	R0330-P1/	0.00
P0360-P1/	R0450-P1/ 0.00	0.00	R0450-P2/	0.00
R0550-P2/	P0360-P2/ 0.00	0.00	R0550-P1/	0.00
R0560-P3/	R0560-P1/ 0.00	0.00	R0560-P2/	0.00
R0730.1/	R0780.1/ 0.00	0.00	R0740.1/	0.00

R0920.1/	R0880.1/ 0.00	0.00	R0950.1/	0.00
R1010-P3/	R0960.1/ 0.00	0.00	R0990.1/	0.00
R0980-P1.1/	R1010-P4/ 0.00	0.00	R1010-P5/	0.00
R0850-P2/	R0980-P2.1/ 0.00	0.00	R0850-P1/	0.00
R0570-P2/	R0850-P3/ 0.00	0.00	R0570-P1/	0.00
R0770-P3/	R0570-P3/ 0.00	0.00	R0770-P1.1/	0.00
R0790-P2/	R0770-P4/ 0.00	0.00	R0790-P1/	0.00
R0530-P3/	R0530-P1/ 0.00	0.00	R0530-P2/	0.00
R0380-P1/	R0910-P1/ 0.00	0.00	R0910-P2/	0.00
R0300-P2/	R0380-P2/ 0.00	0.00	R0300-P1/	0.00
RN-004-P2/	R0290-P2.1/ 0.00	0.00	RN-004-P1/	0.00
RN-001-P2/	RN-004-P3/ 0.00	0.00	RN-001-P1/	0.00
RN-005-P2/	RN-001-P3/ 0.00	0.00	RN-005-P1/	0.00
RN-008-P2/	RN-005-P3/ 0.00	0.00	RN-008-P1.1/	0.00
RN-010-P2/	RN-008-P3/ 0.00	0.00	RN-010-P1/	0.00
RN-013-P2/	RN-010-P3/ 0.00	0.00	RN-013-P1/	0.00
RN-015-P2/	RN-013-P3/ 0.00	0.00	RN-015-P1/	0.00
RN-029-P2/	RN-015-P3/ 0.00	0.00	RN-029-P1/	0.00
R0655-P1.1/	R0742-P1/ 0.00	0.00	R0742-P2/	0.00
R0140-P2.1/	R0490-P8/ 0.00	0.00	R0490-P7/	0.00
R0160-P1.1/	R0140-P1.1/ 0.00	0.00	R0120-P1.1/	0.00
R0880-P2.1/	R0325-P1.1/ 0.00	0.00	R0400-P1.1/	0.00
R-0410-P5/	R1010-P1.1/ 0.00	0.00	R-0410-P4/	0.00
R0410-P1/	R-0410-P6/ 0.00	0.00	R-0410-P7/	0.00
498.1/	R0410-P2/ 0.00	0.00	R0410-P3/	0.00

R0490-P1.1/	0.00	R0490-P3/	0.00
R0490-P4/	0.00		
R0490-P5/	0.00	R0490-P6/	0.00
R0890-ORF-2/	0.00		
R0890-ORF-5/	0.00	R0890ORF-3/	0.00
R0890-ORF-4/	0.00		
N0140-A-W1.1/	0.00	R0540-W3/	0.00
R0290-P5/	0.00		
R0285-W2/	0.00	R0250-W1/	0.00
R0230-W1/	0.00		
R0220-W2/	0.00	R0200-W3/	0.00
R0190-W4/	0.00		
R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00		
R0150-W3/	0.00	R0110-W1/	0.00
R0130-W1/	0.00		
R0100-W4/	0.00	R0310-W5.1/	0.00
R0430-W3/	0.00		
R0340-W3/	0.00	R0350-W1/	0.00
R0330-W1/	0.00		
R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00		
R0780-W1/	0.00	R0740-W3/	0.00
R0870-W1/	0.00		
R0950-W1/	0.00	R0960-W2/	0.00
R0990-W2/	0.00		
R1010-W2/	0.00	R0980-W2/	0.00
R0850-W2/	0.00		
R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00		
R0300-W2/	0.00	R0290-W1/	0.00
R0655-W2/	0.00		
R0140-W2/	0.00	R0120-W2/	0.00
R0160-W1/	0.00		
R0400-W1/	0.00	R0880-W2/	0.00
R1010-W1/	0.00		
R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00		
R0060-W1.1/	0.00	R0080-W1.1/	0.00
R0080-W2.1/	0.00		
R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00		
R0090-W4.1/	0.00	R0100-W1.1/	0.00
R0100-W2.1/	0.00		
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00		
R0130-W2.1/	0.00	R0150-W1.1/	0.00
R0150-W2.1/	0.00		
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00		

R0190-W2.1/	0.00	R0190-W3.1/	0.00
R0200-W1.1/	0.00		
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00		
R0240-W2.1/	0.00	R0240-W3.1/	0.00
R0240-W4.1/	0.00		
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00		
R0250-W3.1/	0.00	R0260-W1.1/	0.00
R0270-W1.1/	0.00		
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00		
R0280-W1.1/	0.00	R0285-W1.1/	0.00
R0290-W2.1/	0.00		
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00		
R0310-W1.1/	0.00	R0310-W2.1/	0.00
R0310-W3.1/	0.00		
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00		
R0330-W3.1/	0.00	R0340-W1.1/	0.00
R0340-W2.1/	0.00		
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00		
R0360-W3.1/	0.00	R0370-W1.1/	0.00
R0370-W2.1/	0.00		
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00		
R0380-W4.1/	0.00	R0390-W1.1/	0.00
R0390-W2/	0.00		
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00		
R0420-W2.1/	0.00	R0430-W1.1/	0.00
R0430-W2.1/	0.00		
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00		
R0460-W1.1/	0.00	R0460-W2.1/	0.00
R0480-W1.1/	0.00		
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00		
R0490-W3.1/	0.00	R0500-W1.1/	0.00
R0510-W2.1/	0.00		
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00		
R0530-W2.1/	0.00	R0530-W3/	0.00
R0540-W1.1/	0.00		
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00		
R0560-W2.1/	0.00	R0560-W3.1/	0.00
R0560-W4.1/	0.00		

R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00		
R0570-W4.1/	0.00	R0570-W5.1/	0.00
R0640-W1.1/	0.00		
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00		
R0690-W2.1/	0.00	R0720-W1.1/	0.00
R0730-W1.1/	0.00		
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00		
R0780-W2.1/	0.00	R0790-W1/	0.00
R0800-W1.1/	0.00		
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00		
R0850-W3.1/	0.00	R0870-W2.1/	0.00
R0885-W1.1/	0.00		
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00		
R0940-W2.1/	0.00	R0945-W1.1/	0.00
R0950-W2.1/	0.00		
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00		
R0980-W1.1/	0.00	R0990-W1.1/	0.00
R0990-W3.1/	0.00		
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00		
R1030-W2.1/	0.00	R2002-W1.1/	0.00
R02040-W1.1/	0.00		
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00		
R2380-W3.1/	0.00	R0440-W2.1/	0.00
R015-W1.1/	0.00		
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00		
R031-W1.1/	0.00	R042-W1.1/	0.00
R043-W1.1/	0.00		
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00		
R0920-P2-W2/	0.00	R0910-W1/	0.00
R0325-DS-W1/	0.00		
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00		
R0520-DS-W1/	0.00	R0640-P1-W1/	0.00
R0640-P1-W2/	0.00		
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00		
R0945-DS-W1/	0.00	R1020-DS-W1/	0.00
R0205-W1/	0.00		
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00		

R0210-W1.1/	0.00	R0515-W1.1/	0.00	
R0515-W2.1/	0.00			
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00			
R0650-W2.1/	0.00	R0660-W3.1/	0.00	
R0742-W1.1/	0.00			
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.00			
R019-P1-W2/	0.00	R0830-P1-W1.1/	0.00	
R0830-P1-W2/	0.00			
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	0.00			
R-0001A-W2/	0.00	R0001C-W1.1/	0.00	
R0001C-W2/	0.00			
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00			
R0001F-W2/	0.00	R0001F-W3/	0.00	
R0001F-W4/	0.00			
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00			
R0001J-W1.1/	0.00	R000J-W2/	0.00	
R000J-W3/	0.00			
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00			
R000J-W7/	0.00	R0001J-W8/	0.00	
R0001J-W9/	0.00			
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00			
R0001J-W13/	0.00	R0001J-W14/	0.00	
R0001I-W1.1/	0.00			
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00			
R001I-W5/	0.00	R0001I-W7/	0.00	
R0001I-W7.1/	0.00			
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00			
R0880-PUMP/	0.00	FREE# 1/	0.00	FREE#
2/	0.00			
FREE# 3/	0.00	FREE# 4/	0.00	FREE#
5/	0.00			
FREE# 6/	0.00	FREE# 7/	0.00	FREE#
8/	0.00			
FREE# 9/	0.00	FREE#10/	0.00	
FREE#11/	0.00			
FREE#12/	0.00	FREE#13/	0.00	
FREE#14/	0.00			
FREE#15/	0.00	FREE#16/	0.00	
FREE#17/	0.00			
FREE#18/	0.00	FREE#19/	0.00	
FREE#20/	0.00			

	FREE#21/	0.00	FREE#22/	0.00
FREE#23/	0.00			
	FREE#24/	0.00	FREE#25/	0.00
FREE#26/	0.00			
	FREE#27/	0.00	FREE#28/	0.00
FREE#29/	0.00			
	FREE#30/	0.00	FREE#31/	0.00
FREE#32/	0.00			
	FREE#33/	0.00	FREE#34/	0.00
FREE#35/	0.00			
	FREE#36/	0.00	FREE#37/	0.00
FREE#38/	0.00			
	FREE#39/	0.00	FREE#40/	0.00
FREE#41/	0.00			
	FREE#42/	0.00	FREE#43/	0.00
FREE#44/	0.00			
	FREE#45/	0.00	FREE#46/	0.00
FREE#47/	0.00			
	FREE#48/	0.00	FREE#49/	0.00
FREE#50/	0.00			
	FREE#51/	0.00	FREE#52/	0.00

	Conduit/	Velocity		
	R0870/	0.00	R0770-P2/	0.00
R0900/	0.00			
	R0370/	0.00	R0280/	0.00
R0202/	0.00			
	RN-002/	0.00	RN-003/	0.00
RN-006/	0.00			
	RN-007/	0.00	RN-009/	0.00
RN-009MH/	0.00			
	RN-011/	0.00	RN-014/	0.00
RN-012/	0.00			
	RN-023/	0.00	RN-021/	0.00
RN-041/	0.00			
	RN-020/	0.00	RN-022/	0.00
RN-024/	0.00			
	RN-026/	0.00	RN-027/	0.00
RN-028/	0.00			
	R0742-P3/	0.00	R0655-P2/	0.00
R0655-P3/	0.00			
	R0655-P4/	0.00	R0120-P2/	0.00
R1010-P2/	0.00			
	RN-025-P1/	0.00	RN-025-P2/	0.00
R0155-P1/	0.00			
	R0386/	0.00	R0388/	0.00
R0385/	0.00			
	R0375/	0.00	R0335/	0.00
R-0001B-P1/	0.00			
	R0540-P1/	0.00	R0540-P2/	0.00

R0540-P3/	0.00			
	R0290-P1/	0.00	R0285.1/	0.00
R0250.1/	0.00			
	R0230.1/	0.00	R0220.1/	0.00
R0200.1/	0.00			
	R0190.1/	0.00	R0170.1/	0.00
R0180-P1/	0.00			
	R0180-P2/	0.00	R0140.1/	0.00
R0140-P3.1/	0.00			
	R0150-P1/	0.00	R0150-P2/	0.00
R0150-P3/	0.00			
	R0150-P4/	0.00	R0150-P5/	0.00
R0110.1/	0.00			
	R0130-P1/	0.00	R0130-P2/	0.00
R0100-P1/	0.00			
	R0100-P2/	0.00	R0310.1/	0.00
R0430-P1/	0.00			
	R0430-P2/	0.00	R0430-P3/	0.00
R0430-P4/	0.00			
	R0340-P1/	0.00	R0340-P2/	0.00
R0350-P1/	0.00			
	R0350-P2/	0.00	R0330-P1/	0.00
R0330-P2/	0.00			
	R0450-P1/	0.00	R0450-P2/	0.00
P0360-P1/	0.00			
	P0360-P2/	0.00	R0550-P1/	0.00
R0550-P2/	0.00			
	R0560-P1/	0.00	R0560-P2/	0.00
R0560-P3/	0.00			
	R0780.1/	0.00	R0740.1/	0.00
R0730.1/	0.00			
	R0880.1/	0.00	R0950.1/	0.00
R0920.1/	0.00			
	R0960.1/	0.00	R0990.1/	0.00
R1010-P3/	0.00			
	R1010-P4/	0.00	R1010-P5/	0.00
R0980-P1.1/	0.00			
	R0980-P2.1/	0.00	R0850-P1/	0.00
R0850-P2/	0.00			
	R0850-P3/	0.00	R0570-P1/	0.00
R0570-P2/	0.00			
	R0570-P3/	0.00	R0770-P1.1/	0.00
R0770-P3/	0.00			
	R0770-P4/	0.00	R0790-P1/	0.00
R0790-P2/	0.00			
	R0530-P1/	0.00	R0530-P2/	0.00
R0530-P3/	0.00			
	R0910-P1/	0.00	R0910-P2/	0.00
R0380-P1/	0.00			
	R0380-P2/	0.00	R0300-P1/	0.00

R0300-P2/	0.00			
	R0290-P2.1/	0.00	RN-004-P1/	0.00
RN-004-P2/	0.00			
	RN-004-P3/	0.00	RN-001-P1/	0.00
RN-001-P2/	0.00			
	RN-001-P3/	0.00	RN-005-P1/	0.00
RN-005-P2/	0.00			
	RN-005-P3/	0.00	RN-008-P1.1/	0.00
RN-008-P2/	0.00			
	RN-008-P3/	0.00	RN-010-P1/	0.00
RN-010-P2/	0.00			
	RN-010-P3/	0.00	RN-013-P1/	0.00
RN-013-P2/	0.00			
	RN-013-P3/	0.00	RN-015-P1/	0.00
RN-015-P2/	0.00			
	RN-015-P3/	0.00	RN-029-P1/	0.00
RN-029-P2/	0.00			
	R0742-P1/	0.00	R0742-P2/	0.00
R0655-P1.1/	0.00			
	R0490-P8/	0.00	R0490-P7/	0.00
R0140-P2.1/	0.00			
	R0140-P1.1/	0.00	R0120-P1.1/	0.00
R0160-P1.1/	0.00			
	R0325-P1.1/	0.00	R0400-P1.1/	0.00
R0880-P2.1/	0.00			
	R1010-P1.1/	0.00	R-0410-P4/	0.00
R-0410-P5/	0.00			
	R-0410-P6/	0.00	R-0410-P7/	0.00
R0410-P1/	0.00			
	R0410-P2/	0.00	R0410-P3/	0.00
498.1/	0.00			
	R0490-P1.1/	0.00	R0490-P3/	0.00
R0490-P4/	0.00			
	R0490-P5/	0.00	R0490-P6/	0.00
R0890-ORF-2/	0.00			
	R0890-ORF-5/	0.00	R0890ORF-3/	0.00
R0890-ORF-4/	0.00			
	N0140-A-W1.1/	0.00	R0540-W3/	0.00
R0290-P5/	0.00			
	R0285-W2/	0.00	R0250-W1/	0.00
R0230-W1/	0.00			
	R0220-W2/	0.00	R0200-W3/	0.00
R0190-W4/	0.00			
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00			
	R0150-W3/	0.00	R0110-W1/	0.00
R0130-W1/	0.00			
	R0100-W4/	0.00	R0310-W5.1/	0.00
R0430-W3/	0.00			
	R0340-W3/	0.00	R0350-W1/	0.00

R0330-W1/	0.00			
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00			
	R0780-W1/	0.00	R0740-W3/	0.00
R0870-W1/	0.00			
	R0950-W1/	0.00	R0960-W2/	0.00
R0990-W2/	0.00			
	R1010-W2/	0.00	R0980-W2/	0.00
R0850-W2/	0.00			
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00			
	R0300-W2/	0.00	R0290-W1/	0.00
R0655-W2/	0.00			
	R0140-W2/	0.00	R0120-W2/	0.00
R0160-W1/	0.00			
	R0400-W1/	0.00	R0880-W2/	0.00
R1010-W1/	0.00			
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00			
	R0060-W1.1/	0.00	R0080-W1.1/	0.00
R0080-W2.1/	0.00			
	R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00			
	R0090-W4.1/	0.00	R0100-W1.1/	0.00
R0100-W2.1/	0.00			
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00			
	R0130-W2.1/	0.00	R0150-W1.1/	0.00
R0150-W2.1/	0.00			
	R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00			
	R0190-W2.1/	0.00	R0190-W3.1/	0.00
R0200-W1.1/	0.00			
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00			
	R0240-W2.1/	0.00	R0240-W3.1/	0.00
R0240-W4.1/	0.00			
	R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00			
	R0250-W3.1/	0.00	R0260-W1.1/	0.00
R0270-W1.1/	0.00			
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00			
	R0280-W1.1/	0.00	R0285-W1.1/	0.00
R0290-W2.1/	0.00			
	R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00			
	R0310-W1.1/	0.00	R0310-W2.1/	0.00
R0310-W3.1/	0.00			
	R0310-W4.1/	0.00	R0325-W2.1/	0.00

R0330-W2.1/	0.00		
R0330-W3.1/	0.00		R0340-W1.1/ 0.00
R0340-W2.1/	0.00		
R0350-W2.1/	0.00		R0350-W3.1/ 0.00
R0360-W2.1/	0.00		
R0360-W3.1/	0.00		R0370-W1.1/ 0.00
R0370-W2.1/	0.00		
R0370-W3.1/	0.00		R0380-W1.1/ 0.00
R0380-W2.1/	0.00		
R0380-W4.1/	0.00		R0390-W1.1/ 0.00
R0390-W2/	0.00		
R0400-W2.1/	0.00		R0410-W1.1/ 0.00
R0420-W1.1/	0.00		
R0420-W2.1/	0.00		R0430-W1.1/ 0.00
R0430-W2.1/	0.00		
R0440-W1.1/	0.00		R0450-W1.1/ 0.00
R0450-W2.1/	0.00		
R0460-W1.1/	0.00		R0460-W2.1/ 0.00
R0480-W1.1/	0.00		
R0480-W2.1/	0.00		R0480-W3.1/ 0.00
R0490-W1.1/	0.00		
R0490-W3.1/	0.00		R0500-W1.1/ 0.00
R0510-W2.1/	0.00		
R0520-W1.1/	0.00		R0520-W2.1/ 0.00
R0530-W1.1/	0.00		
R0530-W2.1/	0.00		R0530-W3/ 0.00
R0540-W1.1/	0.00		
R0540-W2.1/	0.00		R0550-W1.1/ 0.00
R0550-W3.1/	0.00		
R0560-W2.1/	0.00		R0560-W3.1/ 0.00
R0560-W4.1/	0.00		
R0560-W5.1/	0.00		R0570-W1.1/ 0.00
R0570-W3.1/	0.00		
R0570-W4.1/	0.00		R0570-W5.1/ 0.00
R0640-W1.1/	0.00		
R0650-W1.1/	0.00		R0660-W1.1/ 0.00
R0660-W2.1/	0.00		
R0690-W2.1/	0.00		R0720-W1.1/ 0.00
R0730-W1.1/	0.00		
R0740-W2.1/	0.00		R0740-W4.1/ 0.00
R0775-W1.1/	0.00		
R0780-W2.1/	0.00		R0790-W1/ 0.00
R0800-W1.1/	0.00		
R0800-W2.1/	0.00		R0810-W1.1/ 0.00
R0830-W3.1/	0.00		
R0850-W3.1/	0.00		R0870-W2.1/ 0.00
R0885-W1.1/	0.00		
R0910-W2.1/	0.00		R0930-W1.1/ 0.00
R0940-W1.1/	0.00		
R0940-W2.1/	0.00		R0945-W1.1/ 0.00

R0950-W2.1/	0.00			
	R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00			
	R0980-W1.1/	0.00	R0990-W1.1/	0.00
R0990-W3.1/	0.00			
	R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00			
	R1030-W2.1/	0.00	R2002-W1.1/	0.00
R02040-W1.1/	0.00			
	R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00			
	R2380-W3.1/	0.00	R0440-W2.1/	0.00
R015-W1.1/	0.00			
	R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00			
	R031-W1.1/	0.00	R042-W1.1/	0.00
R043-W1.1/	0.00			
	R0850-W1.1/	0.00		

		Conduit/	Cross Sectional Area		
		R0870/	20.21	R0770-P2/	1.86
R0900/	17.52				
		R0370/	3.32	R0280/	0.00
R0202/	14.34				
		RN-002/	0.00	RN-003/	0.00
RN-006/	0.00				
		RN-007/	0.00	RN-009/	0.00
RN-009MH/	0.00				
		RN-011/	0.00	RN-014/	0.00
RN-012/	0.25				
		RN-023/	0.00	RN-021/	0.00
RN-041/	1.16				
		RN-020/	0.00	RN-022/	0.00
RN-024/	0.00				
		RN-026/	0.00	RN-027/	0.11
RN-028/	0.01				
		R0742-P3/	3.09	R0655-P2/	4.94
R0655-P3/	4.92				
		R0655-P4/	4.89	R0120-P2/	3.07
R1010-P2/	0.00				
		RN-025-P1/	2.57	RN-025-P2/	5.44
R0155-P1/	0.46				
		R0386/	4.28	R0388/	0.00
R0385/	32.26				
		R0375/	46.10	R0335/	0.86
R-0001B-P1/	0.25				
		R0540-P1/	0.00	R0540-P2/	0.00
R0540-P3/	0.00				
		R0290-P1/	1.66	R0285.1/	0.08
R0250.1/	0.08				

R0200.1/	R0230.1/ 0.53	0.01	R0220.1/	3.80
R0180-P1/	R0190.1/ 6.83	3.22	R0170.1/	5.79
R0140-P3.1/	R0180-P2/ 0.00	6.83	R0140.1/	0.00
R0150-P3/	R0150-P1/ 0.00	0.00	R0150-P2/	0.00
R0110.1/	R0150-P4/ 0.07	0.00	R0150-P5/	0.00
R0100-P1/	R0130-P1/ 0.00	0.00	R0130-P2/	0.00
R0430-P1/	R0100-P2/ 0.35	0.00	R0310.1/	1.57
R0430-P4/	R0430-P2/ 0.35	0.35	R0430-P3/	0.35
R0350-P1/	R0340-P1/ 8.91	4.81	R0340-P2/	3.27
R0330-P2/	R0350-P2/ 9.65	8.91	R0330-P1/	9.65
P0360-P1/	R0450-P1/ 0.24	1.54	R0450-P2/	1.54
R0550-P2/	P0360-P2/ 4.24	0.74	R0550-P1/	4.27
R0560-P3/	R0560-P1/ 4.60	4.61	R0560-P2/	4.58
R0730.1/	R0780.1/ 1.81	2.86	R0740.1/	1.18
R0920.1/	R0880.1/ 4.16	0.00	R0950.1/	0.96
R1010-P3/	R0960.1/ 0.00	0.00	R0990.1/	0.00
R0980-P1.1/	R1010-P4/ 0.01	0.09	R1010-P5/	0.00
R0850-P2/	R0980-P2.1/ 0.00	0.00	R0850-P1/	0.01
R0570-P2/	R0850-P3/ 12.26	0.00	R0570-P1/	12.35
R0770-P3/	R0570-P3/ 9.99	12.13	R0770-P1.1/	6.77
R0790-P2/	R0770-P4/ 10.21	9.96	R0790-P1/	13.56
R0530-P3/	R0530-P1/ 0.01	0.00	R0530-P2/	0.02
R0380-P1/	R0910-P1/ 0.03	1.78	R0910-P2/	15.98
R0300-P2/	R0380-P2/ 3.16	0.03	R0300-P1/	3.16
RN-004-P2/	R0290-P2.1/ 0.00	0.03	RN-004-P1/	0.00

RN-001-P2/	RN-004-P3/	0.00	RN-001-P1/	0.01
	0.00			
RN-005-P2/	RN-001-P3/	0.01	RN-005-P1/	0.00
	0.00			
RN-008-P2/	RN-005-P3/	0.00	RN-008-P1.1/	0.01
	0.00			
RN-010-P2/	RN-008-P3/	0.00	RN-010-P1/	0.04
	0.03			
RN-013-P2/	RN-010-P3/	0.01	RN-013-P1/	0.07
	0.07			
RN-015-P2/	RN-013-P3/	0.07	RN-015-P1/	0.15
	2.14			
RN-029-P2/	RN-015-P3/	1.80	RN-029-P1/	0.15
	1.53			
R0655-P1.1/	R0742-P1/	1.56	R0742-P2/	1.56
	4.95			
R0140-P2.1/	R0490-P8/	1.23	R0490-P7/	1.23
	7.37			
R0160-P1.1/	R0140-P1.1/	7.37	R0120-P1.1/	3.07
	4.51			
R0880-P2.1/	R0325-P1.1/	0.00	R0400-P1.1/	0.00
	0.00			
R-0410-P5/	R1010-P1.1/	0.00	R-0410-P4/	1.26
	1.26			
R0410-P1/	R-0410-P6/	1.26	R-0410-P7/	1.12
	2.03			
498.1/	R0410-P2/	2.03	R0410-P3/	2.03
	1.79			
R0490-P4/	R0490-P1.1/	1.73	R0490-P3/	1.19
	1.22			
R0890-ORF-2/	R0490-P5/	1.28	R0490-P6/	1.28
	0.45			
R0890-ORF-4/	R0890-ORF-5/	0.45	R0890ORF-3/	0.45
	0.45			
R0290-P5/	N0140-A-W1.1/	0.00	R0540-W3/	0.00
	0.00			
R0230-W1/	R0285-W2/	0.00	R0250-W1/	0.00
	0.00			
R0190-W4/	R0220-W2/	0.00	R0200-W3/	0.00
	0.00			
R0140-W1/	R0170-W3/	0.00	R0180-W1/	0.00
	0.00			
R0130-W1/	R0150-W3/	0.00	R0110-W1/	0.00
	0.00			
R0430-W3/	R0100-W4/	0.00	R0310-W5.1/	0.00
	0.00			
R0330-W1/	R0340-W3/	0.00	R0350-W1/	0.00
	0.00			
R0560-W1/	R0360-W1/	0.00	R0550-W2/	0.00
	0.00			

R0870-W1/	R0780-W1/ 0.00	0.00	R0740-W3/	0.00
R0990-W2/	R0950-W1/ 0.00	0.00	R0960-W2/	0.00
R0850-W2/	R1010-W2/ 0.00	0.00	R0980-W2/	0.00
R0380-W3/	R0770-W2/ 0.00	0.00	R0530-W4/	0.00
R0655-W2/	R0300-W2/ 0.00	0.00	R0290-W1/	0.00
R0160-W1/	R0140-W2/ 0.00	0.00	R0120-W2/	0.00
R1010-W1/	R0400-W1/ 0.00	0.00	R0880-W2/	0.00
R0050-W2.1/	R0490-W2/ 0.00	0.00	R0050-W1.1/	0.00
R0080-W2.1/	R0060-W1.1/ 0.00	0.00	R0080-W1.1/	0.00
R0090-W3.1/	R0090-W1.1/ 0.00	0.00	R0090-W2.1/	0.00
R0100-W2.1/	R0090-W4.1/ 0.00	0.00	R0100-W1.1/	0.00
R0120-W1.1/	R0100-W3.1/ 0.00	0.00	R0110-W2.1/	0.00
R0150-W2.1/	R0130-W2.1/ 0.00	0.00	R0150-W1.1/	0.00
R0190-W1.1/	R0170-W1.1/ 0.00	0.00	R0170-W2.1/	0.00
R0200-W1.1/	R0190-W2.1/ 0.00	0.00	R0190-W3.1/	0.00
R0240-W1.1/	R0200-W2.1/ 0.00	0.00	R0220-W1.1/	0.00
R0240-W4.1/	R0240-W2.1/ 0.00	0.00	R0240-W3.1/	0.00
R0250-W2.1/	R0240-W5.1/ 0.00	0.00	R0240-W6.1/	0.00
R0270-W1.1/	R0250-W3.1/ 0.00	0.00	R0260-W1.1/	0.00
R0275-W1.1/	R0270-W3/ 0.00	0.00	R0270-W2.1/	0.00
R0290-W2.1/	R0280-W1.1/ 0.00	0.00	R0285-W1.1/	0.00
R0300-W1.1/	R0290-W3.1/ 0.00	0.00	R0290-W4.1/	0.00
R0310-W3.1/	R0310-W1.1/ 0.00	0.00	R0310-W2.1/	0.00
R0330-W2.1/	R0310-W4.1/ 0.00	0.00	R0325-W2.1/	0.00
R0340-W2.1/	R0330-W3.1/ 0.00	0.00	R0340-W1.1/	0.00

R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00		
R0360-W3.1/	0.00	R0370-W1.1/	0.00
R0370-W2.1/	0.00		
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00		
R0380-W4.1/	0.00	R0390-W1.1/	0.00
R0390-W2/	0.00		
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00		
R0420-W2.1/	0.00	R0430-W1.1/	0.00
R0430-W2.1/	0.00		
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00		
R0460-W1.1/	0.00	R0460-W2.1/	0.00
R0480-W1.1/	0.00		
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00		
R0490-W3.1/	0.00	R0500-W1.1/	0.00
R0510-W2.1/	0.00		
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00		
R0530-W2.1/	0.00	R0530-W3/	0.00
R0540-W1.1/	0.00		
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00		
R0560-W2.1/	0.00	R0560-W3.1/	0.00
R0560-W4.1/	0.00		
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00		
R0570-W4.1/	0.00	R0570-W5.1/	0.00
R0640-W1.1/	0.00		
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00		
R0690-W2.1/	0.00	R0720-W1.1/	0.00
R0730-W1.1/	0.00		
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00		
R0780-W2.1/	0.00	R0790-W1/	0.00
R0800-W1.1/	0.00		
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00		
R0850-W3.1/	0.00	R0870-W2.1/	0.00
R0885-W1.1/	0.00		
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00		
R0940-W2.1/	0.00	R0945-W1.1/	0.00
R0950-W2.1/	0.00		
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00		

R0980-W1.1/	0.00	R0990-W1.1/	0.00
R0990-W3.1/	0.00		
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00		
R1030-W2.1/	0.00	R2002-W1.1/	0.00
R02040-W1.1/	0.00		
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00		
R2380-W3.1/	0.00	R0440-W2.1/	0.00
R015-W1.1/	0.00		
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00		
R031-W1.1/	0.00	R042-W1.1/	0.00
R043-W1.1/	0.00		
R0850-W1.1/	0.00		

	Conduit/	Hydraulic Radius		
	R0870/	1.26	R0770-P2/	0.40
R0900/	1.58			
	R0370/	0.69	R0280/	0.01
R0202/	1.47			
	RN-002/	0.01	RN-003/	0.00
RN-006/	0.00			
	RN-007/	0.00	RN-009/	0.00
RN-009MH/	0.00			
	RN-011/	0.00	RN-014/	0.00
RN-012/	0.07			
	RN-023/	0.00	RN-021/	0.00
RN-041/	0.41			
	RN-020/	0.00	RN-022/	0.00
RN-024/	0.00			
	RN-026/	0.00	RN-027/	0.11
RN-028/	0.01			
	R0742-P3/	0.57	R0655-P2/	0.62
R0655-P3/	0.63			
	R0655-P4/	0.65	R0120-P2/	0.69
R1010-P2/	0.00			
	RN-025-P1/	0.61	RN-025-P2/	0.88
R0155-P1/	0.12			
	R0386/	0.28	R0388/	0.00
R0385/	1.32			
	R0375/	1.46	R0335/	0.16
R-0001B-P1/	0.07			
	R0540-P1/	0.01	R0540-P2/	0.00
R0540-P3/	0.00			
	R0290-P1/	0.51	R0285.1/	0.07
R0250.1/	0.04			
	R0230.1/	0.01	R0220.1/	0.68
R0200.1/	0.19			
	R0190.1/	0.51	R0170.1/	0.93

R0180-P1/	0.88			
	R0180-P2/	0.88	R0140.1/	0.00
R0140-P3.1/	0.00			
	R0150-P1/	0.00	R0150-P2/	0.00
R0150-P3/	0.00			
	R0150-P4/	0.00	R0150-P5/	0.00
R0110.1/	0.04			
	R0130-P1/	0.00	R0130-P2/	0.00
R0100-P1/	0.00			
	R0100-P2/	0.00	R0310.1/	0.43
R0430-P1/	0.20			
	R0430-P2/	0.20	R0430-P3/	0.20
R0430-P4/	0.20			
	R0340-P1/	0.87	R0340-P2/	0.71
R0350-P1/	1.04			
	R0350-P2/	1.04	R0330-P1/	0.88
R0330-P2/	0.88			
	R0450-P1/	0.49	R0450-P2/	0.49
P0360-P1/	0.17			
	P0360-P2/	0.34	R0550-P1/	0.81
R0550-P2/	0.81			
	R0560-P1/	0.84	R0560-P2/	0.84
R0560-P3/	0.84			
	R0780.1/	0.55	R0740.1/	0.43
R0730.1/	0.37			
	R0880.1/	0.00	R0950.1/	0.34
R0920.1/	0.80			
	R0960.1/	0.00	R0990.1/	0.00
R1010-P3/	0.30			
	R1010-P4/	0.04	R1010-P5/	0.35
R0980-P1.1/	0.01			
	R0980-P2.1/	0.00	R0850-P1/	0.01
R0850-P2/	0.01			
	R0850-P3/	0.00	R0570-P1/	1.02
R0570-P2/	1.03			
	R0570-P3/	1.11	R0770-P1.1/	0.88
R0770-P3/	1.20			
	R0770-P4/	1.20	R0790-P1/	1.42
R0790-P2/	1.21			
	R0530-P1/	0.01	R0530-P2/	0.03
R0530-P3/	0.02			
	R0910-P1/	0.13	R0910-P2/	1.07
R0380-P1/	0.03			
	R0380-P2/	0.03	R0300-P1/	0.50
R0300-P2/	0.50			
	R0290-P2.1/	0.02	RN-004-P1/	0.00
RN-004-P2/	0.00			
	RN-004-P3/	0.00	RN-001-P1/	0.01
RN-001-P2/	0.00			
	RN-001-P3/	0.02	RN-005-P1/	0.00

RN-005-P2/	0.00			
	RN-005-P3/	0.01	RN-008-P1.1/	0.01
RN-008-P2/	0.00			
	RN-008-P3/	0.00	RN-010-P1/	0.04
RN-010-P2/	0.03			
	RN-010-P3/	0.02	RN-013-P1/	0.06
RN-013-P2/	0.06			
	RN-013-P3/	0.06	RN-015-P1/	0.05
RN-015-P2/	0.57			
	RN-015-P3/	0.51	RN-029-P1/	0.05
RN-029-P2/	0.47			
	R0742-P1/	0.46	R0742-P2/	0.46
R0655-P1.1/	0.62			
	R0490-P8/	0.31	R0490-P7/	0.31
R0140-P2.1/	0.75			
	R0140-P1.1/	0.75	R0120-P1.1/	0.69
R0160-P1.1/	0.75			
	R0325-P1.1/	0.00	R0400-P1.1/	0.00
R0880-P2.1/	0.00			
	R1010-P1.1/	0.00	R-0410-P4/	0.43
R-0410-P5/	0.43			
	R-0410-P6/	0.43	R-0410-P7/	0.40
R0410-P1/	0.50			
	R0410-P2/	0.50	R0410-P3/	0.50
498.1/	0.38			
	R0490-P1.1/	0.43	R0490-P3/	0.36
R0490-P4/	0.33			
	R0490-P5/	0.31	R0490-P6/	0.31
R0890-ORF-2/	0.25			
	R0890-ORF-5/	0.25	R0890ORF-3/	0.25
R0890-ORF-4/	0.25			
	N0140-A-W1.1/	0.00	R0540-W3/	0.00
R0290-P5/	0.00			
	R0285-W2/	0.00	R0250-W1/	0.00
R0230-W1/	0.00			
	R0220-W2/	0.00	R0200-W3/	0.00
R0190-W4/	0.00			
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00			
	R0150-W3/	0.00	R0110-W1/	0.00
R0130-W1/	0.00			
	R0100-W4/	0.00	R0310-W5.1/	0.00
R0430-W3/	0.00			
	R0340-W3/	0.00	R0350-W1/	0.00
R0330-W1/	0.00			
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00			
	R0780-W1/	0.00	R0740-W3/	0.00
R0870-W1/	0.00			
	R0950-W1/	0.00	R0960-W2/	0.00

R0990-W2/	0.00			
	R1010-W2/	0.00	R0980-W2/	0.00
R0850-W2/	0.00			
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00			
	R0300-W2/	0.00	R0290-W1/	0.00
R0655-W2/	0.00			
	R0140-W2/	0.00	R0120-W2/	0.00
R0160-W1/	0.00			
	R0400-W1/	0.00	R0880-W2/	0.00
R1010-W1/	0.00			
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00			
	R0060-W1.1/	0.00	R0080-W1.1/	0.00
R0080-W2.1/	0.00			
	R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00			
	R0090-W4.1/	0.00	R0100-W1.1/	0.00
R0100-W2.1/	0.00			
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00			
	R0130-W2.1/	0.00	R0150-W1.1/	0.00
R0150-W2.1/	0.00			
	R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00			
	R0190-W2.1/	0.00	R0190-W3.1/	0.00
R0200-W1.1/	0.00			
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00			
	R0240-W2.1/	0.00	R0240-W3.1/	0.00
R0240-W4.1/	0.00			
	R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00			
	R0250-W3.1/	0.00	R0260-W1.1/	0.00
R0270-W1.1/	0.00			
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00			
	R0280-W1.1/	0.00	R0285-W1.1/	0.00
R0290-W2.1/	0.00			
	R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00			
	R0310-W1.1/	0.00	R0310-W2.1/	0.00
R0310-W3.1/	0.00			
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00			
	R0330-W3.1/	0.00	R0340-W1.1/	0.00
R0340-W2.1/	0.00			
	R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00			
	R0360-W3.1/	0.00	R0370-W1.1/	0.00

R0370-W2.1/	0.00				
R0370-W3.1/		0.00		R0380-W1.1/	0.00
R0380-W2.1/	0.00				
R0380-W4.1/		0.00		R0390-W1.1/	0.00
R0390-W2/	0.00				
R0400-W2.1/		0.00		R0410-W1.1/	0.00
R0420-W1.1/	0.00				
R0420-W2.1/		0.00		R0430-W1.1/	0.00
R0430-W2.1/	0.00				
R0440-W1.1/		0.00		R0450-W1.1/	0.00
R0450-W2.1/	0.00				
R0460-W1.1/		0.00		R0460-W2.1/	0.00
R0480-W1.1/	0.00				
R0480-W2.1/		0.00		R0480-W3.1/	0.00
R0490-W1.1/	0.00				
R0490-W3.1/		0.00		R0500-W1.1/	0.00
R0510-W2.1/	0.00				
R0520-W1.1/		0.00		R0520-W2.1/	0.00
R0530-W1.1/	0.00				
R0530-W2.1/		0.00		R0530-W3/	0.00
R0540-W1.1/	0.00				
R0540-W2.1/		0.00		R0550-W1.1/	0.00
R0550-W3.1/	0.00				
R0560-W2.1/		0.00		R0560-W3.1/	0.00
R0560-W4.1/	0.00				
R0560-W5.1/		0.00		R0570-W1.1/	0.00
R0570-W3.1/	0.00				
R0570-W4.1/		0.00		R0570-W5.1/	0.00
R0640-W1.1/	0.00				
R0650-W1.1/		0.00		R0660-W1.1/	0.00
R0660-W2.1/	0.00				
R0690-W2.1/		0.00		R0720-W1.1/	0.00
R0730-W1.1/	0.00				
R0740-W2.1/		0.00		R0740-W4.1/	0.00
R0775-W1.1/	0.00				
R0780-W2.1/		0.00		R0790-W1/	0.00
R0800-W1.1/	0.00				
R0800-W2.1/		0.00		R0810-W1.1/	0.00
R0830-W3.1/	0.00				
R0850-W3.1/		0.00		R0870-W2.1/	0.00
R0885-W1.1/	0.00				
R0910-W2.1/		0.00		R0930-W1.1/	0.00
R0940-W1.1/	0.00				
R0940-W2.1/		0.00		R0945-W1.1/	0.00
R0950-W2.1/	0.00				
R0960-W1.1/		0.00		R0960-W3.1/	0.00
R0960-W4.1/	0.00				
R0980-W1.1/		0.00		R0990-W1.1/	0.00
R0990-W3.1/	0.00				
R1000-W1.1/		0.00		R1020-W1.1/	0.00

R1030-W1.1/	0.00				
R1030-W2.1/	0.00			R2002-W1.1/	0.00
R02040-W1.1/	0.00				
R2090-W1.1/	0.00			R2370-W4.1/	0.00
R2380-W2.1/	0.00				
R2380-W3.1/	0.00			R0440-W2.1/	0.00
R015-W1.1/	0.00				
R020-W1.1/	0.00			R021-W1.1/	0.00
R030-W1.1/	0.00				
R031-W1.1/	0.00			R042-W1.1/	0.00
R043-W1.1/	0.00				
R0850-W1.1/	0.00				

		Conduit/	Upstream/	Downstream	Elevation		
	R0870/	1.38/	0.13			R0770-P2/	0.13/ 0.13
	R0900/	0.13/	0.13				
	R0370/	2.14/	2.14			R0280/	2.14/ 2.12
	R0202/	-0.08/	-0.08				
	RN-002/	3.47/	3.33			RN-003/	1.23/ 1.23
	RN-006/	0.92/	0.92				
	RN-007/	0.41/	0.41			RN-009/	2.41/ 2.41
	RN-009MH/	0.41/	0.41				
	RN-011/	-0.15/	-0.15			RN-014/	1.48/ 1.48
	RN-012/	1.48/	-0.15				
	RN-023/	-0.17/	-0.17			RN-021/	1.15/ 1.15
	RN-041/	1.48/	1.48				
	RN-020/	0.97/	0.97			RN-022/	-0.13/ -0.13
	RN-024/	-0.17/	-0.17				
	RN-026/	-0.13/	-0.13			RN-027/	-0.14/ -0.14
	RN-028/	-0.14/	-0.13				
	R0742-P3/	1.38/	1.38			R0655-P2/	1.20/ -0.17
	R0655-P3/	1.20/	-0.17				
	R0655-P4/	-0.17/	1.20			R0120-P2/	1.30/ 0.24
	R1010-P2/	0.24/	0.24				
	RN-025-P1/	-0.17/	1.20			RN-025-P2/	1.20/ -0.17
	R0155-P1/	-0.08/	0.24				
	R0386/	0.63/	0.00			R0388/	-0.17/ -0.17
	R0385/	2.11/	0.63				
	R0375/	2.14/	0.49			R0335/	0.32/ 0.32
	R-0001B-P1/	-0.37/	0.70				
	R0540-P1/	1.51/	1.52			R0540-P2/	1.50/ 1.50
	R0540-P3/	1.50/	1.50				
	R0290-P1/	2.14/	2.12			R0285.1/	2.12/ 1.65
	R0250.1/	3.00/	3.00				
	R0230.1/	3.31/	3.00			R0220.1/	2.22/ 2.00
	R0200.1/	-0.08/	-0.08				
	R0190.1/	1.30/	-0.08			R0170.1/	1.30/ -0.20
	R0180-P1/	1.30/	1.41				
	R0180-P2/	1.30/	1.41			R0140.1/	1.30/ 1.30
	R0140-P3.1/	1.30/	1.30				

R0150-P1/	-0.08/	-0.08	R0150-P2/	-0.08/	-0.08
R0150-P3/	-0.08/	-0.08	R0150-P5/	-0.08/	-0.08
R0150-P4/	-0.08/	-0.08	R0130-P2/	-0.72/	-0.72
R0110.1/	1.02/	1.30	R0310.1/	-0.42/	1.30
R0130-P1/	-0.72/	-0.72	R0430-P3/	0.32/	0.32
R0100-P1/	0.46/	0.46	R0340-P2/	0.32/	0.32
R0100-P2/	0.46/	0.46	R0330-P1/	0.32/	0.33
R0430-P1/	0.32/	0.32	R0450-P2/	0.32/	0.32
R0430-P2/	0.32/	0.32	R0550-P1/	0.30/	0.07
R0430-P4/	0.32/	0.32	R0560-P2/	0.30/	0.07
R0340-P1/	0.32/	0.32	R0740.1/	0.13/	0.13
R0350-P1/	0.32/	0.32	R0950.1/	0.13/	1.38
R0350-P2/	0.32/	0.32	R0990.1/	0.60/	0.60
R0330-P2/	0.32/	0.33	R1010-P5/	1.63/	1.63
R0450-P1/	0.32/	0.32	R0850-P1/	1.46/	1.38
P0360-P1/	0.32/	0.33	R0570-P1/	1.38/	0.07
P0360-P2/	0.32/	0.33	R0770-P1.1/	0.13/	0.13
R0550-P2/	0.30/	0.07	R0790-P1/	0.13/	0.13
R0560-P1/	0.30/	0.07	R0530-P2/	1.69/	1.52
R0560-P3/	0.30/	0.07	R0910-P2/	0.13/	-6.91
R0780.1/	0.13/	0.13	R0300-P1/	0.31/	0.33
R0730.1/	1.38/	1.38	RN-004-P1/	1.23/	1.23
R0880.1/	0.36/	0.36	RN-001-P1/	1.23/	1.00
R0920.1/	1.38/	0.13	RN-005-P1/	0.41/	0.41
R0960.1/	1.38/	1.38	RN-008-P1.1/	0.39/	0.41
R1010-P3/	1.63/	1.63			
R1010-P4/	1.62/	1.63			
R0980-P1.1/	1.70/	1.71			
R0980-P2.1/	1.46/	1.46			
R0850-P2/	1.46/	1.38			
R0850-P3/	1.38/	1.38			
R0570-P2/	1.38/	0.07			
R0570-P3/	1.38/	0.07			
R0770-P3/	0.13/	0.13			
R0770-P4/	0.13/	0.13			
R0790-P2/	0.13/	0.13			
R0530-P1/	1.69/	1.52			
R0530-P3/	1.69/	1.52			
R0910-P1/	-5.76/	0.13			
R0380-P1/	2.11/	1.66			
R0380-P2/	2.11/	1.66			
R0300-P2/	0.31/	0.33			
R0290-P2.1/	2.30/	2.12			
RN-004-P2/	1.23/	1.23			
RN-004-P3/	1.23/	1.23			
RN-001-P2/	0.92/	0.92			
RN-001-P3/	1.23/	1.00			
RN-005-P2/	0.41/	0.41			
RN-005-P3/	0.89/	0.92			
RN-008-P2/	-0.15/	-0.15			

RN-008-P3/	-0.15/	-0.15	RN-010-P1/	-0.15/	-0.15
RN-010-P2/	-0.15/	-0.15			
RN-010-P3/	-0.15/	-0.15	RN-013-P1/	-0.15/	-0.17
RN-013-P2/	-0.15/	-0.17			
RN-013-P3/	-0.15/	-0.17	RN-015-P1/	-0.27/	-0.17
RN-015-P2/	-0.17/	-0.27			
RN-015-P3/	-0.17/	-0.27	RN-029-P1/	-0.17/	-0.17
RN-029-P2/	-0.17/	-0.17			
R0742-P1/	1.38/	0.13	R0742-P2/	1.38/	0.13
R0655-P1.1/	1.20/	-0.17			
R0490-P8/	1.20/	0.34	R0490-P7/	1.20/	0.34
R0140-P2.1/	1.41/	1.30			
R0140-P1.1/	1.41/	1.30	R0120-P1.1/	1.30/	0.24
R0160-P1.1/	0.24/	-0.42			
R0325-P1.1/	0.24/	0.24	R0400-P1.1/	0.24/	0.24
R0880-P2.1/	0.24/	0.24			
R1010-P1.1/	0.24/	0.24	R-0410-P4/	-0.17/	0.73
R-0410-P5/	-0.17/	0.73			
R-0410-P6/	-0.17/	0.73	R-0410-P7/	-0.17/	0.73
R0410-P1/	0.73/	-0.17			
R0410-P2/	0.73/	-0.17	R0410-P3/	0.73/	-0.17
498.1/	0.73/	0.34			
R0490-P1.1/	0.34/	0.73	R0490-P3/	0.34/	0.31
R0490-P4/	0.34/	0.31			
R0490-P5/	0.34/	0.31	R0490-P6/	0.34/	0.31
R0890-ORF-2/	1.38/	1.20			
R0890-ORF-5/	1.38/	1.20	R0890ORF-3/	1.38/	1.20
R0890-ORF-4/	1.38/	1.20			
N0140-A-W1.1/	0.24/	0.24	R0540-W3/	1.52/	1.50
R0290-P5/	2.12/	2.14			
R0285-W2/	2.12/	0.49	R0250-W1/	3.00/	3.00
R0230-W1/	3.31/	3.00			
R0220-W2/	2.22/	2.00	R0200-W3/	-0.08/	-0.08
R0190-W4/	1.30/	-0.08			
R0170-W3/	1.30/	-0.20	R0180-W1/	1.30/	1.41
R0140-W1/	1.41/	1.30			
R0150-W3/	1.44/	-0.08	R0110-W1/	1.30/	-0.72
R0130-W1/	-0.60/	-0.60			
R0100-W4/	-0.60/	-0.60	R0310-W5.1/	1.30/	-0.42
R0430-W3/	0.32/	0.32			
R0340-W3/	0.32/	0.32	R0350-W1/	0.32/	0.32
R0330-W1/	0.32/	0.32			
R0360-W1/	0.32/	0.33	R0550-W2/	0.07/	0.30
R0560-W1/	0.07/	0.30			
R0780-W1/	0.13/	0.13	R0740-W3/	0.13/	0.13
R0870-W1/	1.38/	1.38			
R0950-W1/	0.13/	1.38	R0960-W2/	1.90/	1.38
R0990-W2/	1.57/	0.60			
R1010-W2/	1.63/	0.60	R0980-W2/	1.71/	1.63
R0850-W2/	1.71/	1.46			

R0770-W2/	0.13/	0.13	R0530-W4/	1.69/	1.52
R0380-W3/	0.49/	2.11	R0290-W1/	2.30/	2.30
R0300-W2/	0.31/	0.33	R0120-W2/	1.30/	0.24
R0655-W2/	-0.17/	1.20	R0880-W2/	-6.91/	0.24
R0140-W2/	1.41/	1.30	R0050-W1.1/	2.00/	0.24
R0160-W1/	-0.42/	0.24	R0080-W1.1/	0.80/	0.24
R0400-W1/	0.32/	0.24	R0090-W2.1/	2.49/	0.24
R1010-W1/	1.63/	0.24	R0100-W1.1/	0.46/	0.80
R0490-W2/	0.34/	0.73	R0110-W2.1/	1.30/	1.41
R0050-W2.1/	2.00/	-0.72	R0150-W1.1/	1.44/	-0.72
R0060-W1.1/	-0.72/	0.24	R0170-W2.1/	1.30/	1.41
R0080-W2.1/	0.80/	2.00	R0190-W3.1/	1.30/	1.41
R0090-W1.1/	2.49/	-0.72	R0220-W1.1/	2.22/	3.00
R0090-W3.1/	2.49/	1.30	R0240-W3.1/	3.31/	3.31
R0090-W4.1/	2.49/	1.30	R0240-W6.1/	3.00/	-0.08
R0100-W2.1/	0.46/	2.00	R0260-W1.1/	2.00/	-0.20
R0100-W3.1/	0.46/	0.24	R0270-W2.1/	3.00/	2.30
R0120-W1.1/	1.30/	1.30	R0285-W1.1/	2.12/	2.00
R0130-W2.1/	-0.60/	0.24	R0290-W4.1/	2.12/	3.00
R0150-W2.1/	1.44/	1.30	R0310-W2.1/	1.30/	1.41
R0170-W1.1/	1.44/	1.44	R0325-W2.1/	0.33/	0.24
R0190-W1.1/	1.30/	-0.20	R0340-W1.1/	0.32/	0.30
R0190-W2.1/	1.30/	1.30	R0350-W3.1/	0.32/	0.80
R0200-W1.1/	-0.08/	-0.20	R0370-W1.1/	2.14/	0.49
R0200-W2.1/	3.31/	3.31	R0380-W1.1/	0.49/	3.45
R0240-W1.1/	3.00/	1.30			
R0240-W2.1/	3.00/	1.41			
R0240-W4.1/	3.00/	1.30			
R0240-W5.1/	3.00/	2.12			
R0250-W2.1/	3.00/	2.00			
R0250-W3.1/	3.00/	3.00			
R0270-W1.1/	3.00/	2.00			
R0270-W3/	3.00/	2.00			
R0275-W1.1/	2.30/	2.12			
R0280-W1.1/	2.12/	2.12			
R0290-W2.1/	2.12/	1.30			
R0290-W3.1/	2.12/	3.00			
R0300-W1.1/	0.31/	0.24			
R0310-W1.1/	1.30/	0.31			
R0310-W3.1/	1.30/	0.24			
R0310-W4.1/	1.30/	0.32			
R0330-W2.1/	0.32/	0.32			
R0330-W3.1/	0.32/	0.32			
R0340-W2.1/	0.32/	0.32			
R0350-W2.1/	0.32/	0.32			
R0360-W2.1/	0.32/	0.32			
R0360-W3.1/	0.32/	0.11			
R0370-W2.1/	2.14/	0.32			
R0370-W3.1/	2.14/	3.45			
R0380-W2.1/	0.49/	3.69			

R0380-W4.1/	0.49/	3.50	R0390-W1.1/	0.80/	0.32
R0390-W2/	0.80/	0.32			
R0400-W2.1/	0.32/	0.30	R0410-W1.1/	-0.17/	1.20
R0420-W1.1/	3.50/	-0.17			
R0420-W2.1/	3.50/	3.69	R0430-W1.1/	0.32/	1.30
R0430-W2.1/	0.32/	4.24			
R0440-W1.1/	0.32/	0.32	R0450-W1.1/	0.32/	0.24
R0450-W2.1/	0.32/	0.32			
R0460-W1.1/	0.32/	0.32	R0460-W2.1/	0.32/	0.30
R0480-W1.1/	3.69/	-0.17			
R0480-W2.1/	3.69/	3.45	R0480-W3.1/	3.69/	0.34
R0490-W1.1/	0.34/	-0.17			
R0490-W3.1/	0.34/	-0.17	R0500-W1.1/	4.24/	3.45
R0510-W2.1/	-0.10/	0.24			
R0520-W1.1/	0.30/	0.30	R0520-W2.1/	0.30/	-0.10
R0530-W1.1/	1.69/	0.32			
R0530-W2.1/	1.69/	3.45	R0530-W3/	1.69/	4.24
R0540-W1.1/	1.52/	3.45			
R0540-W2.1/	1.52/	3.69	R0550-W1.1/	0.07/	0.32
R0550-W3.1/	0.07/	0.30			
R0560-W2.1/	0.07/	0.24	R0560-W3.1/	0.07/	0.36
R0560-W4.1/	0.07/	0.13			
R0560-W5.1/	0.07/	0.13	R0570-W1.1/	1.38/	0.58
R0570-W3.1/	1.46/	1.46			
R0570-W4.1/	1.38/	0.13	R0570-W5.1/	1.38/	1.38
R0640-W1.1/	1.50/	1.38			
R0650-W1.1/	1.50/	3.69	R0660-W1.1/	0.82/	1.38
R0660-W2.1/	0.82/	0.13			
R0690-W2.1/	0.62/	0.58	R0720-W1.1/	0.58/	0.13
R0730-W1.1/	1.38/	1.38			
R0740-W2.1/	0.13/	1.38	R0740-W4.1/	0.13/	0.13
R0775-W1.1/	0.13/	0.13			
R0780-W2.1/	0.13/	0.13	R0790-W1/	0.13/	1.38
R0800-W1.1/	3.35/	1.38			
R0800-W2.1/	3.35/	1.38	R0810-W1.1/	0.36/	0.24
R0830-W3.1/	0.30/	0.40			
R0850-W3.1/	1.46/	1.38	R0870-W2.1/	1.38/	0.13
R0885-W1.1/	0.13/	-6.91			
R0910-W2.1/	0.13/	0.24	R0930-W1.1/	1.38/	1.20
R0940-W1.1/	0.40/	0.24			
R0940-W2.1/	0.40/	0.15	R0945-W1.1/	0.15/	0.24
R0950-W2.1/	0.13/	0.40			
R0960-W1.1/	1.90/	1.71	R0960-W3.1/	1.90/	0.13
R0960-W4.1/	1.90/	0.13			
R0980-W1.1/	1.71/	0.24	R0990-W1.1/	1.57/	0.40
R0990-W3.1/	1.57/	1.71			
R1000-W1.1/	0.40/	0.15	R1020-W1.1/	0.60/	0.24
R1030-W1.1/	0.50/	0.24			
R1030-W2.1/	0.50/	0.60	R2002-W1.1/	-0.27/	1.20
R02040-W1.1/	0.11/	0.24			

R2090-W1.1/	-0.57/	0.24	R2370-W4.1/	0.73/	1.20
R2380-W2.1/	0.31/	1.20			
R2380-W3.1/	0.31/	0.73	R0440-W2.1/	0.32/	0.32
R015-W1.1/	-0.17/	-0.17			
R020-W1.1/	1.38/	1.15	R021-W1.1/	1.15/	-0.60
R030-W1.1/	0.45/	0.45			
R031-W1.1/	-0.40/	-0.17	R042-W1.1/	-0.60/	-0.17
R043-W1.1/	-0.60/	-0.60			
R0850-W1.1/	1.46/	1.38			

==> System inflows (file) at 8.33 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00		N0290	/ 0.00E+00	N0370	/ 0.00E+00
	/ 0.00E+00			N0275	/
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00		N0385	/ 0.00E+00	N0388	/ 0.00E+00
	/ 0.00E+00			N0388	/
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00		N0310	/ 0.00E+00	N0160	/ 0.00E+00
	/ 0.00E+00			N0300	/
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00		N0460	/ 0.00E+00	N0440	/ 0.00E+00
	/ 0.00E+00			N0360	/
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00		N0550	/ 0.00E+00	N0640	/ 0.00E+00
	/ 0.00E+00			N0660	/
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00		N0720	/ 0.00E+00	N0770	/ 0.00E+00
	/ 0.00E+00			N0885	/
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00		N1030	/ 0.00E+00	N1020	/ 0.00E+00
	/ 0.00E+00			N0940	/
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00		N0850	/ 0.00E+00	N0890	/ 0.00E+00
	/ 0.00E+00			N0930	/
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/
0.00E+00		N0970	/ 0.00E+00	N-0001K	/ 0.00E+00
	/ 0.00E+00			N0870	/
N0790	/ 0.00E+00	N0001-I	/ 0.00E+00	N0915	/
0.00E+00		N0900	/ 0.00E+00	N0910	/ 0.00E+00
	/ 0.00E+00			N0880	/
N0810	/ 0.00E+00	N0740	/ 0.00E+00	N0742	/
0.00E+00		N0800	/ 0.00E+00	N0620	/ 0.00E+00
	/ 0.00E+00			N0730	/
N0570	/ 0.00E+00	N0560	/ 0.00E+00	N0515	/
0.00E+00		N0510	/ 0.00E+00	N0520	/ 0.00E+00
	/ 0.00E+00			N0350	/
N0330	/ 0.00E+00	N0325	/ 0.00E+00	N0180	/
0.00E+00		N0090	/ 0.00E+00	N-0001B	/ 0.00E+00
				N0100	/

/ 0.00E+00			
N0130	/ 0.00E+00	N0080	/ 0.00E+00
0.00E+00	N0170	/ 0.00E+00	N0205
/ 0.00E+00			
N0150	/ 0.00E+00	N0155	/ 0.00E+00
0.00E+00	N0120	/ 0.00E+00	N0110
/ 0.00E+00			
N0140-A	/ 0.00E+00	N0500	/ 0.00E+00
0.00E+00	N0540	/ 0.00E+00	N0650
/ 0.00E+00			
N2380	/ 0.00E+00	N2370	/ 0.00E+00
0.00E+00	N0480	/ 0.00E+00	N0410
/ 0.00E+00			
N0260	/ 0.00E+00	N0250	/ 0.00E+00
0.00E+00	N0200	/ 0.00E+00	N-002
/ 0.00E+00			
N-004	/ 0.00E+00	N-001	/ 0.00E+00
0.00E+00	N-005	/ 0.00E+00	N-007
/ 0.00E+00			
N-008	/ 0.00E+00	N-011	/ 0.00E+00
0.00E+00	N-014	/ 0.00E+00	N-012
/ 0.00E+00			
N-015	/ 0.00E+00	N2002	/ 0.00E+00
0.00E+00	N-022	/ 0.00E+00	N-026
/ 0.00E+00			
N-028	/ 0.00E+00	N-024	/ 0.00E+00
0.00E+00	N-030	/ 0.00E+00	N-023
/ 0.00E+00			
N-025	/ 0.00E+00	N-041	/ 0.00E+00
0.00E+00	N-021	/ 0.00E+00	N-043
/ 0.00E+00			
N-040	/ 0.00E+00	N2090	/ 0.00E+00
0.00E+00	N-0001-E	/ 0.00E+00	N-0001-F
/ 0.00E+00			
N0001-J	/ 0.00E+00		

Cycle 500 Time 8 Hrs - 20.00 Min

Junction /	Depth /	Elevation	==>	"*"	Junction is	Surcharged.
N0335/	0.32 /	0.32		N0550/	1.79 /	0.46
N0690/	0.00 /	0.62				
N0640/	4.28 /	1.50		N0780/	4.52 /	0.13
N0830/	2.35 /	0.30				
N0790/	3.25 /	0.27		N0800/	0.00 /	3.35
N0870/	3.21 /	0.29				
N0510/	1.33 /	-0.10		N0520/	3.14 /	0.31
N0390/	2.50 /	0.80				
N0350/	3.01 /	0.32		N0450/	1.62 /	0.32
N0770/	3.33 /	0.28				
N0720/	1.23 /	0.58		N0960/	0.00 /	1.90

N0920/	1.86	/	0.29		
N0950/	0.71	/	0.29	N0970/	1.61 / 0.40
N0915/	6.27	/	0.27		
N0885/	7.16	/	0.25	N0560/	3.28 / 0.46
N0810/	2.21	/	0.36		
N0570/	3.13	/	0.46	N0990/	0.00 / 1.57
N1000/	1.76	/	0.40		
N1020/	1.60	/	0.60	N1030/	1.55 / 0.50
N0890/	2.77	/	1.23		
N0850/	0.00	/	1.46	N0930/	4.95 / 1.38
N0980/	0.08	/	1.70		
N1010/	0.58	/	1.62	N0430/	0.45 / 0.32
N0500/	1.99	/	4.24		
N0230/	0.00	/	3.31	N0220/	0.82 / 2.00
N0200/	1.56	/	-0.05		
N0190/	0.91	/	-0.05	N0130/	0.00 / -0.60
N0100/	0.00	/	0.46		
N0090/	0.00	/	2.49	N0120/	0.47 / 0.23
N0110/	0.30	/	1.07		
N0170/	0.51	/	-0.20	N0210/	0.52 / -0.20
N0260/	2.23	/	2.00		
N0250/	0.70	/	3.00	N0240/	1.56 / 3.00
N0140/	3.23	/	1.33		
N0150/	0.00	/	1.44	N0270/	1.43 / 3.00
N0290/	0.22	/	1.23		
N0180/	2.79	/	1.33	N0370/	0.00 / 0.98
N0285/	0.00	/	2.00		
N0420/	0.42	/	3.50	N0490/	1.56 / 0.30
N0410/	2.97	/	0.36		
N0380/	0.73	/	0.73	N0660/	1.66 / 0.82
N0740/	1.60	/	0.36		
N0730/	3.16	/	1.06	N0940/	1.41 / 0.40
N0530/	0.00	/	1.66		
N0060/	0.59	/	-0.70	N0050/	2.86 / 2.00
N0325/	4.69	/	0.32		
N0160/	2.32	/	0.23	N0470/	1.64 / 3.45
N0540/	0.17	/	1.52		
N0650/	1.99	/	1.50	N0400/	3.22 / 0.32
N0360/	1.50	/	0.32		
N0480/	1.43	/	3.69	N0080/	0.32 / 0.80
N0310/	1.82	/	0.23		
N0300/	4.17	/	0.32	N0460/	2.46 / 0.31
N0440/	1.69	/	0.32		
N0330/	3.75	/	0.32	N0655/	2.92 / 0.01
N0375/	0.73	/	0.73		
N0385/	1.45	/	0.36	N0275/	0.00 / 2.30
N0280/	0.12	/	2.12		
N0202/	3.52	/	-0.05	N0340/	2.11 / 0.32
N0515/	1.66	/	0.46		
N-001/	1.00	/	1.23	N-002/	0.47 / 3.47

N-003/	0.00	/	2.56		
N-004/	0.00	/	2.88	N-005/	0.06 / 0.93
N-008/	0.95	/	0.91		
N-010/	1.20	/	0.91	N-013/	2.07 / 0.91
N-015/	2.10	/	0.91		
N-006/	0.00	/	2.66	N-007/	0.00 / 2.46
N-009/	0.00	/	2.68		
N-011/	0.00	/	2.04	N-014/	0.06 / 1.61
N-012/	0.00	/	1.48		
N-025/	2.43	/	1.19	N-023/	0.74 / 1.19
N-021/	1.62	/	1.15		
N-019/	1.70	/	1.48	N-041/	0.70 / 1.48
N-020/	0.00	/	1.38		
N-022/	0.23	/	1.19	N-024/	1.46 / 1.19
N-029/	2.17	/	1.19		
N-026/	0.18	/	1.19	N-027/	1.52 / 1.19
N-028/	1.50	/	1.19		
N-030/	0.00	/	-0.07	N-043/	0.56 / -0.60
N-042/	0.03	/	-0.60		
N-031/	0.45	/	-0.40	N-040/	1.31 / -0.17
N0620/	0.00	/	-0.60		
N0900/	3.29	/	0.29	N-009mh/	2.41 / 2.41
N0205/	3.45	/	-0.05		
N0386/	1.45	/	0.36	N0388/	1.45 / 0.36
N0775/	0.78	/	0.13		
N2040/	1.21	/	0.11	N2380/	2.11 / 0.30
N0155/	0.39	/	0.25		
N0945/	0.96	/	0.15	N2002/	2.72 / 0.92
N2090/	1.32	/	-0.57		
N0742/	1.46	/	0.95	N0910/	6.29 / 0.29
N0880/	7.20	/	0.29		
N9004/	3.93	/	1.19	N9004-B/	3.98 / 1.19
N9004-C/	3.73	/	1.19		
N9004-D/	3.87	/	1.19	N9004-F/	2.36 / 1.19
N9001-B/	2.32	/	0.23		
N9001-D/	1.13	/	0.23	N9001-F/	1.13 / 0.23
N9000/	2.22	/	0.23		
N9003/	0.23	/	0.23	N9005/	0.23 / 0.23
N9005-E/	0.23	/	0.23		
N9005-G/	0.23	/	0.23	N9004-J/	2.52 / 1.19
N9004-G/	2.28	/	1.19		
N9002/	1.54	/	0.23	N2370/	1.92 / 0.36
N9000-B/	2.22	/	0.23		
N9000-C/	2.22	/	0.23	N9000-E/	2.22 / 0.23
N9000-F/	2.22	/	0.23		
N9001-E/	2.32	/	0.23	N9001-G/	1.13 / 0.23
N9001-H/	1.13	/	0.23		
N9001-J/	0.40	/	0.23	N9001-K/	0.40 / 0.23
N9002-A/	1.54	/	0.23		
N9002-B/	1.54	/	0.23	N9003-A/	0.23 / 0.23

N9003-B/	0.23	/	0.23		
N9003-C/	0.23	/	0.23	N9003-D/	0.23 / 0.23
N9003-E/	0.23	/	0.23		
N9003-F/	0.23	/	0.23	N9003-G/	0.23 / 0.23
N9004-A/	3.93	/	1.19		
N9004-E/	3.87	/	1.19	N9004-H/	2.36 / 1.19
N9004-I/	2.36	/	1.19		
N9004-K/	2.52	/	1.19	N9005-A/	0.23 / 0.23
N9005-B/	0.23	/	0.23		
N9005-C/	0.23	/	0.23	N9005-D/	0.23 / 0.23
N9005-F/	0.23	/	0.23		
N9005-H/	0.23	/	0.23	N9000-D/	2.48 / 0.23
N-0001A/	8.35	/	0.35		
N-0001B/	0.40	/	-0.10	N0001-C/	0.00 / 2.15
N-0001-E/	0.00	/	4.80		
N-0001E-OF/	0.00	/	3.13	N-0001-F/	0.00 / 3.50
N-0001-G/	0.00	/	4.00		
N-0001F-OF-A/	0.00	/	3.13	N-0001F-OF-B/	0.00 / 3.13
N9004-L/	3.93	/	1.19		
N0001-J/	0.00	/	1.19	N9005-J/	0.23 / 0.23
N9005-K/	0.23	/	0.23		
N0001-I/	0.00	/	1.13	N-0001K/	0.00 / 2.03
N0140-A/	3.43	/	1.33		

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	10.28		R0770-P2/	-4.93
R0900/	10.28			R0370/	0.00*
	R0280/	0.00		R0202/	-0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.00			RN-023/	0.01
	RN-021/	0.00		RN-041/	0.00
RN-020/	0.00			RN-022/	0.00
	RN-024/	0.19		RN-026/	0.00
RN-027/	-0.06			RN-028/	0.06
	R0742-P3/	-4.40		R0655-P2/	0.09
R0655-P3/	0.09			R0655-P4/	-0.08
	R0120-P2/	0.00		R1010-P2/	0.00
RN-025-P1/	0.19			RN-025-P2/	-0.16
	R0155-P1/	0.59		R0386/	0.00
R0388/	0.00			R0385/	0.00
	R0375/	-0.00		R0335/	-0.00
R-0001B-P1/	-0.01			R0540-P1/	-0.00
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	0.00			R0285.1/	0.00
	R0250.1/	0.00		R0230.1/	0.00
R0220.1/	-0.02			R0200.1/	0.00
	R0190.1/	-0.00		R0170.1/	-0.00

R0180-P1/	0.15		R0180-P2/	0.15	
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00	
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.00	
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00		R0100-P2/	0.00	
	R0310.1/	-0.30		R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00	
	R0430-P4/	0.00		R0340-P1/	0.01
R0340-P2/	0.01		R0350-P1/	-0.04	
	R0350-P2/	-0.04		R0330-P1/	0.01
R0330-P2/	0.01		R0450-P1/	0.01	
	R0450-P2/	0.01		P0360-P1/	-0.00
P0360-P2/	-0.00		R0550-P1/	-0.15	
	R0550-P2/	-0.14		R0560-P1/	-0.48
R0560-P2/	-0.61		R0560-P3/	-0.62	
	R0780.1/	0.00		R0740.1/	-4.37
R0730.1/	-10.75		R0880.1/	0.00	
	R0950.1/	-0.00		R0920.1/	0.20
R0960.1/	0.00		R0990.1/	0.00	
	R1010-P3/	0.00		R1010-P4/	0.00
R1010-P5/	0.00		R0980-P1.1/	0.00	
	R0980-P2.1/	0.00		R0850-P1/	0.00
R0850-P2/	0.00		R0850-P3/	0.00	
	R0570-P1/	0.20		R0570-P2/	0.26
R0570-P3/	0.28		R0770-P1.1/	-7.84	
	R0770-P3/	-4.97		R0770-P4/	-4.88
R0790-P1/	-3.47		R0790-P2/	-2.23	
	R0530-P1/	0.00		R0530-P2/	0.00*
R0530-P3/	0.00		R0910-P1/	-0.10	
	R0910-P2/	0.11		R0380-P1/	0.00
R0380-P2/	0.00		R0300-P1/	-0.01	
	R0300-P2/	-0.01		R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00		RN-001-P1/	0.00
RN-001-P2/	0.00		RN-001-P3/	0.00	
	RN-005-P1/	0.00*		RN-005-P2/	0.00
RN-005-P3/	-0.01		RN-008-P1.1/	0.07	
	RN-008-P2/	-0.05		RN-008-P3/	-0.04
RN-010-P1/	0.15		RN-010-P2/	0.14	
	RN-010-P3/	-0.14		RN-013-P1/	-0.53
RN-013-P2/	-0.53		RN-013-P3/	-0.53	
	RN-015-P1/	1.97		RN-015-P2/	-4.88
RN-015-P3/	-4.26		RN-029-P1/	-0.12	
	RN-029-P2/	0.13		R0742-P1/	2.21
R0742-P2/	2.21		R0655-P1.1/	0.09	
	R0490-P8/	-3.80		R0490-P7/	-3.80
R0140-P2.1/	0.02		R0140-P1.1/	0.02	
	R0120-P1.1/	0.00		R0160-P1.1/	-0.99

R0325-P1.1/	0.00	R0400-P1.1/	0.00
R0880-P2.1/	0.00	R1010-P1.1/	0.00
R-0410-P4/	0.12	R-0410-P5/	0.12
R-0410-P6/	0.12	R-0410-P7/	0.15
R0410-P1/	-0.69	R0410-P2/	-0.69
R0410-P3/	-0.69	498.1/	3.04
R0490-P1.1/	-3.03	R0490-P3/	-0.34
R0490-P4/	-0.37	R0490-P5/	-0.40
R0490-P6/	-0.40	R0890-ORF-2/	0.87
R0890-ORF-5/	0.87	R0890ORF-3/	0.87
R0890-ORF-4/	0.87	N0140-A-W1.1/	0.01
R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00
R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00
R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00
R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00
R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00
R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00
R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00
R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00
R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00
R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00
R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00
R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00
R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00

R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00	
	R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00	
	R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00	
	R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00	
	R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00	
	R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00	
	R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00	
	R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00	
	R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00	
	R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00	
	R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00	
	R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00	
	R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00	
	R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00	
	R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00	
	R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00	
	R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00	
	R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00	
	R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00	
	R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00	
	R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00	
	R1000-W1.1/	0.00	R1020-W1.1/	0.00

R1030-W1.1/	0.00		R1030-W2.1/	0.00	
	R2002-W1.1/	-60.09		R02040-W1.1/	0.00
R2090-W1.1/	0.00		R2370-W4.1/	0.00	
	R2380-W2.1/	0.00		R2380-W3.1/	0.00
R0440-W2.1/	0.00		R015-W1.1/	0.00	
	R020-W1.1/	0.00		R021-W1.1/	0.00
R030-W1.1/	0.00		R031-W1.1/	0.00	
	R042-W1.1/	0.00		R043-W1.1/	0.00
R0850-W1.1/	0.00		R0880-WPump/	0.00	
	R0920-P2-W1/	0.00		R0920-P2-W2/	0.00
R0910-W1/	0.00		R0325-DS-W1/	0.00	
	R0400-WPump/	0.00		R0880-WPump2/	0.00
R0880-DS-W1/	0.00		R0520-DS-W1/	0.00	
	R0640-P1-W1/	0.00		R0640-P1-W2/	0.00
R0640-P2-W1/	0.00		R0690-P1-W1/	0.00	
	R0940-DS-W1/	0.00		R0945-DS-W1/	0.00
R1020-DS-W1/	0.00		R0205-W1/	0.00	
	R0205-W2/	0.00		R0205-W3/	0.00
R0205-W4/	0.00		R0210-W1.1/	0.00	
	R0515-W1.1/	0.00		R0515-W2.1/	3.18
R0620-W1/	0.00		R0620-W2/	0.00	
	R0620-W3/	0.00		R0650-W2.1/	0.00
R0660-W3.1/	0.00		R0742-W1.1/	0.00	
	R0890-W1.1/	0.00		R0915-W1.1/	0.00
RN-019-P1-W1/	0.00		R019-P1-W2/	0.00	
	R0830-P1-W1.1/	0.00		R0830-P1-W2/	0.00
R0970-P1-W1/	0.00		R0970-P1-W2/	0.00	
	R-0001A-W1.1/	9.55		R-0001A-W2/	1.02
R0001C-W1.1/	0.00		R0001C-W2/	0.00	
	R0001C-W3/	0.00		R0001E-W1/	0.00
R0001F-W1.1/	0.00		R0001F-W2/	0.00	
	R0001F-W3/	0.00		R0001F-W4/	0.00
R0001F-W5/	0.00		R001G-W1/	0.00	
	R0930-W6.1.1/	0.00		R0001J-W1.1/	0.00
R000J-W2/	0.00		R000J-W3/	0.00	
	R000J-W4/	0.00		R000J-W5/	0.00
R000J-W6/	0.00		R000J-W7/	0.00	
	R0001J-W8/	0.00		R0001J-W9/	0.00
R0001J-W10/	0.00		R0001J-W11/	0.00	
	R0001J-W12/	0.00		R0001J-W13/	0.00
R0001J-W14/	0.00		R0001I-W1.1/	0.00	
	R001I-W2/	0.00		R0001I-W3/	0.00
R001I-W4/	0.00		R001I-W5/	0.00	
	R0001I-W7/	0.00		R0001I-W7.1/	0.00
R0001K-W1.1/	0.00		R0001K-W2/	0.00	
	R0001K-W3/	0.00		R0880-PUMP/	0.00
1/	0.00	FREE# 2/	-0.09		FREE#
	FREE# 3/	-0.09		FREE# 4/	-0.08
5/	7.60	FREE# 6/	0.01		FREE#
	FREE# 7/	0.00		FREE# 8/	0.00
					FREE#

9/	0.00	FREE#10/	0.00		
	FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	0.19		
	FREE#15/	0.16	FREE#16/	0.59	
FREE#17/	0.00	FREE#18/	0.00		
	FREE#19/	0.00	FREE#20/	0.99	
FREE#21/	0.00	FREE#22/	0.00		
	FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00		
	FREE#27/	0.00	FREE#28/	3.18	
FREE#29/	0.00	FREE#30/	0.00		
	FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00		
	FREE#35/	-0.09	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00		
	FREE#39/	-60.09	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00		
	FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	10.56		
	FREE#47/	0.00	FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	3.48		
	FREE#51/	0.00	FREE#52/	0.00	

==> System inflows (file) at 16.67 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360
	/ 0.00E+00				
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00	N0550	/ 0.00E+00	N0640	/ 0.00E+00	N0660
	/ 0.00E+00				
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00	N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885
	/ 0.00E+00				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940
	/ 0.00E+00				
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00	N0850	/ 0.00E+00	N0890	/ 0.00E+00	N0930
	/ 0.00E+00				
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/

0.00E+00 N0970	/ 0.00E+00 N-0001K	/ 0.00E+00 N0870
/ 0.00E+00		
N0790	/ 0.00E+00 N0001-I	/ 0.00E+00 N0915
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880
/ 0.00E+00		
N0810	/ 0.00E+00 N0740	/ 0.00E+00 N0742
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730
/ 0.00E+00		
N0570	/ 0.00E+00 N0560	/ 0.00E+00 N0515
0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350
/ 0.00E+00		
N0330	/ 0.00E+00 N0325	/ 0.00E+00 N0180
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 0.00E+00 N0100
/ 0.00E+00		
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210
/ 0.00E+00		
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140
/ 0.00E+00		
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490
/ 0.00E+00		
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655
0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270
/ 0.00E+00		
N0260	/ 0.00E+00 N0250	/ 0.00E+00 N0240
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003
/ 0.00E+00		
N-004	/ 0.00E+00 N-001	/ 0.00E+00 N-006
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009
/ 0.00E+00		
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010
0.00E+00 N-014	/ 0.00E+00 N-012	/ 0.00E+00 N-013
/ 0.00E+00		
N-015	/ 0.00E+00 N2002	/ 0.00E+00 N-020
0.00E+00 N-022	/ 0.00E+00 N-026	/ 0.00E+00 N-027
/ 0.00E+00		
N-028	/ 0.00E+00 N-024	/ 0.00E+00 N-029
0.00E+00 N-030	/ 0.00E+00 N-023	/ 0.00E+00 N-031
/ 0.00E+00		
N-025	/ 0.00E+00 N-041	/ 0.00E+00 N-019
0.00E+00 N-021	/ 0.00E+00 N-043	/ 0.00E+00 N-042
/ 0.00E+00		
N-040	/ 0.00E+00 N2090	/ 0.00E+00 N-0001A
0.00E+00 N-0001-E	/ 0.00E+00 N-0001-F	/ 0.00E+00 N-0001-G
/ 0.00E+00		
N0001-J	/ 0.00E+00	

Cycle 1000 Time 16 Hrs - 40.00 Min

Junction /	Depth /	Elevation	====>	"*" Junction is Surcharged.
N0335/	0.32 /	0.32		N0550/ 1.75 / 0.42
N0690/	0.00 /	0.62		N0780/ 4.52 / 0.13
N0640/	4.28 /	1.50		N0800/ 0.00 / 3.35
N0830/	2.35 /	0.30		N0520/ 3.14 / 0.31
N0790/	3.37 /	0.39		N0450/ 1.62 / 0.32
N0870/	3.31 /	0.39		N0960/ 0.00 / 1.90
N0510/	1.33 /	-0.10		N0970/ 1.61 / 0.40
N0390/	2.50 /	0.80		N0560/ 3.24 / 0.42
N0350/	3.01 /	0.32		N0990/ 0.00 / 1.57
N0770/	3.44 /	0.39		N1030/ 1.55 / 0.50
N0720/	1.23 /	0.58		N0930/ 4.95 / 1.38
N0920/	1.96 /	0.39		N0430/ 0.45 / 0.32
N0950/	0.81 /	0.39		N0220/ 0.82 / 2.00
N0915/	6.39 /	0.39		N0130/ 0.00 / -0.60
N0885/	7.30 /	0.39		N0120/ 0.48 / 0.24
N0810/	2.21 /	0.36		N0210/ 0.52 / -0.20
N0570/	3.09 /	0.42		N0240/ 1.56 / 3.00
N1000/	1.76 /	0.40		N0270/ 1.43 / 3.00
N1020/	1.60 /	0.60		N0370/ 0.00 / 0.98
N0890/	2.77 /	1.23		N0490/ 1.49 / 0.23
N0850/	0.00 /	1.46		N0660/ 1.66 / 0.82
N0980/	0.08 /	1.70		N0940/ 1.41 / 0.40
N1010/	0.58 /	1.62		N0050/ 2.86 / 2.00
N0500/	1.99 /	4.24		N0470/ 1.64 / 3.45
N0230/	0.00 /	3.31		
N0200/	1.56 /	-0.05		
N0190/	0.91 /	-0.05		
N0100/	0.00 /	0.46		
N0090/	0.00 /	2.49		
N0110/	0.25 /	1.02		
N0170/	0.51 /	-0.20		
N0260/	2.23 /	2.00		
N0250/	0.70 /	3.00		
N0140/	3.23 /	1.33		
N0150/	0.00 /	1.44		
N0290/	0.22 /	1.23		
N0180/	2.79 /	1.33		
N0285/	0.00 /	2.00		
N0420/	0.42 /	3.50		
N0410/	2.88 /	0.27		
N0380/	0.73 /	0.73		
N0740/	1.64 /	0.40		
N0730/	2.89 /	0.79		
N0530/	0.00 /	1.66		
N0060/	0.60 /	-0.69		
N0325/	4.69 /	0.32		
N0160/	2.34 /	0.25		
N0540/	0.16 /	1.51		

N0650/	1.99	/	1.50	N0400/	3.22	/	0.32
N0360/	1.50	/	0.32				
N0480/	1.43	/	3.69	N0080/	0.32	/	0.80
N0310/	1.84	/	0.25				
N0300/	4.17	/	0.32	N0460/	2.46	/	0.31
N0440/	1.69	/	0.32				
N0330/	3.75	/	0.32	N0655/	2.92	/	0.01
N0375/	0.73	/	0.73				
N0385/	1.36	/	0.27	N0275/	0.00	/	2.30
N0280/	0.12	/	2.12				
N0202/	3.52	/	-0.05	N0340/	2.11	/	0.32
N0515/	1.62	/	0.42				
N-001/	1.01	/	1.24	N-002/	0.46	/	3.46
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88	N-005/	0.35	/	1.22
N-008/	1.26	/	1.22				
N-010/	1.51	/	1.22	N-013/	2.38	/	1.22
N-015/	2.41	/	1.22				
N-006/	0.00	/	2.66	N-007/	0.00	/	2.46
N-009/	0.00	/	2.68				
N-011/	0.00	/	2.04	N-014/	0.06	/	1.61
N-012/	0.00	/	1.48				
N-025/	2.44	/	1.20	N-023/	0.75	/	1.20
N-021/	1.70	/	1.23				
N-019/	1.70	/	1.48	N-041/	0.70	/	1.48
N-020/	0.00	/	1.38				
N-022/	0.24	/	1.20	N-024/	1.47	/	1.20
N-029/	2.18	/	1.20				
N-026/	0.19	/	1.20	N-027/	1.53	/	1.20
N-028/	1.51	/	1.20				
N-030/	0.00	/	-0.07	N-043/	0.56	/	-0.60
N-042/	0.03	/	-0.60				
N-031/	0.45	/	-0.40	N-040/	1.31	/	-0.17
N0620/	0.00	/	-0.60				
N0900/	3.39	/	0.39	N-009mh/	2.41	/	2.41
N0205/	3.45	/	-0.05				
N0386/	1.36	/	0.27	N0388/	1.36	/	0.27
N0775/	0.78	/	0.13				
N2040/	1.21	/	0.11	N2380/	2.04	/	0.23
N0155/	0.40	/	0.26				
N0945/	0.96	/	0.15	N2002/	3.02	/	1.22
N2090/	1.32	/	-0.57				
N0742/	1.28	/	0.77	N0910/	6.39	/	0.39
N0880/	7.30	/	0.39				
N9004/	3.94	/	1.20	N9004-B/	3.99	/	1.20
N9004-C/	3.74	/	1.20				
N9004-D/	3.88	/	1.20	N9004-F/	2.37	/	1.20
N9001-B/	2.33	/	0.24				
N9001-D/	1.14	/	0.24	N9001-F/	1.14	/	0.24
N9000/	2.23	/	0.24				

N9003/	0.24	/	0.24	N9005/	0.24	/	0.24
N9005-E/	0.24	/	0.24	N9004-J/	2.53	/	1.20
N9005-G/	0.24	/	0.24	N2370/	1.83	/	0.27
N9004-G/	2.29	/	1.20	N9000-E/	2.23	/	0.24
N9002/	1.55	/	0.24	N9001-G/	1.14	/	0.24
N9000-B/	2.23	/	0.24	N9001-K/	0.41	/	0.24
N9000-C/	2.23	/	0.24	N9003-A/	0.24	/	0.24
N9000-F/	2.23	/	0.24	N9003-D/	0.24	/	0.24
N9001-E/	2.33	/	0.24	N9003-G/	0.24	/	0.24
N9001-H/	1.14	/	0.24	N9004-H/	2.37	/	1.20
N9001-J/	0.41	/	0.24	N9005-A/	0.24	/	0.24
N9002-A/	1.55	/	0.24	N9005-D/	0.24	/	0.24
N9002-B/	1.55	/	0.24	N9000-D/	2.49	/	0.24
N9003-B/	0.24	/	0.24	N0001-C/	0.00	/	2.15
N9003-C/	0.24	/	0.24	N-0001-F/	0.00	/	3.50
N9003-E/	0.24	/	0.24	N-0001F-OF-B/	0.00	/	3.13
N9003-F/	0.24	/	0.24	N9005-J/	0.24	/	0.24
N9004-A/	3.94	/	1.20	N-0001K/	0.00	/	2.03
N9004-E/	3.88	/	1.20				
N9004-I/	2.37	/	1.20				
N9004-K/	2.53	/	1.20				
N9005-B/	0.24	/	0.24				
N9005-C/	0.24	/	0.24				
N9005-F/	0.24	/	0.24				
N9005-H/	0.24	/	0.24				
N-0001A/	8.33	/	0.33				
N-0001B/	0.24	/	-0.26				
N-0001-E/	0.00	/	4.80				
N-0001E-OF/	0.00	/	3.13				
N-0001-G/	0.00	/	4.00				
N-0001F-OF-A/	0.00	/	3.13				
N9004-L/	3.94	/	1.20				
N0001-J/	0.00	/	1.19				
N9005-K/	0.24	/	0.24				
N0001-I/	0.00	/	1.13				
N0140-A/	3.43	/	1.33				

	Conduit/	FLOW	====>	"*"	Conduit uses the normal flow option.
R0900/	R0870/	7.38		R0770-P2/	-2.30
	7.37			R0370/	0.00*
	R0280/	0.00		R0202/	-0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.00			RN-023/	0.04
	RN-021/	0.00*		RN-041/	0.00
RN-020/	0.00			RN-022/	0.01
	RN-024/	0.52		RN-026/	0.00
RN-027/	-0.14			RN-028/	0.15

R0655-P3/	R0742-P3/	-1.49	R0655-P2/	-0.04
	-0.04		R0655-P4/	0.04
RN-025-P1/	R0120-P2/	0.00	R1010-P2/	0.00
	0.62		RN-025-P2/	-0.54
R0388/	R0155-P1/	-0.06	R0386/	0.00
	0.00		R0385/	0.00
	R0375/	-0.00	R0335/	0.00
R-0001B-P1/	-0.00		R0540-P1/	-0.00
	R0540-P2/	0.00	R0540-P3/	0.00
R0290-P1/	0.00		R0285.1/	0.00
	R0250.1/	0.00	R0230.1/	0.00
R0220.1/	0.00		R0200.1/	0.00
	R0190.1/	-0.00	R0170.1/	0.00
R0180-P1/	0.05		R0180-P2/	0.06
	R0140.1/	0.00	R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00
	R0150-P3/	0.00	R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.00
	R0130-P1/	0.00	R0130-P2/	0.00
R0100-P1/	0.00		R0100-P2/	0.00
	R0310.1/	-1.36	R0430-P1/	-0.00
R0430-P2/	-0.00		R0430-P3/	-0.00
	R0430-P4/	-0.00	R0340-P1/	-0.01
R0340-P2/	-0.01		R0350-P1/	0.03
	R0350-P2/	0.03	R0330-P1/	-0.00
R0330-P2/	-0.00		R0450-P1/	-0.00
	R0450-P2/	-0.00	P0360-P1/	0.00
P0360-P2/	0.00		R0550-P1/	-0.08
	R0550-P2/	-0.08	R0560-P1/	-0.47
R0560-P2/	-0.57		R0560-P3/	-0.59
	R0780.1/	0.00	R0740.1/	-1.27
R0730.1/	-7.67		R0880.1/	0.00
	R0950.1/	-0.00	R0920.1/	0.13
R0960.1/	0.00		R0990.1/	0.00
	R1010-P3/	0.00	R1010-P4/	0.00
R1010-P5/	0.00		R0980-P1.1/	0.00
	R0980-P2.1/	0.00	R0850-P1/	0.00
R0850-P2/	0.00		R0850-P3/	0.00
	R0570-P1/	0.19	R0570-P2/	0.22
R0570-P3/	0.22		R0770-P1.1/	-5.07
	R0770-P3/	-3.60	R0770-P4/	-3.54
R0790-P1/	-2.28		R0790-P2/	-1.42
	R0530-P1/	0.00	R0530-P2/	0.00*
R0530-P3/	0.00		R0910-P1/	-0.06
	R0910-P2/	0.06	R0380-P1/	0.00
R0380-P2/	0.00		R0300-P1/	0.00
	R0300-P2/	0.00	R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00
	RN-004-P3/	0.00	RN-001-P1/	0.01
RN-001-P2/	0.00		RN-001-P3/	0.01

	RN-005-P1/	0.01	RN-005-P2/	0.02
RN-005-P3/	-0.01	RN-008-P1.1/	-0.03	
	RN-008-P2/	0.04	RN-008-P3/	0.04
RN-010-P1/	-0.08	RN-010-P2/	-0.08	
	RN-010-P3/	0.08	RN-013-P1/	0.21
RN-013-P2/	0.21	RN-013-P3/	0.21	
	RN-015-P1/	-0.79	RN-015-P2/	1.37
RN-015-P3/	1.93	RN-029-P1/	-0.34	
	RN-029-P2/	0.43	R0742-P1/	0.75*
R0742-P2/	0.75*	R0655-P1.1/	-0.04	
	R0490-P8/	-3.20	R0490-P7/	-3.20
R0140-P2.1/	0.01	R0140-P1.1/	0.01	
	R0120-P1.1/	0.01	R0160-P1.1/	-4.44
R0325-P1.1/	0.00	R0400-P1.1/	0.00	
	R0880-P2.1/	0.00	R1010-P1.1/	0.00
R-0410-P4/	0.11	R-0410-P5/	0.11	
	R-0410-P6/	0.11	R-0410-P7/	0.14
R0410-P1/	-0.58	R0410-P2/	-0.58	
	R0410-P3/	-0.58	498.1/	2.49
R0490-P1.1/	-2.56	R0490-P3/	-0.30	
	R0490-P4/	-0.32	R0490-P5/	-0.35
R0490-P6/	-0.35	R0890-ORF-2/	0.82	
	R0890-ORF-5/	0.82	R0890ORF-3/	0.82
R0890-ORF-4/	0.82	N0140-A-W1.1/	0.01	
	R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00	
	R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00	
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00	
	R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00	
	R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	

R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00

R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	21.64	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	2.92
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.00
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.00	R019-P1-W2/	0.00
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00
R-0001A-W1.1/	8.50	R-0001A-W2/	0.46
R0001C-W1.1/	0.00	R0001C-W2/	0.00
R0001C-W3/	0.00	R0001E-W1/	0.00
R0001F-W1.1/	0.00	R0001F-W2/	0.00
R0001F-W3/	0.00	R0001F-W4/	0.00
R0001F-W5/	0.00	R001G-W1/	0.00
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00
R000J-W2/	0.00	R000J-W3/	0.00
R000J-W4/	0.00	R000J-W5/	0.00
R000J-W6/	0.00	R000J-W7/	0.00

	R0001J-W8/	0.00		R0001J-W9/	0.00	
R0001J-W10/	0.00		R0001J-W11/	0.00		
	R0001J-W12/	0.00		R0001J-W13/	0.00	
R0001J-W14/	0.00		R0001I-W1.1/	0.00		
	R001I-W2/	0.00		R0001I-W3/	0.00	
R001I-W4/	0.00		R001I-W5/	0.00		
	R0001I-W7/	0.00		R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00		R0001K-W2/	0.00		
	R0001K-W3/	0.00		R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.04			
	FREE# 3/	0.04		FREE# 4/	0.04	FREE#
5/	6.40	FREE# 6/	0.01			
	FREE# 7/	0.01		FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00			
	FREE#11/	0.00		FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	0.62			
	FREE#15/	0.54		FREE#16/	-0.06	
FREE#17/	0.00	FREE#18/	0.00			
	FREE#19/	0.00		FREE#20/	4.44	
FREE#21/	0.00	FREE#22/	0.00			
	FREE#23/	0.00		FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00			
	FREE#27/	0.00		FREE#28/	2.92	
FREE#29/	0.00	FREE#30/	0.00			
	FREE#31/	0.00		FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00			
	FREE#35/	0.04		FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00			
	FREE#39/	21.65		FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00			
	FREE#43/	0.00		FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	8.96			
	FREE#47/	0.00		FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	3.30			
	FREE#51/	0.00		FREE#52/	0.00	

==> System inflows (file) at 25.00 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360
	/ 0.00E+00				

N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00		N0550	/ 0.00E+00	N0640	/
	/ 0.00E+00			N0660	
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00		N0720	/ 0.00E+00	N0770	/
	/ 0.00E+00			N0885	
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00		N1030	/ 0.00E+00	N1020	/
	/ 0.00E+00			N0940	
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00		N0850	/ 0.00E+00	N0890	/
	/ 0.00E+00			N0930	
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/
0.00E+00		N0970	/ 0.00E+00	N-0001K	/
	/ 0.00E+00			N0870	
N0790	/ 0.00E+00	N0001-I	/ 0.00E+00	N0915	/
0.00E+00		N0900	/ 0.00E+00	N0910	/
	/ 0.00E+00			N0880	
N0810	/ 0.00E+00	N0740	/ 0.00E+00	N0742	/
0.00E+00		N0800	/ 0.00E+00	N0620	/
	/ 0.00E+00			N0730	
N0570	/ 0.00E+00	N0560	/ 0.00E+00	N0515	/
0.00E+00		N0510	/ 0.00E+00	N0520	/
	/ 0.00E+00			N0350	
N0330	/ 0.00E+00	N0325	/ 0.00E+00	N0180	/
0.00E+00		N0090	/ 0.00E+00	N-0001B	/
	/ 0.00E+00			N0100	
N0130	/ 0.00E+00	N0080	/ 0.00E+00	N0050	/
0.00E+00		N0170	/ 0.00E+00	N0205	/
	/ 0.00E+00			N0210	
N0150	/ 0.00E+00	N0155	/ 0.00E+00	N0060	/
0.00E+00		N0120	/ 0.00E+00	N0110	/
	/ 0.00E+00			N0140	
N0140-A	/ 0.00E+00	N0500	/ 0.00E+00	N0470	/
0.00E+00		N0540	/ 0.00E+00	N0650	/
	/ 0.00E+00			N0490	
N2380	/ 0.00E+00	N2370	/ 0.00E+00	N0655	/
0.00E+00		N0480	/ 0.00E+00	N0410	/
	/ 0.00E+00			N0270	
N0260	/ 0.00E+00	N0250	/ 0.00E+00	N0240	/
0.00E+00		N0200	/ 0.00E+00	N-002	/
	/ 0.00E+00			N-003	
N-004	/ 0.00E+00	N-001	/ 0.00E+00	N-006	/
0.00E+00		N-005	/ 0.00E+00	N-007	/
	/ 0.00E+00			N-009	
N-008	/ 0.00E+00	N-011	/ 0.00E+00	N-010	/
0.00E+00		N-014	/ 0.00E+00	N-012	/
	/ 0.00E+00			N-013	
N-015	/ 0.00E+00	N2002	/ 0.00E+00	N-020	/
0.00E+00		N-022	/ 0.00E+00	N-026	/
				N-027	

/ 0.00E+00			
N-028	/ 0.00E+00	N-024	/ 0.00E+00
0.00E+00 N-030		/ 0.00E+00 N-023	/ 0.00E+00 N-029
/ 0.00E+00			/ 0.00E+00 N-031
N-025	/ 0.00E+00	N-041	/ 0.00E+00
0.00E+00 N-021		/ 0.00E+00 N-043	/ 0.00E+00
/ 0.00E+00			/ 0.00E+00 N-042
N-040	/ 0.00E+00	N2090	/ 0.00E+00
0.00E+00 N-0001-E		/ 0.00E+00 N-0001-F	/ 0.00E+00
/ 0.00E+00			/ 0.00E+00 N-0001A
N0001-J	/ 0.00E+00		/ 0.00E+00 N-0001-G

Cycle 1500 Time 25 Hrs - 0.00 Min

Junction	Depth	Elevation	====>	"*"	Junction	Depth	Elevation
N0335/	0.32 /	0.32			N0550/	1.72 /	0.39
N0690/	0.00 /	0.62					
N0640/	4.28 /	1.50			N0780/	4.52 /	0.13
N0830/	2.35 /	0.30					
N0790/	3.43 /	0.45			N0800/	0.00 /	3.35
N0870/	3.37 /	0.45					
N0510/	1.33 /	-0.10			N0520/	3.14 /	0.31
N0390/	2.50 /	0.80					
N0350/	3.01 /	0.32			N0450/	1.62 /	0.32
N0770/	3.50 /	0.45					
N0720/	1.23 /	0.58			N0960/	0.00 /	1.90
N0920/	2.02 /	0.45					
N0950/	0.87 /	0.45			N0970/	1.61 /	0.40
N0915/	6.45 /	0.45					
N0885/	7.36 /	0.45			N0560/	3.21 /	0.39
N0810/	2.21 /	0.36					
N0570/	3.06 /	0.39			N0990/	0.00 /	1.57
N1000/	1.76 /	0.40					
N1020/	1.60 /	0.60			N1030/	1.55 /	0.50
N0890/	2.78 /	1.24					
N0850/	0.00 /	1.46			N0930/	4.95 /	1.38
N0980/	0.08 /	1.70					
N1010/	0.58 /	1.62			N0430/	0.45 /	0.32
N0500/	1.99 /	4.24					
N0230/	0.00 /	3.31			N0220/	0.82 /	2.00
N0200/	1.56 /	-0.05					
N0190/	0.91 /	-0.05			N0130/	0.00 /	-0.60
N0100/	0.00 /	0.46					
N0090/	0.00 /	2.49			N0120/	0.57 /	0.33
N0110/	0.25 /	1.02					
N0170/	0.51 /	-0.20			N0210/	0.52 /	-0.20
N0260/	2.23 /	2.00					
N0250/	0.70 /	3.00			N0240/	1.56 /	3.00
N0140/	3.23 /	1.33					
N0150/	0.00 /	1.44			N0270/	1.43 /	3.00

N0290/	0.22	/	1.23		
N0180/	2.79	/	1.33	N0370/	0.00 / 0.98
N0285/	0.00	/	2.00		
N0420/	0.42	/	3.50	N0490/	1.43 / 0.17
N0410/	2.81	/	0.20		
N0380/	0.73	/	0.73	N0660/	1.66 / 0.82
N0740/	1.69	/	0.45		
N0730/	2.70	/	0.60	N0940/	1.41 / 0.40
N0530/	0.00	/	1.66		
N0060/	0.60	/	-0.69	N0050/	2.86 / 2.00
N0325/	4.69	/	0.32		
N0160/	2.42	/	0.33	N0470/	1.64 / 3.45
N0540/	0.16	/	1.51		
N0650/	1.99	/	1.50	N0400/	3.22 / 0.32
N0360/	1.50	/	0.32		
N0480/	1.43	/	3.69	N0080/	0.32 / 0.80
N0310/	1.91	/	0.32		
N0300/	4.17	/	0.32	N0460/	2.46 / 0.31
N0440/	1.69	/	0.32		
N0330/	3.75	/	0.32	N0655/	2.92 / 0.01
N0375/	0.73	/	0.73		
N0385/	1.29	/	0.20	N0275/	0.00 / 2.30
N0280/	0.12	/	2.12		
N0202/	3.52	/	-0.05	N0340/	2.11 / 0.32
N0515/	1.59	/	0.39		
N-001/	1.03	/	1.26	N-002/	0.46 / 3.46
N-003/	0.00	/	2.56		
N-004/	0.00	/	2.88	N-005/	0.40 / 1.27
N-008/	1.31	/	1.27		
N-010/	1.56	/	1.27	N-013/	2.43 / 1.27
N-015/	2.46	/	1.27		
N-006/	0.00	/	2.66	N-007/	0.00 / 2.46
N-009/	0.00	/	2.68		
N-011/	0.00	/	2.04	N-014/	0.06 / 1.61
N-012/	0.00	/	1.48		
N-025/	2.53	/	1.29	N-023/	0.84 / 1.29
N-021/	1.75	/	1.28		
N-019/	1.70	/	1.48	N-041/	0.70 / 1.48
N-020/	0.00	/	1.38		
N-022/	0.33	/	1.29	N-024/	1.56 / 1.29
N-029/	2.27	/	1.29		
N-026/	0.28	/	1.29	N-027/	1.62 / 1.29
N-028/	1.60	/	1.29		
N-030/	0.00	/	-0.07	N-043/	0.56 / -0.60
N-042/	0.03	/	-0.60		
N-031/	0.45	/	-0.40	N-040/	1.31 / -0.17
N0620/	0.00	/	-0.60		
N0900/	3.45	/	0.45	N-009mh/	2.41 / 2.41
N0205/	3.45	/	-0.05		
N0386/	1.29	/	0.20	N0388/	1.29 / 0.20

N0775/	0.78	/	0.13		
N2040/	1.21	/	0.11	N2380/	1.98 / 0.17
N0155/	0.47	/	0.33		
N0945/	0.96	/	0.15	N2002/	3.07 / 1.27
N2090/	1.32	/	-0.57		
N0742/	1.11	/	0.60	N0910/	6.45 / 0.45
N0880/	7.36	/	0.45		
N9004/	4.03	/	1.29	N9004-B/	4.08 / 1.29
N9004-C/	3.83	/	1.29		
N9004-D/	3.97	/	1.29	N9004-F/	2.46 / 1.29
N9001-B/	2.42	/	0.33		
N9001-D/	1.23	/	0.33	N9001-F/	1.23 / 0.33
N9000/	2.32	/	0.33		
N9003/	0.33	/	0.33	N9005/	0.33 / 0.33
N9005-E/	0.33	/	0.33		
N9005-G/	0.33	/	0.33	N9004-J/	2.62 / 1.29
N9004-G/	2.38	/	1.29		
N9002/	1.64	/	0.33	N2370/	1.76 / 0.20
N9000-B/	2.32	/	0.33		
N9000-C/	2.32	/	0.33	N9000-E/	2.32 / 0.33
N9000-F/	2.32	/	0.33		
N9001-E/	2.42	/	0.33	N9001-G/	1.23 / 0.33
N9001-H/	1.23	/	0.33		
N9001-J/	0.50	/	0.33	N9001-K/	0.50 / 0.33
N9002-A/	1.64	/	0.33		
N9002-B/	1.64	/	0.33	N9003-A/	0.33 / 0.33
N9003-B/	0.33	/	0.33		
N9003-C/	0.33	/	0.33	N9003-D/	0.33 / 0.33
N9003-E/	0.33	/	0.33		
N9003-F/	0.33	/	0.33	N9003-G/	0.33 / 0.33
N9004-A/	4.03	/	1.29		
N9004-E/	3.97	/	1.29	N9004-H/	2.46 / 1.29
N9004-I/	2.46	/	1.29		
N9004-K/	2.62	/	1.29	N9005-A/	0.33 / 0.33
N9005-B/	0.33	/	0.33		
N9005-C/	0.33	/	0.33	N9005-D/	0.33 / 0.33
N9005-F/	0.33	/	0.33		
N9005-H/	0.33	/	0.33	N9000-D/	2.58 / 0.33
N-0001A/	8.31	/	0.31		
N-0001B/	0.19	/	-0.31	N0001-C/	0.00 / 2.15
N-0001-E/	0.00	/	4.80		
N-0001E-OF/	0.00	/	3.13	N-0001-F/	0.00 / 3.50
N-0001-G/	0.00	/	4.00		
N-0001F-OF-A/	0.00	/	3.13	N-0001F-OF-B/	0.00 / 3.13
N9004-L/	4.03	/	1.29		
N0001-J/	0.00	/	1.19	N9005-J/	0.33 / 0.33
N9005-K/	0.33	/	0.33		
N0001-I/	0.00	/	1.13	N-0001K/	0.00 / 2.03
N0140-A/	3.43	/	1.33		

	Conduit/	FLOW	==> "*" Conduit uses the normal flow option.	
	R0870/	4.67	R0770-P2/	-1.28
R0900/	4.67	R0370/	0.00*	
	R0280/	0.00	R0202/	-0.00
RN-002/	0.00	RN-003/	0.00	
	RN-006/	0.00	RN-007/	0.00
RN-009/	0.00	RN-009MH/	0.00	
	RN-011/	0.00	RN-014/	0.00
RN-012/	0.00	RN-023/	-0.04	
	RN-021/	0.00	RN-041/	0.00
RN-020/	0.00	RN-022/	-0.01	
	RN-024/	-0.39	RN-026/	-0.00
RN-027/	0.09	RN-028/	-0.10	
	R0742-P3/	-0.20	R0655-P2/	-0.01
R0655-P3/	-0.01	R0655-P4/	0.02	
	R0120-P2/	-0.00	R1010-P2/	0.00
RN-025-P1/	-0.41	RN-025-P2/	0.42	
	R0155-P1/	1.98	R0386/	0.00
R0388/	0.00	R0385/	0.00	
	R0375/	-0.00	R0335/	-0.00
R-0001B-P1/	-0.00	R0540-P1/	0.00	
	R0540-P2/	0.00	R0540-P3/	0.00
R0290-P1/	0.00	R0285.1/	0.00	
	R0250.1/	0.00	R0230.1/	0.00
R0220.1/	-0.00	R0200.1/	0.00	
	R0190.1/	-0.00	R0170.1/	-0.00
R0180-P1/	0.01	R0180-P2/	0.02	
	R0140.1/	0.00	R0140-P3.1/	0.00
R0150-P1/	0.00	R0150-P2/	0.00	
	R0150-P3/	0.00	R0150-P4/	0.00
R0150-P5/	0.00	R0110.1/	0.00	
	R0130-P1/	0.00	R0130-P2/	0.00
R0100-P1/	0.00	R0100-P2/	0.00	
	R0310.1/	0.92	R0430-P1/	0.00
R0430-P2/	0.00	R0430-P3/	0.00	
	R0430-P4/	0.00	R0340-P1/	0.00
R0340-P2/	0.00	R0350-P1/	-0.01	
	R0350-P2/	-0.01	R0330-P1/	0.00
R0330-P2/	0.00	R0450-P1/	0.00	
	R0450-P2/	0.00	P0360-P1/	-0.00
P0360-P2/	-0.00	R0550-P1/	-0.05	
	R0550-P2/	-0.05	R0560-P1/	-0.25
R0560-P2/	-0.33	R0560-P3/	-0.34	
	R0780.1/	0.00	R0740.1/	-0.05
R0730.1/	-4.82	R0880.1/	0.00	
	R0950.1/	-0.00	R0920.1/	0.07
R0960.1/	0.00	R0990.1/	0.00	
	R1010-P3/	0.00	R1010-P4/	0.00
R1010-P5/	0.00	R0980-P1.1/	0.00	
	R0980-P2.1/	0.00	R0850-P1/	0.00

R0850-P2/	0.00	R0850-P3/	0.00		
	R0570-P1/	0.12	R0570-P2/	0.14	
R0570-P3/	0.14	R0770-P1.1/	-2.74		
	R0770-P3/	-2.30	R0770-P4/	-2.26	
R0790-P1/	-1.25	R0790-P2/	-0.76		
	R0530-P1/	0.00	R0530-P2/	0.00*	
R0530-P3/	0.00	R0910-P1/	-0.03		
	R0910-P2/	0.03	R0380-P1/	0.00	
R0380-P2/	0.00	R0300-P1/	0.00		
	R0300-P2/	0.00	R0290-P2.1/	0.00	
RN-004-P1/	0.00	RN-004-P2/	0.00		
	RN-004-P3/	0.00	RN-001-P1/	-0.05	
RN-001-P2/	0.00	RN-001-P3/	-0.05		
	RN-005-P1/	-0.04	RN-005-P2/	-0.05	
RN-005-P3/	0.04	RN-008-P1.1/	0.09		
	RN-008-P2/	-0.07	RN-008-P3/	-0.06	
RN-010-P1/	0.11	RN-010-P2/	0.11		
	RN-010-P3/	-0.11	RN-013-P1/	-0.22	
RN-013-P2/	-0.22	RN-013-P3/	-0.22		
	RN-015-P1/	0.81	RN-015-P2/	-1.50	
RN-015-P3/	-1.33	RN-029-P1/	0.20		
	RN-029-P2/	-0.36	R0742-P1/	0.10*	
R0742-P2/	0.10*	R0655-P1.1/	-0.01		
	R0490-P8/	-2.48	R0490-P7/	-2.48	
R0140-P2.1/	0.00	R0140-P1.1/	0.00		
	R0120-P1.1/	-0.00	R0160-P1.1/	3.03	
R0325-P1.1/	0.00	R0400-P1.1/	0.00		
	R0880-P2.1/	0.00	R1010-P1.1/	0.00	
R-0410-P4/	0.09	R-0410-P5/	0.09		
	R-0410-P6/	0.09	R-0410-P7/	0.14	
R0410-P1/	-0.46	R0410-P2/	-0.46		
	R0410-P3/	-0.46	498.1/	1.83	
R0490-P1.1/	-2.12	R0490-P3/	-0.22		
	R0490-P4/	-0.23	R0490-P5/	-0.26	
R0490-P6/	-0.27	R0890-ORF-2/	-1.07		
	R0890-ORF-5/	-1.07	R0890ORF-3/	-1.07	
R0890-ORF-4/	-1.07	N0140-A-W1.1/	0.01		
	R0540-W3/	0.00	R0290-P5/	0.00	
R0285-W2/	0.00	R0250-W1/	0.00		
	R0230-W1/	0.00	R0220-W2/	0.00	
R0200-W3/	0.00	R0190-W4/	0.00		
	R0170-W3/	0.00	R0180-W1/	0.00	
R0140-W1/	0.00	R0150-W3/	0.00		
	R0110-W1/	0.00	R0130-W1/	0.00	
R0100-W4/	0.00	R0310-W5.1/	0.00		
	R0430-W3/	0.00	R0340-W3/	0.00	
R0350-W1/	0.00	R0330-W1/	0.00		
	R0360-W1/	0.00	R0550-W2/	0.00	
R0560-W1/	0.00	R0780-W1/	0.00		
	R0740-W3/	0.00	R0870-W1/	0.00	

R0950-W1/	0.00	R0960-W2/	0.00		
	R0990-W2/	0.00	R1010-W2/	0.00	
R0980-W2/	0.00	R0850-W2/	0.00		
	R0770-W2/	0.00	R0530-W4/	0.00	
R0380-W3/	0.00	R0300-W2/	0.00		
	R0290-W1/	0.00	R0655-W2/	0.00	
R0140-W2/	0.00	R0120-W2/	0.00		
	R0160-W1/	0.00	R0400-W1/	0.00	
R0880-W2/	0.00	R1010-W1/	0.00		
	R0490-W2/	0.00	R0050-W1.1/	0.00	
R0050-W2.1/	0.00	R0060-W1.1/	0.00		
	R0080-W1.1/	0.00	R0080-W2.1/	0.00	
R0090-W1.1/	0.00	R0090-W2.1/	0.00		
	R0090-W3.1/	0.00	R0090-W4.1/	0.00	
R0100-W1.1/	0.00	R0100-W2.1/	0.00		
	R0100-W3.1/	0.00	R0110-W2.1/	0.00	
R0120-W1.1/	0.00	R0130-W2.1/	0.00		
	R0150-W1.1/	0.00	R0150-W2.1/	0.00	
R0170-W1.1/	0.00	R0170-W2.1/	0.00		
	R0190-W1.1/	0.00	R0190-W2.1/	0.00	
R0190-W3.1/	0.00	R0200-W1.1/	0.00		
	R0200-W2.1/	0.00	R0220-W1.1/	0.00	
R0240-W1.1/	0.00	R0240-W2.1/	0.00		
	R0240-W3.1/	0.00	R0240-W4.1/	0.00	
R0240-W5.1/	0.00	R0240-W6.1/	0.00		
	R0250-W2.1/	0.00	R0250-W3.1/	0.00	
R0260-W1.1/	0.00	R0270-W1.1/	0.00		
	R0270-W3/	0.00	R0270-W2.1/	0.00	
R0275-W1.1/	0.00	R0280-W1.1/	0.00		
	R0285-W1.1/	0.00	R0290-W2.1/	0.00	
R0290-W3.1/	0.00	R0290-W4.1/	0.00		
	R0300-W1.1/	0.00	R0310-W1.1/	0.00	
R0310-W2.1/	0.00	R0310-W3.1/	0.00		
	R0310-W4.1/	0.00	R0325-W2.1/	0.00	
R0330-W2.1/	0.00	R0330-W3.1/	0.00		
	R0340-W1.1/	0.00	R0340-W2.1/	0.00	
R0350-W2.1/	0.00	R0350-W3.1/	0.00		
	R0360-W2.1/	0.00	R0360-W3.1/	0.00	
R0370-W1.1/	0.00	R0370-W2.1/	0.00		
	R0370-W3.1/	0.00	R0380-W1.1/	0.00	
R0380-W2.1/	0.00	R0380-W4.1/	0.00		
	R0390-W1.1/	0.00	R0390-W2/	0.00	
R0400-W2.1/	0.00	R0410-W1.1/	0.00		
	R0420-W1.1/	0.00	R0420-W2.1/	0.00	
R0430-W1.1/	0.00	R0430-W2.1/	0.00		
	R0440-W1.1/	0.00	R0450-W1.1/	0.00	
R0450-W2.1/	0.00	R0460-W1.1/	0.00		
	R0460-W2.1/	0.00	R0480-W1.1/	0.00	
R0480-W2.1/	0.00	R0480-W3.1/	0.00		
	R0490-W1.1/	0.00	R0490-W3.1/	0.00	

R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-18.43	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	1.69
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.00
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00

RN-019-P1-W1/	0.00		R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00		R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00		R0970-P1-W2/	0.00	
R-0001A-W1.1/	-2.54		R-0001A-W2/	-0.46	
R0001C-W1.1/	0.00		R0001C-W2/	0.00	
R0001C-W3/	0.00		R0001E-W1/	0.00	
R0001F-W1.1/	0.00		R0001F-W2/	0.00	
R0001F-W3/	0.00		R0001F-W4/	0.00	
R0001F-W5/	0.00		R001G-W1/	0.00	
R0930-W6.1.1/	0.00		R0001J-W1.1/	0.00	
R000J-W2/	0.00		R000J-W3/	0.00	
R000J-W4/	0.00		R000J-W5/	0.00	
R000J-W6/	0.00		R000J-W7/	0.00	
R0001J-W8/	0.00		R0001J-W9/	0.00	
R0001J-W10/	0.00		R0001J-W11/	0.00	
R0001J-W12/	0.00		R0001J-W13/	0.00	
R0001J-W14/	0.00		R0001I-W1.1/	0.00	
R001I-W2/	0.00		R0001I-W3/	0.00	
R001I-W4/	0.00		R001I-W5/	0.00	
R0001I-W7/	0.00		R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00		R0001K-W2/	0.00	
R0001K-W3/	0.00		R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.01		
FREE# 3/	0.01	FREE# 4/	0.02	FREE#	
5/	4.95	FREE# 6/	0.01		
FREE# 7/	-0.00	FREE# 8/	0.00	FREE#	
9/	0.00	FREE#10/	0.00		
FREE#11/	0.00	FREE#12/	0.00		
FREE#13/	0.00	FREE#14/	-0.41		
FREE#15/	-0.42	FREE#16/	1.98		
FREE#17/	0.00	FREE#18/	0.00		
FREE#19/	0.00	FREE#20/	-3.03		
FREE#21/	0.00	FREE#22/	-0.00		
FREE#23/	0.00	FREE#24/	0.00		
FREE#25/	0.00	FREE#26/	0.00		
FREE#27/	0.00	FREE#28/	1.69		
FREE#29/	0.00	FREE#30/	0.00		
FREE#31/	0.00	FREE#32/	0.00		
FREE#33/	0.00	FREE#34/	0.00		
FREE#35/	0.01	FREE#36/	0.00		
FREE#37/	0.00	FREE#38/	0.00		
FREE#39/	-18.43	FREE#40/	0.00		
FREE#41/	0.00	FREE#42/	0.00		
FREE#43/	0.00	FREE#44/	0.00		
FREE#45/	0.00	FREE#46/	-2.99		
FREE#47/	0.00	FREE#48/	0.00		
FREE#49/	0.00	FREE#50/	-4.27		
FREE#51/	0.00	FREE#52/	0.00		

==> System inflows (file) at 33.33 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00 N0230	/ 0.00E+00 N0220	/
0.00E+00 N0290	/ 0.00E+00 N0370	/ 0.00E+00 N0275	
/ 0.00E+00			
N0280	/ 0.00E+00 N0285	/ 0.00E+00 N0380	/
0.00E+00 N0385	/ 0.00E+00 N0386	/ 0.00E+00 N0388	
/ 0.00E+00			
N0420	/ 0.00E+00 N0530	/ 0.00E+00 N0430	/
0.00E+00 N0310	/ 0.00E+00 N0160	/ 0.00E+00 N0300	
/ 0.00E+00			
N0340	/ 0.00E+00 N0390	/ 0.00E+00 N0001-C	/
0.00E+00 N0460	/ 0.00E+00 N0440	/ 0.00E+00 N0360	
/ 0.00E+00			
N2040	/ 0.00E+00 N0450	/ 0.00E+00 N0400	/
0.00E+00 N0550	/ 0.00E+00 N0640	/ 0.00E+00 N0660	
/ 0.00E+00			
N0780	/ 0.00E+00 N0775	/ 0.00E+00 N0690	/
0.00E+00 N0720	/ 0.00E+00 N0770	/ 0.00E+00 N0885	
/ 0.00E+00			
N0960	/ 0.00E+00 N0990	/ 0.00E+00 N1010	/
0.00E+00 N1030	/ 0.00E+00 N1020	/ 0.00E+00 N0940	
/ 0.00E+00			
N1000	/ 0.00E+00 N0945	/ 0.00E+00 N0980	/
0.00E+00 N0850	/ 0.00E+00 N0890	/ 0.00E+00 N0930	
/ 0.00E+00			
N0920	/ 0.00E+00 N0950	/ 0.00E+00 N0830	/
0.00E+00 N0970	/ 0.00E+00 N-0001K	/ 0.00E+00 N0870	
/ 0.00E+00			
N0790	/ 0.00E+00 N0001-I	/ 0.00E+00 N0915	/
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880	
/ 0.00E+00			
N0810	/ 0.00E+00 N0740	/ 0.00E+00 N0742	/
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730	
/ 0.00E+00			
N0570	/ 0.00E+00 N0560	/ 0.00E+00 N0515	/
0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350	
/ 0.00E+00			
N0330	/ 0.00E+00 N0325	/ 0.00E+00 N0180	/
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 0.00E+00 N0100	
/ 0.00E+00			
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050	/
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	
/ 0.00E+00			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140	
/ 0.00E+00			
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470	/
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490	
/ 0.00E+00			
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655	/

0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270
/ 0.00E+00		
N0260	/ 0.00E+00 N0250	/ 0.00E+00 N0240
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003
/ 0.00E+00		
N-004	/ 0.00E+00 N-001	/ 0.00E+00 N-006
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009
/ 0.00E+00		
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010
0.00E+00 N-014	/ 0.00E+00 N-012	/ 0.00E+00 N-013
/ 0.00E+00		
N-015	/ 0.00E+00 N2002	/ 0.00E+00 N-020
0.00E+00 N-022	/ 0.00E+00 N-026	/ 0.00E+00 N-027
/ 0.00E+00		
N-028	/ 0.00E+00 N-024	/ 0.00E+00 N-029
0.00E+00 N-030	/ 0.00E+00 N-023	/ 0.00E+00 N-031
/ 0.00E+00		
N-025	/ 0.00E+00 N-041	/ 0.00E+00 N-019
0.00E+00 N-021	/ 0.00E+00 N-043	/ 0.00E+00 N-042
/ 0.00E+00		
N-040	/ 0.00E+00 N2090	/ 0.00E+00 N-0001A
0.00E+00 N-0001-E	/ 0.00E+00 N-0001-F	/ 0.00E+00 N-0001-G
/ 0.00E+00		
N0001-J	/ 0.00E+00	

Cycle 2000 Time 33 Hrs - 20.00 Min

Junction	Depth	Elevation	====>	"*" Junction is Surcharged.
N0335/	0.32 /	0.32		N0550/ 1.70 / 0.37
N0690/	0.00 /	0.62		
N0640/	4.28 /	1.50		N0780/ 4.52 / 0.13
N0830/	2.35 /	0.30		
N0790/	3.45 /	0.47		N0800/ 0.00 / 3.35
N0870/	3.39 /	0.47		
N0510/	1.33 /	-0.10		N0520/ 3.14 / 0.31
N0390/	2.50 /	0.80		
N0350/	3.01 /	0.32		N0450/ 1.62 / 0.32
N0770/	3.52 /	0.47		
N0720/	1.23 /	0.58		N0960/ 0.00 / 1.90
N0920/	2.04 /	0.47		
N0950/	0.89 /	0.47		N0970/ 1.61 / 0.40
N0915/	6.47 /	0.47		
N0885/	7.38 /	0.47		N0560/ 3.19 / 0.37
N0810/	2.21 /	0.36		
N0570/	3.04 /	0.37		N0990/ 0.00 / 1.57
N1000/	1.76 /	0.40		
N1020/	1.60 /	0.60		N1030/ 1.55 / 0.50
N0890/	2.82 /	1.28		
N0850/	0.00 /	1.46		N0930/ 4.95 / 1.38
N0980/	0.08 /	1.70		

N1010/	0.58	/	1.62	N0430/	0.45	/	0.32
N0500/	1.99	/	4.24	N0220/	0.82	/	2.00
N0230/	0.00	/	3.31	N0130/	0.00	/	-0.60
N0200/	1.56	/	-0.05	N0120/	0.59	/	0.35
N0190/	0.91	/	-0.05	N0210/	0.52	/	-0.20
N0100/	0.00	/	0.46	N0240/	1.56	/	3.00
N0090/	0.00	/	2.49	N0270/	1.43	/	3.00
N0110/	0.25	/	1.02	N0370/	0.00	/	0.98
N0170/	0.51	/	-0.20	N0490/	1.38	/	0.12
N0260/	2.23	/	2.00	N0660/	1.66	/	0.82
N0250/	0.70	/	3.00	N0940/	1.41	/	0.40
N0140/	3.23	/	1.33	N0050/	2.86	/	2.00
N0150/	0.00	/	1.44	N0470/	1.64	/	3.45
N0290/	0.22	/	1.23	N0400/	3.22	/	0.32
N0180/	2.79	/	1.33	N0080/	0.32	/	0.80
N0285/	0.00	/	2.00	N0460/	2.46	/	0.31
N0420/	0.42	/	3.50	N0655/	2.92	/	0.01
N0410/	2.74	/	0.13	N0275/	0.00	/	2.30
N0380/	0.73	/	0.73	N0340/	2.11	/	0.32
N0740/	1.71	/	0.47	N-002/	0.46	/	3.46
N0730/	2.60	/	0.50	N-003/	0.00	/	2.56
N0530/	0.00	/	1.66	N-004/	0.00	/	2.88
N0060/	0.60	/	-0.69	N-008/	1.33	/	1.29
N0325/	4.69	/	0.32	N-010/	1.58	/	1.29
N0160/	2.43	/	0.34	N-015/	2.48	/	1.29
N0540/	0.16	/	1.51	N-006/	0.00	/	2.66
N0650/	1.99	/	1.50	N-009/	0.00	/	2.68
N0360/	1.50	/	0.32	N-011/	0.00	/	2.04
N0480/	1.43	/	3.69	N-012/	0.00	/	1.48
N0310/	1.93	/	0.34	N-025/	2.55	/	1.31
N0300/	4.17	/	0.32	N-021/	1.78	/	1.31
N0440/	1.69	/	0.32				
N0330/	3.75	/	0.32				
N0375/	0.73	/	0.73				
N0385/	1.22	/	0.13				
N0280/	0.12	/	2.12				
N0202/	3.52	/	-0.05				
N0515/	1.57	/	0.37				

N-019/	1.70	/	1.48	N-041/	0.70	/	1.48
N-020/	0.00	/	1.38				
N-022/	0.35	/	1.31	N-024/	1.58	/	1.31
N-029/	2.29	/	1.31				
N-026/	0.30	/	1.31	N-027/	1.64	/	1.31
N-028/	1.62	/	1.31				
N-030/	0.00	/	-0.07	N-043/	0.56	/	-0.60
N-042/	0.03	/	-0.60				
N-031/	0.45	/	-0.40	N-040/	1.31	/	-0.17
N0620/	0.00	/	-0.60				
N0900/	3.47	/	0.47	N-009mh/	2.41	/	2.41
N0205/	3.45	/	-0.05				
N0386/	1.22	/	0.13	N0388/	1.22	/	0.13
N0775/	0.78	/	0.13				
N2040/	1.21	/	0.11	N2380/	1.93	/	0.12
N0155/	0.50	/	0.36				
N0945/	0.96	/	0.15	N2002/	3.09	/	1.29
N2090/	1.32	/	-0.57				
N0742/	1.01	/	0.50	N0910/	6.47	/	0.47
N0880/	7.38	/	0.47				
N9004/	4.05	/	1.31	N9004-B/	4.10	/	1.31
N9004-C/	3.85	/	1.31				
N9004-D/	3.99	/	1.31	N9004-F/	2.48	/	1.31
N9001-B/	2.44	/	0.35				
N9001-D/	1.25	/	0.35	N9001-F/	1.25	/	0.35
N9000/	2.34	/	0.35				
N9003/	0.35	/	0.35	N9005/	0.35	/	0.35
N9005-E/	0.35	/	0.35				
N9005-G/	0.35	/	0.35	N9004-J/	2.64	/	1.31
N9004-G/	2.40	/	1.31				
N9002/	1.66	/	0.35	N2370/	1.69	/	0.13
N9000-B/	2.34	/	0.35				
N9000-C/	2.34	/	0.35	N9000-E/	2.34	/	0.35
N9000-F/	2.34	/	0.35				
N9001-E/	2.44	/	0.35	N9001-G/	1.25	/	0.35
N9001-H/	1.25	/	0.35				
N9001-J/	0.52	/	0.35	N9001-K/	0.52	/	0.35
N9002-A/	1.66	/	0.35				
N9002-B/	1.66	/	0.35	N9003-A/	0.35	/	0.35
N9003-B/	0.35	/	0.35				
N9003-C/	0.35	/	0.35	N9003-D/	0.35	/	0.35
N9003-E/	0.35	/	0.35				
N9003-F/	0.35	/	0.35	N9003-G/	0.35	/	0.35
N9004-A/	4.05	/	1.31				
N9004-E/	3.99	/	1.31	N9004-H/	2.48	/	1.31
N9004-I/	2.48	/	1.31				
N9004-K/	2.64	/	1.31	N9005-A/	0.35	/	0.35
N9005-B/	0.35	/	0.35				
N9005-C/	0.35	/	0.35	N9005-D/	0.35	/	0.35
N9005-F/	0.35	/	0.35				

N9005-H/	0.35 /	0.35	N9000-D/	2.60 /	0.35
N-0001A/	8.32 /	0.32			
N-0001B/	0.16 /	-0.34	N0001-C/	0.00 /	2.15
N-0001-E/	0.00 /	4.80			
N-0001E-OF/	0.00 /	3.13	N-0001-F/	0.00 /	3.50
N-0001-G/	0.00 /	4.00			
N-0001F-OF-A/	0.00 /	3.13	N-0001F-OF-B/	0.00 /	3.13
N9004-L/	4.05 /	1.31			
N0001-J/	0.00 /	1.19	N9005-J/	0.35 /	0.35
N9005-K/	0.35 /	0.35			
N0001-I/	0.00 /	1.13	N-0001K/	0.00 /	2.03
N0140-A/	3.43 /	1.33			

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	2.03		R0770-P2/	-0.53
R0900/	2.03			R0370/	0.00*
	R0280/	0.00		R0202/	-0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.00			RN-023/	-0.06
	RN-021/	0.00		RN-041/	0.00
RN-020/	0.00			RN-022/	-0.01
	RN-024/	-0.60		RN-026/	-0.00
RN-027/	0.14			RN-028/	-0.15
	R0742-P3/	-0.00		R0655-P2/	-0.00
R0655-P3/	-0.00			R0655-P4/	0.01
	R0120-P2/	-0.01		R1010-P2/	0.00
RN-025-P1/	-0.63			RN-025-P2/	0.65
	R0155-P1/	-2.01		R0386/	0.00
R0388/	0.00			R0385/	0.00
	R0375/	-0.00		R0335/	0.00
R-0001B-P1/	-0.00			R0540-P1/	0.00
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	0.00			R0285.1/	0.00
	R0250.1/	0.00		R0230.1/	0.00
R0220.1/	0.00			R0200.1/	0.00
	R0190.1/	0.00		R0170.1/	-0.00
R0180-P1/	-0.01			R0180-P2/	-0.01
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00			R0150-P2/	0.00
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00			R0110.1/	0.00
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00			R0100-P2/	0.00
	R0310.1/	1.29		R0430-P1/	-0.00
R0430-P2/	-0.00			R0430-P3/	-0.00
	R0430-P4/	-0.00		R0340-P1/	-0.00
R0340-P2/	-0.00			R0350-P1/	0.02

R0330-P2/	R0350-P2/	0.02	R0330-P1/	-0.00
	-0.00		R0450-P1/	-0.00
P0360-P2/	R0450-P2/	-0.00	P0360-P1/	0.00
	0.00		R0550-P1/	-0.03
R0560-P2/	R0550-P2/	-0.02	R0560-P1/	-0.10
	-0.16		R0560-P3/	-0.16
R0730.1/	R0780.1/	0.00	R0740.1/	0.06
	-2.09		R0880.1/	0.00
R0960.1/	R0950.1/	-0.00	R0920.1/	0.03
	0.00		R0990.1/	0.00
R1010-P5/	R1010-P3/	0.00	R1010-P4/	0.00
	0.00		R0980-P1.1/	0.00
R0850-P2/	R0980-P2.1/	0.00	R0850-P1/	0.00
	0.00		R0850-P3/	0.00
R0570-P3/	R0570-P1/	0.05	R0570-P2/	0.07
	0.07		R0770-P1.1/	-1.14
R0790-P1/	R0770-P3/	-1.00	R0770-P4/	-0.98
	-0.53		R0790-P2/	-0.30
R0530-P3/	R0530-P1/	0.00	R0530-P2/	0.00*
	0.00		R0910-P1/	-0.01
R0380-P2/	R0910-P2/	0.02	R0380-P1/	0.00
	0.00		R0300-P1/	-0.00
RN-004-P1/	R0300-P2/	-0.00	R0290-P2.1/	0.00
	0.00		RN-004-P2/	0.00
RN-001-P2/	RN-004-P3/	0.00	RN-001-P1/	-0.05
	0.00		RN-001-P3/	-0.05
RN-005-P3/	RN-005-P1/	-0.04	RN-005-P2/	-0.06
	0.04		RN-008-P1.1/	0.10
RN-010-P1/	RN-008-P2/	-0.09	RN-008-P3/	-0.07
	0.14		RN-010-P2/	0.14
RN-013-P2/	RN-010-P3/	-0.13	RN-013-P1/	-0.28
	-0.28		RN-013-P3/	-0.28
RN-015-P3/	RN-015-P1/	0.94	RN-015-P2/	-1.71
	-1.54		RN-029-P1/	0.31
R0742-P2/	RN-029-P2/	-0.56	R0742-P1/	0.00*
	0.00*		R0655-P1.1/	-0.01
R0140-P2.1/	R0490-P8/	-1.67	R0490-P7/	-1.67
	0.00		R0140-P1.1/	0.00
R0325-P1.1/	R0120-P1.1/	-0.01	R0160-P1.1/	4.28
	0.00		R0400-P1.1/	0.00
R-0410-P4/	R0880-P2.1/	0.00	R1010-P1.1/	0.00
	0.13		R-0410-P5/	0.13
R0410-P1/	R-0410-P6/	0.13	R-0410-P7/	0.24
	-0.22		R0410-P2/	-0.22
R0490-P1.1/	R0410-P3/	-0.22	498.1/	1.20
	-1.47		R0490-P3/	-0.15
R0490-P6/	R0490-P4/	-0.15	R0490-P5/	-0.17
	-0.18		R0890-ORF-2/	-0.91
R0890-ORF-4/	R0890-ORF-5/	-0.91	R0890ORF-3/	-0.91
	-0.91		N0140-A-W1.1/	0.01

R0285-W2/	R0540-W3/	0.00	R0290-P5/	0.00
	0.00		R0250-W1/	0.00
R0200-W3/	R0230-W1/	0.00	R0220-W2/	0.00
	0.00		R0190-W4/	0.00
R0140-W1/	R0170-W3/	0.00	R0180-W1/	0.00
	0.00		R0150-W3/	0.00
R0100-W4/	R0110-W1/	0.00	R0130-W1/	0.00
	0.00		R0310-W5.1/	0.00
R0350-W1/	R0430-W3/	0.00	R0340-W3/	0.00
	0.00		R0330-W1/	0.00
R0560-W1/	R0360-W1/	0.00	R0550-W2/	0.00
	0.00		R0780-W1/	0.00
R0950-W1/	R0740-W3/	0.00	R0870-W1/	0.00
	0.00		R0960-W2/	0.00
R0980-W2/	R0990-W2/	0.00	R1010-W2/	0.00
	0.00		R0850-W2/	0.00
R0380-W3/	R0770-W2/	0.00	R0530-W4/	0.00
	0.00		R0300-W2/	0.00
R0140-W2/	R0290-W1/	0.00	R0655-W2/	0.00
	0.00		R0120-W2/	0.00
R0880-W2/	R0160-W1/	0.00	R0400-W1/	0.00
	0.00		R1010-W1/	0.00
R0050-W2.1/	R0490-W2/	0.00	R0050-W1.1/	0.00
	0.00		R0060-W1.1/	0.00
R0090-W1.1/	R0080-W1.1/	0.00	R0080-W2.1/	0.00
	0.00		R0090-W2.1/	0.00
R0100-W1.1/	R0090-W3.1/	0.00	R0090-W4.1/	0.00
	0.00		R0100-W2.1/	0.00
R0120-W1.1/	R0100-W3.1/	0.00	R0110-W2.1/	0.00
	0.00		R0130-W2.1/	0.00
R0170-W1.1/	R0150-W1.1/	0.00	R0150-W2.1/	0.00
	0.00		R0170-W2.1/	0.00
R0190-W3.1/	R0190-W1.1/	0.00	R0190-W2.1/	0.00
	0.00		R0200-W1.1/	0.00
R0240-W1.1/	R0200-W2.1/	0.00	R0220-W1.1/	0.00
	0.00		R0240-W2.1/	0.00
R0240-W5.1/	R0240-W3.1/	0.00	R0240-W4.1/	0.00
	0.00		R0240-W6.1/	0.00
R0260-W1.1/	R0250-W2.1/	0.00	R0250-W3.1/	0.00
	0.00		R0270-W1.1/	0.00
R0275-W1.1/	R0270-W3/	0.00	R0270-W2.1/	0.00
	0.00		R0280-W1.1/	0.00
R0290-W3.1/	R0285-W1.1/	0.00	R0290-W2.1/	0.00
	0.00		R0290-W4.1/	0.00
R0310-W2.1/	R0300-W1.1/	0.00	R0310-W1.1/	0.00
	0.00		R0310-W3.1/	0.00
R0330-W2.1/	R0310-W4.1/	0.00	R0325-W2.1/	0.00
	0.00		R0330-W3.1/	0.00
R0350-W2.1/	R0340-W1.1/	0.00	R0340-W2.1/	0.00
	0.00		R0350-W3.1/	0.00

R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-20.42	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00

R0400-WPump/	0.00	R0880-WPump2/	0.00	
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00	
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00	
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00	
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00	
R1020-DS-W1/	0.00	R0205-W1/	0.00	
R0205-W2/	0.00	R0205-W3/	0.00	
R0205-W4/	0.00	R0210-W1.1/	0.00	
R0515-W1.1/	0.00	R0515-W2.1/	0.77	
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	0.00	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.00	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	-4.69	R-0001A-W2/	-1.00	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00	R0001F-W2/	0.00	
R0001F-W3/	0.00	R0001F-W4/	0.00	
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.00	
FREE# 3/		FREE# 4/	0.01	FREE#
5/	3.34	FREE# 6/	0.01	
FREE# 7/		FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/		FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	-0.63	
FREE#15/	-0.65	FREE#16/	-2.01	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	-4.28	
FREE#21/	0.00	FREE#22/	-0.01	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	0.77	
FREE#29/	0.00	FREE#30/	0.00	

FREE#33/	FREE#31/	0.00	FREE#34/	FREE#32/	0.00
	0.00		0.00	0.00	
	FREE#35/	0.01	FREE#36/	FREE#36/	0.00
FREE#37/	0.00		FREE#38/	0.00	
	FREE#39/	-20.42	FREE#40/	FREE#40/	0.00
FREE#41/	0.00		FREE#42/	0.00	
	FREE#43/	0.00	FREE#44/	FREE#44/	0.00
FREE#45/	0.00		FREE#46/	-5.69	
	FREE#47/	0.00	FREE#48/	FREE#48/	0.00
FREE#49/	0.00		FREE#50/	-3.65	
	FREE#51/	0.00	FREE#52/	FREE#52/	0.00

==> System inflows (file) at 41.67 hours (Junction / Inflow, cfs)

N0190	/ 2.96E-04	N0230	/ 2.44E-03	N0220	/
3.26E-01	N0290	/ 0.00E+00	N0370	/ 1.06E-02	N0275
	/ 9.21E-06				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 6.99E-02	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360
	/ 0.00E+00				
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00	N0550	/ 0.00E+00	N0640	/ 1.47E-03	N0660
	/ 1.40E-01				
N0780	/ 9.70E-03	N0775	/ 2.60E-03	N0690	/
7.29E-05	N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885
	/ 0.00E+00				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940
	/ 0.00E+00				
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00	N0850	/ 0.00E+00	N0890	/ 0.00E+00	N0930
	/ 0.00E+00				
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/
0.00E+00	N0970	/ 0.00E+00	N-0001K	/ 9.65E-05	N0870
	/ 0.00E+00				
N0790	/ 0.00E+00	N0001-I	/ 2.53E-04	N0915	/
0.00E+00	N0900	/ 0.00E+00	N0910	/ 0.00E+00	N0880
	/ 0.00E+00				
N0810	/ 0.00E+00	N0740	/ 0.00E+00	N0742	/
0.00E+00	N0800	/ 2.08E-04	N0620	/ 0.00E+00	N0730
	/ 0.00E+00				
N0570	/ 0.00E+00	N0560	/ 0.00E+00	N0515	/
0.00E+00	N0510	/ 0.00E+00	N0520	/ 0.00E+00	N0350
	/ 0.00E+00				

N0330	/ 2.18E-03	N0325	/ 0.00E+00	N0180	/
0.00E+00	N0090	/ 3.49E-04	N-0001B	/ 0.00E+00	N0100
	/ 1.94E-05				
N0130	/ 0.00E+00	N0080	/ 0.00E+00	N0050	/
0.00E+00	N0170	/ 3.53E-03	N0205	/ 0.00E+00	N0210
	/ 0.00E+00				
N0150	/ 8.25E-04	N0155	/ 0.00E+00	N0060	/
0.00E+00	N0120	/ 2.45E-02	N0110	/ 5.12E-02	N0140
	/ 8.37E-01				
N0140-A	/ 0.00E+00	N0500	/ 0.00E+00	N0470	/
0.00E+00	N0540	/ 0.00E+00	N0650	/ 0.00E+00	N0490
	/ 0.00E+00				
N2380	/ 0.00E+00	N2370	/ 0.00E+00	N0655	/
0.00E+00	N0480	/ 0.00E+00	N0410	/ 0.00E+00	N0270
	/ 0.00E+00				
N0260	/ 0.00E+00	N0250	/ 0.00E+00	N0240	/
0.00E+00	N0200	/ 9.69E-02	N-002	/ 0.00E+00	N-003
	/ 5.06E-05				
N-004	/ 4.95E-04	N-001	/ 0.00E+00	N-006	/
0.00E+00	N-005	/ 0.00E+00	N-007	/ 1.43E-07	N-009
	/ 1.20E-04				
N-008	/ 2.24E-04	N-011	/ 2.88E-04	N-010	/
4.89E-05	N-014	/ 0.00E+00	N-012	/ 2.78E-04	N-013
	/ 0.00E+00				
N-015	/ 0.00E+00	N2002	/ 0.00E+00	N-020	/
0.00E+00	N-022	/ 0.00E+00	N-026	/ 0.00E+00	N-027
	/ 8.38E-04				
N-028	/ 1.35E-06	N-024	/ 0.00E+00	N-029	/
0.00E+00	N-030	/ 0.00E+00	N-023	/ 0.00E+00	N-031
	/ 0.00E+00				
N-025	/ 0.00E+00	N-041	/ 6.66E-04	N-019	/
0.00E+00	N-021	/ 0.00E+00	N-043	/ 0.00E+00	N-042
	/ 0.00E+00				
N-040	/ 0.00E+00	N2090	/ 0.00E+00	N-0001A	/
0.00E+00	N-0001-E	/ 7.76E-04	N-0001-F	/ 0.00E+00	N-0001-G
	/ 8.48E-02				
N0001-J	/ 0.00E+00				

Cycle 2500 Time 41 Hrs - 40.00 Min

Junction	/	Depth	/	Elevation	==>	"*" Junction is Surcharged.
N0335/		0.32 /		0.32		N0550/ 1.72 / 0.39
N0690/		1.68 /		2.30		
N0640/		4.34 /		1.56		N0780/ 4.59 / 0.20
N0830/		2.35 /		0.30		
N0790/		3.46 /		0.48		N0800/ 0.49 / 3.84
N0870/		3.40 /		0.48		
N0510/		1.33 /		-0.10		N0520/ 3.14 / 0.31
N0390/		2.50 /		0.80		
N0350/		3.01 /		0.32		N0450/ 1.62 / 0.32

N0770/	3.53	/	0.48		
N0720/	1.23	/	0.58	N0960/	0.00 / 1.90
N0920/	2.05	/	0.48		
N0950/	0.90	/	0.48	N0970/	1.61 / 0.40
N0915/	6.48	/	0.48		
N0885/	7.39	/	0.48	N0560/	3.21 / 0.39
N0810/	2.21	/	0.36		
N0570/	3.06	/	0.39	N0990/	0.00 / 1.57
N1000/	1.76	/	0.40		
N1020/	1.60	/	0.60	N1030/	1.55 / 0.50
N0890/	2.95	/	1.41		
N0850/	0.00	/	1.46	N0930/	4.95 / 1.38
N0980/	0.08	/	1.70		
N1010/	0.58	/	1.62	N0430/	0.45 / 0.32
N0500/	1.99	/	4.24		
N0230/	0.05	/	3.36	N0220/	0.83 / 2.01
N0200/	2.15	/	0.54		
N0190/	1.50	/	0.54	N0130/	0.01 / -0.59
N0100/	0.22	/	0.68		
N0090/	1.26	/	3.75	N0120/	0.67 / 0.43
N0110/	1.16	/	1.93		
N0170/	0.53	/	-0.18	N0210/	0.54 / -0.18
N0260/	2.24	/	2.01		
N0250/	0.97	/	3.27	N0240/	1.68 / 3.12
N0140/	3.44	/	1.54		
N0150/	0.01	/	1.45	N0270/	1.43 / 3.00
N0290/	0.23	/	1.24		
N0180/	3.00	/	1.54	N0370/	0.02 / 1.00
N0285/	0.00	/	2.00		
N0420/	0.42	/	3.50	N0490/	1.35 / 0.09
N0410/	2.70	/	0.09		
N0380/	0.74	/	0.74	N0660/	1.69 / 0.85
N0740/	1.72	/	0.48		
N0730/	2.58	/	0.48	N0940/	1.41 / 0.40
N0530/	0.00	/	1.66		
N0060/	0.61	/	-0.68	N0050/	2.86 / 2.00
N0325/	4.69	/	0.32		
N0160/	2.53	/	0.44	N0470/	1.64 / 3.45
N0540/	0.16	/	1.51		
N0650/	1.99	/	1.50	N0400/	3.22 / 0.32
N0360/	1.50	/	0.32		
N0480/	1.43	/	3.69	N0080/	0.32 / 0.80
N0310/	2.03	/	0.44		
N0300/	4.17	/	0.32	N0460/	2.46 / 0.31
N0440/	1.69	/	0.32		
N0330/	3.75	/	0.32	N0655/	2.92 / 0.01
N0375/	0.74	/	0.74		
N0385/	1.18	/	0.09	N0275/	0.10 / 2.40
N0280/	0.12	/	2.12		
N0202/	4.13	/	0.56	N0340/	2.11 / 0.32

N0515/	1.59	/	0.39				
N-001/	1.23	/	1.46		N-002/	0.46	3.46
N-003/	0.03	/	2.59				
N-004/	0.01	/	2.89		N-005/	0.54	1.41
N-008/	1.45	/	1.41				
N-010/	1.70	/	1.41		N-013/	2.57	1.41
N-015/	2.60	/	1.41				
N-006/	0.00	/	2.66		N-007/	0.00	2.46
N-009/	0.04	/	2.72				
N-011/	0.06	/	2.10		N-014/	0.13	1.68
N-012/	0.06	/	1.54				
N-025/	2.63	/	1.39		N-023/	0.94	1.39
N-021/	1.89	/	1.42				
N-019/	2.10	/	1.88		N-041/	1.10	1.88
N-020/	0.01	/	1.39				
N-022/	0.43	/	1.39		N-024/	1.66	1.39
N-029/	2.37	/	1.39				
N-026/	0.38	/	1.39		N-027/	1.72	1.39
N-028/	1.70	/	1.39				
N-030/	0.00	/	-0.07		N-043/	0.56	-0.60
N-042/	0.03	/	-0.60				
N-031/	0.45	/	-0.40		N-040/	1.31	-0.17
N0620/	0.00	/	-0.60				
N0900/	3.48	/	0.48		N-009mh/	2.48	2.48
N0205/	4.07	/	0.57				
N0386/	1.18	/	0.09		N0388/	1.18	0.09
N0775/	0.85	/	0.20				
N2040/	1.21	/	0.11		N2380/	1.90	0.09
N0155/	0.52	/	0.38				
N0945/	0.96	/	0.15		N2002/	3.21	1.41
N2090/	1.32	/	-0.57				
N0742/	0.99	/	0.48		N0910/	6.48	0.48
N0880/	7.39	/	0.48				
N9004/	4.13	/	1.39		N9004-B/	4.18	1.39
N9004-C/	3.93	/	1.39				
N9004-D/	4.07	/	1.39		N9004-F/	2.56	1.39
N9001-B/	2.52	/	0.43				
N9001-D/	1.33	/	0.43		N9001-F/	1.33	0.43
N9000/	2.42	/	0.43				
N9003/	0.43	/	0.43		N9005/	0.43	0.43
N9005-E/	0.43	/	0.43				
N9005-G/	0.43	/	0.43		N9004-J/	2.72	1.39
N9004-G/	2.48	/	1.39				
N9002/	1.74	/	0.43		N2370/	1.65	0.09
N9000-B/	2.42	/	0.43				
N9000-C/	2.42	/	0.43		N9000-E/	2.42	0.43
N9000-F/	2.42	/	0.43				
N9001-E/	2.52	/	0.43		N9001-G/	1.33	0.43
N9001-H/	1.33	/	0.43				
N9001-J/	0.60	/	0.43		N9001-K/	0.60	0.43

N9002-A/	1.74 /	0.43			
N9002-B/	1.74 /	0.43		N9003-A/	0.43 / 0.43
N9003-B/	0.43 /	0.43			
N9003-C/	0.43 /	0.43		N9003-D/	0.43 / 0.43
N9003-E/	0.43 /	0.43			
N9003-F/	0.43 /	0.43		N9003-G/	0.43 / 0.43
N9004-A/	4.13 /	1.39			
N9004-E/	4.07 /	1.39		N9004-H/	2.56 / 1.39
N9004-I/	2.56 /	1.39			
N9004-K/	2.72 /	1.39		N9005-A/	0.43 / 0.43
N9005-B/	0.43 /	0.43			
N9005-C/	0.43 /	0.43		N9005-D/	0.43 / 0.43
N9005-F/	0.43 /	0.43			
N9005-H/	0.43 /	0.43		N9000-D/	2.68 / 0.43
N-0001A/	8.36 /	0.36			
N-0001B/	0.15 /	-0.35		N0001-C/	0.00 / 2.15
N-0001-E/	0.02 /	4.82			
N-0001E-OF/	0.00 /	3.13		N-0001-F/	0.00 / 3.50
N-0001-G/	0.01 /	4.01			
N-0001F-OF-A/	0.00 /	3.13		N-0001F-OF-B/	0.00 / 3.13
N9004-L/	4.13 /	1.39			
N0001-J/	0.00 /	1.19		N9005-J/	0.43 / 0.43
N9005-K/	0.43 /	0.43			
N0001-I/	0.06 /	1.19		N-0001K/	0.01 / 2.04
N0140-A/	3.64 /	1.54			

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	-0.01		R0770-P2/	-0.02
R0900/	-0.01			R0370/	0.02*
	R0280/	0.00		R0202/	0.20
RN-002/	0.00			RN-003/	0.01
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.01*			RN-009MH/	0.02
	RN-011/	0.02		RN-014/	0.06
RN-012/	0.07*			RN-023/	0.15
	RN-021/	-0.10		RN-041/	0.10
RN-020/	0.00			RN-022/	0.01
	RN-024/	0.60		RN-026/	0.00
RN-027/	-0.14			RN-028/	0.15
	R0742-P3/	-0.00		R0655-P2/	-0.01
R0655-P3/	-0.01			R0655-P4/	0.01
	R0120-P2/	0.13		R1010-P2/	0.00
RN-025-P1/	0.65			RN-025-P2/	-0.58
	R0155-P1/	3.93		R0386/	0.00
R0388/	0.00			R0385/	0.00
	R0375/	0.01		R0335/	-0.00
R-0001B-P1/	-0.00			R0540-P1/	0.00
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	-0.00			R0285.1/	0.00
	R0250.1/	0.79*		R0230.1/	0.02*

R0220.1/	0.34		R0200.1/	-0.25	
	R0190.1/	0.01		R0170.1/	0.00
R0180-P1/	-0.03		R0180-P2/	-0.03	
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00	
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.31	
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	-0.00		R0100-P2/	-0.00	
	R0310.1/	-1.04		R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00	
	R0430-P4/	0.00		R0340-P1/	-0.00
R0340-P2/	-0.00		R0350-P1/	0.00	
	R0350-P2/	0.00		R0330-P1/	-0.00
R0330-P2/	-0.00		R0450-P1/	-0.00	
	R0450-P2/	-0.00		P0360-P1/	-0.00
P0360-P2/	-0.00		R0550-P1/	0.04	
	R0550-P2/	0.04		R0560-P1/	0.19
R0560-P2/	0.27		R0560-P3/	0.27	
	R0780.1/	-0.01		R0740.1/	0.00
R0730.1/	0.00		R0880.1/	0.00	
	R0950.1/	0.00		R0920.1/	0.00
R0960.1/	0.00		R0990.1/	0.00	
	R1010-P3/	0.00		R1010-P4/	0.00
R1010-P5/	0.00		R0980-P1.1/	0.00	
	R0980-P2.1/	0.00		R0850-P1/	0.00
R0850-P2/	0.00		R0850-P3/	0.00	
	R0570-P1/	-0.12		R0570-P2/	-0.10
R0570-P3/	-0.10		R0770-P1.1/	0.05	
	R0770-P3/	-0.00		R0770-P4/	0.01
R0790-P1/	-0.00		R0790-P2/	0.06	
	R0530-P1/	0.00		R0530-P2/	0.00*
R0530-P3/	0.00		R0910-P1/	0.01	
	R0910-P2/	0.01		R0380-P1/	0.00
R0380-P2/	0.00		R0300-P1/	-0.00	
	R0300-P2/	-0.00		R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00		RN-001-P1/	0.21
RN-001-P2/	0.04		RN-001-P3/	0.23	
	RN-005-P1/	0.14		RN-005-P2/	0.22
RN-005-P3/	-0.15		RN-008-P1.1/	-0.13	
	RN-008-P2/	0.24		RN-008-P3/	0.27
RN-010-P1/	-0.27		RN-010-P2/	-0.25	
	RN-010-P3/	0.27		RN-013-P1/	0.41
RN-013-P2/	0.41		RN-013-P3/	0.41	
	RN-015-P1/	-1.00		RN-015-P2/	1.54
RN-015-P3/	2.11		RN-029-P1/	-0.36	
	RN-029-P2/	0.45		R0742-P1/	0.00*
R0742-P2/	0.00*		R0655-P1.1/	-0.01	
	R0490-P8/	-0.84		R0490-P7/	-0.84

R0140-P2.1/	0.38		R0140-P1.1/	0.39	
	R0120-P1.1/	-0.09		R0160-P1.1/	-3.46
R0325-P1.1/	0.00		R0400-P1.1/	0.00	
	R0880-P2.1/	0.00		R1010-P1.1/	0.00
R-0410-P4/	0.04		R-0410-P5/	0.04	
	R-0410-P6/	0.04		R-0410-P7/	0.12
R0410-P1/	-0.14		R0410-P2/	-0.14	
	R0410-P3/	-0.14		498.1/	0.60
R0490-P1.1/	-0.76		R0490-P3/	-0.07	
	R0490-P4/	-0.07		R0490-P5/	-0.08
R0490-P6/	-0.09		R0890-ORF-2/	0.91	
	R0890-ORF-5/	0.91		R0890ORF-3/	0.91
R0890-ORF-4/	0.91		N0140-A-W1.1/	0.77	
	R0540-W3/	0.00		R0290-P5/	0.00
R0285-W2/	0.00		R0250-W1/	0.00	
	R0230-W1/	0.00		R0220-W2/	0.00
R0200-W3/	0.00		R0190-W4/	0.00	
	R0170-W3/	0.00		R0180-W1/	0.00
R0140-W1/	0.00		R0150-W3/	0.00	
	R0110-W1/	0.00		R0130-W1/	0.00
R0100-W4/	0.00		R0310-W5.1/	0.00	
	R0430-W3/	0.00		R0340-W3/	0.00
R0350-W1/	0.00		R0330-W1/	0.00	
	R0360-W1/	0.00		R0550-W2/	0.00
R0560-W1/	0.00		R0780-W1/	0.00	
	R0740-W3/	0.00		R0870-W1/	0.00
R0950-W1/	0.00		R0960-W2/	0.00	
	R0990-W2/	0.00		R1010-W2/	0.00
R0980-W2/	0.00		R0850-W2/	0.00	
	R0770-W2/	0.00		R0530-W4/	0.00
R0380-W3/	0.00		R0300-W2/	0.00	
	R0290-W1/	0.00		R0655-W2/	0.00
R0140-W2/	0.00		R0120-W2/	0.00	
	R0160-W1/	0.00		R0400-W1/	0.00
R0880-W2/	0.00		R1010-W1/	0.00	
	R0490-W2/	0.00		R0050-W1.1/	0.00
R0050-W2.1/	0.00		R0060-W1.1/	0.00	
	R0080-W1.1/	0.00		R0080-W2.1/	0.00
R0090-W1.1/	0.00		R0090-W2.1/	0.00	
	R0090-W3.1/	0.00		R0090-W4.1/	0.00
R0100-W1.1/	0.00		R0100-W2.1/	0.00	
	R0100-W3.1/	0.00		R0110-W2.1/	0.00
R0120-W1.1/	0.00		R0130-W2.1/	0.00	
	R0150-W1.1/	0.00		R0150-W2.1/	0.00
R0170-W1.1/	0.00		R0170-W2.1/	0.00	
	R0190-W1.1/	0.00		R0190-W2.1/	0.00
R0190-W3.1/	0.00		R0200-W1.1/	0.00	
	R0200-W2.1/	0.00		R0220-W1.1/	0.00
R0240-W1.1/	0.00		R0240-W2.1/	0.00	
	R0240-W3.1/	0.00		R0240-W4.1/	0.00

R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00

R0990-W1.1/	0.00	R0990-W3.1/	0.00	
R1000-W1.1/	0.00	R1020-W1.1/	0.00	
R1030-W1.1/	0.00	R1030-W2.1/	0.00	
R2002-W1.1/	20.89	R02040-W1.1/	0.00	
R2090-W1.1/	0.00	R2370-W4.1/	0.00	
R2380-W2.1/	0.00	R2380-W3.1/	0.00	
R0440-W2.1/	0.00	R015-W1.1/	0.00	
R020-W1.1/	0.00	R021-W1.1/	0.00	
R030-W1.1/	0.00	R031-W1.1/	0.00	
R042-W1.1/	0.00	R043-W1.1/	0.00	
R0850-W1.1/	0.00	R0880-WPump/	0.00	
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00	
R0910-W1/	0.00	R0325-DS-W1/	0.00	
R0400-WPump/	0.00	R0880-WPump2/	0.00	
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00	
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00	
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00	
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00	
R1020-DS-W1/	0.00	R0205-W1/	0.00	
R0205-W2/	0.00	R0205-W3/	0.00	
R0205-W4/	0.00	R0210-W1.1/	0.00	
R0515-W1.1/	0.00	R0515-W2.1/	-1.32	
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	0.00	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.10	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	-8.51	R-0001A-W2/	-4.05	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00	R0001F-W2/	0.00	
R0001F-W3/	0.00	R0001F-W4/	0.00	
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.01	
FREE# 3/	0.01	FREE# 4/	0.01	FREE#

5/	1.68	FREE# 6/	0.77		
	FREE# 7/	-0.09	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00		
	FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	0.65		
	FREE#15/	0.58	FREE#16/	3.93	
FREE#17/	0.00	FREE#18/	0.00		
	FREE#19/	0.00	FREE#20/	3.46	
FREE#21/	0.00	FREE#22/	0.13		
	FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00		
	FREE#27/	0.00	FREE#28/	-1.32	
FREE#29/	0.00	FREE#30/	0.00		
	FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00		
	FREE#35/	0.01	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00		
	FREE#39/	20.89	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00		
	FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	-12.56		
	FREE#47/	0.00	FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	3.65		
	FREE#51/	0.00	FREE#52/	0.00	

==> System inflows (file) at 50.00 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
5.51E-09	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360
	/ 0.00E+00				
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00	N0550	/ 0.00E+00	N0640	/ 0.00E+00	N0660
	/ 0.00E+00				
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00	N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885
	/ 0.00E+00				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940
	/ 0.00E+00				
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00	N0850	/ 0.00E+00	N0890	/ 0.00E+00	N0930

/ 0.00E+00			
N0920	/ 0.00E+00 N0950	/ 0.00E+00 N0830	/
0.00E+00 N0970	/ 0.00E+00 N-0001K	/ 0.00E+00 N0870	
/ 0.00E+00			
N0790	/ 0.00E+00 N0001-I	/ 0.00E+00 N0915	/
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880	
/ 0.00E+00			
N0810	/ 0.00E+00 N0740	/ 0.00E+00 N0742	/
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730	
/ 0.00E+00			
N0570	/ 0.00E+00 N0560	/ 0.00E+00 N0515	/
0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350	
/ 0.00E+00			
N0330	/ 3.77E-04 N0325	/ 0.00E+00 N0180	/
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 0.00E+00 N0100	
/ 0.00E+00			
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050	/
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	
/ 0.00E+00			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140	
/ 1.50E-08			
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470	/
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490	
/ 0.00E+00			
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655	/
0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270	
/ 0.00E+00			
N0260	/ 0.00E+00 N0250	/ 0.00E+00 N0240	/
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003	
/ 0.00E+00			
N-004	/ 0.00E+00 N-001	/ 0.00E+00 N-006	/
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009	
/ 0.00E+00			
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010	/
0.00E+00 N-014	/ 0.00E+00 N-012	/ 0.00E+00 N-013	
/ 0.00E+00			
N-015	/ 0.00E+00 N2002	/ 0.00E+00 N-020	/
0.00E+00 N-022	/ 0.00E+00 N-026	/ 0.00E+00 N-027	
/ 0.00E+00			
N-028	/ 0.00E+00 N-024	/ 0.00E+00 N-029	/
0.00E+00 N-030	/ 0.00E+00 N-023	/ 0.00E+00 N-031	
/ 0.00E+00			
N-025	/ 0.00E+00 N-041	/ 0.00E+00 N-019	/
0.00E+00 N-021	/ 0.00E+00 N-043	/ 0.00E+00 N-042	
/ 0.00E+00			
N-040	/ 0.00E+00 N2090	/ 0.00E+00 N-0001A	/
0.00E+00 N-0001-E	/ 1.04E-08 N-0001-F	/ 0.00E+00 N-0001-G	
/ 3.08E-06			
N0001-J	/ 0.00E+00		

Cycle 3000 Time 50 Hrs - 0.00 Min

Junction / Depth / Elevation			====>	"*" Junction is Surcharged.		
N0335/	0.32 /	0.32		N0550/	1.74 /	0.41
N0690/	1.68 /	2.30				
N0640/	4.34 /	1.56		N0780/	4.59 /	0.20
N0830/	2.35 /	0.30				
N0790/	3.46 /	0.48		N0800/	0.49 /	3.84
N0870/	3.40 /	0.48				
N0510/	1.33 /	-0.10		N0520/	3.14 /	0.31
N0390/	2.50 /	0.80				
N0350/	3.01 /	0.32		N0450/	1.62 /	0.32
N0770/	3.53 /	0.48				
N0720/	1.23 /	0.58		N0960/	0.00 /	1.90
N0920/	2.05 /	0.48				
N0950/	0.90 /	0.48		N0970/	1.61 /	0.40
N0915/	6.48 /	0.48				
N0885/	7.39 /	0.48		N0560/	3.23 /	0.41
N0810/	2.21 /	0.36				
N0570/	3.08 /	0.41		N0990/	0.00 /	1.57
N1000/	1.76 /	0.40				
N1020/	1.60 /	0.60		N1030/	1.55 /	0.50
N0890/	3.00 /	1.46				
N0850/	0.00 /	1.46		N0930/	4.95 /	1.38
N0980/	0.08 /	1.70				
N1010/	0.58 /	1.62		N0430/	0.45 /	0.32
N0500/	1.99 /	4.24				
N0230/	0.00 /	3.31		N0220/	0.83 /	2.01
N0200/	2.18 /	0.57				
N0190/	1.53 /	0.57		N0130/	0.01 /	-0.59
N0100/	0.22 /	0.68				
N0090/	1.26 /	3.75		N0120/	0.84 /	0.60
N0110/	0.34 /	1.11				
N0170/	0.53 /	-0.18		N0210/	0.54 /	-0.18
N0260/	2.24 /	2.01				
N0250/	0.88 /	3.18		N0240/	1.74 /	3.18
N0140/	3.36 /	1.46				
N0150/	0.00 /	1.44		N0270/	1.43 /	3.00
N0290/	0.22 /	1.23				
N0180/	2.92 /	1.46		N0370/	0.00 /	0.98
N0285/	0.00 /	2.00				
N0420/	0.42 /	3.50		N0490/	1.34 /	0.08
N0410/	2.69 /	0.08				
N0380/	0.74 /	0.74		N0660/	1.70 /	0.86
N0740/	1.72 /	0.48				
N0730/	2.58 /	0.48		N0940/	1.41 /	0.40
N0530/	0.00 /	1.66				
N0060/	0.61 /	-0.68		N0050/	2.86 /	2.00
N0325/	4.69 /	0.32				

N0160/	2.60	/	0.51	N0470/	1.64	/	3.45
N0540/	0.16	/	1.51				
N0650/	1.99	/	1.50	N0400/	3.22	/	0.32
N0360/	1.50	/	0.32				
N0480/	1.43	/	3.69	N0080/	0.32	/	0.80
N0310/	2.10	/	0.51				
N0300/	4.17	/	0.32	N0460/	2.46	/	0.31
N0440/	1.69	/	0.32				
N0330/	3.75	/	0.32	N0655/	2.92	/	0.01
N0375/	0.74	/	0.74				
N0385/	1.17	/	0.08	N0275/	0.09	/	2.39
N0280/	0.12	/	2.12				
N0202/	4.14	/	0.57	N0340/	2.11	/	0.32
N0515/	1.61	/	0.41				
N-001/	1.29	/	1.52	N-002/	0.46	/	3.46
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88	N-005/	0.65	/	1.52
N-008/	1.56	/	1.52				
N-010/	1.81	/	1.52	N-013/	2.68	/	1.52
N-015/	2.71	/	1.52				
N-006/	0.00	/	2.66	N-007/	0.00	/	2.46
N-009/	0.00	/	2.68				
N-011/	0.00	/	2.04	N-014/	0.09	/	1.64
N-012/	0.04	/	1.52				
N-025/	2.80	/	1.56	N-023/	1.11	/	1.56
N-021/	2.03	/	1.56				
N-019/	2.05	/	1.83	N-041/	1.05	/	1.83
N-020/	0.18	/	1.56				
N-022/	0.60	/	1.56	N-024/	1.83	/	1.56
N-029/	2.54	/	1.56				
N-026/	0.55	/	1.56	N-027/	1.88	/	1.55
N-028/	1.86	/	1.55				
N-030/	0.00	/	-0.07	N-043/	0.56	/	-0.60
N-042/	0.03	/	-0.60				
N-031/	0.45	/	-0.40	N-040/	1.31	/	-0.17
N0620/	0.00	/	-0.60				
N0900/	3.48	/	0.48	N-009mh/	2.41	/	2.41
N0205/	4.07	/	0.57				
N0386/	1.17	/	0.08	N0388/	1.17	/	0.08
N0775/	0.85	/	0.20				
N2040/	1.21	/	0.11	N2380/	1.89	/	0.08
N0155/	0.68	/	0.54				
N0945/	0.96	/	0.15	N2002/	3.32	/	1.52
N2090/	1.32	/	-0.57				
N0742/	0.99	/	0.48	N0910/	6.48	/	0.48
N0880/	7.39	/	0.48				
N9004/	4.30	/	1.56	N9004-B/	4.35	/	1.56
N9004-C/	4.10	/	1.56				
N9004-D/	4.24	/	1.56	N9004-F/	2.73	/	1.56
N9001-B/	2.69	/	0.60				

N9001-D/	1.50	/	0.60	N9001-F/	1.50	/	0.60
N9000/	2.59	/	0.60	N9005/	0.60	/	0.60
N9003/	0.60	/	0.60	N9004-J/	2.89	/	1.56
N9005-E/	0.60	/	0.60	N2370/	1.64	/	0.08
N9005-G/	0.60	/	0.60	N9000-E/	2.59	/	0.60
N9004-G/	2.65	/	1.56	N9001-G/	1.50	/	0.60
N9002/	1.91	/	0.60	N9001-K/	0.77	/	0.60
N9000-B/	2.59	/	0.60	N9003-A/	0.60	/	0.60
N9000-C/	2.59	/	0.60	N9003-D/	0.60	/	0.60
N9000-F/	2.59	/	0.60	N9003-G/	0.60	/	0.60
N9001-E/	2.69	/	0.60	N9004-H/	2.73	/	1.56
N9001-H/	1.50	/	0.60	N9005-A/	0.60	/	0.60
N9001-J/	0.77	/	0.60	N9005-D/	0.60	/	0.60
N9002-A/	1.91	/	0.60	N9000-D/	2.85	/	0.60
N9002-B/	1.91	/	0.60	N0001-C/	0.00	/	2.15
N9003-B/	0.60	/	0.60	N-0001-F/	0.00	/	3.50
N9003-C/	0.60	/	0.60	N-0001F-OF-B/	0.00	/	3.13
N9003-E/	0.60	/	0.60	N9005-J/	0.60	/	0.60
N9003-F/	0.60	/	0.60	N-0001K/	0.01	/	2.04
N9004-A/	4.30	/	1.56				
N9004-E/	4.24	/	1.56				
N9004-I/	2.73	/	1.56				
N9004-K/	2.89	/	1.56				
N9005-B/	0.60	/	0.60				
N9005-C/	0.60	/	0.60				
N9005-F/	0.60	/	0.60				
N9005-H/	0.60	/	0.60				
N-0001A/	8.40	/	0.40				
N-0001B/	0.14	/	-0.36				
N-0001-E/	0.02	/	4.82				
N-0001E-OF/	0.00	/	3.13				
N-0001-G/	0.02	/	4.02				
N-0001F-OF-A/	0.00	/	3.13				
N9004-L/	4.30	/	1.56				
N0001-J/	0.00	/	1.19				
N9005-K/	0.60	/	0.60				
N0001-I/	0.06	/	1.19				
N0140-A/	3.56	/	1.46				

	Conduit/	FLOW	====>	"*"	Conduit uses the normal flow option.
	R0870/	-0.00		R0770-P2/	0.01
R0900/	-0.00			R0370/	0.00*
	R0280/	0.00		R0202/	-0.06
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.02
RN-012/	0.01			RN-023/	-0.04
	RN-021/	-0.06		RN-041/	0.06
RN-020/	-0.01			RN-022/	-0.03

	RN-024/	-1.15	RN-026/	-0.00
RN-027/	0.26		RN-028/	-0.28
	R0742-P3/	-0.00	R0655-P2/	-0.00
R0655-P3/	-0.00		R0655-P4/	0.00
	R0120-P2/	0.04	R1010-P2/	0.00
RN-025-P1/	-1.02		RN-025-P2/	1.06
	R0155-P1/	5.89	R0386/	0.00
R0388/	0.00		R0385/	0.00
	R0375/	0.00	R0335/	0.00
R-0001B-P1/	-0.00		R0540-P1/	0.00
	R0540-P2/	0.00	R0540-P3/	0.00
R0290-P1/	0.00		R0285.1/	0.00
	R0250.1/	-0.26	R0230.1/	0.00*
R0220.1/	-0.00		R0200.1/	0.06
	R0190.1/	0.01	R0170.1/	0.00
R0180-P1/	0.11		R0180-P2/	0.11
	R0140.1/	0.00	R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00
	R0150-P3/	0.00	R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.00
	R0130-P1/	0.00	R0130-P2/	0.00
R0100-P1/	0.00		R0100-P2/	0.00
	R0310.1/	0.13	R0430-P1/	-0.00
R0430-P2/	-0.00		R0430-P3/	-0.00
	R0430-P4/	-0.00	R0340-P1/	-0.00
R0340-P2/	-0.00		R0350-P1/	0.01
	R0350-P2/	0.01	R0330-P1/	0.00
R0330-P2/	0.00		R0450-P1/	-0.00
	R0450-P2/	-0.00	P0360-P1/	0.00
P0360-P2/	0.00		R0550-P1/	0.13
	R0550-P2/	0.13	R0560-P1/	0.59
R0560-P2/	0.74		R0560-P3/	0.74
	R0780.1/	0.00	R0740.1/	0.00
R0730.1/	0.00		R0880.1/	0.00
	R0950.1/	-0.00	R0920.1/	0.00
R0960.1/	0.00		R0990.1/	0.00
	R1010-P3/	0.00	R1010-P4/	0.00
R1010-P5/	0.00		R0980-P1.1/	0.00
	R0980-P2.1/	0.00	R0850-P1/	0.00
R0850-P2/	0.00		R0850-P3/	0.00
	R0570-P1/	-0.31	R0570-P2/	-0.30
R0570-P3/	-0.28		R0770-P1.1/	-0.00
	R0770-P3/	-0.01	R0770-P4/	0.01
R0790-P1/	-0.03		R0790-P2/	0.03
	R0530-P1/	0.00	R0530-P2/	0.00*
R0530-P3/	0.00		R0910-P1/	0.01
	R0910-P2/	0.01	R0380-P1/	0.00
R0380-P2/	0.00		R0300-P1/	-0.00
	R0300-P2/	-0.00	R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00

RN-001-P2/	RN-004-P3/	0.00	RN-001-P1/	-0.12
	-0.08		RN-001-P3/	-0.12
RN-005-P3/	RN-005-P1/	-0.12	RN-005-P2/	-0.18
	0.13		RN-008-P1.1/	0.27
RN-010-P1/	RN-008-P2/	-0.21	RN-008-P3/	-0.18
	0.32		RN-010-P2/	0.32
RN-013-P2/	RN-010-P3/	-0.31	RN-013-P1/	-0.55
	-0.55		RN-013-P3/	-0.55
RN-015-P3/	RN-015-P1/	2.09	RN-015-P2/	-3.23
	-2.93		RN-029-P1/	0.60
R0742-P2/	RN-029-P2/	-0.95	R0742-P1/	0.00*
	0.00*		R0655-P1.1/	-0.00
R0140-P2.1/	R0490-P8/	-0.01	R0490-P7/	-0.01
	0.16		R0140-P1.1/	0.16
R0325-P1.1/	R0120-P1.1/	-0.04	R0160-P1.1/	0.26
	0.00		R0400-P1.1/	0.00
R-0410-P4/	R0880-P2.1/	0.00	R1010-P1.1/	0.00
	-0.01		R-0410-P5/	-0.01
R0410-P1/	R-0410-P6/	-0.01	R-0410-P7/	0.04
	0.00		R0410-P2/	0.00
R0490-P1.1/	R0410-P3/	0.00	498.1/	0.01
	-0.01		R0490-P3/	0.00
R0490-P6/	R0490-P4/	0.00	R0490-P5/	-0.00
	-0.00		R0890-ORF-2/	-2.09
R0890-ORF-4/	R0890-ORF-5/	-2.09	R0890ORF-3/	-2.09
	-2.09		N0140-A-W1.1/	0.32
R0285-W2/	R0540-W3/	0.00	R0290-P5/	0.00
	0.00		R0250-W1/	0.00
R0200-W3/	R0230-W1/	0.00	R0220-W2/	0.00
	0.00		R0190-W4/	0.00
R0140-W1/	R0170-W3/	0.00	R0180-W1/	0.00
	0.00		R0150-W3/	0.00
R0100-W4/	R0110-W1/	0.00	R0130-W1/	0.00
	0.00		R0310-W5.1/	0.00
R0350-W1/	R0430-W3/	0.00	R0340-W3/	0.00
	0.00		R0330-W1/	0.00
R0560-W1/	R0360-W1/	0.00	R0550-W2/	0.00
	0.00		R0780-W1/	0.00
R0950-W1/	R0740-W3/	0.00	R0870-W1/	0.00
	0.00		R0960-W2/	0.00
R0980-W2/	R0990-W2/	0.00	R1010-W2/	0.00
	0.00		R0850-W2/	0.00
R0380-W3/	R0770-W2/	0.00	R0530-W4/	0.00
	0.00		R0300-W2/	0.00
R0140-W2/	R0290-W1/	0.00	R0655-W2/	0.00
	0.00		R0120-W2/	0.00
R0880-W2/	R0160-W1/	0.00	R0400-W1/	0.00
	0.00		R1010-W1/	0.00
R0050-W2.1/	R0490-W2/	0.00	R0050-W1.1/	0.00
	0.00		R0060-W1.1/	0.00

R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00

R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-38.22	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	-3.84
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.00
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.06	R019-P1-W2/	0.00
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00
R-0001A-W1.1/	-16.90	R-0001A-W2/	-14.42
R0001C-W1.1/	0.00	R0001C-W2/	0.00
R0001C-W3/	0.00	R0001E-W1/	0.00
R0001F-W1.1/	0.00	R0001F-W2/	0.00
R0001F-W3/	0.00	R0001F-W4/	0.00
R0001F-W5/	0.00	R001G-W1/	0.00
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00
R000J-W2/	0.00	R000J-W3/	0.00

R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.00	
FREE# 3/	0.00	FREE# 4/	0.00	FREE#
5/	0.02	FREE# 6/	0.32	
FREE# 7/	-0.04	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	-1.02	
FREE#15/	-1.06	FREE#16/	5.89	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	-0.26	
FREE#21/	0.00	FREE#22/	0.04	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	-3.84	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	
FREE#35/	0.00	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00	
FREE#39/	-38.22	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00	
FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	-31.31	
FREE#47/	0.00	FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	-8.37	
FREE#51/	0.00	FREE#52/	0.00	

==> System inflows (file) at 58.33 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/

0.00E+00 N0460	/ 0.00E+00 N0440	/ 0.00E+00 N0360
/ 0.00E+00		
N2040	/ 0.00E+00 N0450	/ 0.00E+00 N0400
0.00E+00 N0550	/ 0.00E+00 N0640	/ 0.00E+00 N0660
/ 0.00E+00		
N0780	/ 0.00E+00 N0775	/ 0.00E+00 N0690
0.00E+00 N0720	/ 0.00E+00 N0770	/ 0.00E+00 N0885
/ 0.00E+00		
N0960	/ 0.00E+00 N0990	/ 0.00E+00 N1010
0.00E+00 N1030	/ 0.00E+00 N1020	/ 0.00E+00 N0940
/ 0.00E+00		
N1000	/ 0.00E+00 N0945	/ 0.00E+00 N0980
0.00E+00 N0850	/ 0.00E+00 N0890	/ 0.00E+00 N0930
/ 0.00E+00		
N0920	/ 0.00E+00 N0950	/ 0.00E+00 N0830
0.00E+00 N0970	/ 0.00E+00 N-0001K	/ 0.00E+00 N0870
/ 0.00E+00		
N0790	/ 0.00E+00 N0001-I	/ 0.00E+00 N0915
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880
/ 0.00E+00		
N0810	/ 0.00E+00 N0740	/ 0.00E+00 N0742
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730
/ 0.00E+00		
N0570	/ 0.00E+00 N0560	/ 0.00E+00 N0515
0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350
/ 0.00E+00		
N0330	/ 8.24E-06 N0325	/ 0.00E+00 N0180
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 0.00E+00 N0100
/ 0.00E+00		
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210
/ 0.00E+00		
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140
/ 0.00E+00		
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490
/ 0.00E+00		
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655
0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270
/ 0.00E+00		
N0260	/ 0.00E+00 N0250	/ 0.00E+00 N0240
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003
/ 0.00E+00		
N-004	/ 0.00E+00 N-001	/ 0.00E+00 N-006
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009
/ 0.00E+00		
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010
0.00E+00 N-014	/ 0.00E+00 N-012	/ 0.00E+00 N-013
/ 0.00E+00		

N-015	/ 0.00E+00	N2002	/ 0.00E+00	N-020	/
0.00E+00 N-022	/ 0.00E+00	N-026	/ 0.00E+00	N-027	/
/ 0.00E+00					
N-028	/ 0.00E+00	N-024	/ 0.00E+00	N-029	/
0.00E+00 N-030	/ 0.00E+00	N-023	/ 0.00E+00	N-031	/
/ 0.00E+00					
N-025	/ 0.00E+00	N-041	/ 0.00E+00	N-019	/
0.00E+00 N-021	/ 0.00E+00	N-043	/ 0.00E+00	N-042	/
/ 0.00E+00					
N-040	/ 0.00E+00	N2090	/ 0.00E+00	N-0001A	/
0.00E+00 N-0001-E	/ 0.00E+00	N-0001-F	/ 0.00E+00	N-0001-G	/
/ 0.00E+00					
N0001-J	/ 0.00E+00				

Cycle 3500 Time 58 Hrs - 20.00 Min

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 0.32 / 0.32		N0550/ 1.78 / 0.45
N0690/ 1.68 / 2.30		N0780/ 4.59 / 0.20
N0640/ 4.34 / 1.56		N0800/ 0.49 / 3.84
N0830/ 2.35 / 0.30		N0520/ 3.14 / 0.31
N0790/ 3.46 / 0.48		N0450/ 1.62 / 0.32
N0870/ 3.40 / 0.48		N0960/ 0.00 / 1.90
N0510/ 1.33 / -0.10		N0970/ 1.61 / 0.40
N0390/ 2.50 / 0.80		N0560/ 3.27 / 0.45
N0350/ 3.01 / 0.32		N0990/ 0.00 / 1.57
N0770/ 3.53 / 0.48		N1030/ 1.55 / 0.50
N0720/ 1.23 / 0.58		N0930/ 4.95 / 1.38
N0920/ 2.05 / 0.48		N0430/ 0.45 / 0.32
N0950/ 0.90 / 0.48		N0220/ 0.83 / 2.01
N0915/ 6.48 / 0.48		N0130/ 0.01 / -0.59
N0885/ 7.39 / 0.48		N0120/ 0.75 / 0.51
N0810/ 2.21 / 0.36		N0210/ 0.54 / -0.18
N0570/ 3.12 / 0.45		N0240/ 1.74 / 3.18
N1000/ 1.76 / 0.40		
N1020/ 1.60 / 0.60		
N0890/ 3.02 / 1.48		
N0850/ 0.00 / 1.46		
N0980/ 0.08 / 1.70		
N1010/ 0.58 / 1.62		
N0500/ 1.99 / 4.24		
N0230/ 0.00 / 3.31		
N0200/ 2.18 / 0.57		
N0190/ 1.53 / 0.57		
N0100/ 0.22 / 0.68		
N0090/ 1.26 / 3.75		
N0110/ 0.26 / 1.03		
N0170/ 0.53 / -0.18		
N0260/ 2.24 / 2.01		
N0250/ 0.88 / 3.18		

N0140/	3.32	/	1.42		
N0150/	0.00	/	1.44	N0270/	1.43 / 3.00
N0290/	0.22	/	1.23		
N0180/	2.88	/	1.42	N0370/	0.00 / 0.98
N0285/	0.00	/	2.00		
N0420/	0.42	/	3.50	N0490/	1.34 / 0.08
N0410/	2.69	/	0.08		
N0380/	0.74	/	0.74	N0660/	1.70 / 0.86
N0740/	1.72	/	0.48		
N0730/	2.58	/	0.48	N0940/	1.41 / 0.40
N0530/	0.00	/	1.66		
N0060/	0.62	/	-0.67	N0050/	2.86 / 2.00
N0325/	4.69	/	0.32		
N0160/	2.59	/	0.50	N0470/	1.64 / 3.45
N0540/	0.16	/	1.51		
N0650/	1.99	/	1.50	N0400/	3.22 / 0.32
N0360/	1.50	/	0.32		
N0480/	1.43	/	3.69	N0080/	0.32 / 0.80
N0310/	2.09	/	0.50		
N0300/	4.17	/	0.32	N0460/	2.46 / 0.31
N0440/	1.69	/	0.32		
N0330/	3.75	/	0.32	N0655/	2.92 / 0.01
N0375/	0.74	/	0.74		
N0385/	1.17	/	0.08	N0275/	0.09 / 2.39
N0280/	0.12	/	2.12		
N0202/	4.14	/	0.57	N0340/	2.11 / 0.32
N0515/	1.65	/	0.45		
N-001/	1.23	/	1.46	N-002/	0.46 / 3.46
N-003/	0.00	/	2.56		
N-004/	0.00	/	2.88	N-005/	0.59 / 1.46
N-008/	1.50	/	1.46		
N-010/	1.75	/	1.46	N-013/	2.62 / 1.46
N-015/	2.65	/	1.46		
N-006/	0.00	/	2.66	N-007/	0.00 / 2.46
N-009/	0.00	/	2.68		
N-011/	0.00	/	2.04	N-014/	0.08 / 1.63
N-012/	0.01	/	1.49		
N-025/	2.71	/	1.47	N-023/	1.02 / 1.47
N-021/	1.94	/	1.47		
N-019/	2.01	/	1.79	N-041/	1.01 / 1.79
N-020/	0.09	/	1.47		
N-022/	0.51	/	1.47	N-024/	1.74 / 1.47
N-029/	2.45	/	1.47		
N-026/	0.46	/	1.47	N-027/	1.80 / 1.47
N-028/	1.78	/	1.47		
N-030/	0.00	/	-0.07	N-043/	0.56 / -0.60
N-042/	0.03	/	-0.60		
N-031/	0.45	/	-0.40	N-040/	1.31 / -0.17
N0620/	0.00	/	-0.60		
N0900/	3.48	/	0.48	N-009mh/	2.41 / 2.41

N0205/	4.07	/	0.57				
N0386/	1.17	/	0.08	N0388/	1.17	/	0.08
N0775/	0.85	/	0.20				
N2040/	1.21	/	0.11	N2380/	1.89	/	0.08
N0155/	0.65	/	0.51				
N0945/	0.96	/	0.15	N2002/	3.26	/	1.46
N2090/	1.32	/	-0.57				
N0742/	0.99	/	0.48	N0910/	6.48	/	0.48
N0880/	7.39	/	0.48				
N9004/	4.21	/	1.47	N9004-B/	4.26	/	1.47
N9004-C/	4.01	/	1.47				
N9004-D/	4.15	/	1.47	N9004-F/	2.64	/	1.47
N9001-B/	2.60	/	0.51				
N9001-D/	1.41	/	0.51	N9001-F/	1.41	/	0.51
N9000/	2.50	/	0.51				
N9003/	0.51	/	0.51	N9005/	0.51	/	0.51
N9005-E/	0.51	/	0.51				
N9005-G/	0.51	/	0.51	N9004-J/	2.80	/	1.47
N9004-G/	2.56	/	1.47				
N9002/	1.82	/	0.51	N2370/	1.64	/	0.08
N9000-B/	2.50	/	0.51				
N9000-C/	2.50	/	0.51	N9000-E/	2.50	/	0.51
N9000-F/	2.50	/	0.51				
N9001-E/	2.60	/	0.51	N9001-G/	1.41	/	0.51
N9001-H/	1.41	/	0.51				
N9001-J/	0.68	/	0.51	N9001-K/	0.68	/	0.51
N9002-A/	1.82	/	0.51				
N9002-B/	1.82	/	0.51	N9003-A/	0.51	/	0.51
N9003-B/	0.51	/	0.51				
N9003-C/	0.51	/	0.51	N9003-D/	0.51	/	0.51
N9003-E/	0.51	/	0.51				
N9003-F/	0.51	/	0.51	N9003-G/	0.51	/	0.51
N9004-A/	4.21	/	1.47				
N9004-E/	4.15	/	1.47	N9004-H/	2.64	/	1.47
N9004-I/	2.64	/	1.47				
N9004-K/	2.80	/	1.47	N9005-A/	0.51	/	0.51
N9005-B/	0.51	/	0.51				
N9005-C/	0.51	/	0.51	N9005-D/	0.51	/	0.51
N9005-F/	0.51	/	0.51				
N9005-H/	0.51	/	0.51	N9000-D/	2.76	/	0.51
N-0001A/	8.46	/	0.46				
N-0001B/	0.13	/	-0.37	N0001-C/	0.00	/	2.15
N-0001-E/	0.02	/	4.82				
N-0001E-OF/	0.00	/	3.13	N-0001-F/	0.00	/	3.50
N-0001-G/	0.02	/	4.02				
N-0001F-OF-A/	0.00	/	3.13	N-0001F-OF-B/	0.00	/	3.13
N9004-L/	4.21	/	1.47				
N0001-J/	0.00	/	1.19	N9005-J/	0.51	/	0.51
N9005-K/	0.51	/	0.51				
N0001-I/	0.06	/	1.19	N-0001K/	0.01	/	2.04

N0140-A/ 3.52 / 1.42

	Conduit/	FLOW	==> "*" Conduit uses the normal flow option.		
	R0870/	0.00		R0770-P2/	0.01
R0900/	0.00			R0370/	0.00*
	R0280/	0.00		R0202/	-0.01
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.01
RN-012/	0.01*			RN-023/	-0.05
	RN-021/	-0.03		RN-041/	0.04
RN-020/	0.00			RN-022/	-0.01
	RN-024/	-0.59		RN-026/	-0.00
RN-027/	0.15			RN-028/	-0.16
	R0742-P3/	0.00		R0655-P2/	0.00
R0655-P3/	0.00			R0655-P4/	-0.00
	R0120-P2/	0.02		R1010-P2/	0.00
RN-025-P1/	-0.56			RN-025-P2/	0.59
	R0155-P1/	2.59		R0386/	-0.00
R0388/	-0.00			R0385/	-0.00
	R0375/	-0.00		R0335/	-0.00
R-0001B-P1/	-0.00			R0540-P1/	0.00
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	0.00			R0285.1/	0.00
	R0250.1/	0.06		R0230.1/	0.00*
R0220.1/	0.00			R0200.1/	0.01
	R0190.1/	0.00		R0170.1/	0.00
R0180-P1/	0.06			R0180-P2/	0.06
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00			R0150-P2/	0.00
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00			R0110.1/	-0.00
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00			R0100-P2/	0.00
	R0310.1/	0.92		R0430-P1/	0.00
R0430-P2/	0.00			R0430-P3/	0.00
	R0430-P4/	0.00		R0340-P1/	-0.00
R0340-P2/	0.00			R0350-P1/	-0.00
	R0350-P2/	-0.00		R0330-P1/	0.00
R0330-P2/	0.00			R0450-P1/	0.00
	R0450-P2/	0.00		P0360-P1/	0.00
P0360-P2/	-0.00			R0550-P1/	0.05
	R0550-P2/	0.05		R0560-P1/	0.29
R0560-P2/	0.37			R0560-P3/	0.37
	R0780.1/	0.00		R0740.1/	0.00
R0730.1/	-0.00			R0880.1/	0.00
	R0950.1/	-0.00		R0920.1/	-0.00
R0960.1/	0.00			R0990.1/	0.00
	R1010-P3/	0.00		R1010-P4/	0.00

R1010-P5/	0.00	R0980-P1.1/	0.00		
	R0980-P2.1/	0.00	R0850-P1/	0.00	
R0850-P2/	0.00		R0850-P3/	0.00	
	R0570-P1/	-0.16	R0570-P2/	-0.15	
R0570-P3/	-0.14		R0770-P1.1/	-0.00	
	R0770-P3/	-0.01	R0770-P4/	0.01	
R0790-P1/	-0.03		R0790-P2/	0.03	
	R0530-P1/	0.00	R0530-P2/	0.00*	
R0530-P3/	0.00		R0910-P1/	0.01	
	R0910-P2/	0.01	R0380-P1/	0.00	
R0380-P2/	0.00		R0300-P1/	-0.00	
	R0300-P2/	-0.00	R0290-P2.1/	0.00	
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00	RN-001-P1/	-0.02	
RN-001-P2/	-0.01		RN-001-P3/	-0.02	
	RN-005-P1/	-0.02	RN-005-P2/	-0.01	
RN-005-P3/	0.03		RN-008-P1.1/	0.11	
	RN-008-P2/	-0.05	RN-008-P3/	-0.03	
RN-010-P1/	0.11		RN-010-P2/	0.11	
	RN-010-P3/	-0.10	RN-013-P1/	-0.20	
RN-013-P2/	-0.20		RN-013-P3/	-0.20	
	RN-015-P1/	0.85	RN-015-P2/	-1.36	
RN-015-P3/	-1.19		RN-029-P1/	0.32	
	RN-029-P2/	-0.51	R0742-P1/	0.00*	
R0742-P2/	0.00*		R0655-P1.1/	0.00	
	R0490-P8/	0.00	R0490-P7/	0.00	
R0140-P2.1/	0.08		R0140-P1.1/	0.08	
	R0120-P1.1/	-0.03	R0160-P1.1/	3.08	
R0325-P1.1/	0.00		R0400-P1.1/	0.00	
	R0880-P2.1/	0.00	R1010-P1.1/	0.00	
R-0410-P4/	-0.01		R-0410-P5/	-0.01	
	R-0410-P6/	-0.01	R-0410-P7/	0.03	
R0410-P1/	0.00		R0410-P2/	0.00	
	R0410-P3/	0.00		498.1/	-0.00
R0490-P1.1/	0.01		R0490-P3/	0.00	
	R0490-P4/	0.00	R0490-P5/	-0.00	
R0490-P6/	-0.00		R0890-ORF-2/	0.74	
	R0890-ORF-5/	0.74	R0890ORF-3/	0.74	
R0890-ORF-4/	0.74		N0140-A-W1.1/	0.17	
	R0540-W3/	0.00	R0290-P5/	0.00	
R0285-W2/	0.00		R0250-W1/	0.00	
	R0230-W1/	0.00	R0220-W2/	0.00	
R0200-W3/	0.00		R0190-W4/	0.00	
	R0170-W3/	0.00	R0180-W1/	0.00	
R0140-W1/	0.00		R0150-W3/	0.00	
	R0110-W1/	0.00	R0130-W1/	0.00	
R0100-W4/	0.00		R0310-W5.1/	0.00	
	R0430-W3/	0.00	R0340-W3/	0.00	
R0350-W1/	0.00		R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00	

R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00	
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00	
	R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00	
	R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00	
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00	
	R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00	
	R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00	
	R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00	
	R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00	
	R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00	
	R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00	
	R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00	
	R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00	
	R0460-W2.1/	0.00	R0480-W1.1/	0.00

R0480-W2.1/	0.00		R0480-W3.1/	0.00	
R0490-W1.1/		0.00	R0490-W3.1/		0.00
R0500-W1.1/	0.00		R0510-W2.1/	0.00	
R0520-W1.1/		0.00	R0520-W2.1/		0.00
R0530-W1.1/	0.00		R0530-W2.1/	0.00	
R0530-W3/		0.00	R0540-W1.1/		0.00
R0540-W2.1/	0.00		R0550-W1.1/	0.00	
R0550-W3.1/		0.00	R0560-W2.1/		0.00
R0560-W3.1/	0.00		R0560-W4.1/	0.00	
R0560-W5.1/		0.00	R0570-W1.1/		0.00
R0570-W3.1/	0.00		R0570-W4.1/	0.00	
R0570-W5.1/		0.00	R0640-W1.1/		0.00
R0650-W1.1/	0.00		R0660-W1.1/	0.00	
R0660-W2.1/		0.00	R0690-W2.1/		0.00
R0720-W1.1/	0.00		R0730-W1.1/	0.00	
R0740-W2.1/		0.00	R0740-W4.1/		0.00
R0775-W1.1/	0.00		R0780-W2.1/	0.00	
R0790-W1/		0.00	R0800-W1.1/		0.00
R0800-W2.1/	0.00		R0810-W1.1/	0.00	
R0830-W3.1/		0.00	R0850-W3.1/		0.00
R0870-W2.1/	0.00		R0885-W1.1/	0.00	
R0910-W2.1/		0.00	R0930-W1.1/		0.00
R0940-W1.1/	0.00		R0940-W2.1/	0.00	
R0945-W1.1/		0.00	R0950-W2.1/		0.00
R0960-W1.1/	0.00		R0960-W3.1/	0.00	
R0960-W4.1/		0.00	R0980-W1.1/		0.00
R0990-W1.1/	0.00		R0990-W3.1/	0.00	
R1000-W1.1/		0.00	R1020-W1.1/		0.00
R1030-W1.1/	0.00		R1030-W2.1/	0.00	
R2002-W1.1/		-14.64	R02040-W1.1/		0.00
R2090-W1.1/	0.00		R2370-W4.1/	0.00	
R2380-W2.1/		0.00	R2380-W3.1/		0.00
R0440-W2.1/	0.00		R015-W1.1/	0.00	
R020-W1.1/		0.00	R021-W1.1/		0.00
R030-W1.1/	0.00		R031-W1.1/	0.00	
R042-W1.1/		0.00	R043-W1.1/		0.00
R0850-W1.1/	0.00		R0880-WPump/	0.00	
R0920-P2-W1/		0.00	R0920-P2-W2/		0.00
R0910-W1/	0.00		R0325-DS-W1/	0.00	
R0400-WPump/		0.00	R0880-WPump2/		0.00
R0880-DS-W1/	0.00		R0520-DS-W1/	0.00	
R0640-P1-W1/		0.00	R0640-P1-W2/		0.00
R0640-P2-W1/	0.00		R0690-P1-W1/	0.00	
R0940-DS-W1/		0.00	R0945-DS-W1/		0.00
R1020-DS-W1/	0.00		R0205-W1/	0.00	
R0205-W2/		0.00	R0205-W3/		0.00
R0205-W4/	0.00		R0210-W1.1/	0.00	
R0515-W1.1/		0.00	R0515-W2.1/		-1.86
R0620-W1/	0.00		R0620-W2/	0.00	
R0620-W3/		0.00	R0650-W2.1/		0.00

R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.04	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	-7.28	R-0001A-W2/	-7.40	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00	R0001F-W2/	0.00	
R0001F-W3/	0.00	R0001F-W4/	0.00	
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	-0.00	
FREE# 3/	-0.00	FREE# 4/	-0.00	FREE#
5/	-0.01	FREE# 6/	0.17	
FREE# 7/	-0.03	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	-0.56	
FREE#15/	-0.59	FREE#16/	2.59	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	-3.08	
FREE#21/	0.00	FREE#22/	0.02	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	-1.86	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	
FREE#35/	-0.00	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00	
FREE#39/	-14.64	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00	
FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	-14.67	
FREE#47/	0.00	FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	2.97	
FREE#51/	0.00	FREE#52/	0.00	

==> System inflows (file) at 66.67 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
5.83E-05 N0290	/ 0.00E+00	N0370	/ 8.08E-07	N0275	/
/ 0.00E+00					
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00 N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388	/
/ 0.00E+00					
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00 N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300	/
/ 0.00E+00					
N0340	/ 0.00E+00	N0390	/ 1.88E-03	N0001-C	/
0.00E+00 N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360	/
/ 0.00E+00					
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00 N0550	/ 0.00E+00	N0640	/ 0.00E+00	N0660	/
/ 0.00E+00					
N0780	/ 1.69E-09	N0775	/ 0.00E+00	N0690	/
0.00E+00 N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885	/
/ 0.00E+00					
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00 N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940	/
/ 0.00E+00					
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00 N0850	/ 0.00E+00	N0890	/ 0.00E+00	N0930	/
/ 0.00E+00					
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/
0.00E+00 N0970	/ 0.00E+00	N-0001K	/ 0.00E+00	N0870	/
/ 0.00E+00					
N0790	/ 0.00E+00	N0001-I	/ 0.00E+00	N0915	/
0.00E+00 N0900	/ 0.00E+00	N0910	/ 0.00E+00	N0880	/
/ 0.00E+00					
N0810	/ 0.00E+00	N0740	/ 0.00E+00	N0742	/
0.00E+00 N0800	/ 0.00E+00	N0620	/ 0.00E+00	N0730	/
/ 0.00E+00					
N0570	/ 0.00E+00	N0560	/ 0.00E+00	N0515	/
0.00E+00 N0510	/ 0.00E+00	N0520	/ 0.00E+00	N0350	/
/ 0.00E+00					
N0330	/ 4.33E-04	N0325	/ 0.00E+00	N0180	/
0.00E+00 N0090	/ 0.00E+00	N-0001B	/ 0.00E+00	N0100	/
/ 0.00E+00					
N0130	/ 0.00E+00	N0080	/ 0.00E+00	N0050	/
0.00E+00 N0170	/ 0.00E+00	N0205	/ 0.00E+00	N0210	/
/ 0.00E+00					
N0150	/ 0.00E+00	N0155	/ 0.00E+00	N0060	/
0.00E+00 N0120	/ 2.96E-07	N0110	/ 6.59E-07	N0140	/
/ 1.59E-04					
N0140-A	/ 0.00E+00	N0500	/ 0.00E+00	N0470	/
0.00E+00 N0540	/ 0.00E+00	N0650	/ 0.00E+00	N0490	/

	/ 0.00E+00				
N2380		/ 0.00E+00	N2370	/ 0.00E+00	N0655
0.00E+00	N0480		/ 0.00E+00	N0410	/ 0.00E+00
	/ 0.00E+00				
N0260		/ 0.00E+00	N0250	/ 0.00E+00	N0240
0.00E+00	N0200		/ 4.58E-06	N-002	/ 0.00E+00
	/ 0.00E+00				
N-004		/ 0.00E+00	N-001	/ 0.00E+00	N-006
0.00E+00	N-005		/ 0.00E+00	N-007	/ 0.00E+00
	/ 0.00E+00				
N-008		/ 0.00E+00	N-011	/ 0.00E+00	N-010
3.20E-10	N-014		/ 0.00E+00	N-012	/ 0.00E+00
	/ 0.00E+00				
N-015		/ 0.00E+00	N2002	/ 0.00E+00	N-020
0.00E+00	N-022		/ 0.00E+00	N-026	/ 0.00E+00
	/ 3.51E-08				
N-028		/ 0.00E+00	N-024	/ 0.00E+00	N-029
0.00E+00	N-030		/ 0.00E+00	N-023	/ 0.00E+00
	/ 0.00E+00				
N-025		/ 0.00E+00	N-041	/ 0.00E+00	N-019
0.00E+00	N-021		/ 0.00E+00	N-043	/ 0.00E+00
	/ 0.00E+00				
N-040		/ 0.00E+00	N2090	/ 0.00E+00	N-0001A
0.00E+00	N-0001-E		/ 5.77E-06	N-0001-F	/ 0.00E+00
	/ 3.40E-04				
N0001-J		/ 0.00E+00			

Cycle 4000 Time 66 Hrs - 40.00 Min

Junction /	Depth /	Elevation	==>	"*" Junction is Surcharged.
N0335/	0.32 /	0.32		N0550/ 1.82 / 0.49
N0690/	1.69 /	2.31		
N0640/	4.34 /	1.56		N0780/ 4.59 / 0.20
N0830/	2.35 /	0.30		
N0790/	3.46 /	0.48		N0800/ 0.49 / 3.84
N0870/	3.40 /	0.48		
N0510/	1.33 /	-0.10		N0520/ 3.14 / 0.31
N0390/	2.50 /	0.80		
N0350/	3.01 /	0.32		N0450/ 1.62 / 0.32
N0770/	3.53 /	0.48		
N0720/	1.23 /	0.58		N0960/ 0.00 / 1.90
N0920/	2.05 /	0.48		
N0950/	0.90 /	0.48		N0970/ 1.61 / 0.40
N0915/	6.48 /	0.48		
N0885/	7.39 /	0.48		N0560/ 3.31 / 0.49
N0810/	2.21 /	0.36		
N0570/	3.16 /	0.49		N0990/ 0.00 / 1.57
N1000/	1.76 /	0.40		
N1020/	1.60 /	0.60		N1030/ 1.55 / 0.50
N0890/	3.12 /	1.58		

N0850/	0.00	/	1.46	N0930/	4.95	/	1.38
N0980/	0.08	/	1.70				
N1010/	0.58	/	1.62	N0430/	0.45	/	0.32
N0500/	1.99	/	4.24				
N0230/	0.00	/	3.31	N0220/	0.83	/	2.01
N0200/	2.19	/	0.58				
N0190/	1.54	/	0.58	N0130/	0.01	/	-0.59
N0100/	0.22	/	0.68				
N0090/	1.27	/	3.76	N0120/	0.84	/	0.60
N0110/	0.37	/	1.14				
N0170/	0.53	/	-0.18	N0210/	0.54	/	-0.18
N0260/	2.24	/	2.01				
N0250/	0.87	/	3.17	N0240/	1.75	/	3.19
N0140/	3.30	/	1.40				
N0150/	0.00	/	1.44	N0270/	1.43	/	3.00
N0290/	0.22	/	1.23				
N0180/	2.86	/	1.40	N0370/	0.00	/	0.98
N0285/	0.00	/	2.00				
N0420/	0.42	/	3.50	N0490/	1.34	/	0.08
N0410/	2.69	/	0.08				
N0380/	0.74	/	0.74	N0660/	1.70	/	0.86
N0740/	1.72	/	0.48				
N0730/	2.58	/	0.48	N0940/	1.41	/	0.40
N0530/	0.00	/	1.66				
N0060/	0.62	/	-0.67	N0050/	2.86	/	2.00
N0325/	4.69	/	0.32				
N0160/	2.60	/	0.51	N0470/	1.64	/	3.45
N0540/	0.16	/	1.51				
N0650/	1.99	/	1.50	N0400/	3.22	/	0.32
N0360/	1.50	/	0.32				
N0480/	1.43	/	3.69	N0080/	0.32	/	0.80
N0310/	2.10	/	0.51				
N0300/	4.17	/	0.32	N0460/	2.46	/	0.31
N0440/	1.69	/	0.32				
N0330/	3.75	/	0.32	N0655/	2.92	/	0.01
N0375/	0.74	/	0.74				
N0385/	1.17	/	0.08	N0275/	0.09	/	2.39
N0280/	0.12	/	2.12				
N0202/	4.15	/	0.58	N0340/	2.11	/	0.32
N0515/	1.69	/	0.49				
N-001/	1.35	/	1.58	N-002/	0.46	/	3.46
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88	N-005/	0.71	/	1.58
N-008/	1.62	/	1.58				
N-010/	1.87	/	1.58	N-013/	2.74	/	1.58
N-015/	2.77	/	1.58				
N-006/	0.00	/	2.66	N-007/	0.00	/	2.46
N-009/	0.00	/	2.68				
N-011/	0.01	/	2.05	N-014/	0.07	/	1.62
N-012/	0.10	/	1.58				

N-025/	2.80	/	1.56	N-023/	1.11	/	1.56
N-021/	2.03	/	1.56	N-041/	1.00	/	1.78
N-019/	2.00	/	1.78	N-024/	1.83	/	1.56
N-020/	0.18	/	1.56	N-027/	1.90	/	1.57
N-022/	0.60	/	1.56	N-043/	0.56	/	-0.60
N-029/	2.54	/	1.56	N-040/	1.31	/	-0.17
N-026/	0.55	/	1.56	N-009mh/	2.42	/	2.42
N-028/	1.88	/	1.57	N0388/	1.17	/	0.08
N-030/	0.00	/	-0.07	N2380/	1.89	/	0.08
N-042/	0.03	/	-0.60	N2002/	3.38	/	1.58
N-031/	0.45	/	-0.40	N0910/	6.48	/	0.48
N0620/	0.00	/	-0.60	N9004-B/	4.35	/	1.56
N0900/	3.48	/	0.48	N9004-F/	2.73	/	1.56
N0205/	4.08	/	0.58	N9001-F/	1.50	/	0.60
N0386/	1.17	/	0.08	N9005/	0.60	/	0.60
N0775/	0.85	/	0.20	N9004-J/	2.89	/	1.56
N2040/	1.21	/	0.11	N2370/	1.64	/	0.08
N0155/	0.56	/	0.42	N9000-E/	2.59	/	0.60
N0945/	0.96	/	0.15	N9001-G/	1.50	/	0.60
N2090/	1.32	/	-0.57	N9001-K/	0.78	/	0.60
N0742/	0.99	/	0.48	N9003-A/	0.60	/	0.60
N0880/	7.39	/	0.48	N9003-D/	0.60	/	0.60
N9004/	4.30	/	1.56	N9003-G/	0.60	/	0.60
N9004-C/	4.10	/	1.56	N9004-A/	4.30	/	1.56
N9004-D/	4.24	/	1.56	N9004-E/	4.24	/	1.56
N9001-B/	2.69	/	0.60	N9004-I/	2.73	/	1.56
N9001-D/	1.50	/	0.60	N9004-K/	2.89	/	1.56
N9000/	2.59	/	0.60	N9005-B/	0.60	/	0.60
N9003/	0.60	/	0.60				
N9005-E/	0.60	/	0.60				
N9005-G/	0.60	/	0.60				
N9004-G/	2.65	/	1.56				
N9002/	1.91	/	0.60				
N9000-B/	2.59	/	0.60				
N9000-C/	2.59	/	0.60				
N9000-F/	2.59	/	0.60				
N9001-E/	2.69	/	0.60				
N9001-H/	1.50	/	0.60				
N9001-J/	0.78	/	0.60				
N9002-A/	1.91	/	0.60				
N9002-B/	1.91	/	0.60				
N9003-B/	0.60	/	0.60				
N9003-C/	0.60	/	0.60				
N9003-E/	0.60	/	0.60				
N9003-F/	0.60	/	0.60				

N9005-C/	0.60 /	0.60	N9005-D/	0.60 /	0.60
N9005-F/	0.60 /	0.60			
N9005-H/	0.60 /	0.60	N9000-D/	2.85 /	0.60
N-0001A/	8.53 /	0.53			
N-0001B/	0.13 /	-0.37	N0001-C/	0.00 /	2.15
N-0001-E/	0.02 /	4.82			
N-0001E-OF/	0.00 /	3.13	N-0001-F/	0.00 /	3.50
N-0001-G/	0.02 /	4.02			
N-0001F-OF-A/	0.00 /	3.13	N-0001F-OF-B/	0.00 /	3.13
N9004-L/	4.30 /	1.56			
N0001-J/	0.00 /	1.19	N9005-J/	0.60 /	0.60
N9005-K/	0.60 /	0.60			
N0001-I/	0.06 /	1.19	N-0001K/	0.01 /	2.04
N0140-A/	3.50 /	1.40			

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	0.00		R0770-P2/	0.01
R0900/	0.00			R0370/	0.00*
	R0280/	0.00		R0202/	-0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.01			RN-023/	0.11
	RN-021/	-0.03		RN-041/	0.03
RN-020/	0.01			RN-022/	0.04
	RN-024/	0.89		RN-026/	0.00
RN-027/	-0.21			RN-028/	0.23
	R0742-P3/	0.00		R0655-P2/	-0.00
R0655-P3/	-0.00			R0655-P4/	0.00
	R0120-P2/	0.02		R1010-P2/	0.00
RN-025-P1/	0.87			RN-025-P2/	-0.82
	R0155-P1/	-2.70		R0386/	0.00
R0388/	0.00			R0385/	0.00
	R0375/	-0.00		R0335/	-0.00
R-0001B-P1/	-0.00			R0540-P1/	0.00
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	-0.00			R0285.1/	0.00
	R0250.1/	0.15		R0230.1/	0.00*
R0220.1/	0.00			R0200.1/	0.00
	R0190.1/	-0.00		R0170.1/	0.00
R0180-P1/	0.04			R0180-P2/	0.04
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00			R0150-P2/	0.00
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00			R0110.1/	-0.01
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00			R0100-P2/	0.00
	R0310.1/	-0.03		R0430-P1/	0.00
R0430-P2/	0.00			R0430-P3/	0.00

R0340-P2/	R0430-P4/	0.00	R0340-P1/	-0.00
	0.00		R0350-P1/	-0.00
R0330-P2/	R0350-P2/	-0.00	R0330-P1/	0.00
	0.00		R0450-P1/	-0.00
P0360-P2/	R0450-P2/	-0.00	P0360-P1/	-0.00
	-0.00		R0550-P1/	0.10
R0560-P2/	R0550-P2/	0.10	R0560-P1/	0.49
	0.63		R0560-P3/	0.64
R0730.1/	R0780.1/	-0.00	R0740.1/	0.00
	-0.00		R0880.1/	0.00
R0960.1/	R0950.1/	-0.00	R0920.1/	-0.00
	0.00		R0990.1/	0.00
R1010-P5/	R1010-P3/	0.00	R1010-P4/	0.00
	0.00		R0980-P1.1/	0.00
R0850-P2/	R0980-P2.1/	0.00	R0850-P1/	0.00
	0.00		R0850-P3/	0.00
R0570-P3/	R0570-P1/	-0.26	R0570-P2/	-0.25
	-0.24		R0770-P1.1/	0.00
R0790-P1/	R0770-P3/	-0.01	R0770-P4/	0.01
	-0.03		R0790-P2/	0.03
R0530-P3/	R0530-P1/	0.00	R0530-P2/	0.00*
	0.00		R0910-P1/	0.01
R0380-P2/	R0910-P2/	0.01	R0380-P1/	0.00
	0.00		R0300-P1/	-0.00
RN-004-P1/	R0300-P2/	-0.00	R0290-P2.1/	0.00
	0.00		RN-004-P2/	0.00
RN-001-P2/	RN-004-P3/	0.00	RN-001-P1/	0.09
	0.03		RN-001-P3/	0.09
RN-005-P3/	RN-005-P1/	0.08	RN-005-P2/	0.13
	-0.08		RN-008-P1.1/	-0.11
RN-010-P1/	RN-008-P2/	0.16	RN-008-P3/	0.17
	-0.21		RN-010-P2/	-0.20
RN-013-P2/	RN-010-P3/	0.21	RN-013-P1/	0.36
	0.36		RN-013-P3/	0.36
RN-015-P3/	RN-015-P1/	-1.39	RN-015-P2/	1.80
	2.12		RN-029-P1/	-0.55
R0742-P2/	RN-029-P2/	0.66	R0742-P1/	0.00*
	0.00*		R0655-P1.1/	-0.01
R0140-P2.1/	R0490-P8/	-0.00	R0490-P7/	-0.00
	0.05		R0140-P1.1/	0.05
R0325-P1.1/	R0120-P1.1/	-0.01	R0160-P1.1/	-0.04
	0.00		R0400-P1.1/	0.00
R-0410-P4/	R0880-P2.1/	0.00	R1010-P1.1/	0.00
	-0.01		R-0410-P5/	-0.01
R0410-P1/	R-0410-P6/	-0.01	R-0410-P7/	0.02
	0.00		R0410-P2/	0.00
R0490-P1.1/	R0410-P3/	0.00	498.1/	0.00
	-0.00		R0490-P3/	0.00
R0490-P6/	R0490-P4/	0.00	R0490-P5/	-0.00
	-0.00		R0890-ORF-2/	1.06

R0890-ORF-4/	R0890-ORF-5/	1.06	R0890ORF-3/	1.06
	1.06		N0140-A-W1.1/	0.11
R0285-W2/	R0540-W3/	0.00	R0290-P5/	0.00
R0200-W3/	R0230-W1/	0.00	R0250-W1/	0.00
R0140-W1/	R0170-W3/	0.00	R0220-W2/	0.00
R0100-W4/	R0110-W1/	0.00	R0190-W4/	0.00
R0350-W1/	R0430-W3/	0.00	R0180-W1/	0.00
R0560-W1/	R0360-W1/	0.00	R0150-W3/	0.00
R0950-W1/	R0740-W3/	0.00	R0130-W1/	0.00
R0980-W2/	R0990-W2/	0.00	R0310-W5.1/	0.00
R0380-W3/	R0770-W2/	0.00	R0340-W3/	0.00
R0140-W2/	R0290-W1/	0.00	R0330-W1/	0.00
R0880-W2/	R0160-W1/	0.00	R0550-W2/	0.00
	R0490-W2/	0.00	R0780-W1/	0.00
R0050-W2.1/	0.00		R0870-W1/	0.00
	R0080-W1.1/	0.00	R0960-W2/	0.00
R0090-W1.1/	0.00		R1010-W2/	0.00
	R0090-W3.1/	0.00	R0850-W2/	0.00
R0100-W1.1/	0.00		R0530-W4/	0.00
	R0100-W3.1/	0.00	R0300-W2/	0.00
R0120-W1.1/	0.00		R0655-W2/	0.00
	R0150-W1.1/	0.00	R0120-W2/	0.00
R0170-W1.1/	0.00		R0400-W1/	0.00
	R0190-W1.1/	0.00	R1010-W1/	0.00
R0190-W3.1/	0.00		R0050-W1.1/	0.00
	R0200-W2.1/	0.00	R0060-W1.1/	0.00
R0240-W1.1/	0.00		R0080-W2.1/	0.00
	R0240-W3.1/	0.00	R0090-W2.1/	0.00
R0240-W5.1/	0.00		R0090-W4.1/	0.00
	R0250-W2.1/	0.00	R0100-W2.1/	0.00
R0260-W1.1/	0.00		R0110-W2.1/	0.00
	R0270-W3/	0.00	R0130-W2.1/	0.00
R0275-W1.1/	0.00		R0150-W2.1/	0.00
	R0285-W1.1/	0.00	R0170-W2.1/	0.00
R0290-W3.1/	0.00		R0190-W2.1/	0.00
	R0300-W1.1/	0.00	R0200-W1.1/	0.00
R0310-W2.1/	0.00		R0220-W1.1/	0.00
	R0310-W4.1/	0.00	R0240-W2.1/	0.00
R0330-W2.1/	0.00		R0240-W4.1/	0.00
			R0240-W6.1/	0.00
			R0250-W3.1/	0.00
			R0270-W1.1/	0.00
			R0270-W2.1/	0.00
			R0280-W1.1/	0.00
			R0290-W2.1/	0.00
			R0290-W4.1/	0.00
			R0310-W1.1/	0.00
			R0310-W3.1/	0.00
			R0325-W2.1/	0.00
			R0330-W3.1/	0.00

R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	24.28	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00

R0920-P2-W1/	0.00	R0920-P2-W2/	0.00	
R0910-W1/	0.00	R0325-DS-W1/	0.00	
R0400-WPump/	0.00	R0880-WPump2/	0.00	
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00	
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00	
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00	
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00	
R1020-DS-W1/	0.00	R0205-W1/	0.00	
R0205-W2/	0.00	R0205-W3/	0.00	
R0205-W4/	0.00	R0210-W1.1/	0.00	
R0515-W1.1/	0.00	R0515-W2.1/	-3.17	
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	0.00	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.03	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	-10.78	R-0001A-W2/	-13.46	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00	R0001F-W2/	0.00	
R0001F-W3/	0.00	R0001F-W4/	0.00	
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.00	
FREE# 3/	0.00	FREE# 4/	0.00	FREE#
5/	0.00	FREE# 6/	0.11	
FREE# 7/	-0.01	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	0.87	
FREE#15/	0.82	FREE#16/	-2.70	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	0.04	
FREE#21/	0.00	FREE#22/	0.02	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	

	FREE#27/	0.00	FREE#28/	-3.17
FREE#29/	0.00	FREE#30/	0.00	
	FREE#31/	0.00	FREE#32/	0.00
FREE#33/	0.00	FREE#34/	0.00	
	FREE#35/	0.01	FREE#36/	0.00
FREE#37/	0.00	FREE#38/	0.00	
	FREE#39/	24.28	FREE#40/	0.00
FREE#41/	0.00	FREE#42/	0.00	
	FREE#43/	0.00	FREE#44/	0.00
FREE#45/	0.00	FREE#46/	-24.24	
	FREE#47/	0.00	FREE#48/	0.00
FREE#49/	0.00	FREE#50/	4.26	
	FREE#51/	0.00	FREE#52/	0.00

==> System inflows (file) at 75.00 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360
	/ 0.00E+00				
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00	N0550	/ 0.00E+00	N0640	/ 0.00E+00	N0660
	/ 0.00E+00				
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00	N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885
	/ 0.00E+00				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940
	/ 0.00E+00				
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00	N0850	/ 0.00E+00	N0890	/ 0.00E+00	N0930
	/ 0.00E+00				
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/
0.00E+00	N0970	/ 0.00E+00	N-0001K	/ 0.00E+00	N0870
	/ 0.00E+00				
N0790	/ 0.00E+00	N0001-I	/ 0.00E+00	N0915	/
0.00E+00	N0900	/ 0.00E+00	N0910	/ 0.00E+00	N0880
	/ 0.00E+00				
N0810	/ 0.00E+00	N0740	/ 0.00E+00	N0742	/
0.00E+00	N0800	/ 0.00E+00	N0620	/ 0.00E+00	N0730
	/ 0.00E+00				
N0570	/ 0.00E+00	N0560	/ 0.00E+00	N0515	/

0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350	
/ 0.00E+00			
N0330	/ 4.76E-05 N0325	/ 0.00E+00 N0180	/
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 0.00E+00 N0100	
/ 0.00E+00			
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050	/
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	
/ 0.00E+00			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140	
/ 0.00E+00			
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470	/
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490	
/ 0.00E+00			
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655	/
0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270	
/ 0.00E+00			
N0260	/ 0.00E+00 N0250	/ 0.00E+00 N0240	/
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003	
/ 0.00E+00			
N-004	/ 0.00E+00 N-001	/ 0.00E+00 N-006	/
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009	
/ 0.00E+00			
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010	/
0.00E+00 N-014	/ 0.00E+00 N-012	/ 0.00E+00 N-013	
/ 0.00E+00			
N-015	/ 0.00E+00 N2002	/ 0.00E+00 N-020	/
0.00E+00 N-022	/ 0.00E+00 N-026	/ 0.00E+00 N-027	
/ 0.00E+00			
N-028	/ 0.00E+00 N-024	/ 0.00E+00 N-029	/
0.00E+00 N-030	/ 0.00E+00 N-023	/ 0.00E+00 N-031	
/ 0.00E+00			
N-025	/ 0.00E+00 N-041	/ 0.00E+00 N-019	/
0.00E+00 N-021	/ 0.00E+00 N-043	/ 0.00E+00 N-042	
/ 0.00E+00			
N-040	/ 0.00E+00 N2090	/ 0.00E+00 N-0001A	/
0.00E+00 N-0001-E	/ 0.00E+00 N-0001-F	/ 0.00E+00 N-0001-G	
/ 7.35E-10			
N0001-J	/ 0.00E+00		

Cycle 4500 Time 75 Hrs - 0.00 Min

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 0.32 / 0.32		N0550/ 1.84 / 0.51
N0690/ 1.69 / 2.31		
N0640/ 4.34 / 1.56		N0780/ 4.59 / 0.20
N0830/ 2.35 / 0.30		
N0790/ 3.46 / 0.48		N0800/ 0.49 / 3.84
N0870/ 3.40 / 0.48		
N0510/ 1.33 / -0.10		N0520/ 3.14 / 0.31

N0390/	2.50	/	0.80		
N0350/	3.01	/	0.32	N0450/	1.62 / 0.32
N0770/	3.53	/	0.48		
N0720/	1.23	/	0.58	N0960/	0.00 / 1.90
N0920/	2.05	/	0.48		
N0950/	0.90	/	0.48	N0970/	1.61 / 0.40
N0915/	6.48	/	0.48		
N0885/	7.39	/	0.48	N0560/	3.33 / 0.51
N0810/	2.21	/	0.36		
N0570/	3.18	/	0.51	N0990/	0.00 / 1.57
N1000/	1.76	/	0.40		
N1020/	1.60	/	0.60	N1030/	1.55 / 0.50
N0890/	3.05	/	1.51		
N0850/	0.00	/	1.46	N0930/	4.95 / 1.38
N0980/	0.08	/	1.70		
N1010/	0.58	/	1.62	N0430/	0.45 / 0.32
N0500/	1.99	/	4.24		
N0230/	0.00	/	3.31	N0220/	0.83 / 2.01
N0200/	2.19	/	0.58		
N0190/	1.54	/	0.58	N0130/	0.01 / -0.59
N0100/	0.22	/	0.68		
N0090/	1.27	/	3.76	N0120/	0.79 / 0.55
N0110/	0.27	/	1.04		
N0170/	0.53	/	-0.18	N0210/	0.54 / -0.18
N0260/	2.24	/	2.01		
N0250/	0.88	/	3.18	N0240/	1.74 / 3.18
N0140/	3.28	/	1.38		
N0150/	0.00	/	1.44	N0270/	1.43 / 3.00
N0290/	0.22	/	1.23		
N0180/	2.84	/	1.38	N0370/	0.00 / 0.98
N0285/	0.00	/	2.00		
N0420/	0.42	/	3.50	N0490/	1.34 / 0.08
N0410/	2.69	/	0.08		
N0380/	0.74	/	0.74	N0660/	1.70 / 0.86
N0740/	1.72	/	0.48		
N0730/	2.58	/	0.48	N0940/	1.41 / 0.40
N0530/	0.00	/	1.66		
N0060/	0.62	/	-0.67	N0050/	2.86 / 2.00
N0325/	4.69	/	0.32		
N0160/	2.60	/	0.51	N0470/	1.64 / 3.45
N0540/	0.16	/	1.51		
N0650/	1.99	/	1.50	N0400/	3.22 / 0.32
N0360/	1.50	/	0.32		
N0480/	1.43	/	3.69	N0080/	0.32 / 0.80
N0310/	2.10	/	0.51		
N0300/	4.17	/	0.32	N0460/	2.46 / 0.31
N0440/	1.69	/	0.32		
N0330/	3.75	/	0.32	N0655/	2.92 / 0.01
N0375/	0.74	/	0.74		
N0385/	1.17	/	0.08	N0275/	0.09 / 2.39

N0280/	0.12	/	2.12		
N0202/	4.15	/	0.58	N0340/	2.11 / 0.32
N0515/	1.71	/	0.51		
N-001/	1.28	/	1.51	N-002/	0.46 / 3.46
N-003/	0.00	/	2.56		
N-004/	0.00	/	2.88	N-005/	0.64 / 1.51
N-008/	1.55	/	1.51		
N-010/	1.80	/	1.51	N-013/	2.67 / 1.51
N-015/	2.70	/	1.51		
N-006/	0.00	/	2.66	N-007/	0.00 / 2.46
N-009/	0.00	/	2.68		
N-011/	0.00	/	2.04	N-014/	0.07 / 1.62
N-012/	0.03	/	1.51		
N-025/	2.75	/	1.51	N-023/	1.06 / 1.51
N-021/	1.98	/	1.51		
N-019/	1.98	/	1.76	N-041/	0.98 / 1.76
N-020/	0.13	/	1.51		
N-022/	0.55	/	1.51	N-024/	1.78 / 1.51
N-029/	2.49	/	1.51		
N-026/	0.50	/	1.51	N-027/	1.84 / 1.51
N-028/	1.82	/	1.51		
N-030/	0.00	/	-0.07	N-043/	0.56 / -0.60
N-042/	0.03	/	-0.60		
N-031/	0.45	/	-0.40	N-040/	1.31 / -0.17
N0620/	0.00	/	-0.60		
N0900/	3.48	/	0.48	N-009mh/	2.41 / 2.41
N0205/	4.08	/	0.58		
N0386/	1.17	/	0.08	N0388/	1.17 / 0.08
N0775/	0.85	/	0.20		
N2040/	1.21	/	0.11	N2380/	1.89 / 0.08
N0155/	0.70	/	0.56		
N0945/	0.96	/	0.15	N2002/	3.31 / 1.51
N2090/	1.32	/	-0.57		
N0742/	0.99	/	0.48	N0910/	6.48 / 0.48
N0880/	7.39	/	0.48		
N9004/	4.25	/	1.51	N9004-B/	4.30 / 1.51
N9004-C/	4.05	/	1.51		
N9004-D/	4.19	/	1.51	N9004-F/	2.68 / 1.51
N9001-B/	2.64	/	0.55		
N9001-D/	1.45	/	0.55	N9001-F/	1.45 / 0.55
N9000/	2.54	/	0.55		
N9003/	0.55	/	0.55	N9005/	0.55 / 0.55
N9005-E/	0.55	/	0.55		
N9005-G/	0.55	/	0.55	N9004-J/	2.84 / 1.51
N9004-G/	2.60	/	1.51		
N9002/	1.86	/	0.55	N2370/	1.64 / 0.08
N9000-B/	2.54	/	0.55		
N9000-C/	2.54	/	0.55	N9000-E/	2.54 / 0.55
N9000-F/	2.54	/	0.55		
N9001-E/	2.64	/	0.55	N9001-G/	1.45 / 0.55

N9001-H/	1.45 /	0.55		
N9001-J/	0.72 /	0.55	N9001-K/	0.72 / 0.55
N9002-A/	1.86 /	0.55		
N9002-B/	1.86 /	0.55	N9003-A/	0.55 / 0.55
N9003-B/	0.55 /	0.55		
N9003-C/	0.55 /	0.55	N9003-D/	0.55 / 0.55
N9003-E/	0.55 /	0.55		
N9003-F/	0.55 /	0.55	N9003-G/	0.55 / 0.55
N9004-A/	4.25 /	1.51		
N9004-E/	4.19 /	1.51	N9004-H/	2.68 / 1.51
N9004-I/	2.68 /	1.51		
N9004-K/	2.84 /	1.51	N9005-A/	0.55 / 0.55
N9005-B/	0.55 /	0.55		
N9005-C/	0.55 /	0.55	N9005-D/	0.55 / 0.55
N9005-F/	0.55 /	0.55		
N9005-H/	0.55 /	0.55	N9000-D/	2.80 / 0.55
N-0001A/	8.54 /	0.54		
N-0001B/	0.13 /	-0.37	N0001-C/	0.00 / 2.15
N-0001-E/	0.02 /	4.82		
N-0001E-OF/	0.00 /	3.13	N-0001-F/	0.00 / 3.50
N-0001-G/	0.02 /	4.02		
N-0001F-OF-A/	0.00 /	3.13	N-0001F-OF-B/	0.00 / 3.13
N9004-L/	4.25 /	1.51		
N0001-J/	0.00 /	1.19	N9005-J/	0.55 / 0.55
N9005-K/	0.55 /	0.55		
N0001-I/	0.06 /	1.19	N-0001K/	0.01 / 2.04
N0140-A/	3.48 /	1.38		

	Conduit/	FLOW	====>	"*" Conduit uses the normal flow option.
	R0870/	0.00		R0770-P2/ 0.00
R0900/	0.00		R0370/	0.00*
	R0280/	0.00		R0202/ 0.00
RN-002/	0.00		RN-003/	0.00
	RN-006/	0.00		RN-007/ 0.00
RN-009/	0.00		RN-009MH/	0.00
	RN-011/	0.00		RN-014/ 0.00
RN-012/	0.01		RN-023/	0.01
	RN-021/	-0.02		RN-041/ 0.02
RN-020/	-0.00		RN-022/	-0.00
	RN-024/	-0.23		RN-026/ -0.00
RN-027/	0.05		RN-028/	-0.05
	R0742-P3/	-0.00		R0655-P2/ 0.00
R0655-P3/	0.00		R0655-P4/	-0.00
	R0120-P2/	0.01		R1010-P2/ 0.00
RN-025-P1/	-0.18		RN-025-P2/	0.20
	R0155-P1/	1.52		R0386/ -0.00
R0388/	-0.00		R0385/	-0.00
	R0375/	0.00		R0335/ -0.00
R-0001B-P1/	0.00		R0540-P1/	0.00
	R0540-P2/	0.00		R0540-P3/ 0.00

R0290-P1/	0.00		R0285.1/	0.00	
	R0250.1/	-0.23		R0230.1/	0.00*
R0220.1/	0.00		R0200.1/	-0.00	
	R0190.1/	-0.00		R0170.1/	-0.00
R0180-P1/	0.02		R0180-P2/	0.02	
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00	
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.00	
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00		R0100-P2/	0.00	
	R0310.1/	-0.01		R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00	
	R0430-P4/	0.00		R0340-P1/	-0.00
R0340-P2/	0.00		R0350-P1/	-0.00	
	R0350-P2/	-0.00		R0330-P1/	0.00
R0330-P2/	0.00		R0450-P1/	0.00	
	R0450-P2/	0.00		P0360-P1/	0.00
P0360-P2/	-0.00		R0550-P1/	0.05	
	R0550-P2/	0.05		R0560-P1/	0.24
R0560-P2/	0.29		R0560-P3/	0.29	
	R0780.1/	0.00		R0740.1/	-0.00
R0730.1/	0.00		R0880.1/	0.00	
	R0950.1/	0.00		R0920.1/	0.00
R0960.1/	0.00		R0990.1/	0.00	
	R1010-P3/	0.00		R1010-P4/	0.00
R1010-P5/	0.00		R0980-P1.1/	0.00	
	R0980-P2.1/	0.00		R0850-P1/	0.00
R0850-P2/	0.00		R0850-P3/	0.00	
	R0570-P1/	-0.12		R0570-P2/	-0.11
R0570-P3/	-0.11		R0770-P1.1/	-0.00	
	R0770-P3/	-0.01		R0770-P4/	0.01
R0790-P1/	-0.03		R0790-P2/	0.02	
	R0530-P1/	0.00		R0530-P2/	0.00*
R0530-P3/	0.00		R0910-P1/	0.01	
	R0910-P2/	0.01		R0380-P1/	0.00
R0380-P2/	0.00		R0300-P1/	-0.00	
	R0300-P2/	-0.00		R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00		RN-001-P1/	-0.01
RN-001-P2/	-0.01		RN-001-P3/	-0.01	
	RN-005-P1/	-0.01		RN-005-P2/	-0.01
RN-005-P3/	0.02		RN-008-P1.1/	0.05	
	RN-008-P2/	-0.02		RN-008-P3/	-0.02
RN-010-P1/	0.05		RN-010-P2/	0.05	
	RN-010-P3/	-0.04		RN-013-P1/	-0.08
RN-013-P2/	-0.08		RN-013-P3/	-0.08	
	RN-015-P1/	0.35		RN-015-P2/	-0.54
RN-015-P3/	-0.48		RN-029-P1/	0.12	
	RN-029-P2/	-0.18		R0742-P1/	0.00*

R0742-P2/	0.00*	R0655-P1.1/	0.00
	R0490-P8/	0.00	R0490-P7/
R0140-P2.1/	0.04	R0140-P1.1/	0.04
	R0120-P1.1/	-0.01	R0160-P1.1/
R0325-P1.1/	0.00	R0400-P1.1/	0.00
	R0880-P2.1/	0.00	R1010-P1.1/
R-0410-P4/	-0.00	R-0410-P5/	-0.00
	R-0410-P6/	-0.00	R-0410-P7/
R0410-P1/	0.00	R0410-P2/	0.00
	R0410-P3/	0.00	498.1/
R0490-P1.1/	0.00	R0490-P3/	0.00
	R0490-P4/	0.00	R0490-P5/
R0490-P6/	-0.00	R0890-ORF-2/	-0.50
	R0890-ORF-5/	-0.50	R0890ORF-3/
R0890-ORF-4/	-0.50	N0140-A-W1.1/	0.07
	R0540-W3/	0.00	R0290-P5/
R0285-W2/	0.00	R0250-W1/	0.00
	R0230-W1/	0.00	R0220-W2/
R0200-W3/	0.00	R0190-W4/	0.00
	R0170-W3/	0.00	R0180-W1/
R0140-W1/	0.00	R0150-W3/	0.00
	R0110-W1/	0.00	R0130-W1/
R0100-W4/	0.00	R0310-W5.1/	0.00
	R0430-W3/	0.00	R0340-W3/
R0350-W1/	0.00	R0330-W1/	0.00
	R0360-W1/	0.00	R0550-W2/
R0560-W1/	0.00	R0780-W1/	0.00
	R0740-W3/	0.00	R0870-W1/
R0950-W1/	0.00	R0960-W2/	0.00
	R0990-W2/	0.00	R1010-W2/
R0980-W2/	0.00	R0850-W2/	0.00
	R0770-W2/	0.00	R0530-W4/
R0380-W3/	0.00	R0300-W2/	0.00
	R0290-W1/	0.00	R0655-W2/
R0140-W2/	0.00	R0120-W2/	0.00
	R0160-W1/	0.00	R0400-W1/
R0880-W2/	0.00	R1010-W1/	0.00
	R0490-W2/	0.00	R0050-W1.1/
R0050-W2.1/	0.00	R0060-W1.1/	0.00
	R0080-W1.1/	0.00	R0080-W2.1/
R0090-W1.1/	0.00	R0090-W2.1/	0.00
	R0090-W3.1/	0.00	R0090-W4.1/
R0100-W1.1/	0.00	R0100-W2.1/	0.00
	R0100-W3.1/	0.00	R0110-W2.1/
R0120-W1.1/	0.00	R0130-W2.1/	0.00
	R0150-W1.1/	0.00	R0150-W2.1/
R0170-W1.1/	0.00	R0170-W2.1/	0.00
	R0190-W1.1/	0.00	R0190-W2.1/
R0190-W3.1/	0.00	R0200-W1.1/	0.00
	R0200-W2.1/	0.00	R0220-W1.1/

R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00

R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-11.98	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	-1.55
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.00
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.02	R019-P1-W2/	0.00
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00
R-0001A-W1.1/	-1.78	R-0001A-W2/	-3.55
R0001C-W1.1/	0.00	R0001C-W2/	0.00
R0001C-W3/	0.00	R0001E-W1/	0.00
R0001F-W1.1/	0.00	R0001F-W2/	0.00
R0001F-W3/	0.00	R0001F-W4/	0.00
R0001F-W5/	0.00	R001G-W1/	0.00
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00
R000J-W2/	0.00	R000J-W3/	0.00
R000J-W4/	0.00	R000J-W5/	0.00
R000J-W6/	0.00	R000J-W7/	0.00
R0001J-W8/	0.00	R0001J-W9/	0.00
R0001J-W10/	0.00	R0001J-W11/	0.00
R0001J-W12/	0.00	R0001J-W13/	0.00
R0001J-W14/	0.00	R0001I-W1.1/	0.00
R001I-W2/	0.00	R0001I-W3/	0.00
R001I-W4/	0.00	R001I-W5/	0.00
R0001I-W7/	0.00	R0001I-W7.1/	0.00
R0001K-W1.1/	0.00	R0001K-W2/	0.00
R0001K-W3/	0.00	R0880-PUMP/	0.00

FREE#

1/	0.00	FREE# 2/	-0.00			
	FREE# 3/	-0.00	FREE# 4/	-0.00	FREE#	
5/	-0.00	FREE# 6/	0.07			
	FREE# 7/	-0.01	FREE# 8/	0.00	FREE#	
9/	0.00	FREE#10/	0.00			
	FREE#11/	0.00	FREE#12/	0.00		
FREE#13/	0.00	FREE#14/	-0.18			
	FREE#15/	-0.20	FREE#16/	1.52		
FREE#17/	0.00	FREE#18/	0.00			
	FREE#19/	0.00	FREE#20/	0.02		
FREE#21/	0.00	FREE#22/	0.01			
	FREE#23/	0.00	FREE#24/	0.00		
FREE#25/	0.00	FREE#26/	0.00			
	FREE#27/	0.00	FREE#28/	-1.55		
FREE#29/	0.00	FREE#30/	0.00			
	FREE#31/	0.00	FREE#32/	0.00		
FREE#33/	0.00	FREE#34/	0.00			
	FREE#35/	-0.00	FREE#36/	0.00		
FREE#37/	0.00	FREE#38/	0.00			
	FREE#39/	-11.98	FREE#40/	0.00		
FREE#41/	0.00	FREE#42/	0.00			
	FREE#43/	0.00	FREE#44/	0.00		
FREE#45/	0.00	FREE#46/	-5.33			
	FREE#47/	0.00	FREE#48/	0.00		
FREE#49/	0.00	FREE#50/	-2.00			
	FREE#51/	0.00	FREE#52/	0.00		

==> System inflows (file) at 83.33 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360
	/ 0.00E+00				
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00	N0550	/ 0.00E+00	N0640	/ 0.00E+00	N0660
	/ 0.00E+00				
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00	N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885
	/ 0.00E+00				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940
	/ 0.00E+00				

N1000	/ 0.00E+00 N0945	/ 0.00E+00 N0980	/
0.00E+00 N0850	/ 0.00E+00 N0890	/ 0.00E+00 N0930	/
/ 0.00E+00			
N0920	/ 0.00E+00 N0950	/ 0.00E+00 N0830	/
0.00E+00 N0970	/ 0.00E+00 N-0001K	/ 0.00E+00 N0870	/
/ 0.00E+00			
N0790	/ 0.00E+00 N0001-I	/ 0.00E+00 N0915	/
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880	/
/ 0.00E+00			
N0810	/ 0.00E+00 N0740	/ 0.00E+00 N0742	/
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730	/
/ 0.00E+00			
N0570	/ 0.00E+00 N0560	/ 0.00E+00 N0515	/
0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350	/
/ 0.00E+00			
N0330	/ 0.00E+00 N0325	/ 0.00E+00 N0180	/
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 0.00E+00 N0100	/
/ 0.00E+00			
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050	/
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	/
/ 0.00E+00			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140	/
/ 0.00E+00			
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470	/
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490	/
/ 0.00E+00			
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655	/
0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270	/
/ 0.00E+00			
N0260	/ 0.00E+00 N0250	/ 0.00E+00 N0240	/
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003	/
/ 0.00E+00			
N-004	/ 0.00E+00 N-001	/ 0.00E+00 N-006	/
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009	/
/ 0.00E+00			
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010	/
0.00E+00 N-014	/ 0.00E+00 N-012	/ 0.00E+00 N-013	/
/ 0.00E+00			
N-015	/ 0.00E+00 N2002	/ 0.00E+00 N-020	/
0.00E+00 N-022	/ 0.00E+00 N-026	/ 0.00E+00 N-027	/
/ 0.00E+00			
N-028	/ 0.00E+00 N-024	/ 0.00E+00 N-029	/
0.00E+00 N-030	/ 0.00E+00 N-023	/ 0.00E+00 N-031	/
/ 0.00E+00			
N-025	/ 0.00E+00 N-041	/ 0.00E+00 N-019	/
0.00E+00 N-021	/ 0.00E+00 N-043	/ 0.00E+00 N-042	/
/ 0.00E+00			
N-040	/ 0.00E+00 N2090	/ 0.00E+00 N-0001A	/
0.00E+00 N-0001-E	/ 0.00E+00 N-0001-F	/ 0.00E+00 N-0001-G	/

/ 0.00E+00
 N0001-J / 0.00E+00

Cycle 5000 Time 83 Hrs - 20.00 Min

Junction	Depth	Elevation	====>	"*"	Junction is Surcharged.
N0335/	0.32 /	0.32		N0550/	1.84 / 0.51
N0690/	1.69 /	2.31		N0780/	4.59 / 0.20
N0640/	4.34 /	1.56		N0800/	0.49 / 3.84
N0830/	2.35 /	0.30		N0520/	3.14 / 0.31
N0790/	3.46 /	0.48		N0450/	1.62 / 0.32
N0870/	3.40 /	0.48		N0960/	0.00 / 1.90
N0510/	1.33 /	-0.10		N0970/	1.61 / 0.40
N0390/	2.50 /	0.80		N0560/	3.33 / 0.51
N0350/	3.01 /	0.32		N0990/	0.00 / 1.57
N0770/	3.53 /	0.48		N1030/	1.55 / 0.50
N0720/	1.23 /	0.58		N0930/	4.95 / 1.38
N0920/	2.05 /	0.48		N0430/	0.45 / 0.32
N0950/	0.90 /	0.48		N0220/	0.83 / 2.01
N0915/	6.48 /	0.48		N0130/	0.01 / -0.59
N0885/	7.39 /	0.48		N0120/	0.74 / 0.50
N0810/	2.21 /	0.36		N0210/	0.54 / -0.18
N0570/	3.18 /	0.51		N0240/	1.74 / 3.18
N1000/	1.76 /	0.40		N0270/	1.43 / 3.00
N1020/	1.60 /	0.60		N0370/	0.00 / 0.98
N0890/	2.99 /	1.45		N0490/	1.34 / 0.08
N0850/	0.00 /	1.46		N0660/	1.70 / 0.86
N0980/	0.08 /	1.70		N0940/	1.41 / 0.40
N1010/	0.58 /	1.62			
N0500/	1.99 /	4.24			
N0230/	0.00 /	3.31			
N0200/	2.19 /	0.58			
N0190/	1.54 /	0.58			
N0100/	0.22 /	0.68			
N0090/	1.27 /	3.76			
N0110/	0.25 /	1.02			
N0170/	0.53 /	-0.18			
N0260/	2.24 /	2.01			
N0250/	0.88 /	3.18			
N0140/	3.27 /	1.37			
N0150/	0.00 /	1.44			
N0290/	0.22 /	1.23			
N0180/	2.83 /	1.37			
N0285/	0.00 /	2.00			
N0420/	0.42 /	3.50			
N0410/	2.69 /	0.08			
N0380/	0.74 /	0.74			
N0740/	1.72 /	0.48			
N0730/	2.58 /	0.48			
N0530/	0.00 /	1.66			

N0060/	0.62 /	-0.67	N0050/	2.86 /	2.00
N0325/	4.69 /	0.32			
N0160/	2.59 /	0.50	N0470/	1.64 /	3.45
N0540/	0.16 /	1.51			
N0650/	1.99 /	1.50	N0400/	3.22 /	0.32
N0360/	1.50 /	0.32			
N0480/	1.43 /	3.69	N0080/	0.32 /	0.80
N0310/	2.08 /	0.49			
N0300/	4.17 /	0.32	N0460/	2.46 /	0.31
N0440/	1.69 /	0.32			
N0330/	3.75 /	0.32	N0655/	2.92 /	0.01
N0375/	0.74 /	0.74			
N0385/	1.17 /	0.08	N0275/	0.09 /	2.39
N0280/	0.12 /	2.12			
N0202/	4.15 /	0.58	N0340/	2.11 /	0.32
N0515/	1.71 /	0.51			
N-001/	1.22 /	1.45	N-002/	0.46 /	3.46
N-003/	0.00 /	2.56			
N-004/	0.00 /	2.88	N-005/	0.58 /	1.45
N-008/	1.49 /	1.45			
N-010/	1.74 /	1.45	N-013/	2.61 /	1.45
N-015/	2.64 /	1.45			
N-006/	0.00 /	2.66	N-007/	0.00 /	2.46
N-009/	0.00 /	2.68			
N-011/	0.00 /	2.04	N-014/	0.06 /	1.61
N-012/	0.00 /	1.48			
N-025/	2.70 /	1.46	N-023/	1.01 /	1.46
N-021/	1.93 /	1.46			
N-019/	1.97 /	1.75	N-041/	0.97 /	1.75
N-020/	0.08 /	1.46			
N-022/	0.50 /	1.46	N-024/	1.73 /	1.46
N-029/	2.44 /	1.46			
N-026/	0.45 /	1.46	N-027/	1.79 /	1.46
N-028/	1.77 /	1.46			
N-030/	0.00 /	-0.07	N-043/	0.56 /	-0.60
N-042/	0.03 /	-0.60			
N-031/	0.45 /	-0.40	N-040/	1.31 /	-0.17
N0620/	0.00 /	-0.60			
N0900/	3.48 /	0.48	N-009mh/	2.41 /	2.41
N0205/	4.08 /	0.58			
N0386/	1.17 /	0.08	N0388/	1.17 /	0.08
N0775/	0.85 /	0.20			
N2040/	1.21 /	0.11	N2380/	1.89 /	0.08
N0155/	0.66 /	0.52			
N0945/	0.96 /	0.15	N2002/	3.25 /	1.45
N2090/	1.32 /	-0.57			
N0742/	0.99 /	0.48	N0910/	6.48 /	0.48
N0880/	7.39 /	0.48			
N9004/	4.20 /	1.46	N9004-B/	4.25 /	1.46
N9004-C/	4.00 /	1.46			

N9004-D/	4.14 /	1.46	N9004-F/	2.63 /	1.46
N9001-B/	2.59 /	0.50	N9001-F/	1.40 /	0.50
N9001-D/	1.40 /	0.50	N9005/	0.50 /	0.50
N9000/	2.49 /	0.50	N9004-J/	2.79 /	1.46
N9003/	0.50 /	0.50	N2370/	1.64 /	0.08
N9005-E/	0.50 /	0.50	N9000-E/	2.49 /	0.50
N9005-G/	0.50 /	0.50	N9001-G/	1.40 /	0.50
N9004-G/	2.55 /	1.46	N9001-K/	0.68 /	0.50
N9002/	1.81 /	0.50	N9003-A/	0.50 /	0.50
N9000-B/	2.49 /	0.50	N9003-D/	0.50 /	0.50
N9000-C/	2.49 /	0.50	N9003-G/	0.50 /	0.50
N9000-F/	2.49 /	0.50	N9003-H/	2.63 /	1.46
N9001-E/	2.59 /	0.50	N9005-A/	0.50 /	0.50
N9001-H/	1.40 /	0.50	N9005-D/	0.50 /	0.50
N9001-J/	0.68 /	0.50	N9000-D/	2.75 /	0.50
N9002-A/	1.81 /	0.50	N0001-C/	0.00 /	2.15
N9002-B/	1.81 /	0.50	N-0001-F/	0.00 /	3.50
N9003-B/	0.50 /	0.50	N-0001F-OF-B/	0.00 /	3.13
N9003-C/	0.50 /	0.50	N9005-J/	0.50 /	0.50
N9003-E/	0.50 /	0.50	N-0001K/	0.01 /	2.04
N9003-F/	0.50 /	0.50			
N9004-A/	4.20 /	1.46			
N9004-E/	4.14 /	1.46			
N9004-I/	2.63 /	1.46			
N9004-K/	2.79 /	1.46			
N9005-B/	0.50 /	0.50			
N9005-C/	0.50 /	0.50			
N9005-F/	0.50 /	0.50			
N9005-H/	0.50 /	0.50			
N-0001A/	8.53 /	0.53			
N-0001B/	0.13 /	-0.37			
N-0001-E/	0.02 /	4.82			
N-0001E-OF/	0.00 /	3.13			
N-0001-G/	0.02 /	4.02			
N-0001F-OF-A/	0.00 /	3.13			
N9004-L/	4.20 /	1.46			
N0001-J/	0.00 /	1.19			
N9005-K/	0.50 /	0.50			
N0001-I/	0.06 /	1.19			
N0140-A/	3.47 /	1.37			

	Conduit/	FLOW	====>	"*"	Conduit uses the normal flow option.
	R0870/	0.00		R0770-P2/	-0.01
R0900/	0.00		R0370/	0.00*	
	R0280/	0.00		R0202/	0.00
RN-002/	0.00		RN-003/	0.00	
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00		RN-009MH/	0.00	
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.00*		RN-023/	-0.06	

RN-020/	RN-021/ -0.00	-0.01	RN-041/ -0.02	0.01
RN-027/	RN-024/ 0.16	-0.68	RN-022/ RN-026/ -0.17	-0.00
R0655-P3/	R0742-P3/ 0.00	0.00	RN-028/ R0655-P2/ -0.00	0.00
RN-025-P1/	R0120-P2/ -0.65	0.01	R0655-P4/ R1010-P2/ 0.67	0.00
R0388/	R0155-P1/ 0.00	1.23	RN-025-P2/ R0386/ 0.00	-0.00
R-0001B-P1/	R0375/ 0.00	-0.00	R0385/ R0335/ 0.00	-0.00
R0290-P1/	R0540-P2/ 0.00	0.00	R0540-P1/ R0540-P3/ 0.00	0.00
R0220.1/	R0250.1/ -0.00	0.12	R0285.1/ R0230.1/ 0.00	0.00*
R0180-P1/	R0190.1/ 0.02	0.00	R0200.1/ R0170.1/ -0.00	-0.00
R0150-P1/	R0140.1/ 0.00	0.00	R0180-P2/ R0140-P3.1/ 0.00	0.00
R0150-P5/	R0150-P3/ 0.00	0.00	R0150-P2/ R0150-P4/ -0.00	0.00
R0100-P1/	R0130-P1/ 0.00	0.00	R0110.1/ R0130-P2/ 0.00	0.00
R0430-P2/	R0310.1/ 0.00	1.07	R0100-P2/ R0430-P1/ 0.00	0.00
R0340-P2/	R0430-P4/ 0.00	0.00	R0430-P3/ R0340-P1/ 0.00	-0.00
R0330-P2/	R0350-P2/ -0.00	0.00	R0350-P1/ R0330-P1/ 0.00	-0.00
P0360-P2/	R0450-P2/ -0.00	0.00	R0450-P1/ P0360-P1/ -0.01	-0.00
R0560-P2/	R0550-P2/ -0.09	-0.01	R0550-P1/ R0560-P1/ -0.10	-0.06
R0730.1/	R0780.1/ -0.00	-0.00	R0560-P3/ R0740.1/ 0.00	0.00
R0960.1/	R0950.1/ 0.00	-0.00	R0880.1/ R0920.1/ 0.00	0.00
R1010-P5/	R1010-P3/ 0.00	0.00	R0990.1/ R1010-P4/ 0.00	0.00
R0850-P2/	R0980-P2.1/ 0.00	0.00	R0980-P1.1/ R0850-P1/ 0.00	0.00
R0570-P3/	R0570-P1/ 0.04	0.03	R0850-P3/ R0570-P2/ -0.00	0.04
R0790-P1/	R0770-P3/ -0.02	-0.01	R0770-P1.1/ R0770-P4/ 0.02	0.01
R0530-P3/	R0530-P1/ 0.00	0.00	R0790-P2/ R0530-P2/ 0.01	0.00*
R0380-P2/	R0910-P2/ 0.00	0.01	R0910-P1/ R0380-P1/ 0.00	0.00
			R0300-P1/ 0.00	

RN-004-P1/	R0300-P2/	0.00	RN-004-P2/	R0290-P2.1/	0.00
	0.00		0.00		
RN-001-P2/	RN-004-P3/	0.00	RN-001-P1/		-0.05
	-0.03				
RN-005-P3/	RN-005-P1/	-0.05	RN-001-P3/		-0.05
	0.05				
RN-010-P1/	RN-008-P2/	-0.09	RN-008-P1.1/		0.12
	0.15				
RN-013-P2/	RN-010-P3/	-0.14	RN-010-P2/		0.14
	-0.26				
RN-015-P3/	RN-015-P1/	0.97	RN-013-P1/		-0.26
	-1.44				
R0742-P2/	RN-029-P2/	-0.59	RN-013-P3/		-0.26
	0.00*				
R0140-P2.1/	R0490-P8/	-0.00	RN-029-P1/		0.36
	0.03				
R0325-P1.1/	R0120-P1.1/	-0.02	R0742-P1/		0.00*
	0.00				
R-0410-P4/	R0880-P2.1/	0.00	R0655-P1.1/		0.00
	-0.00				
R0410-P1/	R-0410-P6/	-0.00	R0490-P7/		-0.00
	0.00				
R0490-P1.1/	R0410-P3/	0.00	R0140-P1.1/		0.03
	-0.00				
R0490-P6/	R0490-P4/	0.00	R0160-P1.1/		3.59
	-0.00				
R0890-ORF-5/	R0890-ORF-2/	-0.78	R0400-P1.1/		0.00
	-0.78				
R0890-ORF-4/	R0890-ORF-3/	-0.78	R1010-P1.1/		0.00
	-0.78				
R0285-W2/	N0140-A-W1.1/	0.05	R-0410-P5/		-0.00
	0.00				
R0200-W3/	R0540-W3/	0.00	R-0410-P7/		0.01
	0.00				
R0140-W1/	R0230-W1/	0.00	R0410-P2/		0.00
	0.00				
R0100-W4/	R0170-W3/	0.00	498.1/		0.00
	0.00				
R0350-W1/	R0110-W1/	0.00	R0490-P3/		0.00
	0.00				
R0560-W1/	R0430-W3/	0.00	R0490-P5/		-0.00
	0.00				
R0950-W1/	R0360-W1/	0.00	R0890-ORF-2/		-0.78
	0.00				
R0980-W2/	R0740-W3/	0.00	R0890-ORF-3/		-0.78
	0.00				
R0380-W3/	R0990-W2/	0.00	N0140-A-W1.1/		0.05
	0.00				
R0140-W2/	R0770-W2/	0.00	R0290-P5/		0.00
	0.00				
R0880-W2/	R0290-W1/	0.00	R0250-W1/		0.00
	0.00				
	R0160-W1/	0.00	R0220-W2/		0.00
	0.00				
			R0190-W4/		0.00
			R0180-W1/		0.00
			R0150-W3/		0.00
			R0130-W1/		0.00
			R0310-W5.1/		0.00
			R0340-W3/		0.00
			R0330-W1/		0.00
			R0550-W2/		0.00
			R0780-W1/		0.00
			R0870-W1/		0.00
			R0960-W2/		0.00
			R1010-W2/		0.00
			R0850-W2/		0.00
			R0530-W4/		0.00
			R0300-W2/		0.00
			R0655-W2/		0.00
			R0120-W2/		0.00
			R0400-W1/		0.00
			R1010-W1/		0.00

R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00
R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00

R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-18.56	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	0.43
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.00
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.01	R019-P1-W2/	0.00
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00
R-0001A-W1.1/	4.42	R-0001A-W2/	6.23
R0001C-W1.1/	0.00	R0001C-W2/	0.00
R0001C-W3/	0.00	R0001E-W1/	0.00
R0001F-W1.1/	0.00	R0001F-W2/	0.00
R0001F-W3/	0.00	R0001F-W4/	0.00
R0001F-W5/	0.00	R001G-W1/	0.00

R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	-0.00	
FREE# 3/	-0.00	FREE# 4/	-0.00	FREE#
5/	0.00	FREE# 6/	0.05	
FREE# 7/	-0.02	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	-0.65	
FREE#15/	-0.67	FREE#16/	1.23	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	-3.59	
FREE#21/	0.00	FREE#22/	0.01	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	0.43	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	
FREE#35/	-0.00	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00	
FREE#39/	-18.56	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00	
FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	10.65	
FREE#47/	0.00	FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	-3.12	
FREE#51/	0.00	FREE#52/	0.00	

==> System inflows (file) at 91.67 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300

/ 0.00E+00			
N0340	/ 0.00E+00 N0390	/ 0.00E+00 N0001-C	/
0.00E+00 N0460	/ 0.00E+00 N0440	/ 0.00E+00 N0360	
/ 0.00E+00			
N2040	/ 0.00E+00 N0450	/ 0.00E+00 N0400	/
0.00E+00 N0550	/ 0.00E+00 N0640	/ 0.00E+00 N0660	
/ 0.00E+00			
N0780	/ 0.00E+00 N0775	/ 0.00E+00 N0690	/
0.00E+00 N0720	/ 0.00E+00 N0770	/ 0.00E+00 N0885	
/ 0.00E+00			
N0960	/ 0.00E+00 N0990	/ 0.00E+00 N1010	/
0.00E+00 N1030	/ 0.00E+00 N1020	/ 0.00E+00 N0940	
/ 0.00E+00			
N1000	/ 0.00E+00 N0945	/ 0.00E+00 N0980	/
0.00E+00 N0850	/ 0.00E+00 N0890	/ 0.00E+00 N0930	
/ 0.00E+00			
N0920	/ 0.00E+00 N0950	/ 0.00E+00 N0830	/
0.00E+00 N0970	/ 0.00E+00 N-0001K	/ 0.00E+00 N0870	
/ 0.00E+00			
N0790	/ 0.00E+00 N0001-I	/ 0.00E+00 N0915	/
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880	
/ 0.00E+00			
N0810	/ 0.00E+00 N0740	/ 0.00E+00 N0742	/
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730	
/ 0.00E+00			
N0570	/ 0.00E+00 N0560	/ 0.00E+00 N0515	/
0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350	
/ 0.00E+00			
N0330	/ 7.38E-05 N0325	/ 0.00E+00 N0180	/
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 0.00E+00 N0100	
/ 0.00E+00			
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050	/
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	
/ 0.00E+00			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140	
/ 0.00E+00			
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470	/
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490	
/ 0.00E+00			
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655	/
0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270	
/ 0.00E+00			
N0260	/ 0.00E+00 N0250	/ 0.00E+00 N0240	/
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003	
/ 0.00E+00			
N-004	/ 0.00E+00 N-001	/ 0.00E+00 N-006	/
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009	
/ 0.00E+00			
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010	/

0.00E+00 N-014 / 0.00E+00 N-012 / 0.00E+00 N-013
 / 0.00E+00
 N-015 / 0.00E+00 N2002 / 0.00E+00 N-020 /
 0.00E+00 N-022 / 0.00E+00 N-026 / 0.00E+00 N-027 /
 / 0.00E+00
 N-028 / 0.00E+00 N-024 / 0.00E+00 N-029 /
 0.00E+00 N-030 / 0.00E+00 N-023 / 0.00E+00 N-031 /
 / 0.00E+00
 N-025 / 0.00E+00 N-041 / 0.00E+00 N-019 /
 0.00E+00 N-021 / 0.00E+00 N-042 / 0.00E+00 N-042 /
 / 0.00E+00
 N-040 / 0.00E+00 N2090 / 0.00E+00 N-0001A /
 0.00E+00 N-0001-E / 1.23E-09 N-0001-F / 0.00E+00 N-0001-G /
 / 5.21E-07
 N0001-J / 0.00E+00

Cycle 5500 Time 91 Hrs - 40.00 Min

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 0.32 / 0.32		N0550/ 1.83 / 0.50
N0690/ 1.69 / 2.31		
N0640/ 4.35 / 1.57		N0780/ 4.59 / 0.20
N0830/ 2.35 / 0.30		
N0790/ 3.46 / 0.48		N0800/ 0.49 / 3.84
N0870/ 3.40 / 0.48		
N0510/ 1.33 / -0.10		N0520/ 3.14 / 0.31
N0390/ 2.50 / 0.80		
N0350/ 3.01 / 0.32		N0450/ 1.62 / 0.32
N0770/ 3.53 / 0.48		
N0720/ 1.23 / 0.58		N0960/ 0.00 / 1.90
N0920/ 2.05 / 0.48		
N0950/ 0.90 / 0.48		N0970/ 1.61 / 0.40
N0915/ 6.48 / 0.48		
N0885/ 7.39 / 0.48		N0560/ 3.32 / 0.50
N0810/ 2.21 / 0.36		
N0570/ 3.17 / 0.50		N0990/ 0.00 / 1.57
N1000/ 1.76 / 0.40		
N1020/ 1.60 / 0.60		N1030/ 1.55 / 0.50
N0890/ 2.91 / 1.37		
N0850/ 0.00 / 1.46		N0930/ 4.95 / 1.38
N0980/ 0.08 / 1.70		
N1010/ 0.58 / 1.62		N0430/ 0.45 / 0.32
N0500/ 1.99 / 4.24		
N0230/ 0.00 / 3.31		N0220/ 0.83 / 2.01
N0200/ 2.19 / 0.58		
N0190/ 1.54 / 0.58		N0130/ 0.01 / -0.59
N0100/ 0.22 / 0.68		
N0090/ 1.27 / 3.76		N0120/ 0.60 / 0.36
N0110/ 0.27 / 1.04		
N0170/ 0.53 / -0.18		N0210/ 0.54 / -0.18

N0260/	2.24	/	2.01					
	N0250/	0.87	/	3.17	N0240/	1.75	/	3.19
N0140/	3.26	/	1.36					
	N0150/	0.00	/	1.44	N0270/	1.43	/	3.00
N0290/	0.22	/	1.23					
	N0180/	2.82	/	1.36	N0370/	0.00	/	0.98
N0285/	0.00	/	2.00					
	N0420/	0.42	/	3.50	N0490/	1.34	/	0.08
N0410/	2.69	/	0.08					
	N0380/	0.74	/	0.74	N0660/	1.70	/	0.86
N0740/	1.72	/	0.48					
	N0730/	2.58	/	0.48	N0940/	1.41	/	0.40
N0530/	0.00	/	1.66					
	N0060/	0.62	/	-0.67	N0050/	2.86	/	2.00
N0325/	4.69	/	0.32					
	N0160/	2.46	/	0.37	N0470/	1.64	/	3.45
N0540/	0.16	/	1.51					
	N0650/	1.99	/	1.50	N0400/	3.22	/	0.32
N0360/	1.50	/	0.32					
	N0480/	1.43	/	3.69	N0080/	0.32	/	0.80
N0310/	1.96	/	0.37					
	N0300/	4.17	/	0.32	N0460/	2.46	/	0.31
N0440/	1.69	/	0.32					
	N0330/	3.75	/	0.32	N0655/	2.92	/	0.01
N0375/	0.74	/	0.74					
	N0385/	1.17	/	0.08	N0275/	0.09	/	2.39
N0280/	0.12	/	2.12					
	N0202/	4.15	/	0.58	N0340/	2.11	/	0.32
N0515/	1.70	/	0.50					
	N-001/	1.13	/	1.36	N-002/	0.46	/	3.46
N-003/	0.00	/	2.56					
	N-004/	0.00	/	2.88	N-005/	0.47	/	1.34
N-008/	1.38	/	1.34					
	N-010/	1.63	/	1.34	N-013/	2.50	/	1.34
N-015/	2.53	/	1.34					
	N-006/	0.00	/	2.66	N-007/	0.00	/	2.46
N-009/	0.00	/	2.68					
	N-011/	0.00	/	2.04	N-014/	0.06	/	1.61
N-012/	0.00	/	1.48					
	N-025/	2.56	/	1.32	N-023/	0.87	/	1.32
N-021/	1.79	/	1.32					
	N-019/	1.96	/	1.74	N-041/	0.96	/	1.74
N-020/	0.00	/	1.38					
	N-022/	0.36	/	1.32	N-024/	1.59	/	1.32
N-029/	2.30	/	1.32					
	N-026/	0.31	/	1.32	N-027/	1.65	/	1.32
N-028/	1.63	/	1.32					
	N-030/	0.00	/	-0.07	N-043/	0.56	/	-0.60
N-042/	0.03	/	-0.60					
	N-031/	0.45	/	-0.40	N-040/	1.31	/	-0.17

N0620/	0.00	/	-0.60				
N0900/	3.48	/	0.48	N-009mh/	2.41	/	2.41
N0205/	4.08	/	0.58				
N0386/	1.17	/	0.08	N0388/	1.17	/	0.08
N0775/	0.85	/	0.20				
N2040/	1.21	/	0.11	N2380/	1.89	/	0.08
N0155/	0.44	/	0.30				
N0945/	0.96	/	0.15	N2002/	3.14	/	1.34
N2090/	1.32	/	-0.57				
N0742/	0.99	/	0.48	N0910/	6.48	/	0.48
N0880/	7.39	/	0.48				
N9004/	4.06	/	1.32	N9004-B/	4.11	/	1.32
N9004-C/	3.86	/	1.32				
N9004-D/	4.00	/	1.32	N9004-F/	2.49	/	1.32
N9001-B/	2.45	/	0.36				
N9001-D/	1.26	/	0.36	N9001-F/	1.26	/	0.36
N9000/	2.35	/	0.36				
N9003/	0.36	/	0.36	N9005/	0.36	/	0.36
N9005-E/	0.36	/	0.36				
N9005-G/	0.36	/	0.36	N9004-J/	2.65	/	1.32
N9004-G/	2.41	/	1.32				
N9002/	1.67	/	0.36	N2370/	1.64	/	0.08
N9000-B/	2.35	/	0.36				
N9000-C/	2.35	/	0.36	N9000-E/	2.35	/	0.36
N9000-F/	2.35	/	0.36				
N9001-E/	2.45	/	0.36	N9001-G/	1.26	/	0.36
N9001-H/	1.26	/	0.36				
N9001-J/	0.53	/	0.36	N9001-K/	0.53	/	0.36
N9002-A/	1.67	/	0.36				
N9002-B/	1.67	/	0.36	N9003-A/	0.36	/	0.36
N9003-B/	0.36	/	0.36				
N9003-C/	0.36	/	0.36	N9003-D/	0.36	/	0.36
N9003-E/	0.36	/	0.36				
N9003-F/	0.36	/	0.36	N9003-G/	0.36	/	0.36
N9004-A/	4.06	/	1.32				
N9004-E/	4.00	/	1.32	N9004-H/	2.49	/	1.32
N9004-I/	2.49	/	1.32				
N9004-K/	2.65	/	1.32	N9005-A/	0.36	/	0.36
N9005-B/	0.36	/	0.36				
N9005-C/	0.36	/	0.36	N9005-D/	0.36	/	0.36
N9005-F/	0.36	/	0.36				
N9005-H/	0.36	/	0.36	N9000-D/	2.61	/	0.36
N-0001A/	8.50	/	0.50				
N-0001B/	0.13	/	-0.37	N0001-C/	0.00	/	2.15
N-0001-E/	0.02	/	4.82				
N-0001E-OF/	0.00	/	3.13	N-0001-F/	0.00	/	3.50
N-0001-G/	0.02	/	4.02				
N-0001F-OF-A/	0.00	/	3.13	N-0001F-OF-B/	0.00	/	3.13
N9004-L/	4.06	/	1.32				
N0001-J/	0.00	/	1.19	N9005-J/	0.36	/	0.36

N9005-K/ 0.36 / 0.36
 N0001-I/ 0.06 / 1.19
 N0140-A/ 3.46 / 1.36
 N-0001K/ 0.01 / 2.04

	Conduit/	FLOW	====> "*" Conduit uses the normal flow option.		
	R0870/	0.00		R0770-P2/	-0.01
R0900/	0.00			R0370/	0.00*
	R0280/	0.00		R0202/	0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.00*			RN-023/	0.07
	RN-021/	-0.01		RN-041/	0.01
RN-020/	0.00			RN-022/	0.01
	RN-024/	0.57		RN-026/	0.00
RN-027/	-0.13			RN-028/	0.14
	R0742-P3/	-0.00		R0655-P2/	-0.00
R0655-P3/	-0.00			R0655-P4/	0.00
	R0120-P2/	0.01		R1010-P2/	0.00
RN-025-P1/	0.62			RN-025-P2/	-0.55
	R0155-P1/	2.98		R0386/	0.00
R0388/	-0.00			R0385/	-0.00
	R0375/	-0.00		R0335/	0.00
R-0001B-P1/	0.00			R0540-P1/	0.00
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	0.00			R0285.1/	0.00
	R0250.1/	0.12		R0230.1/	0.00*
R0220.1/	0.00			R0200.1/	-0.00
	R0190.1/	-0.00		R0170.1/	0.00
R0180-P1/	0.01			R0180-P2/	0.01
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00			R0150-P2/	0.00
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00			R0110.1/	-0.00
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00			R0100-P2/	0.00
	R0310.1/	-1.24		R0430-P1/	0.00
R0430-P2/	0.00			R0430-P3/	0.00
	R0430-P4/	0.00		R0340-P1/	-0.00
R0340-P2/	0.00			R0350-P1/	0.00
	R0350-P2/	0.00		R0330-P1/	-0.00
R0330-P2/	-0.00			R0450-P1/	0.00
	R0450-P2/	0.00		P0360-P1/	0.00
P0360-P2/	0.00			R0550-P1/	-0.10
	R0550-P2/	-0.09		R0560-P1/	-0.50
R0560-P2/	-0.60			R0560-P3/	-0.61
	R0780.1/	0.00		R0740.1/	-0.00
R0730.1/	-0.00			R0880.1/	0.00
	R0950.1/	0.00		R0920.1/	0.00

R0960.1/	0.00	R0990.1/	0.00		
	R1010-P3/	0.00	R1010-P4/	0.00	
R1010-P5/	0.00	R0980-P1.1/	0.00		
	R0980-P2.1/	0.00	R0850-P1/	0.00	
R0850-P2/	0.00	R0850-P3/	0.00		
	R0570-P1/	0.24	R0570-P2/	0.25	
R0570-P3/	0.24	R0770-P1.1/	0.00		
	R0770-P3/	-0.01	R0770-P4/	0.01	
R0790-P1/	-0.02	R0790-P2/	0.02		
	R0530-P1/	0.00	R0530-P2/	0.00*	
R0530-P3/	0.00	R0910-P1/	0.01		
	R0910-P2/	0.01	R0380-P1/	0.00	
R0380-P2/	0.00	R0300-P1/	0.00		
	R0300-P2/	0.00	R0290-P2.1/	0.00	
RN-004-P1/	0.00	RN-004-P2/	0.00		
	RN-004-P3/	0.00	RN-001-P1/	0.05	
RN-001-P2/	0.00	RN-001-P3/	0.06		
	RN-005-P1/	0.04	RN-005-P2/	0.07	
RN-005-P3/	-0.05	RN-008-P1.1/	-0.07		
	RN-008-P2/	0.10	RN-008-P3/	0.10	
RN-010-P1/	-0.14	RN-010-P2/	-0.14		
	RN-010-P3/	0.14	RN-013-P1/	0.28	
RN-013-P2/	0.28	RN-013-P3/	0.28		
	RN-015-P1/	-0.99	RN-015-P2/	1.56	
RN-015-P3/	2.09	RN-029-P1/	-0.36		
	RN-029-P2/	0.45	R0742-P1/	0.00*	
R0742-P2/	0.00*	R0655-P1.1/	-0.01		
	R0490-P8/	0.00	R0490-P7/	0.00	
R0140-P2.1/	0.02	R0140-P1.1/	0.02		
	R0120-P1.1/	-0.01	R0160-P1.1/	-4.14	
R0325-P1.1/	0.00	R0400-P1.1/	0.00		
	R0880-P2.1/	0.00	R1010-P1.1/	0.00	
R-0410-P4/	-0.00	R-0410-P5/	-0.00		
	R-0410-P6/	-0.00	R-0410-P7/	0.01	
R0410-P1/	0.00	R0410-P2/	0.00		
	R0410-P3/	0.00	498.1/	-0.00	
R0490-P1.1/	0.00	R0490-P3/	0.00		
	R0490-P4/	0.00	R0490-P5/	-0.00	
R0490-P6/	-0.00	R0890-ORF-2/	1.39		
	R0890-ORF-5/	1.39	R0890ORF-3/	1.39	
R0890-ORF-4/	1.39	N0140-A-W1.1/	0.04		
	R0540-W3/	0.00	R0290-P5/	0.00	
R0285-W2/	0.00	R0250-W1/	0.00		
	R0230-W1/	0.00	R0220-W2/	0.00	
R0200-W3/	0.00	R0190-W4/	0.00		
	R0170-W3/	0.00	R0180-W1/	0.00	
R0140-W1/	0.00	R0150-W3/	0.00		
	R0110-W1/	0.00	R0130-W1/	0.00	
R0100-W4/	0.00	R0310-W5.1/	0.00		
	R0430-W3/	0.00	R0340-W3/	0.00	

R0350-W1/	0.00	R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00	
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00	
	R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00	
	R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00	
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00	
	R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00	
	R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00	
	R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00	
	R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00	
	R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00	
	R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00	
	R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00	
	R0440-W1.1/	0.00	R0450-W1.1/	0.00

R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	23.12	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	3.08

R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	0.00	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.01	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	12.95	R-0001A-W2/	7.70	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00	R0001F-W2/	0.00	
R0001F-W3/	0.00	R0001F-W4/	0.00	
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.00	
FREE# 3/	0.00	FREE# 4/	0.00	FREE#
5/	-0.00	FREE# 6/	0.04	
FREE# 7/	-0.01	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	0.62	
FREE#15/	0.55	FREE#16/	2.98	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	4.14	
FREE#21/	0.00	FREE#22/	0.01	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	3.08	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	
FREE#35/	0.01	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00	
FREE#39/	23.12	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00	
FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	20.65	
FREE#47/	0.00	FREE#48/	0.00	

FREE#49/	0.00	FREE#50/	5.56
FREE#51/	0.00	FREE#52/	0.00

==> System inflows (file) at 100.00 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
2.34E-07 N0290	/ 0.00E+00	N0370	/ 8.90E-10	N0275	/
/ 0.00E+00					
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00 N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388	/
/ 0.00E+00					
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00 N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300	/
/ 0.00E+00					
N0340	/ 0.00E+00	N0390	/ 1.38E-04	N0001-C	/
0.00E+00 N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360	/
/ 0.00E+00					
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00 N0550	/ 0.00E+00	N0640	/ 0.00E+00	N0660	/
/ 0.00E+00					
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00 N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885	/
/ 0.00E+00					
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00 N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940	/
/ 0.00E+00					
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00 N0850	/ 0.00E+00	N0890	/ 0.00E+00	N0930	/
/ 0.00E+00					
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/
0.00E+00 N0970	/ 0.00E+00	N-0001K	/ 0.00E+00	N0870	/
/ 0.00E+00					
N0790	/ 0.00E+00	N0001-I	/ 0.00E+00	N0915	/
0.00E+00 N0900	/ 0.00E+00	N0910	/ 0.00E+00	N0880	/
/ 0.00E+00					
N0810	/ 0.00E+00	N0740	/ 0.00E+00	N0742	/
0.00E+00 N0800	/ 0.00E+00	N0620	/ 0.00E+00	N0730	/
/ 0.00E+00					
N0570	/ 0.00E+00	N0560	/ 0.00E+00	N0515	/
0.00E+00 N0510	/ 0.00E+00	N0520	/ 0.00E+00	N0350	/
/ 0.00E+00					
N0330	/ 7.90E-05	N0325	/ 0.00E+00	N0180	/
0.00E+00 N0090	/ 0.00E+00	N-0001B	/ 0.00E+00	N0100	/
/ 0.00E+00					
N0130	/ 0.00E+00	N0080	/ 0.00E+00	N0050	/
0.00E+00 N0170	/ 0.00E+00	N0205	/ 0.00E+00	N0210	/
/ 0.00E+00					
N0150	/ 0.00E+00	N0155	/ 0.00E+00	N0060	/
0.00E+00 N0120	/ 1.32E-10	N0110	/ 2.95E-10	N0140	/
/ 6.38E-07					

N0140-A	/ 0.00E+00	N0500	/ 0.00E+00	N0470	/
0.00E+00	N0540	/ 0.00E+00	N0650	/ 0.00E+00	N0490
	/ 0.00E+00				
N2380	/ 0.00E+00	N2370	/ 0.00E+00	N0655	/
0.00E+00	N0480	/ 0.00E+00	N0410	/ 0.00E+00	N0270
	/ 0.00E+00				
N0260	/ 0.00E+00	N0250	/ 0.00E+00	N0240	/
0.00E+00	N0200	/ 6.15E-09	N-002	/ 0.00E+00	N-003
	/ 0.00E+00				
N-004	/ 0.00E+00	N-001	/ 0.00E+00	N-006	/
0.00E+00	N-005	/ 0.00E+00	N-007	/ 0.00E+00	N-009
	/ 0.00E+00				
N-008	/ 0.00E+00	N-011	/ 0.00E+00	N-010	/
0.00E+00	N-014	/ 0.00E+00	N-012	/ 0.00E+00	N-013
	/ 0.00E+00				
N-015	/ 0.00E+00	N2002	/ 0.00E+00	N-020	/
0.00E+00	N-022	/ 0.00E+00	N-026	/ 0.00E+00	N-027
	/ 2.27E-11				
N-028	/ 0.00E+00	N-024	/ 0.00E+00	N-029	/
0.00E+00	N-030	/ 0.00E+00	N-023	/ 0.00E+00	N-031
	/ 0.00E+00				
N-025	/ 0.00E+00	N-041	/ 0.00E+00	N-019	/
0.00E+00	N-021	/ 0.00E+00	N-043	/ 0.00E+00	N-042
	/ 0.00E+00				
N-040	/ 0.00E+00	N2090	/ 0.00E+00	N-0001A	/
0.00E+00	N-0001-E	/ 1.05E-07	N-0001-F	/ 0.00E+00	N-0001-G
	/ 1.15E-05				
N0001-J	/ 0.00E+00				

Cycle 6000 Time 100 Hrs - 0.00 Min

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 0.32 / 0.32		N0550/ 1.79 / 0.46
N0690/ 1.69 / 2.31		N0780/ 4.59 / 0.20
N0640/ 4.35 / 1.57		N0800/ 0.49 / 3.84
N0830/ 2.35 / 0.30		N0520/ 3.14 / 0.31
N0790/ 3.46 / 0.48		N0450/ 1.62 / 0.32
N0870/ 3.40 / 0.48		N0960/ 0.00 / 1.90
N0510/ 1.33 / -0.10		N0970/ 1.61 / 0.40
N0390/ 2.50 / 0.80		N0560/ 3.28 / 0.46
N0350/ 3.01 / 0.32		N0990/ 0.00 / 1.57
N0770/ 3.53 / 0.48		
N0720/ 1.23 / 0.58		
N0920/ 2.05 / 0.48		
N0950/ 0.90 / 0.48		
N0915/ 6.48 / 0.48		
N0885/ 7.39 / 0.48		
N0810/ 2.21 / 0.36		
N0570/ 3.13 / 0.46		
N1000/ 1.76 / 0.40		

N1020/	1.60	/	0.60	N1030/	1.55	/	0.50
N0890/	2.81	/	1.27	N0930/	4.95	/	1.38
N0850/	0.00	/	1.46	N0430/	0.45	/	0.32
N0980/	0.08	/	1.70	N0220/	0.83	/	2.01
N1010/	0.58	/	1.62	N0130/	0.01	/	-0.59
N0500/	1.99	/	4.24	N0120/	0.56	/	0.32
N0230/	0.00	/	3.31	N0210/	0.54	/	-0.18
N0200/	2.19	/	0.58	N0240/	1.74	/	3.18
N0190/	1.54	/	0.58	N0270/	1.43	/	3.00
N0100/	0.22	/	0.68	N0370/	0.00	/	0.98
N0090/	1.27	/	3.76	N0490/	1.34	/	0.08
N0110/	0.27	/	1.04	N0660/	1.70	/	0.86
N0170/	0.53	/	-0.18	N0940/	1.41	/	0.40
N0260/	2.24	/	2.01	N0050/	2.86	/	2.00
N0250/	0.88	/	3.18	N0470/	1.64	/	3.45
N0140/	3.26	/	1.36	N0400/	3.22	/	0.32
N0150/	0.00	/	1.44	N0080/	0.32	/	0.80
N0290/	0.22	/	1.23	N0460/	2.46	/	0.31
N0180/	2.82	/	1.36	N0655/	2.92	/	0.01
N0285/	0.00	/	2.00	N0275/	0.09	/	2.39
N0420/	0.42	/	3.50	N0340/	2.11	/	0.32
N0410/	2.69	/	0.08	N-002/	0.46	/	3.46
N0380/	0.74	/	0.74	N-005/	0.41	/	1.28
N0740/	1.72	/	0.48	N-013/	2.44	/	1.28
N0730/	2.58	/	0.48	N-007/	0.00	/	2.46
N0530/	0.00	/	1.66				
N0060/	0.62	/	-0.67				
N0325/	4.69	/	0.32				
N0160/	2.41	/	0.32				
N0540/	0.16	/	1.51				
N0650/	1.99	/	1.50				
N0360/	1.50	/	0.32				
N0480/	1.43	/	3.69				
N0310/	1.91	/	0.32				
N0300/	4.17	/	0.32				
N0440/	1.69	/	0.32				
N0330/	3.75	/	0.32				
N0375/	0.74	/	0.74				
N0385/	1.17	/	0.08				
N0280/	0.12	/	2.12				
N0202/	4.15	/	0.58				
N0515/	1.66	/	0.46				
N-001/	1.04	/	1.27				
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88				
N-008/	1.32	/	1.28				
N-010/	1.57	/	1.28				
N-015/	2.47	/	1.28				
N-006/	0.00	/	2.66				
N-009/	0.00	/	2.68				

N-011/	0.00	/	2.04	N-014/	0.06	/	1.61
N-012/	0.00	/	1.48				
N-025/	2.52	/	1.28	N-023/	0.83	/	1.28
N-021/	1.75	/	1.28				
N-019/	1.96	/	1.74	N-041/	0.96	/	1.74
N-020/	0.00	/	1.38				
N-022/	0.32	/	1.28	N-024/	1.55	/	1.28
N-029/	2.26	/	1.28				
N-026/	0.27	/	1.28	N-027/	1.61	/	1.28
N-028/	1.59	/	1.28				
N-030/	0.00	/	-0.07	N-043/	0.56	/	-0.60
N-042/	0.03	/	-0.60				
N-031/	0.45	/	-0.40	N-040/	1.31	/	-0.17
N0620/	0.00	/	-0.60				
N0900/	3.48	/	0.48	N-009mh/	2.41	/	2.41
N0205/	4.08	/	0.58				
N0386/	1.17	/	0.08	N0388/	1.17	/	0.08
N0775/	0.85	/	0.20				
N2040/	1.21	/	0.11	N2380/	1.89	/	0.08
N0155/	0.48	/	0.34				
N0945/	0.96	/	0.15	N2002/	3.08	/	1.28
N2090/	1.32	/	-0.57				
N0742/	0.99	/	0.48	N0910/	6.48	/	0.48
N0880/	7.39	/	0.48				
N9004/	4.02	/	1.28	N9004-B/	4.07	/	1.28
N9004-C/	3.82	/	1.28				
N9004-D/	3.96	/	1.28	N9004-F/	2.45	/	1.28
N9001-B/	2.41	/	0.32				
N9001-D/	1.22	/	0.32	N9001-F/	1.22	/	0.32
N9000/	2.31	/	0.32				
N9003/	0.32	/	0.32	N9005/	0.32	/	0.32
N9005-E/	0.32	/	0.32				
N9005-G/	0.32	/	0.32	N9004-J/	2.61	/	1.28
N9004-G/	2.37	/	1.28				
N9002/	1.63	/	0.32	N2370/	1.64	/	0.08
N9000-B/	2.31	/	0.32				
N9000-C/	2.31	/	0.32	N9000-E/	2.31	/	0.32
N9000-F/	2.31	/	0.32				
N9001-E/	2.41	/	0.32	N9001-G/	1.22	/	0.32
N9001-H/	1.22	/	0.32				
N9001-J/	0.49	/	0.32	N9001-K/	0.49	/	0.32
N9002-A/	1.63	/	0.32				
N9002-B/	1.63	/	0.32	N9003-A/	0.32	/	0.32
N9003-B/	0.32	/	0.32				
N9003-C/	0.32	/	0.32	N9003-D/	0.32	/	0.32
N9003-E/	0.32	/	0.32				
N9003-F/	0.32	/	0.32	N9003-G/	0.32	/	0.32
N9004-A/	4.02	/	1.28				
N9004-E/	3.96	/	1.28	N9004-H/	2.45	/	1.28
N9004-I/	2.45	/	1.28				

N9004-K/	2.61 /	1.28	N9005-A/	0.32 /	0.32
N9005-B/	0.32 /	0.32	N9005-D/	0.32 /	0.32
N9005-C/	0.32 /	0.32	N9000-D/	2.57 /	0.32
N9005-F/	0.32 /	0.32	N0001-C/	0.00 /	2.15
N9005-H/	0.32 /	0.32	N-0001-F/	0.00 /	3.50
N-0001A/	8.45 /	0.45	N-0001F-OF-B/	0.00 /	3.13
N-0001B/	0.13 /	-0.37	N9004-L/	4.02 /	1.28
N-0001-E/	0.03 /	4.83	N0001-J/	0.00 /	1.19
N-0001E-OF/	0.00 /	3.13	N9005-K/	0.32 /	0.32
N-0001-G/	0.02 /	4.02	N0001-I/	0.06 /	1.19
N-0001F-OF-A/	0.00 /	3.13	N0140-A/	3.46 /	1.36
N9004-L/	4.02 /	1.28			
N0001-J/	0.00 /	1.19			
N9005-K/	0.32 /	0.32			
N0001-I/	0.06 /	1.19			
N0140-A/	3.46 /	1.36			

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	0.00		R0770-P2/	-0.00
R0900/	0.00			R0370/	0.00*
	R0280/	0.00		R0202/	0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.00*			RN-023/	-0.01
	RN-021/	-0.01		RN-041/	0.01
RN-020/	0.00			RN-022/	-0.00
	RN-024/	-0.19		RN-026/	-0.00
RN-027/	0.06			RN-028/	-0.06
	R0742-P3/	0.00		R0655-P2/	0.01
R0655-P3/	0.01			R0655-P4/	-0.01
	R0120-P2/	0.01		R1010-P2/	0.00
RN-025-P1/	-0.14			RN-025-P2/	0.16
	R0155-P1/	0.83		R0386/	-0.00
R0388/	0.00			R0385/	0.00
	R0375/	0.00		R0335/	-0.00
R-0001B-P1/	0.00			R0540-P1/	0.00
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	-0.00			R0285.1/	0.00
	R0250.1/	-0.17		R0230.1/	0.00*
R0220.1/	-0.00			R0200.1/	-0.00
	R0190.1/	0.00		R0170.1/	-0.00
R0180-P1/	0.01			R0180-P2/	0.01
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00			R0150-P2/	0.00
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00			R0110.1/	-0.00
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00			R0100-P2/	0.00

	R0310.1/	0.15	R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00
	R0430-P4/	0.00	R0340-P1/	-0.00
R0340-P2/	0.00		R0350-P1/	-0.00
	R0350-P2/	-0.00	R0330-P1/	0.00
R0330-P2/	0.00		R0450-P1/	0.00
	R0450-P2/	0.00	P0360-P1/	0.00
P0360-P2/	-0.00		R0550-P1/	-0.09
	R0550-P2/	-0.09	R0560-P1/	-0.45
R0560-P2/	-0.56		R0560-P3/	-0.57
	R0780.1/	0.00	R0740.1/	-0.00
R0730.1/	-0.00		R0880.1/	0.00
	R0950.1/	-0.00	R0920.1/	-0.00
R0960.1/	0.00		R0990.1/	0.00
	R1010-P3/	0.00	R1010-P4/	0.00
R1010-P5/	0.00		R0980-P1.1/	0.00
	R0980-P2.1/	0.00	R0850-P1/	0.00
R0850-P2/	0.00		R0850-P3/	0.00
	R0570-P1/	0.22	R0570-P2/	0.23
R0570-P3/	0.23		R0770-P1.1/	0.01
	R0770-P3/	-0.01	R0770-P4/	0.01
R0790-P1/	-0.02		R0790-P2/	0.02
	R0530-P1/	0.00	R0530-P2/	0.00*
R0530-P3/	0.00		R0910-P1/	0.01
	R0910-P2/	0.01	R0380-P1/	0.00
R0380-P2/	0.00		R0300-P1/	-0.00
	R0300-P2/	-0.00	R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00
	RN-004-P3/	0.00	RN-001-P1/	-0.02
RN-001-P2/	0.00		RN-001-P3/	-0.02
	RN-005-P1/	-0.02	RN-005-P2/	-0.03
RN-005-P3/	0.02		RN-008-P1.1/	0.04
	RN-008-P2/	-0.03	RN-008-P3/	-0.03
RN-010-P1/	0.06		RN-010-P2/	0.06
	RN-010-P3/	-0.06	RN-013-P1/	-0.14
RN-013-P2/	-0.14		RN-013-P3/	-0.14
	RN-015-P1/	0.48	RN-015-P2/	-0.89
RN-015-P3/	-0.78		RN-029-P1/	0.09
	RN-029-P2/	-0.18	R0742-P1/	0.00*
R0742-P2/	0.00*		R0655-P1.1/	0.01
	R0490-P8/	-0.00	R0490-P7/	-0.00
R0140-P2.1/	0.02		R0140-P1.1/	0.02
	R0120-P1.1/	-0.01	R0160-P1.1/	0.65
R0325-P1.1/	0.00		R0400-P1.1/	0.00
	R0880-P2.1/	0.00	R1010-P1.1/	0.00
R-0410-P4/	-0.00		R-0410-P5/	-0.00
	R-0410-P6/	-0.00	R-0410-P7/	0.01
R0410-P1/	0.00		R0410-P2/	0.00
	R0410-P3/	0.00	498.1/	0.00
R0490-P1.1/	-0.00		R0490-P3/	0.00

R0490-P6/	R0490-P4/	0.00	R0490-P5/	-0.00
	-0.00	R0890-ORF-2/	-0.55	
	R0890-ORF-5/	-0.55	R0890ORF-3/	-0.55
R0890-ORF-4/	-0.55	N0140-A-W1.1/	0.03	
	R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00	
	R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00	
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00	
	R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00	
	R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00	
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00	
	R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00	
	R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00	
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00	
	R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00	
	R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	

R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-11.12	R2020-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00

R042-W1.1/	0.00	R043-W1.1/	0.00	
R0850-W1.1/	0.00	R0880-WPump/	0.00	
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00	
R0910-W1/	0.00	R0325-DS-W1/	0.00	
R0400-WPump/	0.00	R0880-WPump2/	0.00	
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00	
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00	
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00	
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00	
R1020-DS-W1/	0.00	R0205-W1/	0.00	
R0205-W2/	0.00	R0205-W3/	0.00	
R0205-W4/	0.00	R0210-W1.1/	0.00	
R0515-W1.1/	0.00	R0515-W2.1/	2.89	
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	0.00	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.01	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	11.71	R-0001A-W2/	5.08	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00	R0001F-W2/	0.00	
R0001F-W3/	0.00	R0001F-W4/	0.00	
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.00	R0001I-W7.1/	0.00	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	-0.01	
FREE# 3/	-0.01	FREE# 4/	-0.01	FREE#
5/	0.00	FREE# 6/	0.03	
FREE# 7/	-0.01	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	-0.14	
FREE#15/	-0.16	FREE#16/	0.83	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	-0.65	
FREE#21/	0.00	FREE#22/	0.01	

	FREE#23/	0.00	FREE#24/	0.00
FREE#25/	0.00	FREE#26/	0.00	
	FREE#27/	0.00	FREE#28/	2.90
FREE#29/	0.00	FREE#30/	0.00	
	FREE#31/	0.00	FREE#32/	0.00
FREE#33/	0.00	FREE#34/	0.00	
	FREE#35/	-0.01	FREE#36/	0.00
FREE#37/	0.00	FREE#38/	0.00	
	FREE#39/	-11.12	FREE#40/	0.00
FREE#41/	0.00	FREE#42/	0.00	
	FREE#43/	0.00	FREE#44/	0.00
FREE#45/	0.00	FREE#46/	16.79	
	FREE#47/	0.00	FREE#48/	0.00
FREE#49/	0.00	FREE#50/	-2.19	
	FREE#51/	0.00	FREE#52/	0.00

==> System inflows (file) at 108.33 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 0.00E+00	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 0.00E+00				
N0340	/ 0.00E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 0.00E+00	N0360
	/ 0.00E+00				
N2040	/ 0.00E+00	N0450	/ 0.00E+00	N0400	/
0.00E+00	N0550	/ 0.00E+00	N0640	/ 0.00E+00	N0660
	/ 0.00E+00				
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00	N0720	/ 0.00E+00	N0770	/ 0.00E+00	N0885
	/ 0.00E+00				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940
	/ 0.00E+00				
N1000	/ 0.00E+00	N0945	/ 0.00E+00	N0980	/
0.00E+00	N0850	/ 0.00E+00	N0890	/ 0.00E+00	N0930
	/ 0.00E+00				
N0920	/ 0.00E+00	N0950	/ 0.00E+00	N0830	/
0.00E+00	N0970	/ 0.00E+00	N-0001K	/ 0.00E+00	N0870
	/ 0.00E+00				
N0790	/ 0.00E+00	N0001-I	/ 0.00E+00	N0915	/
0.00E+00	N0900	/ 0.00E+00	N0910	/ 0.00E+00	N0880
	/ 0.00E+00				
N0810	/ 0.00E+00	N0740	/ 0.00E+00	N0742	/
0.00E+00	N0800	/ 0.00E+00	N0620	/ 0.00E+00	N0730

/ 0.00E+00			
N0570	/ 0.00E+00	N0560	/ 0.00E+00
0.00E+00	N0510	/ 0.00E+00	N0520
/ 0.00E+00			
N0330	/ 7.40E-06	N0325	/ 0.00E+00
0.00E+00	N0090	/ 0.00E+00	N-0001B
/ 0.00E+00			
N0130	/ 0.00E+00	N0080	/ 0.00E+00
0.00E+00	N0170	/ 0.00E+00	N0205
/ 0.00E+00			
N0150	/ 0.00E+00	N0155	/ 0.00E+00
0.00E+00	N0120	/ 0.00E+00	N0110
/ 0.00E+00			
N0140-A	/ 0.00E+00	N0500	/ 0.00E+00
0.00E+00	N0540	/ 0.00E+00	N0650
/ 0.00E+00			
N2380	/ 0.00E+00	N2370	/ 0.00E+00
0.00E+00	N0480	/ 0.00E+00	N0410
/ 0.00E+00			
N0260	/ 0.00E+00	N0250	/ 0.00E+00
0.00E+00	N0200	/ 0.00E+00	N-002
/ 0.00E+00			
N-004	/ 0.00E+00	N-001	/ 0.00E+00
0.00E+00	N-005	/ 0.00E+00	N-007
/ 0.00E+00			
N-008	/ 0.00E+00	N-011	/ 0.00E+00
0.00E+00	N-014	/ 0.00E+00	N-012
/ 0.00E+00			
N-015	/ 0.00E+00	N2002	/ 0.00E+00
0.00E+00	N-022	/ 0.00E+00	N-026
/ 0.00E+00			
N-028	/ 0.00E+00	N-024	/ 0.00E+00
0.00E+00	N-030	/ 0.00E+00	N-023
/ 0.00E+00			
N-025	/ 0.00E+00	N-041	/ 0.00E+00
0.00E+00	N-021	/ 0.00E+00	N-043
/ 0.00E+00			
N-040	/ 0.00E+00	N2090	/ 0.00E+00
0.00E+00	N-0001-E	/ 0.00E+00	N-0001-F
/ 1.84E-11			
N0001-J	/ 0.00E+00		

Cycle 6500 Time 108 Hrs - 20.00 Min

Junction / Depth / Elevation	==>	"*" Junction is Surcharged.
N0335/ 0.32 / 0.32		N0550/ 1.76 / 0.43
N0690/ 1.69 / 2.31		
N0640/ 4.35 / 1.57		N0780/ 4.59 / 0.20
N0830/ 2.35 / 0.30		
N0790/ 3.46 / 0.48		N0800/ 0.49 / 3.84

N0870/	3.40	/	0.48		
N0510/	1.33	/	-0.10	N0520/	3.14 / 0.31
N0390/	2.50	/	0.80		
N0350/	3.01	/	0.32	N0450/	1.62 / 0.32
N0770/	3.53	/	0.48		
N0720/	1.23	/	0.58	N0960/	0.00 / 1.90
N0920/	2.05	/	0.48		
N0950/	0.90	/	0.48	N0970/	1.61 / 0.40
N0915/	6.48	/	0.48		
N0885/	7.39	/	0.48	N0560/	3.25 / 0.43
N0810/	2.21	/	0.36		
N0570/	3.10	/	0.43	N0990/	0.00 / 1.57
N1000/	1.76	/	0.40		
N1020/	1.60	/	0.60	N1030/	1.55 / 0.50
N0890/	2.83	/	1.29		
N0850/	0.00	/	1.46	N0930/	4.95 / 1.38
N0980/	0.08	/	1.70		
N1010/	0.58	/	1.62	N0430/	0.45 / 0.32
N0500/	1.99	/	4.24		
N0230/	0.00	/	3.31	N0220/	0.83 / 2.01
N0200/	2.19	/	0.58		
N0190/	1.54	/	0.58	N0130/	0.01 / -0.59
N0100/	0.22	/	0.68		
N0090/	1.27	/	3.76	N0120/	0.56 / 0.32
N0110/	0.25	/	1.02		
N0170/	0.53	/	-0.18	N0210/	0.54 / -0.18
N0260/	2.24	/	2.01		
N0250/	0.88	/	3.18	N0240/	1.74 / 3.18
N0140/	3.25	/	1.35		
N0150/	0.00	/	1.44	N0270/	1.43 / 3.00
N0290/	0.22	/	1.23		
N0180/	2.81	/	1.35	N0370/	0.00 / 0.98
N0285/	0.00	/	2.00		
N0420/	0.42	/	3.50	N0490/	1.34 / 0.08
N0410/	2.69	/	0.08		
N0380/	0.74	/	0.74	N0660/	1.70 / 0.86
N0740/	1.72	/	0.48		
N0730/	2.58	/	0.48	N0940/	1.41 / 0.40
N0530/	0.00	/	1.66		
N0060/	0.62	/	-0.67	N0050/	2.86 / 2.00
N0325/	4.69	/	0.32		
N0160/	2.41	/	0.32	N0470/	1.64 / 3.45
N0540/	0.16	/	1.51		
N0650/	1.99	/	1.50	N0400/	3.22 / 0.32
N0360/	1.50	/	0.32		
N0480/	1.43	/	3.69	N0080/	0.32 / 0.80
N0310/	1.91	/	0.32		
N0300/	4.17	/	0.32	N0460/	2.46 / 0.31
N0440/	1.69	/	0.32		
N0330/	3.75	/	0.32	N0655/	2.92 / 0.01

N0375/	0.74	/	0.74		
N0385/	1.17	/	0.08	N0275/	0.09 / 2.39
N0280/	0.12	/	2.12		
N0202/	4.15	/	0.58	N0340/	2.11 / 0.32
N0515/	1.63	/	0.43		
N-001/	1.06	/	1.29	N-002/	0.46 / 3.46
N-003/	0.00	/	2.56		
N-004/	0.00	/	2.88	N-005/	0.41 / 1.28
N-008/	1.32	/	1.28		
N-010/	1.57	/	1.28	N-013/	2.44 / 1.28
N-015/	2.47	/	1.28		
N-006/	0.00	/	2.66	N-007/	0.00 / 2.46
N-009/	0.00	/	2.68		
N-011/	0.00	/	2.04	N-014/	0.06 / 1.61
N-012/	0.00	/	1.48		
N-025/	2.52	/	1.28	N-023/	0.83 / 1.28
N-021/	1.75	/	1.28		
N-019/	1.95	/	1.73	N-041/	0.95 / 1.73
N-020/	0.00	/	1.38		
N-022/	0.32	/	1.28	N-024/	1.55 / 1.28
N-029/	2.26	/	1.28		
N-026/	0.27	/	1.28	N-027/	1.61 / 1.28
N-028/	1.59	/	1.28		
N-030/	0.00	/	-0.07	N-043/	0.56 / -0.60
N-042/	0.03	/	-0.60		
N-031/	0.45	/	-0.40	N-040/	1.31 / -0.17
N0620/	0.00	/	-0.60		
N0900/	3.48	/	0.48	N-009mh/	2.41 / 2.41
N0205/	4.08	/	0.58		
N0386/	1.17	/	0.08	N0388/	1.17 / 0.08
N0775/	0.85	/	0.20		
N2040/	1.21	/	0.11	N2380/	1.89 / 0.08
N0155/	0.46	/	0.32		
N0945/	0.96	/	0.15	N2002/	3.08 / 1.28
N2090/	1.32	/	-0.57		
N0742/	0.99	/	0.48	N0910/	6.48 / 0.48
N0880/	7.39	/	0.48		
N9004/	4.02	/	1.28	N9004-B/	4.07 / 1.28
N9004-C/	3.82	/	1.28		
N9004-D/	3.96	/	1.28	N9004-F/	2.45 / 1.28
N9001-B/	2.41	/	0.32		
N9001-D/	1.22	/	0.32	N9001-F/	1.22 / 0.32
N9000/	2.31	/	0.32		
N9003/	0.32	/	0.32	N9005/	0.32 / 0.32
N9005-E/	0.32	/	0.32		
N9005-G/	0.32	/	0.32	N9004-J/	2.61 / 1.28
N9004-G/	2.37	/	1.28		
N9002/	1.63	/	0.32	N2370/	1.64 / 0.08
N9000-B/	2.31	/	0.32		
N9000-C/	2.31	/	0.32	N9000-E/	2.31 / 0.32

N9000-F/	2.31 /	0.32		
N9001-E/	2.41 /	0.32		
N9001-H/	1.22 /	0.32	N9001-G/	1.22 / 0.32
N9001-J/	0.49 /	0.32	N9001-K/	0.49 / 0.32
N9002-A/	1.63 /	0.32		
N9002-B/	1.63 /	0.32	N9003-A/	0.32 / 0.32
N9003-B/	0.32 /	0.32		
N9003-C/	0.32 /	0.32	N9003-D/	0.32 / 0.32
N9003-E/	0.32 /	0.32		
N9003-F/	0.32 /	0.32	N9003-G/	0.32 / 0.32
N9004-A/	4.02 /	1.28		
N9004-E/	3.96 /	1.28	N9004-H/	2.45 / 1.28
N9004-I/	2.45 /	1.28		
N9004-K/	2.61 /	1.28	N9005-A/	0.32 / 0.32
N9005-B/	0.32 /	0.32		
N9005-C/	0.32 /	0.32	N9005-D/	0.32 / 0.32
N9005-F/	0.32 /	0.32		
N9005-H/	0.32 /	0.32	N9000-D/	2.57 / 0.32
N-0001A/	8.41 /	0.41		
N-0001B/	0.13 /	-0.37	N0001-C/	0.00 / 2.15
N-0001-E/	0.03 /	4.83		
N-0001E-OF/	0.00 /	3.13	N-0001-F/	0.00 / 3.50
N-0001-G/	0.02 /	4.02		
N-0001F-OF-A/	0.00 /	3.13	N-0001F-OF-B/	0.00 / 3.13
N9004-L/	4.02 /	1.28		
N0001-J/	0.00 /	1.19	N9005-J/	0.32 / 0.32
N9005-K/	0.32 /	0.32		
N0001-I/	0.06 /	1.19	N-0001K/	0.01 / 2.04
N0140-A/	3.45 /	1.35		

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	-0.00		R0770-P2/	0.00
R0900/	-0.00			R0370/	0.00*
	R0280/	0.00		R0202/	0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.00
RN-012/	0.00*			RN-023/	0.02
	RN-021/	-0.01		RN-041/	0.01
RN-020/	0.00			RN-022/	0.00
	RN-024/	0.20		RN-026/	0.00
RN-027/	-0.06			RN-028/	0.06
	R0742-P3/	0.00		R0655-P2/	-0.00
R0655-P3/	-0.01			R0655-P4/	0.01
	R0120-P2/	0.01		R1010-P2/	0.00
RN-025-P1/	0.19			RN-025-P2/	-0.17
	R0155-P1/	-2.63		R0386/	0.00
R0388/	0.00			R0385/	-0.00
	R0375/	0.00		R0335/	-0.00

R-0001B-P1/	0.00		R0540-P1/	0.00	
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	0.00		R0285.1/	0.00	
	R0250.1/	0.24		R0230.1/	0.00*
R0220.1/	0.00		R0200.1/	-0.00	
	R0190.1/	-0.00		R0170.1/	-0.00
R0180-P1/	0.01		R0180-P2/	0.01	
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00	
	R0150-P3/	0.00		R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.00	
	R0130-P1/	0.00		R0130-P2/	0.00
R0100-P1/	0.00		R0100-P2/	0.00	
	R0310.1/	-0.31		R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00	
	R0430-P4/	0.00		R0340-P1/	-0.00
R0340-P2/	0.00		R0350-P1/	-0.00	
	R0350-P2/	-0.00		R0330-P1/	0.00
R0330-P2/	0.00		R0450-P1/	-0.00	
	R0450-P2/	-0.00		P0360-P1/	0.00
P0360-P2/	0.00		R0550-P1/	-0.08	
	R0550-P2/	-0.08		R0560-P1/	-0.40
R0560-P2/	-0.49		R0560-P3/	-0.50	
	R0780.1/	-0.01		R0740.1/	0.00
R0730.1/	0.00		R0880.1/	0.00	
	R0950.1/	0.00		R0920.1/	0.00
R0960.1/	0.00		R0990.1/	0.00	
	R1010-P3/	0.00		R1010-P4/	0.00
R1010-P5/	0.00		R0980-P1.1/	0.00	
	R0980-P2.1/	0.00		R0850-P1/	0.00
R0850-P2/	0.00		R0850-P3/	0.00	
	R0570-P1/	0.20		R0570-P2/	0.21
R0570-P3/	0.21		R0770-P1.1/	-0.01	
	R0770-P3/	-0.01		R0770-P4/	0.01
R0790-P1/	-0.02		R0790-P2/	0.02	
	R0530-P1/	0.00		R0530-P2/	0.00*
R0530-P3/	0.00		R0910-P1/	0.01	
	R0910-P2/	0.00		R0380-P1/	0.00
R0380-P2/	0.00		R0300-P1/	-0.00	
	R0300-P2/	-0.00		R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00		RN-001-P1/	0.01
RN-001-P2/	0.00		RN-001-P3/	0.01	
	RN-005-P1/	0.01		RN-005-P2/	0.02
RN-005-P3/	-0.01		RN-008-P1.1/	-0.02	
	RN-008-P2/	0.03		RN-008-P3/	0.02
RN-010-P1/	-0.04		RN-010-P2/	-0.04	
	RN-010-P3/	0.04		RN-013-P1/	0.07
RN-013-P2/	0.07		RN-013-P3/	0.07	
	RN-015-P1/	-0.11		RN-015-P2/	0.29

RN-015-P3/	0.47	RN-029-P1/	-0.12	
	RN-029-P2/	0.14	R0742-P1/	0.00*
R0742-P2/	0.00*	R0655-P1.1/	-0.01	
	R0490-P8/	0.00	R0490-P7/	0.00
R0140-P2.1/	0.01	R0140-P1.1/	0.01	
	R0120-P1.1/	-0.01	R0160-P1.1/	-1.01
R0325-P1.1/	0.00	R0400-P1.1/	0.00	
	R0880-P2.1/	0.00	R1010-P1.1/	0.00
R-0410-P4/	-0.00	R-0410-P5/	-0.00	
	R-0410-P6/	-0.00	R-0410-P7/	0.01
R0410-P1/	0.00	R0410-P2/	0.00	
	R0410-P3/	0.00	498.1/	-0.00
R0490-P1.1/	0.00	R0490-P3/	0.00	
	R0490-P4/	0.00	R0490-P5/	-0.00
R0490-P6/	-0.00	R0890-ORF-2/	0.42	
	R0890-ORF-5/	0.42	R0890ORF-3/	0.42
R0890-ORF-4/	0.42	N0140-A-W1.1/	0.03	
	R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00	
	R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00	
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00	
	R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00	
	R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00	
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00	
	R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00	
	R0190-W1.1/	0.00	R0190-W2.1/	0.00

R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00

R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	7.88	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	2.56
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.00
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.01	R019-P1-W2/	0.00
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00
R-0001A-W1.1/	9.89	R-0001A-W2/	3.31
R0001C-W1.1/	0.00	R0001C-W2/	0.00
R0001C-W3/	0.00	R0001E-W1/	0.00
R0001F-W1.1/	0.00	R0001F-W2/	0.00
R0001F-W3/	0.00	R0001F-W4/	0.00
R0001F-W5/	0.00	R001G-W1/	0.00
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00
R000J-W2/	0.00	R000J-W3/	0.00
R000J-W4/	0.00	R000J-W5/	0.00
R000J-W6/	0.00	R000J-W7/	0.00
R0001J-W8/	0.00	R0001J-W9/	0.00
R0001J-W10/	0.00	R0001J-W11/	0.00
R0001J-W12/	0.00	R0001J-W13/	0.00
R0001J-W14/	0.00	R0001I-W1.1/	0.00
R001I-W2/	0.00	R0001I-W3/	0.00
R001I-W4/	0.00	R001I-W5/	0.00
R0001I-W7/	0.00	R0001I-W7.1/	0.00

R0001K-W1.1/	0.00	R0001K-W2/	0.00		
	R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.00		
	FREE# 3/	0.01	FREE# 4/	0.01	FREE#
5/	-0.00	FREE# 6/	0.03		
	FREE# 7/	-0.01	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00		
	FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	0.19		
	FREE#15/	0.17	FREE#16/	-2.63	
FREE#17/	0.00	FREE#18/	0.00		
	FREE#19/	0.00	FREE#20/	1.01	
FREE#21/	0.00	FREE#22/	0.01		
	FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00		
	FREE#27/	0.00	FREE#28/	2.56	
FREE#29/	0.00	FREE#30/	0.00		
	FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00		
	FREE#35/	0.01	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00		
	FREE#39/	7.88	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00		
	FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	13.20		
	FREE#47/	0.00	FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	1.67		
	FREE#51/	0.00	FREE#52/	0.00	

```
#####
# WEIR Name                      RN-019-P1-W1
# WEIR Surcharge Coefficient     0.39876
# X-SEC area                     0.17376
# Current Flow                   0.35901
# Time Step Number               6889
# At Time (hours)                114.82
#####
```

==> System inflows (file) at 116.67 hours (Junction / Inflow, cfs)

```
N0190 / 5.42E-03 N0230 / 1.40E-02 N0220 /
2.41E-02 N0290 / 9.00E-04 N0370 / 2.04E-02 N0275 /
/ 1.56E-03
N0280 / 0.00E+00 N0285 / 0.00E+00 N0380 /
0.00E+00 N0385 / 0.00E+00 N0386 / 0.00E+00 N0388 /
/ 0.00E+00
N0420 / 8.44E-04 N0530 / 4.06E-03 N0430 /
2.06E-03 N0310 / 3.42E-03 N0160 / 2.24E-03 N0300 /
/ 1.44E-04
N0340 / 0.00E+00 N0390 / 2.33E-02 N0001-C /
```

4.34E-03 N0460	/ 0.00E+00 N0440	/ 0.00E+00 N0360
/ 5.70E-04		
N2040	/ 0.00E+00 N0450	/ 0.00E+00 N0400
0.00E+00 N0550	/ 0.00E+00 N0640	/ 9.46E-03 N0660
/ 1.04E-02		
N0780	/ 2.14E-02 N0775	/ 1.46E-02 N0690
1.55E-03 N0720	/ 0.00E+00 N0770	/ 0.00E+00 N0885
/ 0.00E+00		
N0960	/ 1.25E-03 N0990	/ 1.11E-03 N1010
5.56E-04 N1030	/ 1.60E-03 N1020	/ 0.00E+00 N0940
/ 0.00E+00		
N1000	/ 0.00E+00 N0945	/ 0.00E+00 N0980
0.00E+00 N0850	/ 0.00E+00 N0890	/ 0.00E+00 N0930
/ 2.50E-04		
N0920	/ 0.00E+00 N0950	/ 4.94E-04 N0830
9.24E-04 N0970	/ 1.28E-03 N-0001K	/ 3.69E-03 N0870
/ 0.00E+00		
N0790	/ 0.00E+00 N0001-I	/ 1.27E-02 N0915
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880
/ 0.00E+00		
N0810	/ 0.00E+00 N0740	/ 0.00E+00 N0742
0.00E+00 N0800	/ 4.66E-03 N0620	/ 3.13E-04 N0730
/ 2.10E-04		
N0570	/ 2.48E-03 N0560	/ 2.12E-04 N0515
0.00E+00 N0510	/ 0.00E+00 N0520	/ 0.00E+00 N0350
/ 0.00E+00		
N0330	/ 2.03E-03 N0325	/ 2.32E-04 N0180
0.00E+00 N0090	/ 6.80E-03 N-0001B	/ 8.73E-04 N0100
/ 1.42E-03		
N0130	/ 7.19E-03 N0080	/ 0.00E+00 N0050
0.00E+00 N0170	/ 1.94E-02 N0205	/ 0.00E+00 N0210
/ 0.00E+00		
N0150	/ 1.63E-02 N0155	/ 0.00E+00 N0060
0.00E+00 N0120	/ 1.37E-02 N0110	/ 3.60E-02 N0140
/ 6.94E-02		
N0140-A	/ 0.00E+00 N0500	/ 0.00E+00 N0470
0.00E+00 N0540	/ 0.00E+00 N0650	/ 0.00E+00 N0490
/ 0.00E+00		
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655
0.00E+00 N0480	/ 0.00E+00 N0410	/ 0.00E+00 N0270
/ 0.00E+00		
N0260	/ 0.00E+00 N0250	/ 4.42E-03 N0240
3.30E-04 N0200	/ 1.85E-02 N-002	/ 6.39E-04 N-003
/ 1.33E-03		
N-004	/ 5.11E-03 N-001	/ 0.00E+00 N-006
1.05E-03 N-005	/ 6.08E-05 N-007	/ 8.78E-04 N-009
/ 2.69E-03		
N-008	/ 4.82E-03 N-011	/ 4.95E-03 N-010
4.73E-03 N-014	/ 1.17E-03 N-012	/ 5.09E-03 N-013
/ 1.58E-04		

N-015	/ 0.00E+00	N2002	/ 0.00E+00	N-020	/
0.00E+00 N-022	/ 2.24E-03	N-026	/ 0.00E+00	N-027	/
/ 3.42E-03					
N-028	/ 1.80E-04	N-024	/ 2.17E-03	N-029	/
5.32E-04 N-030	/ 0.00E+00	N-023	/ 3.80E-04	N-031	/
/ 0.00E+00					
N-025	/ 2.52E-04	N-041	/ 1.30E-02	N-019	/
1.62E-03 N-021	/ 0.00E+00	N-043	/ 0.00E+00	N-042	/
/ 0.00E+00					
N-040	/ 0.00E+00	N2090	/ 0.00E+00	N-0001A	/
4.49E-02 N-0001-E	/ 7.75E-04	N-0001-F	/ 4.27E-03	N-0001-G	/
/ 2.72E-03					
N0001-J	/ 3.04E-03				

Cycle 7000 Time 116 Hrs - 40.00 Min

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 0.32 / 0.32		N0550/ 1.72 / 0.39
N0690/ 2.06 / 2.68		N0780/ 4.66 / 0.27
N0640/ 4.43 / 1.65		N0800/ 0.71 / 4.06
N0830/ 2.35 / 0.30		N0520/ 3.14 / 0.31
N0790/ 3.46 / 0.48		N0450/ 1.62 / 0.32
N0870/ 3.40 / 0.48		N0960/ 0.01 / 1.91
N0510/ 1.33 / -0.10		N0970/ 1.61 / 0.40
N0390/ 2.50 / 0.80		N0560/ 3.21 / 0.39
N0350/ 3.01 / 0.32		N0990/ 0.02 / 1.59
N0770/ 3.53 / 0.48		N1030/ 1.56 / 0.51
N0720/ 1.23 / 0.58		N0930/ 4.95 / 1.38
N0920/ 2.05 / 0.48		N0430/ 0.45 / 0.32
N0950/ 0.90 / 0.48		N0220/ 0.84 / 2.02
N0915/ 6.48 / 0.48		N0130/ 0.39 / -0.21
N0885/ 7.39 / 0.48		N0120/ 0.36 / 0.12
N0810/ 2.21 / 0.36		N0210/ 0.55 / -0.17
N0570/ 3.06 / 0.39		N0240/ 1.90 / 3.34
N1000/ 1.76 / 0.40		
N1020/ 1.60 / 0.60		
N0890/ 2.72 / 1.18		
N0850/ 0.00 / 1.46		
N0980/ 0.08 / 1.70		
N1010/ 0.58 / 1.62		
N0500/ 1.99 / 4.24		
N0230/ 0.07 / 3.38		
N0200/ 2.69 / 1.08		
N0190/ 2.04 / 1.08		
N0100/ 0.23 / 0.69		
N0090/ 1.59 / 4.08		
N0110/ 1.75 / 2.52		
N0170/ 0.54 / -0.17		
N0260/ 2.24 / 2.01		
N0250/ 1.04 / 3.34		

N0140/	3.45	/	1.55				
N0150/	0.03	/	1.47				
N0290/	0.28	/	1.29				
N0180/	3.01	/	1.55				
N0285/	0.00	/	2.00				
N0420/	0.42	/	3.50				
N0410/	2.69	/	0.08				
N0380/	0.94	/	0.94				
N0740/	1.72	/	0.48				
N0730/	2.58	/	0.48				
N0530/	0.01	/	1.67				
N0060/	0.67	/	-0.62				
N0325/	4.69	/	0.32				
N0160/	2.21	/	0.12				
N0540/	0.22	/	1.57				
N0650/	2.00	/	1.51				
N0360/	1.50	/	0.32				
N0480/	1.43	/	3.69				
N0310/	1.71	/	0.12				
N0300/	4.17	/	0.32				
N0440/	1.69	/	0.32				
N0330/	3.75	/	0.32				
N0375/	0.94	/	0.94				
N0385/	1.17	/	0.08				
N0280/	0.12	/	2.12				
N0202/	4.65	/	1.08				
N0515/	1.59	/	0.39				
N-001/	1.16	/	1.39				
N-003/	0.02	/	2.58				
N-004/	0.02	/	2.90				
N-008/	1.11	/	1.07				
N-010/	1.36	/	1.07				
N-015/	2.26	/	1.07				
N-006/	0.02	/	2.68				
N-009/	0.03	/	2.71				
N-011/	0.05	/	2.09				
N-012/	0.06	/	1.54				
N-025/	2.32	/	1.08				
N-021/	2.12	/	1.65				
N-019/	2.32	/	2.10				
N-020/	0.00	/	1.38				
N-022/	0.13	/	1.09				
N-029/	2.06	/	1.08				
N-026/	0.08	/	1.09				
N-028/	1.40	/	1.09				
N-030/	0.00	/	-0.07				
N-042/	0.03	/	-0.60				
N-031/	0.45	/	-0.40				
N0620/	0.00	/	-0.60				
N0900/	3.48	/	0.48				
N0270/	1.43	/	3.00				
N0370/	0.04	/	1.02				
N0490/	1.34	/	0.08				
N0660/	1.74	/	0.90				
N0940/	1.41	/	0.40				
N0050/	2.86	/	2.00				
N0470/	1.64	/	3.45				
N0400/	3.22	/	0.32				
N0080/	0.32	/	0.80				
N0460/	2.46	/	0.31				
N0655/	2.92	/	0.01				
N0275/	0.11	/	2.41				
N0340/	2.11	/	0.32				
N-002/	0.52	/	3.52				
N-005/	0.23	/	1.10				
N-013/	2.23	/	1.07				
N-007/	0.02	/	2.48				
N-014/	0.13	/	1.68				
N-023/	0.63	/	1.08				
N-041/	1.32	/	2.10				
N-024/	1.35	/	1.08				
N-027/	1.42	/	1.09				
N-043/	0.56	/	-0.60				
N-040/	1.31	/	-0.17				
N-009mh/	2.46	/	2.46				

N0205/	4.58	/	1.08				
N0386/	1.17	/	0.08		N0388/	1.17	/ 0.08
N0775/	0.92	/	0.27				
N2040/	1.21	/	0.11		N2380/	1.89	/ 0.08
N0155/	0.28	/	0.14				
N0945/	0.96	/	0.15		N2002/	2.87	/ 1.07
N2090/	1.32	/	-0.57				
N0742/	0.99	/	0.48		N0910/	6.48	/ 0.48
N0880/	7.39	/	0.48				
N9004/	3.82	/	1.08		N9004-B/	3.87	/ 1.08
N9004-C/	3.62	/	1.08				
N9004-D/	3.76	/	1.08		N9004-F/	2.25	/ 1.08
N9001-B/	2.21	/	0.12				
N9001-D/	1.02	/	0.12		N9001-F/	1.02	/ 0.12
N9000/	2.11	/	0.12				
N9003/	0.12	/	0.12		N9005/	0.12	/ 0.12
N9005-E/	0.12	/	0.12				
N9005-G/	0.12	/	0.12		N9004-J/	2.41	/ 1.08
N9004-G/	2.17	/	1.08				
N9002/	1.43	/	0.12		N2370/	1.64	/ 0.08
N9000-B/	2.11	/	0.12				
N9000-C/	2.11	/	0.12		N9000-E/	2.11	/ 0.12
N9000-F/	2.11	/	0.12				
N9001-E/	2.21	/	0.12		N9001-G/	1.02	/ 0.12
N9001-H/	1.02	/	0.12				
N9001-J/	0.29	/	0.12		N9001-K/	0.29	/ 0.12
N9002-A/	1.43	/	0.12				
N9002-B/	1.43	/	0.12		N9003-A/	0.12	/ 0.12
N9003-B/	0.12	/	0.12				
N9003-C/	0.12	/	0.12		N9003-D/	0.12	/ 0.12
N9003-E/	0.12	/	0.12				
N9003-F/	0.12	/	0.12		N9003-G/	0.12	/ 0.12
N9004-A/	3.82	/	1.08				
N9004-E/	3.76	/	1.08		N9004-H/	2.25	/ 1.08
N9004-I/	2.25	/	1.08				
N9004-K/	2.41	/	1.08		N9005-A/	0.12	/ 0.12
N9005-B/	0.12	/	0.12				
N9005-C/	0.12	/	0.12		N9005-D/	0.12	/ 0.12
N9005-F/	0.12	/	0.12				
N9005-H/	0.12	/	0.12		N9000-D/	2.37	/ 0.12
N-0001A/	8.38	/	0.38				
N-0001B/	0.43	/	-0.07		N0001-C/	0.01	/ 2.16
N-0001-E/	0.10	/	4.90				
N-0001E-OF/	0.00	/	3.13		N-0001-F/	0.01	/ 3.51
N-0001-G/	0.05	/	4.05				
N-0001F-OF-A/	0.00	/	3.13		N-0001F-OF-B/	0.00	/ 3.13
N9004-L/	3.82	/	1.08				
N0001-J/	0.00	/	1.19		N9005-J/	0.12	/ 0.12
N9005-K/	0.12	/	0.12				
N0001-I/	0.52	/	1.65		N-0001K/	0.04	/ 2.07

N0140-A/ 3.65 / 1.55

	Conduit/	FLOW	==> "*" Conduit uses the normal flow option.	
	R0870/	-0.02	R0770-P2/	-0.00
R0900/	-0.02	R0370/	0.03*	
	R0280/	0.00	R0202/	-0.03
RN-002/	0.02	RN-003/	0.00	
	RN-006/	0.00	RN-007/	0.00
RN-009/	0.01*	RN-009MH/	0.01	
	RN-011/	0.02	RN-014/	0.05
RN-012/	0.07*	RN-023/	0.43	
	RN-021/	-0.34	RN-041/	0.33
RN-020/	0.00	RN-022/	0.01	
	RN-024/	1.59	RN-026/	0.01
RN-027/	-0.37	RN-028/	0.41	
	R0742-P3/	-0.00	R0655-P2/	-0.01
R0655-P3/	-0.01	R0655-P4/	0.01	
	R0120-P2/	0.01	R1010-P2/	0.00
RN-025-P1/	1.28	RN-025-P2/	-1.17	
	R0155-P1/	-0.28	R0386/	0.00
R0388/	0.00	R0385/	0.00	
	R0375/	0.03	R0335/	0.00
R-0001B-P1/	-0.02	R0540-P1/	-0.02	
	R0540-P2/	0.00	R0540-P3/	0.00
R0290-P1/	-0.01	R0285.1/	0.00	
	R0250.1/	0.30	R0230.1/	0.03*
R0220.1/	-0.16	R0200.1/	0.03	
	R0190.1/	0.01	R0170.1/	0.02
R0180-P1/	0.45	R0180-P2/	0.44	
	R0140.1/	0.00	R0140-P3.1/	0.00
R0150-P1/	0.01	R0150-P2/	0.00	
	R0150-P3/	0.00	R0150-P4/	0.01
R0150-P5/	0.00	R0110.1/	-0.99	
	R0130-P1/	0.03	R0130-P2/	0.03
R0100-P1/	-0.00	R0100-P2/	-0.00	
	R0310.1/	0.00	R0430-P1/	0.00
R0430-P2/	0.00	R0430-P3/	0.00	
	R0430-P4/	0.00	R0340-P1/	0.00
R0340-P2/	0.00	R0350-P1/	-0.03	
	R0350-P2/	-0.03	R0330-P1/	-0.00
R0330-P2/	-0.00	R0450-P1/	0.03	
	R0450-P2/	0.03	P0360-P1/	0.01
P0360-P2/	0.02	R0550-P1/	-0.10	
	R0550-P2/	-0.10	R0560-P1/	-0.40
R0560-P2/	-0.51	R0560-P3/	-0.52	
	R0780.1/	-0.04	R0740.1/	0.01
R0730.1/	0.01	R0880.1/	0.00	
	R0950.1/	0.01	R0920.1/	0.00
R0960.1/	0.00	R0990.1/	0.00	
	R1010-P3/	0.00	R1010-P4/	-0.00

R1010-P5/	0.00	R0980-P1.1/	0.00		
	R0980-P2.1/	0.00	R0850-P1/	0.00	
R0850-P2/	0.00		R0850-P3/	0.00	
	R0570-P1/	0.21	R0570-P2/	0.23	
R0570-P3/	0.23		R0770-P1.1/	0.04	
	R0770-P3/	0.01	R0770-P4/	0.02	
R0790-P1/	0.01		R0790-P2/	0.04	
	R0530-P1/	0.00	R0530-P2/	0.00*	
R0530-P3/	0.00*		R0910-P1/	0.01	
	R0910-P2/	0.00	R0380-P1/	0.00	
R0380-P2/	0.00		R0300-P1/	-0.01	
	R0300-P2/	-0.01	R0290-P2.1/	0.01	
RN-004-P1/	0.01		RN-004-P2/	0.01	
	RN-004-P3/	0.00	RN-001-P1/	0.13	
RN-001-P2/	0.00*		RN-001-P3/	0.15	
	RN-005-P1/	0.08	RN-005-P2/	0.11	
RN-005-P3/	-0.11		RN-008-P1.1/	-0.07	
	RN-008-P2/	0.09	RN-008-P3/	0.08	
RN-010-P1/	-0.05		RN-010-P2/	-0.04	
	RN-010-P3/	0.06	RN-013-P1/	-0.04	
RN-013-P2/	-0.04		RN-013-P3/	-0.04	
	RN-015-P1/	0.39	RN-015-P2/	-0.81	
RN-015-P3/	-0.39		RN-029-P1/	-0.98	
	RN-029-P2/	1.01	R0742-P1/	0.00*	
R0742-P2/	0.00*		R0655-P1.1/	-0.01	
	R0490-P8/	-0.00	R0490-P7/	-0.00	
R0140-P2.1/	0.41		R0140-P1.1/	0.41	
	R0120-P1.1/	-0.04	R0160-P1.1/	0.11	
R0325-P1.1/	0.00		R0400-P1.1/	0.00	
	R0880-P2.1/	0.00	R1010-P1.1/	0.00	
R-0410-P4/	-0.00		R-0410-P5/	-0.00	
	R-0410-P6/	-0.00	R-0410-P7/	0.01	
R0410-P1/	0.00		R0410-P2/	0.00	
	R0410-P3/	0.00		498.1/	0.00
R0490-P1.1/	-0.00		R0490-P3/	0.00	
	R0490-P4/	0.00	R0490-P5/	-0.00	
R0490-P6/	-0.00		R0890-ORF-2/	0.83	
	R0890-ORF-5/	0.83	R0890ORF-3/	0.83	
R0890-ORF-4/	0.83		N0140-A-W1.1/	0.81	
	R0540-W3/	0.00	R0290-P5/	0.00	
R0285-W2/	0.00		R0250-W1/	0.00	
	R0230-W1/	0.00	R0220-W2/	0.00	
R0200-W3/	0.00		R0190-W4/	0.00	
	R0170-W3/	0.00	R0180-W1/	0.00	
R0140-W1/	0.00		R0150-W3/	0.00	
	R0110-W1/	0.00	R0130-W1/	0.00	
R0100-W4/	0.00		R0310-W5.1/	0.00	
	R0430-W3/	0.00	R0340-W3/	0.00	
R0350-W1/	0.00		R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00	

R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00	
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00	
	R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00	
	R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00	
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00	
	R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00	
	R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00	
	R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00	
	R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00	
	R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00	
	R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00	
	R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00	
	R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00	
	R0460-W2.1/	0.00	R0480-W1.1/	0.00

R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-7.34	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.00	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	0.00	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	2.82
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.07

R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.34	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00	
R-0001A-W1.1/	11.09	R-0001A-W2/	1.88	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.00	R0001E-W1/	0.00	
R0001F-W1.1/	0.00	R0001F-W2/	0.00	
R0001F-W3/	0.00	R0001F-W4/	0.00	
R0001F-W5/	0.00	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.00	
R000J-W6/	0.00	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.00	R0001J-W13/	0.00	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.04	R0001I-W7.1/	0.04	
R0001K-W1.1/	0.00	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.01	
FREE# 3/	0.01	FREE# 4/	0.01	FREE#
5/	0.00	FREE# 6/	0.81	
FREE# 7/	-0.04	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.00	FREE#14/	1.28	
FREE#15/	1.17	FREE#16/	-0.28	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	-0.11	
FREE#21/	0.00	FREE#22/	0.01	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	2.82	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	
FREE#35/	0.01	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00	
FREE#39/	-7.34	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00	
FREE#43/	0.00	FREE#44/	0.00	
FREE#45/	0.00	FREE#46/	12.97	
FREE#47/	0.00	FREE#48/	0.00	
FREE#49/	0.00	FREE#50/	3.31	
FREE#51/	0.00	FREE#52/	0.00	

```
#####
# WEIR Name                      R0001C-W3
# WEIR Surcharge Coefficient      0.39876
# X-SEC area                      0.05940
# Current Flow                    0.08061
# Time Step Number                7136
# At Time (hours)                 118.94
#####
```

==> System inflows (file) at 125.00 hours (Junction / Inflow, cfs)

```

N0190          / 4.83E-08 N0230          / 1.03E-06 N0220          /
8.55E-04 N0290          / 4.02E-03 N0370          / 5.34E-04 N0275          /
  / 3.79E-08
N0280          / 7.43E-03 N0285          / 3.99E+00 N0380          /
1.16E+00 N0385          / 1.31E-08 N0386          / 1.31E-08 N0388          /
  / 1.31E-08
N0420          / 2.41E-07 N0530          / 1.44E-02 N0430          /
2.13E-02 N0310          / 7.02E-03 N0160          / 6.50E-05 N0300          /
  / 1.27E+00
N0340          / 4.89E+00 N0390          / 8.06E-02 N0001-C          /
1.18E-03 N0460          / 8.56E+00 N0440          / 5.56E+00 N0360          /
  / 3.70E-01
N2040          / 4.02E+00 N0450          / 7.73E+00 N0400          /
1.21E+01 N0550          / 1.22E-01 N0640          / 7.81E-07 N0660          /
  / 5.27E-04
N0780          / 6.58E-06 N0775          / 1.05E-06 N0690          /
1.60E-08 N0720          / 4.72E-01 N0770          / 1.20E+00 N0885          /
  / 2.99E+00
N0960          / 2.43E-05 N0990          / 4.02E-05 N1010          /
4.70E-06 N1030          / 3.11E-05 N1020          / 1.79E+00 N0940          /
  / 4.91E+00
N1000          / 1.19E-03 N0945          / 2.81E+00 N0980          /
7.19E+00 N0850          / 4.06E+00 N0890          / 6.98E+00 N0930          /
  / 2.74E+00
N0920          / 3.19E-08 N0950          / 1.05E+00 N0830          /
7.36E-04 N0970          / 9.75E-05 N-0001K          / 6.23E-08 N0870          /
  / 1.13E+00
N0790          / 2.50E+00 N0001-I          / 2.42E-07 N0915          /
4.11E-02 N0900          / 1.88E-11 N0910          / 3.05E-03 N0880          /
  / 8.50E-03
N0810          / 1.28E+01 N0740          / 1.99E-02 N0742          /
5.07E-09 N0800          / 5.14E-08 N0620          / 1.06E-06 N0730          /
  / 5.67E+00
N0570          / 2.90E-01 N0560          / 1.56E+00 N0515          /
9.78E-01 N0510          / 1.10E+01 N0520          / 1.80E+01 N0350          /
  / 6.34E-01
N0330          / 1.31E+00 N0325          / 1.31E+00 N0180          /
5.05E-03 N0090          / 6.45E-08 N-0001B          / 6.71E-02 N0100          /

```


	/ 3.04E-08						
N0130		/ 1.56E-05	N0080		/ 5.23E-04	N0050	/
5.04E-01	N0170		/ 1.37E-06	N0205		/ 7.51E-09	N0210
	/ 1.61E+00						
N0150		/ 1.58E-07	N0155		/ 2.47E-08	N0060	/
3.12E+00	N0120		/ 8.31E-05	N0110		/ 2.60E-04	N0140
	/ 2.61E-03						
N0140-A		/ 2.55E-23	N0500		/ 1.69E+00	N0470	/
1.26E+01	N0540		/ 1.20E+00	N0650		/ 5.84E-01	N0490
	/ 1.30E+01						
N2380		/ 1.03E-01	N2370		/ 1.73E+00	N0655	/
1.20E+00	N0480		/ 7.36E+00	N0410		/ 9.55E+00	N0270
	/ 2.15E+00						
N0260		/ 6.34E+00	N0250		/ 8.30E-05	N0240	/
1.72E-08	N0200		/ 2.47E-04	N-002		/ 2.06E-08	N-003
	/ 1.72E-08						
N-004		/ 1.52E-07	N-001		/ 1.89E+00	N-006	/
3.21E-07	N-005		/ 2.91E-08	N-007		/ 7.47E-08	N-009
	/ 2.97E-08						
N-008		/ 8.11E-07	N-011		/ 4.17E-08	N-010	/
1.36E-05	N-014		/ 1.09E-03	N-012		/ 4.54E-08	N-013
	/ 1.76E-08						
N-015		/ 8.12E-04	N2002		/ 1.98E-02	N-020	/
1.47E-01	N-022		/ 8.51E-05	N-026		/ 2.35E-09	N-027
	/ 5.62E-05						
N-028		/ 4.24E-09	N-024		/ 1.15E-03	N-029	/
2.02E-08	N-030		/ 1.57E-03	N-023		/ 4.38E-07	N-031
	/ 1.11E-01						
N-025		/ 1.32E-08	N-041		/ 1.24E-07	N-019	/
9.54E-04	N-021		/ 1.31E-01	N-043		/ 3.17E-03	N-042
	/ 8.09E-01						
N-040		/ 4.26E+00	N2090		/ 1.52E+00	N-0001A	/
1.42E+01	N-0001-E		/ 3.63E-04	N-0001-F		/ 1.24E-07	N-0001-G
	/ 3.31E-03						
N0001-J		/ 1.97E-07					

Cycle 7500 Time 125 Hrs - 0.00 Min

Junction	Depth	Elevation	====>	"*"	Junction is Surcharged.
N0335/	0.55 /	0.55		N0550/	1.80 / 0.47
N0690/	3.93 /	4.55			
N0640/	4.82 /	2.04		N0780/	4.98 / 0.59
N0830/	2.52 /	0.47			
N0790/	3.70 /	0.72		N0800/	1.63 / 4.98
N0870/	3.64 /	0.72			
N0510/	1.89 /	0.46		N0520/	3.38 / 0.55
N0390/	2.60 /	0.90			
N0350/	3.24 /	0.55		N0450/	1.82 / 0.52
N0770/	3.77 /	0.72			
N0720/	1.34 /	0.69		N0960/	0.01 / 1.91

N0920/	2.30	/	0.73		
N0950/	1.14	/	0.72	N0970/	1.82 / 0.61
N0915/	6.72	/	0.72		
N0885/	7.63	/	0.72	N0560/	3.29 / 0.47
N0810/	2.27	/	0.42		
N0570/	3.14	/	0.47	N0990/	0.68 / 2.25
N1000/	1.80	/	0.44		
N1020/	3.25	/	2.25	N1030/	2.00 / 0.95
N0890/	3.09	/	1.55		
N0850/	0.82	/	2.28	N0930/	5.09 / 1.52
N0980/	1.01	/	2.63		
N1010/	1.23	/	2.27	N0430/	0.68 / 0.55
N0500/	2.04	/	4.29		
N0230/	0.92	/	4.23	N0220/	1.01 / 2.19
N0200/	3.75	/	2.14		
N0190/	3.10	/	2.14	N0130/	0.98 / 0.38
N0100/	0.22	/	0.68		
N0090/	2.45	/	4.94	N0120/	0.27 / 0.03
N0110/	3.36	/	4.13		
N0170/	0.67	/	-0.04	N0210/	0.68 / -0.04
N0260/	2.42	/	2.19		
N0250/	1.93	/	4.23	N0240/	2.79 / 4.23
N0140/	3.72	/	1.82		
N0150/	0.00	/	1.44	N0270/	1.89 / 3.46
N0290/	1.65	/	2.66		
N0180/	3.28	/	1.82	N0370/	1.68 / 2.66
N0285/	0.67	/	2.67		
N0420/	0.78	/	3.86	N0490/	1.70 / 0.44
N0410/	3.05	/	0.44		
N0380/	2.66	/	2.66	N0660/	1.99 / 1.15
N0740/	1.96	/	0.72		
N0730/	2.82	/	0.72	N0940/	1.88 / 0.87
N0530/	0.21	/	1.87		
N0060/	1.67	/	0.38	N0050/	3.10 / 2.24
N0325/	4.92	/	0.55		
N0160/	2.12	/	0.03	N0470/	1.92 / 3.73
N0540/	0.52	/	1.87		
N0650/	2.11	/	1.62	N0400/	3.32 / 0.42
N0360/	1.72	/	0.54		
N0480/	1.69	/	3.95	N0080/	1.65 / 2.13
N0310/	1.63	/	0.04		
N0300/	4.40	/	0.55	N0460/	2.70 / 0.55
N0440/	1.92	/	0.55		
N0330/	3.98	/	0.55	N0655/	2.92 / 0.01
N0375/	2.66	/	2.66		
N0385/	1.89	/	0.80	N0275/	0.36 / 2.66
N0280/	0.74	/	2.74		
N0202/	5.71	/	2.14	N0340/	2.34 / 0.55
N0515/	1.67	/	0.47		
N-001/	1.39	/	1.62	N-002/	0.52 / 3.52

N-003/	0.01	/	2.57		
N-004/	0.00	/	2.88	N-005/	0.42 / 1.29
N-008/	1.08	/	1.04		
N-010/	1.32	/	1.03	N-013/	2.19 / 1.03
N-015/	2.22	/	1.03		
N-006/	0.01	/	2.67	N-007/	0.01 / 2.47
N-009/	0.00	/	2.68		
N-011/	0.01	/	2.05	N-014/	0.19 / 1.74
N-012/	0.11	/	1.59		
N-025/	2.23	/	0.99	N-023/	0.60 / 1.05
N-021/	2.29	/	1.82		
N-019/	3.58	/	3.36	N-041/	2.58 / 3.36
N-020/	0.26	/	1.64		
N-022/	0.38	/	1.34	N-024/	1.27 / 1.00
N-029/	1.97	/	0.99		
N-026/	0.01	/	1.02	N-027/	1.33 / 1.00
N-028/	1.31	/	1.00		
N-030/	0.05	/	-0.02	N-043/	1.10 / -0.06
N-042/	0.53	/	-0.10		
N-031/	0.80	/	-0.05	N-040/	1.56 / 0.08
N0620/	0.27	/	-0.33		
N0900/	3.72	/	0.72	N-009mh/	2.43 / 2.43
N0205/	5.64	/	2.14		
N0386/	1.84	/	0.75	N0388/	1.75 / 0.66
N0775/	1.24	/	0.59		
N2040/	1.47	/	0.37	N2380/	2.22 / 0.41
N0155/	0.15	/	0.01		
N0945/	1.66	/	0.85	N2002/	2.83 / 1.03
N2090/	1.81	/	-0.08		
N0742/	1.23	/	0.72	N0910/	6.72 / 0.72
N0880/	7.64	/	0.73		
N9004/	3.73	/	0.99	N9004-B/	3.78 / 0.99
N9004-C/	3.53	/	0.99		
N9004-D/	3.67	/	0.99	N9004-F/	2.16 / 0.99
N9001-B/	2.12	/	0.03		
N9001-D/	0.93	/	0.03	N9001-F/	0.93 / 0.03
N9000/	2.02	/	0.03		
N9003/	0.03	/	0.03	N9005/	0.03 / 0.03
N9005-E/	0.03	/	0.03		
N9005-G/	0.08	/	0.08	N9004-J/	2.32 / 0.99
N9004-G/	2.08	/	0.99		
N9002/	1.34	/	0.03	N2370/	2.00 / 0.44
N9000-B/	2.02	/	0.03		
N9000-C/	2.02	/	0.03	N9000-E/	2.02 / 0.03
N9000-F/	2.02	/	0.03		
N9001-E/	2.12	/	0.03	N9001-G/	0.93 / 0.03
N9001-H/	0.93	/	0.03		
N9001-J/	0.21	/	0.03	N9001-K/	0.21 / 0.03
N9002-A/	1.34	/	0.03		
N9002-B/	1.34	/	0.03	N9003-A/	0.03 / 0.03

N9003-B/	0.03	/	0.03					
	N9003-C/	0.03	/	0.03	N9003-D/	0.03	/	0.03
N9003-E/	0.03	/	0.03					
	N9003-F/	0.03	/	0.03	N9003-G/	0.03	/	0.03
N9004-A/	3.73	/	0.99					
	N9004-E/	3.67	/	0.99	N9004-H/	2.16	/	0.99
N9004-I/	2.16	/	0.99					
	N9004-K/	2.32	/	0.99	N9005-A/	0.03	/	0.03
N9005-B/	0.03	/	0.03					
	N9005-C/	0.03	/	0.03	N9005-D/	0.03	/	0.03
N9005-F/	0.14	/	0.14					
	N9005-H/	0.03	/	0.03	N9000-D/	2.28	/	0.03
N-0001A/	8.69	/	0.69					
	N-0001B/	0.88	/	0.38	N0001-C/	0.30	/	2.45
N-0001-E/	0.34	/	5.14					
	N-0001E-OF/	0.00	/	3.13	N-0001-F/	0.35	/	3.85
N-0001-G/	0.41	/	4.41					
N-0001F-OF-A/	0.00	/	3.13		N-0001F-OF-B/	0.00	/	3.13
N9004-L/	3.73	/	0.99					
	N0001-J/	0.21	/	1.40	N9005-J/	0.03	/	0.03
N9005-K/	0.03	/	0.03					
	N0001-I/	0.82	/	1.95	N-0001K/	0.42	/	2.45
N0140-A/	3.92	/	1.82					

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	4.86		R0770-P2/	-1.13
R0900/	4.79		R0370/	0.09	
	R0280/	-0.04		R0202/	-0.02
RN-002/	0.02		RN-003/	0.00	
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00		RN-009MH/	0.00	
	RN-011/	0.00		RN-014/	0.15
RN-012/	0.16*		RN-023/	0.86	
	RN-021/	-0.85		RN-041/	0.75
RN-020/	0.79		RN-022/	0.81	
	RN-024/	0.84		RN-026/	0.00*
RN-027/	-0.01		RN-028/	0.01	
	R0742-P3/	0.18		R0655-P2/	-0.82
R0655-P3/	-0.80		R0655-P4/	0.81	
	R0120-P2/	0.07		R1010-P2/	0.05
RN-025-P1/	0.97		RN-025-P2/	-0.78	
	R0155-P1/	0.33*		R0386/	6.35
R0388/	6.35		R0385/	6.35	
	R0375/	0.13		R0335/	0.02
R-0001B-P1/	0.02		R0540-P1/	-0.68	
	R0540-P2/	0.34		R0540-P3/	0.21
R0290-P1/	-0.06		R0285.1/	4.01	
	R0250.1/	0.07		R0230.1/	0.00
R0220.1/	-0.00		R0200.1/	0.02	
	R0190.1/	0.00		R0170.1/	-0.00

R0180-P1/	1.24		R0180-P2/	1.23	
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00*	
	R0150-P3/	0.00*		R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-3.43	
	R0130-P1/	-0.23		R0130-P2/	-0.22
R0100-P1/	0.00		R0100-P2/	0.00	
	R0310.1/	-0.01		R0430-P1/	-0.00
R0430-P2/	-0.00		R0430-P3/	-0.00	
	R0430-P4/	-0.00		R0340-P1/	-2.81
R0340-P2/	-2.00		R0350-P1/	2.58	
	R0350-P2/	2.58		R0330-P1/	-0.59
R0330-P2/	-0.59		R0450-P1/	2.92	
	R0450-P2/	2.92		P0360-P1/	-0.11
P0360-P2/	-0.21		R0550-P1/	-0.06	
	R0550-P2/	-0.06		R0560-P1/	-0.68
R0560-P2/	-0.84		R0560-P3/	-0.86	
	R0780.1/	-0.01		R0740.1/	0.68
R0730.1/	-0.55		R0880.1/	0.00	
	R0950.1/	6.23		R0920.1/	-2.19
R0960.1/	0.00		R0990.1/	-0.20	
	R1010-P3/	-1.87		R1010-P4/	-2.07
R1010-P5/	-2.04		R0980-P1.1/	-6.20	
	R0980-P2.1/	1.13		R0850-P1/	2.21
R0850-P2/	1.76		R0850-P3/	1.31	
	R0570-P1/	0.24		R0570-P2/	0.30
R0570-P3/	0.32		R0770-P1.1/	-4.34	
	R0770-P3/	-3.49		R0770-P4/	-3.43
R0790-P1/	-3.04		R0790-P2/	-1.75	
	R0530-P1/	-0.11		R0530-P2/	-0.12
R0530-P3/	0.25		R0910-P1/	0.91	
	R0910-P2/	-0.32		R0380-P1/	-3.18
R0380-P2/	-3.18		R0300-P1/	0.08	
	R0300-P2/	0.08		R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00		RN-001-P1/	0.91
RN-001-P2/	0.37		RN-001-P3/	0.95	
	RN-005-P1/	0.69		RN-005-P2/	0.82
RN-005-P3/	-0.77		RN-008-P1.1/	-0.92	
	RN-008-P2/	0.83		RN-008-P3/	0.60
RN-010-P1/	-0.84		RN-010-P2/	-0.79	
	RN-010-P3/	0.80		RN-013-P1/	0.97
RN-013-P2/	0.97		RN-013-P3/	0.97	
	RN-015-P1/	-0.75		RN-015-P2/	1.56
RN-015-P3/	3.21		RN-029-P1/	-0.35	
	RN-029-P2/	0.50		R0742-P1/	-0.09
R0742-P2/	-0.09		R0655-P1.1/	-0.82	
	R0490-P8/	-4.83		R0490-P7/	-4.83
R0140-P2.1/	1.85		R0140-P1.1/	1.88	
	R0120-P1.1/	-0.07		R0160-P1.1/	-0.32

R0325-P1.1/	0.00	R0400-P1.1/	0.00
R0880-P2.1/	0.00	R1010-P1.1/	0.16
R-0410-P4/	0.65	R-0410-P5/	0.65
R-0410-P6/	0.65	R-0410-P7/	0.72
R0410-P1/	-2.21	R0410-P2/	-2.21
R0410-P3/	-2.21	498.1/	0.81
R0490-P1.1/	-0.81	R0490-P3/	1.22
R0490-P4/	1.20	R0490-P5/	1.20
R0490-P6/	1.21	R0890-ORF-2/	2.60
R0890-ORF-5/	2.60	R0890ORF-3/	2.60
R0890-ORF-4/	2.60	N0140-A-W1.1/	3.82
R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00
R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00
R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00
R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00
R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00
R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00
R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00
R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00
R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00
R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00
R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00
R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00
R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00

R0260-W1.1/	0.00	R0270-W1.1/	0.00
	R0270-W3/	0.00	R0270-W2.1/
R0275-W1.1/	0.00	R0280-W1.1/	0.00
	R0285-W1.1/	0.00	R0290-W2.1/
R0290-W3.1/	0.00	R0290-W4.1/	0.00
	R0300-W1.1/	0.00	R0310-W1.1/
R0310-W2.1/	0.00	R0310-W3.1/	0.00
	R0310-W4.1/	0.00	R0325-W2.1/
R0330-W2.1/	0.00	R0330-W3.1/	0.00
	R0340-W1.1/	0.00	R0340-W2.1/
R0350-W2.1/	0.00	R0350-W3.1/	0.00
	R0360-W2.1/	0.00	R0360-W3.1/
R0370-W1.1/	0.00	R0370-W2.1/	0.00
	R0370-W3.1/	0.00	R0380-W1.1/
R0380-W2.1/	0.00	R0380-W4.1/	0.00
	R0390-W1.1/	0.00	R0390-W2/
R0400-W2.1/	0.00	R0410-W1.1/	0.00
	R0420-W1.1/	0.00	R0420-W2.1/
R0430-W1.1/	0.00	R0430-W2.1/	0.00
	R0440-W1.1/	0.00	R0450-W1.1/
R0450-W2.1/	0.00	R0460-W1.1/	0.00
	R0460-W2.1/	0.00	R0480-W1.1/
R0480-W2.1/	0.00	R0480-W3.1/	0.00
	R0490-W1.1/	0.00	R0490-W3.1/
R0500-W1.1/	0.00	R0510-W2.1/	0.00
	R0520-W1.1/	0.00	R0520-W2.1/
R0530-W1.1/	0.00	R0530-W2.1/	0.00
	R0530-W3/	0.00	R0540-W1.1/
R0540-W2.1/	0.00	R0550-W1.1/	0.00
	R0550-W3.1/	0.00	R0560-W2.1/
R0560-W3.1/	0.00	R0560-W4.1/	0.00
	R0560-W5.1/	0.00	R0570-W1.1/
R0570-W3.1/	0.00	R0570-W4.1/	0.00
	R0570-W5.1/	0.00	R0640-W1.1/
R0650-W1.1/	0.00	R0660-W1.1/	0.00
	R0660-W2.1/	0.00	R0690-W2.1/
R0720-W1.1/	0.00	R0730-W1.1/	0.00
	R0740-W2.1/	0.00	R0740-W4.1/
R0775-W1.1/	0.00	R0780-W2.1/	0.00
	R0790-W1/	0.00	R0800-W1.1/
R0800-W2.1/	0.00	R0810-W1.1/	0.00
	R0830-W3.1/	0.00	R0850-W3.1/
R0870-W2.1/	0.00	R0885-W1.1/	0.00
	R0910-W2.1/	0.00	R0930-W1.1/
R0940-W1.1/	0.00	R0940-W2.1/	0.00
	R0945-W1.1/	0.00	R0950-W2.1/
R0960-W1.1/	0.00	R0960-W3.1/	0.00
	R0960-W4.1/	0.00	R0980-W1.1/
R0990-W1.1/	0.00	R0990-W3.1/	0.00
	R1000-W1.1/	0.00	R1020-W1.1/

R1030-W1.1/	0.00		R1030-W2.1/	0.00	
	R2002-W1.1/	19.05		R02040-W1.1/	0.00
R2090-W1.1/	0.00		R2370-W4.1/	0.00	
	R2380-W2.1/	0.00		R2380-W3.1/	0.00
R0440-W2.1/	0.00		R015-W1.1/	0.00	
	R020-W1.1/	-0.62		R021-W1.1/	0.00
R030-W1.1/	0.00		R031-W1.1/	0.00	
	R042-W1.1/	0.00		R043-W1.1/	0.00
R0850-W1.1/	0.00		R0880-WPump/	0.00	
	R0920-P2-W1/	0.00		R0920-P2-W2/	0.00
R0910-W1/	0.00		R0325-DS-W1/	0.00	
	R0400-WPump/	0.00		R0880-WPump2/	0.00
R0880-DS-W1/	0.00		R0520-DS-W1/	0.00	
	R0640-P1-W1/	0.59		R0640-P1-W2/	0.00
R0640-P2-W1/	0.00		R0690-P1-W1/	0.00	
	R0940-DS-W1/	0.00		R0945-DS-W1/	0.00
R1020-DS-W1/	0.00		R0205-W1/	0.00	
	R0205-W2/	0.00		R0205-W3/	0.00
R0205-W4/	0.05		R0210-W1.1/	0.00	
	R0515-W1.1/	0.00		R0515-W2.1/	3.45
R0620-W1/	0.00		R0620-W2/	0.00	
	R0620-W3/	0.00		R0650-W2.1/	2.04
R0660-W3.1/	0.00		R0742-W1.1/	0.00	
	R0890-W1.1/	0.00		R0915-W1.1/	0.00
RN-019-P1-W1/	0.69		R019-P1-W2/	0.65	
	R0830-P1-W1.1/	0.00		R0830-P1-W2/	0.00
R0970-P1-W1/	0.00		R0970-P1-W2/	0.00	
	R-0001A-W1.1/	22.11		R-0001A-W2/	21.56
R0001C-W1.1/	0.00		R0001C-W2/	0.00	
	R0001C-W3/	0.10		R0001E-W1/	0.00
R0001F-W1.1/	0.10		R0001F-W2/	0.00	
	R0001F-W3/	0.10		R0001F-W4/	0.00
R0001F-W5/	0.10		R001G-W1/	0.00	
	R0930-W6.1.1/	0.00		R0001J-W1.1/	0.00
R000J-W2/	0.00		R000J-W3/	0.00	
	R000J-W4/	0.00		R000J-W5/	0.35
R000J-W6/	0.35		R000J-W7/	0.00	
	R0001J-W8/	0.00		R0001J-W9/	0.00
R0001J-W10/	0.00		R0001J-W11/	0.00	
	R0001J-W12/	0.35		R0001J-W13/	0.35
R0001J-W14/	0.00		R0001I-W1.1/	0.00	
	R001I-W2/	0.00		R0001I-W3/	0.00
R001I-W4/	0.00		R001I-W5/	0.00	
	R0001I-W7/	0.49		R0001I-W7.1/	0.49
R0001K-W1.1/	0.00		R0001K-W2/	0.00	
	R0001K-W3/	0.00		R0880-PUMP/	0.00
1/	0.00	FREE# 2/	0.82		FREE#
	FREE# 3/	0.80		FREE# 4/	0.81
5/	9.66	FREE# 6/	3.82		FREE#
	FREE# 7/	-0.07		FREE# 8/	0.00
					FREE#

9/	0.00	FREE#10/	0.00		
	FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.05	FREE#14/	0.97		
	FREE#15/	0.78	FREE#16/	0.33	
FREE#17/	0.00	FREE#18/	0.00		
	FREE#19/	0.00	FREE#20/	0.32	
FREE#21/	0.00	FREE#22/	0.07		
	FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00		
	FREE#27/	0.00	FREE#28/	3.45	
FREE#29/	0.00	FREE#30/	0.00		
	FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00		
	FREE#35/	0.82	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00		
	FREE#39/	19.05	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.00		
	FREE#43/	0.00	FREE#44/	0.16	
FREE#45/	0.00	FREE#46/	43.67		
	FREE#47/	0.00	FREE#48/	0.29	
FREE#49/	0.00	FREE#50/	10.41		
	FREE#51/	0.70	FREE#52/	0.70	

```
#####
# WEIR Name                R0640-P1-W1
# WEIR Surcharge Coefficient 0.39876
# X-SEC area                0.79165
# Current Flow               1.79088
# Time Step Number          7821
# At Time (hours)           130.37
#####
```

==> System inflows (file) at 133.33 hours (Junction / Inflow, cfs)

N0190	/ 2.92E-01	N0230	/ 5.26E-01	N0220	/
7.42E-01	N0290	/ 9.29E-01	N0370	/ 1.55E+00	N0275
	/ 2.79E-01				
N0280	/ 3.66E+00	N0285	/ 1.37E+01	N0380	/
8.41E+00	N0385	/ 1.18E-01	N0386	/ 1.18E-01	N0388
	/ 1.18E-01				
N0420	/ 2.07E+00	N0530	/ 3.52E+00	N0430	/
3.87E+00	N0310	/ 2.53E+00	N0160	/ 6.43E-01	N0300
	/ 4.09E+00				
N0340	/ 1.62E+01	N0390	/ 1.21E+01	N0001-C	/
8.41E-01	N0460	/ 6.07E+01	N0440	/ 2.53E+01	N0360
	/ 2.35E+00				
N2040	/ 2.52E+01	N0450	/ 3.30E+01	N0400	/
5.36E+01	N0550	/ 5.76E+00	N0640	/ 4.06E-01	N0660
	/ 4.09E-01				
N0780	/ 5.99E-01	N0775	/ 5.31E-01	N0690	/

9.96E-02 N0720	/ 7.42E+00 N0770	/ 6.35E+00 N0885	
/ 1.93E+01			
N0960	/ 2.34E-01 N0990	/ 2.09E-01 N1010	/
1.70E-01 N1030	/ 3.00E-01 N1020	/ 1.54E+01 N0940	
/ 1.98E+01			
N1000	/ 9.39E-01 N0945	/ 1.13E+01 N0980	/
2.75E+01 N0850	/ 2.66E+01 N0890	/ 6.54E+01 N0930	
/ 1.07E+01			
N0920	/ 2.82E-01 N0950	/ 5.18E+00 N0830	/
5.13E-01 N0970	/ 2.56E-01 N-0001K	/ 4.28E-01 N0870	
/ 9.76E+00			
N0790	/ 1.21E+01 N0001-I	/ 1.70E+00 N0915	/
2.02E+01 N0900	/ 1.69E-04 N0910	/ 1.50E+00 N0880	
/ 4.33E-01			
N0810	/ 4.42E+01 N0740	/ 4.79E+00 N0742	/
4.57E-02 N0800	/ 3.23E-01 N0620	/ 6.62E-02 N0730	
/ 1.93E+01			
N0570	/ 7.38E+00 N0560	/ 4.52E+00 N0515	/
4.64E+00 N0510	/ 5.09E+01 N0520	/ 6.95E+01 N0350	
/ 7.26E+00			
N0330	/ 5.09E+00 N0325	/ 5.22E+00 N0180	/
2.67E+00 N0090	/ 3.94E-01 N-0001B	/ 1.89E+00 N0100	
/ 2.19E-01			
N0130	/ 9.32E-01 N0080	/ 7.47E-01 N0050	/
3.82E+00 N0170	/ 6.92E-01 N0205	/ 6.77E-02 N0210	
/ 7.07E+00			
N0150	/ 9.68E-01 N0155	/ 2.22E-01 N0060	/
1.81E+01 N0120	/ 4.57E-01 N0110	/ 1.48E+00 N0140	
/ 2.29E+00			
N0140-A	/ 6.20E-04 N0500	/ 5.52E+00 N0470	/
9.35E+01 N0540	/ 4.54E+00 N0650	/ 3.71E+00 N0490	
/ 4.91E+01			
N2380	/ 5.25E+00 N2370	/ 2.44E+01 N0655	/
9.32E+00 N0480	/ 7.97E+01 N0410	/ 3.12E+01 N0270	
/ 1.24E+01			
N0260	/ 3.56E+01 N0250	/ 5.57E-01 N0240	/
1.39E-01 N0200	/ 4.90E-01 N-002	/ 1.58E-01 N-003	
/ 1.12E-01			
N-004	/ 2.38E-01 N-001	/ 9.12E+00 N-006	/
2.10E-01 N-005	/ 2.51E-01 N-007	/ 1.44E-01 N-009	
/ 1.86E-01			
N-008	/ 4.88E-01 N-011	/ 2.50E-01 N-010	/
4.45E-01 N-014	/ 5.79E-01 N-012	/ 2.74E-01 N-013	
/ 1.48E-01			
N-015	/ 9.25E-01 N2002	/ 6.53E+00 N-020	/
1.66E+00 N-022	/ 3.36E-01 N-026	/ 2.05E-02 N-027	
/ 2.66E-01			
N-028	/ 3.11E-02 N-024	/ 9.92E-01 N-029	/
1.58E-01 N-030	/ 1.31E+00 N-023	/ 5.07E-02 N-031	
/ 2.09E+00			

N-025	/ 1.06E-01	N-041	/ 7.57E-01	N-019	/
7.77E-01 N-021		/ 2.33E+00	N-043	/ 1.05E+00	N-042
/ 2.68E+00					
N-040	/ 1.40E+01	N2090	/ 1.21E+01	N-0001A	/
3.88E+02 N-0001-E		/ 1.70E-01	N-0001-F	/ 9.36E-01	N-0001-G
/ 6.16E-01					
N0001-J	/ 1.61E+00				

Cycle 8000 Time 133 Hrs - 20.00 Min

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 0.92 / 0.92		N0550/ 1.95 / 0.62
N0690/ 4.07 / 4.69		
N0640/ 5.15 / 2.37		N0780/ 5.28 / 0.89
N0830/ 2.87 / 0.82		
N0790/ 4.02 / 1.04		N0800/ 2.23 / 5.58
N0870/ 4.10 / 1.18		
N0510/ 2.13 / 0.70		N0520/ 3.67 / 0.84
N0390/ 2.73 / 1.03		
N0350/ 3.59 / 0.90		N0450/ 2.05 / 0.75
N0770/ 4.14 / 1.09		
N0720/ 1.53 / 0.88		N0960/ 0.19 / 2.09
N0920/ 2.75 / 1.18		
N0950/ 1.59 / 1.17		N0970/ 2.22 / 1.01
N0915/ 7.03 / 1.03		
N0885/ 7.86 / 0.95		N0560/ 3.44 / 0.62
N0810/ 2.38 / 0.53		
N0570/ 3.29 / 0.62		N0990/ 1.20 / 2.77
N1000/ 1.90 / 0.54		
N1020/ 3.77 / 2.77		N1030/ 2.71 / 1.66
N0890/ 3.59 / 2.05		
N0850/ 1.92 / 3.38		N0930/ 5.32 / 1.75
N0980/ 1.84 / 3.46		
N1010/ 1.78 / 2.82		N0430/ 1.06 / 0.93
N0500/ 2.16 / 4.41		
N0230/ 1.54 / 4.85		N0220/ 1.26 / 2.44
N0200/ 3.82 / 2.21		
N0190/ 3.17 / 2.21		N0130/ 1.75 / 1.15
N0100/ 0.69 / 1.15		
N0090/ 2.90 / 5.39		N0120/ 0.64 / 0.40
N0110/ 3.90 / 4.67		
N0170/ 0.89 / 0.18		N0210/ 0.90 / 0.18
N0260/ 2.67 / 2.44		
N0250/ 2.55 / 4.85		N0240/ 3.41 / 4.85
N0140/ 4.28 / 2.38		
N0150/ 0.20 / 1.64		N0270/ 2.31 / 3.88
N0290/ 2.30 / 3.31		
N0180/ 3.85 / 2.39		N0370/ 2.33 / 3.31
N0285/ 1.35 / 3.35		
N0420/ 1.53 / 4.61		N0490/ 2.37 / 1.11

N0410/	3.56	/	0.95		
N0380/	3.31	/	3.31	N0660/	2.27 / 1.43
N0740/	2.33	/	1.09		
N0730/	3.15	/	1.05	N0940/	2.29 / 1.28
N0530/	0.62	/	2.28		
N0060/	2.44	/	1.15	N0050/	3.42 / 2.56
N0325/	5.26	/	0.89		
N0160/	2.48	/	0.39	N0470/	2.19 / 4.00
N0540/	0.95	/	2.30		
N0650/	2.41	/	1.92	N0400/	3.47 / 0.57
N0360/	2.05	/	0.87		
N0480/	1.98	/	4.24	N0080/	2.51 / 2.99
N0310/	1.98	/	0.39		
N0300/	4.74	/	0.89	N0460/	2.99 / 0.84
N0440/	2.15	/	0.78		
N0330/	4.32	/	0.89	N0655/	2.93 / 0.02
N0375/	3.31	/	3.31		
N0385/	2.43	/	1.34	N0275/	1.01 / 3.31
N0280/	1.76	/	3.76		
N0202/	5.78	/	2.21	N0340/	2.69 / 0.90
N0515/	1.82	/	0.62		
N-001/	1.79	/	2.02	N-002/	0.70 / 3.70
N-003/	0.14	/	2.70		
N-004/	0.12	/	3.00	N-005/	0.82 / 1.69
N-008/	1.45	/	1.41		
N-010/	1.66	/	1.37	N-013/	2.51 / 1.35
N-015/	2.53	/	1.34		
N-006/	0.21	/	2.87	N-007/	0.18 / 2.64
N-009/	0.20	/	2.88		
N-011/	0.22	/	2.26	N-014/	0.44 / 1.99
N-012/	0.37	/	1.85		
N-025/	2.61	/	1.37	N-023/	1.11 / 1.56
N-021/	2.71	/	2.24		
N-019/	4.08	/	3.86	N-041/	3.08 / 3.86
N-020/	0.82	/	2.20		
N-022/	1.06	/	2.02	N-024/	1.79 / 1.52
N-029/	2.36	/	1.38		
N-026/	0.51	/	1.52	N-027/	1.86 / 1.53
N-028/	1.84	/	1.53		
N-030/	0.17	/	0.10	N-043/	1.25 / 0.09
N-042/	0.67	/	0.04		
N-031/	0.90	/	0.05	N-040/	1.90 / 0.42
N0620/	0.77	/	0.17		
N0900/	4.17	/	1.17	N-009mh/	2.64 / 2.64
N0205/	5.71	/	2.21		
N0386/	2.36	/	1.27	N0388/	2.25 / 1.16
N0775/	1.54	/	0.89		
N2040/	1.72	/	0.62	N2380/	2.70 / 0.89
N0155/	0.43	/	0.29		
N0945/	2.05	/	1.24	N2002/	3.14 / 1.34

N2090/	2.09	/	0.20		
N0742/	1.58	/	1.07	N0910/	7.14 / 1.14
N0880/	8.05	/	1.14		
N9004/	4.10	/	1.36	N9004-B/	4.15 / 1.36
N9004-C/	3.90	/	1.36	N9004-F/	2.53 / 1.36
N9004-D/	4.04	/	1.36	N9001-F/	1.30 / 0.40
N9001-B/	2.49	/	0.40		
N9001-D/	1.30	/	0.40	N9005/	0.40 / 0.40
N9000/	2.39	/	0.40		
N9003/	0.40	/	0.40	N9004-J/	2.69 / 1.36
N9005-E/	0.40	/	0.40		
N9005-G/	0.47	/	0.47	N2370/	2.51 / 0.95
N9004-G/	2.45	/	1.36		
N9002/	1.71	/	0.40	N9000-E/	2.39 / 0.40
N9000-B/	2.39	/	0.40	N9001-G/	1.30 / 0.40
N9000-C/	2.39	/	0.40	N9001-K/	0.57 / 0.40
N9000-F/	2.39	/	0.40		
N9001-E/	2.49	/	0.40	N9003-A/	0.40 / 0.40
N9001-H/	1.30	/	0.40	N9003-D/	0.40 / 0.40
N9001-J/	0.57	/	0.40	N9003-G/	0.40 / 0.40
N9002-A/	1.71	/	0.40		
N9002-B/	1.71	/	0.40	N9004-H/	2.53 / 1.36
N9003-B/	0.40	/	0.40	N9005-A/	0.40 / 0.40
N9003-C/	0.40	/	0.40	N9005-D/	0.40 / 0.40
N9003-E/	0.40	/	0.40		
N9003-F/	0.40	/	0.40	N9000-D/	2.65 / 0.40
N9004-A/	4.10	/	1.36		
N9004-E/	4.04	/	1.36	N0001-C/	0.74 / 2.89
N9004-I/	2.53	/	1.36		
N9004-K/	2.69	/	1.36	N-0001-F/	0.56 / 4.06
N9005-B/	0.40	/	0.40		
N9005-C/	0.40	/	0.40	N-0001F-OF-B/	0.00 / 3.13
N9005-F/	0.54	/	0.54		
N9005-H/	0.40	/	0.40	N9005-J/	0.40 / 0.40
N-0001A/	9.11	/	1.11		
N-0001B/	1.65	/	1.15	N-0001K/	0.93 / 2.96
N-0001-E/	0.55	/	5.35		
N-0001E-OF/	0.00	/	3.13		
N-0001-G/	0.75	/	4.75		
N-0001F-OF-A/	0.00	/	3.13		
N9004-L/	4.10	/	1.36		
N0001-J/	0.58	/	1.77		
N9005-K/	0.40	/	0.40		
N0001-I/	1.18	/	2.31		
N0140-A/	4.47	/	2.37		

	Conduit/	FLOW	====>	"*" Conduit uses the normal flow option.
	R0870/	46.09		R0770-P2/ -21.96
R0900/	44.36	R0370/		2.52
	R0280/	-8.15		R0202/ -0.93

RN-002/	0.32	RN-003/	0.12	
	RN-006/	0.23	RN-007/	0.16
RN-009/	0.21	RN-009MH/	0.21	
	RN-011/	0.28	RN-014/	1.42
RN-012/	1.75*	RN-023/	3.92	
	RN-021/	-3.77	RN-041/	2.42
RN-020/	7.14	RN-022/	8.22	
	RN-024/	12.80	RN-026/	0.03
RN-027/	-1.13	RN-028/	1.22	
	R0742-P3/	2.34	R0655-P2/	-6.04
R0655-P3/	-5.92	R0655-P4/	5.99	
	R0120-P2/	0.67	R1010-P2/	1.58
RN-025-P1/	8.39	RN-025-P2/	-7.53	
	R0155-P1/	2.32	R0386/	29.94
R0388/	30.05	R0385/	29.83	
	R0375/	10.67	R0335/	3.92
R-0001B-P1/	-1.24	R0540-P1/	-3.67	
	R0540-P2/	2.76	R0540-P3/	2.49
R0290-P1/	-1.07	R0285.1/	13.62	
	R0250.1/	0.26	R0230.1/	0.42
R0220.1/	0.73	R0200.1/	0.93	
	R0190.1/	0.32	R0170.1/	0.70
R0180-P1/	5.81	R0180-P2/	5.78	
	R0140.1/	0.03	R0140-P3.1/	0.03
R0150-P1/	0.44	R0150-P2/	0.00*	
	R0150-P3/	0.00*	R0150-P4/	0.57
R0150-P5/	0.00	R0110.1/	-10.66	
	R0130-P1/	-0.17	R0130-P2/	-0.14
R0100-P1/	-0.10	R0100-P2/	-0.10	
	R0310.1/	-0.29	R0430-P1/	-0.98
R0430-P2/	-0.98	R0430-P3/	-0.98	
	R0430-P4/	-0.98	R0340-P1/	-10.68
R0340-P2/	-8.30	R0350-P1/	12.35	
	R0350-P2/	12.35	R0330-P1/	0.13
R0330-P2/	0.13	R0450-P1/	11.10	
	R0450-P2/	11.10	P0360-P1/	-1.10
P0360-P2/	-1.66	R0550-P1/	-2.34	
	R0550-P2/	-2.24	R0560-P1/	-0.77
R0560-P2/	-0.92	R0560-P3/	-0.93	
	R0780.1/	-0.56	R0740.1/	0.39
R0730.1/	4.49	R0880.1/	0.00	
	R0950.1/	5.09	R0920.1/	1.22
R0960.1/	0.25	R0990.1/	-0.35	
	R1010-P3/	-5.89	R1010-P4/	-6.17
R1010-P5/	-6.06	R0980-P1.1/	-21.59	
	R0980-P2.1/	6.35	R0850-P1/	12.35
R0850-P2/	11.67	R0850-P3/	10.63	
	R0570-P1/	1.51	R0570-P2/	1.62
R0570-P3/	1.65	R0770-P1.1/	-17.46	
	R0770-P3/	-22.43	R0770-P4/	-22.52

R0790-P1/	-10.34		R0790-P2/	-5.39	
	R0530-P1/	2.40		R0530-P2/	-1.32
R0530-P3/	2.81		R0910-P1/	-0.20	
	R0910-P2/	0.07		R0380-P1/	-14.86
R0380-P2/	-14.86		R0300-P1/	-1.37	
	R0300-P2/	-1.37		R0290-P2.1/	0.26
RN-004-P1/	0.08		RN-004-P2/	0.13	
	RN-004-P3/	0.04		RN-001-P1/	3.95
RN-001-P2/	2.86		RN-001-P3/	4.00	
	RN-005-P1/	3.57		RN-005-P2/	4.21
RN-005-P3/	-3.76		RN-008-P1.1/	-4.42	
	RN-008-P2/	4.28		RN-008-P3/	3.67
RN-010-P1/	-4.43		RN-010-P2/	-4.21	
	RN-010-P3/	4.26		RN-013-P1/	4.69
RN-013-P2/	4.69		RN-013-P3/	4.69	
	RN-015-P1/	-1.30		RN-015-P2/	2.23
RN-015-P3/	3.37		RN-029-P1/	-5.57	
	RN-029-P2/	6.96		R0742-P1/	-1.15
R0742-P2/	-1.15		R0655-P1.1/	-6.03	
	R0490-P8/	-8.25		R0490-P7/	-8.25
R0140-P2.1/	8.57		R0140-P1.1/	8.72	
	R0120-P1.1/	-0.17		R0160-P1.1/	4.36
R0325-P1.1/	0.00		R0400-P1.1/	0.00	
	R0880-P2.1/	0.00		R1010-P1.1/	2.03
R-0410-P4/	0.99		R-0410-P5/	0.99	
	R-0410-P6/	1.00		R-0410-P7/	0.99
R0410-P1/	-5.99		R0410-P2/	-5.99	
	R0410-P3/	-5.99		498.1/	-5.36
R0490-P1.1/	5.31		R0490-P3/	3.74	
	R0490-P4/	3.73		R0490-P5/	3.75
R0490-P6/	3.74		R0890-ORF-2/	5.31	
	R0890-ORF-5/	5.31		R0890ORF-3/	5.31
R0890-ORF-4/	5.31		N0140-A-W1.1/	17.46	
	R0540-W3/	0.00		R0290-P5/	0.00
R0285-W2/	0.00		R0250-W1/	0.00	
	R0230-W1/	0.00		R0220-W2/	0.00
R0200-W3/	0.00		R0190-W4/	0.00	
	R0170-W3/	0.00		R0180-W1/	0.00
R0140-W1/	0.00		R0150-W3/	0.00	
	R0110-W1/	0.00		R0130-W1/	0.00
R0100-W4/	0.00		R0310-W5.1/	0.00	
	R0430-W3/	0.00		R0340-W3/	0.00
R0350-W1/	0.00		R0330-W1/	0.00	
	R0360-W1/	0.00		R0550-W2/	0.00
R0560-W1/	0.00		R0780-W1/	0.00	
	R0740-W3/	0.00		R0870-W1/	0.00
R0950-W1/	0.00		R0960-W2/	0.00	
	R0990-W2/	0.00		R1010-W2/	0.00
R0980-W2/	0.00		R0850-W2/	0.00	
	R0770-W2/	0.00		R0530-W4/	0.00

R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00	
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00	
	R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00	
	R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00	
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00	
	R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00	
	R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.00	R0330-W3.1/	0.00	
	R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00	
	R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00	
	R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00	
	R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00	
	R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00	
	R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00	
	R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00	
	R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00	
	R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00	
	R0530-W3/	0.00	R0540-W1.1/	0.00

R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	0.00	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-26.53	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	-4.92	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	1.91	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.18
R0940-DS-W1/	0.00	R0945-DS-W1/	0.00
R1020-DS-W1/	4.28	R0205-W1/	0.03
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	1.33	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	4.18
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	14.38
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.71	R019-P1-W2/	5.24
R0830-P1-W1.1/	-0.87	R0830-P1-W2/	0.00
R0970-P1-W1/	-0.87	R0970-P1-W2/	0.00
R-0001A-W1.1/	38.04	R-0001A-W2/	65.92

R0001C-W1.1/	0.00		R0001C-W2/	0.77	
	R0001C-W3/	0.16		R0001E-W1/	0.36
R0001F-W1.1/	1.31		R0001F-W2/	0.00	
	R0001F-W3/	1.31		R0001F-W4/	0.95
R0001F-W5/	1.31		R001G-W1/	0.00	
	R0930-W6.1.1/	0.00		R0001J-W1.1/	0.00
R000J-W2/	0.00		R000J-W3/	0.00	
	R000J-W4/	0.00		R000J-W5/	1.57
R000J-W6/	1.57		R000J-W7/	0.00	
	R0001J-W8/	0.00		R0001J-W9/	0.00
R0001J-W10/	0.00		R0001J-W11/	0.00	
	R0001J-W12/	1.57		R0001J-W13/	1.57
R0001J-W14/	0.00		R0001I-W1.1/	0.00	
	R001I-W2/	0.00		R0001I-W3/	0.00
R001I-W4/	0.00		R001I-W5/	0.00	
	R0001I-W7/	1.36		R0001I-W7.1/	1.36
R0001K-W1.1/	0.25		R0001K-W2/	0.00	
	R0001K-W3/	0.00		R0880-PUMP/	0.00
1/	0.00	FREE# 2/	6.04		FREE#
	FREE# 3/	5.92	FREE# 4/	5.99	FREE#
5/	16.49	FREE# 6/	17.46		FREE#
	FREE# 7/	-0.17	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00		
	FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	1.58	FREE#14/	8.39		
	FREE#15/	7.53	FREE#16/	2.32	
FREE#17/	0.00	FREE#18/	0.00		
	FREE#19/	0.00	FREE#20/	-4.36	
FREE#21/	0.00	FREE#22/	0.67		
	FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00		
	FREE#27/	0.00	FREE#28/	4.18	
FREE#29/	0.00	FREE#30/	0.00		
	FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00		
	FREE#35/	6.03	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00		
	FREE#39/	-26.53	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	4.28		
	FREE#43/	0.00	FREE#44/	2.03	
FREE#45/	0.00	FREE#46/	103.96		
	FREE#47/	0.36	FREE#48/	4.87	
FREE#49/	0.00	FREE#50/	21.22		
	FREE#51/	3.13	FREE#52/	3.13	

==> System inflows (file) at 141.67 hours (Junction / Inflow, cfs)

N0190 / 0.00E+00 N0230 / 0.00E+00 N0220 /
1.35E-05 N0290 / 5.64E-04 N0370 / 2.33E-06 N0275 /
/ 0.00E+00

N0280	/ 1.64E-03 N0285	/ 8.10E+00 N0380	/
6.60E-01 N0385	/ 0.00E+00 N0386	/ 0.00E+00 N0388	
/ 0.00E+00			
N0420	/ 0.00E+00 N0530	/ 1.99E-03 N0430	/
3.09E-03 N0310	/ 9.17E-04 N0160	/ 8.57E-08 N0300	
/ 8.55E-01			
N0340	/ 1.19E+01 N0390	/ 9.23E-03 N0001-C	/
5.33E-05 N0460	/ 5.00E+00 N0440	/ 5.83E+00 N0360	
/ 1.37E-01			
N2040	/ 2.73E+00 N0450	/ 8.45E+00 N0400	/
1.32E+01 N0550	/ 1.97E-02 N0640	/ 0.00E+00 N0660	
/ 0.00E+00			
N0780	/ 2.71E-10 N0775	/ 0.00E+00 N0690	/
0.00E+00 N0720	/ 6.93E-02 N0770	/ 1.02E+00 N0885	
/ 1.94E+00			
N0960	/ 3.12E-08 N0990	/ 1.07E-07 N1010	/
1.48E-09 N1030	/ 4.00E-08 N1020	/ 7.01E-01 N0940	
/ 6.56E+00			
N1000	/ 1.29E-04 N0945	/ 3.75E+00 N0980	/
1.07E+01 N0850	/ 2.59E+00 N0890	/ 2.10E+00 N0930	
/ 2.91E+00			
N0920	/ 0.00E+00 N0950	/ 6.78E-01 N0830	/
4.44E-05 N0970	/ 6.17E-07 N-0001K	/ 0.00E+00 N0870	
/ 4.43E-01			
N0790	/ 2.41E+00 N0001-I	/ 0.00E+00 N0915	/
9.08E-03 N0900	/ 0.00E+00 N0910	/ 6.74E-04 N0880	
/ 1.62E-03			
N0810	/ 2.59E+01 N0740	/ 2.43E-03 N0742	/
0.00E+00 N0800	/ 0.00E+00 N0620	/ 1.76E-10 N0730	
/ 8.42E+00			
N0570	/ 4.09E-02 N0560	/ 3.03E+00 N0515	/
9.62E-01 N0510	/ 1.05E+01 N0520	/ 2.61E+01 N0350	
/ 1.14E-01			
N0330	/ 6.77E-01 N0325	/ 1.24E+00 N0180	/
5.83E-04 N0090	/ 0.00E+00 N-0001B	/ 8.84E-03 N0100	
/ 0.00E+00			
N0130	/ 2.48E-09 N0080	/ 1.06E-05 N0050	/
2.68E-01 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	
/ 1.81E+00			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
2.10E+00 N0120	/ 1.23E-07 N0110	/ 3.99E-07 N0140	
/ 4.16E-05			
N0140-A	/ 0.00E+00 N0500	/ 4.90E+00 N0470	/
6.96E+00 N0540	/ 1.83E+00 N0650	/ 3.88E-01 N0490	
/ 2.77E+01			
N2380	/ 1.96E-02 N2370	/ 2.69E-01 N0655	/
6.00E-01 N0480	/ 1.51E+00 N0410	/ 2.72E+01 N0270	
/ 1.64E+00			
N0260	/ 4.98E+00 N0250	/ 1.51E-07 N0240	/
0.00E+00 N0200	/ 1.17E-06 N-002	/ 0.00E+00 N-003	

	/ 0.00E+00				
N-004		/ 0.00E+00	N-001	/ 1.82E+00	N-006
0.00E+00	N-005		/ 0.00E+00	N-007	/ 0.00E+00
	/ 0.00E+00				
N-008		/ 0.00E+00	N-011	/ 0.00E+00	N-010
3.84E-09	N-014		/ 1.03E-04	N-012	/ 0.00E+00
	/ 0.00E+00				
N-015		/ 0.00E+00	N2002	/ 3.04E-03	N-020
2.87E-02	N-022		/ 3.04E-07	N-026	/ 0.00E+00
	/ 1.36E-07				
N-028		/ 0.00E+00	N-024	/ 4.44E-05	N-029
0.00E+00	N-030		/ 5.08E-04	N-023	/ 2.31E-11
	/ 1.55E-02				
N-025		/ 0.00E+00	N-041	/ 0.00E+00	N-019
4.17E-05	N-021		/ 1.87E-02	N-043	/ 4.88E-04
	/ 2.00E+00				
N-040		/ 1.09E+01	N2090	/ 7.17E-01	N-0001A
2.27E+00	N-0001-E		/ 3.27E-05	N-0001-F	/ 0.00E+00
	/ 3.58E-04				N-0001-G
N0001-J		/ 0.00E+00			

Cycle 8500 Time 141 Hrs - 40.00 Min

Junction	Depth	Elevation	====>	"*" Junction is Surcharged.
N0335/	1.00 /	1.00		N0550/ 2.02 / 0.69
N0690/	4.01 /	4.63		
N0640/	4.85 /	2.07		N0780/ 5.29 / 0.90
N0830/	3.04 /	0.99		
N0790/	4.13 /	1.15		N0800/ 2.25 / 5.60
N0870/	4.08 /	1.16		
N0510/	2.26 /	0.83		N0520/ 3.85 / 1.02
N0390/	2.75 /	1.05		
N0350/	3.69 /	1.00		N0450/ 2.25 / 0.95
N0770/	4.20 /	1.15		
N0720/	1.59 /	0.94		N0960/ 0.00 / 1.90
N0920/	2.73 /	1.16		
N0950/	1.58 /	1.16		N0970/ 2.37 / 1.16
N0915/	7.15 /	1.15		
N0885/	8.05 /	1.14		N0560/ 3.51 / 0.69
N0810/	2.52 /	0.67		
N0570/	3.36 /	0.69		N0990/ 1.34 / 2.91
N1000/	1.91 /	0.55		
N1020/	3.91 /	2.91		N1030/ 2.75 / 1.70
N0890/	3.57 /	2.03		
N0850/	0.90 /	2.36		N0930/ 5.56 / 1.99
N0980/	1.33 /	2.95		
N1010/	1.87 /	2.91		N0430/ 1.13 / 1.00
N0500/	2.33 /	4.58		
N0230/	1.57 /	4.88		N0220/ 1.42 / 2.60
N0200/	3.75 /	2.14		

N0190/	3.10	/	2.14	N0130/	2.04	/	1.44
N0100/	0.98	/	1.44	N0120/	0.49	/	0.25
N0090/	2.92	/	5.41	N0210/	0.98	/	0.26
N0110/	0.67	/	1.44	N0240/	3.44	/	4.88
N0170/	0.97	/	0.26	N0270/	2.52	/	4.09
N0260/	2.83	/	2.60	N0370/	2.03	/	3.01
N0250/	2.58	/	4.88	N0490/	2.59	/	1.33
N0140/	3.57	/	1.67	N0660/	2.29	/	1.45
N0150/	0.00	/	1.44	N0940/	2.55	/	1.54
N0290/	2.00	/	3.01	N0050/	3.56	/	2.70
N0180/	3.13	/	1.67	N0470/	2.31	/	4.12
N0285/	1.02	/	3.02	N0400/	3.59	/	0.69
N0420/	1.58	/	4.66	N0080/	2.56	/	3.04
N0410/	3.95	/	1.34	N0460/	3.17	/	1.02
N0380/	3.01	/	3.01	N0655/	2.92	/	0.01
N0740/	2.41	/	1.17	N0275/	0.71	/	3.01
N0730/	3.34	/	1.24	N0340/	2.79	/	1.00
N0530/	0.27	/	1.93	N-002/	0.50	/	3.50
N0060/	2.73	/	1.44	N-005/	0.43	/	1.30
N0325/	5.37	/	1.00	N-013/	2.37	/	1.21
N0160/	2.34	/	0.25	N-007/	0.00	/	2.46
N0540/	0.58	/	1.93	N-014/	0.15	/	1.70
N0650/	2.12	/	1.63	N-023/	0.81	/	1.26
N0360/	2.18	/	1.00	N-041/	2.67	/	3.45
N0480/	2.07	/	4.33	N-024/	1.48	/	1.21
N0310/	1.84	/	0.25				
N0300/	4.85	/	1.00				
N0440/	2.31	/	0.94				
N0330/	4.43	/	1.00				
N0375/	3.01	/	3.01				
N0385/	2.49	/	1.40				
N0280/	1.01	/	3.01				
N0202/	5.71	/	2.14				
N0515/	1.89	/	0.69				
N-001/	1.38	/	1.61				
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88				
N-008/	1.25	/	1.21				
N-010/	1.50	/	1.21				
N-015/	2.40	/	1.21				
N-006/	0.00	/	2.66				
N-009/	0.00	/	2.68				
N-011/	0.00	/	2.04				
N-012/	0.07	/	1.55				
N-025/	2.45	/	1.21				
N-021/	2.29	/	1.82				
N-019/	3.67	/	3.45				
N-020/	0.23	/	1.61				
N-022/	0.35	/	1.31				
N-029/	2.19	/	1.21				

N-026/	0.20 /	1.21	N-027/	1.54 /	1.21
N-028/	1.52 /	1.21	N-043/	1.27 /	0.11
N-030/	0.19 /	0.12	N-040/	2.21 /	0.73
N-042/	0.91 /	0.28	N-009mh/	2.42 /	2.42
N-031/	0.93 /	0.08	N0388/	2.45 /	1.36
N0620/	0.80 /	0.20	N2380/	3.08 /	1.27
N0900/	4.16 /	1.16	N2002/	3.01 /	1.21
N0205/	5.64 /	2.14	N0910/	7.16 /	1.16
N0386/	2.47 /	1.38	N9004-B/	4.00 /	1.21
N0775/	1.55 /	0.90	N9004-F/	2.38 /	1.21
N2040/	1.85 /	0.75	N9001-F/	1.15 /	0.25
N0155/	0.28 /	0.14	N9005/	0.25 /	0.25
N0945/	2.27 /	1.46	N9004-J/	2.54 /	1.21
N2090/	2.22 /	0.33	N2370/	2.90 /	1.34
N0742/	1.68 /	1.17	N9000-E/	2.24 /	0.25
N0880/	8.07 /	1.16	N9001-G/	1.15 /	0.25
N9004/	3.95 /	1.21	N9001-K/	0.42 /	0.25
N9004-C/	3.75 /	1.21	N9003-A/	0.25 /	0.25
N9004-D/	3.89 /	1.21	N9003-D/	0.25 /	0.25
N9001-B/	2.34 /	0.25	N9003-G/	0.25 /	0.25
N9001-D/	1.15 /	0.25	N9004-H/	2.38 /	1.21
N9000/	2.24 /	0.25	N9005-A/	0.25 /	0.25
N9003/	0.25 /	0.25	N9005-D/	0.25 /	0.25
N9005-E/	0.25 /	0.25	N9000-D/	2.50 /	0.25
N9005-G/	0.53 /	0.53	N0001-C/	0.66 /	2.81
N9004-G/	2.30 /	1.21			
N9002/	1.56 /	0.25			
N9000-B/	2.24 /	0.25			
N9000-C/	2.24 /	0.25			
N9000-F/	2.24 /	0.25			
N9001-E/	2.34 /	0.25			
N9001-H/	1.15 /	0.25			
N9001-J/	0.42 /	0.25			
N9002-A/	1.56 /	0.25			
N9002-B/	1.56 /	0.25			
N9003-B/	0.25 /	0.25			
N9003-C/	0.25 /	0.25			
N9003-E/	0.25 /	0.25			
N9003-F/	0.25 /	0.25			
N9004-A/	3.95 /	1.21			
N9004-E/	3.89 /	1.21			
N9004-I/	2.38 /	1.21			
N9004-K/	2.54 /	1.21			
N9005-B/	0.25 /	0.25			
N9005-C/	0.25 /	0.25			
N9005-F/	0.60 /	0.60			
N9005-H/	0.25 /	0.25			
N-0001A/	9.08 /	1.08			
N-0001B/	1.94 /	1.44			
N-0001-E/	0.51 /	5.31			

N-0001E-OF/	0.00 /	3.13	N-0001-F/	0.38 /	3.88
N-0001-G/	0.79 /	4.79			
N-0001F-OF-A/	0.00 /	3.13	N-0001F-OF-B/	0.00 /	3.13
N9004-L/	3.95 /	1.21			
N0001-J/	0.33 /	1.52	N9005-J/	0.25 /	0.25
N9005-K/	0.25 /	0.25			
N0001-I/	1.10 /	2.23	N-0001K/	0.91 /	2.94
N0140-A/	3.77 /	1.67			

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	12.01		R0770-P2/	-10.18
R0900/	11.28			R0370/	0.86
	R0280/	-0.04		R0202/	-0.01
RN-002/	0.01			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.08
RN-012/	0.08*			RN-023/	1.39
	RN-021/	-1.37		RN-041/	1.01
RN-020/	0.63			RN-022/	0.65
	RN-024/	0.82		RN-026/	0.00
RN-027/	-0.03			RN-028/	0.03
	R0742-P3/	-3.77		R0655-P2/	-0.78
R0655-P3/	-0.76			R0655-P4/	0.77
	R0120-P2/	0.12		R1010-P2/	2.01
RN-025-P1/	1.24			RN-025-P2/	-1.07
	R0155-P1/	1.17*		R0386/	16.75
R0388/	16.74			R0385/	16.76
	R0375/	0.91		R0335/	0.00
R-0001B-P1/	0.12			R0540-P1/	-0.95
	R0540-P2/	0.54		R0540-P3/	0.38
R0290-P1/	-0.58			R0285.1/	8.27
	R0250.1/	0.04		R0230.1/	0.02
R0220.1/	-0.01			R0200.1/	0.01
	R0190.1/	0.00		R0170.1/	-0.00
R0180-P1/	0.62			R0180-P2/	0.61
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00			R0150-P2/	0.00*
	R0150-P3/	0.00*		R0150-P4/	0.00
R0150-P5/	0.00			R0110.1/	0.00
	R0130-P1/	-0.04		R0130-P2/	-0.04
R0100-P1/	0.00			R0100-P2/	0.00
	R0310.1/	-0.23		R0430-P1/	-0.00
R0430-P2/	-0.00			R0430-P3/	-0.00
	R0430-P4/	-0.00		R0340-P1/	-6.62
R0340-P2/	-5.26			R0350-P1/	5.95
	R0350-P2/	5.95		R0330-P1/	-0.88
R0330-P2/	-0.88			R0450-P1/	6.73
	R0450-P2/	6.73		P0360-P1/	-0.04
P0360-P2/	-0.05			R0550-P1/	-0.01

R0560-P2/	R0550-P2/	-0.01	R0560-P1/	-1.10
	-1.37		R0560-P3/	-1.39
R0730.1/	R0780.1/	-0.01	R0740.1/	-3.35
	-3.52		R0880.1/	0.00
R0960.1/	R0950.1/	-0.29	R0920.1/	1.07
	0.00		R0990.1/	0.05
R1010-P5/	R1010-P3/	-0.82	R1010-P4/	-0.85
	-0.84		R0980-P1.1/	-7.00
R0850-P2/	R0980-P2.1/	3.96	R0850-P1/	2.71
	2.21		R0850-P3/	1.69
R0570-P3/	R0570-P1/	0.23	R0570-P2/	0.26
	0.28		R0770-P1.1/	-2.86
R0790-P1/	R0770-P3/	-5.17	R0770-P4/	-5.18
	-2.24		R0790-P2/	-1.07
R0530-P3/	R0530-P1/	-0.21	R0530-P2/	-0.23
	0.45		R0910-P1/	-0.39
R0380-P2/	R0910-P2/	0.15	R0380-P1/	-8.38
	-8.38		R0300-P1/	0.30
RN-004-P1/	R0300-P2/	0.30	R0290-P2.1/	0.07
	0.00		RN-004-P2/	0.00
RN-001-P2/	RN-004-P3/	0.00	RN-001-P1/	0.89
	0.36		RN-001-P3/	0.92
RN-005-P3/	RN-005-P1/	0.63	RN-005-P2/	0.85
	-0.72		RN-008-P1.1/	-0.69
RN-010-P1/	RN-008-P2/	0.80	RN-008-P3/	0.70
	-0.75		RN-010-P2/	-0.71
RN-013-P2/	RN-010-P3/	0.73	RN-013-P1/	0.76
	0.76		RN-013-P3/	0.76
RN-015-P3/	RN-015-P1/	-0.57	RN-015-P2/	1.00
	1.66		RN-029-P1/	-0.38
R0742-P2/	RN-029-P2/	0.49	R0742-P1/	1.88
	1.88		R0655-P1.1/	-0.77
R0140-P2.1/	R0490-P8/	-9.10	R0490-P7/	-9.10
	0.92		R0140-P1.1/	0.93
R0325-P1.1/	R0120-P1.1/	-0.12	R0160-P1.1/	-1.03
	0.00		R0400-P1.1/	0.00
R-0410-P4/	R0880-P2.1/	0.00	R1010-P1.1/	2.49
	1.09		R-0410-P5/	1.09
R0410-P1/	R-0410-P6/	1.10	R-0410-P7/	1.10
	-7.37		R0410-P2/	-7.37
R0490-P1.1/	R0410-P3/	-7.37	498.1/	1.03
	-1.02		R0490-P3/	1.97
R0490-P6/	R0490-P4/	1.96	R0490-P5/	1.97
	1.97		R0890-ORF-2/	5.18
R0890-ORF-4/	R0890-ORF-5/	5.18	R0890ORF-3/	5.18
	5.18		N0140-A-W1.1/	1.90
R0285-W2/	R0540-W3/	0.00	R0290-P5/	0.00
	0.00		R0250-W1/	0.00
R0200-W3/	R0230-W1/	0.00	R0220-W2/	0.00
	0.00		R0190-W4/	0.00

R0140-W1/	R0170-W3/	0.00	R0180-W1/	0.00
	0.00		R0150-W3/	0.00
R0100-W4/	R0110-W1/	0.00	R0130-W1/	0.00
	0.00		R0310-W5.1/	0.00
R0350-W1/	R0430-W3/	0.00	R0340-W3/	0.00
	0.00		R0330-W1/	0.00
R0560-W1/	R0360-W1/	0.00	R0550-W2/	0.00
	0.00		R0780-W1/	0.00
R0950-W1/	R0740-W3/	0.00	R0870-W1/	0.00
	0.00		R0960-W2/	0.00
R0980-W2/	R0990-W2/	0.00	R1010-W2/	0.00
	0.00		R0850-W2/	0.00
R0380-W3/	R0770-W2/	0.00	R0530-W4/	0.00
	0.00		R0300-W2/	0.00
R0140-W2/	R0290-W1/	0.00	R0655-W2/	0.00
	0.00		R0120-W2/	0.00
R0880-W2/	R0160-W1/	0.00	R0400-W1/	0.00
	0.00		R1010-W1/	0.00
R0050-W2.1/	R0490-W2/	0.00	R0050-W1.1/	0.00
	0.00		R0060-W1.1/	0.00
R0090-W1.1/	R0080-W1.1/	0.00	R0080-W2.1/	0.00
	0.00		R0090-W2.1/	0.00
R0100-W1.1/	R0090-W3.1/	0.00	R0090-W4.1/	0.00
	0.00		R0100-W2.1/	0.00
R0120-W1.1/	R0100-W3.1/	0.00	R0110-W2.1/	0.00
	0.00		R0130-W2.1/	0.00
R0170-W1.1/	R0150-W1.1/	0.00	R0150-W2.1/	0.00
	0.00		R0170-W2.1/	0.00
R0190-W3.1/	R0190-W1.1/	0.00	R0190-W2.1/	0.00
	0.00		R0200-W1.1/	0.00
R0240-W1.1/	R0200-W2.1/	0.00	R0220-W1.1/	0.00
	0.00		R0240-W2.1/	0.00
R0240-W5.1/	R0240-W3.1/	0.00	R0240-W4.1/	0.00
	0.00		R0240-W6.1/	0.00
R0260-W1.1/	R0250-W2.1/	0.00	R0250-W3.1/	0.00
	0.00		R0270-W1.1/	0.00
R0275-W1.1/	R0270-W3/	0.00	R0270-W2.1/	0.00
	0.00		R0280-W1.1/	0.00
R0290-W3.1/	R0285-W1.1/	0.00	R0290-W2.1/	0.00
	0.00		R0290-W4.1/	0.00
R0310-W2.1/	R0300-W1.1/	0.00	R0310-W1.1/	0.00
	0.00		R0310-W3.1/	0.00
R0330-W2.1/	R0310-W4.1/	0.00	R0325-W2.1/	0.00
	0.46		R0330-W3.1/	0.00
R0350-W2.1/	R0340-W1.1/	0.00	R0340-W2.1/	0.00
	0.00		R0350-W3.1/	0.00
R0370-W1.1/	R0360-W2.1/	0.00	R0360-W3.1/	0.00
	0.00		R0370-W2.1/	0.00
R0380-W2.1/	R0370-W3.1/	0.00	R0380-W1.1/	0.00
	0.00		R0380-W4.1/	0.00

R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	-0.16	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	6.93	R2040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	-0.59	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.70	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00

R0940-DS-W1/	0.05	R0945-DS-W1/	0.00	
R1020-DS-W1/	6.19	R0205-W1/	0.00	
R0205-W2/	0.00	R0205-W3/	0.00	
R0205-W4/	0.02	R0210-W1.1/	0.00	
R0515-W1.1/	0.00	R0515-W2.1/	4.91	
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	2.47	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.71	R019-P1-W2/	1.23	
R0830-P1-W1.1/	-0.66	R0830-P1-W2/	0.00	
R0970-P1-W1/	-0.08	R0970-P1-W2/	0.00	
R-0001A-W1.1/	37.66	R-0001A-W2/	62.30	
R0001C-W1.1/	0.00	R0001C-W2/	0.34	
R0001C-W3/	0.15	R0001E-W1/	0.01	
R0001F-W1.1/	0.20	R0001F-W2/	0.00	
R0001F-W3/	0.20	R0001F-W4/	0.04	
R0001F-W5/	0.20	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.67	
R000J-W6/	0.67	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.67	R0001J-W13/	0.67	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	1.13	R0001I-W7.1/	1.13	
R0001K-W1.1/	0.23	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.78	
FREE# 3/	0.76	FREE# 4/	0.77	FREE#
5/	18.19	FREE# 6/	1.90	
FREE# 7/	-0.12	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	2.01	FREE#14/	1.24	
FREE#15/	1.07	FREE#16/	1.17	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	1.03	
FREE#21/	0.00	FREE#22/	0.12	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	4.91	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	
FREE#35/	0.77	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00	

	FREE#39/	6.93	FREE#40/	0.00
FREE#41/	0.00		FREE#42/	6.19
	FREE#43/	0.05	FREE#44/	2.49
FREE#45/	0.00		FREE#46/	99.96
	FREE#47/	0.01	FREE#48/	0.64
FREE#49/	0.00		FREE#50/	20.73
	FREE#51/	1.33	FREE#52/	1.33

==> System inflows (file) at 150.00 hours (Junction / Inflow, cfs)

N0190	/ 1.04E-03	N0230	/ 3.50E-03	N0220	/
1.10E-02		N0290	/ 4.17E-03	N0370	/ 2.59E-02
	/ 1.00E-03				
N0280	/ 1.47E-02	N0285	/ 3.75E+00	N0380	/
9.10E-03		N0385	/ 4.28E-04	N0386	/ 4.28E-04
	/ 4.28E-04				
N0420	/ 7.48E-03	N0530	/ 1.64E-02	N0430	/
1.48E-02		N0310	/ 1.54E-02	N0160	/ 9.97E-03
	/ 6.67E-02				
N0340	/ 7.04E+00	N0390	/ 3.77E-02	N0001-C	/
1.03E-02		N0460	/ 6.48E-02	N0440	/ 9.75E-01
	/ 2.60E-03				
N2040	/ 5.16E-02	N0450	/ 1.56E+00	N0400	/
2.38E+00		N0550	/ 9.80E-03	N0640	/ 2.70E-03
	/ 4.99E-03				
N0780	/ 5.89E-03	N0775	/ 3.54E-03	N0690	/
3.56E-04		N0720	/ 1.30E-02	N0770	/ 3.48E-02
	/ 2.57E-02				
N0960	/ 3.63E-03	N0990	/ 3.43E-03	N1010	/
2.16E-03		N1030	/ 4.65E-03	N1020	/ 1.86E-02
	/ 1.55E+00				
N1000	/ 8.30E-03	N0945	/ 8.86E-01	N0980	/
3.00E+00		N0850	/ 3.12E-02	N0890	/ 5.26E-02
	/ 5.63E-01				
N0920	/ 1.02E-03	N0950	/ 1.61E-02	N0830	/
5.80E-03		N0970	/ 4.30E-03	N-0001K	/ 1.53E-03
	/ 1.18E-02				
N0790	/ 2.69E-01	N0001-I	/ 6.11E-03	N0915	/
8.11E-02		N0900	/ 6.11E-07	N0910	/ 6.02E-03
	/ 1.06E-03				
N0810	/ 1.19E+01	N0740	/ 1.66E-02	N0742	/
1.65E-04		N0800	/ 1.15E-03	N0620	/ 7.53E-04
	/ 2.81E+00				
N0570	/ 9.30E-03	N0560	/ 1.63E+00	N0515	/
1.22E-01		N0510	/ 1.33E+00	N0520	/ 6.98E+00
	/ 1.05E-02				
N0330	/ 1.59E-02	N0325	/ 2.15E-01	N0180	/
2.14E-02		N0090	/ 1.41E-03	N-0001B	/ 2.58E-03
	/ 7.84E-04				
N0130	/ 1.06E-02	N0080	/ 1.16E-02	N0050	/

4.25E-03 N0170	/ 4.61E-03 N0205	/ 2.44E-04 N0210	
/ 3.35E-01			
N0150	/ 3.46E-03 N0155	/ 8.04E-04 N0060	/
4.61E-02 N0120	/ 7.27E-03 N0110	/ 2.36E-02 N0140	
/ 3.40E-02			
N0140-A	/ 3.92E-09 N0500	/ 3.54E+00 N0470	/
1.02E-01 N0540	/ 5.41E-01 N0650	/ 6.69E-03 N0490	
/ 1.22E+01			
N2380	/ 1.28E-02 N2370	/ 3.99E-02 N0655	/
1.05E-02 N0480	/ 1.10E-01 N0410	/ 1.93E+01 N0270	
/ 3.97E-02			
N0260	/ 1.28E-01 N0250	/ 8.92E-03 N0240	/
4.99E-04 N0200	/ 8.12E-03 N-002	/ 5.68E-04 N-003	
/ 4.00E-04			
N-004	/ 1.21E-03 N-001	/ 2.03E-01 N-006	/
1.41E-03 N-005	/ 9.07E-04 N-007	/ 7.31E-04 N-009	
/ 6.66E-04			
N-008	/ 3.26E-03 N-011	/ 8.92E-04 N-010	/
5.63E-03 N-014	/ 5.03E-03 N-012	/ 9.79E-04 N-013	
/ 5.34E-04			
N-015	/ 1.15E-02 N2002	/ 2.43E-02 N-020	/
2.35E-03 N-022	/ 5.60E-03 N-026	/ 7.41E-05 N-027	
/ 4.35E-03			
N-028	/ 1.12E-04 N-024	/ 1.31E-02 N-029	/
5.67E-04 N-030	/ 6.84E-03 N-023	/ 5.03E-04 N-031	
/ 4.09E-03			
N-025	/ 3.81E-04 N-041	/ 2.70E-03 N-019	/
9.89E-03 N-021	/ 4.37E-03 N-043	/ 3.89E-03 N-042	
/ 1.20E+00			
N-040	/ 6.82E+00 N2090	/ 1.39E-02 N-0001A	/
4.86E-01 N-0001-E	/ 1.42E-03 N-0001-F	/ 3.36E-03 N-0001-G	
/ 2.71E-03			
N0001-J	/ 5.81E-03		

Cycle 9000 Time 150 Hrs - 0.00 Min

Junction / Depth / Elevation	==>	"*" Junction is Surcharged.
N0335/ 1.02 / 1.02		N0550/ 2.00 / 0.67
N0690/ 4.01 / 4.63		
N0640/ 4.73 / 1.95		N0780/ 5.29 / 0.90
N0830/ 3.20 / 1.15		
N0790/ 4.16 / 1.18		N0800/ 2.25 / 5.60
N0870/ 4.10 / 1.18		
N0510/ 2.28 / 0.85		N0520/ 3.88 / 1.05
N0390/ 2.75 / 1.05		
N0350/ 3.71 / 1.02		N0450/ 2.31 / 1.01
N0770/ 4.23 / 1.18		
N0720/ 1.60 / 0.95		N0960/ 0.02 / 1.92
N0920/ 2.75 / 1.18		
N0950/ 1.60 / 1.18		N0970/ 2.39 / 1.18

N0915/	7.18	/	1.18					
	N0885/	8.09	/	1.18	N0560/	3.49	/	0.67
N0810/	2.58	/	0.73					
	N0570/	3.34	/	0.67	N0990/	1.26	/	2.83
N1000/	1.91	/	0.55					
	N1020/	3.83	/	2.83	N1030/	2.75	/	1.70
N0890/	3.19	/	1.65					
	N0850/	0.63	/	2.09	N0930/	5.61	/	2.04
N0980/	1.20	/	2.82					
	N1010/	1.78	/	2.82	N0430/	1.15	/	1.02
N0500/	2.44	/	4.69					
	N0230/	1.57	/	4.88	N0220/	1.43	/	2.61
N0200/	3.74	/	2.13					
	N0190/	3.09	/	2.13	N0130/	2.05	/	1.45
N0100/	0.99	/	1.45					
	N0090/	2.92	/	5.41	N0120/	0.74	/	0.50
N0110/	0.68	/	1.45					
	N0170/	0.98	/	0.27	N0210/	0.99	/	0.27
N0260/	2.84	/	2.61					
	N0250/	2.58	/	4.88	N0240/	3.44	/	4.88
N0140/	3.40	/	1.50					
	N0150/	0.01	/	1.45	N0270/	2.54	/	4.11
N0290/	1.70	/	2.71					
	N0180/	2.96	/	1.50	N0370/	1.73	/	2.71
N0285/	0.69	/	2.69					
	N0420/	1.58	/	4.66	N0490/	2.65	/	1.39
N0410/	4.09	/	1.48					
	N0380/	2.71	/	2.71	N0660/	2.29	/	1.45
N0740/	2.43	/	1.19					
	N0730/	3.32	/	1.22	N0940/	2.60	/	1.59
N0530/	0.13	/	1.79					
	N0060/	2.74	/	1.45	N0050/	3.57	/	2.71
N0325/	5.39	/	1.02					
	N0160/	2.57	/	0.48	N0470/	2.31	/	4.12
N0540/	0.44	/	1.79					
	N0650/	2.04	/	1.55	N0400/	3.62	/	0.72
N0360/	2.20	/	1.02					
	N0480/	2.07	/	4.33	N0080/	2.56	/	3.04
N0310/	2.07	/	0.48					
	N0300/	4.87	/	1.02	N0460/	3.20	/	1.05
N0440/	2.34	/	0.97					
	N0330/	4.45	/	1.02	N0655/	2.92	/	0.01
N0375/	2.71	/	2.71					
	N0385/	2.57	/	1.48	N0275/	0.41	/	2.71
N0280/	0.71	/	2.71					
	N0202/	5.70	/	2.13	N0340/	2.81	/	1.02
N0515/	1.87	/	0.67					
	N-001/	1.20	/	1.43	N-002/	0.48	/	3.48
N-003/	0.01	/	2.57					
	N-004/	0.01	/	2.89	N-005/	0.55	/	1.42

N-008/	1.46	/	1.42		
N-010/	1.71	/	1.42	N-013/	2.58 / 1.42
N-015/	2.61	/	1.42		
N-006/	0.02	/	2.68	N-007/	0.02 / 2.48
N-009/	0.02	/	2.70		
N-011/	0.02	/	2.06	N-014/	0.10 / 1.65
N-012/	0.03	/	1.51		
N-025/	2.70	/	1.46	N-023/	1.01 / 1.46
N-021/	2.13	/	1.66		
N-019/	3.45	/	3.23	N-041/	2.45 / 3.23
N-020/	0.07	/	1.45		
N-022/	0.49	/	1.45	N-024/	1.72 / 1.45
N-029/	2.44	/	1.46		
N-026/	0.44	/	1.45	N-027/	1.78 / 1.45
N-028/	1.76	/	1.45		
N-030/	0.19	/	0.12	N-043/	1.27 / 0.11
N-042/	1.05	/	0.42		
N-031/	0.93	/	0.08	N-040/	2.35 / 0.87
N0620/	0.80	/	0.20		
N0900/	4.18	/	1.18	N-009mh/	2.43 / 2.43
N0205/	5.63	/	2.13		
N0386/	2.57	/	1.48	N0388/	2.57 / 1.48
N0775/	1.55	/	0.90		
N2040/	1.86	/	0.76	N2380/	3.20 / 1.39
N0155/	0.62	/	0.48		
N0945/	2.32	/	1.51	N2002/	3.22 / 1.42
N2090/	2.22	/	0.33		
N0742/	1.70	/	1.19	N0910/	7.18 / 1.18
N0880/	8.09	/	1.18		
N9004/	4.20	/	1.46	N9004-B/	4.25 / 1.46
N9004-C/	4.00	/	1.46		
N9004-D/	4.14	/	1.46	N9004-F/	2.63 / 1.46
N9001-B/	2.59	/	0.50		
N9001-D/	1.40	/	0.50	N9001-F/	1.40 / 0.50
N9000/	2.49	/	0.50		
N9003/	0.50	/	0.50	N9005/	0.50 / 0.50
N9005-E/	0.50	/	0.50		
N9005-G/	0.50	/	0.50	N9004-J/	2.79 / 1.46
N9004-G/	2.55	/	1.46		
N9002/	1.81	/	0.50	N2370/	3.03 / 1.47
N9000-B/	2.49	/	0.50		
N9000-C/	2.49	/	0.50	N9000-E/	2.49 / 0.50
N9000-F/	2.49	/	0.50		
N9001-E/	2.59	/	0.50	N9001-G/	1.40 / 0.50
N9001-H/	1.40	/	0.50		
N9001-J/	0.67	/	0.50	N9001-K/	0.67 / 0.50
N9002-A/	1.81	/	0.50		
N9002-B/	1.81	/	0.50	N9003-A/	0.50 / 0.50
N9003-B/	0.50	/	0.50		
N9003-C/	0.50	/	0.50	N9003-D/	0.50 / 0.50

N9003-E/	0.50 /	0.50		
N9003-F/	0.50 /	0.50		
N9004-A/	4.20 /	1.46		N9003-G/ 0.50 / 0.50
N9004-E/	4.14 /	1.46		
N9004-I/	2.63 /	1.46		N9004-H/ 2.63 / 1.46
N9004-K/	2.79 /	1.46		
N9005-B/	0.50 /	0.50		N9005-A/ 0.50 / 0.50
N9005-C/	0.50 /	0.50		
N9005-F/	0.54 /	0.54		N9005-D/ 0.50 / 0.50
N9005-H/	0.50 /	0.50		
N-0001A/	8.93 /	0.93		N9000-D/ 2.75 / 0.50
N-0001B/	1.95 /	1.45		
N-0001-E/	0.50 /	5.30		N0001-C/ 0.59 / 2.74
N-0001E-OF/	0.00 /	3.13		
N-0001-G/	0.79 /	4.79		N-0001-F/ 0.34 / 3.84
N-0001F-OF-A/	0.00 /	3.13		
N9004-L/	4.20 /	1.46		N-0001F-OF-B/ 0.00 / 3.13
N0001-J/	0.20 /	1.39		
N9005-K/	0.50 /	0.50		N9005-J/ 0.50 / 0.50
N0001-I/	1.01 /	2.14		
N0140-A/	3.60 /	1.50		N-0001K/ 0.88 / 2.91

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	5.18		R0770-P2/	-3.43
R0900/	4.29			R0370/	0.42
	R0280/	-0.03		R0202/	-0.01
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00		RN-014/	0.02
RN-012/	0.03*			RN-023/	0.67
	RN-021/	-0.75		RN-041/	0.46
RN-020/	0.00			RN-022/	-0.01
	RN-024/	-0.82		RN-026/	-0.00
RN-027/	0.19			RN-028/	-0.20
	R0742-P3/	-2.59		R0655-P2/	-0.17
R0655-P3/	-0.16			R0655-P4/	0.16
	R0120-P2/	0.04		R1010-P2/	1.60
RN-025-P1/	-0.42			RN-025-P2/	0.44
	R0155-P1/	-4.45		R0386/	7.46
R0388/	7.46			R0385/	7.47
	R0375/	0.45		R0335/	0.01
R-0001B-P1/	0.04			R0540-P1/	-0.37
	R0540-P2/	0.14		R0540-P3/	0.06
R0290-P1/	-0.29			R0285.1/	3.78
	R0250.1/	0.01		R0230.1/	-0.00
R0220.1/	0.01			R0200.1/	0.01
	R0190.1/	0.00		R0170.1/	0.01
R0180-P1/	0.17			R0180-P2/	0.16
	R0140.1/	0.00		R0140-P3.1/	0.00

R0150-P1/	0.00		R0150-P2/	0.00*	
	R0150-P3/	0.00*		R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.03	
	R0130-P1/	-0.02		R0130-P2/	-0.02
R0100-P1/	0.00		R0100-P2/	0.00	
	R0310.1/	1.58		R0430-P1/	-0.00
R0430-P2/	-0.00		R0430-P3/	-0.00	
	R0430-P4/	-0.00		R0340-P1/	-3.87
R0340-P2/	-3.09		R0350-P1/	3.43	
	R0350-P2/	3.43		R0330-P1/	0.15
R0330-P2/	0.15		R0450-P1/	2.65	
	R0450-P2/	2.65		P0360-P1/	-0.11
P0360-P2/	-0.15		R0550-P1/	-0.07	
	R0550-P2/	-0.07		R0560-P1/	-0.90
R0560-P2/	-1.12		R0560-P3/	-1.13	
	R0780.1/	-0.01		R0740.1/	-2.52
R0730.1/	-2.43		R0880.1/	0.00	
	R0950.1/	0.00		R0920.1/	0.05
R0960.1/	0.00		R0990.1/	0.15	
	R1010-P3/	1.08		R1010-P4/	1.10
R1010-P5/	1.03		R0980-P1.1/	-0.44	
	R0980-P2.1/	2.65		R0850-P1/	1.22
R0850-P2/	0.89		R0850-P3/	0.58	
	R0570-P1/	0.25		R0570-P2/	0.26
R0570-P3/	0.27		R0770-P1.1/	-1.87	
	R0770-P3/	-2.12		R0770-P4/	-2.12
R0790-P1/	-0.75		R0790-P2/	-0.33	
	R0530-P1/	-0.01		R0530-P2/	-0.01
R0530-P3/	0.03*		R0910-P1/	-0.02	
	R0910-P2/	0.01		R0380-P1/	-3.73
R0380-P2/	-3.73		R0300-P1/	-0.13	
	R0300-P2/	-0.13		R0290-P2.1/	0.02
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00		RN-001-P1/	0.07
RN-001-P2/	0.01		RN-001-P3/	0.08	
	RN-005-P1/	0.03		RN-005-P2/	0.04
RN-005-P3/	-0.03		RN-008-P1.1/	0.06	
	RN-008-P2/	-0.01		RN-008-P3/	0.01
RN-010-P1/	0.10		RN-010-P2/	0.10	
	RN-010-P3/	-0.09		RN-013-P1/	-0.29
RN-013-P2/	-0.29		RN-013-P3/	-0.29	
	RN-015-P1/	1.61		RN-015-P2/	-2.69
RN-015-P3/	-2.41		RN-029-P1/	0.43	
	RN-029-P2/	-0.71		R0742-P1/	1.29
R0742-P2/	1.29		R0655-P1.1/	-0.17	
	R0490-P8/	-9.31		R0490-P7/	-9.31
R0140-P2.1/	0.26		R0140-P1.1/	0.26	
	R0120-P1.1/	-0.04		R0160-P1.1/	5.24
R0325-P1.1/	0.00		R0400-P1.1/	0.00	
	R0880-P2.1/	0.00		R1010-P1.1/	2.05

R-0410-P4/	0.76	R-0410-P5/	0.76
R0410-P1/	-5.24	R0410-P2/	-5.24
R0490-P1.1/	-3.80	R0490-P3/	0.20
R0490-P6/	0.20	R0890-ORF-2/	3.17
R0890-ORF-4/	3.17	R0890ORF-3/	3.17
R0285-W2/	0.00	N0140-A-W1.1/	0.53
R0200-W3/	0.00	R0290-P5/	0.00
R0140-W1/	0.00	R0250-W1/	0.00
R0100-W4/	0.00	R0220-W2/	0.00
R0350-W1/	0.00	R0190-W4/	0.00
R0560-W1/	0.00	R0170-W3/	0.00
R0950-W1/	0.00	R0150-W3/	0.00
R0980-W2/	0.00	R0130-W1/	0.00
R0380-W3/	0.00	R0310-W5.1/	0.00
R0140-W2/	0.00	R0430-W3/	0.00
R0880-W2/	0.00	R0330-W1/	0.00
R0050-W2.1/	0.00	R0780-W1/	0.00
R0090-W1.1/	0.00	R0960-W2/	0.00
R0100-W1.1/	0.00	R0850-W2/	0.00
R0120-W1.1/	0.00	R0530-W4/	0.00
R0170-W1.1/	0.00	R0300-W2/	0.00
R0190-W3.1/	0.00	R0120-W2/	0.00
R0240-W1.1/	0.00	R0160-W1/	0.00
R0240-W5.1/	0.00	R1010-W1/	0.00
R0260-W1.1/	0.00	R0490-W2/	0.00
		R0050-W1.1/	0.00
		R0060-W1.1/	0.00
		R0080-W2.1/	0.00
		R0090-W2.1/	0.00
		R0090-W3.1/	0.00
		R0090-W4.1/	0.00
		R0100-W2.1/	0.00
		R0110-W2.1/	0.00
		R0130-W2.1/	0.00
		R0150-W2.1/	0.00
		R0170-W2.1/	0.00
		R0190-W2.1/	0.00
		R0200-W1.1/	0.00
		R0220-W1.1/	0.00
		R0240-W2.1/	0.00
		R0240-W3.1/	0.00
		R0240-W4.1/	0.00
		R0240-W6.1/	0.00
		R0250-W3.1/	0.00
		R0270-W1.1/	0.00
		R0270-W2.1/	0.00

R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.77	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	-0.63	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-33.71	R02040-W1.1/	0.00

R2090-W1.1/	0.00	R2370-W4.1/	0.00	
R2380-W2.1/	0.00	R2380-W3.1/	0.00	
R0440-W2.1/	0.00	R015-W1.1/	0.00	
R020-W1.1/	0.00	R021-W1.1/	0.00	
R030-W1.1/	0.00	R031-W1.1/	0.00	
R042-W1.1/	0.00	R043-W1.1/	0.00	
R0850-W1.1/	0.00	R0880-WPump/	0.00	
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00	
R0910-W1/	0.00	R0325-DS-W1/	0.00	
R0400-WPump/	0.00	R0880-WPump2/	0.00	
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00	
R0640-P1-W1/	0.28	R0640-P1-W2/	0.00	
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00	
R0940-DS-W1/	0.24	R0945-DS-W1/	0.01	
R1020-DS-W1/	5.04	R0205-W1/	0.00	
R0205-W2/	0.00	R0205-W3/	0.00	
R0205-W4/	0.01	R0210-W1.1/	0.00	
R0515-W1.1/	0.00	R0515-W2.1/	4.23	
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	0.65	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.69	R019-P1-W2/	0.05	
R0830-P1-W1.1/	-0.84	R0830-P1-W2/	0.00	
R0970-P1-W1/	-0.05	R0970-P1-W2/	0.00	
R-0001A-W1.1/	29.29	R-0001A-W2/	44.65	
R0001C-W1.1/	0.00	R0001C-W2/	0.09	
R0001C-W3/	0.15	R0001E-W1/	0.00	
R0001F-W1.1/	0.06	R0001F-W2/	0.00	
R0001F-W3/	0.06	R0001F-W4/	0.00	
R0001F-W5/	0.06	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.32	
R000J-W6/	0.32	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.32	R0001J-W13/	0.32	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.91	R0001I-W7.1/	0.91	
R0001K-W1.1/	0.17	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.17	
FREE# 3/	0.16	FREE# 4/	0.16	FREE#
5/	18.61	FREE# 6/	0.53	
FREE# 7/	-0.04	FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	

FREE#13/	1.60	FREE#14/	-0.42
FREE#15/	-0.44	FREE#16/	-4.45
FREE#17/	0.00	FREE#18/	0.00
FREE#19/	0.00	FREE#20/	-5.24
FREE#21/	0.00	FREE#22/	0.04
FREE#23/	0.00	FREE#24/	0.00
FREE#25/	0.00	FREE#26/	0.00
FREE#27/	0.00	FREE#28/	4.23
FREE#29/	0.00	FREE#30/	0.00
FREE#31/	0.00	FREE#32/	0.00
FREE#33/	0.00	FREE#34/	0.00
FREE#35/	0.17	FREE#36/	0.00
FREE#37/	0.00	FREE#38/	0.00
FREE#39/	-33.71	FREE#40/	0.00
FREE#41/	0.00	FREE#42/	5.04
FREE#43/	0.24	FREE#44/	2.05
FREE#45/	0.01	FREE#46/	73.93
FREE#47/	0.00	FREE#48/	0.19
FREE#49/	0.00	FREE#50/	12.68
FREE#51/	0.64	FREE#52/	0.64

==> System inflows (file) at 158.33 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 4.41E-08	N0370	/ 0.00E+00	N0275
/ 0.00E+00					
N0280	/ 0.00E+00	N0285	/ 1.65E+00	N0380	/
7.22E-04	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
/ 0.00E+00					
N0420	/ 0.00E+00	N0530	/ 1.36E-07	N0430	/
3.94E-07	N0310	/ 2.31E-08	N0160	/ 0.00E+00	N0300
/ 4.69E-03					
N0340	/ 3.96E+00	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 5.41E-03	N0440	/ 5.58E-03	N0360
/ 1.66E-04					
N2040	/ 2.79E-03	N0450	/ 3.05E-02	N0400	/
2.02E-02	N0550	/ 1.24E-05	N0640	/ 0.00E+00	N0660
/ 0.00E+00					
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00	N0720	/ 0.00E+00	N0770	/ 9.47E-04	N0885
/ 2.02E-03					
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 9.84E-04	N0940
/ 1.08E-01					
N1000	/ 0.00E+00	N0945	/ 6.16E-02	N0980	/
8.06E-01	N0850	/ 2.71E-03	N0890	/ 2.69E-03	N0930
/ 1.49E-02					
N0920	/ 0.00E+00	N0950	/ 6.47E-04	N0830	/
0.00E+00	N0970	/ 0.00E+00	N-0001K	/ 0.00E+00	N0870
/ 6.23E-04					

N0790	/ 2.30E-03 N0001-I	/ 0.00E+00 N0915	/
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880	/
/ 0.00E+00			
N0810	/ 5.19E+00 N0740	/ 0.00E+00 N0742	/
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730	/
/ 8.30E-01			
N0570	/ 3.46E-05 N0560	/ 8.36E-01 N0515	/
9.14E-04 N0510	/ 9.97E-03 N0520	/ 1.79E+00 N0350	/
/ 2.72E-04			
N0330	/ 6.21E-04 N0325	/ 1.49E-03 N0180	/
3.75E-09 N0090	/ 0.00E+00 N-0001B	/ 6.87E-06 N0100	/
/ 0.00E+00			
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050	/
3.04E-04 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	/
/ 6.56E-03			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
2.09E-03 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140	/
/ 0.00E+00			
N0140-A	/ 0.00E+00 N0500	/ 2.44E+00 N0470	/
7.73E-03 N0540	/ 1.48E-01 N0650	/ 4.00E-04 N0490	/
/ 5.07E+00			
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655	/
7.11E-04 N0480	/ 3.43E-03 N0410	/ 1.31E+01 N0270	/
/ 1.59E-03			
N0260	/ 4.79E-03 N0250	/ 0.00E+00 N0240	/
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003	/
/ 0.00E+00			
N-004	/ 0.00E+00 N-001	/ 1.74E-03 N-006	/
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009	/
/ 0.00E+00			
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010	/
0.00E+00 N-014	/ 3.79E-10 N-012	/ 0.00E+00 N-013	/
/ 0.00E+00			
N-015	/ 0.00E+00 N2002	/ 0.00E+00 N-020	/
6.67E-05 N-022	/ 0.00E+00 N-026	/ 0.00E+00 N-027	/
/ 0.00E+00			
N-028	/ 0.00E+00 N-024	/ 0.00E+00 N-029	/
0.00E+00 N-030	/ 0.00E+00 N-023	/ 0.00E+00 N-031	/
/ 0.00E+00			
N-025	/ 0.00E+00 N-041	/ 0.00E+00 N-019	/
0.00E+00 N-021	/ 0.00E+00 N-043	/ 0.00E+00 N-042	/
/ 6.88E-01			
N-040	/ 4.07E+00 N2090	/ 8.87E-04 N-0001A	/
1.97E-03 N-0001-E	/ 1.52E-10 N-0001-F	/ 0.00E+00 N-0001-G	/
/ 2.73E-08			
N0001-J	/ 0.00E+00		

Cycle 9500 Time 158 Hrs - 20.00 Min

Junction / Depth / Elevation ==> "*" Junction is Surcharged.

N0335/	1.03	/	1.03	N0550/	1.97	/	0.64
N0690/	4.01	/	4.63	N0780/	5.29	/	0.90
N0640/	4.67	/	1.89	N0800/	2.25	/	5.60
N0830/	3.24	/	1.19	N0520/	3.88	/	1.05
N0790/	4.17	/	1.19	N0450/	2.33	/	1.03
N0870/	4.11	/	1.19	N0960/	0.00	/	1.90
N0510/	2.28	/	0.85	N0970/	2.40	/	1.19
N0390/	2.75	/	1.05	N0560/	3.46	/	0.64
N0350/	3.72	/	1.03	N0990/	1.15	/	2.72
N0770/	4.24	/	1.19	N1030/	2.75	/	1.70
N0720/	1.62	/	0.97	N0930/	5.61	/	2.04
N0920/	2.76	/	1.19	N0430/	1.16	/	1.03
N0950/	1.61	/	1.19	N0220/	1.43	/	2.61
N0915/	7.19	/	1.19	N0130/	2.05	/	1.45
N0885/	8.10	/	1.19	N0120/	0.62	/	0.38
N0810/	2.61	/	0.76	N0210/	0.99	/	0.27
N0570/	3.31	/	0.64	N0240/	3.44	/	4.88
N1000/	1.91	/	0.55	N0270/	2.54	/	4.11
N1020/	3.72	/	2.72	N0370/	1.54	/	2.52
N0890/	2.96	/	1.42	N0490/	2.63	/	1.37
N0850/	0.52	/	1.98	N0660/	2.29	/	1.45
N0980/	1.09	/	2.71	N0940/	2.61	/	1.60
N1010/	1.67	/	2.71	N0050/	3.57	/	2.71
N0500/	2.51	/	4.76	N0470/	2.31	/	4.12
N0230/	1.57	/	4.88	N0400/	3.62	/	0.72
N0200/	3.74	/	2.13				
N0190/	3.09	/	2.13				
N0100/	0.99	/	1.45				
N0090/	2.92	/	5.41				
N0110/	0.68	/	1.45				
N0170/	0.98	/	0.27				
N0260/	2.84	/	2.61				
N0250/	2.58	/	4.88				
N0140/	3.34	/	1.44				
N0150/	0.00	/	1.44				
N0290/	1.51	/	2.52				
N0180/	2.90	/	1.44				
N0285/	0.49	/	2.49				
N0420/	1.58	/	4.66				
N0410/	4.14	/	1.53				
N0380/	2.52	/	2.52				
N0740/	2.43	/	1.19				
N0730/	3.29	/	1.19				
N0530/	0.02	/	1.68				
N0060/	2.74	/	1.45				
N0325/	5.40	/	1.03				
N0160/	2.49	/	0.40				
N0540/	0.33	/	1.68				
N0650/	2.01	/	1.52				
N0360/	2.21	/	1.03				

N0480/	2.07	/	4.33	N0080/	2.56	/	3.04
N0310/	1.99	/	0.40				
N0300/	4.88	/	1.03	N0460/	3.20	/	1.05
N0440/	2.34	/	0.97				
N0330/	4.46	/	1.03	N0655/	2.92	/	0.01
N0375/	2.52	/	2.52				
N0385/	2.62	/	1.53	N0275/	0.22	/	2.52
N0280/	0.67	/	2.67				
N0202/	5.70	/	2.13	N0340/	2.82	/	1.03
N0515/	1.84	/	0.64				
N-001/	1.16	/	1.39	N-002/	0.47	/	3.47
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88	N-005/	0.50	/	1.37
N-008/	1.41	/	1.37				
N-010/	1.66	/	1.37	N-013/	2.53	/	1.37
N-015/	2.56	/	1.37				
N-006/	0.00	/	2.66	N-007/	0.00	/	2.46
N-009/	0.00	/	2.68				
N-011/	0.00	/	2.04	N-014/	0.08	/	1.63
N-012/	0.01	/	1.49				
N-025/	2.58	/	1.34	N-023/	0.90	/	1.35
N-021/	2.11	/	1.64				
N-019/	3.29	/	3.07	N-041/	2.29	/	3.07
N-020/	0.00	/	1.38				
N-022/	0.38	/	1.34	N-024/	1.61	/	1.34
N-029/	2.32	/	1.34				
N-026/	0.33	/	1.34	N-027/	1.68	/	1.35
N-028/	1.66	/	1.35				
N-030/	0.19	/	0.12	N-043/	1.27	/	0.11
N-042/	1.13	/	0.50				
N-031/	0.93	/	0.08	N-040/	2.42	/	0.94
N0620/	0.80	/	0.20				
N0900/	4.19	/	1.19	N-009mh/	2.41	/	2.41
N0205/	5.63	/	2.13				
N0386/	2.62	/	1.53	N0388/	2.62	/	1.53
N0775/	1.55	/	0.90				
N2040/	1.86	/	0.76	N2380/	3.18	/	1.37
N0155/	0.38	/	0.24				
N0945/	2.33	/	1.52	N2002/	3.17	/	1.37
N2090/	2.22	/	0.33				
N0742/	1.70	/	1.19	N0910/	7.19	/	1.19
N0880/	8.10	/	1.19				
N9004/	4.08	/	1.34	N9004-B/	4.13	/	1.34
N9004-C/	3.88	/	1.34				
N9004-D/	4.02	/	1.34	N9004-F/	2.51	/	1.34
N9001-B/	2.47	/	0.38				
N9001-D/	1.28	/	0.38	N9001-F/	1.28	/	0.38
N9000/	2.37	/	0.38				
N9003/	0.38	/	0.38	N9005/	0.38	/	0.38
N9005-E/	0.38	/	0.38				

N9005-G/	0.39 /	0.39	N9004-J/	2.67 /	1.34
N9004-G/	2.43 /	1.34	N2370/	3.09 /	1.53
N9002/	1.69 /	0.38	N9000-E/	2.37 /	0.38
N9000-B/	2.37 /	0.38	N9001-G/	1.28 /	0.38
N9000-C/	2.37 /	0.38	N9001-K/	0.56 /	0.38
N9000-F/	2.37 /	0.38	N9003-A/	0.38 /	0.38
N9001-E/	2.47 /	0.38	N9003-D/	0.38 /	0.38
N9001-H/	1.28 /	0.38	N9003-G/	0.38 /	0.38
N9001-J/	0.56 /	0.38	N9004-H/	2.51 /	1.34
N9002-A/	1.69 /	0.38	N9005-A/	0.38 /	0.38
N9002-B/	1.69 /	0.38	N9005-D/	0.38 /	0.38
N9003-B/	0.38 /	0.38	N9000-D/	2.63 /	0.38
N9003-C/	0.38 /	0.38	N0001-C/	0.56 /	2.71
N9003-E/	0.38 /	0.38	N-0001-F/	0.32 /	3.82
N9003-F/	0.38 /	0.38	N-0001F-OF-B/	0.00 /	3.13
N9004-A/	4.08 /	1.34	N9005-J/	0.38 /	0.38
N9004-E/	4.02 /	1.34	N-0001K/	0.84 /	2.87
N9004-I/	2.51 /	1.34			
N9004-K/	2.67 /	1.34			
N9005-B/	0.38 /	0.38			
N9005-C/	0.38 /	0.38			
N9005-F/	0.46 /	0.46			
N9005-H/	0.38 /	0.38			
N-0001A/	8.80 /	0.80			
N-0001B/	1.95 /	1.45			
N-0001-E/	0.50 /	5.30			
N-0001E-OF/	0.00 /	3.13			
N-0001-G/	0.79 /	4.79			
N-0001F-OF-A/	0.00 /	3.13			
N9004-L/	4.08 /	1.34			
N0001-J/	0.13 /	1.32			
N9005-K/	0.38 /	0.38			
N0001-I/	0.94 /	2.07			
N0140-A/	3.54 /	1.44			

	Conduit/	FLOW	==>	"*" Conduit uses the normal flow option.
	R0870/	2.19		R0770-P2/ -1.32
R0900/	2.13		R0370/	0.18
	R0280/	0.00		R0202/ 0.01
RN-002/	0.00		RN-003/	0.00
	RN-006/	0.00		RN-007/ 0.00
RN-009/	0.00		RN-009MH/	0.00
	RN-011/	0.00		RN-014/ 0.01
RN-012/	0.01*		RN-023/	0.71
	RN-021/	-0.65		RN-041/ 0.47
RN-020/	0.00*		RN-022/	0.01
	RN-024/	0.67		RN-026/ 0.00
RN-027/	-0.16		RN-028/	0.17
	R0742-P3/	-0.57		R0655-P2/ -0.05
R0655-P3/	-0.05		R0655-P4/	0.05

	R0120-P2/	0.03	R1010-P2/	1.11
RN-025-P1/	1.06		RN-025-P2/	-0.94
	R0155-P1/	0.89	R0386/	3.59
R0388/	3.59		R0385/	3.60
	R0375/	0.18	R0335/	-0.00
R-0001B-P1/	0.03		R0540-P1/	-0.13
	R0540-P2/	0.02	R0540-P3/	0.00
R0290-P1/	-0.14		R0285.1/	1.66
	R0250.1/	0.00	R0230.1/	-0.00
R0220.1/	0.00		R0200.1/	-0.01
	R0190.1/	-0.00	R0170.1/	0.00
R0180-P1/	0.08		R0180-P2/	0.08
	R0140.1/	0.00	R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00*
	R0150-P3/	0.00*	R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	-0.00
	R0130-P1/	-0.00	R0130-P2/	-0.01
R0100-P1/	0.00		R0100-P2/	0.00
	R0310.1/	-1.41	R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00
	R0430-P4/	-0.00	R0340-P1/	-2.18
R0340-P2/	-1.74		R0350-P1/	1.94
	R0350-P2/	1.94	R0330-P1/	0.12
R0330-P2/	0.12		R0450-P1/	1.23
	R0450-P2/	1.23	P0360-P1/	-0.05
P0360-P2/	-0.06		R0550-P1/	-0.11
	R0550-P2/	-0.11	R0560-P1/	-0.82
R0560-P2/	-1.02		R0560-P3/	-1.04
	R0780.1/	0.00	R0740.1/	-0.52
R0730.1/	-0.46		R0880.1/	0.00
	R0950.1/	-0.00	R0920.1/	0.02
R0960.1/	0.00		R0990.1/	0.14
	R1010-P3/	1.14	R1010-P4/	1.16
R1010-P5/	1.08		R0980-P1.1/	0.78
	R0980-P2.1/	1.64*	R0850-P1/	0.80
R0850-P2/	0.53		R0850-P3/	0.31
	R0570-P1/	0.29	R0570-P2/	0.31
R0570-P3/	0.31		R0770-P1.1/	-0.03
	R0770-P3/	-1.06	R0770-P4/	-1.05
R0790-P1/	0.16		R0790-P2/	0.21
	R0530-P1/	0.00	R0530-P2/	0.00
R0530-P3/	0.00		R0910-P1/	-0.01
	R0910-P2/	0.00	R0380-P1/	-1.80
R0380-P2/	-1.80		R0300-P1/	-0.06
	R0300-P2/	-0.06	R0290-P2.1/	0.00
RN-004-P1/	0.00		RN-004-P2/	0.00
	RN-004-P3/	0.00	RN-001-P1/	0.07
RN-001-P2/	0.01		RN-001-P3/	0.07
	RN-005-P1/	0.05	RN-005-P2/	0.09
RN-005-P3/	-0.06		RN-008-P1.1/	-0.09

	RN-008-P2/	0.12	RN-008-P3/	0.12
RN-010-P1/	-0.17		RN-010-P2/	-0.16
	RN-010-P3/	0.17	RN-013-P1/	0.33
RN-013-P2/	0.33		RN-013-P3/	0.33
	RN-015-P1/	-1.17	RN-015-P2/	1.81
RN-015-P3/	2.39		RN-029-P1/	-0.42
	RN-029-P2/	0.52	R0742-P1/	0.29
R0742-P2/	0.29		R0655-P1.1/	-0.05
	R0490-P8/	-9.23	R0490-P7/	-9.23
R0140-P2.1/	0.12		R0140-P1.1/	0.12
	R0120-P1.1/	-0.02	R0160-P1.1/	-4.69
R0325-P1.1/	0.00		R0400-P1.1/	0.00
	R0880-P2.1/	0.00	R1010-P1.1/	1.50
R-0410-P4/	0.57		R-0410-P5/	0.57
	R-0410-P6/	0.57	R-0410-P7/	0.57
R0410-P1/	-3.95		R0410-P2/	-3.95
	R0410-P3/	-3.95	498.1/	5.25
R0490-P1.1/	-5.22		R0490-P3/	-0.40
	R0490-P4/	-0.40	R0490-P5/	-0.40
R0490-P6/	-0.40		R0890-ORF-2/	1.80
	R0890-ORF-5/	1.80	R0890ORF-3/	1.80
R0890-ORF-4/	1.80		N0140-A-W1.1/	0.24
	R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00		R0250-W1/	0.00
	R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00		R0190-W4/	0.00
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00		R0150-W3/	0.00
	R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00		R0310-W5.1/	0.00
	R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00		R0330-W1/	0.00
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00		R0780-W1/	0.00
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00		R0960-W2/	0.00
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00		R0850-W2/	0.00
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00		R0300-W2/	0.00
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00		R0120-W2/	0.00
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00		R1010-W1/	0.00
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00		R0060-W1.1/	0.00
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00		R0090-W2.1/	0.00
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00		R0100-W2.1/	0.00

R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	0.98	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	-0.93	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00

R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	26.42	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	0.00	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.14	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.27	R0945-DS-W1/	0.03
R1020-DS-W1/	3.55	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	0.00
R0515-W1.1/	0.00	R0515-W2.1/	4.38
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.19
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.65	R019-P1-W2/	0.00
R0830-P1-W1.1/	-0.04	R0830-P1-W2/	0.00
R0970-P1-W1/	-0.02	R0970-P1-W2/	0.00
R-0001A-W1.1/	24.81	R-0001A-W2/	32.05
R0001C-W1.1/	0.00	R0001C-W2/	0.01
R0001C-W3/	0.14	R0001E-W1/	0.00
R0001F-W1.1/	0.03	R0001F-W2/	0.00
R0001F-W3/	0.03	R0001F-W4/	0.00
R0001F-W5/	0.03	R001G-W1/	0.00
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00
R000J-W2/	0.00	R000J-W3/	0.00
R000J-W4/	0.00	R000J-W5/	0.18
R000J-W6/	0.18	R000J-W7/	0.00
R0001J-W8/	0.00	R0001J-W9/	0.00
R0001J-W10/	0.00	R0001J-W11/	0.00

R0001J-W12/	0.18	R0001J-W13/	0.18	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.74	R0001I-W7.1/	0.74	
R0001K-W1.1/	0.14	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.05	
		FREE# 3/	0.05	FREE#
5/	18.46	FREE# 6/	0.24	
		FREE# 7/	-0.02	FREE#
9/	0.00	FREE#10/	0.00	FREE#
		FREE#11/	0.00	
FREE#13/	1.11	FREE#14/	1.06	
		FREE#15/	0.94	
FREE#17/	0.00	FREE#16/	0.89	
		FREE#18/	0.00	
FREE#21/	0.00	FREE#20/	4.69	
		FREE#22/	0.03	
FREE#25/	0.00	FREE#24/	0.00	
		FREE#26/	0.00	
FREE#29/	0.00	FREE#28/	4.38	
		FREE#30/	0.00	
FREE#33/	0.00	FREE#32/	0.00	
		FREE#34/	0.00	
FREE#37/	0.00	FREE#36/	0.00	
		FREE#38/	0.00	
FREE#41/	0.00	FREE#39/	26.42	
		FREE#42/	3.55	
FREE#45/	0.03	FREE#44/	1.50	
		FREE#46/	56.86	
FREE#49/	0.00	FREE#48/	0.09	
		FREE#50/	7.21	
FREE#51/	0.35	FREE#52/	0.35	

==> System inflows (file) at 166.67 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
2.36E-06	N0290	/ 2.57E-04	N0370	/ 1.79E-07	N0275
	/ 0.00E+00				
N0280	/ 1.53E-03	N0285	/ 6.73E-01	N0380	/
1.53E-02	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 9.12E-04	N0430	/
1.34E-03	N0310	/ 4.21E-04	N0160	/ 3.14E-09	N0300
	/ 1.02E-02				
N0340	/ 2.21E+00	N0390	/ 8.27E-03	N0001-C	/
1.46E-05	N0460	/ 1.11E-01	N0440	/ 5.62E-02	N0360
	/ 3.96E-03				
N2040	/ 4.87E-02	N0450	/ 7.41E-02	N0400	/
1.20E-01	N0550	/ 4.72E-03	N0640	/ 0.00E+00	N0660

/ 0.00E+00			
N0780	/ 0.00E+00 N0775	/ 0.00E+00 N0690	/
0.00E+00 N0720	/ 9.40E-03 N0770	/ 1.32E-02 N0885	
/ 3.69E-02			
N0960	/ 1.15E-09 N0990	/ 5.87E-09 N1010	/
0.00E+00 N1030	/ 1.47E-09 N1020	/ 2.59E-02 N0940	
/ 4.62E-02			
N1000	/ 0.00E+00 N0945	/ 2.64E-02 N0980	/
6.75E-02 N0850	/ 5.05E-02 N0890	/ 1.13E-01 N0930	
/ 2.38E-02			
N0920	/ 0.00E+00 N0950	/ 1.01E-02 N0830	/
1.36E-05 N0970	/ 5.47E-08 N-0001K	/ 0.00E+00 N0870	
/ 1.64E-02			
N0790	/ 2.62E-02 N0001-I	/ 0.00E+00 N0915	/
8.45E-03 N0900	/ 0.00E+00 N0910	/ 6.27E-04 N0880	
/ 4.13E-04			
N0810	/ 2.10E+00 N0740	/ 2.42E-03 N0742	/
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730	
/ 8.01E-02			
N0570	/ 7.26E-03 N0560	/ 4.29E-01 N0515	/
1.01E-02 N0510	/ 1.11E-01 N0520	/ 1.66E-01 N0350	
/ 1.05E-02			
N0330	/ 9.47E-03 N0325	/ 1.14E-02 N0180	/
2.43E-04 N0090	/ 0.00E+00 N-0001B	/ 1.73E-03 N0100	
/ 0.00E+00			
N0130	/ 0.00E+00 N0080	/ 1.68E-06 N0050	/
6.80E-03 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210	
/ 1.59E-02			
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060	/
3.50E-02 N0120	/ 5.57E-09 N0110	/ 1.81E-08 N0140	
/ 7.28E-06			
N0140-A	/ 0.00E+00 N0500	/ 1.66E+00 N0470	/
1.68E-01 N0540	/ 1.37E-02 N0650	/ 7.14E-03 N0490	
/ 2.01E+00			
N2380	/ 5.01E-03 N2370	/ 3.25E-02 N0655	/
1.64E-02 N0480	/ 1.20E-01 N0410	/ 8.79E+00 N0270	
/ 2.48E-02			
N0260	/ 7.18E-02 N0250	/ 6.83E-09 N0240	/
0.00E+00 N0200	/ 1.03E-07 N-002	/ 0.00E+00 N-003	
/ 0.00E+00			
N-004	/ 0.00E+00 N-001	/ 1.98E-02 N-006	/
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009	
/ 0.00E+00			
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010	/
0.00E+00 N-014	/ 4.06E-05 N-012	/ 0.00E+00 N-013	
/ 0.00E+00			
N-015	/ 0.00E+00 N2002	/ 2.94E-03 N-020	/
2.45E-03 N-022	/ 1.99E-08 N-026	/ 0.00E+00 N-027	
/ 7.44E-09			
N-028	/ 0.00E+00 N-024	/ 1.07E-05 N-029	/

0.00E+00 N-030 / 4.15E-04 N-023 / 0.00E+00 N-031
 / 2.42E-03
 N-025 / 0.00E+00 N-041 / 0.00E+00 N-019 /
 1.07E-05 N-021 / 2.78E-03 N-043 / 4.70E-04 N-042 /
 / 3.91E-01
 N-040 / 2.41E+00 N2090 / 2.11E-02 N-0001A /
 3.94E-01 N-0001-E / 1.32E-05 N-0001-F / 0.00E+00 N-0001-G /
 / 1.63E-04
 N0001-J / 0.00E+00

Cycle 10000 Time 166 Hrs - 40.00 Min

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 1.03 / 1.03		N0550/ 1.95 / 0.62
N0690/ 4.01 / 4.63		
N0640/ 4.64 / 1.86		N0780/ 5.30 / 0.91
N0830/ 3.25 / 1.20		
N0790/ 4.18 / 1.20		N0800/ 2.25 / 5.60
N0870/ 4.12 / 1.20		
N0510/ 2.28 / 0.85		N0520/ 3.88 / 1.05
N0390/ 2.75 / 1.05		
N0350/ 3.72 / 1.03		N0450/ 2.33 / 1.03
N0770/ 4.25 / 1.20		
N0720/ 1.64 / 0.99		N0960/ 0.00 / 1.90
N0920/ 2.77 / 1.20		
N0950/ 1.62 / 1.20		N0970/ 2.41 / 1.20
N0915/ 7.20 / 1.20		
N0885/ 8.11 / 1.20		N0560/ 3.44 / 0.62
N0810/ 2.62 / 0.77		
N0570/ 3.29 / 0.62		N0990/ 1.04 / 2.61
N1000/ 1.91 / 0.55		
N1020/ 3.61 / 2.61		N1030/ 2.76 / 1.71
N0890/ 3.02 / 1.48		
N0850/ 0.43 / 1.89		N0930/ 5.61 / 2.04
N0980/ 0.98 / 2.60		
N1010/ 1.56 / 2.60		N0430/ 1.16 / 1.03
N0500/ 2.56 / 4.81		
N0230/ 1.57 / 4.88		N0220/ 1.43 / 2.61
N0200/ 3.74 / 2.13		
N0190/ 3.09 / 2.13		N0130/ 2.05 / 1.45
N0100/ 0.99 / 1.45		
N0090/ 2.92 / 5.41		N0120/ 0.90 / 0.66
N0110/ 0.68 / 1.45		
N0170/ 0.98 / 0.27		N0210/ 0.99 / 0.27
N0260/ 2.84 / 2.61		
N0250/ 2.58 / 4.88		N0240/ 3.44 / 4.88
N0140/ 3.31 / 1.41		
N0150/ 0.00 / 1.44		N0270/ 2.54 / 4.11
N0290/ 1.39 / 2.40		
N0180/ 2.87 / 1.41		N0370/ 1.42 / 2.40

N0285/	0.35	/	2.35								
	N0420/	1.58	/	4.66							
N0410/	4.15	/	1.54		N0490/	2.57	/	1.31			
	N0380/	2.40	/	2.40		N0660/	2.29	/	1.45		
N0740/	2.44	/	1.20			N0940/	2.60	/	1.59		
	N0730/	3.30	/	1.20			N0050/	3.57	/	2.71	
N0530/	0.00	/	1.66				N0470/	2.31	/	4.12	
	N0060/	2.74	/	1.45			N0400/	3.63	/	0.73	
N0325/	5.40	/	1.03				N0080/	2.56	/	3.04	
	N0160/	2.60	/	0.51			N0460/	3.20	/	1.05	
N0540/	0.23	/	1.58				N0655/	2.92	/	0.01	
	N0650/	2.00	/	1.51			N0275/	0.10	/	2.40	
N0360/	2.21	/	1.03				N0340/	2.82	/	1.03	
	N0480/	2.07	/	4.33				N-002/	0.47	/	3.47
N0310/	2.10	/	0.51					N-005/	0.67	/	1.54
	N0300/	4.88	/	1.03				N-013/	2.70	/	1.54
N0440/	2.34	/	0.97					N-007/	0.00	/	2.46
	N0330/	4.46	/	1.03				N-014/	0.08	/	1.63
N0375/	2.40	/	2.40					N-023/	1.17	/	1.62
	N0385/	2.63	/	1.54				N-041/	2.12	/	2.90
N0280/	0.68	/	2.68					N-024/	1.89	/	1.62
	N0202/	5.70	/	2.13				N-027/	1.95	/	1.62
N0515/	1.82	/	0.62					N-043/	1.27	/	0.11
	N-001/	1.30	/	1.53				N-040/	2.45	/	0.97
N-003/	0.00	/	2.56					N-009mh/	2.41	/	2.41
	N-004/	0.00	/	2.88				N0388/	2.63	/	1.54
N-008/	1.58	/	1.54					N2380/	3.13	/	1.32
	N-010/	1.83	/	1.54							
N-015/	2.73	/	1.54								
	N-006/	0.00	/	2.66							
N-009/	0.00	/	2.68								
	N-011/	0.00	/	2.04							
N-012/	0.07	/	1.55								
	N-025/	2.86	/	1.62							
N-021/	2.14	/	1.67								
	N-019/	3.12	/	2.90							
N-020/	0.24	/	1.62								
	N-022/	0.66	/	1.62							
N-029/	2.60	/	1.62								
	N-026/	0.61	/	1.62							
N-028/	1.93	/	1.62								
	N-030/	0.19	/	0.12							
N-042/	1.17	/	0.54								
	N-031/	0.93	/	0.08							
N0620/	0.80	/	0.20								
	N0900/	4.20	/	1.20							
N0205/	5.63	/	2.13								
	N0386/	2.63	/	1.54							
N0775/	1.56	/	0.91								
	N2040/	1.86	/	0.76							

N0155/	0.74	/	0.60				
N0945/	2.33	/	1.52		N2002/	3.35	/ 1.55
N2090/	2.22	/	0.33				
N0742/	1.71	/	1.20		N0910/	7.20	/ 1.20
N0880/	8.11	/	1.20				
N9004/	4.36	/	1.62		N9004-B/	4.41	/ 1.62
N9004-C/	4.16	/	1.62				
N9004-D/	4.30	/	1.62		N9004-F/	2.79	/ 1.62
N9001-B/	2.75	/	0.66				
N9001-D/	1.56	/	0.66		N9001-F/	1.56	/ 0.66
N9000/	2.65	/	0.66				
N9003/	0.66	/	0.66		N9005/	0.66	/ 0.66
N9005-E/	0.66	/	0.66				
N9005-G/	0.66	/	0.66		N9004-J/	2.95	/ 1.62
N9004-G/	2.71	/	1.62				
N9002/	1.97	/	0.66		N2370/	3.09	/ 1.53
N9000-B/	2.65	/	0.66				
N9000-C/	2.65	/	0.66		N9000-E/	2.65	/ 0.66
N9000-F/	2.65	/	0.66				
N9001-E/	2.75	/	0.66		N9001-G/	1.56	/ 0.66
N9001-H/	1.56	/	0.66				
N9001-J/	0.83	/	0.66		N9001-K/	0.83	/ 0.66
N9002-A/	1.97	/	0.66				
N9002-B/	1.97	/	0.66		N9003-A/	0.66	/ 0.66
N9003-B/	0.66	/	0.66				
N9003-C/	0.66	/	0.66		N9003-D/	0.66	/ 0.66
N9003-E/	0.66	/	0.66				
N9003-F/	0.66	/	0.66		N9003-G/	0.66	/ 0.66
N9004-A/	4.36	/	1.62				
N9004-E/	4.30	/	1.62		N9004-H/	2.79	/ 1.62
N9004-I/	2.79	/	1.62				
N9004-K/	2.95	/	1.62		N9005-A/	0.66	/ 0.66
N9005-B/	0.66	/	0.66				
N9005-C/	0.66	/	0.66		N9005-D/	0.66	/ 0.66
N9005-F/	0.66	/	0.66				
N9005-H/	0.66	/	0.66		N9000-D/	2.91	/ 0.66
N-0001A/	8.71	/	0.71				
N-0001B/	1.95	/	1.45		N0001-C/	0.53	/ 2.68
N-0001-E/	0.50	/	5.30				
N-0001E-OF/	0.00	/	3.13		N-0001-F/	0.31	/ 3.81
N-0001-G/	0.79	/	4.79				
N-0001F-OF-A/	0.00	/	3.13		N-0001F-OF-B/	0.00	/ 3.13
N9004-L/	4.36	/	1.62				
N0001-J/	0.10	/	1.29		N9005-J/	0.66	/ 0.66
N9005-K/	0.66	/	0.66				
N0001-I/	0.88	/	2.01		N-0001K/	0.82	/ 2.85
N0140-A/	3.51	/	1.41				

Conduit/ FLOW ==> "*" Conduit uses the normal flow option.
R0870/ 0.97 R0770-P2/ -0.43

R0900/	0.95		R0370/	0.11	
	R0280/	-0.01		R0202/	0.00
RN-002/	0.00		RN-003/	0.00	
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00		RN-009MH/	0.00	
	RN-011/	0.00		RN-014/	0.01
RN-012/	0.00		RN-023/	0.51	
	RN-021/	-0.61		RN-041/	0.49
RN-020/	-0.01		RN-022/	-0.03	
	RN-024/	-1.05		RN-026/	-0.00
RN-027/	0.25		RN-028/	-0.28	
	R0742-P3/	-0.01		R0655-P2/	-0.02
R0655-P3/	-0.02		R0655-P4/	0.02	
	R0120-P2/	0.03		R1010-P2/	0.71
RN-025-P1/	-0.57		RN-025-P2/	0.71	
	R0155-P1/	6.62		R0386/	1.84
R0388/	1.85		R0385/	1.84	
	R0375/	0.12		R0335/	0.00
R-0001B-P1/	0.03		R0540-P1/	-0.00	
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	-0.09		R0285.1/	0.97	
	R0250.1/	0.02		R0230.1/	0.01
R0220.1/	0.00		R0200.1/	-0.00	
	R0190.1/	-0.00		R0170.1/	0.00
R0180-P1/	0.05		R0180-P2/	0.05	
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00*	
	R0150-P3/	0.00*		R0150-P4/	0.00
R0150-P5/	0.00		R0110.1/	0.00	
	R0130-P1/	-0.01		R0130-P2/	-0.00
R0100-P1/	0.00		R0100-P2/	0.00	
	R0310.1/	0.16		R0430-P1/	-0.00
R0430-P2/	-0.00		R0430-P3/	-0.00	
	R0430-P4/	-0.00		R0340-P1/	-1.22
R0340-P2/	-0.98		R0350-P1/	1.09	
	R0350-P2/	1.09		R0330-P1/	0.04
R0330-P2/	0.04		R0450-P1/	0.47	
	R0450-P2/	0.47		P0360-P1/	-0.02
P0360-P2/	-0.03		R0550-P1/	0.04	
	R0550-P2/	0.04		R0560-P1/	0.29
R0560-P2/	0.25		R0560-P3/	0.25	
	R0780.1/	0.01		R0740.1/	0.02
R0730.1/	0.09		R0880.1/	0.00	
	R0950.1/	0.01		R0920.1/	0.01
R0960.1/	0.00		R0990.1/	0.11	
	R1010-P3/	0.86		R1010-P4/	0.88
R1010-P5/	0.80		R0980-P1.1/	0.79	
	R0980-P2.1/	0.89*		R0850-P1/	0.50
R0850-P2/	0.30		R0850-P3/	0.14	
	R0570-P1/	-0.19		R0570-P2/	-0.17

R0570-P3/	-0.16	R0770-P1.1/	0.68	
	R0770-P3/	-0.47	R0770-P4/	-0.47
R0790-P1/	0.51	R0790-P2/	0.30	
	R0530-P1/	0.00*	R0530-P2/	0.00*
R0530-P3/	0.00	R0910-P1/	-0.00	
	R0910-P2/	0.00	R0380-P1/	-0.92
R0380-P2/	-0.92	R0300-P1/	-0.03	
	R0300-P2/	-0.03	R0290-P2.1/	0.00
RN-004-P1/	0.00	RN-004-P2/	0.00	
	RN-004-P3/	0.00	RN-001-P1/	-0.23
RN-001-P2/	-0.16	RN-001-P3/	-0.23	
	RN-005-P1/	-0.22	RN-005-P2/	-0.33
RN-005-P3/	0.24	RN-008-P1.1/	0.48	
	RN-008-P2/	-0.37	RN-008-P3/	-0.32
RN-010-P1/	0.57	RN-010-P2/	0.56	
	RN-010-P3/	-0.54	RN-013-P1/	-0.98
RN-013-P2/	-0.98	RN-013-P3/	-0.98	
	RN-015-P1/	3.73	RN-015-P2/	-5.59
RN-015-P3/	-5.07	RN-029-P1/	0.53	
	RN-029-P2/	-0.83	R0742-P1/	0.00
R0742-P2/	0.00	R0655-P1.1/	-0.02	
	R0490-P8/	-9.03	R0490-P7/	-9.03
R0140-P2.1/	0.07	R0140-P1.1/	0.07	
	R0120-P1.1/	-0.01	R0160-P1.1/	0.29
R0325-P1.1/	0.00	R0400-P1.1/	0.00	
	R0880-P2.1/	0.00	R1010-P1.1/	1.04
R-0410-P4/	0.46	R-0410-P5/	0.46	
	R-0410-P6/	0.46	R-0410-P7/	0.46
R0410-P1/	-3.19	R0410-P2/	-3.19	
	R0410-P3/	-3.19	498.1/	6.23
R0490-P1.1/	-6.19	R0490-P3/	-0.55	
	R0490-P4/	-0.55	R0490-P5/	-0.55
R0490-P6/	-0.55	R0890-ORF-2/	-2.88	
	R0890-ORF-5/	-2.88	R0890ORF-3/	-2.88
R0890-ORF-4/	-2.88	N0140-A-W1.1/	0.15	
	R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00	
	R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00	
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00	
	R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00	
	R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00

R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	
	R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00	
	R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00	
	R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00	
	R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00	
	R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00	
	R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00	
	R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	1.08	R0330-W3.1/	0.00	
	R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00	
	R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00	
	R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00	
	R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00	
	R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00	
	R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00	
	R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00	
	R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00	
	R0520-W1.1/	0.00	R0520-W2.1/	0.00

R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0540-W2.1/	0.00	R0540-W1.1/	0.00
R0560-W3.1/	0.00	R0550-W1.1/	0.00
R0570-W3.1/	0.00	R0560-W2.1/	0.00
R0650-W1.1/	0.00	R0560-W4.1/	0.00
R0720-W1.1/	-1.06	R0570-W1.1/	0.00
R0775-W1.1/	0.00	R0570-W4.1/	0.00
R0800-W2.1/	0.00	R0640-W1.1/	0.00
R0870-W2.1/	0.00	R0660-W1.1/	0.00
R0940-W1.1/	0.00	R0690-W2.1/	0.00
R0960-W1.1/	0.00	R0730-W1.1/	0.00
R0990-W1.1/	0.00	R0740-W4.1/	0.00
R1030-W1.1/	0.00	R0780-W2.1/	0.00
R2090-W1.1/	0.00	R0800-W1.1/	0.00
R0440-W2.1/	0.00	R0810-W1.1/	0.00
R030-W1.1/	0.00	R0850-W3.1/	0.00
R0850-W1.1/	0.00	R0885-W1.1/	0.00
R0910-W1/	0.00	R0930-W1.1/	0.00
R0880-DS-W1/	0.00	R0940-W2.1/	0.00
R0640-P2-W1/	0.00	R0950-W2.1/	0.00
R1020-DS-W1/	2.26	R0960-W3.1/	0.00
R0205-W2/	0.00	R0980-W1.1/	0.00
R0205-W4/	0.01	R0990-W3.1/	0.00
R0620-W1/	0.00	R1020-W1.1/	0.00
R0660-W3.1/	0.00	R1030-W2.1/	0.00
R0890-W1.1/	0.00	R2002-W1.1/	-64.14
RN-019-P1-W1/	0.61	R2040-W1.1/	0.00
R0830-P1-W1.1/	-0.01	R2370-W4.1/	0.00
		R2380-W3.1/	0.00
		R015-W1.1/	0.00
		R021-W1.1/	0.00
		R031-W1.1/	0.00
		R043-W1.1/	0.00
		R0880-WPump/	0.00
		R0920-P2-W2/	0.00
		R0325-DS-W1/	0.00
		R0880-WPump2/	0.00
		R0520-DS-W1/	0.00
		R0640-P1-W2/	0.00
		R0690-P1-W1/	0.00
		R0945-DS-W1/	0.03
		R0205-W1/	0.00
		R0205-W3/	0.00
		R0210-W1.1/	0.00
		R0515-W2.1/	-1.74
		R0620-W2/	0.00
		R0650-W2.1/	0.05
		R0742-W1.1/	0.00
		R0915-W1.1/	0.00
		R019-P1-W2/	0.00
		R0830-P1-W2/	0.00

R0970-P1-W1/	-0.01	R0970-P1-W2/	0.00	
R-0001A-W1.1/	9.47	R-0001A-W2/	16.02	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.14	R0001E-W1/	0.00	
R0001F-W1.1/	0.02	R0001F-W2/	0.00	
R0001F-W3/	0.02	R0001F-W4/	0.00	
R0001F-W5/	0.02	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.11	
R000J-W6/	0.11	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.11	R0001J-W13/	0.11	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.62	R0001I-W7.1/	0.62	
R0001K-W1.1/	0.11	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.02	
FREE# 3/		FREE# 4/	0.02	FREE#
5/	18.05	FREE# 6/	0.15	
FREE# 7/		FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.71	FREE#14/	-0.57	
FREE#15/	-0.71	FREE#16/	6.62	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	-0.29	
FREE#21/	0.00	FREE#22/	0.03	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	-1.74	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	
FREE#35/	0.02	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00	
FREE#39/	-64.14	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	2.26	
FREE#43/	0.26	FREE#44/	1.04	
FREE#45/	0.03	FREE#46/	25.49	
FREE#47/	0.00	FREE#48/	0.05	
FREE#49/	0.00	FREE#50/	-11.50	
FREE#51/	0.22	FREE#52/	0.22	

==> System inflows (file) at 175.00 hours (Junction / Inflow, cfs)

N0190 / 8.47E-02 N0230 / 1.98E-01 N0220 /

2.64E-01 N0290	/ 7.86E-02 N0370	/ 7.28E-01 N0275	
/ 8.15E-02			
N0280	/ 3.27E-01 N0285	/ 5.09E-01 N0380	/
2.04E-01 N0385	/ 3.49E-02 N0386	/ 3.49E-02 N0388	
/ 3.49E-02			
N0420	/ 6.10E-01 N0530	/ 3.12E-01 N0430	/
2.75E-01 N0310	/ 3.00E-01 N0160	/ 3.26E-01 N0300	
/ 4.24E-02			
N0340	/ 1.47E+00 N0390	/ 8.21E-01 N0001-C	/
2.27E-01 N0460	/ 1.46E+00 N0440	/ 4.97E-01 N0360	
/ 5.76E-02			
N2040	/ 5.67E-01 N0450	/ 6.39E-01 N0400	/
1.05E+00 N0550	/ 1.72E-01 N0640	/ 1.53E-01 N0660	
/ 1.36E-01			
N0780	/ 2.65E-01 N0775	/ 2.00E-01 N0690	/
2.89E-02 N0720	/ 2.78E-01 N0770	/ 1.32E-01 N0885	
/ 4.42E-01			
N0960	/ 1.19E-01 N0990	/ 1.03E-01 N1010	/
8.34E-02 N1030	/ 1.52E-01 N1020	/ 4.08E-01 N0940	
/ 3.77E-01			
N1000	/ 2.03E-01 N0945	/ 2.16E-01 N0980	/
5.18E-01 N0850	/ 6.16E-01 N0890	/ 7.27E-01 N0930	
/ 2.03E-01			
N0920	/ 8.32E-02 N0950	/ 1.08E-01 N0830	/
1.26E-01 N0970	/ 1.18E-01 N-0001K	/ 1.25E-01 N0870	
/ 2.58E-01			
N0790	/ 2.42E-01 N0001-I	/ 4.97E-01 N0915	/
1.81E+00 N0900	/ 4.99E-05 N0910	/ 1.34E-01 N0880	
/ 2.26E-02			
N0810	/ 1.58E+00 N0740	/ 3.65E-01 N0742	/
1.35E-02 N0800	/ 9.37E-02 N0620	/ 3.13E-02 N0730	
/ 3.51E-01			
N0570	/ 1.61E-01 N0560	/ 2.60E-01 N0515	/
9.27E-02 N0510	/ 1.01E+00 N0520	/ 1.31E+00 N0350	
/ 2.28E-01			
N0330	/ 1.01E-01 N0325	/ 9.97E-02 N0180	/
4.32E-01 N0090	/ 1.14E-01 N-0001B	/ 4.48E-02 N0100	
/ 6.38E-02			
N0130	/ 4.40E-01 N0080	/ 2.84E-01 N0050	/
9.47E-02 N0170	/ 2.61E-01 N0205	/ 1.99E-02 N0210	
/ 1.37E-01			
N0150	/ 2.81E-01 N0155	/ 6.56E-02 N0060	/
3.96E-01 N0120	/ 2.27E-01 N0110	/ 7.36E-01 N0140	
/ 8.15E-01			
N0140-A	/ 3.74E-05 N0500	/ 1.20E+00 N0470	/
2.29E+00 N0540	/ 8.52E-02 N0650	/ 8.43E-02 N0490	
/ 1.11E+00			
N2380	/ 2.74E-01 N2370	/ 8.59E-01 N0655	/
2.34E-01 N0480	/ 2.40E+00 N0410	/ 6.28E+00 N0270	
/ 2.67E-01			

N0260	/ 7.57E-01	N0250	/ 2.79E-01	N0240	/
4.07E-02 N0200	/ 2.22E-01	N-002	/ 4.62E-02	N-003	/
/ 3.25E-02					
N-004	/ 8.00E-02	N-001	/ 1.83E-01	N-006	/
8.02E-02 N-005	/ 7.40E-02	N-007	/ 4.86E-02	N-009	/
/ 5.41E-02					
N-008	/ 1.85E-01	N-011	/ 7.25E-02	N-010	/
2.17E-01 N-014	/ 1.03E-01	N-012	/ 7.95E-02	N-013	/
/ 4.35E-02					
N-015	/ 3.13E-01	N2002	/ 5.38E-01	N-020	/
5.10E-02 N-022	/ 1.63E-01	N-026	/ 6.04E-03	N-027	/
/ 1.31E-01					
N-028	/ 9.08E-03	N-024	/ 2.97E-01	N-029	/
4.62E-02 N-030	/ 1.56E-01	N-023	/ 2.27E-02	N-031	/
/ 8.74E-02					
N-025	/ 3.11E-02	N-041	/ 2.20E-01	N-019	/
2.21E-01 N-021	/ 9.34E-02	N-043	/ 8.61E-02	N-042	/
/ 2.61E-01					
N-040	/ 1.62E+00	N2090	/ 3.08E-01	N-0001A	/
8.44E+00 N-0001-E	/ 2.89E-02	N-0001-F	/ 2.74E-01	N-0001-G	/
/ 5.10E-02					
N0001-J	/ 4.73E-01				

Cycle 10500 Time 175 Hrs - 0.00 Min

Junction	Depth	Elevation	====>	"*" Junction is Surcharged.
N0335/	1.04 /	1.04		N0550/ 2.00 / 0.67
N0690/	4.02 /	4.64		
N0640/	4.64 /	1.86		N0780/ 5.30 / 0.91
N0830/	3.25 /	1.20		
N0790/	4.18 /	1.20		N0800/ 2.26 / 5.61
N0870/	4.12 /	1.20		
N0510/	2.29 /	0.86		N0520/ 3.89 / 1.06
N0390/	2.76 /	1.06		
N0350/	3.73 /	1.04		N0450/ 2.34 / 1.04
N0770/	4.25 /	1.20		
N0720/	1.67 /	1.02		N0960/ 0.15 / 2.05
N0920/	2.77 /	1.20		
N0950/	1.62 /	1.20		N0970/ 2.41 / 1.20
N0915/	7.20 /	1.20		
N0885/	8.11 /	1.20		N0560/ 3.49 / 0.67
N0810/	2.63 /	0.78		
N0570/	3.34 /	0.67		N0990/ 0.96 / 2.53
N1000/	1.91 /	0.55		
N1020/	3.53 /	2.53		N1030/ 2.77 / 1.72
N0890/	3.30 /	1.76		
N0850/	0.45 /	1.91		N0930/ 5.62 / 2.05
N0980/	0.90 /	2.52		
N1010/	1.48 /	2.52		N0430/ 1.17 / 1.04
N0500/	2.59 /	4.84		

N0230/	1.58	/	4.89	N0220/	1.44	/	2.62
N0200/	3.76	/	2.15	N0130/	2.06	/	1.46
N0190/	3.11	/	2.15	N0120/	1.13	/	0.89
N0100/	1.00	/	1.46	N0210/	1.00	/	0.28
N0090/	2.92	/	5.41	N0240/	3.45	/	4.89
N0110/	0.85	/	1.62	N0270/	2.55	/	4.12
N0170/	0.99	/	0.28	N0370/	1.37	/	2.35
N0260/	2.85	/	2.62	N0490/	2.52	/	1.26
N0250/	2.59	/	4.89	N0660/	2.30	/	1.46
N0140/	3.32	/	1.42	N0940/	2.60	/	1.59
N0150/	0.11	/	1.55	N0050/	3.57	/	2.71
N0290/	1.34	/	2.35	N0470/	2.32	/	4.13
N0180/	2.88	/	1.42	N0400/	3.63	/	0.73
N0285/	0.31	/	2.31	N0080/	2.57	/	3.05
N0420/	1.60	/	4.68	N0460/	3.21	/	1.06
N0410/	4.13	/	1.52	N0655/	2.92	/	0.01
N0380/	2.35	/	2.35	N0275/	0.23	/	2.53
N0740/	2.44	/	1.20	N0340/	2.83	/	1.04
N0730/	3.30	/	1.20	N-002/	0.53	/	3.53
N0530/	0.13	/	1.79	N-005/	0.98	/	1.85
N0060/	2.75	/	1.46	N-008/	1.89	/	1.85
N0325/	5.41	/	1.04	N-010/	2.14	/	1.85
N0160/	2.60	/	0.51	N-015/	3.05	/	1.86
N0540/	0.37	/	1.72	N-006/	0.16	/	2.82
N0650/	2.01	/	1.52	N-009/	0.15	/	2.83
N0360/	2.22	/	1.04	N-011/	0.15	/	2.19
N0480/	2.08	/	4.34	N-012/	0.37	/	1.85
N0310/	2.10	/	0.51	N-025/	3.01	/	1.77
N0300/	4.89	/	1.04	N-021/	2.25	/	1.78
N0440/	2.35	/	0.98	N-019/	2.97	/	2.75
N0330/	4.47	/	1.04	N-020/	0.39	/	1.77
N0375/	2.35	/	2.35				
N0385/	2.61	/	1.52				
N0280/	0.86	/	2.86				
N0202/	5.72	/	2.15				
N0515/	1.87	/	0.67				
N-001/	1.62	/	1.85				
N-003/	0.10	/	2.66				
N-004/	0.08	/	2.96				
N-008/	1.89	/	1.85				
N-010/	2.14	/	1.85				
N-015/	3.05	/	1.86				
N-006/	0.16	/	2.82				
N-009/	0.15	/	2.83				
N-011/	0.15	/	2.19				
N-012/	0.37	/	1.85				
N-025/	3.01	/	1.77				
N-021/	2.25	/	1.78				
N-019/	2.97	/	2.75				
N-020/	0.39	/	1.77				

N-022/	0.81	/	1.77	N-024/	2.04	/	1.77
N-029/	2.75	/	1.77	N-027/	2.10	/	1.77
N-026/	0.76	/	1.77	N-043/	1.27	/	0.11
N-028/	2.08	/	1.77	N-040/	2.48	/	1.00
N-030/	0.19	/	0.12	N-009mh/	2.60	/	2.60
N-042/	1.20	/	0.57	N0388/	2.61	/	1.52
N-031/	0.93	/	0.08	N2380/	3.07	/	1.26
N0620/	0.81	/	0.21	N2002/	3.66	/	1.86
N0900/	4.20	/	1.20	N0910/	7.20	/	1.20
N0205/	5.65	/	2.15	N9004-B/	4.65	/	1.86
N0386/	2.61	/	1.52	N9004-F/	3.03	/	1.86
N0775/	1.56	/	0.91	N9001-F/	1.80	/	0.90
N2040/	1.86	/	0.76	N9005/	0.90	/	0.90
N0155/	1.05	/	0.91	N9004-J/	3.19	/	1.86
N0945/	2.33	/	1.52	N2370/	3.08	/	1.52
N2090/	2.23	/	0.34	N9000-E/	2.89	/	0.90
N0742/	1.71	/	1.20	N9001-G/	1.80	/	0.90
N0880/	8.11	/	1.20	N9001-K/	1.07	/	0.90
N9004/	4.60	/	1.86	N9003-A/	0.90	/	0.90
N9004-C/	4.40	/	1.86	N9003-D/	0.90	/	0.90
N9004-D/	4.54	/	1.86	N9003-G/	0.90	/	0.90
N9001-B/	2.99	/	0.90	N9004-H/	3.03	/	1.86
N9001-D/	1.80	/	0.90	N9005-A/	0.90	/	0.90
N9000/	2.89	/	0.90	N9005-D/	0.90	/	0.90
N9003/	0.90	/	0.90	N9000-D/	3.15	/	0.90
N9005-E/	0.90	/	0.90				
N9005-G/	0.90	/	0.90				
N9004-G/	2.95	/	1.86				
N9002/	2.21	/	0.90				
N9000-B/	2.89	/	0.90				
N9000-C/	2.89	/	0.90				
N9000-F/	2.89	/	0.90				
N9001-E/	2.99	/	0.90				
N9001-H/	1.80	/	0.90				
N9001-J/	1.07	/	0.90				
N9002-A/	2.21	/	0.90				
N9002-B/	2.21	/	0.90				
N9003-B/	0.90	/	0.90				
N9003-C/	0.90	/	0.90				
N9003-E/	0.90	/	0.90				
N9003-F/	0.90	/	0.90				
N9004-A/	4.60	/	1.86				
N9004-E/	4.54	/	1.86				
N9004-I/	3.03	/	1.86				
N9004-K/	3.19	/	1.86				
N9005-B/	0.90	/	0.90				
N9005-C/	0.90	/	0.90				
N9005-F/	0.90	/	0.90				
N9005-H/	0.90	/	0.90				
N-0001A/	8.77	/	0.77				

N-0001B/	1.96 /	1.46	N0001-C/	0.51 /	2.66
N-0001-E/	0.50 /	5.30			
N-0001E-OF/	0.00 /	3.13	N-0001-F/	0.32 /	3.82
N-0001-G/	0.80 /	4.80			
N-0001F-OF-A/	0.00 /	3.13	N-0001F-OF-B/	0.00 /	3.13
N9004-L/	4.60 /	1.86			
N0001-J/	0.08 /	1.27	N9005-J/	0.90 /	0.90
N9005-K/	0.90 /	0.90			
N0001-I/	0.84 /	1.97	N-0001K/	0.81 /	2.84
N0140-A/	3.52 /	1.42			

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	1.69		R0770-P2/	-0.91
R0900/	1.81			R0370/	0.76
	R0280/	-0.18		R0202/	-0.23
RN-002/	0.02			RN-003/	0.06
	RN-006/	0.12		RN-007/	0.09
RN-009/	0.11			RN-009MH/	0.14
	RN-011/	0.13*		RN-014/	-0.49
RN-012/	-0.41			RN-023/	0.44
	RN-021/	-0.45		RN-041/	0.31
RN-020/	0.23			RN-022/	0.38
	RN-024/	0.69		RN-026/	0.01
RN-027/	-0.13			RN-028/	0.14
	R0742-P3/	0.02		R0655-P2/	-0.09
R0655-P3/	-0.09			R0655-P4/	0.09
	R0120-P2/	0.13		R1010-P2/	0.48
RN-025-P1/	24.97			RN-025-P2/	24.03
	R0155-P1/	2.59		R0386/	1.36
R0388/	1.40			R0385/	1.33
	R0375/	0.94		R0335/	0.27
R-0001B-P1/	0.07			R0540-P1/	-0.21
	R0540-P2/	0.05		R0540-P3/	0.01
R0290-P1/	-0.03			R0285.1/	0.03
	R0250.1/	0.18		R0230.1/	0.15
R0220.1/	0.26			R0200.1/	0.23
	R0190.1/	0.07		R0170.1/	0.28
R0180-P1/	-0.14			R0180-P2/	-0.13
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.14			R0150-P2/	0.00*
	R0150-P3/	0.00*		R0150-P4/	0.18*
R0150-P5/	0.00			R0110.1/	-0.84
	R0130-P1/	0.25		R0130-P2/	0.24
R0100-P1/	-0.03			R0100-P2/	-0.03
	R0310.1/	-0.41		R0430-P1/	-0.07
R0430-P2/	-0.07			R0430-P3/	-0.07
	R0430-P4/	-0.07		R0340-P1/	-0.95
R0340-P2/	-0.76			R0350-P1/	0.94
	R0350-P2/	0.94		R0330-P1/	-0.01
R0330-P2/	-0.01			R0450-P1/	0.34

P0360-P2/	R0450-P2/	0.34	P0360-P1/	-0.01
	-0.01		R0550-P1/	0.12
R0560-P2/	R0550-P2/	0.12	R0560-P1/	0.91
	1.14		R0560-P3/	1.15
R0730.1/	R0780.1/	-0.23	R0740.1/	-0.20
	0.16		R0880.1/	0.00
R0960.1/	R0950.1/	0.11	R0920.1/	-0.10
	0.14		R0990.1/	0.16
R1010-P5/	R1010-P3/	0.39	R1010-P4/	0.40
	0.36		R0980-P1.1/	-0.01
R0850-P2/	R0980-P2.1/	0.51*	R0850-P1/	0.58
	0.35		R0850-P3/	0.18
R0570-P3/	R0570-P1/	-0.43	R0570-P2/	-0.41
	-0.40		R0770-P1.1/	0.27
R0790-P1/	R0770-P3/	-0.99	R0770-P4/	-0.99
	0.66		R0790-P2/	0.37
R0530-P3/	R0530-P1/	0.09*	R0530-P2/	0.18
	0.04*		R0910-P1/	0.02
R0380-P2/	R0910-P2/	-0.01	R0380-P1/	-0.64
	-0.64		R0300-P1/	-0.03
RN-004-P1/	R0300-P2/	-0.03	R0290-P2.1/	0.17*
	0.04		RN-004-P2/	0.06
RN-001-P2/	RN-004-P3/	0.01	RN-001-P1/	0.21
	0.14		RN-001-P3/	0.21
RN-005-P3/	RN-005-P1/	0.21	RN-005-P2/	0.36
	-0.20		RN-008-P1.1/	-0.30
RN-010-P1/	RN-008-P2/	0.42	RN-008-P3/	0.42
	-0.47		RN-010-P2/	-0.46
RN-013-P2/	RN-010-P3/	0.48	RN-013-P1/	0.26
	0.26		RN-013-P3/	0.26
RN-015-P3/	RN-015-P1/	0.46	RN-015-P2/	-0.33
	-0.31		RN-029-P1/	-0.30
R0742-P2/	RN-029-P2/	0.31	R0742-P1/	-0.00
	-0.00		R0655-P1.1/	-0.09
R0140-P2.1/	R0490-P8/	-8.83	R0490-P7/	-8.83
	0.10		R0140-P1.1/	0.10
R0325-P1.1/	R0120-P1.1/	0.09	R0160-P1.1/	-0.76
	0.00		R0400-P1.1/	0.00
R-0410-P4/	R0880-P2.1/	0.00	R1010-P1.1/	0.76
	0.39		R-0410-P5/	0.39
R0410-P1/	R-0410-P6/	0.40	R-0410-P7/	0.39
	-2.75		R0410-P2/	-2.75
R0490-P1.1/	R0410-P3/	-2.75	498.1/	6.74
	-6.70		R0490-P3/	-0.54
R0490-P6/	R0490-P4/	-0.53	R0490-P5/	-0.54
	-0.54		R0890-ORF-2/	-2.30
R0890-ORF-4/	R0890-ORF-5/	-2.30	R0890ORF-3/	-2.30
	-2.30		N0140-A-W1.1/	0.18
R0285-W2/	R0540-W3/	0.00	R0290-P5/	0.00
	0.00		R0250-W1/	0.00

R0200-W3/	R0230-W1/	0.00	R0220-W2/	0.00
	0.00		R0190-W4/	0.00
R0140-W1/	R0170-W3/	0.00	R0180-W1/	0.00
	0.00		R0150-W3/	0.00
R0100-W4/	R0110-W1/	0.00	R0130-W1/	0.00
	0.00		R0310-W5.1/	0.00
R0350-W1/	R0430-W3/	0.00	R0340-W3/	0.00
	0.00		R0330-W1/	0.00
R0560-W1/	R0360-W1/	0.00	R0550-W2/	0.00
	0.00		R0780-W1/	0.00
R0950-W1/	R0740-W3/	0.00	R0870-W1/	0.00
	0.00		R0960-W2/	0.00
R0980-W2/	R0990-W2/	0.00	R1010-W2/	0.00
	0.00		R0850-W2/	0.00
R0380-W3/	R0770-W2/	0.00	R0530-W4/	0.00
	0.00		R0300-W2/	0.00
R0140-W2/	R0290-W1/	0.00	R0655-W2/	0.00
	0.00		R0120-W2/	0.00
R0880-W2/	R0160-W1/	0.00	R0400-W1/	0.00
	0.00		R1010-W1/	0.00
R0050-W2.1/	R0490-W2/	0.00	R0050-W1.1/	0.00
	0.00		R0060-W1.1/	0.00
R0090-W1.1/	R0080-W1.1/	0.00	R0080-W2.1/	0.00
	0.00		R0090-W2.1/	0.00
R0100-W1.1/	R0090-W3.1/	0.00	R0090-W4.1/	0.00
	0.00		R0100-W2.1/	0.00
R0120-W1.1/	R0100-W3.1/	0.00	R0110-W2.1/	0.00
	0.00		R0130-W2.1/	0.00
R0170-W1.1/	R0150-W1.1/	0.00	R0150-W2.1/	0.00
	0.00		R0170-W2.1/	0.00
R0190-W3.1/	R0190-W1.1/	0.00	R0190-W2.1/	0.00
	0.00		R0200-W1.1/	0.00
R0240-W1.1/	R0200-W2.1/	0.00	R0220-W1.1/	0.00
	0.00		R0240-W2.1/	0.00
R0240-W5.1/	R0240-W3.1/	0.00	R0240-W4.1/	0.00
	0.00		R0240-W6.1/	0.00
R0260-W1.1/	R0250-W2.1/	0.00	R0250-W3.1/	0.00
	0.00		R0270-W1.1/	0.00
R0275-W1.1/	R0270-W3/	0.00	R0270-W2.1/	0.00
	0.00		R0280-W1.1/	0.00
R0290-W3.1/	R0285-W1.1/	0.00	R0290-W2.1/	0.00
	0.00		R0290-W4.1/	0.00
R0310-W2.1/	R0300-W1.1/	0.00	R0310-W1.1/	0.00
	0.00		R0310-W3.1/	0.00
R0330-W2.1/	R0310-W4.1/	0.00	R0325-W2.1/	0.00
	1.16		R0330-W3.1/	0.00
R0350-W2.1/	R0340-W1.1/	0.00	R0340-W2.1/	0.00
	0.00		R0350-W3.1/	0.00
R0370-W1.1/	R0360-W2.1/	0.00	R0360-W3.1/	0.00
	0.00		R0370-W2.1/	0.00

R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	-1.21	R0730-W1.1/	0.00
R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-14.62	R2040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	-0.18	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00

R0640-P1-W1/	0.07	R0640-P1-W2/	0.00	
R0640-P2-W1/	0.00	R0690-P1-W1/	0.02	
R0940-DS-W1/	0.26	R0945-DS-W1/	0.04	
R1020-DS-W1/	1.46	R0205-W1/	0.00	
R0205-W2/	0.00	R0205-W3/	0.00	
R0205-W4/	0.14	R0210-W1.1/	0.00	
R0515-W1.1/	0.00	R0515-W2.1/	-5.81	
R0620-W1/	0.00	R0620-W2/	0.00	
R0620-W3/	0.00	R0650-W2.1/	0.12	
R0660-W3.1/	0.00	R0742-W1.1/	0.00	
R0890-W1.1/	0.00	R0915-W1.1/	0.00	
RN-019-P1-W1/	0.55	R019-P1-W2/	0.00	
R0830-P1-W1.1/	0.04	R0830-P1-W2/	0.00	
R0970-P1-W1/	0.08	R0970-P1-W2/	0.00	
R-0001A-W1.1/	-20.09	R-0001A-W2/	-35.73	
R0001C-W1.1/	0.00	R0001C-W2/	0.00	
R0001C-W3/	0.14	R0001E-W1/	0.00	
R0001F-W1.1/	0.03	R0001F-W2/	0.00	
R0001F-W3/	0.03	R0001F-W4/	0.00	
R0001F-W5/	0.03	R001G-W1/	0.00	
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00	
R000J-W2/	0.00	R000J-W3/	0.00	
R000J-W4/	0.00	R000J-W5/	0.09	
R000J-W6/	0.09	R000J-W7/	0.00	
R0001J-W8/	0.00	R0001J-W9/	0.00	
R0001J-W10/	0.00	R0001J-W11/	0.00	
R0001J-W12/	0.09	R0001J-W13/	0.09	
R0001J-W14/	0.00	R0001I-W1.1/	0.00	
R001I-W2/	0.00	R0001I-W3/	0.00	
R001I-W4/	0.00	R001I-W5/	0.00	
R0001I-W7/	0.53	R0001I-W7.1/	0.53	
R0001K-W1.1/	0.10	R0001K-W2/	0.00	
R0001K-W3/	0.00	R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.09	
FREE# 3/		FREE# 4/	0.09	FREE#
5/	17.66	FREE# 6/	0.18	
FREE# 7/		FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00	
FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.48	FREE#14/	24.97	
FREE#15/	-24.03	FREE#16/	2.59	
FREE#17/	0.00	FREE#18/	0.00	
FREE#19/	0.00	FREE#20/	0.76	
FREE#21/	0.00	FREE#22/	0.13	
FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00	
FREE#27/	0.00	FREE#28/	-5.81	
FREE#29/	0.00	FREE#30/	0.00	
FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00	

	FREE#35/	0.09	FREE#36/	0.00
FREE#37/	0.00		FREE#38/	0.00
	FREE#39/	-23.37	FREE#40/	0.00
FREE#41/	0.00		FREE#42/	1.46
	FREE#43/	0.26	FREE#44/	0.76
FREE#45/	0.04		FREE#46/	-55.82
	FREE#47/	0.00	FREE#48/	0.08
FREE#49/	0.00		FREE#50/	-9.18
	FREE#51/	0.18	FREE#52/	0.18

==> System inflows (file) at 183.33 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00		N0290	/ 1.67E-06	N0370	/ 0.00E+00
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 1.82E-01	N0380	/
1.89E-02		N0385	/ 0.00E+00	N0388	/ 0.00E+00
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 5.17E-06	N0430	/
1.43E-05		N0310	/ 9.45E-07	N0160	/ 0.00E+00
	/ 2.30E-02				
N0340	/ 8.17E-01	N0390	/ 0.00E+00	N0001-C	/
0.00E+00		N0460	/ 1.41E-01	N0440	/ 1.51E-01
	/ 4.36E-03				
N2040	/ 7.21E-02	N0450	/ 2.15E-01	N0400	/
3.42E-01		N0550	/ 3.90E-04	N0640	/ 0.00E+00
	/ 0.00E+00				
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00		N0720	/ 1.02E-03	N0770	/ 2.76E-02
	/ 5.23E-02				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00		N1030	/ 0.00E+00	N1020	/ 2.60E-02
	/ 1.59E-01				
N1000	/ 0.00E+00	N0945	/ 9.10E-02	N0980	/
2.54E-01		N0850	/ 7.02E-02	N0890	/ 7.26E-02
	/ 7.14E-02				
N0920	/ 0.00E+00	N0950	/ 1.84E-02	N0830	/
5.16E-10		N0970	/ 0.00E+00	N-0001K	/ 0.00E+00
	/ 1.65E-02				
N0790	/ 6.35E-02	N0001-I	/ 0.00E+00	N0915	/
0.00E+00		N0900	/ 0.00E+00	N0910	/ 0.00E+00
	/ 0.00E+00				
N0810	/ 5.83E-01	N0740	/ 0.00E+00	N0742	/
0.00E+00		N0800	/ 0.00E+00	N0620	/ 0.00E+00
	/ 1.92E-01				
N0570	/ 1.05E-03	N0560	/ 1.48E-01	N0515	/
2.53E-02		N0510	/ 2.76E-01	N0520	/ 6.22E-01
	/ 7.35E-03				
N0330	/ 1.78E-02	N0325	/ 3.15E-02	N0180	/
1.69E-07		N0090	/ 0.00E+00	N-0001B	/ 2.11E-04

	/ 0.00E+00				
N0130		/ 0.00E+00	N0080	/ 0.00E+00	N0050
7.95E-03	N0170		/ 0.00E+00	N0205	/ 0.00E+00
	/ 4.63E-02				N0210
N0150		/ 0.00E+00	N0155	/ 0.00E+00	N0060
5.38E-02	N0120		/ 0.00E+00	N0110	/ 0.00E+00
	/ 0.00E+00				N0140
N0140-A		/ 0.00E+00	N0500	/ 8.31E-01	N0470
2.02E-01	N0540		/ 4.32E-02	N0650	/ 1.03E-02
	/ 6.38E-01				N0490
N2380		/ 0.00E+00	N2370	/ 1.83E-02	N0655
1.87E-02	N0480		/ 9.24E-02	N0410	/ 4.30E+00
	/ 4.53E-02				N0270
N0260		/ 1.38E-01	N0250	/ 0.00E+00	N0240
0.00E+00	N0200		/ 0.00E+00	N-002	/ 0.00E+00
	/ 0.00E+00				N-003
N-004		/ 0.00E+00	N-001	/ 4.79E-02	N-006
0.00E+00	N-005		/ 0.00E+00	N-007	/ 0.00E+00
	/ 0.00E+00				N-009
N-008		/ 0.00E+00	N-011	/ 0.00E+00	N-010
0.00E+00	N-014		/ 1.77E-08	N-012	/ 0.00E+00
	/ 0.00E+00				N-013
N-015		/ 0.00E+00	N2002	/ 0.00E+00	N-020
1.80E-03	N-022		/ 0.00E+00	N-026	/ 0.00E+00
	/ 0.00E+00				N-027
N-028		/ 0.00E+00	N-024	/ 0.00E+00	N-029
0.00E+00	N-030		/ 0.00E+00	N-023	/ 0.00E+00
	/ 0.00E+00				N-031
N-025		/ 0.00E+00	N-041	/ 0.00E+00	N-019
0.00E+00	N-021		/ 0.00E+00	N-043	/ 0.00E+00
	/ 1.60E-01				N-042
N-040		/ 1.02E+00	N2090	/ 2.33E-02	N-0001A
5.96E-02	N-0001-E		/ 7.01E-09	N-0001-F	/ 0.00E+00
	/ 1.03E-06				N-0001-G
N0001-J		/ 0.00E+00			

Cycle 11000 Time 183 Hrs - 20.00 Min

Junction	Depth	Elevation	====>	"*"	Junction is Surcharged.
N0335/	1.04	1.04		N0550/	2.06 / 0.73
N0690/	4.01	4.63			
N0640/	4.62	1.84		N0780/	5.30 / 0.91
N0830/	3.26	1.21			
N0790/	4.19	1.21		N0800/	2.26 / 5.61
N0870/	4.13	1.21			
N0510/	2.29	0.86		N0520/	3.89 / 1.06
N0390/	2.76	1.06			
N0350/	3.73	1.04		N0450/	2.34 / 1.04
N0770/	4.26	1.21			
N0720/	1.70	1.05		N0960/	0.00 / 1.90

N0920/	2.78	/	1.21		
N0950/	1.63	/	1.21	N0970/	2.42 / 1.21
N0915/	7.21	/	1.21		
N0885/	8.12	/	1.21	N0560/	3.55 / 0.73
N0810/	2.63	/	0.78		
N0570/	3.40	/	0.73	N0990/	0.90 / 2.47
N1000/	1.92	/	0.56		
N1020/	3.47	/	2.47	N1030/	2.77 / 1.72
N0890/	3.37	/	1.83		
N0850/	0.31	/	1.77	N0930/	5.62 / 2.05
N0980/	0.85	/	2.47		
N1010/	1.43	/	2.47	N0430/	1.17 / 1.04
N0500/	2.61	/	4.86		
N0230/	1.58	/	4.89	N0220/	1.44 / 2.62
N0200/	3.74	/	2.13		
N0190/	3.09	/	2.13	N0130/	2.07 / 1.47
N0100/	1.01	/	1.47		
N0090/	2.93	/	5.42	N0120/	1.06 / 0.82
N0110/	0.70	/	1.47		
N0170/	0.99	/	0.28	N0210/	1.00 / 0.28
N0260/	2.85	/	2.62		
N0250/	2.59	/	4.89	N0240/	3.45 / 4.89
N0140/	3.31	/	1.41		
N0150/	0.00	/	1.44	N0270/	2.55 / 4.12
N0290/	1.28	/	2.29		
N0180/	2.87	/	1.41	N0370/	1.31 / 2.29
N0285/	0.30	/	2.30		
N0420/	1.60	/	4.68	N0490/	2.47 / 1.21
N0410/	4.10	/	1.49		
N0380/	2.29	/	2.29	N0660/	2.30 / 1.46
N0740/	2.45	/	1.21		
N0730/	3.31	/	1.21	N0940/	2.60 / 1.59
N0530/	0.00	/	1.66		
N0060/	2.76	/	1.47	N0050/	3.58 / 2.72
N0325/	5.41	/	1.04		
N0160/	2.60	/	0.51	N0470/	2.32 / 4.13
N0540/	0.26	/	1.61		
N0650/	2.00	/	1.51	N0400/	3.64 / 0.74
N0360/	2.22	/	1.04		
N0480/	2.08	/	4.34	N0080/	2.58 / 3.06
N0310/	2.10	/	0.51		
N0300/	4.89	/	1.04	N0460/	3.21 / 1.06
N0440/	2.35	/	0.98		
N0330/	4.47	/	1.04	N0655/	2.92 / 0.01
N0375/	2.29	/	2.29		
N0385/	2.58	/	1.49	N0275/	0.09 / 2.39
N0280/	0.67	/	2.67		
N0202/	5.70	/	2.13	N0340/	2.83 / 1.04
N0515/	1.93	/	0.73		
N-001/	1.56	/	1.79	N-002/	0.48 / 3.48

N-003/	0.00	/	2.56		
N-004/	0.00	/	2.88	N-005/	0.92 / 1.79
N-008/	1.83	/	1.79	N-013/	2.95 / 1.79
N-010/	2.08	/	1.79	N-007/	0.00 / 2.46
N-015/	2.98	/	1.79	N-011/	0.00 / 2.04
N-006/	0.00	/	2.66	N-014/	0.24 / 1.79
N-009/	0.00	/	2.68	N-023/	1.28 / 1.73
N-011/	0.00	/	2.04	N-041/	1.78 / 2.56
N-012/	0.31	/	1.79	N-024/	2.00 / 1.73
N-025/	2.97	/	1.73	N-027/	2.06 / 1.73
N-021/	2.22	/	1.75	N-043/	1.27 / 0.11
N-019/	2.78	/	2.56	N-040/	2.49 / 1.01
N-020/	0.35	/	1.73	N-009mh/	2.41 / 2.41
N-022/	0.77	/	1.73	N0388/	2.58 / 1.49
N-029/	2.71	/	1.73	N2380/	3.02 / 1.21
N-026/	0.72	/	1.73	N2002/	3.59 / 1.79
N-028/	2.04	/	1.73	N0910/	7.21 / 1.21
N-030/	0.19	/	0.12	N9004-B/	4.57 / 1.78
N-042/	1.22	/	0.59	N9004-F/	2.95 / 1.78
N-031/	0.93	/	0.08	N9001-F/	1.72 / 0.82
N0620/	0.81	/	0.21	N9005/	0.82 / 0.82
N0900/	4.21	/	1.21	N9004-J/	3.11 / 1.78
N0205/	5.63	/	2.13	N2370/	3.05 / 1.49
N0386/	2.58	/	1.49	N9000-E/	2.81 / 0.82
N0775/	1.56	/	0.91	N9001-G/	1.72 / 0.82
N2040/	1.86	/	0.76	N9001-K/	0.99 / 0.82
N0155/	0.96	/	0.82	N9003-A/	0.82 / 0.82
N0945/	2.33	/	1.52		
N2090/	2.23	/	0.34		
N0742/	1.72	/	1.21		
N0880/	8.12	/	1.21		
N9004/	4.52	/	1.78		
N9004-C/	4.32	/	1.78		
N9004-D/	4.46	/	1.78		
N9001-B/	2.91	/	0.82		
N9001-D/	1.72	/	0.82		
N9000/	2.81	/	0.82		
N9003/	0.82	/	0.82		
N9005-E/	0.82	/	0.82		
N9005-G/	0.82	/	0.82		
N9004-G/	2.87	/	1.78		
N9002/	2.13	/	0.82		
N9000-B/	2.81	/	0.82		
N9000-C/	2.81	/	0.82		
N9000-F/	2.81	/	0.82		
N9001-E/	2.91	/	0.82		
N9001-H/	1.72	/	0.82		
N9001-J/	0.99	/	0.82		
N9002-A/	2.13	/	0.82		
N9002-B/	2.13	/	0.82		

N9003-B/	0.82 /	0.82				
	N9003-C/	0.82 /	0.82	N9003-D/	0.82 /	0.82
N9003-E/	0.82 /	0.82				
	N9003-F/	0.82 /	0.82	N9003-G/	0.82 /	0.82
N9004-A/	4.52 /	1.78				
	N9004-E/	4.46 /	1.78	N9004-H/	2.95 /	1.78
N9004-I/	2.95 /	1.78				
	N9004-K/	3.11 /	1.78	N9005-A/	0.82 /	0.82
N9005-B/	0.82 /	0.82				
	N9005-C/	0.82 /	0.82	N9005-D/	0.82 /	0.82
N9005-F/	0.82 /	0.82				
	N9005-H/	0.82 /	0.82	N9000-D/	3.07 /	0.82
N-0001A/	8.85 /	0.85				
	N-0001B/	1.97 /	1.47	N0001-C/	0.49 /	2.64
N-0001-E/	0.50 /	5.30				
	N-0001E-OF/	0.00 /	3.13	N-0001-F/	0.31 /	3.81
N-0001-G/	0.80 /	4.80				
N-0001F-OF-A/	0.00 /	3.13		N-0001F-OF-B/	0.00 /	3.13
N9004-L/	4.52 /	1.78				
	N0001-J/	0.07 /	1.26	N9005-J/	0.82 /	0.82
N9005-K/	0.82 /	0.82				
	N0001-I/	0.79 /	1.92	N-0001K/	0.79 /	2.82
N0140-A/	3.51 /	1.41				

	Conduit/	FLOW	==>	"*"	Conduit uses the normal flow option.
	R0870/	0.54		R0770-P2/	-0.07
R0900/	0.54		R0370/	0.10	
	R0280/	-0.00		R0202/	0.00
RN-002/	0.00		RN-003/	0.00	
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00		RN-009MH/	0.00	
	RN-011/	0.00*		RN-014/	0.16
RN-012/	0.17		RN-023/	0.56	
	RN-021/	-0.50		RN-041/	0.47
RN-020/	0.00		RN-022/	0.07	
	RN-024/	0.62		RN-026/	0.00
RN-027/	-0.14		RN-028/	0.15	
	R0742-P3/	-0.08		R0655-P2/	-0.02
R0655-P3/	-0.02		R0655-P4/	0.02	
	R0120-P2/	0.02		R1010-P2/	0.34
RN-025-P1/	19.83		RN-025-P2/	18.21	
	R0155-P1/	3.11		R0386/	0.83
R0388/	0.83		R0385/	0.83	
	R0375/	0.10		R0335/	0.00
R-0001B-P1/	0.01		R0540-P1/	-0.05	
	R0540-P2/	0.00		R0540-P3/	0.00
R0290-P1/	-0.10		R0285.1/	0.72	
	R0250.1/	-0.04		R0230.1/	-0.01
R0220.1/	-0.00		R0200.1/	-0.00	
	R0190.1/	-0.00		R0170.1/	0.00

R0180-P1/	0.05		R0180-P2/	0.05	
	R0140.1/	0.00		R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00*	
	R0150-P3/	0.00*		R0150-P4/	0.00*
R0150-P5/	0.00		R0110.1/	-0.00	
	R0130-P1/	-0.02		R0130-P2/	-0.02
R0100-P1/	0.00		R0100-P2/	0.00	
	R0310.1/	-0.00		R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00	
	R0430-P4/	-0.00		R0340-P1/	-0.46
R0340-P2/	-0.36		R0350-P1/	0.42	
	R0350-P2/	0.42		R0330-P1/	-0.03
R0330-P2/	-0.03		R0450-P1/	-0.14	
	R0450-P2/	-0.14		P0360-P1/	0.00
P0360-P2/	0.00		R0550-P1/	0.11	
	R0550-P2/	0.10		R0560-P1/	0.47
R0560-P2/	0.62		R0560-P3/	0.63	
	R0780.1/	-0.00		R0740.1/	-0.07
R0730.1/	-0.07		R0880.1/	0.00	
	R0950.1/	0.02		R0920.1/	0.00
R0960.1/	0.00		R0990.1/	0.05	
	R1010-P3/	0.32		R1010-P4/	0.33
R1010-P5/	0.30		R0980-P1.1/	0.03	
	R0980-P2.1/	0.29*		R0850-P1/	0.23
R0850-P2/	0.10		R0850-P3/	0.03	
	R0570-P1/	-0.25		R0570-P2/	-0.23
R0570-P3/	-0.22		R0770-P1.1/	0.78	
	R0770-P3/	-0.27		R0770-P4/	-0.26
R0790-P1/	0.50		R0790-P2/	0.26	
	R0530-P1/	0.00*		R0530-P2/	0.00*
R0530-P3/	0.00*		R0910-P1/	-0.00	
	R0910-P2/	0.00		R0380-P1/	-0.41
R0380-P2/	-0.41		R0300-P1/	0.01	
	R0300-P2/	0.01		R0290-P2.1/	0.00*
RN-004-P1/	0.00		RN-004-P2/	0.00	
	RN-004-P3/	0.00		RN-001-P1/	0.13
RN-001-P2/	0.08		RN-001-P3/	0.13	
	RN-005-P1/	0.13		RN-005-P2/	0.20
RN-005-P3/	-0.12		RN-008-P1.1/	-0.15	
	RN-008-P2/	0.23		RN-008-P3/	0.26
RN-010-P1/	-0.30		RN-010-P2/	-0.29	
	RN-010-P3/	0.30		RN-013-P1/	0.53
RN-013-P2/	0.53		RN-013-P3/	0.53	
	RN-015-P1/	-1.96		RN-015-P2/	2.17
RN-015-P3/	2.36		RN-029-P1/	-0.39	
	RN-029-P2/	0.46		R0742-P1/	0.04
R0742-P2/	0.04		R0655-P1.1/	-0.02	
	R0490-P8/	-8.64		R0490-P7/	-8.64
R0140-P2.1/	0.07		R0140-P1.1/	0.07	
	R0120-P1.1/	-0.02		R0160-P1.1/	-0.00

R0325-P1.1/	0.00	R0400-P1.1/	0.00
R0880-P2.1/	0.00	R1010-P1.1/	0.59
R-0410-P4/	0.36	R-0410-P5/	0.36
R-0410-P6/	0.36	R-0410-P7/	0.36
R0410-P1/	-2.48	R0410-P2/	-2.48
R0410-P3/	-2.48	498.1/	6.99
R0490-P1.1/	-6.95	R0490-P3/	-0.46
R0490-P4/	-0.45	R0490-P5/	-0.46
R0490-P6/	-0.46	R0890-ORF-2/	1.67
R0890-ORF-5/	1.67	R0890ORF-3/	1.67
R0890-ORF-4/	1.67	N0140-A-W1.1/	0.15
R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00
R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00
R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00
R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00
R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00
R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00
R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00
R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00
R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00
R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00
R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00
R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00
R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00
R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00

R0260-W1.1/	0.00	R0270-W1.1/	0.00	
	R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00	
	R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00	
	R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00	
	R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	1.20	R0330-W3.1/	0.00	
	R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00	
	R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00	
	R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00	
	R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00	
	R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00	
	R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00	
	R0460-W2.1/	-0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00	
	R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00	
	R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00	
	R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00	
	R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00	
	R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00	
	R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00	
	R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	-1.31	R0730-W1.1/	0.00	
	R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00	
	R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00	
	R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00	
	R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00	
	R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00	
	R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00	
	R1000-W1.1/	0.00	R1020-W1.1/	0.00

R1030-W1.1/	0.00		R1030-W2.1/	0.00	
	R2002-W1.1/	27.03		R02040-W1.1/	0.00
R2090-W1.1/	0.00		R2370-W4.1/	0.00	
	R2380-W2.1/	0.00		R2380-W3.1/	0.00
R0440-W2.1/	0.00		R015-W1.1/	0.00	
	R020-W1.1/	-0.00		R021-W1.1/	0.00
R030-W1.1/	0.00		R031-W1.1/	0.00	
	R042-W1.1/	0.00		R043-W1.1/	0.00
R0850-W1.1/	0.00		R0880-WPump/	0.00	
	R0920-P2-W1/	0.00		R0920-P2-W2/	0.00
R0910-W1/	0.00		R0325-DS-W1/	0.00	
	R0400-WPump/	0.00		R0880-WPump2/	0.00
R0880-DS-W1/	0.00		R0520-DS-W1/	0.00	
	R0640-P1-W1/	0.04		R0640-P1-W2/	0.00
R0640-P2-W1/	0.00		R0690-P1-W1/	0.00	
	R0940-DS-W1/	0.26		R0945-DS-W1/	0.04
R1020-DS-W1/	0.97		R0205-W1/	0.00	
	R0205-W2/	0.00		R0205-W3/	0.00
R0205-W4/	0.01		R0210-W1.1/	0.00	
	R0515-W1.1/	0.00		R0515-W2.1/	-3.16
R0620-W1/	0.00		R0620-W2/	0.00	
	R0620-W3/	0.00		R0650-W2.1/	0.08
R0660-W3.1/	0.00		R0742-W1.1/	0.00	
	R0890-W1.1/	0.00		R0915-W1.1/	0.00
RN-019-P1-W1/	0.50		R019-P1-W2/	0.00	
	R0830-P1-W1.1/	-0.00		R0830-P1-W2/	0.00
R0970-P1-W1/	-0.00		R0970-P1-W2/	0.00	
	R-0001A-W1.1/	6.22		R-0001A-W2/	15.02
R0001C-W1.1/	0.00		R0001C-W2/	0.00	
	R0001C-W3/	0.13		R0001E-W1/	0.00
R0001F-W1.1/	0.02		R0001F-W2/	0.00	
	R0001F-W3/	0.02		R0001F-W4/	0.00
R0001F-W5/	0.02		R001G-W1/	0.00	
	R0930-W6.1.1/	0.00		R0001J-W1.1/	0.00
R000J-W2/	0.00		R000J-W3/	0.00	
	R000J-W4/	0.00		R000J-W5/	0.06
R000J-W6/	0.06		R000J-W7/	0.00	
	R0001J-W8/	0.00		R0001J-W9/	0.00
R0001J-W10/	0.00		R0001J-W11/	0.00	
	R0001J-W12/	0.06		R0001J-W13/	0.06
R0001J-W14/	0.00		R0001I-W1.1/	0.00	
	R001I-W2/	0.00		R0001I-W3/	0.00
R001I-W4/	0.00		R001I-W5/	0.00	
	R0001I-W7/	0.45		R0001I-W7.1/	0.45
R0001K-W1.1/	0.08		R0001K-W2/	0.00	
	R0001K-W3/	0.00		R0880-PUMP/	0.00
1/	0.00	FREE# 2/	0.02		FREE#
	FREE# 3/	0.02		FREE# 4/	0.02
5/	17.28	FREE# 6/	0.15		FREE#
	FREE# 7/	-0.02		FREE# 8/	0.00
					FREE#

9/	0.00	FREE#10/	0.00		
	FREE#11/	0.00	FREE#12/	0.00	
FREE#13/	0.34	FREE#14/	19.83		
	FREE#15/	-18.21	FREE#16/	3.11	
FREE#17/	0.00	FREE#18/	0.00		
	FREE#19/	0.00	FREE#20/	0.00	
FREE#21/	0.00	FREE#22/	0.02		
	FREE#23/	0.00	FREE#24/	0.00	
FREE#25/	0.00	FREE#26/	0.00		
	FREE#27/	0.00	FREE#28/	-3.16	
FREE#29/	0.00	FREE#30/	0.00		
	FREE#31/	0.00	FREE#32/	0.00	
FREE#33/	0.00	FREE#34/	0.00		
	FREE#35/	0.02	FREE#36/	0.00	
FREE#37/	0.00	FREE#38/	0.00		
	FREE#39/	27.03	FREE#40/	0.00	
FREE#41/	0.00	FREE#42/	0.97		
	FREE#43/	0.26	FREE#44/	0.59	
FREE#45/	0.04	FREE#46/	21.24		
	FREE#47/	0.00	FREE#48/	0.05	
FREE#49/	0.00	FREE#50/	6.69		
	FREE#51/	0.12	FREE#52/	0.12	

==> System inflows (file) at 191.67 hours (Junction / Inflow, cfs)

N0190	/ 0.00E+00	N0230	/ 0.00E+00	N0220	/
0.00E+00	N0290	/ 0.00E+00	N0370	/ 0.00E+00	N0275
	/ 0.00E+00				
N0280	/ 0.00E+00	N0285	/ 8.49E-02	N0380	/
0.00E+00	N0385	/ 0.00E+00	N0386	/ 0.00E+00	N0388
	/ 0.00E+00				
N0420	/ 0.00E+00	N0530	/ 0.00E+00	N0430	/
0.00E+00	N0310	/ 0.00E+00	N0160	/ 0.00E+00	N0300
	/ 1.86E-03				
N0340	/ 4.37E-01	N0390	/ 0.00E+00	N0001-C	/
0.00E+00	N0460	/ 0.00E+00	N0440	/ 2.15E-02	N0360
	/ 0.00E+00				
N2040	/ 0.00E+00	N0450	/ 3.33E-02	N0400	/
5.14E-02	N0550	/ 5.00E-08	N0640	/ 0.00E+00	N0660
	/ 0.00E+00				
N0780	/ 0.00E+00	N0775	/ 0.00E+00	N0690	/
0.00E+00	N0720	/ 0.00E+00	N0770	/ 2.71E-03	N0885
	/ 0.00E+00				
N0960	/ 0.00E+00	N0990	/ 0.00E+00	N1010	/
0.00E+00	N1030	/ 0.00E+00	N1020	/ 0.00E+00	N0940
	/ 3.87E-02				
N1000	/ 0.00E+00	N0945	/ 2.21E-02	N0980	/
7.50E-02	N0850	/ 0.00E+00	N0890	/ 5.18E-04	N0930
	/ 1.16E-02				
N0920	/ 0.00E+00	N0950	/ 4.49E-05	N0830	/

0.00E+00 N0970	/ 0.00E+00 N-0001K	/ 0.00E+00 N0870
/ 0.00E+00		
N0790	/ 7.84E-03 N0001-I	/ 0.00E+00 N0915
0.00E+00 N0900	/ 0.00E+00 N0910	/ 0.00E+00 N0880
/ 0.00E+00		
N0810	/ 2.70E-01 N0740	/ 0.00E+00 N0742
0.00E+00 N0800	/ 0.00E+00 N0620	/ 0.00E+00 N0730
/ 6.48E-02		
N0570	/ 3.96E-07 N0560	/ 3.48E-02 N0515
3.24E-03 N0510	/ 3.53E-02 N0520	/ 1.74E-01 N0350
/ 0.00E+00		
N0330	/ 2.29E-04 N0325	/ 4.60E-03 N0180
0.00E+00 N0090	/ 0.00E+00 N-0001B	/ 5.72E-08 N0100
/ 0.00E+00		
N0130	/ 0.00E+00 N0080	/ 0.00E+00 N0050
0.00E+00 N0170	/ 0.00E+00 N0205	/ 0.00E+00 N0210
/ 7.17E-03		
N0150	/ 0.00E+00 N0155	/ 0.00E+00 N0060
0.00E+00 N0120	/ 0.00E+00 N0110	/ 0.00E+00 N0140
/ 0.00E+00		
N0140-A	/ 0.00E+00 N0500	/ 5.54E-01 N0470
0.00E+00 N0540	/ 1.32E-02 N0650	/ 0.00E+00 N0490
/ 2.82E-01		
N2380	/ 0.00E+00 N2370	/ 0.00E+00 N0655
0.00E+00 N0480	/ 0.00E+00 N0410	/ 2.82E+00 N0270
/ 1.11E-04		
N0260	/ 2.26E-03 N0250	/ 0.00E+00 N0240
0.00E+00 N0200	/ 0.00E+00 N-002	/ 0.00E+00 N-003
/ 0.00E+00		
N-004	/ 0.00E+00 N-001	/ 5.92E-03 N-006
0.00E+00 N-005	/ 0.00E+00 N-007	/ 0.00E+00 N-009
/ 0.00E+00		
N-008	/ 0.00E+00 N-011	/ 0.00E+00 N-010
0.00E+00 N-014	/ 0.00E+00 N-012	/ 0.00E+00 N-013
/ 0.00E+00		
N-015	/ 0.00E+00 N2002	/ 0.00E+00 N-020
0.00E+00 N-022	/ 0.00E+00 N-026	/ 0.00E+00 N-027
/ 0.00E+00		
N-028	/ 0.00E+00 N-024	/ 0.00E+00 N-029
0.00E+00 N-030	/ 0.00E+00 N-023	/ 0.00E+00 N-031
/ 0.00E+00		
N-025	/ 0.00E+00 N-041	/ 0.00E+00 N-019
0.00E+00 N-021	/ 0.00E+00 N-043	/ 0.00E+00 N-042
/ 8.10E-02		
N-040	/ 5.30E-01 N2090	/ 0.00E+00 N-0001A
2.46E-05 N-0001-E	/ 0.00E+00 N-0001-F	/ 0.00E+00 N-0001-G
/ 0.00E+00		
N0001-J	/ 0.00E+00	

Cycle 11500 Time 191 Hrs - 40.00 Min

Junction /	Depth /	Elevation	====>	"*" Junction is Surcharged.
N0335/	1.04 /	1.04		N0550/ 2.11 / 0.78
N0690/	4.01 /	4.63		N0780/ 5.30 / 0.91
N0640/	4.61 /	1.83		N0800/ 2.26 / 5.61
N0830/	3.26 /	1.21		N0520/ 3.89 / 1.06
N0790/	4.19 /	1.21		N0450/ 2.34 / 1.04
N0870/	4.13 /	1.21		N0960/ 0.00 / 1.90
N0510/	2.29 /	0.86		N0970/ 2.42 / 1.21
N0390/	2.76 /	1.06		N0560/ 3.60 / 0.78
N0350/	3.73 /	1.04		N0990/ 0.85 / 2.42
N0770/	4.26 /	1.21		N1030/ 2.77 / 1.72
N0720/	1.72 /	1.07		N0930/ 5.63 / 2.06
N0920/	2.78 /	1.21		N0430/ 1.17 / 1.04
N0950/	1.63 /	1.21		N0220/ 1.44 / 2.62
N0915/	7.21 /	1.21		N0130/ 2.07 / 1.47
N0885/	8.12 /	1.21		N0120/ 1.20 / 0.96
N0810/	2.63 /	0.78		N0210/ 1.01 / 0.29
N0570/	3.45 /	0.78		N0240/ 3.45 / 4.89
N1000/	1.92 /	0.56		N0270/ 2.55 / 4.12
N1020/	3.42 /	2.42		N0370/ 1.26 / 2.24
N0890/	3.43 /	1.89		N0490/ 2.42 / 1.16
N0850/	0.23 /	1.69		N0660/ 2.30 / 1.46
N0980/	0.80 /	2.42		N0940/ 2.60 / 1.59
N1010/	1.38 /	2.42		N0050/ 3.58 / 2.72
N0500/	2.63 /	4.88		N0470/ 2.32 / 4.13
N0230/	1.58 /	4.89		
N0200/	3.74 /	2.13		
N0190/	3.09 /	2.13		
N0100/	1.01 /	1.47		
N0090/	2.93 /	5.42		
N0110/	0.70 /	1.47		
N0170/	1.00 /	0.29		
N0260/	2.85 /	2.62		
N0250/	2.59 /	4.89		
N0140/	3.29 /	1.39		
N0150/	0.00 /	1.44		
N0290/	1.23 /	2.24		
N0180/	2.85 /	1.39		
N0285/	0.23 /	2.23		
N0420/	1.60 /	4.68		
N0410/	4.06 /	1.45		
N0380/	2.24 /	2.24		
N0740/	2.45 /	1.21		
N0730/	3.31 /	1.21		
N0530/	0.00 /	1.66		
N0060/	2.76 /	1.47		
N0325/	5.41 /	1.04		
N0160/	2.60 /	0.51		
N0540/	0.29 /	1.64		

N0650/	2.00	/	1.51	N0400/	3.65	/	0.75
N0360/	2.22	/	1.04				
N0480/	2.08	/	4.34	N0080/	2.58	/	3.06
N0310/	2.10	/	0.51				
N0300/	4.89	/	1.04	N0460/	3.21	/	1.06
N0440/	2.35	/	0.98				
N0330/	4.47	/	1.04	N0655/	2.92	/	0.01
N0375/	2.24	/	2.24				
N0385/	2.54	/	1.45	N0275/	0.09	/	2.39
N0280/	0.67	/	2.67				
N0202/	5.70	/	2.13	N0340/	2.83	/	1.04
N0515/	1.98	/	0.78				
N-001/	1.69	/	1.92	N-002/	0.47	/	3.47
N-003/	0.00	/	2.56				
N-004/	0.00	/	2.88	N-005/	1.05	/	1.92
N-008/	1.96	/	1.92				
N-010/	2.21	/	1.92	N-013/	3.08	/	1.92
N-015/	3.11	/	1.92				
N-006/	0.00	/	2.66	N-007/	0.00	/	2.46
N-009/	0.00	/	2.68				
N-011/	0.00	/	2.04	N-014/	0.37	/	1.92
N-012/	0.44	/	1.92				
N-025/	3.03	/	1.79	N-023/	1.34	/	1.79
N-021/	2.26	/	1.79				
N-019/	2.56	/	2.34	N-041/	1.56	/	2.34
N-020/	0.41	/	1.79				
N-022/	0.83	/	1.79	N-024/	2.06	/	1.79
N-029/	2.77	/	1.79				
N-026/	0.78	/	1.79	N-027/	2.12	/	1.79
N-028/	2.10	/	1.79				
N-030/	0.19	/	0.12	N-043/	1.27	/	0.11
N-042/	1.23	/	0.60				
N-031/	0.93	/	0.08	N-040/	2.50	/	1.02
N0620/	0.81	/	0.21				
N0900/	4.21	/	1.21	N-009mh/	2.41	/	2.41
N0205/	5.63	/	2.13				
N0386/	2.54	/	1.45	N0388/	2.54	/	1.45
N0775/	1.56	/	0.91				
N2040/	1.87	/	0.77	N2380/	2.97	/	1.16
N0155/	1.08	/	0.94				
N0945/	2.33	/	1.52	N2002/	3.72	/	1.92
N2090/	2.23	/	0.34				
N0742/	1.72	/	1.21	N0910/	7.21	/	1.21
N0880/	8.12	/	1.21				
N9004/	4.66	/	1.92	N9004-B/	4.71	/	1.92
N9004-C/	4.46	/	1.92				
N9004-D/	4.60	/	1.92	N9004-F/	3.09	/	1.92
N9001-B/	3.05	/	0.96				
N9001-D/	1.86	/	0.96	N9001-F/	1.86	/	0.96
N9000/	2.95	/	0.96				

N9003/	0.96	/	0.96	N9005/	0.96	/	0.96
N9005-E/	0.96	/	0.96				
N9005-G/	0.96	/	0.96	N9004-J/	3.25	/	1.92
N9004-G/	3.01	/	1.92				
N9002/	2.27	/	0.96	N2370/	3.01	/	1.45
N9000-B/	2.95	/	0.96				
N9000-C/	2.95	/	0.96	N9000-E/	2.95	/	0.96
N9000-F/	2.95	/	0.96				
N9001-E/	3.05	/	0.96	N9001-G/	1.86	/	0.96
N9001-H/	1.86	/	0.96				
N9001-J/	1.13	/	0.96	N9001-K/	1.13	/	0.96
N9002-A/	2.27	/	0.96				
N9002-B/	2.27	/	0.96	N9003-A/	0.96	/	0.96
N9003-B/	0.96	/	0.96				
N9003-C/	0.96	/	0.96	N9003-D/	0.96	/	0.96
N9003-E/	0.96	/	0.96				
N9003-F/	0.96	/	0.96	N9003-G/	0.96	/	0.96
N9004-A/	4.66	/	1.92				
N9004-E/	4.60	/	1.92	N9004-H/	3.09	/	1.92
N9004-I/	3.09	/	1.92				
N9004-K/	3.25	/	1.92	N9005-A/	0.96	/	0.96
N9005-B/	0.96	/	0.96				
N9005-C/	0.96	/	0.96	N9005-D/	0.96	/	0.96
N9005-F/	0.96	/	0.96				
N9005-H/	0.96	/	0.96	N9000-D/	3.21	/	0.96
N-0001A/	8.89	/	0.89				
N-0001B/	1.97	/	1.47	N0001-C/	0.46	/	2.61
N-0001-E/	0.50	/	5.30				
N-0001E-OF/	0.00	/	3.13	N-0001-F/	0.31	/	3.81
N-0001-G/	0.80	/	4.80				
N-0001F-OF-A/	0.00	/	3.13	N-0001F-OF-B/	0.00	/	3.13
N9004-L/	4.66	/	1.92				
N0001-J/	0.05	/	1.24	N9005-J/	0.96	/	0.96
N9005-K/	0.96	/	0.96				
N0001-I/	0.76	/	1.89	N-0001K/	0.78	/	2.81
N0140-A/	3.49	/	1.39				

	Conduit/	FLOW	====>	"*"	Conduit uses the normal flow option.
	R0870/	0.27		R0770-P2/	0.08
R0900/	0.27			R0370/	0.04
	R0280/	0.00		R0202/	-0.00
RN-002/	0.00			RN-003/	0.00
	RN-006/	0.00		RN-007/	0.00
RN-009/	0.00			RN-009MH/	0.00
	RN-011/	0.00*		RN-014/	0.16
RN-012/	0.17			RN-023/	0.23
	RN-021/	-0.23		RN-041/	0.40
RN-020/	0.20			RN-022/	0.16
	RN-024/	0.16		RN-026/	0.00
RN-027/	0.01			RN-028/	-0.01

R0655-P3/	R0742-P3/	-0.05	R0655-P2/	-0.01
	-0.01		R0655-P4/	0.01
RN-025-P1/	R0120-P2/	0.01	R1010-P2/	0.24
	27.72		RN-025-P2/	27.35
R0388/	R0155-P1/	4.48	R0386/	0.46
	0.47		R0385/	0.46
	R0375/	0.04	R0335/	0.00
R-0001B-P1/	0.02		R0540-P1/	-0.01
	R0540-P2/	0.01	R0540-P3/	0.00
R0290-P1/	-0.01		R0285.1/	-0.49
	R0250.1/	-0.02	R0230.1/	-0.00
R0220.1/	0.00		R0200.1/	0.00
	R0190.1/	0.00	R0170.1/	-0.00
R0180-P1/	0.03		R0180-P2/	0.03
	R0140.1/	0.00	R0140-P3.1/	0.00
R0150-P1/	0.00		R0150-P2/	0.00*
	R0150-P3/	0.00*	R0150-P4/	0.00*
R0150-P5/	0.00		R0110.1/	-0.00
	R0130-P1/	0.00	R0130-P2/	0.00
R0100-P1/	0.00		R0100-P2/	-0.00
	R0310.1/	0.00	R0430-P1/	0.00
R0430-P2/	0.00		R0430-P3/	0.00
	R0430-P4/	-0.00	R0340-P1/	-0.25
R0340-P2/	-0.20		R0350-P1/	0.23
	R0350-P2/	0.23	R0330-P1/	-0.04
R0330-P2/	-0.04		R0450-P1/	-0.29
	R0450-P2/	-0.29	P0360-P1/	0.02
P0360-P2/	0.01		R0550-P1/	0.19
	R0550-P2/	0.19	R0560-P1/	0.93
R0560-P2/	1.17		R0560-P3/	1.18
	R0780.1/	0.01	R0740.1/	-0.06
R0730.1/	-0.04		R0880.1/	0.00
	R0950.1/	-0.00	R0920.1/	-0.00
R0960.1/	0.00		R0990.1/	0.04
	R1010-P3/	0.26	R1010-P4/	0.26
R1010-P5/	0.24		R0980-P1.1/	0.07
	R0980-P2.1/	0.15*	R0850-P1/	0.12
R0850-P2/	0.04		R0850-P3/	0.00
	R0570-P1/	-0.43	R0570-P2/	-0.41
R0570-P3/	-0.40		R0770-P1.1/	0.87
	R0770-P3/	-0.14	R0770-P4/	-0.14
R0790-P1/	0.55		R0790-P2/	0.29
	R0530-P1/	0.00*	R0530-P2/	0.00*
R0530-P3/	0.00*		R0910-P1/	0.00
	R0910-P2/	0.00	R0380-P1/	-0.23
R0380-P2/	-0.23		R0300-P1/	0.02
	R0300-P2/	0.02	R0290-P2.1/	0.00*
RN-004-P1/	0.00		RN-004-P2/	0.00
	RN-004-P3/	0.00	RN-001-P1/	-0.15
RN-001-P2/	-0.12		RN-001-P3/	-0.15

	RN-005-P1/	-0.12	RN-005-P2/	-0.30
RN-005-P3/	0.12	RN-008-P1.1/	0.31	
	RN-008-P2/	-0.25	RN-008-P3/	-0.22
RN-010-P1/	0.33	RN-010-P2/	0.33	
	RN-010-P3/	-0.32	RN-013-P1/	-0.32
RN-013-P2/	-0.32	RN-013-P3/	-0.32	
	RN-015-P1/	0.48	RN-015-P2/	-0.49
RN-015-P3/	-0.42	RN-029-P1/	-0.08	
	RN-029-P2/	0.08	R0742-P1/	0.03
R0742-P2/	0.03	R0655-P1.1/	-0.01	
	R0490-P8/	-8.44	R0490-P7/	-8.44
R0140-P2.1/	0.05	R0140-P1.1/	0.05	
	R0120-P1.1/	-0.01	R0160-P1.1/	0.00
R0325-P1.1/	0.00	R0400-P1.1/	0.00	
	R0880-P2.1/	0.00	R1010-P1.1/	0.45
R-0410-P4/	0.32	R-0410-P5/	0.32	
	R-0410-P6/	0.32	R-0410-P7/	0.32
R0410-P1/	-2.20	R0410-P2/	-2.20	
	R0410-P3/	-2.20	498.1/	7.08
R0490-P1.1/	-7.04	R0490-P3/	-0.44	
	R0490-P4/	-0.44	R0490-P5/	-0.44
R0490-P6/	-0.44	R0890-ORF-2/	-1.36	
	R0890-ORF-5/	-1.36	R0890ORF-3/	-1.36
R0890-ORF-4/	-1.36	N0140-A-W1.1/	0.09	
	R0540-W3/	0.00	R0290-P5/	0.00
R0285-W2/	0.00	R0250-W1/	0.00	
	R0230-W1/	0.00	R0220-W2/	0.00
R0200-W3/	0.00	R0190-W4/	0.00	
	R0170-W3/	0.00	R0180-W1/	0.00
R0140-W1/	0.00	R0150-W3/	0.00	
	R0110-W1/	0.00	R0130-W1/	0.00
R0100-W4/	0.00	R0310-W5.1/	0.00	
	R0430-W3/	0.00	R0340-W3/	0.00
R0350-W1/	0.00	R0330-W1/	0.00	
	R0360-W1/	0.00	R0550-W2/	0.00
R0560-W1/	0.00	R0780-W1/	0.00	
	R0740-W3/	0.00	R0870-W1/	0.00
R0950-W1/	0.00	R0960-W2/	0.00	
	R0990-W2/	0.00	R1010-W2/	0.00
R0980-W2/	0.00	R0850-W2/	0.00	
	R0770-W2/	0.00	R0530-W4/	0.00
R0380-W3/	0.00	R0300-W2/	0.00	
	R0290-W1/	0.00	R0655-W2/	0.00
R0140-W2/	0.00	R0120-W2/	0.00	
	R0160-W1/	0.00	R0400-W1/	0.00
R0880-W2/	0.00	R1010-W1/	0.00	
	R0490-W2/	0.00	R0050-W1.1/	0.00
R0050-W2.1/	0.00	R0060-W1.1/	0.00	
	R0080-W1.1/	0.00	R0080-W2.1/	0.00
R0090-W1.1/	0.00	R0090-W2.1/	0.00	

R0090-W3.1/	0.00	R0090-W4.1/	0.00
R0100-W1.1/	0.00	R0100-W2.1/	0.00
R0100-W3.1/	0.00	R0110-W2.1/	0.00
R0120-W1.1/	0.00	R0130-W2.1/	0.00
R0150-W1.1/	0.00	R0150-W2.1/	0.00
R0170-W1.1/	0.00	R0170-W2.1/	0.00
R0190-W1.1/	0.00	R0190-W2.1/	0.00
R0190-W3.1/	0.00	R0200-W1.1/	0.00
R0200-W2.1/	0.00	R0220-W1.1/	0.00
R0240-W1.1/	0.00	R0240-W2.1/	0.00
R0240-W3.1/	0.00	R0240-W4.1/	0.00
R0240-W5.1/	0.00	R0240-W6.1/	0.00
R0250-W2.1/	0.00	R0250-W3.1/	0.00
R0260-W1.1/	0.00	R0270-W1.1/	0.00
R0270-W3/	0.00	R0270-W2.1/	0.00
R0275-W1.1/	0.00	R0280-W1.1/	0.00
R0285-W1.1/	0.00	R0290-W2.1/	0.00
R0290-W3.1/	0.00	R0290-W4.1/	0.00
R0300-W1.1/	0.00	R0310-W1.1/	0.00
R0310-W2.1/	0.00	R0310-W3.1/	0.00
R0310-W4.1/	0.00	R0325-W2.1/	0.00
R0330-W2.1/	1.17	R0330-W3.1/	0.00
R0340-W1.1/	0.00	R0340-W2.1/	0.00
R0350-W2.1/	0.00	R0350-W3.1/	0.00
R0360-W2.1/	0.00	R0360-W3.1/	0.00
R0370-W1.1/	0.00	R0370-W2.1/	0.00
R0370-W3.1/	0.00	R0380-W1.1/	0.00
R0380-W2.1/	0.00	R0380-W4.1/	0.00
R0390-W1.1/	0.00	R0390-W2/	0.00
R0400-W2.1/	0.00	R0410-W1.1/	0.00
R0420-W1.1/	0.00	R0420-W2.1/	0.00
R0430-W1.1/	0.00	R0430-W2.1/	0.00
R0440-W1.1/	0.00	R0450-W1.1/	0.00
R0450-W2.1/	0.00	R0460-W1.1/	0.00
R0460-W2.1/	0.00	R0480-W1.1/	0.00
R0480-W2.1/	0.00	R0480-W3.1/	0.00
R0490-W1.1/	0.00	R0490-W3.1/	0.00
R0500-W1.1/	0.00	R0510-W2.1/	0.00
R0520-W1.1/	0.00	R0520-W2.1/	0.00
R0530-W1.1/	0.00	R0530-W2.1/	0.00
R0530-W3/	0.00	R0540-W1.1/	0.00
R0540-W2.1/	0.00	R0550-W1.1/	0.00
R0550-W3.1/	0.00	R0560-W2.1/	0.00
R0560-W3.1/	0.00	R0560-W4.1/	0.00
R0560-W5.1/	0.00	R0570-W1.1/	0.00
R0570-W3.1/	0.00	R0570-W4.1/	0.00
R0570-W5.1/	0.00	R0640-W1.1/	0.00
R0650-W1.1/	0.00	R0660-W1.1/	0.00
R0660-W2.1/	0.00	R0690-W2.1/	0.00
R0720-W1.1/	-1.31	R0730-W1.1/	0.00

R0740-W2.1/	0.00	R0740-W4.1/	0.00
R0775-W1.1/	0.00	R0780-W2.1/	0.00
R0790-W1/	0.00	R0800-W1.1/	0.00
R0800-W2.1/	0.00	R0810-W1.1/	0.00
R0830-W3.1/	0.00	R0850-W3.1/	0.00
R0870-W2.1/	0.00	R0885-W1.1/	0.00
R0910-W2.1/	0.00	R0930-W1.1/	0.00
R0940-W1.1/	0.00	R0940-W2.1/	0.00
R0945-W1.1/	0.00	R0950-W2.1/	0.00
R0960-W1.1/	0.00	R0960-W3.1/	0.00
R0960-W4.1/	0.00	R0980-W1.1/	0.00
R0990-W1.1/	0.00	R0990-W3.1/	0.00
R1000-W1.1/	0.00	R1020-W1.1/	0.00
R1030-W1.1/	0.00	R1030-W2.1/	0.00
R2002-W1.1/	-3.35	R02040-W1.1/	0.00
R2090-W1.1/	0.00	R2370-W4.1/	0.00
R2380-W2.1/	0.00	R2380-W3.1/	0.00
R0440-W2.1/	0.00	R015-W1.1/	0.00
R020-W1.1/	-0.18	R021-W1.1/	0.00
R030-W1.1/	0.00	R031-W1.1/	0.00
R042-W1.1/	0.00	R043-W1.1/	0.00
R0850-W1.1/	0.00	R0880-WPump/	0.00
R0920-P2-W1/	0.00	R0920-P2-W2/	0.00
R0910-W1/	0.00	R0325-DS-W1/	0.00
R0400-WPump/	0.00	R0880-WPump2/	0.00
R0880-DS-W1/	0.00	R0520-DS-W1/	0.00
R0640-P1-W1/	0.03	R0640-P1-W2/	0.00
R0640-P2-W1/	0.00	R0690-P1-W1/	0.00
R0940-DS-W1/	0.25	R0945-DS-W1/	0.04
R1020-DS-W1/	0.59	R0205-W1/	0.00
R0205-W2/	0.00	R0205-W3/	0.00
R0205-W4/	0.00	R0210-W1.1/	-2.15
R0515-W1.1/	0.00	R0515-W2.1/	-5.80
R0620-W1/	0.00	R0620-W2/	0.00
R0620-W3/	0.00	R0650-W2.1/	0.02
R0660-W3.1/	0.00	R0742-W1.1/	0.00
R0890-W1.1/	0.00	R0915-W1.1/	0.00
RN-019-P1-W1/	0.41	R019-P1-W2/	0.00
R0830-P1-W1.1/	0.00	R0830-P1-W2/	0.00
R0970-P1-W1/	0.00	R0970-P1-W2/	0.00
R-0001A-W1.1/	-14.83	R-0001A-W2/	-31.25
R0001C-W1.1/	0.00	R0001C-W2/	0.00
R0001C-W3/	0.13	R0001E-W1/	0.00
R0001F-W1.1/	0.01	R0001F-W2/	0.00
R0001F-W3/	0.01	R0001F-W4/	0.00
R0001F-W5/	0.01	R001G-W1/	0.00
R0930-W6.1.1/	0.00	R0001J-W1.1/	0.00
R000J-W2/	0.00	R000J-W3/	0.00
R000J-W4/	0.00	R000J-W5/	0.04
R000J-W6/	0.04	R000J-W7/	0.00

	R0001J-W8/	0.00		R0001J-W9/	0.00	
R0001J-W10/	0.00		R0001J-W11/	0.00		
	R0001J-W12/	0.04		R0001J-W13/	0.04	
R0001J-W14/	0.00		R0001I-W1.1/	0.00		
	R001I-W2/	0.00		R0001I-W3/	0.00	
R001I-W4/	0.00		R001I-W5/	0.00		
	R0001I-W7/	0.38		R0001I-W7.1/	0.38	
R0001K-W1.1/	0.07		R0001K-W2/	0.00		
	R0001K-W3/	0.00		R0880-PUMP/	0.00	FREE#
1/	0.00	FREE# 2/	0.01			
	FREE# 3/	0.01		FREE# 4/	0.01	FREE#
5/	16.88	FREE# 6/	0.09			
	FREE# 7/	-0.01		FREE# 8/	0.00	FREE#
9/	0.00	FREE#10/	0.00			
	FREE#11/	0.00		FREE#12/	0.00	
FREE#13/	0.24		FREE#14/	27.72		
	FREE#15/	-27.35		FREE#16/	4.48	
FREE#17/	0.00		FREE#18/	0.00		
	FREE#19/	0.00		FREE#20/	-0.00	
FREE#21/	0.00		FREE#22/	0.01		
	FREE#23/	0.00		FREE#24/	0.00	
FREE#25/	0.00		FREE#26/	0.00		
	FREE#27/	-2.15		FREE#28/	-5.80	
FREE#29/	0.00		FREE#30/	0.00		
	FREE#31/	0.00		FREE#32/	0.00	
FREE#33/	0.00		FREE#34/	0.00		
	FREE#35/	0.01		FREE#36/	0.00	
FREE#37/	0.00		FREE#38/	0.00		
	FREE#39/	-0.00		FREE#40/	0.00	
FREE#41/	0.00		FREE#42/	0.59		
	FREE#43/	0.25		FREE#44/	0.45	
FREE#45/	0.04		FREE#46/	-46.08		
	FREE#47/	0.00		FREE#48/	0.03	
FREE#49/	0.00		FREE#50/	-5.43		
	FREE#51/	0.08		FREE#52/	0.08	

```

*=====*
| Table E5 - Junction Time Limitation Summary |
|           (0.10 or 0.25)* Depth * Area     |
| Time step = -----                        |
|                               Sum of Flow   |
*=====*
| The time this junction was the limiting junction |
|           is listed in the third column.       |
*=====*

```

Junction	Time(.10)	Time(.25)	Time(sec)
----- N0335	423.25	600.00	60.0

N0550	267.73	600.00	0.0
N0690	60.33	150.84	0.0
N0640	600.00	600.00	0.0
N0780	600.00	600.00	0.0
N0830	600.00	600.00	0.0
N0790	600.00	600.00	0.0
N0800	347.39	600.00	0.0
N0870	36.32	90.80	180.0
N0510	600.00	600.00	0.0
N0520	600.00	600.00	0.0
N0390	600.00	600.00	0.0
N0350	600.00	600.00	0.0
N0450	600.00	600.00	0.0
N0770	253.29	600.00	0.0
N0720	600.00	600.00	0.0
N0960	364.19	600.00	0.0
N0920	72.82	182.05	0.0
N0950	10.83	27.07	51240.0
N0970	600.00	600.00	0.0
N0915	600.00	600.00	0.0
N0885	600.00	600.00	0.0
N0560	147.34	368.34	0.0
N0810	600.00	600.00	0.0
N0570	172.40	430.99	0.0
N0990	465.13	600.00	0.0
N1000	600.00	600.00	0.0
N1020	528.48	600.00	0.0
N1030	600.00	600.00	0.0
N0890	600.00	600.00	0.0
N0850	239.87	599.66	0.0
N0930	600.00	600.00	0.0
N0980	250.22	600.00	0.0
N1010	135.06	337.65	0.0
N0430	400.33	600.00	0.0
N0500	600.00	600.00	0.0
N0230	67.83	169.58	0.0
N0220	60.69	151.73	0.0
N0200	104.17	260.42	0.0
N0190	8.23	20.57	60.0
N0130	274.77	600.00	0.0
N0100	135.59	338.97	0.0
N0090	124.67	311.68	0.0
N0120	25.78	64.46	0.0
N0110	42.43	106.09	240.0
N0170	12.45	31.12	0.0
N0210	600.00	600.00	0.0
N0260	600.00	600.00	0.0
N0250	466.18	600.00	0.0
N0240	600.00	600.00	0.0
N0140	205.77	514.43	0.0

N0150	132.43	331.09	0.0
N0270	600.00	600.00	0.0
N0290	142.17	355.43	0.0
N0180	422.10	600.00	0.0
N0370	113.09	282.73	0.0
N0285	81.34	203.34	0.0
N0420	600.00	600.00	0.0
N0490	473.40	600.00	0.0
N0410	341.62	600.00	0.0
N0380	196.77	491.94	0.0
N0660	600.00	600.00	0.0
N0740	600.00	600.00	0.0
N0730	600.00	600.00	0.0
N0940	600.00	600.00	0.0
N0530	341.00	600.00	0.0
N0060	600.00	600.00	0.0
N0050	600.00	600.00	0.0
N0325	46.68	116.69	0.0
N0160	424.95	600.00	0.0
N0470	600.00	600.00	0.0
N0540	428.64	600.00	0.0
N0650	600.00	600.00	0.0
N0400	600.00	600.00	0.0
N0360	600.00	600.00	0.0
N0480	600.00	600.00	0.0
N0080	259.56	600.00	0.0
N0310	584.64	600.00	0.0
N0300	600.00	600.00	0.0
N0460	508.03	600.00	0.0
N0440	600.00	600.00	0.0
N0330	600.00	600.00	0.0
N0655	118.03	295.07	0.0
N0375	292.28	600.00	0.0
N0385	225.08	562.70	0.0
N0275	278.18	600.00	0.0
N0280	131.73	329.33	0.0
N0202	217.13	542.82	0.0
N0340	600.00	600.00	0.0
N0515	600.00	600.00	0.0
N-001	325.99	600.00	0.0
N-002	361.85	600.00	0.0
N-003	284.14	600.00	0.0
N-004	176.12	440.31	0.0
N-005	257.54	600.00	0.0
N-008	258.54	600.00	0.0
N-010	322.80	600.00	0.0
N-013	425.68	600.00	0.0
N-015	184.88	462.20	0.0
N-006	249.24	600.00	0.0
N-007	284.87	600.00	0.0

N-009	126.24	315.61	0.0
N-011	85.70	214.26	0.0
N-014	469.29	600.00	0.0
N-012	123.58	308.95	0.0
N-025	18.53	46.33	0.0
N-023	37.31	93.28	0.0
N-021	600.00	600.00	0.0
N-019	216.97	542.42	0.0
N-041	215.40	538.51	0.0
N-020	451.08	600.00	0.0
N-022	299.68	600.00	0.0
N-024	27.66	69.14	0.0
N-029	18.70	46.75	0.0
N-026	517.04	600.00	0.0
N-027	38.56	96.40	0.0
N-028	30.68	76.70	0.0
N-030	600.00	600.00	0.0
N-043	600.00	600.00	0.0
N-042	600.00	600.00	0.0
N-031	600.00	600.00	0.0
N-040	600.00	600.00	0.0
N0620	600.00	600.00	0.0
N0900	41.73	104.33	60.0
N-009mh	119.78	299.46	0.0
N0205	212.18	530.45	0.0
N0386	48.75	121.87	0.0
N0388	38.71	96.77	0.0
N0775	600.00	600.00	0.0
N2040	600.00	600.00	0.0
N2380	600.00	600.00	0.0
N0155	31.06	77.65	638100.0
N0945	600.00	600.00	0.0
N2002	329.92	600.00	0.0
N2090	600.00	600.00	0.0
N0742	32.82	82.04	0.0
N0910	21.93	54.82	360.0
N0880	13.67	34.17	900.0
N9004	600.00	600.00	0.0
N9004-B	600.00	600.00	0.0
N9004-C	600.00	600.00	0.0
N9004-D	600.00	600.00	0.0
N9004-F	600.00	600.00	0.0
N9001-B	600.00	600.00	0.0
N9001-D	600.00	600.00	0.0
N9001-F	600.00	600.00	0.0
N9000	600.00	600.00	0.0
N9003	600.00	600.00	0.0
N9005	600.00	600.00	0.0
N9005-E	600.00	600.00	0.0
N9005-G	600.00	600.00	0.0

N9004-J	600.00	600.00	0.0
N9004-G	600.00	600.00	0.0
N9002	600.00	600.00	0.0
N2370	600.00	600.00	0.0
N9000-B	600.00	600.00	0.0
N9000-C	600.00	600.00	0.0
N9000-E	600.00	600.00	0.0
N9000-F	600.00	600.00	0.0
N9001-E	600.00	600.00	0.0
N9001-G	600.00	600.00	0.0
N9001-H	600.00	600.00	0.0
N9001-J	600.00	600.00	0.0
N9001-K	600.00	600.00	0.0
N9002-A	600.00	600.00	0.0
N9002-B	600.00	600.00	0.0
N9003-A	600.00	600.00	0.0
N9003-B	600.00	600.00	0.0
N9003-C	600.00	600.00	0.0
N9003-D	600.00	600.00	0.0
N9003-E	600.00	600.00	0.0
N9003-F	600.00	600.00	0.0
N9003-G	600.00	600.00	0.0
N9004-A	600.00	600.00	0.0
N9004-E	600.00	600.00	0.0
N9004-H	600.00	600.00	0.0
N9004-I	600.00	600.00	0.0
N9004-K	600.00	600.00	0.0
N9005-A	600.00	600.00	0.0
N9005-B	600.00	600.00	0.0
N9005-C	600.00	600.00	0.0
N9005-D	600.00	600.00	0.0
N9005-F	600.00	600.00	0.0
N9005-H	600.00	600.00	0.0
N9000-D	600.00	600.00	0.0
N-0001A	600.00	600.00	0.0
N-0001B	566.17	600.00	0.0
N0001-C	600.00	600.00	0.0
N-0001-E	600.00	600.00	0.0
N-0001E-OF	600.00	600.00	0.0
N-0001-F	600.00	600.00	0.0
N-0001-G	600.00	600.00	0.0
N-0001F-OF-A	600.00	600.00	0.0
N-0001F-OF-B	600.00	600.00	0.0
N9004-L	600.00	600.00	0.0
N0001-J	600.00	600.00	0.0
N9005-J	600.00	600.00	0.0
N9005-K	600.00	600.00	0.0
N0001-I	600.00	600.00	0.0
N-0001K	600.00	600.00	0.0
N0140-A	28.50	71.25	0.0

The junction requiring the smallest time step was...N0155

```

*=====
|
|   Table E5a - Conduit Explicit Condition Summary
|   Courant   =           Conduit Length
|   Time step = -----
|               Velocity + sqrt(g*depth)
|
|           Conduit Implicit Condition Summary
|   Courant   =           Conduit Length
|   Time step = -----
|               Velocity
|
*=====
|
|   The 3rd column is the Explicit time step times the
|   minimum courant time step factor
|
|   Minimum Conduit Time Step in seconds in the 4th column
|   in the list. Maximum possible is 10 * maximum time step
|
|   The 5th column is the maximum change at any time step
|   during the simulation. The 6th column is the wobble
|   value which is an indicator of the flow stability.
|
|   You should use this section to find those conduits that
|   are slowing your model down. Use modify conduits to
|   alter the length of the slow conduits to make your
|   simulation faster, or change the conduit name to
|   "CHME?????" where ????? are any characters, this will
|   lengthen the conduit based on the model time step,
|   not the value listed in modify conduits.
|
*=====

```

Wobble	Conduit Type of Soln	Time(exp)	Expl*Cmin	Time(imp)	Time(min)	Max Qchange
12.165	R0870 Normal Soln	1.46	1.46	3.18	1.0	14.213
0.548	R0770-P2 Normal Soln	14.83	14.83	67.36	0.0	0.077
27.582	R0900 Normal Soln	7.94	7.94	17.05	0.0	14.343
5.615	R0370 Normal Soln	7.60	7.60	14.00	0.0	0.094
1.345	R0280 Normal Soln	4.57	4.57	12.60	0.0	-0.016
4.237	R0202 Normal Soln	6.35	6.35	99.32	0.0	-0.714
	RN-002	7.43	7.43	18.44	0.0	0.003

1.238	Normal Soln					
	RN-003	8.07	8.07	18.74	0.0	-0.006
1.641	Normal Soln					
	RN-006	7.03	7.03	18.23	0.0	0.007
1.496	Normal Soln					
	RN-007	9.36	9.36	24.54	0.0	0.005
1.433	Normal Soln					
	RN-009	30.50	30.50	95.30	0.0	0.011
1.742	Normal Soln					
	RN-009MH	15.70	15.70	43.46	0.0	0.009
3.377	Normal Soln					
	RN-011	30.04	30.04	80.58	0.0	0.016
1.653	Normal Soln					
	RN-014	1.75	1.75	3.98	0.0	0.013
0.904	Normal Soln					
	RN-012	50.45	50.45	180.47	0.0	0.017
0.692	Normal Soln					
	RN-023	11.59	11.59	31.45	0.0	-0.075
22.811	Normal Soln					
	RN-021	6.95	6.95	18.65	0.0	-0.043
6.932	Normal Soln					
	RN-041	7.36	7.36	41.94	0.0	0.008
3.215	Normal Soln					
	RN-020	7.40	7.40	17.25	0.0	-0.004
1.036	Normal Soln					
	RN-022	6.73	6.73	17.22	0.0	0.005
4.891	Normal Soln					
	RN-024	6.50	6.50	14.44	0.0	-0.062
13.810	Normal Soln					
	RN-026	9.44	9.44	31.34	0.0	0.001
1.163	Normal Soln					
	RN-027	5.42	5.42	24.56	0.0	0.013
42.198	Normal Soln					
	RN-028	8.58	8.58	29.96	0.0	-0.022
21.568	Normal Soln					
	R0742-P3	22.87	22.87	101.18	0.0	-1.298
6.534	Normal Soln					
	R0655-P2	7.31	7.31	28.97	0.0	2.123
10.685	Normal Soln					
	R0655-P3	7.56	7.56	28.98	0.0	2.046
9.933	Normal Soln					
	R0655-P4	7.49	7.49	29.91	0.0	-1.969
16.565	Normal Soln					
	R0120-P2	15.32	15.32	35.14	0.0	-3.235
4.591	Normal Soln					
	R1010-P2	7.40	7.40	23.71	0.0	-0.003
1.502	Normal Soln					
	RN-025-P1	5.51	5.51	13.74	0.0	-1.339
14.223	Normal Soln					
	RN-025-P2	4.61	4.61	8.99	0.0	3.301

14.766	Normal Soln					
	R0155-P1	2.48	2.48	4.45	0.0	-2.940
449.738	Normal Soln					
	R0386	4.78	4.78	17.99	0.0	-19.014
3.876	Normal Soln					
	R0388	4.80	4.80	14.92	0.0	15.195
2.540	Normal Soln					
	R0385	4.75	4.75	19.89	0.0	1.861
2.705	Normal Soln					
	R0375	3.77	3.77	23.96	0.0	-0.082
5.813	Normal Soln					
	R0335	5.45	5.45	16.77	0.0	0.008
0.940	Normal Soln					
	R-0001B-P1	64.21	64.21	332.43	0.0	-0.096
3.761	Normal Soln					
	R0540-P1	6.43	6.43	16.15	0.0	-0.002
4.066	Normal Soln					
	R0540-P2	6.80	6.80	17.00	0.0	0.002
3.236	Normal Soln					
	R0540-P3	6.85	6.85	16.46	0.0	0.002
2.015	Normal Soln					
	R0290-P1	7.47	7.47	26.36	0.0	-1.568
3.707	Normal Soln					
	R0285.1	4.34	4.34	10.75	0.0	-0.112
25.210	Normal Soln					
	R0250.1	7.26	7.26	16.76	0.0	-0.044
9.420	Normal Soln					
	R0230.1	3.35	3.35	8.06	0.0	0.013
7.460	Normal Soln					
	R0220.1	16.46	16.46	41.54	0.0	0.249
1.807	Normal Soln					
	R0200.1	5.29	5.29	16.32	0.0	0.592
6.755	Normal Soln					
	R0190.1	6.36	6.36	25.09	0.0	-2.088
14.262	Normal Soln					
	R0170.1	4.10	4.10	6.75	0.0	-5.944
16.042	Normal Soln					
	R0180-P1	14.64	14.64	111.92	0.0	-1.297
17.747	Normal Soln					
	R0180-P2	14.81	14.81	113.77	0.0	-1.285
17.676	Normal Soln					
	R0140.1	4.68	4.68	11.36	0.0	0.000
0.068	Normal Soln					
	R0140-P3.1	4.68	4.68	11.36	0.0	0.000
0.068	Normal Soln					
	R0150-P1	5.11	5.11	9.53	0.0	0.012
3.762	Normal Soln					
	R0150-P2	5.46	5.46	9.26	0.0	0.006
2.314	Normal Soln					
	R0150-P3	5.38	5.38	9.10	0.0	0.009

1.136	Normal Soln					
	R0150-P4	4.49	4.49	7.51	0.0	0.015
3.763	Normal Soln					
	R0150-P5	6.36	6.36	11.84	0.0	0.006
2.692	Normal Soln					
	R0110.1	17.57	17.57	70.63	0.0	-0.055
9.584	Normal Soln					
	R0130-P1	5.60	5.60	10.44	0.0	0.011
0.582	Normal Soln					
	R0130-P2	5.95	5.95	11.21	0.0	-0.011
0.576	Normal Soln					
	R0100-P1	7.26	7.26	19.79	0.0	-0.004
0.502	Normal Soln					
	R0100-P2	7.38	7.38	20.16	0.0	-0.004
0.505	Normal Soln					
	R0310.1	5.42	5.42	13.29	0.0	-1.364
6.757	Normal Soln					
	R0430-P1	18.18	18.18	78.46	0.0	-0.001
2.008	Normal Soln					
	R0430-P2	18.18	18.18	78.46	0.0	-0.001
2.008	Normal Soln					
	R0430-P3	18.18	18.18	78.46	0.0	-0.001
2.008	Normal Soln					
	R0430-P4	18.32	18.32	79.24	0.0	-0.001
2.008	Normal Soln					
	R0340-P1	3.50	3.50	18.86	0.0	-0.005
0.533	Normal Soln					
	R0340-P2	3.81	3.81	20.41	0.0	-0.003
0.367	Normal Soln					
	R0350-P1	4.52	4.52	32.73	0.0	0.006
0.869	Normal Soln					
	R0350-P2	4.52	4.52	32.73	0.0	0.006
0.869	Normal Soln					
	R0330-P1	5.77	5.77	241.79	0.0	0.015
0.514	Normal Soln					
	R0330-P2	5.77	5.77	241.79	0.0	0.015
0.514	Normal Soln					
	R0450-P1	2.07	2.07	5.79	0.0	-0.002
2.247	Normal Soln					
	R0450-P2	2.07	2.07	5.79	0.0	-0.002
2.247	Normal Soln					
	P0360-P1	3.02	3.02	17.17	0.0	0.004
2.475	Normal Soln					
	P0360-P2	2.72	2.72	12.78	0.0	0.003
21.260	Normal Soln					
	R0550-P1	3.55	3.55	7.30	0.0	3.154
1.345	Normal Soln					
	R0550-P2	3.87	3.87	8.76	0.0	1.855
1.777	Normal Soln					
	R0560-P1	8.63	8.63	28.54	0.0	2.019

1.324	Normal Soln					
	R0560-P2	8.04	8.04	22.51	0.0	2.480
1.236	Normal Soln					
	R0560-P3	8.00	8.00	22.47	0.0	2.490
1.226	Normal Soln					
	R0780.1	9.52	9.52	59.87	0.0	-0.020
0.754	Normal Soln					
	R0740.1	2.55	2.55	8.89	0.0	-0.441
3.334	Normal Soln					
	R0730.1	1.19	1.19	2.58	708.0	-0.923
34.814	Normal Soln					
	R0880.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0950.1	2.74	2.74	5.64	0.0	-0.859
155.171	Normal Soln					
	R0920.1	1.48	1.48	2.31	0.0	-0.196
21.180	Normal Soln					
	R0960.1	6.38	6.38	14.90	0.0	0.003
0.888	Normal Soln					
	R0990.1	4.50	4.50	10.87	0.0	0.002
1.682	Normal Soln					
	R1010-P3	13.10	13.10	42.30	0.0	0.008
0.723	Normal Soln					
	R1010-P4	12.92	12.92	42.50	0.0	0.010
0.725	Normal Soln					
	R1010-P5	13.35	13.35	46.03	0.0	0.006
0.641	Normal Soln					
	R0980-P1.1	4.04	4.04	9.54	0.0	-0.005
3.148	Normal Soln					
	R0980-P2.1	5.35	5.35	15.34	0.0	-0.007
1.026	Normal Soln					
	R0850-P1	13.67	13.67	47.11	0.0	0.004
5.048	Normal Soln					
	R0850-P2	13.57	13.57	45.96	0.0	0.004
4.099	Normal Soln					
	R0850-P3	13.87	13.87	47.38	0.0	0.003
3.788	Normal Soln					
	R0570-P1	6.45	6.45	14.07	0.0	9.324
6.217	Normal Soln					
	R0570-P2	5.82	5.82	11.28	0.0	17.960
5.815	Normal Soln					
	R0570-P3	6.48	6.48	13.84	0.0	9.667
4.694	Normal Soln					
	R0770-P1.1	1.26	1.26	2.84	454.0	1.991
4.175	Normal Soln					
	R0770-P3	15.43	15.43	40.05	0.0	4.848
11.276	Normal Soln					
	R0770-P4	15.11	15.11	37.92	0.0	5.135
7.119	Normal Soln					
	R0790-P1	23.69	23.69	170.62	0.0	0.039

1.592	Normal Soln					
	R0790-P2	20.74	20.74	167.29	0.0	0.030
2.851	Normal Soln					
	R0530-P1	3.79	3.79	9.70	0.0	-0.004
0.985	Normal Soln					
	R0530-P2	4.33	4.33	11.38	0.0	0.003
1.114	Normal Soln					
	R0530-P3	3.49	3.49	8.29	0.0	0.003
0.861	Normal Soln					
	R0910-P1	1.57	1.57	3.44	0.0	-13.035
10.123	Normal Soln					
	R0910-P2	3.42	3.42	6.36	0.0	14.965
5.268	Normal Soln					
	R0380-P1	2.04	2.04	5.02	0.0	-0.001
0.217	Normal Soln					
	R0380-P2	2.04	2.04	5.02	0.0	-0.001
0.217	Normal Soln					
	R0300-P1	2.82	2.82	30.66	0.0	-0.015
3.702	Normal Soln					
	R0300-P2	2.82	2.82	30.66	0.0	-0.015
3.702	Normal Soln					
	R0290-P2.1	11.47	11.47	23.68	0.0	-0.009
2.246	Normal Soln					
	RN-004-P1	8.78	8.78	20.95	0.0	0.003
0.702	Normal Soln					
	RN-004-P2	7.43	7.43	15.05	0.0	-0.006
0.694	Normal Soln					
	RN-004-P3	7.89	7.89	15.80	0.0	-0.005
0.530	Normal Soln					
	RN-001-P1	4.16	4.16	11.40	0.0	0.003
2.551	Normal Soln					
	RN-001-P2	4.31	4.31	11.46	0.0	0.003
1.490	Normal Soln					
	RN-001-P3	4.16	4.16	11.46	0.0	0.003
2.648	Normal Soln					
	RN-005-P1	9.64	9.64	25.47	0.0	0.004
3.261	Normal Soln					
	RN-005-P2	3.12	3.12	7.32	0.0	0.006
5.844	Normal Soln					
	RN-005-P3	9.27	9.27	24.53	0.0	-0.004
7.423	Normal Soln					
	RN-008-P1.1	6.97	6.97	18.21	0.0	-0.012
5.181	Normal Soln					
	RN-008-P2	7.13	7.13	17.58	0.0	0.010
3.009	Normal Soln					
	RN-008-P3	7.25	7.25	17.66	0.0	0.009
2.495	Normal Soln					
	RN-010-P1	8.82	8.82	26.46	0.0	-0.016
7.143	Normal Soln					
	RN-010-P2	8.92	8.92	26.48	0.0	-0.015

10.891	Normal Soln					
	RN-010-P3	9.09	9.09	27.80	0.0	0.013
9.237	Normal Soln					
	RN-013-P1	12.80	12.80	33.14	0.0	0.013
9.146	Normal Soln					
	RN-013-P2	12.80	12.80	33.14	0.0	0.013
9.146	Normal Soln					
	RN-013-P3	12.80	12.80	33.14	0.0	0.013
9.146	Normal Soln					
	RN-015-P1	8.26	8.26	35.64	0.0	-0.015
4.156	Normal Soln					
	RN-015-P2	7.24	7.24	26.38	0.0	0.632
13.212	Normal Soln					
	RN-015-P3	6.82	6.82	21.59	0.0	0.640
9.888	Normal Soln					
	RN-029-P1	5.58	5.58	11.54	0.0	2.556
2.703	Normal Soln					
	RN-029-P2	5.57	5.57	13.90	0.0	-3.062
16.824	Normal Soln					
	R0742-P1	10.96	10.96	23.23	0.0	-0.379
0.417	Normal Soln					
	R0742-P2	10.96	10.96	23.23	0.0	-0.379
0.417	Normal Soln					
	R0655-P1.1	7.29	7.29	28.96	0.0	2.116
8.182	Normal Soln					
	R0490-P8	5.30	5.30	11.81	0.0	-0.419
7.975	Normal Soln					
	R0490-P7	5.30	5.30	11.81	0.0	-0.419
7.975	Normal Soln					
	R0140-P2.1	6.21	6.21	52.16	0.0	-1.531
5.889	Normal Soln					
	R0140-P1.1	5.98	5.98	49.46	0.0	-1.588
5.975	Normal Soln					
	R0120-P1.1	15.44	15.44	35.47	0.0	-3.203
5.211	Normal Soln					
	R0160-P1.1	1.86	1.86	4.05	0.0	0.414
33.485	Normal Soln					
	R0325-P1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0400-P1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0880-P2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R1010-P1.1	6.95	6.95	22.22	0.0	-0.003
2.016	Normal Soln					
	R-0410-P4	4.70	4.70	10.39	0.0	-0.490
7.727	Normal Soln					
	R-0410-P5	4.70	4.70	10.39	0.0	-0.490
7.727	Normal Soln					
	R-0410-P6	4.62	4.62	10.19	0.0	-0.506

7.725	Normal Soln					
	R-0410-P7	4.85	4.85	12.00	0.0	-0.375
3.059	Normal Soln					
	R0410-P1	4.27	4.27	8.81	0.0	0.914
0.324	Normal Soln					
	R0410-P2	4.27	4.27	8.81	0.0	0.914
0.324	Normal Soln					
	R0410-P3	4.27	4.27	8.81	0.0	0.914
0.324	Normal Soln					
	498.1	7.07	7.07	19.64	0.0	0.715
6.337	Normal Soln					
	R0490-P1.1	6.78	6.78	21.31	0.0	-0.622
7.606	Normal Soln					
	R0490-P3	7.66	7.66	29.82	0.0	0.215
2.112	Normal Soln					
	R0490-P4	7.50	7.50	30.30	0.0	0.204
1.823	Normal Soln					
	R0490-P5	7.61	7.61	29.84	0.0	0.207
2.353	Normal Soln					
	R0490-P6	7.84	7.84	29.86	0.0	0.206
3.330	Normal Soln					
	R0890-ORF-2	0.56	0.56	0.90	10357.0	0.013
1060.157	Normal Soln					
	R0890-ORF-5	0.56	0.56	0.90	0.0	0.013
1060.157	Normal Soln					
	R0890ORF-3	0.56	0.56	0.90	0.0	0.013
1060.157	Normal Soln					
	R0890-ORF-4	0.56	0.56	0.90	0.0	0.013
1060.157	Normal Soln					
	N0140-A-W1.1	27.53	27.53	121.81	0.0	0.075
5.251	Normal Soln					
	R0540-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0290-P5	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0285-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0250-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0230-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0220-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0200-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0190-W4	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0170-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0180-W1	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln					
	R0140-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0150-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0110-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0130-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0100-W4	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0310-W5.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0430-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0340-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0350-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0330-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0360-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0550-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0560-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0780-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0740-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0870-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0950-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0960-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0990-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R1010-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0980-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0850-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0770-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0530-W4	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0380-W3	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln					
	R0300-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0290-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0655-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0140-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0120-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0160-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0400-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0880-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R1010-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0490-W2	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0050-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0050-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0060-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0080-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0080-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0090-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0090-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0090-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0090-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0100-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0100-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0100-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0110-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0120-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0130-W2.1	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln					
	R0150-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0150-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0170-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0170-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0190-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0190-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0190-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0200-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0200-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0220-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0240-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0240-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0240-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0240-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0240-W5.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0240-W6.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0250-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0250-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0260-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0270-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0270-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0270-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0275-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0280-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0285-W1.1	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln					
	R0290-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0290-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0290-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0300-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0310-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0310-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0310-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0310-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0325-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0330-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0330-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0340-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0340-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0350-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0350-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0360-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0360-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0370-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0370-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0370-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0380-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0380-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0380-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0390-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0390-W2	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln					
	R0400-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0410-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0420-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0420-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0430-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0430-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0440-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0450-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0450-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0460-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0460-W2.1	600.00	600.00	600.00	0.0	288.776
0.000	Normal Soln					
	R0480-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0480-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0480-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0490-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0490-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0500-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0510-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0520-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0520-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0530-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0530-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0530-W3	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0540-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0540-W2.1	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln					
	R0550-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0550-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0560-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0560-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0560-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0560-W5.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0570-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0570-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0570-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0570-W5.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0640-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0650-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0660-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0660-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0690-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0720-W1.1	600.00	600.00	600.00	0.0	-0.000
0.000	Normal Soln					
	R0730-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0740-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0740-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0775-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0780-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0790-W1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0800-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0800-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0810-W1.1	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln					
	R0830-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0850-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0870-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0885-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0910-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0930-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0940-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0940-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0945-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0950-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0960-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0960-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0960-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0980-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0990-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R0990-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R1000-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R1020-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R1030-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R1030-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R2002-W1.1	600.00	600.00	600.00	0.0	-25.228
0.000	Normal Soln					
	R02040-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R2090-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R2370-W4.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln					
	R2380-W2.1	600.00	600.00	600.00	0.0	0.000

0.000	Normal Soln	R2380-W3.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R0440-W2.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R015-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R020-W1.1	600.00	600.00	600.00	0.0	0.007
0.000	Normal Soln	R021-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R030-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R031-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R042-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R043-W1.1	600.00	600.00	600.00	0.0	0.000
0.000	Normal Soln	R0850-W1.1	600.00	600.00	600.00	0.0	0.000

0.000 Normal Soln
The conduit with the smallest time step limitation was..R0890-ORF-2
The conduit with the largest wobble was.....R0890-ORF-2
The conduit with the largest flow change in any
consecutive time step.....R0460-W2.1

```

*=====
| Table E6. Final Model Condition |
| This table is used for steady state |
| flow comparison and is the information |
| saved to the hot-restart file. |
| Final Time = 192.000 hours |
*=====

```

Junction / Depth / Elevation	====>	"*" Junction is Surcharged.
N0335/ 1.04 / 1.04/		N0550/ 2.11 / 0.78/
N0690/ 4.01 / 4.63/		N0780/ 5.30 / 0.91/
N0640/ 4.61 / 1.83/		N0800/ 2.26 / 5.61/
N0830/ 3.26 / 1.21/		N0520/ 3.89 / 1.06/
N0790/ 4.19 / 1.21/		N0450/ 2.34 / 1.04/
N0870/ 4.13 / 1.21/		N0960/ 0.00 / 1.90/
N0510/ 2.29 / 0.86/		N0970/ 2.42 / 1.21/
N0390/ 2.76 / 1.06/		N0560/ 3.60 / 0.78/
N0350/ 3.73 / 1.04/		
N0770/ 4.26 / 1.21/		
N0720/ 1.73 / 1.08/		
N0920/ 2.78 / 1.21/		
N0950/ 1.63 / 1.21/		
N0915/ 7.21 / 1.21/		
N0885/ 8.12 / 1.21/		

N0810/	2.63 /	0.78/				
	N0570/	3.45 /	0.78/	N0990/	0.85 /	2.42/
N1000/	1.92 /	0.56/				
	N1020/	3.42 /	2.42/	N1030/	2.77 /	1.72/
N0890/	3.43 /	1.89/				
	N0850/	0.22 /	1.68/	N0930/	5.63 /	2.06/
N0980/	0.80 /	2.42/				
	N1010/	1.38 /	2.42/	N0430/	1.17 /	1.04/
N0500/	2.63 /	4.88/				
	N0230/	1.58 /	4.89/	N0220/	1.44 /	2.62/
N0200/	3.74 /	2.13/				
	N0190/	3.09 /	2.13/	N0130/	2.07 /	1.47/
N0100/	1.01 /	1.47/				
	N0090/	2.93 /	5.42/	N0120/	1.20 /	0.96/
N0110/	0.70 /	1.47/				
	N0170/	1.00 /	0.29/	N0210/	1.01 /	0.29/
N0260/	2.85 /	2.62/				
	N0250/	2.59 /	4.89/	N0240/	3.45 /	4.89/
N0140/	3.29 /	1.39/				
	N0150/	0.00 /	1.44/	N0270/	2.55 /	4.12/
N0290/	1.23 /	2.24/				
	N0180/	2.85 /	1.39/	N0370/	1.26 /	2.24/
N0285/	0.18 /	2.18/				
	N0420/	1.60 /	4.68/	N0490/	2.42 /	1.16/
N0410/	4.06 /	1.45/				
	N0380/	2.24 /	2.24/	N0660/	2.30 /	1.46/
N0740/	2.45 /	1.21/				
	N0730/	3.31 /	1.21/	N0940/	2.60 /	1.59/
N0530/	0.00 /	1.66/				
	N0060/	2.76 /	1.47/	N0050/	3.58 /	2.72/
N0325/	5.41 /	1.04/				
	N0160/	2.60 /	0.51/	N0470/	2.32 /	4.13/
N0540/	0.29 /	1.64/				
	N0650/	2.00 /	1.51/	N0400/	3.65 /	0.75/
N0360/	2.22 /	1.04/				
	N0480/	2.08 /	4.34/	N0080/	2.58 /	3.06/
N0310/	2.10 /	0.51/				
	N0300/	4.89 /	1.04/	N0460/	3.21 /	1.06/
N0440/	2.35 /	0.98/				
	N0330/	4.47 /	1.04/	N0655/	2.92 /	0.01/
N0375/	2.24 /	2.24/				
	N0385/	2.54 /	1.45/	N0275/	0.09 /	2.39/
N0280/	0.67 /	2.67/				
	N0202/	5.70 /	2.13/	N0340/	2.83 /	1.04/
N0515/	1.98 /	0.78/				
	N-001/	1.69 /	1.92/	N-002/	0.47 /	3.47/
N-003/	0.00 /	2.56/				
	N-004/	0.00 /	2.88/	N-005/	1.05 /	1.92/
N-008/	1.96 /	1.92/				
	N-010/	2.21 /	1.92/	N-013/	3.08 /	1.92/

N-015/	3.11 /	1.92/		
N-006/	0.00 /	2.66/	N-007/	0.00 / 2.46/
N-009/	0.00 /	2.68/		
N-011/	0.00 /	2.04/	N-014/	0.37 / 1.92/
N-012/	0.44 /	1.92/		
N-025/	3.03 /	1.79/	N-023/	1.34 / 1.79/
N-021/	2.26 /	1.79/		
N-019/	2.55 /	2.33/	N-041/	1.55 / 2.33/
N-020/	0.41 /	1.79/		
N-022/	0.83 /	1.79/	N-024/	2.06 / 1.79/
N-029/	2.77 /	1.79/		
N-026/	0.78 /	1.79/	N-027/	2.12 / 1.79/
N-028/	2.10 /	1.79/		
N-030/	0.19 /	0.12/	N-043/	1.27 / 0.11/
N-042/	1.23 /	0.60/		
N-031/	0.93 /	0.08/	N-040/	2.50 / 1.02/
N0620/	0.81 /	0.21/		
N0900/	4.21 /	1.21/	N-009mh/	2.41 / 2.41/
N0205/	5.63 /	2.13/		
N0386/	2.54 /	1.45/	N0388/	2.54 / 1.45/
N0775/	1.56 /	0.91/		
N2040/	1.87 /	0.77/	N2380/	2.97 / 1.16/
N0155/	1.12 /	0.98/		
N0945/	2.33 /	1.52/	N2002/	3.72 / 1.92/
N2090/	2.23 /	0.34/		
N0742/	1.72 /	1.21/	N0910/	7.21 / 1.21/
N0880/	8.12 /	1.21/		
N9004/	4.66 /	1.92/	N9004-B/	4.71 / 1.92/
N9004-C/	4.46 /	1.92/		
N9004-D/	4.60 /	1.92/	N9004-F/	3.09 / 1.92/
N9001-B/	3.05 /	0.96/		
N9001-D/	1.86 /	0.96/	N9001-F/	1.86 / 0.96/
N9000/	2.95 /	0.96/		
N9003/	0.96 /	0.96/	N9005/	0.96 / 0.96/
N9005-E/	0.96 /	0.96/		
N9005-G/	0.96 /	0.96/	N9004-J/	3.25 / 1.92/
N9004-G/	3.01 /	1.92/		
N9002/	2.27 /	0.96/	N2370/	3.01 / 1.45/
N9000-B/	2.95 /	0.96/		
N9000-C/	2.95 /	0.96/	N9000-E/	2.95 / 0.96/
N9000-F/	2.95 /	0.96/		
N9001-E/	3.05 /	0.96/	N9001-G/	1.86 / 0.96/
N9001-H/	1.86 /	0.96/		
N9001-J/	1.13 /	0.96/	N9001-K/	1.13 / 0.96/
N9002-A/	2.27 /	0.96/		
N9002-B/	2.27 /	0.96/	N9003-A/	0.96 / 0.96/
N9003-B/	0.96 /	0.96/		
N9003-C/	0.96 /	0.96/	N9003-D/	0.96 / 0.96/
N9003-E/	0.96 /	0.96/		
N9003-F/	0.96 /	0.96/	N9003-G/	0.96 / 0.96/

N9004-A/	4.66 /	1.92/		
N9004-E/	4.60 /	1.92/	N9004-H/	3.09 / 1.92/
N9004-I/	3.09 /	1.92/		
N9004-K/	3.25 /	1.92/	N9005-A/	0.96 / 0.96/
N9005-B/	0.96 /	0.96/		
N9005-C/	0.96 /	0.96/	N9005-D/	0.96 / 0.96/
N9005-F/	0.96 /	0.96/		
N9005-H/	0.96 /	0.96/	N9000-D/	3.21 / 0.96/
N-0001A/	8.89 /	0.89/		
N-0001B/	1.97 /	1.47/	N0001-C/	0.46 / 2.61/
N-0001-E/	0.50 /	5.30/		
N-0001E-OF/	0.00 /	3.13/	N-0001-F/	0.31 / 3.81/
N-0001-G/	0.80 /	4.80/		
N-0001F-OF-A/	0.00 /	3.13/	N-0001F-OF-B/	0.00 / 3.13/
N9004-L/	4.66 /	1.92/		
N0001-J/	0.05 /	1.24/	N9005-J/	0.96 / 0.96/
N9005-K/	0.96 /	0.96/		
N0001-I/	0.76 /	1.89/	N-0001K/	0.78 / 2.81/
N0140-A/	3.49 /	1.39/		

	Conduit/	Flow	====> "*" Conduit uses the normal flow option.	
	R0870/	0.26 /		R0770-P2/ 0.08 /
R0900/	0.27 /			
	R0370/	0.03 /		R0280/ 0.00 /
R0202/	0.00 /			
	RN-002/	0.00 /		RN-003/ 0.00 /
RN-006/	0.00 /			
	RN-007/	0.00 /		RN-009/ 0.00 /
RN-009MH/	0.00 /			
	RN-011/	0.00*/		RN-014/ -0.18 /
RN-012/	-0.18 /			
	RN-023/	0.22 /		RN-021/ -0.23 /
RN-041/	0.40 /			
	RN-020/	0.17 /		RN-022/ 0.20 /
RN-024/	0.18 /			
	RN-026/	-0.00 /		RN-027/ -0.00 /
RN-028/	0.00 /			
	R0742-P3/	-0.05 /		R0655-P2/ -0.00 /
R0655-P3/	-0.00 /			
	R0655-P4/	0.00 /		R0120-P2/ 0.01 /
R1010-P2/	0.24 /			
	RN-025-P1/	27.73 /		RN-025-P2/ 27.34 /
R0155-P1/	-1.12 /			
	R0386/	0.45 /		R0388/ 0.46 /
R0385/	0.45 /			
	R0375/	0.03 /		R0335/ 0.00 /
R-0001B-P1/	-0.03 /			
	R0540-P1/	-0.01 /		R0540-P2/ 0.01 /
R0540-P3/	0.00 /			
	R0290-P1/	-0.02 /		R0285.1/ 0.13 /

R0250.1/	0.01 /		R0220.1/	-0.00 /
	R0230.1/	0.00 /		
R0200.1/	-0.00 /		R0170.1/	-0.00 /
	R0190.1/	-0.00 /		
R0180-P1/	0.03 /		R0140.1/	0.00 /
	R0180-P2/	0.03 /		
R0140-P3.1/	0.00 /		R0150-P2/	0.00*/
	R0150-P1/	0.00 /		
R0150-P3/	0.00*/		R0150-P5/	0.00 /
	R0150-P4/	0.00*/		
R0110.1/	-0.00 /		R0130-P2/	0.01 /
	R0130-P1/	0.01 /		
R0100-P1/	0.00 /		R0310.1/	0.00 /
	R0100-P2/	-0.00 /		
R0430-P1/	0.00 /		R0430-P3/	0.00 /
	R0430-P2/	0.00 /		
R0430-P4/	-0.00 /		R0340-P2/	-0.19 /
	R0340-P1/	-0.24 /		
R0350-P1/	0.23 /		R0330-P1/	-0.04 /
	R0350-P2/	0.23 /		
R0330-P2/	-0.04 /		R0450-P2/	-0.29 /
	R0450-P1/	-0.29 /		
P0360-P1/	0.02 /		R0550-P1/	0.19 /
	P0360-P2/	0.02 /		
R0550-P2/	0.19 /		R0560-P2/	1.17 /
	R0560-P1/	0.92 /		
R0560-P3/	1.17 /		R0740.1/	-0.06 /
	R0780.1/	0.00 /		
R0730.1/	-0.04 /		R0950.1/	0.00 /
	R0880.1/	0.00 /		
R0920.1/	-0.00 /		R0990.1/	0.04 /
	R0960.1/	0.00 /		
R1010-P3/	0.25 /		R1010-P5/	0.23 /
	R1010-P4/	0.26 /		
R0980-P1.1/	0.07 /		R0850-P1/	0.11 /
	R0980-P2.1/	0.15*/		
R0850-P2/	0.03 /		R0570-P1/	-0.42 /
	R0850-P3/	0.00 /		
R0570-P2/	-0.41 /		R0770-P1.1/	0.87 /
	R0570-P3/	-0.39 /		
R0770-P3/	-0.14 /		R0790-P1/	0.55 /
	R0770-P4/	-0.13 /		
R0790-P2/	0.29 /		R0530-P2/	0.00*/
	R0530-P1/	0.00*/		
R0530-P3/	0.00*/		R0910-P2/	0.00 /
	R0910-P1/	0.00 /		
R0380-P1/	-0.22 /		R0300-P1/	0.02 /
	R0380-P2/	-0.22 /		
R0300-P2/	0.02 /		RN-004-P1/	0.00 /
	R0290-P2.1/	0.00*/		

RN-004-P2/	0.00 /				
	RN-004-P3/	0.00 /		RN-001-P1/	0.11 /
RN-001-P2/	0.08 /				
	RN-001-P3/	0.11 /		RN-005-P1/	0.07 /
RN-005-P2/	0.23 /				
	RN-005-P3/	-0.06 /		RN-008-P1.1/	-0.10 /
RN-008-P2/	0.15 /				
	RN-008-P3/	0.14 /		RN-010-P1/	-0.14 /
RN-010-P2/	-0.14 /				
	RN-010-P3/	0.15 /		RN-013-P1/	0.12 /
RN-013-P2/	0.12 /				
	RN-013-P3/	0.12 /		RN-015-P1/	-0.15 /
RN-015-P2/	0.31 /				
	RN-015-P3/	0.35 /		RN-029-P1/	-0.08 /
RN-029-P2/	0.08 /				
	R0742-P1/	0.02 /		R0742-P2/	0.02 /
R0655-P1.1/	-0.00 /				
	R0490-P8/	-8.43 /		R0490-P7/	-8.43 /
R0140-P2.1/	0.04 /				
	R0140-P1.1/	0.05 /		R0120-P1.1/	-0.02 /
R0160-P1.1/	0.00 /				
	R0325-P1.1/	0.00 /		R0400-P1.1/	0.00 /
R0880-P2.1/	0.00 /				
	R1010-P1.1/	0.44 /		R-0410-P4/	0.32 /
R-0410-P5/	0.32 /				
	R-0410-P6/	0.32 /		R-0410-P7/	0.32 /
R0410-P1/	-2.19 /				
	R0410-P2/	-2.19 /		R0410-P3/	-2.19 /
498.1/	7.08 /				
	R0490-P1.1/	-7.05 /		R0490-P3/	-0.44 /
R0490-P4/	-0.44 /				
	R0490-P5/	-0.44 /		R0490-P6/	-0.44 /
R0890-ORF-2/	-1.26 /				
	R0890-ORF-5/	-1.26 /		R0890ORF-3/	-1.26 /
R0890-ORF-4/	-1.26 /				
	N0140-A-W1.1/	0.09 /		R0540-W3/	0.00 /
R0290-P5/	0.00 /				
	R0285-W2/	0.00 /		R0250-W1/	0.00 /
R0230-W1/	0.00 /				
	R0220-W2/	0.00 /		R0200-W3/	0.00 /
R0190-W4/	0.00 /				
	R0170-W3/	0.00 /		R0180-W1/	0.00 /
R0140-W1/	0.00 /				
	R0150-W3/	0.00 /		R0110-W1/	0.00 /
R0130-W1/	0.00 /				
	R0100-W4/	0.00 /		R0310-W5.1/	0.00 /
R0430-W3/	0.00 /				
	R0340-W3/	0.00 /		R0350-W1/	0.00 /
R0330-W1/	0.00 /				
	R0360-W1/	0.00 /		R0550-W2/	0.00 /

R0560-W1/	0.00 /			
	R0780-W1/	0.00 /	R0740-W3/	0.00 /
R0870-W1/	0.00 /			
	R0950-W1/	0.00 /	R0960-W2/	0.00 /
R0990-W2/	0.00 /			
	R1010-W2/	0.00 /	R0980-W2/	0.00 /
R0850-W2/	0.00 /			
	R0770-W2/	0.00 /	R0530-W4/	0.00 /
R0380-W3/	0.00 /			
	R0300-W2/	0.00 /	R0290-W1/	0.00 /
R0655-W2/	0.00 /			
	R0140-W2/	0.00 /	R0120-W2/	0.00 /
R0160-W1/	0.00 /			
	R0400-W1/	0.00 /	R0880-W2/	0.00 /
R1010-W1/	0.00 /			
	R0490-W2/	0.00 /	R0050-W1.1/	0.00 /
R0050-W2.1/	0.00 /			
	R0060-W1.1/	0.00 /	R0080-W1.1/	0.00 /
R0080-W2.1/	0.00 /			
	R0090-W1.1/	0.00 /	R0090-W2.1/	0.00 /
R0090-W3.1/	0.00 /			
	R0090-W4.1/	0.00 /	R0100-W1.1/	0.00 /
R0100-W2.1/	0.00 /			
	R0100-W3.1/	0.00 /	R0110-W2.1/	0.00 /
R0120-W1.1/	0.00 /			
	R0130-W2.1/	0.00 /	R0150-W1.1/	0.00 /
R0150-W2.1/	0.00 /			
	R0170-W1.1/	0.00 /	R0170-W2.1/	0.00 /
R0190-W1.1/	0.00 /			
	R0190-W2.1/	0.00 /	R0190-W3.1/	0.00 /
R0200-W1.1/	0.00 /			
	R0200-W2.1/	0.00 /	R0220-W1.1/	0.00 /
R0240-W1.1/	0.00 /			
	R0240-W2.1/	0.00 /	R0240-W3.1/	0.00 /
R0240-W4.1/	0.00 /			
	R0240-W5.1/	0.00 /	R0240-W6.1/	0.00 /
R0250-W2.1/	0.00 /			
	R0250-W3.1/	0.00 /	R0260-W1.1/	0.00 /
R0270-W1.1/	0.00 /			
	R0270-W3/	0.00 /	R0270-W2.1/	0.00 /
R0275-W1.1/	0.00 /			
	R0280-W1.1/	0.00 /	R0285-W1.1/	0.00 /
R0290-W2.1/	0.00 /			
	R0290-W3.1/	0.00 /	R0290-W4.1/	0.00 /
R0300-W1.1/	0.00 /			
	R0310-W1.1/	0.00 /	R0310-W2.1/	0.00 /
R0310-W3.1/	0.00 /			
	R0310-W4.1/	0.00 /	R0325-W2.1/	0.00 /
R0330-W2.1/	1.17 /			
	R0330-W3.1/	0.00 /	R0340-W1.1/	0.00 /

R0340-W2.1/	0.00 /		
R0350-W2.1/	0.00 /	R0350-W3.1/	0.00 /
R0360-W2.1/	0.00 /		
R0360-W3.1/	0.00 /	R0370-W1.1/	0.00 /
R0370-W2.1/	0.00 /		
R0370-W3.1/	0.00 /	R0380-W1.1/	0.00 /
R0380-W2.1/	0.00 /		
R0380-W4.1/	0.00 /	R0390-W1.1/	0.00 /
R0390-W2/	0.00 /		
R0400-W2.1/	0.00 /	R0410-W1.1/	0.00 /
R0420-W1.1/	0.00 /		
R0420-W2.1/	0.00 /	R0430-W1.1/	0.00 /
R0430-W2.1/	0.00 /		
R0440-W1.1/	0.00 /	R0450-W1.1/	0.00 /
R0450-W2.1/	0.00 /		
R0460-W1.1/	0.00 /	R0460-W2.1/	0.00 /
R0480-W1.1/	0.00 /		
R0480-W2.1/	0.00 /	R0480-W3.1/	0.00 /
R0490-W1.1/	0.00 /		
R0490-W3.1/	0.00 /	R0500-W1.1/	0.00 /
R0510-W2.1/	0.00 /		
R0520-W1.1/	0.00 /	R0520-W2.1/	0.00 /
R0530-W1.1/	0.00 /		
R0530-W2.1/	0.00 /	R0530-W3/	0.00 /
R0540-W1.1/	0.00 /		
R0540-W2.1/	0.00 /	R0550-W1.1/	0.00 /
R0550-W3.1/	0.00 /		
R0560-W2.1/	0.00 /	R0560-W3.1/	0.00 /
R0560-W4.1/	0.00 /		
R0560-W5.1/	0.00 /	R0570-W1.1/	0.00 /
R0570-W3.1/	0.00 /		
R0570-W4.1/	0.00 /	R0570-W5.1/	0.00 /
R0640-W1.1/	0.00 /		
R0650-W1.1/	0.00 /	R0660-W1.1/	0.00 /
R0660-W2.1/	0.00 /		
R0690-W2.1/	0.00 /	R0720-W1.1/	-1.31 /
R0730-W1.1/	0.00 /		
R0740-W2.1/	0.00 /	R0740-W4.1/	0.00 /
R0775-W1.1/	0.00 /		
R0780-W2.1/	0.00 /	R0790-W1/	0.00 /
R0800-W1.1/	0.00 /		
R0800-W2.1/	0.00 /	R0810-W1.1/	0.00 /
R0830-W3.1/	0.00 /		
R0850-W3.1/	0.00 /	R0870-W2.1/	0.00 /
R0885-W1.1/	0.00 /		
R0910-W2.1/	0.00 /	R0930-W1.1/	0.00 /
R0940-W1.1/	0.00 /		
R0940-W2.1/	0.00 /	R0945-W1.1/	0.00 /
R0950-W2.1/	0.00 /		
R0960-W1.1/	0.00 /	R0960-W3.1/	0.00 /

R0960-W4.1/	0.00 /			
R0980-W1.1/	0.00 /		R0990-W1.1/	0.00 /
R0990-W3.1/	0.00 /			
R1000-W1.1/	0.00 /		R1020-W1.1/	0.00 /
R1030-W1.1/	0.00 /			
R1030-W2.1/	0.00 /		R2002-W1.1/	-25.24 /
R02040-W1.1/	0.00 /			
R2090-W1.1/	0.00 /		R2370-W4.1/	0.00 /
R2380-W2.1/	0.00 /			
R2380-W3.1/	0.00 /		R0440-W2.1/	0.00 /
R015-W1.1/	0.00 /			
R020-W1.1/	-0.18 /		R021-W1.1/	0.00 /
R030-W1.1/	0.00 /			
R031-W1.1/	0.00 /		R042-W1.1/	0.00 /
R043-W1.1/	0.00 /			
R0850-W1.1/	0.00 /		R0880-WPump/	0.00 /
R0920-P2-W1/	0.00 /			
R0920-P2-W2/	0.00 /		R0910-W1/	0.00 /
R0325-DS-W1/	0.00 /			
R0400-WPump/	0.00 /		R0880-WPump2/	0.00 /
R0880-DS-W1/	0.00 /			
R0520-DS-W1/	0.00 /		R0640-P1-W1/	0.03 /
R0640-P1-W2/	0.00 /			
R0640-P2-W1/	0.00 /		R0690-P1-W1/	0.00 /
R0940-DS-W1/	0.25 /			
R0945-DS-W1/	0.04 /		R1020-DS-W1/	0.57 /
R0205-W1/	0.00 /			
R0205-W2/	0.00 /		R0205-W3/	0.00 /
R0205-W4/	0.00 /			
R0210-W1.1/	-2.17 /		R0515-W1.1/	0.00 /
R0515-W2.1/	-5.75 /			
R0620-W1/	0.00 /		R0620-W2/	0.00 /
R0620-W3/	0.00 /			
R0650-W2.1/	0.02 /		R0660-W3.1/	0.00 /
R0742-W1.1/	0.00 /			
R0890-W1.1/	0.00 /		R0915-W1.1/	0.00 /
RN-019-P1-W1/	0.41 /			
R019-P1-W2/	0.00 /		R0830-P1-W1.1/	0.00 /
R0830-P1-W2/	0.00 /			
R0970-P1-W1/	0.00 /		R0970-P1-W2/	0.00 /
R-0001A-W1.1/	-14.48 /			
R-0001A-W2/	-30.34 /		R0001C-W1.1/	0.00 /
R0001C-W2/	0.00 /			
R0001C-W3/	0.13 /		R0001E-W1/	0.00 /
R0001F-W1.1/	0.01 /			
R0001F-W2/	0.00 /		R0001F-W3/	0.01 /
R0001F-W4/	0.00 /			
R0001F-W5/	0.01 /		R001G-W1/	0.00 /
R0930-W6.1.1/	0.00 /			
R0001J-W1.1/	0.00 /		R000J-W2/	0.00 /

R000J-W3/	0.00 /		R000J-W5/	0.04 /
	R000J-W4/	0.00 /		
R000J-W6/	0.04 /			
	R000J-W7/	0.00 /	R0001J-W8/	0.00 /
R0001J-W9/	0.00 /			
	R0001J-W10/	0.00 /	R0001J-W11/	0.00 /
R0001J-W12/	0.04 /			
	R0001J-W13/	0.04 /	R0001J-W14/	0.00 /
R0001I-W1.1/	0.00 /			
	R001I-W2/	0.00 /	R0001I-W3/	0.00 /
R001I-W4/	0.00 /			
	R001I-W5/	0.00 /	R0001I-W7/	0.38 /
R0001I-W7.1/	0.38 /			
	R0001K-W1.1/	0.07 /	R0001K-W2/	0.00 /
R0001K-W3/	0.00 /			
	R0880-PUMP/	0.00 /	FREE# 1/	0.00 /
FREE# 2/	0.00 /			
	FREE# 3/	0.00 /	FREE# 4/	0.00 /
FREE# 5/	16.87 /			
	FREE# 6/	0.09 /	FREE# 7/	-0.02 /
FREE# 8/	0.00 /			
	FREE# 9/	0.00 /	FREE#10/	0.00 /
FREE#11/	0.00 /			
	FREE#12/	0.00 /	FREE#13/	0.24 /
FREE#14/	27.73 /			
	FREE#15/	-27.34 /	FREE#16/	-1.12 /
FREE#17/	0.00 /			
	FREE#18/	0.00 /	FREE#19/	0.00 /
FREE#20/	-0.00 /			
	FREE#21/	0.00 /	FREE#22/	0.01 /
FREE#23/	0.00 /			
	FREE#24/	0.00 /	FREE#25/	0.00 /
FREE#26/	0.00 /			
	FREE#27/	-2.17 /	FREE#28/	-5.75 /
FREE#29/	0.00 /			
	FREE#30/	0.00 /	FREE#31/	0.00 /
FREE#32/	0.00 /			
	FREE#33/	0.00 /	FREE#34/	0.00 /
FREE#35/	0.00 /			
	FREE#36/	0.00 /	FREE#37/	0.00 /
FREE#38/	0.00 /			
	FREE#39/	-25.17 /	FREE#40/	0.00 /
FREE#41/	0.00 /			
	FREE#42/	0.57 /	FREE#43/	0.25 /
FREE#44/	0.44 /			
	FREE#45/	0.04 /	FREE#46/	-44.82 /
FREE#47/	0.00 /			
	FREE#48/	0.03 /	FREE#49/	0.00 /
FREE#50/	-5.03 /			
	FREE#51/	0.08 /	FREE#52/	0.08 /

	Conduit/	Velocity		
	R0870/	0.01 /	R0770-P2/	0.02 /
R0900/	0.01 /			
	R0370/	0.01 /	R0280/	0.00 /
R0202/	0.00 /			
	RN-002/	0.21 /	RN-003/	0.00 /
RN-006/	0.00 /			
	RN-007/	0.00 /	RN-009/	0.00 /
RN-009MH/	0.00 /			
	RN-011/	0.00 /	RN-014/	-0.36 /
RN-012/	-0.02 /			
	RN-023/	0.13 /	RN-021/	-0.36 /
RN-041/	0.12 /			
	RN-020/	0.25 /	RN-022/	0.12 /
RN-024/	0.05 /			
	RN-026/	-0.00 /	RN-027/	-0.00 /
RN-028/	0.00 /			
	R0742-P3/	-0.02 /	R0655-P2/	-0.00 /
R0655-P3/	-0.00 /			
	R0655-P4/	0.00 /	R0120-P2/	0.00 /
R1010-P2/	1.06 /			
	RN-025-P1/	3.91 /	RN-025-P2/	3.86 /
R0155-P1/	-0.18 /			
	R0386/	0.02 /	R0388/	0.02 /
R0385/	0.02 /			
	R0375/	0.00 /	R0335/	0.00 /
R-0001B-P1/	-0.01 /			
	R0540-P1/	-0.45 /	R0540-P2/	0.31 /
R0540-P3/	0.00 /			
	R0290-P1/	-0.01 /	R0285.1/	0.56 /
R0250.1/	0.00 /			
	R0230.1/	0.00 /	R0220.1/	-0.00 /
R0200.1/	-0.00 /			
	R0190.1/	-0.00 /	R0170.1/	-0.00 /
R0180-P1/	0.00 /			
	R0180-P2/	0.00 /	R0140.1/	0.00 /
R0140-P3.1/	0.00 /			
	R0150-P1/	0.00 /	R0150-P2/	0.00 /
R0150-P3/	0.00 /			
	R0150-P4/	0.00 /	R0150-P5/	0.00 /
R0110.1/	-0.00 /			
	R0130-P1/	0.00 /	R0130-P2/	0.00 /
R0100-P1/	0.00 /			
	R0100-P2/	-0.00 /	R0310.1/	0.00 /
R0430-P1/	0.00 /			
	R0430-P2/	0.00 /	R0430-P3/	0.00 /
R0430-P4/	-0.00 /			
	R0340-P1/	-0.03 /	R0340-P2/	-0.03 /
R0350-P1/	0.02 /			

R0330-P2/	R0350-P2/	0.02 /	R0330-P1/	-0.00 /
	-0.00 /			
P0360-P1/	R0450-P1/	-0.08 /	R0450-P2/	-0.08 /
	0.01 /			
R0550-P2/	P0360-P2/	0.01 /	R0550-P1/	0.03 /
	0.03 /			
R0560-P3/	R0560-P1/	0.14 /	R0560-P2/	0.18 /
	0.18 /			
R0730.1/	R0780.1/	0.00 /	R0740.1/	-0.02 /
	-0.02 /			
R0920.1/	R0880.1/	0.00 /	R0950.1/	0.00 /
	-0.00 /			
R1010-P3/	R0960.1/	0.00 /	R0990.1/	0.03 /
	0.18 /			
R0980-P1.1/	R1010-P4/	0.18 /	R1010-P5/	0.17 /
	0.06 /			
R0850-P2/	R0980-P2.1/	1.36 /	R0850-P1/	0.56 /
	0.39 /			
R0570-P2/	R0850-P3/	0.16 /	R0570-P1/	-0.04 /
	-0.03 /			
R0770-P3/	R0570-P3/	-0.03 /	R0770-P1.1/	0.12 /
	-0.01 /			
R0790-P2/	R0770-P4/	-0.01 /	R0790-P1/	0.03 /
	0.02 /			
R0530-P3/	R0530-P1/	0.00 /	R0530-P2/	0.00 /
	0.00 /			
R0380-P1/	R0910-P1/	0.00 /	R0910-P2/	0.00 /
	-1.02 /			
R0300-P2/	R0380-P2/	-1.02 /	R0300-P1/	0.01 /
	0.01 /			
RN-004-P2/	R0290-P2.1/	0.00 /	RN-004-P1/	0.00 /
	0.00 /			
RN-001-P2/	RN-004-P3/	0.00 /	RN-001-P1/	0.10 /
	0.10 /			
RN-005-P2/	RN-001-P3/	0.09 /	RN-005-P1/	0.04 /
	0.12 /			
RN-008-P2/	RN-005-P3/	-0.03 /	RN-008-P1.1/	-0.03 /
	0.04 /			
RN-010-P2/	RN-008-P3/	0.05 /	RN-010-P1/	-0.03 /
	-0.03 /			
RN-013-P2/	RN-010-P3/	0.03 /	RN-013-P1/	0.02 /
	0.02 /			
RN-015-P2/	RN-013-P3/	0.02 /	RN-015-P1/	-0.02 /
	0.04 /			
RN-029-P2/	RN-015-P3/	0.05 /	RN-029-P1/	-0.01 /
	0.01 /			
R0655-P1.1/	R0742-P1/	0.02 /	R0742-P2/	0.02 /
	-0.00 /			
R0140-P2.1/	R0490-P8/	-6.83 /	R0490-P7/	-6.83 /
	0.01 /			

R0140-P1.1/	0.01 /	R0120-P1.1/	-0.00 /
R0160-P1.1/	0.00 /		
R0325-P1.1/	0.00 /	R0400-P1.1/	0.00 /
R0880-P2.1/	0.00 /		
R1010-P1.1/	1.29 /	R-0410-P4/	0.18 /
R-0410-P5/	0.18 /		
R-0410-P6/	0.18 /	R-0410-P7/	0.18 /
R0410-P1/	-0.23 /		
R0410-P2/	-0.23 /	R0410-P3/	-0.23 /
498.1/	4.00 /		
R0490-P1.1/	-3.97 /	R0490-P3/	-0.36 /
R0490-P4/	-0.35 /		
R0490-P5/	-0.36 /	R0490-P6/	-0.36 /
R0890-ORF-2/	-2.30 /		
R0890-ORF-5/	-2.30 /	R0890ORF-3/	-2.30 /
R0890-ORF-4/	-2.30 /		
N0140-A-W1.1/	0.11 /	R0540-W3/	0.00 /
R0290-P5/	0.00 /		
R0285-W2/	0.00 /	R0250-W1/	0.00 /
R0230-W1/	0.00 /		
R0220-W2/	0.00 /	R0200-W3/	0.00 /
R0190-W4/	0.00 /		
R0170-W3/	0.00 /	R0180-W1/	0.00 /
R0140-W1/	0.00 /		
R0150-W3/	0.00 /	R0110-W1/	0.00 /
R0130-W1/	0.00 /		
R0100-W4/	0.00 /	R0310-W5.1/	0.00 /
R0430-W3/	0.00 /		
R0340-W3/	0.00 /	R0350-W1/	0.00 /
R0330-W1/	0.00 /		
R0360-W1/	0.00 /	R0550-W2/	0.00 /
R0560-W1/	0.00 /		
R0780-W1/	0.00 /	R0740-W3/	0.00 /
R0870-W1/	0.00 /		
R0950-W1/	0.00 /	R0960-W2/	0.00 /
R0990-W2/	0.00 /		
R1010-W2/	0.00 /	R0980-W2/	0.00 /
R0850-W2/	0.00 /		
R0770-W2/	0.00 /	R0530-W4/	0.00 /
R0380-W3/	0.00 /		
R0300-W2/	0.00 /	R0290-W1/	0.00 /
R0655-W2/	0.00 /		
R0140-W2/	0.00 /	R0120-W2/	0.00 /
R0160-W1/	0.00 /		
R0400-W1/	0.00 /	R0880-W2/	0.00 /
R1010-W1/	0.00 /		
R0490-W2/	0.00 /	R0050-W1.1/	0.00 /
R0050-W2.1/	0.00 /		
R0060-W1.1/	0.00 /	R0080-W1.1/	0.00 /
R0080-W2.1/	0.00 /		

R0090-W1.1/	0.00 /	R0090-W2.1/	0.00 /
R0090-W3.1/	0.00 /		
R0090-W4.1/	0.00 /	R0100-W1.1/	0.00 /
R0100-W2.1/	0.00 /		
R0100-W3.1/	0.00 /	R0110-W2.1/	0.00 /
R0120-W1.1/	0.00 /		
R0130-W2.1/	0.00 /	R0150-W1.1/	0.00 /
R0150-W2.1/	0.00 /		
R0170-W1.1/	0.00 /	R0170-W2.1/	0.00 /
R0190-W1.1/	0.00 /		
R0190-W2.1/	0.00 /	R0190-W3.1/	0.00 /
R0200-W1.1/	0.00 /		
R0200-W2.1/	0.00 /	R0220-W1.1/	0.00 /
R0240-W1.1/	0.00 /		
R0240-W2.1/	0.00 /	R0240-W3.1/	0.00 /
R0240-W4.1/	0.00 /		
R0240-W5.1/	0.00 /	R0240-W6.1/	0.00 /
R0250-W2.1/	0.00 /		
R0250-W3.1/	0.00 /	R0260-W1.1/	0.00 /
R0270-W1.1/	0.00 /		
R0270-W3/	0.00 /	R0270-W2.1/	0.00 /
R0275-W1.1/	0.00 /		
R0280-W1.1/	0.00 /	R0285-W1.1/	0.00 /
R0290-W2.1/	0.00 /		
R0290-W3.1/	0.00 /	R0290-W4.1/	0.00 /
R0300-W1.1/	0.00 /		
R0310-W1.1/	0.00 /	R0310-W2.1/	0.00 /
R0310-W3.1/	0.00 /		
R0310-W4.1/	0.00 /	R0325-W2.1/	0.00 /
R0330-W2.1/	0.71 /		
R0330-W3.1/	0.00 /	R0340-W1.1/	0.00 /
R0340-W2.1/	0.00 /		
R0350-W2.1/	0.00 /	R0350-W3.1/	0.00 /
R0360-W2.1/	0.00 /		
R0360-W3.1/	0.00 /	R0370-W1.1/	0.00 /
R0370-W2.1/	0.00 /		
R0370-W3.1/	0.00 /	R0380-W1.1/	0.00 /
R0380-W2.1/	0.00 /		
R0380-W4.1/	0.00 /	R0390-W1.1/	0.00 /
R0390-W2/	0.00 /		
R0400-W2.1/	0.00 /	R0410-W1.1/	0.00 /
R0420-W1.1/	0.00 /		
R0420-W2.1/	0.00 /	R0430-W1.1/	0.00 /
R0430-W2.1/	0.00 /		
R0440-W1.1/	0.00 /	R0450-W1.1/	0.00 /
R0450-W2.1/	0.00 /		
R0460-W1.1/	0.00 /	R0460-W2.1/	264.00 /
R0480-W1.1/	0.00 /		
R0480-W2.1/	0.00 /	R0480-W3.1/	0.00 /
R0490-W1.1/	0.00 /		

R0490-W3.1/	0.00 /	R0500-W1.1/	0.00 /
R0510-W2.1/	0.00 /	R0520-W2.1/	0.00 /
R0520-W1.1/	0.00 /	R0530-W3/	0.00 /
R0530-W1.1/	0.00 /	R0530-W2.1/	0.00 /
R0540-W1.1/	0.00 /	R0540-W2.1/	0.00 /
R0540-W2.1/	0.00 /	R0550-W1.1/	0.00 /
R0550-W3.1/	0.00 /	R0560-W3.1/	0.00 /
R0560-W2.1/	0.00 /	R0560-W4.1/	0.00 /
R0560-W4.1/	0.00 /	R0560-W5.1/	0.00 /
R0570-W3.1/	0.00 /	R0570-W1.1/	0.00 /
R0570-W4.1/	0.00 /	R0570-W5.1/	0.00 /
R0640-W1.1/	0.00 /	R0660-W1.1/	0.00 /
R0650-W1.1/	0.00 /	R0660-W2.1/	0.00 /
R0660-W2.1/	0.00 /	R0690-W2.1/	0.00 /
R0730-W1.1/	0.00 /	R0720-W1.1/	-0.18 /
R0740-W2.1/	0.00 /	R0740-W4.1/	0.00 /
R0775-W1.1/	0.00 /	R0790-W1/	0.00 /
R0780-W2.1/	0.00 /	R0810-W1.1/	0.00 /
R0800-W1.1/	0.00 /	R0870-W2.1/	0.00 /
R0800-W2.1/	0.00 /	R0930-W1.1/	0.00 /
R0830-W3.1/	0.00 /	R0945-W1.1/	0.00 /
R0850-W3.1/	0.00 /	R0960-W3.1/	0.00 /
R0885-W1.1/	0.00 /	R0960-W4.1/	0.00 /
R0910-W2.1/	0.00 /	R0980-W1.1/	0.00 /
R0940-W1.1/	0.00 /	R0990-W1.1/	0.00 /
R0940-W2.1/	0.00 /	R0990-W3.1/	0.00 /
R0950-W2.1/	0.00 /	R1000-W1.1/	0.00 /
R0960-W1.1/	0.00 /	R1020-W1.1/	0.00 /
R0960-W4.1/	0.00 /	R1030-W1.1/	0.00 /
R0980-W1.1/	0.00 /	R1030-W2.1/	0.00 /
R0990-W3.1/	0.00 /	R2002-W1.1/	23.88 /
R1000-W1.1/	0.00 /	R2370-W4.1/	0.00 /
R1030-W1.1/	0.00 /	R0440-W2.1/	0.00 /
R1030-W2.1/	0.00 /	R021-W1.1/	0.00 /
R2040-W1.1/	0.00 /	R042-W1.1/	0.00 /
R2090-W1.1/	0.00 /		
R2380-W2.1/	0.00 /		
R2380-W3.1/	0.00 /		
R015-W1.1/	0.00 /		
R020-W1.1/	-0.29 /		
R030-W1.1/	0.00 /		
R031-W1.1/	0.00 /		
R043-W1.1/	0.00 /		
R0850-W1.1/	0.00 /		
Conduit/	Width		
R0870/	0.03 /	R0770-P2/	3.66 /

R0900/	0.03 /			
	R0370/	2.87 /	R0280/	0.89 /
R0202/	1.46 /			
	RN-002/	0.78 /	RN-003/	0.78 /
RN-006/	1.18 /			
	RN-007/	0.98 /	RN-009/	1.18 /
RN-009MH/	0.98 /			
	RN-011/	1.42 /	RN-014/	2.06 /
RN-012/	3.27 /			
	RN-023/	0.89 /	RN-021/	1.25 /
RN-041/	2.42 /			
	RN-020/	2.12 /	RN-022/	2.87 /
RN-024/	2.30 /			
	RN-026/	1.48 /	RN-027/	0.01 /
RN-028/	0.01 /			
	R0742-P3/	0.84 /	R0655-P2/	0.53 /
R0655-P3/	0.83 /			
	R0655-P4/	0.83 /	R0120-P2/	2.47 /
R1010-P2/	1.16 /			
	RN-025-P1/	1.16 /	RN-025-P2/	1.18 /
R0155-P1/	3.33 /			
	R0386/	21.27 /	R0388/	21.27 /
R0385/	21.27 /			
	R0375/	32.01 /	R0335/	15.79 /
R-0001B-P1/	2.89 /			
	R0540-P1/	0.82 /	R0540-P2/	0.78 /
R0540-P3/	0.78 /			
	R0290-P1/	2.49 /	R0285.1/	1.38 /
R0250.1/	0.82 /			
	R0230.1/	1.54 /	R0220.1/	6.23 /
R0200.1/	0.02 /			
	R0190.1/	0.01 /	R0170.1/	3.47 /
R0180-P1/	1.28 /			
	R0180-P2/	1.28 /	R0140.1/	0.78 /
R0140-P3.1/	0.78 /			
	R0150-P1/	0.78 /	R0150-P2/	0.44 /
R0150-P3/	0.65 /			
	R0150-P4/	0.83 /	R0150-P5/	0.49 /
R0110.1/	1.88 /			
	R0130-P1/	4.37 /	R0130-P2/	4.37 /
R0100-P1/	2.66 /			
	R0100-P2/	2.81 /	R0310.1/	2.31 /
R0430-P1/	2.00 /			
	R0430-P2/	2.00 /	R0430-P3/	2.00 /
R0430-P4/	1.97 /			
	R0340-P1/	2.80 /	R0340-P2/	3.25 /
R0350-P1/	1.15 /			
	R0350-P2/	1.15 /	R0330-P1/	0.06 /
R0330-P2/	0.06 /			
	R0450-P1/	2.35 /	R0450-P2/	2.35 /

P0360-P1/	1.40 /			
	P0360-P2/	0.84 /	R0550-P1/	4.00 /
R0550-P2/	4.00 /			
	R0560-P1/	3.95 /	R0560-P2/	3.95 /
R0560-P3/	3.95 /			
	R0780.1/	3.95 /	R0740.1/	0.73 /
R0730.1/	0.01 /			
	R0880.1/	0.00 /	R0950.1/	1.46 /
R0920.1/	2.81 /			
	R0960.1/	0.98 /	R0990.1/	1.98 /
R1010-P3/	2.34 /			
	R1010-P4/	2.35 /	R1010-P5/	2.31 /
R0980-P1.1/	2.27 /			
	R0980-P2.1/	1.12 /	R0850-P1/	1.38 /
R0850-P2/	1.06 /			
	R0850-P3/	0.98 /	R0570-P1/	2.44 /
R0570-P2/	2.43 /			
	R0570-P3/	2.66 /	R0770-P1.1/	0.01 /
R0770-P3/	1.55 /			
	R0770-P4/	1.51 /	R0790-P1/	4.08 /
R0790-P2/	1.55 /			
	R0530-P1/	0.82 /	R0530-P2/	0.83 /
R0530-P3/	0.85 /			
	R0910-P1/	0.02 /	R0910-P2/	0.02 /
R0380-P1/	1.49 /			
	R0380-P2/	1.49 /	R0300-P1/	0.01 /
R0300-P2/	0.01 /			
	R0290-P2.1/	0.87 /	RN-004-P1/	0.98 /
RN-004-P2/	0.98 /			
	RN-004-P3/	0.98 /	RN-001-P1/	2.26 /
RN-001-P2/	2.09 /			
	RN-001-P3/	2.27 /	RN-005-P1/	2.45 /
RN-005-P2/	2.45 /			
	RN-005-P3/	2.47 /	RN-008-P1.1/	2.99 /
RN-008-P2/	2.99 /			
	RN-008-P3/	2.97 /	RN-010-P1/	2.65 /
RN-010-P2/	2.71 /			
	RN-010-P3/	2.76 /	RN-013-P1/	2.69 /
RN-013-P2/	2.69 /			
	RN-013-P3/	2.69 /	RN-015-P1/	1.34 /
RN-015-P2/	1.14 /			
	RN-015-P3/	1.16 /	RN-029-P1/	1.72 /
RN-029-P2/	1.61 /			
	R0742-P1/	2.58 /	R0742-P2/	2.58 /
R0655-P1.1/	0.49 /			
	R0490-P8/	0.01 /	R0490-P7/	0.01 /
R0140-P2.1/	0.97 /			
	R0140-P1.1/	0.97 /	R0120-P1.1/	2.21 /
R0160-P1.1/	0.53 /			
	R0325-P1.1/	0.00 /	R0400-P1.1/	0.00 /

R0880-P2.1/	0.00 /		
R1010-P1.1/	1.29 /	R-0410-P4/	0.01 /
R-0410-P5/	0.01 /		
R-0410-P6/	0.01 /	R-0410-P7/	0.01 /
R0410-P1/	1.09 /		
R0410-P2/	1.09 /	R0410-P3/	1.09 /
498.1/	0.01 /		
R0490-P1.1/	0.01 /	R0490-P3/	0.01 /
R0490-P4/	0.01 /		
R0490-P5/	0.01 /	R0490-P6/	0.01 /
R0890-ORF-2/	0.00 /		
R0890-ORF-5/	0.00 /	R0890ORF-3/	0.00 /
R0890-ORF-4/	0.00 /		
N0140-A-W1.1/	10.32 /	R0540-W3/	0.00 /
R0290-P5/	0.00 /		
R0285-W2/	0.00 /	R0250-W1/	0.00 /
R0230-W1/	0.00 /		
R0220-W2/	0.00 /	R0200-W3/	0.00 /
R0190-W4/	0.00 /		
R0170-W3/	0.00 /	R0180-W1/	0.00 /
R0140-W1/	0.00 /		
R0150-W3/	0.00 /	R0110-W1/	0.00 /
R0130-W1/	0.00 /		
R0100-W4/	0.00 /	R0310-W5.1/	0.00 /
R0430-W3/	0.00 /		
R0340-W3/	0.00 /	R0350-W1/	0.00 /
R0330-W1/	0.00 /		
R0360-W1/	0.00 /	R0550-W2/	0.00 /
R0560-W1/	0.00 /		
R0780-W1/	0.00 /	R0740-W3/	0.00 /
R0870-W1/	0.00 /		
R0950-W1/	0.00 /	R0960-W2/	0.00 /
R0990-W2/	0.00 /		
R1010-W2/	0.00 /	R0980-W2/	0.00 /
R0850-W2/	0.00 /		
R0770-W2/	0.00 /	R0530-W4/	0.00 /
R0380-W3/	0.00 /		
R0300-W2/	0.00 /	R0290-W1/	0.00 /
R0655-W2/	0.00 /		
R0140-W2/	0.00 /	R0120-W2/	0.00 /
R0160-W1/	0.00 /		
R0400-W1/	0.00 /	R0880-W2/	0.00 /
R1010-W1/	0.00 /		
R0490-W2/	0.00 /	R0050-W1.1/	0.00 /
R0050-W2.1/	0.00 /		
R0060-W1.1/	0.00 /	R0080-W1.1/	0.00 /
R0080-W2.1/	0.00 /		
R0090-W1.1/	0.00 /	R0090-W2.1/	0.00 /
R0090-W3.1/	0.00 /		
R0090-W4.1/	0.00 /	R0100-W1.1/	0.00 /

R0100-W2.1/	0.00 /				
	R0100-W3.1/	0.00 /		R0110-W2.1/	0.00 /
R0120-W1.1/	0.00 /				
	R0130-W2.1/	0.00 /		R0150-W1.1/	0.00 /
R0150-W2.1/	0.00 /				
	R0170-W1.1/	0.00 /		R0170-W2.1/	0.00 /
R0190-W1.1/	0.00 /				
	R0190-W2.1/	0.00 /		R0190-W3.1/	0.00 /
R0200-W1.1/	0.00 /				
	R0200-W2.1/	0.00 /		R0220-W1.1/	0.00 /
R0240-W1.1/	0.00 /				
	R0240-W2.1/	0.00 /		R0240-W3.1/	0.00 /
R0240-W4.1/	0.00 /				
	R0240-W5.1/	0.00 /		R0240-W6.1/	0.00 /
R0250-W2.1/	0.00 /				
	R0250-W3.1/	0.00 /		R0260-W1.1/	0.00 /
R0270-W1.1/	0.00 /				
	R0270-W3/	0.00 /		R0270-W2.1/	0.00 /
R0275-W1.1/	0.00 /				
	R0280-W1.1/	0.00 /		R0285-W1.1/	0.00 /
R0290-W2.1/	0.00 /				
	R0290-W3.1/	0.00 /		R0290-W4.1/	0.00 /
R0300-W1.1/	0.00 /				
	R0310-W1.1/	0.00 /		R0310-W2.1/	0.00 /
R0310-W3.1/	0.00 /				
	R0310-W4.1/	0.00 /		R0325-W2.1/	0.00 /
R0330-W2.1/	0.00 /				
	R0330-W3.1/	0.00 /		R0340-W1.1/	0.00 /
R0340-W2.1/	0.00 /				
	R0350-W2.1/	0.00 /		R0350-W3.1/	0.00 /
R0360-W2.1/	0.00 /				
	R0360-W3.1/	0.00 /		R0370-W1.1/	0.00 /
R0370-W2.1/	0.00 /				
	R0370-W3.1/	0.00 /		R0380-W1.1/	0.00 /
R0380-W2.1/	0.00 /				
	R0380-W4.1/	0.00 /		R0390-W1.1/	0.00 /
R0390-W2/	0.00 /				
	R0400-W2.1/	0.00 /		R0410-W1.1/	0.00 /
R0420-W1.1/	0.00 /				
	R0420-W2.1/	0.00 /		R0430-W1.1/	0.00 /
R0430-W2.1/	0.00 /				
	R0440-W1.1/	0.00 /		R0450-W1.1/	0.00 /
R0450-W2.1/	0.00 /				
	R0460-W1.1/	0.00 /		R0460-W2.1/	0.00 /
R0480-W1.1/	0.00 /				
	R0480-W2.1/	0.00 /		R0480-W3.1/	0.00 /
R0490-W1.1/	0.00 /				
	R0490-W3.1/	0.00 /		R0500-W1.1/	0.00 /
R0510-W2.1/	0.00 /				
	R0520-W1.1/	0.00 /		R0520-W2.1/	0.00 /

R0530-W1.1/	0.00 /				
	R0530-W2.1/	0.00 /		R0530-W3/	0.00 /
R0540-W1.1/	0.00 /				
	R0540-W2.1/	0.00 /		R0550-W1.1/	0.00 /
R0550-W3.1/	0.00 /				
	R0560-W2.1/	0.00 /		R0560-W3.1/	0.00 /
R0560-W4.1/	0.00 /				
	R0560-W5.1/	0.00 /		R0570-W1.1/	0.00 /
R0570-W3.1/	0.00 /				
	R0570-W4.1/	0.00 /		R0570-W5.1/	0.00 /
R0640-W1.1/	0.00 /				
	R0650-W1.1/	0.00 /		R0660-W1.1/	0.00 /
R0660-W2.1/	0.00 /				
	R0690-W2.1/	0.00 /		R0720-W1.1/	0.00 /
R0730-W1.1/	0.00 /				
	R0740-W2.1/	0.00 /		R0740-W4.1/	0.00 /
R0775-W1.1/	0.00 /				
	R0780-W2.1/	0.00 /		R0790-W1/	0.00 /
R0800-W1.1/	0.00 /				
	R0800-W2.1/	0.00 /		R0810-W1.1/	0.00 /
R0830-W3.1/	0.00 /				
	R0850-W3.1/	0.00 /		R0870-W2.1/	0.00 /
R0885-W1.1/	0.00 /				
	R0910-W2.1/	0.00 /		R0930-W1.1/	0.00 /
R0940-W1.1/	0.00 /				
	R0940-W2.1/	0.00 /		R0945-W1.1/	0.00 /
R0950-W2.1/	0.00 /				
	R0960-W1.1/	0.00 /		R0960-W3.1/	0.00 /
R0960-W4.1/	0.00 /				
	R0980-W1.1/	0.00 /		R0990-W1.1/	0.00 /
R0990-W3.1/	0.00 /				
	R1000-W1.1/	0.00 /		R1020-W1.1/	0.00 /
R1030-W1.1/	0.00 /				
	R1030-W2.1/	0.00 /		R2002-W1.1/	0.00 /
R02040-W1.1/	0.00 /				
	R2090-W1.1/	0.00 /		R2370-W4.1/	0.00 /
R2380-W2.1/	0.00 /				
	R2380-W3.1/	0.00 /		R0440-W2.1/	0.00 /
R015-W1.1/	0.00 /				
	R020-W1.1/	0.00 /		R021-W1.1/	0.00 /
R030-W1.1/	0.00 /				
	R031-W1.1/	0.00 /		R042-W1.1/	0.00 /
R043-W1.1/	0.00 /				
	R0850-W1.1/	0.00 /			

	Junction/	EGL			
	N0335/	1.04 /		N0550/	2.11 /
N0690/	4.01 /				
	N0640/	4.61 /		N0780/	5.30 /
N0830/	3.26 /				

N0870/	N0790/	4.19 /	N0800/	2.26 /
	4.69 /			
N0390/	N0510/	2.29 /	N0520/	4332.07 /
	2.76 /			
N0770/	N0350/	3.73 /	N0450/	2.34 /
	4.26 /			
N0920/	N0720/	1.73 /	N0960/	0.00 /
	2.78 /			
N0915/	N0950/	1.63 /	N0970/	2.42 /
	7.21 /			
N0810/	N0885/	8.12 /	N0560/	3.60 /
	2.63 /			
N1000/	N0570/	4.05 /	N0990/	0.85 /
	1.92 /			
N0890/	N1020/	3.42 /	N1030/	2.77 /
	3.43 /			
N0980/	N0850/	0.25 /	N0930/	5.63 /
	0.80 /			
N0500/	N1010/	1.38 /	N0430/	1.17 /
	2.63 /			
N0200/	N0230/	1.58 /	N0220/	1.44 /
	3.74 /			
N0100/	N0190/	3.09 /	N0130/	2.07 /
	1.01 /			
N0110/	N0090/	2.93 /	N0120/	1.54 /
	0.70 /			
N0260/	N0170/	2.01 /	N0210/	1.01 /
	2.85 /			
N0140/	N0250/	2.59 /	N0240/	3.45 /
	3.31 /			
N0290/	N0150/	0.00 /	N0270/	2.55 /
	1.23 /			
N0285/	N0180/	2.85 /	N0370/	1.26 /
	0.18 /			
N0410/	N0420/	1.60 /	N0490/	3.14 /
	4.06 /			
N0740/	N0380/	2.26 /	N0660/	2.30 /
	2.45 /			
N0530/	N0730/	3.48 /	N0940/	2.60 /
	0.00 /			
N0325/	N0060/	2.76 /	N0050/	3.58 /
	5.41 /			
N0540/	N0160/	2.60 /	N0470/	2.32 /
	0.29 /			
N0360/	N0650/	2.06 /	N0400/	3.65 /
	2.22 /			
N0310/	N0480/	2.08 /	N0080/	2.58 /
	2.10 /			
N0440/	N0300/	4.89 /	N0460/	3.21 /
	2.35 /			

N0375/	N0330/ 2.24 /	4.47 /	N0655/	2.92 /
N0280/	N0385/ 0.67 /	3.20 /	N0275/	0.09 /
N0515/	N0202/ 1.98 /	5.70 /	N0340/	2.83 /
N-003/	N-001/ 0.00 /	3.10 /	N-002/	0.47 /
N-008/	N-004/ 2.42 /	0.00 /	N-005/	1.75 /
N-015/	N-010/ 3.11 /	2.21 /	N-013/	3.08 /
N-009/	N-006/ 0.00 /	0.00 /	N-007/	0.00 /
N-012/	N-011/ 0.44 /	0.00 /	N-014/	0.37 /
N-021/	N-025/ 2.27 /	3.26 /	N-023/	1.34 /
N-020/	N-019/ 0.41 /	2.55 /	N-041/	1.55 /
N-029/	N-022/ 2.77 /	0.83 /	N-024/	2.06 /
N-028/	N-026/ 2.10 /	0.78 /	N-027/	2.12 /
N-042/	N-030/ 1.23 /	0.19 /	N-043/	1.27 /
N0620/	N-031/ 0.81 /	0.93 /	N-040/	2.50 /
N0205/	N0900/ 5.63 /	4.21 /	N-009mh/	2.41 /
N0775/	N0386/ 1.56 /	2.54 /	N0388/	2.54 /
N0155/	N2040/ 1.12 /	1.87 /	N2380/	2.97 /
N2090/	N0945/ 2.23 /	2.33 /	N2002/	3.72 /
N0880/	N0742/ 8.12 /	1.72 /	N0910/	7.21 /
N9004-C/	N9004/ 4.46 /	4.66 /	N9004-B/	4.71 /
N9001-B/	N9004-D/ 3.39 /	4.60 /	N9004-F/	3.09 /
N9000/	N9001-D/ 2.95 /	1.86 /	N9001-F/	1.86 /
N9005-E/	N9003/ 0.96 /	0.96 /	N9005/	0.96 /
N9004-G/	N9005-G/ 3.01 /	2.18 /	N9004-J/	3.25 /
N9000-B/	N9002/ 2.95 /	2.27 /	N2370/	3.25 /

N9000-F/	N9000-C/	2.95 /	N9000-E/	2.95 /
	2.95 /			
N9001-H/	N9001-E/	3.05 /	N9001-G/	1.86 /
	1.86 /			
N9002-A/	N9001-J/	1.13 /	N9001-K/	1.13 /
	2.27 /			
N9003-B/	N9002-B/	2.27 /	N9003-A/	0.96 /
	0.96 /			
N9003-E/	N9003-C/	0.96 /	N9003-D/	0.96 /
	0.96 /			
N9004-A/	N9003-F/	0.96 /	N9003-G/	0.96 /
	4.66 /			
N9004-I/	N9004-E/	4.60 /	N9004-H/	3.09 /
	3.09 /			
N9005-B/	N9004-K/	41.35 /	N9005-A/	0.96 /
	0.96 /			
N9005-F/	N9005-C/	0.96 /	N9005-D/	0.96 /
	2.17 /			
N-0001A/	N9005-H/	0.96 /	N9000-D/	3.21 /
	8.89 /			
N-0001-E/	N-0001B/	1.97 /	N0001-C/	0.46 /
	0.50 /			
N-0001-G/	N-0001E-OF/	0.00 /	N-0001-F/	0.31 /
	0.80 /			
N9004-L/	N-0001F-OF-A/	0.00 /	N-0001F-OF-B/	0.00 /
	4.74 /			
N9005-K/	N0001-J/	0.05 /	N9005-J/	0.96 /
	0.96 /			
N0140-A/	N0001-I/	0.76 /	N-0001K/	0.78 /
	3.49 /			

Junction/ Freeboard

N0690/	N0335/	5.84 /	N0550/	25.61 /
	3.51 /			
N0830/	N0640/	12.86 /	N0780/	3.99 /
	6.50 /			
N0870/	N0790/	6.03 /	N0800/	2.42 /
	7.80 /			
N0390/	N0510/	5.81 /	N0520/	7.81 /
	18.36 /			
N0770/	N0350/	5.92 /	N0450/	6.45 /
	5.70 /			
N0920/	N0720/	6.08 /	N0960/	5.65 /
	5.40 /			
N0915/	N0950/	6.52 /	N0970/	7.97 /
	6.62 /			
N0810/	N0885/	6.28 /	N0560/	6.38 /
	1001.82 /			
N1000/	N0570/	26.42 /	N0990/	4.22 /
	14.89 /			

N0890/	N1020/ 15.74 /	6.14 /	N1030/	5.52 /
N0980/	N0850/ 12.25 /	12.15 /	N0930/	13.67 /
N0500/	N1010/ 9.07 /	5.70 /	N0430/	9.32 /
N0200/	N0230/ 9.35 /	3.60 /	N0220/	8.31 /
N0100/	N0190/ 9.24 /	7.25 /	N0130/	11.22 /
N0110/	N0090/ 8.15 /	2.07 /	N0120/	8.89 /
N0260/	N0170/ 10.67 /	12.28 /	N0210/	14.75 /
N0140/	N0250/ 8.95 /	5.19 /	N0240/	2.23 /
N0290/	N0150/ 5.96 /	13.42 /	N0270/	12.84 /
N0285/	N0180/ 12.44 /	7.98 /	N0370/	8.14 /
N0410/	N0420/ 23.04 /	25.81 /	N0490/	12.09 /
N0740/	N0380/ 31.05 /	26.44 /	N0660/	16.85 /
N0530/	N0730/ 25.57 /	9.57 /	N0940/	7.00 /
N0325/	N0060/ 1000.56 /	19.95 /	N0050/	7.03 /
N0540/	N0160/ 10.30 /	9.16 /	N0470/	9.69 /
N0360/	N0650/ 6.09 /	11.22 /	N0400/	1001.85 /
N0310/	N0480/ 9.50 /	11.93 /	N0080/	6.92 /
N0440/	N0300/ 10.03 /	19.50 /	N0460/	9.98 /
N0375/	N0330/ 3.19 /	6.47 /	N0655/	11.01 /
N0280/	N0385/ 11.11 /	5.55 /	N0275/	13.96 /
N0515/	N0202/ 6.62 /	2.87 /	N0340/	9.52 /
N-003/	N-001/ 7.15 /	25.30 /	N-002/	5.64 /
N-008/	N-004/ 10.03 /	8.37 /	N-005/	6.64 /
N-015/	N-010/ 8.77 /	9.17 /	N-013/	7.05 /
N-009/	N-006/ 9.77 /	8.17 /	N-007/	9.65 /

N-012/	N-011/	10.45 /	N-014/	9.12 /
	11.38 /			
N-021/	N-025/	8.64 /	N-023/	4.74 /
	8.36 /			
N-020/	N-019/	8.39 /	N-041/	12.93 /
	9.27 /			
N-029/	N-022/	8.67 /	N-024/	8.97 /
	5.68 /			
N-028/	N-026/	8.95 /	N-027/	9.36 /
	4.92 /			
N-042/	N-030/	8.02 /	N-043/	8.32 /
	8.45 /			
N0620/	N-031/	10.28 /	N-040/	9.82 /
	4.79 /			
N0205/	N0900/	3.79 /	N-009mh/	3.59 /
	1.87 /			
N0775/	N0386/	5.55 /	N0388/	5.55 /
	5.55 /			
N0155/	N2040/	5.16 /	N2380/	18.91 /
	6.71 /			
N2090/	N0945/	4.31 /	N2002/	5.98 /
	8.19 /			
N0880/	N0742/	4.79 /	N0910/	1.79 /
	1001.39 /			
N9004-C/	N9004/	8.08 /	N9004-B/	-1.91 /
	-1.91 /			
N9001-B/	N9004-D/	-1.91 /	N9004-F/	-1.84 /
	4.34 /			
N9000/	N9001-D/	0.64 /	N9001-F/	0.64 /
	-0.45 /			
N9005-E/	N9003/	1001.64 /	N9005/	1001.64 /
	2.44 /			
N9004-G/	N9005-G/	2.52 /	N9004-J/	-0.25 /
	-0.01 /			
N9000-B/	N9002/	1.23 /	N2370/	10.68 /
	-0.45 /			
N9000-F/	N9000-C/	-0.45 /	N9000-E/	-0.45 /
	-0.45 /			
N9001-H/	N9001-E/	-0.05 /	N9001-G/	0.64 /
	0.64 /			
N9002-A/	N9001-J/	-0.96 /	N9001-K/	-0.96 /
	1.23 /			
N9003-B/	N9002-B/	1.23 /	N9003-A/	1001.64 /
	1001.64 /			
N9003-E/	N9003-C/	1001.64 /	N9003-D/	1001.64 /
	1001.64 /			
N9004-A/	N9003-F/	1001.64 /	N9003-G/	1001.64 /
	-1.91 /			
N9004-I/	N9004-E/	-1.91 /	N9004-H/	-1.84 /
	-1.84 /			

N9005-B/	N9004-K/	-0.25 /	N9005-A/	1001.64 /
	1001.64 /			
	N9005-C/	1001.64 /	N9005-D/	1001.64 /
N9005-F/	2.44 /			
	N9005-H/	2.52 /	N9000-D/	4.04 /
N-0001A/	14.81 /			
	N-0001B/	5.53 /	N0001-C/	8.44 /
N-0001-E/	0.70 /			
	N-0001E-OF/	1.87 /	N-0001-F/	1.19 /
N-0001-G/	1.20 /			
	N-0001F-OF-A/	1.87 /	N-0001F-OF-B/	1.87 /
N9004-L/	8.08 /			
	N0001-J/	7.35 /	N9005-J/	2.44 /
N9005-K/	2.44 /			
	N0001-I/	5.94 /	N-0001K/	5.72 /
N0140-A/	8.91 /			

Junction/ Max Volume				
	N0335/	45.53 /	N0550/	231884.76 /
N0690/	24108.01 /			
	N0640/	241736.76 /	N0780/	20097.25 /
N0830/	219424.53 /			
	N0790/	1100180.73 /	N0800/	125129.89 /
N0870/	149094.46 /			
	N0510/	2410692.19 /	N0520/	5733432.18 /
N0390/	4269109.78 /			
	N0350/	147419.40 /	N0450/	3663626.38 /
N0770/	989469.18 /			
	N0720/	789671.59 /	N0960/	2702.12 /
N0920/	82082.66 /			
	N0950/	6340.12 /	N0970/	122645.38 /
N0915/	2986691.91 /			
	N0885/	2623320.74 /	N0560/	651554.70 /
N0810/	5698350.22 /			
	N0570/	921263.65 /	N0990/	23533.76 /
N1000/	493973.03 /			
	N1020/	1330952.99 /	N1030/	98239.07 /
N0890/	2434034.94 /			
	N0850/	20164.59 /	N0930/	1568663.70 /
N0980/	77242.04 /			
	N1010/	1129.70 /	N0430/	627.16 /
N0500/	972663.43 /			
	N0230/	22556.73 /	N0220/	1289.86 /
N0200/	22459.97 /			
	N0190/	5091.69 /	N0130/	80223.75 /
N0100/	841.47 /			
	N0090/	164325.64 /	N0120/	847.73 /
N0110/	180239.66 /			
	N0170/	5139.43 /	N0210/	1070863.62 /
N0260/	3254206.98 /			

	N0250/	215444.48 /		N0240/	185066.35 /
N0140/	94806.24 /			N0270/	595723.39 /
	N0150/	2456.78 /			
N0290/	48105.03 /			N0370/	23421.53 /
	N0180/	300940.64 /			
N0285/	9568.61 /			N0490/	266010.25 /
	N0420/	571838.69 /			
N0410/	2632248.15 /			N0660/	293766.54 /
	N0380/	688625.24 /			
N0740/	236645.79 /			N0940/	1090378.14 /
	N0730/	1855052.31 /			
N0530/	6068.05 /			N0050/	227369.12 /
	N0060/	1532936.86 /			
N0325/	235.75 /			N0470/	4703707.78 /
	N0160/	380480.87 /			
N0540/	9291.97 /			N0400/	3920761.13 /
	N0650/	75662.58 /			
N0360/	341308.22 /			N0080/	121510.47 /
	N0480/	4028649.72 /			
N0310/	203097.88 /			N0460/	2476747.63 /
	N0300/	489202.64 /			
N0440/	1336726.62 /			N0655/	33012.12 /
	N0330/	911890.07 /			
N0375/	144.34 /			N0275/	8091.28 /
	N0385/	68.69 /			
N0280/	41982.18 /			N0340/	61037.08 /
	N0202/	260.30 /			
N0515/	876635.39 /			N-002/	7846.32 /
	N-001/	49104.54 /			
N-003/	818.13 /			N-005/	10135.70 /
	N-004/	516.32 /			
N-008/	20768.89 /			N-013/	109841.72 /
	N-010/	28605.34 /			
N-015/	956105.32 /			N-007/	332.43 /
	N-006/	389.96 /			
N-009/	528.61 /			N-014/	19439.93 /
	N-011/	567.36 /			
N-012/	362.86 /			N-023/	6977.90 /
	N-025/	46363.65 /			
N-021/	5063.50 /			N-041/	175804.62 /
	N-019/	96764.58 /			
N-020/	6313.29 /			N-024/	56804.10 /
	N-022/	9299.43 /			
N-029/	41979.77 /			N-027/	19008.09 /
	N-026/	340.34 /			
N-028/	1986.65 /			N-043/	70558.24 /
	N-030/	109189.89 /			
N-042/	247763.06 /			N-040/	1440358.90 /
	N-031/	101539.79 /			
N0620/	16467.64 /				

	N0900/	551.96 /		N-009mh/	156.73 /
N0205/	86475.61 /				
	N0386/	668.60 /		N0388/	2135.53 /
N0775/	625223.73 /				
	N2040/	1180918.52 /		N2380/	1294329.29 /
N0155/	9057.36 /				
	N0945/	601497.89 /		N2002/	4337012.58 /
N2090/	549102.06 /				
	N0742/	395.16 /		N0910/	47160.49 /
N0880/	356423.63 /				
	N9004/	58.56 /		N9004-B/	59.19 /
N9004-C/	56.05 /				
	N9004-D/	57.81 /		N9004-F/	38.83 /
N9001-B/	38.33 /				
	N9001-D/	23.38 /		N9001-F/	23.38 /
N9000/	37.07 /				
	N9003/	12.07 /		N9005/	12.07 /
N9005-E/	12.07 /				
	N9005-G/	12.07 /		N9004-J/	40.84 /
N9004-G/	37.83 /				
	N9002/	28.53 /		N2370/	3523711.45 /
N9000-B/	37.07 /				
	N9000-C/	37.07 /		N9000-E/	37.07 /
N9000-F/	37.07 /				
	N9001-E/	38.33 /		N9001-G/	23.38 /
N9001-H/	23.38 /				
	N9001-J/	14.24 /		N9001-K/	14.24 /
N9002-A/	28.53 /				
	N9002-B/	28.53 /		N9003-A/	12.07 /
N9003-B/	12.07 /				
	N9003-C/	12.07 /		N9003-D/	12.07 /
N9003-E/	12.07 /				
	N9003-F/	12.07 /		N9003-G/	12.07 /
N9004-A/	58.56 /				
	N9004-E/	57.81 /		N9004-H/	38.83 /
N9004-I/	38.83 /				
	N9004-K/	40.84 /		N9005-A/	12.07 /
N9005-B/	12.07 /				
	N9005-C/	12.07 /		N9005-D/	12.07 /
N9005-F/	12.07 /				
	N9005-H/	12.07 /		N9000-D/	40.34 /
N-0001A/	20262413.38 /				
	N-0001B/	26099.22 /		N0001-C/	112712.21 /
N-0001-E/	17231.29 /				
	N-0001E-OF/	0.00 /		N-0001-F/	180120.17 /
N-0001-G/	62406.71 /				
	N-0001F-OF-A/	0.00 /		N-0001F-OF-B/	0.00 /
N9004-L/	58.56 /				
	N0001-J/	272305.67 /		N9005-J/	12.07 /
N9005-K/	12.07 /				

	N0001-I/	442786.80 /	N-0001K/	134287.03 /
N0140-A/	8065.07 /			

Junction/Total Fldng

	N0335/	0.00 /	N0550/	0.00 /
N0690/	0.00 /			
	N0640/	0.00 /	N0780/	0.00 /
N0830/	0.00 /			
	N0790/	0.00 /	N0800/	0.00 /
N0870/	0.00 /			
	N0510/	0.00 /	N0520/	0.00 /
N0390/	0.00 /			
	N0350/	0.00 /	N0450/	0.00 /
N0770/	0.00 /			
	N0720/	0.00 /	N0960/	0.00 /
N0920/	0.00 /			
	N0950/	0.00 /	N0970/	0.00 /
N0915/	0.00 /			
	N0885/	0.00 /	N0560/	0.00 /
N0810/	0.00 /			
	N0570/	0.00 /	N0990/	0.00 /
N1000/	0.00 /			
	N1020/	0.00 /	N1030/	0.00 /
N0890/	0.00 /			
	N0850/	0.00 /	N0930/	0.00 /
N0980/	0.00 /			
	N1010/	0.00 /	N0430/	0.00 /
N0500/	0.00 /			
	N0230/	0.00 /	N0220/	0.00 /
N0200/	0.00 /			
	N0190/	0.00 /	N0130/	0.00 /
N0100/	0.00 /			
	N0090/	0.00 /	N0120/	0.00 /
N0110/	0.00 /			
	N0170/	0.00 /	N0210/	0.00 /
N0260/	0.00 /			
	N0250/	0.00 /	N0240/	0.00 /
N0140/	0.00 /			
	N0150/	0.00 /	N0270/	0.00 /
N0290/	0.00 /			
	N0180/	0.00 /	N0370/	0.00 /
N0285/	0.00 /			
	N0420/	0.00 /	N0490/	0.00 /
N0410/	0.00 /			
	N0380/	0.00 /	N0660/	0.00 /
N0740/	0.00 /			
	N0730/	0.00 /	N0940/	0.00 /
N0530/	0.00 /			
	N0060/	0.00 /	N0050/	0.00 /
N0325/	0.00 /			

N0540/	N0160/ 0.00 /	0.00 /	N0470/	0.00 /
N0360/	N0650/ 0.00 /	0.00 /	N0400/	0.00 /
N0310/	N0480/ 0.00 /	0.00 /	N0080/	0.00 /
N0440/	N0300/ 0.00 /	0.00 /	N0460/	0.00 /
N0375/	N0330/ 0.00 /	0.00 /	N0655/	0.00 /
N0280/	N0385/ 0.00 /	0.00 /	N0275/	0.00 /
N0515/	N0202/ 0.00 /	0.00 /	N0340/	0.00 /
N-003/	N-001/ 0.00 /	0.00 /	N-002/	0.00 /
N-008/	N-004/ 0.00 /	0.00 /	N-005/	0.00 /
N-015/	N-010/ 0.00 /	0.00 /	N-013/	0.00 /
N-009/	N-006/ 0.00 /	0.00 /	N-007/	0.00 /
N-012/	N-011/ 0.00 /	0.00 /	N-014/	0.00 /
N-021/	N-025/ 0.00 /	0.00 /	N-023/	0.00 /
N-020/	N-019/ 0.00 /	0.00 /	N-041/	0.00 /
N-029/	N-022/ 0.00 /	0.00 /	N-024/	0.00 /
N-028/	N-026/ 0.00 /	0.00 /	N-027/	0.00 /
N-042/	N-030/ 0.00 /	0.00 /	N-043/	0.00 /
N0620/	N-031/ 0.00 /	0.00 /	N-040/	0.00 /
N0205/	N0900/ 0.00 /	0.00 /	N-009mh/	0.00 /
N0775/	N0386/ 0.00 /	0.00 /	N0388/	0.00 /
N0155/	N2040/ 0.00 /	0.00 /	N2380/	0.00 /
N2090/	N0945/ 0.00 /	0.00 /	N2002/	0.00 /
N0880/	N0742/ 0.00 /	0.00 /	N0910/	0.00 /
N9004-C/	N9004/ 0.00 /	0.00 /	N9004-B/	0.00 /
N9001-B/	N9004-D/ 0.00 /	0.00 /	N9004-F/	0.00 /

N9000/	N9001-D/ 0.00 /	0.00 /	N9001-F/	0.00 /
N9005-E/	N9003/ 0.00 /	0.00 /	N9005/	0.00 /
N9004-G/	N9005-G/ 0.00 /	0.00 /	N9004-J/	0.00 /
N9000-B/	N9002/ 0.00 /	0.00 /	N2370/	0.00 /
N9000-F/	N9000-C/ 0.00 /	0.00 /	N9000-E/	0.00 /
N9001-H/	N9001-E/ 0.00 /	0.00 /	N9001-G/	0.00 /
N9002-A/	N9001-J/ 0.00 /	0.00 /	N9001-K/	0.00 /
N9003-B/	N9002-B/ 0.00 /	0.00 /	N9003-A/	0.00 /
N9003-E/	N9003-C/ 0.00 /	0.00 /	N9003-D/	0.00 /
N9004-A/	N9003-F/ 0.00 /	0.00 /	N9003-G/	0.00 /
N9004-I/	N9004-E/ 0.00 /	0.00 /	N9004-H/	0.00 /
N9005-B/	N9004-K/ 0.00 /	0.00 /	N9005-A/	0.00 /
N9005-F/	N9005-C/ 0.00 /	0.00 /	N9005-D/	0.00 /
N-0001A/	N9005-H/ 0.00 /	0.00 /	N9000-D/	0.00 /
N-0001-E/	N-0001B/ 0.00 /	0.00 /	N0001-C/	0.00 /
N-0001-G/	N-0001E-OF/ 0.00 /	0.00 /	N-0001-F/	0.00 /
N9004-L/	N-0001F-OF-A/ 0.00 /	0.00 /	N-0001F-OF-B/	0.00 /
N9005-K/	N0001-J/ 0.00 /	0.00 /	N9005-J/	0.00 /
N0140-A/	N0001-I/ 0.00 /	0.00 /	N-0001K/	0.00 /

Conduit/ Cross Sectional Area

R0900/	R0870/ 20.51 /	20.50 /	R0770-P2/	5.40 /
R0202/	R0370/ 20.56 /	3.65 /	R0280/	0.08 /
RN-006/	RN-002/ 0.00 /	0.00 /	RN-003/	0.00 /
RN-009MH/	RN-007/ 0.00 /	0.00 /	RN-009/	0.00 /
RN-012/	RN-011/ 9.42 /	0.04 /	RN-014/	0.48 /

RN-041/	RN-023/	1.67 /	RN-021/	0.63 /
	3.23 /			
	RN-020/	0.68 /	RN-022/	1.68 /
RN-024/	3.63 /			
	RN-026/	1.05 /	RN-027/	1.77 /
RN-028/	1.77 /			
	R0742-P3/	3.08 /	R0655-P2/	5.12 /
R0655-P3/	5.04 /			
	R0655-P4/	5.04 /	R0120-P2/	2.49 /
R1010-P2/	0.22 /			
	RN-025-P1/	7.08 /	RN-025-P2/	7.08 /
R0155-P1/	6.21 /			
	R0386/	20.34 /	R0388/	20.34 /
R0385/	20.34 /			
	R0375/	53.47 /	R0335/	8.34 /
R-0001B-P1/	4.74 /			
	R0540-P1/	0.02 /	R0540-P2/	0.02 /
R0540-P3/	0.00 /			
	R0290-P1/	2.35 /	R0285.1/	0.24 /
R0250.1/	3.08 /			
	R0230.1/	2.71 /	R0220.1/	7.73 /
R0200.1/	7.41 /			
	R0190.1/	3.16 /	R0170.1/	2.49 /
R0180-P1/	6.94 /			
	R0180-P2/	6.94 /	R0140.1/	0.00 /
R0140-P3.1/	0.00 /			
	R0150-P1/	0.00 /	R0150-P2/	0.02 /
R0150-P3/	0.02 /			
	R0150-P4/	0.02 /	R0150-P5/	0.00 /
R0110.1/	0.93 /			
	R0130-P1/	5.70 /	R0130-P2/	5.70 /
R0100-P1/	1.54 /			
	R0100-P2/	2.02 /	R0310.1/	3.53 /
R0430-P1/	1.68 /			
	R0430-P2/	1.68 /	R0430-P3/	1.68 /
R0430-P4/	1.88 /			
	R0340-P1/	8.21 /	R0340-P2/	6.95 /
R0350-P1/	9.89 /			
	R0350-P2/	9.89 /	R0330-P1/	9.68 /
R0330-P2/	9.68 /			
	R0450-P1/	3.51 /	R0450-P2/	3.51 /
P0360-P1/	1.26 /			
	P0360-P2/	1.69 /	R0550-P1/	6.26 /
R0550-P2/	6.24 /			
	R0560-P1/	6.60 /	R0560-P2/	6.57 /
R0560-P3/	6.58 /			
	R0780.1/	6.26 /	R0740.1/	3.24 /
R0730.1/	1.82 /			
	R0880.1/	0.00 /	R0950.1/	2.79 /
R0920.1/	5.03 /			

R1010-P3/	R0960.1/ 1.44 /	0.00 /	R0990.1/	1.28 /
R0980-P1.1/	R1010-P4/ 1.18 /	1.49 /	R1010-P5/	1.38 /
R0850-P2/	R0980-P2.1/ 0.09 /	0.11 /	R0850-P1/	0.21 /
R0570-P2/	R0850-P3/ 11.85 /	0.02 /	R0570-P1/	11.85 /
R0770-P3/	R0570-P3/ 12.72 /	11.62 /	R0770-P1.1/	7.08 /
R0790-P2/	R0770-P4/ 12.73 /	12.83 /	R0790-P1/	19.17 /
R0530-P3/	R0530-P1/ 0.03 /	0.02 /	R0530-P2/	0.02 /
R0380-P1/	R0910-P1/ 0.22 /	17.77 /	R0910-P2/	17.78 /
R0300-P2/	R0380-P2/ 3.17 /	0.22 /	R0300-P1/	3.17 /
RN-004-P2/	R0290-P2.1/ 0.00 /	0.05 /	RN-004-P1/	0.00 /
RN-001-P2/	RN-004-P3/ 0.85 /	0.00 /	RN-001-P1/	1.18 /
RN-005-P2/	RN-001-P3/ 1.82 /	1.20 /	RN-005-P1/	1.83 /
RN-008-P2/	RN-005-P3/ 3.29 /	1.95 /	RN-008-P1.1/	3.84 /
RN-010-P2/	RN-008-P3/ 5.39 /	3.01 /	RN-010-P1/	5.56 /
RN-013-P2/	RN-010-P3/ 5.44 /	5.25 /	RN-013-P1/	5.44 /
RN-015-P2/	RN-013-P3/ 7.21 /	5.44 /	RN-015-P1/	6.80 /
RN-029-P2/	RN-015-P3/ 6.81 /	7.08 /	RN-029-P1/	6.61 /
R0655-P1.1/	R0742-P1/ 5.12 /	1.38 /	R0742-P2/	1.38 /
R0140-P2.1/	R0490-P8/ 7.36 /	1.23 /	R0490-P7/	1.23 /
R0160-P1.1/	R0140-P1.1/ 5.08 /	7.36 /	R0120-P1.1/	3.76 /
R0880-P2.1/	R0325-P1.1/ 0.00 /	0.00 /	R0400-P1.1/	0.00 /
R-0410-P5/	R1010-P1.1/ 1.78 /	0.34 /	R-0410-P4/	1.78 /
R0410-P1/	R-0410-P6/ 9.45 /	1.78 /	R-0410-P7/	1.77 /
498.1/	R0410-P2/ 1.77 /	9.45 /	R0410-P3/	9.45 /
R0490-P4/	R0490-P1.1/ 1.24 /	1.78 /	R0490-P3/	1.24 /

	R0490-P5/	1.24 /		R0490-P6/	1.24 /
R0890-ORF-2/	0.55 /			R0890ORF-3/	0.55 /
	R0890-ORF-5/	0.55 /			
R0890-ORF-4/	0.55 /			R0540-W3/	2.60 /
	N0140-A-W1.1/	0.82 /			
R0290-P5/	2.60 /			R0250-W1/	2.60 /
	R0285-W2/	2.60 /			
R0230-W1/	3.20 /			R0200-W3/	3.20 /
	R0220-W2/	3.20 /			
R0190-W4/	3.20 /			R0180-W1/	2.60 /
	R0170-W3/	3.20 /			
R0140-W1/	3.20 /			R0110-W1/	3.20 /
	R0150-W3/	2.60 /			
R0130-W1/	3.20 /			R0310-W5.1/	2.60 /
	R0100-W4/	3.20 /			
R0430-W3/	3.20 /			R0350-W1/	2.60 /
	R0340-W3/	2.60 /			
R0330-W1/	2.60 /			R0550-W2/	3.20 /
	R0360-W1/	2.60 /			
R0560-W1/	2.60 /			R0740-W3/	3.20 /
	R0780-W1/	3.20 /			
R0870-W1/	2.60 /			R0960-W2/	2.60 /
	R0950-W1/	2.60 /			
R0990-W2/	3.20 /			R0980-W2/	3.20 /
	R1010-W2/	3.20 /			
R0850-W2/	2.60 /			R0530-W4/	3.20 /
	R0770-W2/	3.20 /			
R0380-W3/	2.60 /			R0290-W1/	2.60 /
	R0300-W2/	2.60 /			
R0655-W2/	3.20 /			R0120-W2/	3.20 /
	R0140-W2/	2.60 /			
R0160-W1/	2.60 /			R0880-W2/	3.20 /
	R0400-W1/	3.20 /			
R1010-W1/	3.20 /			R0050-W1.1/	3.20 /
	R0490-W2/	2.60 /			
R0050-W2.1/	3.20 /			R0080-W1.1/	3.20 /
	R0060-W1.1/	3.20 /			
R0080-W2.1/	3.20 /			R0090-W2.1/	3.20 /
	R0090-W1.1/	3.20 /			
R0090-W3.1/	3.20 /			R0100-W1.1/	3.20 /
	R0090-W4.1/	3.20 /			
R0100-W2.1/	3.20 /			R0110-W2.1/	3.20 /
	R0100-W3.1/	3.20 /			
R0120-W1.1/	3.20 /			R0150-W1.1/	2.60 /
	R0130-W2.1/	3.20 /			
R0150-W2.1/	3.20 /			R0170-W2.1/	3.20 /
	R0170-W1.1/	3.20 /			
R0190-W1.1/	3.20 /			R0190-W3.1/	3.20 /
	R0190-W2.1/	3.20 /			
R0200-W1.1/	3.20 /				

R0200-W2.1/	3.20 /	R0220-W1.1/	3.20 /
R0240-W1.1/	3.20 /		
R0240-W2.1/	2.60 /	R0240-W3.1/	3.20 /
R0240-W4.1/	2.60 /		
R0240-W5.1/	2.60 /	R0240-W6.1/	3.20 /
R0250-W2.1/	2.60 /		
R0250-W3.1/	2.60 /	R0260-W1.1/	2.60 /
R0270-W1.1/	2.60 /		
R0270-W3/	2.60 /	R0270-W2.1/	2.60 /
R0275-W1.1/	3.20 /		
R0280-W1.1/	2.60 /	R0285-W1.1/	2.60 /
R0290-W2.1/	2.60 /		
R0290-W3.1/	2.60 /	R0290-W4.1/	2.60 /
R0300-W1.1/	3.20 /		
R0310-W1.1/	3.20 /	R0310-W2.1/	2.60 /
R0310-W3.1/	3.20 /		
R0310-W4.1/	3.20 /	R0325-W2.1/	2.60 /
R0330-W2.1/	1.65 /		
R0330-W3.1/	2.60 /	R0340-W1.1/	2.60 /
R0340-W2.1/	2.60 /		
R0350-W2.1/	2.60 /	R0350-W3.1/	2.60 /
R0360-W2.1/	2.60 /		
R0360-W3.1/	3.20 /	R0370-W1.1/	2.60 /
R0370-W2.1/	3.20 /		
R0370-W3.1/	2.60 /	R0380-W1.1/	2.60 /
R0380-W2.1/	2.60 /		
R0380-W4.1/	2.60 /	R0390-W1.1/	2.60 /
R0390-W2/	2.60 /		
R0400-W2.1/	2.60 /	R0410-W1.1/	2.60 /
R0420-W1.1/	2.60 /		
R0420-W2.1/	2.60 /	R0430-W1.1/	3.20 /
R0430-W2.1/	3.20 /		
R0440-W1.1/	2.60 /	R0450-W1.1/	2.60 /
R0450-W2.1/	2.60 /		
R0460-W1.1/	2.60 /	R0460-W2.1/	834.08 /
R0480-W1.1/	2.60 /		
R0480-W2.1/	2.60 /	R0480-W3.1/	2.60 /
R0490-W1.1/	2.60 /		
R0490-W3.1/	2.60 /	R0500-W1.1/	3.20 /
R0510-W2.1/	3.20 /		
R0520-W1.1/	2.60 /	R0520-W2.1/	3.20 /
R0530-W1.1/	3.20 /		
R0530-W2.1/	3.20 /	R0530-W3/	3.20 /
R0540-W1.1/	2.60 /		
R0540-W2.1/	2.60 /	R0550-W1.1/	3.20 /
R0550-W3.1/	3.20 /		
R0560-W2.1/	2.60 /	R0560-W3.1/	2.60 /
R0560-W4.1/	3.20 /		
R0560-W5.1/	2.60 /	R0570-W1.1/	3.20 /
R0570-W3.1/	3.20 /		

R0570-W4.1/	3.20 /	R0570-W5.1/	2.60 /
R0640-W1.1/	3.20 /		
R0650-W1.1/	2.60 /	R0660-W1.1/	3.20 /
R0660-W2.1/	3.20 /		
R0690-W2.1/	3.20 /	R0720-W1.1/	7.36 /
R0730-W1.1/	3.20 /		
R0740-W2.1/	3.20 /	R0740-W4.1/	3.20 /
R0775-W1.1/	2.60 /		
R0780-W2.1/	3.20 /	R0790-W1/	3.20 /
R0800-W1.1/	3.20 /		
R0800-W2.1/	3.20 /	R0810-W1.1/	3.20 /
R0830-W3.1/	3.20 /		
R0850-W3.1/	2.60 /	R0870-W2.1/	3.20 /
R0885-W1.1/	2.60 /		
R0910-W2.1/	3.20 /	R0930-W1.1/	3.20 /
R0940-W1.1/	3.20 /		
R0940-W2.1/	3.20 /	R0945-W1.1/	3.20 /
R0950-W2.1/	3.20 /		
R0960-W1.1/	3.20 /	R0960-W3.1/	3.20 /
R0960-W4.1/	3.20 /		
R0980-W1.1/	3.20 /	R0990-W1.1/	3.20 /
R0990-W3.1/	3.20 /		
R1000-W1.1/	3.20 /	R1020-W1.1/	3.20 /
R1030-W1.1/	3.20 /		
R1030-W2.1/	3.20 /	R2002-W1.1/	11.29 /
R02040-W1.1/	3.20 /		
R2090-W1.1/	3.20 /	R2370-W4.1/	3.20 /
R2380-W2.1/	3.20 /		
R2380-W3.1/	3.20 /	R0440-W2.1/	2.60 /
R015-W1.1/	3.20 /		
R020-W1.1/	0.61 /	R021-W1.1/	2.60 /
R030-W1.1/	3.20 /		
R031-W1.1/	3.20 /	R042-W1.1/	3.20 /
R043-W1.1/	3.20 /		
R0850-W1.1/	2.60 /		

Conduit/		Final Volume		
	R0870/	635.63 /	R0770-P2/	1080.78 /
R0900/	3465.59 /			
	R0370/	420.30 /	R0280/	3.86 /
R0202/	1932.86 /			
	RN-002/	0.29 /	RN-003/	0.00 /
RN-006/	0.00 /			
	RN-007/	0.00 /	RN-009/	0.00 /
RN-009MH/	0.00 /			
	RN-011/	11.23 /	RN-014/	7.25 /
RN-012/	6170.48 /			
	RN-023/	184.09 /	RN-021/	43.97 /
RN-041/	290.89 /			
	RN-020/	54.39 /	RN-022/	117.46 /

RN-024/	308.82 /			
	RN-026/	52.56 /		RN-027/ 88.59 /
RN-028/	138.09 /			
	R0742-P3/	748.13 /		R0655-P2/ 476.59 /
R0655-P3/	469.05 /			
	R0655-P4/	468.56 /		R0120-P2/ 388.20 /
R1010-P2/	12.06 /			
	RN-025-P1/	588.03 /		RN-025-P2/ 587.77 /
R0155-P1/	260.69 /			
	R0386/	671.33 /		R0388/ 671.32 /
R0385/	671.33 /			
	R0375/	1764.37 /		R0335/ 275.37 /
R-0001B-P1/	2400.66 /			
	R0540-P1/	1.23 /		R0540-P2/ 1.29 /
R0540-P3/	0.00 /			
	R0290-P1/	185.41 /		R0285.1/ 12.58 /
R0250.1/	271.08 /			
	R0230.1/	113.63 /		R0220.1/ 1268.05 /
R0200.1/	488.79 /			
	R0190.1/	287.41 /		R0170.1/ 184.27 /
R0180-P1/	1262.65 /			
	R0180-P2/	1276.52 /		R0140.1/ 0.00 /
R0140-P3.1/	0.00 /			
	R0150-P1/	0.00 /		R0150-P2/ 1.21 /
R0150-P3/	1.53 /			
	R0150-P4/	1.35 /		R0150-P5/ 0.00 /
R0110.1/	249.19 /			
	R0130-P1/	353.09 /		R0130-P2/ 370.18 /
R0100-P1/	97.07 /			
	R0100-P2/	129.50 /		R0310.1/ 310.86 /
R0430-P1/	253.31 /			
	R0430-P2/	253.31 /		R0430-P3/ 253.31 /
R0430-P4/	286.36 /			
	R0340-P1/	320.28 /		R0340-P2/ 270.98 /
R0350-P1/	603.16 /			
	R0350-P2/	603.16 /		R0330-P1/ 725.75 /
R0330-P2/	725.75 /			
	R0450-P1/	77.18 /		R0450-P2/ 77.18 /
P0360-P1/	26.40 /			
	P0360-P2/	35.56 /		R0550-P1/ 300.67 /
R0550-P2/	299.33 /			
	R0560-P1/	765.04 /		R0560-P2/ 762.19 /
R0560-P3/	763.82 /			
	R0780.1/	889.15 /		R0740.1/ 80.98 /
R0730.1/	39.96 /			
	R0880.1/	0.00 /		R0950.1/ 128.27 /
R0920.1/	150.98 /			
	R0960.1/	0.00 /		R0990.1/ 44.68 /
R1010-P3/	179.17 /			
	R1010-P4/	185.69 /		R1010-P5/ 175.88 /

R0980-P1.1/	63.68 /		
R0980-P2.1/	6.44 /	R0850-P1/	31.51 /
R0850-P2/	13.07 /		
R0850-P3/	3.08 /	R0570-P1/	1599.59 /
R0570-P2/	1599.89 /		
R0570-P3/	1568.78 /	R0770-P1.1/	148.70 /
R0770-P3/	3090.72 /		
R0770-P4/	3105.85 /	R0790-P1/	5119.38 /
R0790-P2/	3131.10 /		
R0530-P1/	0.58 /	R0530-P2/	0.69 /
R0530-P3/	1.11 /		
R0910-P1/	586.53 /	R0910-P2/	1493.53 /
R0380-P1/	5.52 /		
R0380-P2/	5.52 /	R0300-P1/	126.84 /
R0300-P2/	126.84 /		
R0290-P2.1/	5.59 /	RN-004-P1/	0.00 /
RN-004-P2/	0.00 /		
RN-004-P3/	0.00 /	RN-001-P1/	44.79 /
RN-001-P2/	32.39 /		
RN-001-P3/	45.57 /	RN-005-P1/	168.74 /
RN-005-P2/	60.04 /		
RN-005-P3/	179.80 /	RN-008-P1.1/	307.49 /
RN-008-P2/	263.58 /		
RN-008-P3/	240.41 /	RN-010-P1/	588.92 /
RN-010-P2/	570.86 /		
RN-010-P3/	550.74 /	RN-013-P1/	869.70 /
RN-013-P2/	869.70 /		
RN-013-P3/	869.70 /	RN-015-P1/	612.06 /
RN-015-P2/	649.10 /		
RN-015-P3/	636.97 /	RN-029-P1/	495.93 /
RN-029-P2/	510.88 /		
R0742-P1/	123.99 /	R0742-P2/	123.99 /
R0655-P1.1/	476.10 /		
R0490-P8/	109.89 /	R0490-P7/	109.89 /
R0140-P2.1/	633.24 /		
R0140-P1.1/	611.15 /	R0120-P1.1/	589.87 /
R0160-P1.1/	147.40 /		
R0325-P1.1/	0.00 /	R0400-P1.1/	0.00 /
R0880-P2.1/	0.00 /		
R1010-P1.1/	18.50 /	R-0410-P4/	120.72 /
R-0410-P5/	120.72 /		
R-0410-P6/	118.95 /	R-0410-P7/	120.68 /
R0410-P1/	699.07 /		
R0410-P2/	699.07 /	R0410-P3/	699.07 /
498.1/	157.79 /		
R0490-P1.1/	159.81 /	R0490-P3/	112.44 /
R0490-P4/	113.80 /		
R0490-P5/	112.48 /	R0490-P6/	112.39 /
R0890-ORF-2/	5.46 /		
R0890-ORF-5/	5.46 /	R0890ORF-3/	5.46 /

R0890-ORF-4/	5.46 /			
	N0140-A-W1.1/	164.03 /	R0540-W3/	0.00 /
R0290-P5/	0.00 /			
	R0285-W2/	0.00 /	R0250-W1/	0.00 /
R0230-W1/	0.00 /			
	R0220-W2/	0.00 /	R0200-W3/	0.00 /
R0190-W4/	0.00 /			
	R0170-W3/	0.00 /	R0180-W1/	0.00 /
R0140-W1/	0.00 /			
	R0150-W3/	0.00 /	R0110-W1/	0.00 /
R0130-W1/	0.00 /			
	R0100-W4/	0.00 /	R0310-W5.1/	0.00 /
R0430-W3/	0.00 /			
	R0340-W3/	0.00 /	R0350-W1/	0.00 /
R0330-W1/	0.00 /			
	R0360-W1/	0.00 /	R0550-W2/	0.00 /
R0560-W1/	0.00 /			
	R0780-W1/	0.00 /	R0740-W3/	0.00 /
R0870-W1/	0.00 /			
	R0950-W1/	0.00 /	R0960-W2/	0.00 /
R0990-W2/	0.00 /			
	R1010-W2/	0.00 /	R0980-W2/	0.00 /
R0850-W2/	0.00 /			
	R0770-W2/	0.00 /	R0530-W4/	0.00 /
R0380-W3/	0.00 /			
	R0300-W2/	0.00 /	R0290-W1/	0.00 /
R0655-W2/	0.00 /			
	R0140-W2/	0.00 /	R0120-W2/	0.00 /
R0160-W1/	0.00 /			
	R0400-W1/	0.00 /	R0880-W2/	0.00 /
R1010-W1/	0.00 /			
	R0490-W2/	0.00 /	R0050-W1.1/	0.00 /
R0050-W2.1/	0.00 /			
	R0060-W1.1/	0.00 /	R0080-W1.1/	0.00 /
R0080-W2.1/	0.00 /			
	R0090-W1.1/	0.00 /	R0090-W2.1/	0.00 /
R0090-W3.1/	0.00 /			
	R0090-W4.1/	0.00 /	R0100-W1.1/	0.00 /
R0100-W2.1/	0.00 /			
	R0100-W3.1/	0.00 /	R0110-W2.1/	0.00 /
R0120-W1.1/	0.00 /			
	R0130-W2.1/	0.00 /	R0150-W1.1/	0.00 /
R0150-W2.1/	0.00 /			
	R0170-W1.1/	0.00 /	R0170-W2.1/	0.00 /
R0190-W1.1/	0.00 /			
	R0190-W2.1/	0.00 /	R0190-W3.1/	0.00 /
R0200-W1.1/	0.00 /			
	R0200-W2.1/	0.00 /	R0220-W1.1/	0.00 /
R0240-W1.1/	0.00 /			
	R0240-W2.1/	0.00 /	R0240-W3.1/	0.00 /

R0240-W4.1/	0.00 /			
R0240-W5.1/	0.00 /		R0240-W6.1/	0.00 /
R0250-W2.1/	0.00 /			
R0250-W3.1/	0.00 /		R0260-W1.1/	0.00 /
R0270-W1.1/	0.00 /			
R0270-W3/	0.00 /		R0270-W2.1/	0.00 /
R0275-W1.1/	0.00 /			
R0280-W1.1/	0.00 /		R0285-W1.1/	0.00 /
R0290-W2.1/	0.00 /			
R0290-W3.1/	0.00 /		R0290-W4.1/	0.00 /
R0300-W1.1/	0.00 /			
R0310-W1.1/	0.00 /		R0310-W2.1/	0.00 /
R0310-W3.1/	0.00 /			
R0310-W4.1/	0.00 /		R0325-W2.1/	0.00 /
R0330-W2.1/	0.00 /			
R0330-W3.1/	0.00 /		R0340-W1.1/	0.00 /
R0340-W2.1/	0.00 /			
R0350-W2.1/	0.00 /		R0350-W3.1/	0.00 /
R0360-W2.1/	0.00 /			
R0360-W3.1/	0.00 /		R0370-W1.1/	0.00 /
R0370-W2.1/	0.00 /			
R0370-W3.1/	0.00 /		R0380-W1.1/	0.00 /
R0380-W2.1/	0.00 /			
R0380-W4.1/	0.00 /		R0390-W1.1/	0.00 /
R0390-W2/	0.00 /			
R0400-W2.1/	0.00 /		R0410-W1.1/	0.00 /
R0420-W1.1/	0.00 /			
R0420-W2.1/	0.00 /		R0430-W1.1/	0.00 /
R0430-W2.1/	0.00 /			
R0440-W1.1/	0.00 /		R0450-W1.1/	0.00 /
R0450-W2.1/	0.00 /			
R0460-W1.1/	0.00 /		R0460-W2.1/	0.00 /
R0480-W1.1/	0.00 /			
R0480-W2.1/	0.00 /		R0480-W3.1/	0.00 /
R0490-W1.1/	0.00 /			
R0490-W3.1/	0.00 /		R0500-W1.1/	0.00 /
R0510-W2.1/	0.00 /			
R0520-W1.1/	0.00 /		R0520-W2.1/	0.00 /
R0530-W1.1/	0.00 /			
R0530-W2.1/	0.00 /		R0530-W3/	0.00 /
R0540-W1.1/	0.00 /			
R0540-W2.1/	0.00 /		R0550-W1.1/	0.00 /
R0550-W3.1/	0.00 /			
R0560-W2.1/	0.00 /		R0560-W3.1/	0.00 /
R0560-W4.1/	0.00 /			
R0560-W5.1/	0.00 /		R0570-W1.1/	0.00 /
R0570-W3.1/	0.00 /			
R0570-W4.1/	0.00 /		R0570-W5.1/	0.00 /
R0640-W1.1/	0.00 /			
R0650-W1.1/	0.00 /		R0660-W1.1/	0.00 /

R0660-W2.1/	0.00 /				
	R0690-W2.1/	0.00 /		R0720-W1.1/	0.00 /
R0730-W1.1/	0.00 /				
	R0740-W2.1/	0.00 /		R0740-W4.1/	0.00 /
R0775-W1.1/	0.00 /				
	R0780-W2.1/	0.00 /		R0790-W1/	0.00 /
R0800-W1.1/	0.00 /				
	R0800-W2.1/	0.00 /		R0810-W1.1/	0.00 /
R0830-W3.1/	0.00 /				
	R0850-W3.1/	0.00 /		R0870-W2.1/	0.00 /
R0885-W1.1/	0.00 /				
	R0910-W2.1/	0.00 /		R0930-W1.1/	0.00 /
R0940-W1.1/	0.00 /				
	R0940-W2.1/	0.00 /		R0945-W1.1/	0.00 /
R0950-W2.1/	0.00 /				
	R0960-W1.1/	0.00 /		R0960-W3.1/	0.00 /
R0960-W4.1/	0.00 /				
	R0980-W1.1/	0.00 /		R0990-W1.1/	0.00 /
R0990-W3.1/	0.00 /				
	R1000-W1.1/	0.00 /		R1020-W1.1/	0.00 /
R1030-W1.1/	0.00 /				
	R1030-W2.1/	0.00 /		R2002-W1.1/	0.00 /
R02040-W1.1/	0.00 /				
	R2090-W1.1/	0.00 /		R2370-W4.1/	0.00 /
R2380-W2.1/	0.00 /				
	R2380-W3.1/	0.00 /		R0440-W2.1/	0.00 /
R015-W1.1/	0.00 /				
	R020-W1.1/	0.00 /		R021-W1.1/	0.00 /
R030-W1.1/	0.00 /				
	R031-W1.1/	0.00 /		R042-W1.1/	0.00 /
R043-W1.1/	0.00 /				
	R0850-W1.1/	0.00 /			

Conduit/ Hydraulic Radius

	R0870/	1.23 /		R0770-P2/	0.86 /
R0900/	1.23 /				
	R0370/	0.71 /		R0280/	0.04 /
R0202/	1.25 /				
	RN-002/	0.01 /		RN-003/	0.01 /
RN-006/	0.01 /				
	RN-007/	0.01 /		RN-009/	0.01 /
RN-009MH/	0.01 /				
	RN-011/	0.03 /		RN-014/	0.21 /
RN-012/	1.12 /				
	RN-023/	0.45 /		RN-021/	0.32 /
RN-041/	0.71 /				
	RN-020/	0.28 /		RN-022/	0.48 /
RN-024/	0.74 /				
	RN-026/	0.41 /		RN-027/	0.38 /
RN-028/	0.38 /				

R0655-P3/	R0742-P3/	0.57 /	R0655-P2/	0.62 /
	0.62 /			
R1010-P2/	R0655-P4/	0.62 /	R0120-P2/	0.62 /
	0.17 /			
R0155-P1/	RN-025-P1/	0.76 /	RN-025-P2/	0.75 /
	0.97 /			
R0385/	R0386/	0.94 /	R0388/	0.94 /
	0.94 /			
R-0001B-P1/	R0375/	1.63 /	R0335/	0.52 /
	0.86 /			
R0540-P3/	R0540-P1/	0.02 /	R0540-P2/	0.03 /
	0.00 /			
R0250.1/	R0290-P1/	0.61 /	R0285.1/	0.14 /
	0.57 /			
R0200.1/	R0230.1/	0.60 /	R0220.1/	1.06 /
	0.74 /			
R0180-P1/	R0190.1/	0.50 /	R0170.1/	0.59 /
	0.85 /			
R0140-P3.1/	R0180-P2/	0.85 /	R0140.1/	0.00 /
	0.00 /			
R0150-P3/	R0150-P1/	0.00 /	R0150-P2/	0.02 /
	0.02 /			
R0110.1/	R0150-P4/	0.02 /	R0150-P5/	0.00 /
	0.37 /			
R0100-P1/	R0130-P1/	0.94 /	R0130-P2/	0.94 /
	0.47 /			
R0430-P1/	R0100-P2/	0.55 /	R0310.1/	0.73 /
	0.52 /			
R0430-P4/	R0430-P2/	0.52 /	R0430-P3/	0.52 /
	0.54 /			
R0350-P1/	R0340-P1/	1.06 /	R0340-P2/	1.02 /
	0.88 /			
R0330-P2/	R0350-P2/	0.88 /	R0330-P1/	0.88 /
	0.88 /			
P0360-P1/	R0450-P1/	0.73 /	R0450-P2/	0.73 /
	0.44 /			
R0550-P2/	P0360-P2/	0.44 /	R0550-P1/	1.00 /
	1.00 /			
R0560-P3/	R0560-P1/	1.01 /	R0560-P2/	1.01 /
	1.01 /			
R0730.1/	R0780.1/	0.94 /	R0740.1/	0.51 /
	0.37 /			
R0920.1/	R0880.1/	0.00 /	R0950.1/	0.60 /
	0.87 /			
R1010-P3/	R0960.1/	0.01 /	R0990.1/	0.45 /
	0.46 /			
R0980-P1.1/	R1010-P4/	0.47 /	R1010-P5/	0.45 /
	0.41 /			
R0850-P2/	R0980-P2.1/	0.09 /	R0850-P1/	0.14 /
	0.08 /			

R0570-P2/	R0850-P3/	0.02 /	R0570-P1/	1.19 /
	1.19 /			
R0770-P3/	R0570-P3/	1.20 /	R0770-P1.1/	0.75 /
	1.00 /			
R0790-P2/	R0770-P4/	1.00 /	R0790-P1/	1.56 /
	1.00 /			
R0530-P3/	R0530-P1/	0.02 /	R0530-P2/	0.02 /
	0.02 /			
R0380-P1/	R0910-P1/	1.19 /	R0910-P2/	1.19 /
	0.12 /			
R0300-P2/	R0380-P2/	0.12 /	R0300-P1/	0.50 /
	0.50 /			
RN-004-P2/	R0290-P2.1/	0.03 /	RN-004-P1/	0.01 /
	0.01 /			
RN-001-P2/	RN-004-P3/	0.00 /	RN-001-P1/	0.41 /
	0.34 /			
RN-005-P2/	RN-001-P3/	0.42 /	RN-005-P1/	0.54 /
	0.53 /			
RN-008-P2/	RN-005-P3/	0.55 /	RN-008-P1.1/	0.78 /
	0.72 /			
RN-010-P2/	RN-008-P3/	0.69 /	RN-010-P1/	0.90 /
	0.89 /			
RN-013-P2/	RN-010-P3/	0.89 /	RN-013-P1/	0.89 /
	0.89 /			
RN-015-P2/	RN-013-P3/	0.89 /	RN-015-P1/	0.84 /
	0.75 /			
RN-029-P2/	RN-015-P3/	0.77 /	RN-029-P1/	0.88 /
	0.88 /			
R0655-P1.1/	R0742-P1/	0.44 /	R0742-P2/	0.44 /
	0.62 /			
R0140-P2.1/	R0490-P8/	0.31 /	R0490-P7/	0.31 /
	0.75 /			
R0160-P1.1/	R0140-P1.1/	0.75 /	R0120-P1.1/	0.74 /
	0.63 /			
R0880-P2.1/	R0325-P1.1/	0.00 /	R0400-P1.1/	0.00 /
	0.00 /			
R-0410-P5/	R1010-P1.1/	0.22 /	R-0410-P4/	0.38 /
	0.38 /			
R0410-P1/	R-0410-P6/	0.38 /	R-0410-P7/	0.38 /
	0.86 /			
498.1/	R0410-P2/	0.86 /	R0410-P3/	0.86 /
	0.38 /			
R0490-P4/	R0490-P1.1/	0.38 /	R0490-P3/	0.31 /
	0.31 /			
R0890-ORF-2/	R0490-P5/	0.31 /	R0490-P6/	0.31 /
	0.21 /			
R0890-ORF-4/	R0890-ORF-5/	0.21 /	R0890ORF-3/	0.21 /
	0.21 /			
R0290-P5/	N0140-A-W1.1/	0.08 /	R0540-W3/	1.50 /
	1.50 /			

R0230-W1/	R0285-W2/	1.50 /	R0250-W1/	1.50 /
	1.50 /			
R0190-W4/	R0220-W2/	1.50 /	R0200-W3/	1.50 /
	1.50 /			
R0140-W1/	R0170-W3/	1.50 /	R0180-W1/	1.50 /
	1.50 /			
R0130-W1/	R0150-W3/	1.50 /	R0110-W1/	1.50 /
	1.50 /			
R0430-W3/	R0100-W4/	1.50 /	R0310-W5.1/	1.50 /
	1.50 /			
R0330-W1/	R0340-W3/	1.50 /	R0350-W1/	1.50 /
	1.50 /			
R0560-W1/	R0360-W1/	1.50 /	R0550-W2/	1.50 /
	1.50 /			
R0870-W1/	R0780-W1/	1.50 /	R0740-W3/	1.50 /
	1.50 /			
R0990-W2/	R0950-W1/	1.50 /	R0960-W2/	1.50 /
	1.50 /			
R0850-W2/	R1010-W2/	1.50 /	R0980-W2/	1.50 /
	1.50 /			
R0380-W3/	R0770-W2/	1.50 /	R0530-W4/	1.50 /
	1.50 /			
R0655-W2/	R0300-W2/	1.50 /	R0290-W1/	1.50 /
	1.50 /			
R0160-W1/	R0140-W2/	1.50 /	R0120-W2/	1.50 /
	1.50 /			
R1010-W1/	R0400-W1/	1.50 /	R0880-W2/	1.50 /
	1.50 /			
	R0490-W2/	1.50 /	R0050-W1.1/	1.50 /
R0050-W2.1/	1.50 /			
	R0060-W1.1/	1.50 /	R0080-W1.1/	1.50 /
R0080-W2.1/	1.50 /			
	R0090-W1.1/	1.50 /	R0090-W2.1/	1.50 /
R0090-W3.1/	1.50 /			
	R0090-W4.1/	1.50 /	R0100-W1.1/	1.50 /
R0100-W2.1/	1.50 /			
	R0100-W3.1/	1.50 /	R0110-W2.1/	1.50 /
R0120-W1.1/	1.50 /			
	R0130-W2.1/	1.50 /	R0150-W1.1/	1.50 /
R0150-W2.1/	1.50 /			
	R0170-W1.1/	1.50 /	R0170-W2.1/	1.50 /
R0190-W1.1/	1.50 /			
	R0190-W2.1/	1.50 /	R0190-W3.1/	1.50 /
R0200-W1.1/	1.50 /			
	R0200-W2.1/	1.50 /	R0220-W1.1/	1.50 /
R0240-W1.1/	1.50 /			
	R0240-W2.1/	1.50 /	R0240-W3.1/	1.50 /
R0240-W4.1/	1.50 /			
	R0240-W5.1/	1.50 /	R0240-W6.1/	1.50 /
R0250-W2.1/	1.50 /			

R0250-W3.1/	1.50 /	R0260-W1.1/	1.50 /
R0270-W1.1/	1.50 /		
R0270-W3/	1.50 /	R0270-W2.1/	1.50 /
R0275-W1.1/	1.50 /		
R0280-W1.1/	1.50 /	R0285-W1.1/	1.50 /
R0290-W2.1/	1.50 /		
R0290-W3.1/	1.50 /	R0290-W4.1/	1.50 /
R0300-W1.1/	1.50 /		
R0310-W1.1/	1.50 /	R0310-W2.1/	1.50 /
R0310-W3.1/	1.50 /		
R0310-W4.1/	1.50 /	R0325-W2.1/	1.50 /
R0330-W2.1/	1.50 /		
R0330-W3.1/	1.50 /	R0340-W1.1/	1.50 /
R0340-W2.1/	1.50 /		
R0350-W2.1/	1.50 /	R0350-W3.1/	1.50 /
R0360-W2.1/	1.50 /		
R0360-W3.1/	1.50 /	R0370-W1.1/	1.50 /
R0370-W2.1/	1.50 /		
R0370-W3.1/	1.50 /	R0380-W1.1/	1.50 /
R0380-W2.1/	1.50 /		
R0380-W4.1/	1.50 /	R0390-W1.1/	1.50 /
R0390-W2/	1.50 /		
R0400-W2.1/	1.50 /	R0410-W1.1/	1.50 /
R0420-W1.1/	1.50 /		
R0420-W2.1/	1.50 /	R0430-W1.1/	1.50 /
R0430-W2.1/	1.50 /		
R0440-W1.1/	1.50 /	R0450-W1.1/	1.50 /
R0450-W2.1/	1.50 /		
R0460-W1.1/	1.50 /	R0460-W2.1/	1.50 /
R0480-W1.1/	1.50 /		
R0480-W2.1/	1.50 /	R0480-W3.1/	1.50 /
R0490-W1.1/	1.50 /		
R0490-W3.1/	1.50 /	R0500-W1.1/	1.50 /
R0510-W2.1/	1.50 /		
R0520-W1.1/	1.50 /	R0520-W2.1/	1.50 /
R0530-W1.1/	1.50 /		
R0530-W2.1/	1.50 /	R0530-W3/	1.50 /
R0540-W1.1/	1.50 /		
R0540-W2.1/	1.50 /	R0550-W1.1/	1.50 /
R0550-W3.1/	1.50 /		
R0560-W2.1/	1.50 /	R0560-W3.1/	1.50 /
R0560-W4.1/	1.50 /		
R0560-W5.1/	1.50 /	R0570-W1.1/	1.50 /
R0570-W3.1/	1.50 /		
R0570-W4.1/	1.50 /	R0570-W5.1/	1.50 /
R0640-W1.1/	1.50 /		
R0650-W1.1/	1.50 /	R0660-W1.1/	1.50 /
R0660-W2.1/	1.50 /		
R0690-W2.1/	1.50 /	R0720-W1.1/	1.50 /
R0730-W1.1/	1.50 /		

R0775-W1.1/	R0740-W2.1/	1.50 /	R0740-W4.1/	1.50 /
R0800-W1.1/	R0780-W2.1/	1.50 /	R0790-W1/	1.50 /
R0830-W3.1/	R0800-W2.1/	1.50 /	R0810-W1.1/	1.50 /
R0885-W1.1/	R0850-W3.1/	1.50 /	R0870-W2.1/	1.50 /
R0940-W1.1/	R0910-W2.1/	1.50 /	R0930-W1.1/	1.50 /
R0950-W2.1/	R0940-W2.1/	1.50 /	R0945-W1.1/	1.50 /
R0960-W4.1/	R0960-W1.1/	1.50 /	R0960-W3.1/	1.50 /
R0990-W3.1/	R0980-W1.1/	1.50 /	R0990-W1.1/	1.50 /
R1030-W1.1/	R1000-W1.1/	1.50 /	R1020-W1.1/	1.50 /
R2020-W1.1/	R1030-W2.1/	1.50 /	R2002-W1.1/	1.50 /
R2380-W2.1/	R2090-W1.1/	1.50 /	R2370-W4.1/	1.50 /
R015-W1.1/	R2380-W3.1/	1.50 /	R0440-W2.1/	1.50 /
R030-W1.1/	R020-W1.1/	1.50 /	R021-W1.1/	1.50 /
R043-W1.1/	R031-W1.1/	1.50 /	R042-W1.1/	1.50 /
	R0850-W1.1/	1.50 /		

Conduit/ Upstream/ Downstream Elevation					
	R0870/	1.21/	1.21	R0770-P2/	1.21/ 1.21
	R0900/	1.21/	1.21/		
	R0370/	2.24/	2.24	R0280/	2.24/ 2.67
	R0202/	2.13/	2.13/		
	RN-002/	3.47/	3.33	RN-003/	2.56/ 2.37
	RN-006/	2.66/	2.62/		
	RN-007/	2.46/	2.38	RN-009/	2.68/ 2.41
RN-009MH/	2.41/	2.31/			
	RN-011/	2.04/	1.92	RN-014/	1.92/ 1.92
	RN-012/	1.92/	1.92/		
	RN-023/	1.79/	1.79	RN-021/	1.79/ 1.79
	RN-041/	2.33/	2.33/		
	RN-020/	1.79/	1.79	RN-022/	1.79/ 1.79
	RN-024/	1.79/	1.79/		
	RN-026/	1.79/	1.79	RN-027/	1.79/ 1.79
	RN-028/	1.79/	1.79/		
	R0742-P3/	1.21/	1.21	R0655-P2/	1.92/ 0.01
R0655-P3/	1.92/	0.01/			
	R0655-P4/	0.01/	1.92	R0120-P2/	0.96/ 0.96

R1010-P2/	2.42/	2.16/		
RN-025-P1/	1.79/	1.92	RN-025-P2/	1.92/
R0155-P1/	0.98/	0.96/		1.79
R0386/	1.45/	1.45	R0388/	1.45/
R0385/	1.45/	1.45/		1.45
R0375/	2.24/	2.24	R0335/	1.04/
R-0001B-P1/	1.47/	1.47/		1.04
R0540-P1/	1.52/	1.64	R0540-P2/	1.64/
R0540-P3/	1.51/	1.51/		1.57
R0290-P1/	2.24/	2.24	R0285.1/	2.18/
R0250.1/	4.89/	4.89/		2.24
R0230.1/	4.89/	4.89	R0220.1/	2.62/
R0200.1/	2.13/	2.13/		2.62
R0190.1/	2.13/	2.13	R0170.1/	0.29/
R0180-P1/	1.39/	1.39/		0.29
R0180-P2/	1.39/	1.39	R0140.1/	0.96/
R0140-P3.1/	0.96/	0.96/		0.96
R0150-P1/	0.98/	0.98	R0150-P2/	1.44/
R0150-P3/	1.44/	0.98/		0.98
R0150-P4/	1.44/	0.98	R0150-P5/	0.98/
R0110.1/	1.47/	1.47/		0.98
R0130-P1/	1.47/	1.47	R0130-P2/	1.47/
R0100-P1/	1.47/	1.47/		1.47
R0100-P2/	1.47/	1.47	R0310.1/	0.51/
R0430-P1/	1.04/	1.04/		0.51
R0430-P2/	1.04/	1.04	R0430-P3/	1.04/
R0430-P4/	1.04/	1.04/		1.04
R0340-P1/	1.04/	1.04	R0340-P2/	1.04/
R0350-P1/	1.04/	1.04/		1.04
R0350-P2/	1.04/	1.04	R0330-P1/	1.04/
R0330-P2/	1.04/	1.04/		1.04
R0450-P1/	1.04/	1.04	R0450-P2/	1.04/
P0360-P1/	1.04/	1.04/		1.04
P0360-P2/	1.04/	1.04	R0550-P1/	0.78/
R0550-P2/	0.78/	0.78/		0.78
R0560-P1/	0.78/	0.78	R0560-P2/	0.78/
R0560-P3/	0.78/	0.78/		0.78
R0780.1/	0.91/	0.91	R0740.1/	1.21/
R0730.1/	1.21/	1.21/		1.21
R0880.1/	0.78/	0.78	R0950.1/	1.21/
R0920.1/	1.21/	1.21/		1.21
R0960.1/	1.90/	1.77	R0990.1/	2.42/
R1010-P3/	2.42/	2.42/		2.42
R1010-P4/	2.42/	2.42	R1010-P5/	2.42/
R0980-P1.1/	2.42/	2.42/		2.42
R0980-P2.1/	2.42/	1.68	R0850-P1/	1.68/
R0850-P2/	1.68/	1.39/		1.41
R0850-P3/	1.68/	1.45	R0570-P1/	0.78/
R0570-P2/	0.78/	0.78/		0.78
R0570-P3/	0.78/	0.78	R0770-P1.1/	1.21/
				1.21

R0770-P3/	1.21/	1.21/		
R0770-P4/	1.21/	1.21	R0790-P1/	1.21/ 1.21
R0790-P2/	1.21/	1.21/		
R0530-P1/	1.66/	1.64	R0530-P2/	1.66/ 1.64
R0530-P3/	1.66/	1.64/		
R0910-P1/	1.21/	1.21	R0910-P2/	1.21/ 1.21
R0380-P1/	2.21/	2.24/		
R0380-P2/	2.21/	2.24	R0300-P1/	1.04/ 1.04
R0300-P2/	1.04/	1.04/		
R0290-P2.1/	2.39/	2.24	RN-004-P1/	2.88/ 2.72
RN-004-P2/	2.88/	2.57/		
RN-004-P3/	1.92/	1.92	RN-001-P1/	1.92/ 1.92
RN-001-P2/	1.92/	1.92/		
RN-001-P3/	1.92/	1.92	RN-005-P1/	1.92/ 1.92
RN-005-P2/	1.92/	1.92/		
RN-005-P3/	1.92/	1.92	RN-008-P1.1/	1.92/ 1.92
RN-008-P2/	1.92/	1.92/		
RN-008-P3/	1.92/	1.92	RN-010-P1/	1.92/ 1.92
RN-010-P2/	1.92/	1.92/		
RN-010-P3/	1.92/	1.92	RN-013-P1/	1.92/ 1.92
RN-013-P2/	1.92/	1.92/		
RN-013-P3/	1.92/	1.92	RN-015-P1/	1.92/ 1.92
RN-015-P2/	1.92/	1.92/		
RN-015-P3/	1.92/	1.92	RN-029-P1/	1.79/ 1.79
RN-029-P2/	1.79/	1.79/		
R0742-P1/	1.21/	1.21	R0742-P2/	1.21/ 1.21
R0655-P1.1/	1.92/	0.01/		
R0490-P8/	1.92/	1.16	R0490-P7/	1.92/ 1.16
R0140-P2.1/	1.39/	1.39/		
R0140-P1.1/	1.39/	1.39	R0120-P1.1/	0.96/ 0.96
R0160-P1.1/	0.96/	0.51/		
R0325-P1.1/	0.96/	0.96	R0400-P1.1/	0.96/ 0.96
R0880-P2.1/	0.96/	0.96/		
R1010-P1.1/	2.42/	2.15	R-0410-P4/	1.45/ 1.45
R-0410-P5/	1.45/	1.45/		
R-0410-P6/	1.45/	1.45	R-0410-P7/	1.45/ 1.45
R0410-P1/	1.45/	1.45/		
R0410-P2/	1.45/	1.45	R0410-P3/	1.45/ 1.45
498.1/	1.45/	1.16/		
R0490-P1.1/	1.16/	1.45	R0490-P3/	1.16/ 1.16
R0490-P4/	1.16/	1.16/		
R0490-P5/	1.16/	1.16	R0490-P6/	1.16/ 1.16
R0890-ORF-2/	1.89/	1.92/		
R0890-ORF-5/	1.89/	1.92	R0890ORF-3/	1.89/ 1.92
R0890-ORF-4/	1.89/	1.92/		
N0140-A-W1.1/	1.39/	1.30	R0540-W3/	1.64/ 1.51
R0290-P5/	2.24/	2.24/		
R0285-W2/	2.18/	2.24	R0250-W1/	4.89/ 4.89
R0230-W1/	4.89/	4.89/		
R0220-W2/	2.62/	2.62	R0200-W3/	2.13/ 2.13

R0190-W4/	2.13/	2.13/		
R0170-W3/	0.29/	0.29	R0180-W1/	1.39/ 1.39
R0140-W1/	1.39/	0.96/		
R0150-W3/	1.44/	0.98	R0110-W1/	1.47/ 1.47
R0130-W1/	1.47/	1.47/		
R0100-W4/	1.47/	1.47	R0310-W5.1/	0.51/ 0.51
R0430-W3/	1.04/	1.04/		
R0340-W3/	1.04/	1.04	R0350-W1/	1.04/ 1.04
R0330-W1/	1.04/	1.04/		
R0360-W1/	1.04/	1.04	R0550-W2/	0.78/ 0.78
R0560-W1/	0.78/	0.78/		
R0780-W1/	0.91/	0.91	R0740-W3/	1.21/ 1.21
R0870-W1/	1.21/	1.21/		
R0950-W1/	1.21/	1.21	R0960-W2/	1.90/ 1.21
R0990-W2/	2.42/	2.42/		
R1010-W2/	2.42/	2.42	R0980-W2/	2.42/ 2.42
R0850-W2/	2.42/	1.68/		
R0770-W2/	1.21/	1.21	R0530-W4/	1.66/ 1.64
R0380-W3/	2.24/	1.45/		
R0300-W2/	1.04/	1.04	R0290-W1/	2.24/ 2.39
R0655-W2/	0.01/	1.92/		
R0140-W2/	1.39/	1.39	R0120-W2/	0.96/ 0.96
R0160-W1/	0.51/	0.96/		
R0400-W1/	0.75/	0.96	R0880-W2/	1.21/ 0.96
R1010-W1/	2.42/	0.96/		
R0490-W2/	1.16/	1.45	R0050-W1.1/	2.72/ 0.96
R0050-W2.1/	2.72/	1.47/		
R0060-W1.1/	1.47/	0.96	R0080-W1.1/	3.06/ 0.96
R0080-W2.1/	3.06/	2.72/		
R0090-W1.1/	5.42/	1.47	R0090-W2.1/	5.42/ 0.96
R0090-W3.1/	5.42/	1.47/		
R0090-W4.1/	5.42/	0.96	R0100-W1.1/	1.47/ 3.06
R0100-W2.1/	1.47/	2.72/		
R0100-W3.1/	1.47/	0.96	R0110-W2.1/	1.47/ 1.39
R0120-W1.1/	0.96/	1.47/		
R0130-W2.1/	1.47/	0.96	R0150-W1.1/	1.44/ 1.47
R0150-W2.1/	1.44/	1.47/		
R0170-W1.1/	0.29/	1.44	R0170-W2.1/	0.29/ 1.39
R0190-W1.1/	2.13/	0.29/		
R0190-W2.1/	2.13/	0.29	R0190-W3.1/	2.13/ 1.39
R0200-W1.1/	2.13/	0.29/		
R0200-W2.1/	2.13/	4.89	R0220-W1.1/	2.62/ 4.89
R0240-W1.1/	4.89/	2.13/		
R0240-W2.1/	4.89/	1.39	R0240-W3.1/	4.89/ 4.89
R0240-W4.1/	4.89/	1.39/		
R0240-W5.1/	4.89/	2.24	R0240-W6.1/	4.89/ 2.13
R0250-W2.1/	4.89/	2.62/		
R0250-W3.1/	4.89/	4.12	R0260-W1.1/	2.62/ 0.29
R0270-W1.1/	4.12/	2.62/		
R0270-W3/	4.12/	2.62	R0270-W2.1/	4.12/ 2.39

R0275-W1.1/	2.39/	2.67/		
R0280-W1.1/	2.67/	2.18	R0285-W1.1/	2.18/ 2.62
R0290-W2.1/	2.24/	1.39/		
R0290-W3.1/	2.24/	4.89	R0290-W4.1/	2.24/ 4.12
R0300-W1.1/	1.04/	0.96/		
R0310-W1.1/	0.51/	1.04	R0310-W2.1/	0.51/ 1.39
R0310-W3.1/	0.51/	0.96/		
R0310-W4.1/	0.51/	1.04	R0325-W2.1/	1.04/ 0.96
R0330-W2.1/	1.04/	0.75/		
R0330-W3.1/	1.04/	0.98	R0340-W1.1/	1.04/ 1.06
R0340-W2.1/	1.04/	1.06/		
R0350-W2.1/	1.04/	1.06	R0350-W3.1/	1.04/ 1.06
R0360-W2.1/	1.04/	1.04/		
R0360-W3.1/	1.04/	0.77	R0370-W1.1/	2.24/ 2.24
R0370-W2.1/	2.24/	1.04/		
R0370-W3.1/	2.24/	4.13	R0380-W1.1/	2.24/ 4.13
R0380-W2.1/	2.24/	4.34/		
R0380-W4.1/	2.24/	4.68	R0390-W1.1/	1.06/ 1.06
R0390-W2/	1.06/	0.98/		
R0400-W2.1/	0.75/	1.06	R0410-W1.1/	1.45/ 1.92
R0420-W1.1/	4.68/	1.45/		
R0420-W2.1/	4.68/	4.34	R0430-W1.1/	1.04/ 1.39
R0430-W2.1/	1.04/	4.88/		
R0440-W1.1/	0.98/	0.75	R0450-W1.1/	1.04/ 0.96
R0450-W2.1/	1.04/	0.75/		
R0460-W1.1/	1.06/	0.75	R0460-W2.1/	1.06/ 1.06
R0480-W1.1/	4.34/	1.45/		
R0480-W2.1/	4.34/	4.13	R0480-W3.1/	4.34/ 1.16
R0490-W1.1/	1.16/	1.45/		
R0490-W3.1/	1.16/	0.01	R0500-W1.1/	4.88/ 4.13
R0510-W2.1/	0.86/	0.96/		
R0520-W1.1/	1.06/	0.78	R0520-W2.1/	1.06/ 0.86
R0530-W1.1/	1.66/	1.04/		
R0530-W2.1/	1.66/	4.13	R0530-W3/	1.66/ 4.88
R0540-W1.1/	1.64/	4.13/		
R0540-W2.1/	1.64/	4.34	R0550-W1.1/	0.78/ 1.04
R0550-W3.1/	0.78/	1.06/		
R0560-W2.1/	0.78/	0.96	R0560-W3.1/	0.78/ 0.78
R0560-W4.1/	0.78/	1.21/		
R0560-W5.1/	0.78/	1.21	R0570-W1.1/	0.78/ 1.08
R0570-W3.1/	0.78/	1.68/		
R0570-W4.1/	0.78/	1.21	R0570-W5.1/	0.78/ 1.21
R0640-W1.1/	1.83/	0.78/		
R0650-W1.1/	1.51/	4.34	R0660-W1.1/	1.46/ 1.21
R0660-W2.1/	1.46/	1.21/		
R0690-W2.1/	4.63/	1.08	R0720-W1.1/	1.08/ 1.21
R0730-W1.1/	1.21/	0.78/		
R0740-W2.1/	1.21/	1.21	R0740-W4.1/	1.21/ 1.21
R0775-W1.1/	0.91/	1.21/		
R0780-W2.1/	0.91/	1.21	R0790-W1/	1.21/ 1.21

R0800-W1.1/	5.61/	0.78/		
R0800-W2.1/	5.61/	1.21	R0810-W1.1/	0.78/ 0.96
R0830-W3.1/	1.21/	1.21/		
R0850-W3.1/	1.68/	2.06	R0870-W2.1/	1.21/ 1.21
R0885-W1.1/	1.21/	1.21/		
R0910-W2.1/	1.21/	0.96	R0930-W1.1/	2.06/ 1.92
R0940-W1.1/	1.59/	0.96/		
R0940-W2.1/	1.59/	1.52	R0945-W1.1/	1.52/ 0.96
R0950-W2.1/	1.21/	1.21/		
R0960-W1.1/	1.90/	2.42	R0960-W3.1/	1.90/ 1.21
R0960-W4.1/	1.90/	1.21/		
R0980-W1.1/	2.42/	0.96	R0990-W1.1/	2.42/ 1.59
R0990-W3.1/	2.42/	2.42/		
R1000-W1.1/	0.56/	1.52	R1020-W1.1/	2.42/ 0.96
R1030-W1.1/	1.72/	0.96/		
R1030-W2.1/	1.72/	2.42	R2002-W1.1/	1.92/ 1.92
R02040-W1.1/	0.77/	0.96/		
R2090-W1.1/	0.34/	0.96	R2370-W4.1/	1.45/ 1.92
R2380-W2.1/	1.16/	1.92/		
R2380-W3.1/	1.16/	1.45	R0440-W2.1/	0.98/ 1.06
R015-W1.1/	1.92/	1.02/		
R020-W1.1/	1.79/	1.79	R021-W1.1/	1.79/ 0.60
R030-W1.1/	0.12/	1.79/		
R031-W1.1/	0.08/	1.79	R042-W1.1/	0.60/ 1.02
R043-W1.1/	0.11/	0.60/		
R0850-W1.1/	1.68/	1.89		

=====

| Table E7 - Iteration Summary |

=====

Total number of time steps simulated.....	11520
Total number of passes in the simulation.....	536413
Total number of time steps during simulation....	534707
Ratio of actual # of time steps / NTCYC.....	46.416
Average number of iterations per time step.....	1.003
Average time step size(seconds).....	1.293
Smallest time step size(seconds).....	1.000
Largest time step size(seconds).....	15.000
Average minimum Conduit Courant time step (sec).	1.364
Average minimum implicit time step (sec).....	1.260
Average minimum junction time step (sec).....	1.260
Average Courant Factor Tf.....	1.260
Number of times omega reduced.....	121097

=====

| Table E8 - Junction Time Step Limitation Summary |

=====

Not Convr = Number of times this junction did not
 converge during the simulation.
 Avg Convr = Average junction iterations.
 Conv err = Mean convergence error.
 Omega Cng = Change of omega during iterations
 Max Itern = Maximum number of iterations

-----*								
Ittrn >25	Junction Not Convr Ittrn >40	Avg Convr	Total Itt	Omega Cng	Max Itern	Ittrn >10		
-----		-----		-----		-----		
	N0335	0	1.07	570151	0	5	0	
0	0							
	N0550	0	1.09	580550	2	10	1	
0	0							
	N0690	0	1.00	534707	0	1	0	
0	0							
	N0640	0	1.00	534707	0	1	0	
0	0							
	N0780	0	1.12	598643	0	5	0	
0	0							
	N0830	0	1.02	544482	0	27	2	
2	0							
	N0790	0	1.07	572429	1	16	2	
0	0							
	N0800	0	1.00	534707	0	1	0	
0	0							
	N0870	0	1.54	824685	268	425	640	
124	121							
	N0510	0	1.00	534707	0	1	0	
0	0							
	N0520	33442	35.51	18986396	33835	501	55407	
53668	49113							
	N0390	0	1.00	534707	0	1	0	
0	0							
	N0350	0	1.14	609566	3	8	0	
0	0							
	N0450	0	1.02	545541	0	4	0	
0	0							
	N0770	0	1.14	608845	3	19	6	
0	0							
	N0720	0	1.02	546871	0	10	1	
0	0							
	N0960	0	1.05	560601	0	4	0	
0	0							
	N0920	0	1.38	740399	80	461	267	
76	76							
	N0950	0	1.36	729264	60	263	209	
24	21							
	N0970	0	1.02	543370	0	27	3	

2	0						
	N0915	0	1.06	566264	0	15	1
0	0						
	N0885	0	1.05	558873	0	6	0
0	0						
	N0560	0	1.12	596507	3	14	12
0	0						
	N0810	0	1.00	534707	0	1	0
0	0						
	N0570	0	1.10	590211	1	13	7
0	0						
	N0990	0	1.04	553596	0	4	0
0	0						
	N1000	0	1.00	534707	0	1	0
0	0						
	N1020	0	1.04	557838	0	6	0
0	0						
	N1030	0	1.00	534707	0	1	0
0	0						
	N0890	0	1.12	598672	4	30	5
1	0						
	N0850	0	1.05	559581	0	29	2
1	0						
	N0930	0	1.00	534707	0	1	0
0	0						
	N0980	0	1.04	558619	0	11	2
0	0						
	N1010	0	1.02	545749	0	5	0
0	0						
	N0430	0	1.03	549450	0	3	0
0	0						
	N0500	0	1.00	534707	0	1	0
0	0						
	N0230	0	1.09	582498	0	5	0
0	0						
	N0220	0	1.14	610109	1	19	26
0	0						
	N0200	0	1.28	681781	8	24	59
0	0						
	N0190	0	1.13	605188	4	19	15
0	0						
	N0130	1	1.33	709142	224	501	224
221	220						
	N0100	0	1.03	550854	0	5	0
0	0						
	N0090	0	1.00	534707	0	1	0
0	0						
	N0120	0	1.22	652820	4	27	104
2	0						
	N0110	0	1.04	554031	0	6	0

0	0						
	N0170	2	1.13	603908	9	501	12
8	8						
	N0210	0	1.14	611723	1	17	3
0	0						
	N0260	0	1.14	610971	0	17	25
0	0						
	N0250	0	1.39	743104	0	25	76
12	0						
	N0240	0	1.30	694800	0	25	61
14	0						
	N0140	0	1.21	649433	5	23	85
0	0						
	N0150	24	5.59	2991443	6042	501	6041
6018	5992						
	N0270	0	1.00	534707	0	1	0
0	0						
	N0290	0	1.39	744311	347	466	344
342	342						
	N0180	0	1.20	639734	0	17	17
0	0						
	N0370	0	1.59	849183	379	483	377
374	374						
	N0285	0	1.34	716257	63	198	436
54	54						
	N0420	0	1.00	534707	0	1	0
0	0						
	N0490	0	1.04	557609	2	9	0
0	0						
	N0410	7797	8.53	4561757	1518	501	9316
9314	9314						
	N0380	0	1.95	1040941	65	200	597
57	56						
	N0660	0	1.00	534707	0	1	0
0	0						
	N0740	0	1.07	573674	13	496	11
11	11						
	N0730	0	1.15	615723	1	15	25
0	0						
	N0940	0	1.00	534707	0	1	0
0	0						
	N0530	0	1.06	567979	0	8	0
0	0						
	N0060	7	1.38	735476	184	501	193
191	191						
	N0050	0	1.00	534707	0	1	0
0	0						
	N0325	2	1.16	621168	17	501	16
4	2						
	N0160	0	1.32	706776	1	15	8

0	0						
	N0470	0	1.00	534707	0	1	0
0	0						
	N0540	0	1.09	580616	0	13	4
0	0						
	N0650	0	1.04	557882	0	6	0
0	0						
	N0400	0	1.00	534707	0	1	0
0	0						
	N0360	0	1.02	544616	1	25	7
1	0						
	N0480	0	1.00	534707	0	1	0
0	0						
	N0080	0	1.00	534707	0	1	0
0	0						
	N0310	0	1.23	657253	2	10	1
0	0						
	N0300	0	1.07	571014	0	7	0
0	0						
	N0460	30254	33.67	18005857	30792	501	58394
56826	53195						
	N0440	0	1.00	534707	0	1	0
0	0						
	N0330	0	1.24	660866	0	31	3
1	0						
	N0655	0	1.14	610689	2	17	21
0	0						
	N0375	0	1.90	1016590	244	485	246
242	241						
	N0385	0	1.05	561203	4	496	5
5	4						
	N0275	0	1.28	683950	303	464	302
300	300						
	N0280	0	1.04	553811	0	5	0
0	0						
	N0202	0	1.48	789144	63	27	94
2	0						
	N0340	0	1.09	582835	0	6	0
0	0						
	N0515	0	1.12	599946	2	18	7
0	0						
	N-001	64	2.05	1095503	1259	501	1323
1315	1310						
	N-002	0	1.04	554181	0	7	0
0	0						
	N-003	0	1.05	561746	0	5	0
0	0						
	N-004	67	1.91	1019608	1215	501	1270
1264	1257						
	N-005	0	1.21	646251	1	18	9

0	0						
	N-008	0	1.30	692899	0	13	1
0	0						
	N-010	0	1.36	726808	0	14	1
0	0						
	N-013	0	1.47	784895	0	26	6
1	0						
	N-015	0	1.67	894661	1	16	30
0	0						
	N-006	0	1.06	566367	0	5	0
0	0						
	N-007	0	1.05	561068	0	5	0
0	0						
	N-009	0	1.09	580169	4	489	4
4	4						
	N-011	0	1.10	586465	0	6	0
0	0						
	N-014	0	1.07	569569	0	14	1
0	0						
	N-012	0	1.14	610841	0	34	5
4	0						
	N-025	0	1.44	770561	4	20	15
0	0						
	N-023	0	1.15	617204	0	17	1
0	0						
	N-021	0	1.08	577189	0	24	1
0	0						
	N-019	0	1.06	566438	0	5	0
0	0						
	N-041	0	1.05	562284	0	5	0
0	0						
	N-020	0	1.14	608611	0	12	17
0	0						
	N-022	0	1.21	644353	0	14	17
0	0						
	N-024	0	1.52	813740	1	16	7
0	0						
	N-029	0	1.45	774180	1	14	13
0	0						
	N-026	0	1.01	539650	0	3	0
0	0						
	N-027	0	1.22	650838	0	8	0
0	0						
	N-028	0	1.24	661357	6	495	3
1	1						
	N-030	0	1.00	534707	0	1	0
0	0						
	N-043	0	1.00	534707	0	1	0
0	0						
	N-042	0	1.00	534707	0	1	0

0	0						
	N-031	0	1.00	534707	0	1	0
0	0						
	N-040	0	1.00	534707	0	1	0
0	0						
	N0620	0	1.00	534707	0	1	0
0	0						
	N0900	0	1.41	754916	18	500	60
14	14						
	N-009mh	0	1.11	595352	0	5	0
0	0						
	N0205	0	1.31	700394	0	53	40
3	2						
	N0386	5	1.05	563495	10	501	10
9	7						
	N0388	0	1.04	558076	6	19	3
0	0						
	N0775	0	1.12	599067	0	4	0
0	0						
	N2040	0	1.00	534707	0	1	0
0	0						
	N2380	0	1.01	542052	0	6	0
0	0						
	N0155	166	8.44	4510897	7430	501	10469
6589	6190						
	N0945	0	1.00	534707	0	1	0
0	0						
	N2002	13708	18.75	10027512	17309	501	23793
23774	23767						
	N2090	0	1.00	534707	0	1	0
0	0						
	N0742	0	1.04	557406	14	495	15
12	12						
	N0910	6	1.53	817810	34	501	218
32	32						
	N0880	0	1.33	713688	4	19	198
0	0						
	N9004	0	1.00	534707	0	1	0
0	0						
	N9004-B	0	1.45	776656	1	19	6
0	0						
	N9004-C	0	1.44	772226	1	19	11
0	0						
	N9004-D	0	1.45	773952	0	17	14
0	0						
	N9004-F	0	1.03	552796	2	8	0
0	0						
	N9001-B	0	1.11	591046	0	5	0
0	0						
	N9001-D	0	1.67	892894	45	20	116

0	0						
	N9001-F	0	1.00	534707	0	1	0
0	0						
	N9000	0	1.00	534707	0	1	0
0	0						
	N9003	0	1.00	534707	0	1	0
0	0						
	N9005	0	1.00	534707	0	1	0
0	0						
	N9005-E	0	1.00	534707	0	1	0
0	0						
	N9005-G	0	1.01	541003	0	5	0
0	0						
	N9004-J	0	1.82	973585	1	15	6
0	0						
	N9004-G	0	1.83	978674	1	13	8
0	0						
	N9002	0	4.53	2420707	3913	453	6514
731	320						
	N2370	8732	9.52	5088355	2324	501	11056
11053	11053						
	N9000-B	0	1.00	534707	0	1	0
0	0						
	N9000-C	0	1.00	534707	0	1	0
0	0						
	N9000-E	0	1.00	534707	0	1	0
0	0						
	N9000-F	0	1.67	892166	3	16	12
0	0						
	N9001-E	0	1.00	534707	0	1	0
0	0						
	N9001-G	0	1.50	803971	43	20	104
0	0						
	N9001-H	0	1.00	534707	0	1	0
0	0						
	N9001-J	0	1.00	534707	0	1	0
0	0						
	N9001-K	0	1.00	534707	0	1	0
0	0						
	N9002-A	0	1.00	534707	0	1	0
0	0						
	N9002-B	0	1.04	555495	0	4	0
0	0						
	N9003-A	0	1.33	710541	1	14	2
0	0						
	N9003-B	0	1.00	534707	0	1	0
0	0						
	N9003-C	0	1.00	534707	0	1	0
0	0						
	N9003-D	0	1.00	534707	0	1	0

0	0						
	N9003-E	0	1.00	534707	0	1	0
0	0						
	N9003-F	0	1.00	534707	0	1	0
0	0						
	N9003-G	0	1.00	534707	0	1	0
0	0						
	N9004-A	0	1.45	776268	1	19	11
0	0						
	N9004-E	0	1.00	534707	0	1	0
0	0						
	N9004-H	0	1.00	534707	0	1	0
0	0						
	N9004-I	0	1.00	534707	0	1	0
0	0						
	N9004-K	0	4.88	2611782	12860	109	18159
14354	11644						
	N9005-A	0	1.00	534707	0	1	0
0	0						
	N9005-B	0	1.00	534707	0	1	0
0	0						
	N9005-C	0	1.02	545048	0	4	0
0	0						
	N9005-D	0	1.00	534707	0	1	0
0	0						
	N9005-F	0	1.02	542941	0	5	0
0	0						
	N9005-H	0	1.00	534707	0	1	0
0	0						
	N9000-D	0	1.60	853856	14	48	37
6	1						
	N-0001A	0	1.00	536138	0	14	1
0	0						
	N-0001B	0	1.05	562375	0	9	0
0	0						
	N0001-C	0	1.00	534707	0	1	0
0	0						
	N-0001-E	0	1.00	534707	0	1	0
0	0						
	N-0001E-OF	0	1.01	538419	0	4	0
0	0						
	N-0001-F	0	1.00	534707	0	1	0
0	0						
	N-0001-G	0	1.00	534707	0	1	0
0	0						
	N-0001F-OF-A	0	1.03	553036	0	14	1
0	0						
	N-0001F-OF-B	0	1.00	534707	0	1	0
0	0						
	N9004-L	0	1.47	788260	4	26	13

1	0							
	N0001-J	0	1.00	534707	0	1	0	
0	0							
	N9005-J	0	1.02	546511	0	5	0	
0	0							
	N9005-K	0	1.02	546511	0	5	0	
0	0							
	N0001-I	0	1.00	534707	0	1	0	
0	0							
	N-0001K	0	1.00	534707	0	1	0	
0	0							
	N0140-A	0	1.08	576769	5	23	41	
0	0							

Total number of iterations for all junctions.. 186791855
Minimum number of possible iterations..... 107476107
Efficiency of the simulation..... 1.74

Excellent Efficiency

```

*=====
| Extran Efficiency is an indicator of the efficiency of |
| the simulation. Ideal efficiency is one iteration per |
| time step. Altering the underrelaxation parameter, |
| lowering the time step, increasing the flow and head |
| tolerance are good ways of improving the efficiency, |
| another is lowering the internal time step. The lower the |
| efficiency generally the faster your model will run. |
| If your efficiency is less than 1.5 then you may try |
| increasing your time step so that your overall simulation |
| is faster. Ideal efficiency would be around 2.0 |
|
| Good Efficiency < 1.5 mean iterations |
| Excellent Efficiency < 2.5 and > 1.5 mean iterations |
| Good Efficiency < 4.0 and > 2.5 mean iterations |
| Fair Efficiency < 7.5 and > 4.0 mean iterations |
| Poor Efficiency > 7.5 mean iterations |
*=====

```

```

*=====
| Table E9 - JUNCTION SUMMARY STATISTICS |
| The Maximum area is only the area of the node, it |
| does not include the area of the surrounding conduits |
*=====

```

Freeboard node	Maximum Junction Area	Maximum Junction Gutter Depth	Maximum Gutter Elevation	Uppermost Gutter Crown Elevation	Maximum Junction Gutter Elevation	Time of Occurrence	Feet of Surge at Max	of
----------------	-----------------------	-------------------------------	--------------------------	----------------------------------	-----------------------------------	--------------------	----------------------	----

feet	ft^2	Name feet	feet feet	feet ft/s	feet	Hr.	Min.	Elevation
		N0335	6.8800	6.8800	1.0453	131	0	0.0000
5.8347	43.5600	0.0000	0.00	0.0000				
		N0550	26.3900	2.7400	0.7822	192	0	0.0000
25.6078	181622.41	0.0000	0.00	0.0000				
		N0690	8.1450	0.6200	4.9411	130	34	4.3211
3.2039	12553.614	0.0000	0.00	0.0000				
		N0640	14.6900	-2.7800	2.4257	131	20	5.2057
12.2643	116005.24	0.0000	0.00	0.0000				
		N0780	4.9050	-1.5567	0.9113	176	27	2.4679
3.9937	35575.631	0.0000	0.00	0.0000				
		N0830	7.7050	-2.0500	1.2056	187	49	3.2556
6.4994	155540.48	0.0000	0.00	0.0000				
		N0790	7.2350	1.5100	1.2057	187	22	0.0000
6.0293	1698466.5	0.0000	0.00	0.0000				
		N0800	8.0250	3.3500	5.6082	177	29	2.2582
2.4168	156656.83	0.0000	0.00	0.0000				
		N0870	9.0100	4.2700	1.3637	0	0	0.0000
7.6463	139216.60	0.0000	0.00	0.0000				
		N0510	6.6700	-1.4300	0.8605	192	0	2.2905
5.8095	7310359.5	0.0000	0.00	0.0000				
		N0520	8.8700	-2.8300	1.0629	192	0	3.8929
7.8071	7879150.4	0.0000	0.00	0.0000				
		N0390	19.4200	-1.7000	1.0569	180	51	2.7569
18.3631	3599798.4	0.0000	0.00	0.0000				
		N0350	6.9650	2.5600	1.0420	182	44	0.0000
5.9230	191525.71	0.0000	0.00	0.0000				
		N0450	7.4950	1.8500	1.0420	182	47	0.0000
6.4530	7405701.1	0.0000	0.00	0.0000				
		N0770	6.9100	1.3600	1.2056	187	16	0.0000
5.7044	1473762.3	0.0000	0.00	0.0000				
		N0720	7.1600	-0.6500	1.0757	192	0	1.7257
6.0843	1464765.5	0.0000	0.00	0.0000				
		N0960	7.5550	4.4000	2.6266	130	41	0.0000
4.9284	13282.567	0.0000	0.00	0.0000				
		N0920	6.6100	2.1500	1.2056	187	14	0.0000
5.4044	82449.349	0.0000	0.00	0.0000				
		N0950	7.7300	1.5800	1.2056	187	8	0.0000
6.5244	20076.508	0.0000	0.00	0.0000				
		N0970	9.1800	-1.2100	1.2056	187	36	2.4156
7.9744	98566.588	0.0000	0.00	0.0000				
		N0915	7.8300	1.7000	1.2057	187	20	0.0000
6.6243	4772059.0	0.0000	0.00	0.0000				
		N0885	7.4900	3.6370	1.2056	187	32	0.0000
6.2844	5155028.9	0.0000	0.00	0.0000				
		N0560	7.1600	1.8700	0.7820	192	0	0.0000
6.3780	1009349.7	0.0000	0.00	0.0000				

	N0810	1002.6000	1002.5000	0.7798	192	0	0.0000
1001.8202	9733236.3	0.0000	0.00	0.0000			
	N0570	27.2050	1.5100	1.3771	0	0	0.0000
25.8279	662547.60	0.0000	0.00	0.0000			
	N0990	6.6400	3.5700	2.9091	140	11	0.0000
3.7309	44468.451	0.0000	0.00	0.0000			
	N1000	15.4500	-1.3600	0.5554	178	24	1.9154
14.8946	768834.00	0.0000	0.00	0.0000			
	N1020	8.5550	4.1700	2.9091	140	11	0.0000
5.6459	2702148.9	0.0000	0.00	0.0000			
	N1030	7.2450	-1.0500	1.7204	179	27	2.7704
5.5246	71572.761	0.0000	0.00	0.0000			
	N0890	17.6350	1.5530	2.2005	136	30	0.6475
15.4345	1466920.9	0.0000	0.00	0.0000			
	N0850	13.8350	4.1500	3.4184	132	26	0.0000
10.4166	72424.540	0.0000	0.00	0.0000			
	N0930	15.7300	-3.5700	2.0561	192	0	5.6261
13.6739	831584.22	0.0000	0.00	0.0000			
	N0980	14.6700	4.7800	3.4620	133	13	0.0000
11.2080	283246.45	0.0000	0.00	0.0000			
	N1010	8.1200	4.2000	2.9136	138	43	0.0000
5.2064	3249.8165	0.0000	0.00	0.0000			
	N0430	10.3650	1.8700	1.1342	130	55	0.0000
9.2308	1279.2726	0.0000	0.00	0.0000			
	N0500	13.9500	2.2500	4.8763	192	0	2.6263
9.0737	1395365.6	0.0000	0.00	0.0000			
	N0230	8.4850	5.3100	4.9840	118	32	0.0000
3.5010	63079.594	0.0000	0.00	0.0000			
	N0220	10.9350	5.1800	2.6218	191	55	0.0000
8.3132	2406.8557	0.0000	0.00	0.0000			
	N0200	11.4850	2.0567	2.4428	118	39	0.3862
9.0422	15953.504	0.0000	0.00	0.0000			
	N0190	9.3800	1.0400	2.8814	118	28	1.8414
6.4986	6534.0000	0.0000	0.00	0.0000			
	N0130	12.6850	4.2600	1.4670	190	40	0.0000
11.2180	63167.690	0.0000	0.00	0.0000			
	N0100	10.7050	3.4600	1.4671	189	57	0.0000
9.2379	2238.6897	0.0000	0.00	0.0000			
	N0090	7.4850	2.4900	5.4159	177	29	2.9259
2.0691	203831.30	0.0000	0.00	0.0000			
	N0120	9.8550	4.0200	1.2068	0	0	0.0000
8.6482	1502.6906	0.0000	0.00	0.0000			
	N0110	9.6150	2.7700	4.8496	131	46	2.0796
4.7654	216981.90	0.0000	0.00	0.0000			
	N0170	12.5650	3.2900	1.2366	0	0	0.0000
11.3284	7453.2380	0.0000	0.00	0.0000			
	N0210	15.0400	3.2800	0.2899	192	0	0.0000
14.7501	1805064.5	0.0000	0.00	0.0000			
	N0260	13.2900	4.9400	2.6218	191	58	0.0000
10.6682	3436814.9	0.0000	0.00	0.0000			

	N0250	10.0800	5.0000	4.8885	176	18	0.0000
5.1915	260613.60	0.0000	0.00	0.0000			
	N0240	7.1200	4.4100	4.8886	176	3	0.4786
2.2314	133192.69	0.0000	0.00	0.0000			
	N0140	10.3350	4.3100	2.5475	131	30	0.0000
7.7875	96494.839	0.0000	0.00	0.0000			
	N0150	14.8550	3.4700	2.5912	118	2	0.0000
12.2638	5980.5808	0.0000	0.00	0.0000			
	N0270	16.9650	1.5700	4.1238	191	44	2.5538
12.8412	948276.61	0.0000	0.00	0.0000			
	N0290	8.1950	3.8300	3.4495	131	0	0.0000
4.7455	47254.044	0.0000	0.00	0.0000			
	N0180	9.3650	1.5400	2.5604	131	34	1.0204
6.8046	286321.38	0.0000	0.00	0.0000			
	N0370	10.3750	3.7300	3.4331	130	57	0.0000
6.9419	39748.357	0.0000	0.00	0.0000			
	N0285	14.6250	4.5000	3.3514	133	39	0.0000
11.2736	28421.156	0.0000	0.00	0.0000			
	N0420	30.4900	3.0800	4.6817	177	30	1.6017
25.8083	472611.82	0.0000	0.00	0.0000			
	N0490	13.2450	0.4300	1.3908	151	30	0.9608
11.8542	900534.29	0.0000	0.00	0.0000			
	N0410	24.4900	6.0700	1.5366	164	33	0.0000
22.9534	3084382.9	0.0000	0.00	0.0000			
	N0380	28.6750	5.4300	3.3136	133	48	0.0000
25.3614	700322.16	0.0000	0.00	0.0000			
	N0660	18.3100	-0.8400	1.4578	177	31	2.2978
16.8522	194293.85	0.0000	0.00	0.0000			
	N0740	32.2550	3.1000	1.2056	187	10	0.0000
31.0494	382559.29	0.0000	0.00	0.0000			
	N0730	10.7750	1.2800	1.3800	0	0	0.1000
9.3950	1957712.0	0.0000	0.00	0.0000			
	N0940	8.5900	-1.0100	1.5970	157	21	2.6070
6.9930	2317913.2	0.0000	0.00	0.0000			
	N0530	27.2300	3.7400	2.6445	131	11	0.0000
24.5855	20230.005	0.0000	0.00	0.0000			
	N0060	21.4200	3.9000	1.4670	190	45	0.0000
19.9530	1589603.9	0.0000	0.00	0.0000			
	N0050	9.7450	-0.8600	2.7158	188	11	3.5758
7.0292	339552.78	0.0000	0.00	0.0000			
	N0325	1001.6000	1001.6000	1.0420	182	41	0.0000
1000.5580	43.5600	0.0000	0.00	0.0000			
	N0160	9.6700	1.3600	0.5103	175	59	0.0000
9.1597	406491.37	0.0000	0.00	0.0000			
	N0470	13.8200	1.8100	4.1287	188	24	2.3187
9.6913	10687263.	0.0000	0.00	0.0000			
	N0540	11.9400	3.6700	2.6545	131	10	0.0000
9.2855	20608.361	0.0000	0.00	0.0000			
	N0650	12.7300	3.5800	2.1013	131	29	0.0000
10.6287	65531.232	0.0000	0.00	0.0000			

	N0400	1002.6000	1002.6000	0.7463	192	0	0.0000
1001.8537	8903124.1	0.0000	0.00	0.0000			
	N0360	7.1300	1.5600	1.0420	182	34	0.0000
6.0880	408539.21	0.0000	0.00	0.0000			
	N0480	16.2750	2.2600	4.3409	185	31	2.0809
11.9341	8667852.0	0.0000	0.00	0.0000			
	N0080	9.9750	0.4800	3.0561	181	41	2.5761
6.9189	126159.01	0.0000	0.00	0.0000			
	N0310	10.0100	0.9100	1.2987	0	0	0.3887
8.7113	195970.05	0.0000	0.00	0.0000			
	N0300	20.5450	-1.8500	1.0420	182	49	2.8920
19.5030	501422.61	0.0000	0.00	0.0000			
	N0460	11.0400	-2.1500	1.0629	192	0	3.2129
9.9771	5365408.9	0.0000	0.00	0.0000			
	N0440	11.0100	-1.3700	0.9792	192	0	2.3492
10.0308	3171624.4	0.0000	0.00	0.0000			
	N0330	7.5100	1.9500	1.0420	182	43	0.0000
6.4680	745109.40	0.0000	0.00	0.0000			
	N0655	11.0200	-0.1400	0.0422	131	26	0.1822
10.9778	101442.95	0.0000	0.00	0.0000			
	N0375	5.4300	5.4300	3.3136	133	48	0.0000
2.1164	43.5600	0.0000	0.00	0.0000			
	N0385	7.0000	6.0700	1.5382	0	0	0.0000
5.4618	26.1360	0.0000	0.00	0.0000			
	N0275	16.3500	4.3900	3.4801	130	57	0.0000
12.8699	47080.626	0.0000	0.00	0.0000			
	N0280	13.7800	4.0900	3.8547	131	48	0.0000
9.9253	188115.13	0.0000	0.00	0.0000			
	N0202	5.0000	1.7867	2.4057	118	41	0.6190
2.5943	43.5600	0.0000	0.00	0.0000			
	N0340	10.5650	6.8800	1.0420	182	43	0.0000
9.5230	151849.60	0.0000	0.00	0.0000			
	N0515	7.4000	2.8000	0.7822	192	0	0.0000
6.6178	1040289.6	0.0000	0.00	0.0000			
	N-001	27.2250	5.3300	2.2825	130	47	0.0000
24.9425	61300.018	0.0000	0.00	0.0000			
	N-002	9.1150	5.4600	4.1814	130	37	0.0000
4.9336	16137.082	0.0000	0.00	0.0000			
	N-003	9.7100	4.5600	3.3179	118	8	0.0000
6.3921	4069.7349	0.0000	0.00	0.0000			
	N-004	11.2550	5.4300	3.4901	118	2	0.0000
7.7649	2341.1133	0.0000	0.00	0.0000			
	N-005	8.5650	5.6200	2.0729	130	39	0.0000
6.4921	18862.800	0.0000	0.00	0.0000			
	N-008	11.9500	4.8800	1.9231	191	12	0.0000
10.0269	31359.179	0.0000	0.00	0.0000			
	N-010	11.0900	5.1400	1.9228	191	11	0.0000
9.1672	37762.784	0.0000	0.00	0.0000			
	N-013	8.9750	2.8400	1.9224	191	11	0.0000
7.0526	76195.658	0.0000	0.00	0.0000			

		N-015	10.6900	2.6300	1.9215	191	8	0.0000
8.7685	737199.30	0.0000	0.00	0.0000				
		N-006	10.8300	5.6600	3.5139	130	28	0.0000
7.3161	840.5330	0.0000	0.00	0.0000				
		N-007	12.1150	4.9600	3.2232	130	28	0.0000
8.8918	435.6000	0.0000	0.00	0.0000				
		N-009	12.4450	5.6800	3.8897	118	2	0.0000
8.5553	549.4268	0.0000	0.00	0.0000				
		N-011	12.4950	5.5400	3.3425	118	1	0.0000
9.1525	435.6000	0.0000	0.00	0.0000				
		N-014	11.0400	5.1100	2.3335	130	43	0.0000
8.7065	31165.587	0.0000	0.00	0.0000				
		N-012	13.3000	5.4800	2.3130	130	36	0.0000
10.9870	435.6000	0.0000	0.00	0.0000				
		N-025	10.4350	2.8830	1.7913	192	0	0.0000
8.6437	66426.249	0.0000	0.00	0.0000				
		N-023	6.5350	2.4800	1.7916	191	56	0.0000
4.7434	16352.574	0.0000	0.00	0.0000				
		N-021	10.1550	2.4000	2.3896	131	31	0.0000
7.7654	23298.721	0.0000	0.00	0.0000				
		N-019	10.7200	3.1400	3.9083	131	35	0.7683
6.8117	207934.81	0.0000	0.00	0.0000				
		N-041	15.2600	3.2800	3.9114	131	37	0.6314
11.3486	110642.40	0.0000	0.00	0.0000				
		N-020	11.0600	4.3800	2.3426	131	31	0.0000
8.7174	25183.691	0.0000	0.00	0.0000				
		N-022	10.4600	4.3033	2.2140	131	5	0.0000
8.2460	31989.244	0.0000	0.00	0.0000				
		N-024	10.7600	4.2833	1.7913	192	0	0.0000
8.9687	124885.48	0.0000	0.00	0.0000				
		N-029	7.4700	2.3400	1.7913	192	0	0.0000
5.6787	61386.512	0.0000	0.00	0.0000				
		N-026	10.7450	2.5100	1.7913	192	0	0.0000
8.9537	435.6000	0.0000	0.00	0.0000				
		N-027	11.1500	1.1700	1.7913	191	57	0.6213
9.3587	41062.841	0.0000	0.00	0.0000				
		N-028	6.7150	1.3700	1.7913	192	0	0.4213
4.9237	4276.6200	0.0000	0.00	0.0000				
		N-030	8.1350	-0.0700	0.1191	179	31	0.1891
8.0159	577605.60	0.0000	0.00	0.0000				
		N-043	8.4300	-1.1600	0.1142	180	24	1.2742
8.3158	294988.86	0.0000	0.00	0.0000				
		N-042	9.0500	-0.6300	0.5962	192	0	1.2262
8.4538	360470.00	0.0000	0.00	0.0000				
		N-031	10.3600	-0.8500	0.0822	183	4	0.9322
10.2778	580493.04	0.0000	0.00	0.0000				
		N-040	10.8400	-1.4800	1.0202	192	0	2.5002
9.8198	2766423.6	0.0000	0.00	0.0000				
		N0620	5.0000	-0.6000	0.2124	178	37	0.8124
4.7876	20947.537	0.0000	0.00	0.0000				

		N0900	5.0000	1.0100	1.2056	187	7	0.1956
3.7944	435.6000	0.0000	0.00	0.0000				
		N-009mh	6.0000	5.4100	3.5980	118	3	0.0000
2.4020	43.5600	0.0000	0.00	0.0000				
		N0205	4.0000	1.5000	2.4032	118	41	0.9032
1.5968	46028.556	0.0000	0.00	0.0000				
		N0386	7.0000	6.0700	1.5369	164	24	0.0000
5.4631	787.9463	0.0000	0.00	0.0000				
		N0388	7.0000	6.0700	1.5368	164	32	0.0000
5.4632	1261.9566	0.0000	0.00	0.0000				
		N0775	6.4600	2.1833	0.9112	177	4	0.0000
5.5488	717661.11	0.0000	0.00	0.0000				
		N2040	5.9300	-1.1000	0.7652	190	24	1.8652
5.1648	2785949.6	0.0000	0.00	0.0000				
		N2380	20.0700	-0.1200	1.3909	151	29	1.5109
18.6791	1133539.7	0.0000	0.00	0.0000				
		N0155	7.6900	3.3600	1.6064	118	7	0.0000
6.0836	12583.576	0.0000	0.00	0.0000				
		N0945	5.8300	-0.8100	1.5232	187	35	2.3332
4.3068	1333345.7	0.0000	0.00	0.0000				
		N2002	7.9000	2.8630	1.9203	192	0	0.0000
5.9797	3026629.7	0.0000	0.00	0.0000				
		N2090	8.5300	-1.8900	0.3420	187	44	2.2320
8.1880	1154982.8	0.0000	0.00	0.0000				
		N0742	6.0000	3.5000	1.2944	0	0	0.0000
4.7056	489.2777	0.0000	0.00	0.0000				
		N0910	3.0000	1.1000	1.2056	187	13	0.1056
1.7944	43560.000	0.0000	0.00	0.0000				
		N0880	1002.6000	1002.6000	1.2056	187	15	0.0000
1001.3944	43995.600	0.0000	0.00	0.0000				
		N9004	10.0000	-2.7400	1.9203	192	0	4.6603
8.0797	12.5660	0.0000	0.00	0.0000				
		N9004-B	0.0100	-0.2900	1.9203	192	0	2.2103
0.0000	12.5660	0.0000	0.00	0.0000				
		N9004-C	0.0100	-0.0400	1.9203	192	0	1.9603
0.0000	12.5660	0.0000	0.00	0.0000				
		N9004-D	0.0100	-0.1800	1.9203	192	0	2.1003
0.0000	12.5660	0.0000	0.00	0.0000				
		N9004-F	0.0800	0.0800	1.9203	192	0	1.8403
0.0000	12.5660	0.0000	0.00	0.0000				
		N9001-B	5.3000	5.3000	0.9603	192	0	0.0000
4.3397	12.5660	0.0000	0.00	0.0000				
		N9001-D	1.6000	1.6000	0.9603	192	0	0.0000
0.6397	12.5660	0.0000	0.00	0.0000				
		N9001-F	1.6000	-0.9000	0.9603	192	0	1.8603
0.6397	12.5660	0.0000	0.00	0.0000				
		N9000	0.5100	-1.9900	0.9603	192	0	2.9503
0.0000	12.5660	0.0000	0.00	0.0000				
		N9003	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660	0.0000	0.00	0.0000				

		N9005	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660		0.0000	0.00	0.0000			
		N9005-E	3.4000	0.0000	0.9603	192	0	0.9603
2.4397	12.5660		0.0000	0.00	0.0000			
		N9005-G	3.4800	3.4800	0.9603	192	0	0.0000
2.5197	12.5660		0.0000	0.00	0.0000			
		N9004-J	1.6700	1.6700	1.9203	192	0	0.2503
0.0000	12.5660		0.0000	0.00	0.0000			
		N9004-G	1.9100	1.9100	1.9203	192	0	0.0103
0.0000	12.5660		0.0000	0.00	0.0000			
		N9002	2.1900	2.1900	0.9603	192	0	0.0000
1.2297	12.5660		0.0000	0.00	0.0000			
		N2370	12.1300	3.5000	1.5356	164	39	0.0000
10.5944	4149584.2		0.0000	0.00	0.0000			
		N9000-B	0.5100	-1.9900	0.9603	192	0	2.9503
0.0000	12.5660		0.0000	0.00	0.0000			
		N9000-C	0.5100	-1.9900	0.9603	192	0	2.9503
0.0000	12.5660		0.0000	0.00	0.0000			
		N9000-E	0.5100	-1.9900	0.9603	192	0	2.9503
0.0000	12.5660		0.0000	0.00	0.0000			
		N9000-F	0.5100	0.5100	0.9603	192	0	0.4503
0.0000	12.5660		0.0000	0.00	0.0000			
		N9001-E	0.9100	-2.0900	0.9603	192	0	3.0503
0.0000	12.5660		0.0000	0.00	0.0000			
		N9001-G	1.6000	1.6000	0.9603	192	0	0.0000
0.6397	12.5660		0.0000	0.00	0.0000			
		N9001-H	1.6000	-0.9000	0.9603	192	0	1.8603
0.6397	12.5660		0.0000	0.00	0.0000			
		N9001-J	0.0000	-0.1730	0.9603	192	0	1.1333
0.0000	12.5660		0.0000	0.00	0.0000			
		N9001-K	0.0000	-0.1730	0.9603	192	0	1.1333
0.0000	12.5660		0.0000	0.00	0.0000			
		N9002-A	2.1900	-1.3100	0.9603	192	0	2.2703
1.2297	12.5660		0.0000	0.00	0.0000			
		N9002-B	2.1900	-1.3100	0.9603	192	0	2.2703
1.2297	12.5660		0.0000	0.00	0.0000			
		N9003-A	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660		0.0000	0.00	0.0000			
		N9003-B	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660		0.0000	0.00	0.0000			
		N9003-C	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660		0.0000	0.00	0.0000			
		N9003-D	1002.6000	1001.5000	0.9603	192	0	0.0000
1001.6397	12.5660		0.0000	0.00	0.0000			
		N9003-E	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660		0.0000	0.00	0.0000			
		N9003-F	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660		0.0000	0.00	0.0000			
		N9003-G	1002.6000	1002.5000	0.9603	192	0	0.0000
1001.6397	12.5660		0.0000	0.00	0.0000			

		N9004-A	0.0100	-0.2400	1.9203	192	0	2.1603
0.0000	12.5660	0.0000	0.00	0.0000				
		N9004-E	0.0100	-2.6800	1.9203	192	0	4.6003
0.0000	12.5660	0.0000	0.00	0.0000				
		N9004-H	0.0800	-1.1700	1.9203	192	0	3.0903
0.0000	12.5660	0.0000	0.00	0.0000				
		N9004-I	0.0800	-1.1700	1.9203	192	0	3.0903
0.0000	12.5660	0.0000	0.00	0.0000				
		N9004-K	1.6700	-1.3300	1.9203	192	0	3.2503
0.0000	12.5660	0.0000	0.00	0.0000				
		N9005-A	1002.6000	1002.0000	0.9603	192	0	0.0000
1001.6397	12.5660	0.0000	0.00	0.0000				
		N9005-B	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660	0.0000	0.00	0.0000				
		N9005-C	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660	0.0000	0.00	0.0000				
		N9005-D	1002.6000	0.0000	0.9603	192	0	0.9603
1001.6397	12.5660	0.0000	0.00	0.0000				
		N9005-F	3.4000	3.4000	0.9603	192	0	0.0000
2.4397	12.5660	0.0000	0.00	0.0000				
		N9005-H	3.4800	0.0000	0.9603	192	0	0.9603
2.5197	12.5660	0.0000	0.00	0.0000				
		N9000-D	5.0000	-2.2500	0.9603	192	0	3.2103
4.0397	12.5660	0.0000	0.00	0.0000				
		N-0001A	15.7000	-8.0000	1.1692	136	3	9.1692
14.5308	18154764.	0.0000	0.00	0.0000				
		N-0001B	7.0000	2.5500	1.4673	190	20	0.0000
5.5327	45810.307	0.0000	0.00	0.0000				
		N0001-C	11.0500	2.1500	2.8861	133	14	0.7361
8.1639	224054.08	0.0000	0.00	0.0000				
		N-0001-E	6.0000	4.8000	5.3650	132	0	0.5650
0.6350	42261.126	0.0000	0.00	0.0000				
		N-0001E-OF	5.0000	3.1300	3.1300	0	0	0.0000
1.8700	12.5660	0.0000	0.00	0.0000				
		N-0001-F	5.0000	3.5000	4.1948	130	54	0.6948
0.8052	268399.93	0.0000	0.00	0.0000				
		N-0001-G	6.0000	4.0000	4.7992	188	16	0.7992
1.2008	99440.703	0.0000	0.00	0.0000				
		N-0001F-OF-A	5.0000	3.1300	3.1300	0	0	0.0000
1.8700	12.5660	0.0000	0.00	0.0000				
		N-0001F-OF-B	5.0000	3.1300	3.1300	0	0	0.0000
1.8700	12.5660	0.0000	0.00	0.0000				
		N9004-L	10.0000	1.5530	1.9203	192	0	0.3673
8.0797	12.5660	0.0000	0.00	0.0000				
		N0001-J	8.5900	1.1900	1.8073	131	24	0.6173
6.7827	447053.23	0.0000	0.00	0.0000				
		N9005-J	3.4000	0.0000	0.9603	192	0	0.9603
2.4397	12.5660	0.0000	0.00	0.0000				
		N9005-K	3.4000	0.0000	0.9603	192	0	0.9603
2.4397	12.5660	0.0000	0.00	0.0000				

	N0001-I	7.8300	1.1300	2.3120	132	43	1.1820
5.5180	691240.14	0.0000	0.00	0.0000			
	N-0001K	8.5300	2.0300	2.9760	135	47	0.9460
5.5540	154029.75	0.0000	0.00	0.0000			
	N0140-A	10.3000	5.3000	2.5287	131	30	0.0000
7.7713	1742.4000	0.0000	0.00	0.0000			

=====

Table E10 - CONDUIT SUMMARY STATISTICS

Note: The peak flow may be less than the design flow and the conduit may still surcharge because of the downstream boundary conditions.

* denotes an open conduit that has been overtopped this is a potential source of severe errors

=====

Time of Occurrence	Ratio of Max. Flow	Conduit Design Name	Maximum Water Elev at Pipe Ends (ft)	Design Flow (cfs)	Design Velocity (ft/s)	Conduit Maximum Ratio Vertical Depth US DS (in)	Maximum Computed Flow (cfs)	Time of Occurrence Hr. Min.	Maximum Computed Velocity (ft/s)	Hr.
		R0870	150.9904	7.3654	48.0000	200.0116	0	1	9.7545	0
1	1.3247		1.3637	1.2056	1.071	1.049				
		R0770-P2	179.0232	14.2462	48.0000	-23.0974	136	26	2.9694	0
24	-0.1290		1.2056	1.2056	0.392	1.054				
		R0900	67.2157	3.2788	48.0000	202.2871	0	1	9.9755	0
1	3.0095		1.2056	1.2056	1.049	1.071				
		R0370	35.8092	7.0214	24.0000	34.3259	118	31	8.2175	118
31	0.9586		3.4331	3.3136	1.227	1.522				
		R0280	26.1354	8.3192	24.0000	-9.3587	131	48	-4.0487	119
40	-0.3581		3.8547	3.7621	0.592	0.836				
		R0202	76.9944	3.9213	60.0000	-19.3561	118	32	-0.9468	118
33	-0.2514		2.4057	2.4032	1.181	1.195				
		RN-002	10.5302	3.3519	24.0000	3.2667	130	37	3.2531	130
37	0.3102		4.1814	3.9611	0.361	0.316				
		RN-003	12.7682	4.0642	24.0000	4.0395	118	8	3.7348	118
9	0.3164		3.3179	3.0741	0.379	0.352				
		RN-006	18.6566	2.6394	36.0000	5.3448	130	28	3.2913	130
28	0.2865		3.5139	3.3442	0.285	0.241				
		RN-007	14.5125	2.9565	30.0000	3.7964	130	28	3.0576	130
28	0.2616		3.2232	3.0183	0.305	0.255				
		RN-009	22.4378	3.1743	36.0000	7.8247	118	2	2.9385	118
2	0.3487		3.8897	3.5980	0.403	0.396				
		RN-009MH	11.3974	2.3219	30.0000	7.8161	118	3	3.4975	118

3	0.6858	3.5980	3.2380	0.475	0.371							
		RN-011	39.1518	4.0694	42.0000	12.2386	118	1	3.8471	118		
2	0.3126	3.3425	2.6994	0.372	0.303							
		RN-014	48.7436	5.0663	42.0000	5.3038	130	52	3.7714	130		
52	0.1088	2.3335	2.3130	0.207	0.209							
		RN-012	98.7936	7.8617	48.0000	9.3946	130	36	3.6298	118		
0	0.0951	2.3130	1.9224	0.208	0.771							
		RN-023	3.2550	1.8420	18.0000	4.7924	131	8	3.4981	131		
9	1.4723	1.7916	1.7913	0.894	0.954							
		RN-021	2.3658	1.9278	15.0000	-4.4691	131	31	-3.7525	131		
31	-1.8891	2.3896	2.0864	0.928	0.749							
		RN-041	17.5255	3.5703	30.0000	10.7384	130	32	2.1460	130		
32	0.6127	3.9114	3.9083	1.253	1.307							
		RN-020	50.4504	7.1373	36.0000	9.3180	131	41	4.6386	131		
55	0.1847	2.3426	2.2140	0.321	0.408							
		RN-022	16.1753	1.8536	39.9996	11.8385	131	5	4.0651	131		
5	0.7319	2.2140	2.0078	0.373	0.317							
		RN-024	23.6115	4.8101	30.0000	19.4496	131	25	5.8851	131		
26	0.8237	1.7913	1.7913	0.685	0.781							
		RN-026	4.8280	2.7321	18.0000	0.5004	130	27	1.5961	129		
8	0.1036	1.7913	1.7913	0.521	0.581							
		RN-027	2.2759	1.2879	18.0000	-2.7304	118	39	2.0698	0		
7	-1.1997	1.7913	1.7913	1.401	1.414							
		RN-028	4.8211	2.7282	18.0000	-3.3301	0	8	-2.6431	0		
8	-0.6907	1.7913	1.7913	1.281	1.374							
		R0742-P3	6.6504	2.1169	24.0000	-7.6211	0	2	-2.4096	0		
2	-1.1460	1.2944	1.3800	0.902	1.050							
		R0655-P2	15.8955	3.2382	30.0000	16.5318	0	1	3.2189	0		
1	1.0400	0.0422	0.0100	1.133	1.160							
		R0655-P3	16.6714	3.3963	30.0000	15.9538	0	1	3.2176	0		
1	0.9570	0.0422	0.0100	1.033	1.064							
		R0655-P4	10.0532	2.0480	30.0000	-15.8080	0	1	-3.1205	0		
1	-1.5724	0.0422	0.0100	1.073	1.076							
		R0120-P2	28.9026	5.8880	30.0000	9.4799	0	0	4.4402	118		
20	0.3280	1.2068	0.9603	0.579	0.744							
		R1010-P2	2.9988	1.6970	18.0000	2.0446	138	43	2.2773	138		
43	0.6818	2.9136	2.5191	0.522	0.359							
		RN-025-P1	28.5963	4.0456	36.0000	-38.2376	0	1	-6.1399	0		
1	-1.3372	1.7913	1.6700	0.997	1.000							
		RN-025-P2	30.7174	4.3456	36.0000	57.0953	0	1	9.4448	0		
1	1.8587	1.7913	1.9100	0.960	1.050							
		R0155-P1	90.9579	9.4540	42.0000	45.2849	118	7	9.4394	118		
7	0.4979	1.6064	0.9603	0.499	0.649							
		R0386	46.9111	0.0000	72.8400	54.5512	0	0	1.8339	132		
42	1.1629	1.5369	1.5368	0.253	0.253							
		R0388	46.9111	0.0000	72.8400	30.0745	133	49	2.2119	132		
16	0.6411	1.5368	1.5366	0.253	0.253							
		R0385	46.9111	0.0000	72.8400	29.9603	133	49	1.6591	133		
9	0.6387	1.5381	1.5369	0.253	0.253							
		R0375	54.3497	0.0000	65.1600	38.2640	118	31	1.3758	0		

1	0.7040	3.3136	3.3136	0.610	0.610					
		R0335	62.9940	0.0000	82.5600	15.7629	130	55	1.9683	130
55	0.2502	1.0453	1.0420	0.152	0.151					
		R-0001B-P1	7.7875	1.1017	36.0000	-3.0652	131	31	-1.5231	0
3	-0.3936	1.4673	1.4670	0.612	0.639					
		R0540-P1	6.5818	2.0951	24.0000	-7.7599	131	10	-4.0867	131
10	-1.1790	2.6545	2.5001	0.572	0.515					
		R0540-P2	6.5818	2.0951	24.0000	6.3973	131	10	3.8817	131
10	0.9720	2.6545	2.4552	0.527	0.448					
		R0540-P3	9.8728	3.1426	24.0000	6.0835	131	10	4.0092	131
10	0.6162	2.6545	2.4522	0.492	0.436					
		R0290-P1	23.4491	4.7770	30.0000	-8.9207	118	56	-2.9978	119
59	-0.3804	3.4495	3.4331	0.888	0.969					
		R0285.1	36.1097	7.3562	30.0000	13.6240	133	19	4.9290	131
59	0.3773	3.3514	3.3136	0.541	0.665					
		R0250.1	20.0671	6.3876	24.0000	9.9120	118	58	5.2496	118
45	0.4939	4.8885	4.8886	0.944	1.239					
		R0230.1	11.9585	3.8065	24.0000	14.3650	118	32	5.2133	118
32	1.2012	4.9840	4.8885	0.837	0.989					
		R0220.1	111.4234	5.4353	48.0000	16.6132	118	27	3.9481	118
27	0.1491	2.6218	2.6218	0.360	0.420					
		R0200.1	47.7783	6.4565	29.0000	19.3638	118	33	4.0468	39
54	0.4053	2.4428	2.4057	1.160	1.256					
		R0190.1	10.3564	3.2965	24.0000	11.4479	118	3	3.6269	118
3	1.1054	2.8814	2.4428	1.921	2.026					
		R0170.1	18.0897	1.4395	48.0000	51.9438	0	0	10.9440	0
1	2.8715	1.2366	0.2899	0.487	0.252					
		R0180-P1	14.1707	2.0047	36.0000	-11.9906	118	22	-1.6263	118
23	-0.8462	2.5604	2.5475	1.340	1.359					
		R0180-P2	14.0935	1.9938	36.0000	-11.9249	118	22	-1.6174	118
23	-0.8461	2.5604	2.5475	1.340	1.359					
		R0140.1	14.0688	4.4783	24.0000	0.4025	131	30	1.9373	131
30	0.0286	2.5475	2.2338	0.119	0.107					
		R0140-P3.1	14.0688	4.4783	24.0000	0.4025	131	30	1.9373	131
30	0.0286	2.5475	2.2338	0.119	0.107					
		R0150-P1	20.9143	6.6572	24.0000	13.1648	118	2	7.0341	118
2	0.6295	2.5912	2.1810	0.576	0.575					
		R0150-P2	5.7543	7.3266	12.0000	3.8451	118	1	7.3498	117
58	0.6682	2.5912	1.6064	0.621	0.906					
		R0150-P3	15.5517	8.8005	18.0000	5.3744	118	1	7.4732	118
59	0.3456	2.5912	1.6064	0.414	0.604					
		R0150-P4	26.9314	8.5725	24.0000	16.9508	118	2	9.0572	118
2	0.6294	2.5912	1.9009	0.576	0.575					
		R0150-P5	6.5464	5.3345	15.0000	4.4943	118	2	5.7459	118
2	0.6865	2.5912	2.0911	0.609	0.609					
		R0110.1	3.7426	1.1913	24.0000	-11.0758	132	8	-3.7945	131
46	-2.9594	4.8496	2.2134	1.915	0.722					
		R0130-P1	162.3340	10.2069	54.0000	12.5091	130	32	5.9384	118
31	0.0771	1.4670	1.4670	0.379	0.459					
		R0130-P2	158.5436	9.9686	54.0000	12.2167	130	32	5.7997	118

31	0.0771	1.4670	1.4670	0.379	0.459					
		R0100-P1	42.6991	6.0407	36.0000	-3.1601	118	5	-3.1840	118
5	-0.0740	1.4671	1.4670	0.262	0.336					
		R0100-P2	42.3642	5.9933	36.0000	-3.1351	118	5	-3.1740	118
5	-0.0740	1.4671	1.4670	0.262	0.336					
		R0310.1	31.7755	6.4733	30.0000	-33.4635	0	1	-6.6330	0
1	-1.0531	1.2987	0.8265	0.975	0.967					
		R0430-P1	7.1909	2.2889	24.0000	-3.9441	130	55	-1.9247	130
55	-0.5485	1.1342	1.0453	0.567	0.588					
		R0430-P2	7.1909	2.2889	24.0000	-3.9441	130	55	-1.9247	130
55	-0.5485	1.1342	1.0453	0.567	0.588					
		R0430-P3	7.1909	2.2889	24.0000	-3.9441	130	55	-1.9247	130
55	-0.5485	1.1342	1.0453	0.567	0.588					
		R0430-P4	7.1672	2.2814	24.0000	-3.9311	130	55	-1.9183	130
55	-0.5485	1.1342	1.0453	0.567	0.588					
		R0340-P1	120.4172	12.5159	42.0000	-15.2979	131	5	-2.0682	131
1	-0.1270	1.0420	1.0420	0.695	0.809					
		R0340-P2	126.2946	13.1268	42.0000	-11.5396	131	7	-1.9108	131
2	-0.0914	1.0420	1.0420	0.566	0.692					
		R0350-P1	130.9609	13.6118	42.0000	17.9250	131	6	1.8638	131
5	0.1369	1.0420	1.0420	1.066	1.278					
		R0350-P2	130.9609	13.6118	42.0000	17.9250	131	6	1.8638	131
5	0.1369	1.0420	1.0420	1.066	1.278					
		R0330-P1	130.2511	13.5380	42.0000	3.1145	131	25	0.3102	131
25	0.0239	1.0420	1.0420	1.212	1.469					
		R0330-P2	130.2511	13.5380	42.0000	3.1145	131	25	0.3102	131
25	0.0239	1.0420	1.0420	1.212	1.469					
		R0450-P1	14.9791	3.0515	30.0000	11.2406	134	13	3.7996	133
4	0.7504	1.0420	1.0420	0.637	0.677					
		R0450-P2	14.9791	3.0515	30.0000	11.2406	134	13	3.7996	133
4	0.7504	1.0420	1.0420	0.637	0.677					
		P0360-P1	6.3311	3.5827	18.0000	-1.4923	131	50	-1.2230	131
35	-0.2357	1.0420	1.0420	0.655	0.828					
		P0360-P2	1.2416	0.7026	18.0000	-2.3601	131	42	-1.6437	131
32	-1.9008	1.0420	1.0420	0.915	0.921					
		R0550-P1	80.9839	6.4445	48.0000	27.9495	0	1	6.5802	0
1	0.3451	0.7822	0.7822	0.496	0.528					
		R0550-P2	55.0177	4.3782	48.0000	23.2858	0	1	5.4794	0
1	0.4232	0.7822	0.7822	0.496	0.511					
		R0560-P1	123.8430	9.8551	48.0000	-35.2929	0	22	-4.0643	0
21	-0.2850	0.7820	0.7822	0.496	0.746					
		R0560-P2	152.0017	12.0959	48.0000	-43.5665	0	23	-5.1544	0
21	-0.2866	0.7820	0.7822	0.496	0.728					
		R0560-P3	155.2361	12.3533	48.0000	-44.3448	0	23	-5.1632	0
21	-0.2857	0.7820	0.7822	0.496	0.738					
		R0780.1	187.5288	18.3852	34.0000	-22.6292	118	7	-2.3721	118
7	-0.1207	0.9113	0.9112	0.551	1.871					
		R0740.1	14.0785	4.4813	24.0000	-6.0328	4	19	-2.8114	4
19	-0.4285	1.2056	1.2056	0.923	1.088					
		R0730.1	7.9869	4.4372	14.0000	-15.4724	0	11	-8.5288	0

11	-1.9372	1.3800	1.3637	2.297	2.652					
		R0880.1	49.7487	5.1708	42.0000	0.0000	0	0	0.0000	0
0	0.0000	0.7798	0.7798	.0000	.0000					
		R0950.1	28.2219	8.9833	24.0000	-26.0521	0	0	-8.1306	0
1	-0.9231	1.2056	1.3637	0.813	1.197					
		R0920.1	87.5071	12.3797	36.0000	53.0876	0	1	12.9689	0
1	0.6067	1.2056	1.3637	0.539	0.738					
		R0960.1	21.8023	4.4415	30.0000	4.2581	130	41	3.6239	130
41	0.1953	2.6266	2.4477	0.291	0.271					
		R0990.1	10.1471	3.2299	24.0000	2.9621	130	36	3.2198	118
41	0.2919	2.9091	2.9091	0.670	0.700					
		R1010-P3	28.2164	5.7482	30.0000	-5.9879	132	28	-2.9325	119
55	-0.2122	2.9136	2.9091	0.513	0.712					
		R1010-P4	30.0061	6.1128	30.0000	-6.3069	132	26	-2.9414	119
55	-0.2102	2.9136	2.9091	0.517	0.744					
		R1010-P5	31.2965	6.3757	30.0000	-6.1915	132	26	-2.7600	119
55	-0.1978	2.9136	2.9091	0.497	0.748					
		R0980-P1.1	17.1031	3.4842	30.0000	-21.5972	133	13	-5.6616	133
14	-1.2628	3.4620	3.2793	0.705	0.664					
		R0980-P2.1	25.4326	5.1811	30.0000	8.0463	134	58	3.7810	136
57	0.3164	3.4620	3.4184	0.473	0.759					
		R0850-P1	7.1848	1.4637	30.0000	12.8108	132	26	3.2476	132
27	1.7831	3.4184	2.5023	0.783	0.481					
		R0850-P2	8.3409	1.6992	30.0000	12.1428	132	26	3.2421	132
27	1.4558	3.4184	2.5184	0.743	0.467					
		R0850-P3	8.1674	1.6638	30.0000	11.0957	132	26	3.1240	132
27	1.3585	3.4184	2.5649	0.707	0.446					
		R0570-P1	50.1123	3.9878	48.0000	119.1113	0	1	9.5988	0
2	2.3769	1.3771	0.7820	1.012	0.898					
		R0570-P2	62.8191	4.9990	48.0000	146.6131	0	2	11.9898	0
2	2.3339	1.3771	0.7820	0.994	0.901					
		R0570-P3	65.6124	5.2213	48.0000	119.2204	0	2	9.7605	0
2	1.8170	1.3771	0.7820	0.967	0.878					
		R0770-P1.1	46.6414	6.5984	36.0000	48.9767	0	23	7.4010	0
23	1.0501	1.2056	1.2057	1.265	1.382					
		R0770-P3	26.4115	2.1018	48.0000	58.0465	0	2	6.0746	0
2	2.1978	1.2056	1.2056	1.009	1.026					
		R0770-P4	42.4401	3.3773	48.0000	60.7483	0	2	6.3874	0
2	1.4314	1.2056	1.2056	1.004	1.049					
		R0790-P1	77.6987	3.7902	48.0000	20.6973	0	25	1.5649	0
27	0.2664	1.2057	1.2057	0.876	0.924					
		R0790-P2	29.7647	2.3686	48.0000	14.7826	0	24	1.4705	0
26	0.4966	1.2057	1.2057	1.024	1.046					
		R0530-P1	21.6854	6.9027	24.0000	5.7055	131	27	3.9188	131
45	0.2631	2.6445	2.6545	0.472	0.602					
		R0530-P2	20.5315	6.5354	24.0000	4.2475	130	45	3.4267	118
31	0.2069	2.6445	2.6545	0.492	0.612					
		R0530-P3	26.7356	8.5102	24.0000	6.8486	131	13	4.7038	131
22	0.2562	2.6445	2.6545	0.452	0.652					
		R0910-P1	104.9274	5.9212	57.0000	-131.604	0	2	-9.5906	0

2	-1.2542	1.2056	1.2056	1.466	1.517					
	R0910-P2	130.8466	7.3839	57.0000	192.3875	0	1	13.3807	0	
1	1.4703	1.2056	1.2056	1.509	1.709					
	R0380-P1	139.5803	14.5077	42.0000	-14.9465	133	48	-4.9808	133	
48	-0.1071	3.3136	3.2451	0.355	0.453					
	R0380-P2	139.5803	14.5077	42.0000	-14.9465	133	48	-4.9808	133	
48	-0.1071	3.3136	3.2451	0.355	0.453					
	R0300-P1	13.9715	4.4473	24.0000	-4.1386	131	19	-1.3045	131	
19	-0.2962	1.0420	1.0420	2.446	2.706					
	R0300-P2	13.9715	4.4473	24.0000	-4.1386	131	19	-1.3045	131	
19	-0.2962	1.0420	1.0420	2.446	2.706					
	R0290-P2.1	16.6726	5.3070	24.0000	7.1871	118	24	5.1092	118	
25	0.4311	3.4495	3.4801	0.530	0.825					
	RN-004-P1	21.7145	4.4236	30.0000	2.9323	118	2	3.1982	118	
3	0.1350	3.4901	3.2787	0.244	0.223					
	RN-004-P2	30.6868	6.2515	30.0000	4.0073	118	2	4.3208	118	
3	0.1306	3.4901	3.1795	0.244	0.244					
	RN-004-P3	31.6541	6.4485	30.0000	3.4884	118	3	4.2417	118	
3	0.1102	3.4901	3.1485	0.224	0.223					
	RN-001-P1	16.9051	3.4439	30.0000	6.4663	130	54	3.3330	131	
11	0.3825	2.2825	2.0729	0.425	0.429					
	RN-001-P2	20.0672	4.0881	30.0000	5.1979	130	54	3.3159	131	
12	0.2590	2.2825	2.0729	0.361	0.401					
	RN-001-P3	16.5164	3.3647	30.0000	6.5037	130	54	3.3173	131	
11	0.3938	2.2825	2.0729	0.429	0.429					
	RN-005-P1	13.8981	2.8313	30.0000	7.5241	130	40	3.6130	131	
11	0.5414	2.0729	1.9231	0.457	0.433					
	RN-005-P2	13.3977	2.7294	30.0000	9.7463	130	39	4.5087	130	
39	0.7275	2.0729	1.9412	0.457	0.416					
	RN-005-P3	6.5516	1.3347	30.0000	-8.4303	130	42	-3.7506	130	
49	-1.2868	2.0729	1.9231	0.473	0.421					
	RN-008-P1.1	22.8495	3.2325	36.0000	-16.0272	130	34	-4.3946	130	
30	-0.7014	1.9231	1.9228	0.511	0.538					
	RN-008-P2	35.2135	4.9817	36.0000	14.1896	130	35	4.5512	130	
31	0.4030	1.9231	1.9228	0.468	0.531					
	RN-008-P3	37.8917	5.3606	36.0000	12.8419	130	36	4.5292	130	
32	0.3389	1.9231	1.9228	0.434	0.508					
	RN-010-P1	22.1934	3.1397	36.0000	-19.7362	130	35	-4.0059	118	
25	-0.8893	1.9228	1.9224	0.704	0.737					
	RN-010-P2	14.0364	1.9857	36.0000	-19.0029	130	35	-4.0026	118	
25	-1.3538	1.9228	1.9224	0.701	0.714					
	RN-010-P3	15.7677	2.2307	36.0000	17.4527	130	36	3.7774	118	
25	1.1069	1.9228	1.9224	0.694	0.711					
	RN-013-P1	22.1240	3.1299	36.0000	21.3940	130	44	4.8283	130	
43	0.9670	1.9224	1.9215	0.714	0.764					
	RN-013-P2	22.1240	3.1299	36.0000	21.3940	130	44	4.8283	130	
43	0.9670	1.9224	1.9215	0.714	0.764					
	RN-013-P3	22.1240	3.1299	36.0000	21.3940	130	44	4.8283	130	
43	0.9670	1.9224	1.9215	0.714	0.764					
	RN-015-P1	75.8346	10.7284	36.0000	-13.2163	130	55	-2.5256	130	

53	-0.1743	1.9215	1.9203	0.686	0.963								
	RN-015-P2	35.2518	4.9871	36.0000	20.7355	130	54	3.4111	130				
53	0.5882	1.9215	1.9203	1.037	1.097								
	RN-015-P3	47.7311	6.7526	36.0000	24.0365	130	54	4.1694	130				
52	0.5036	1.9215	1.9203	0.991	1.100								
	RN-029-P1	77.5090	10.9653	36.0000	15.4696	0	3	6.5613	0				
2	0.1996	1.7913	1.7913	0.636	0.924								
	RN-029-P2	16.6869	2.3607	36.0000	-26.9931	0	3	-5.4354	0				
3	-1.6176	1.7913	1.7913	0.920	0.934								
	R0742-P1	44.4656	6.2906	36.0000	4.1283	0	0	3.8366	0				
4	0.0928	1.2944	1.2056	0.265	0.369								
	R0742-P2	44.4656	6.2906	36.0000	4.1283	0	0	3.8366	0				
4	0.0928	1.2944	1.2056	0.265	0.369								
	R0655-P1.1	20.7252	4.2221	30.0000	16.4782	0	1	3.2199	0				
1	0.7951	0.0422	0.0100	1.113	1.168								
	R0490-P8	2.4277	1.9783	15.0000	-9.3113	151	35	-7.5393	151				
35	-3.8354	1.3908	0.0800	2.049	1.072								
	R0490-P7	2.4277	1.9783	15.0000	-9.3113	151	35	-7.5393	151				
35	-3.8354	1.3908	0.0800	2.049	1.072								
	R0140-P2.1	37.0505	5.2416	36.0000	11.6898	131	28	1.6486	131				
28	0.3155	2.5475	2.5287	1.482	1.540								
	R0140-P1.1	37.7141	5.3355	36.0000	11.8996	131	28	1.6782	131				
28	0.3155	2.5475	2.5287	1.482	1.540								
	R0120-P1.1	28.8104	5.8692	30.0000	9.4319	0	0	4.4268	118				
20	0.3274	1.2068	0.9603	0.579	0.744								
	R0160-P1.1	13.0466	2.6578	30.0000	32.3875	0	1	7.1813	0				
1	2.4824	0.5103	0.5100	1.000	1.040								
	R0325-P1.1	20.0738	4.0894	30.0000	0.0000	0	0	0.0000	0				
0	0.0000	0.9603	0.9603	.0000	.0000								
	R0400-P1.1	55.1912	5.7365	42.0000	0.0000	0	0	0.0000	0				
0	0.0000	0.9603	0.9603	.0000	.0000								
	R0880-P2.1	30.8103	4.3588	36.0000	0.0000	0	0	0.0000	0				
0	0.0000	0.9603	0.9603	.0000	.0000								
	R1010-P1.1	2.7917	1.5798	18.0000	2.5296	138	43	2.4303	138				
43	0.9061	2.9136	2.5022	0.589	0.401								
	R-0410-P4	4.2580	2.4096	18.0000	-11.4810	0	2	-6.5417	0				
2	-2.6963	1.5366	1.5356	1.784	1.837								
	R-0410-P5	4.2580	2.4096	18.0000	-11.4810	0	2	-6.5417	0				
2	-2.6963	1.5366	1.5356	1.784	1.837								
	R-0410-P6	4.2897	2.4275	18.0000	-11.5439	0	1	-6.5764	0				
1	-2.6911	1.5366	1.5356	1.784	1.837								
	R-0410-P7	9.6396	5.4549	18.0000	-9.9043	0	1	-5.6663	0				
1	-1.0275	1.5366	1.5356	1.711	1.984								
	R0410-P1	204.6947	21.2755	42.0000	17.0423	0	1	8.4260	0				
1	0.0833	1.5366	1.5356	0.439	1.184								
	R0410-P2	204.6947	21.2755	42.0000	17.0423	0	1	8.4260	0				
1	0.0833	1.5366	1.5356	0.439	1.184								
	R0410-P3	204.6947	21.2755	42.0000	17.0423	0	1	8.4260	0				
1	0.0833	1.5366	1.5356	0.439	1.184								
	498.1	6.4466	3.6480	18.0000	8.1231	0	1	4.5324	0				

1	1.2601	1.3908	1.5356	1.481	1.737						
	R0490-P1.1		5.2343	2.9620	18.0000	-7.4651	0	2	-4.2243	0	
2	-1.4262	1.3908	1.5356	1.641	1.844						
	R0490-P3		6.6477	5.4171	15.0000	3.7577	132	53	3.0513	132	
53	0.5653	1.3908	1.3909	1.769	2.321						
	R0490-P4		7.3381	5.9796	15.0000	3.7404	132	53	3.0359	132	
53	0.5097	1.3908	1.3909	1.825	2.505						
	R0490-P5		5.6589	4.6113	15.0000	3.7601	132	53	3.0498	132	
52	0.6645	1.3908	1.3909	1.961	2.361						
	R0490-P6		4.0015	3.2607	15.0000	3.7583	132	53	3.0478	132	
52	0.9392	1.3908	1.3909	2.009	2.209						
	R0890-ORF-2		0.0750	0.0000	9.9960	6.0544	136	30	11.0602	136	
30	80.7479	2.2005	1.9203	1.777	1.441						
	R0890-ORF-5		0.0750	0.0000	9.9960	6.0544	136	30	11.0602	136	
30	80.7479	2.2005	1.9203	1.777	1.441						
	R0890ORF-3		0.0750	0.0000	9.9960	6.0544	136	30	11.0602	136	
30	80.7479	2.2005	1.9203	1.777	1.441						
	R0890-ORF-4		0.0750	0.0000	9.9960	6.0544	136	30	11.0602	136	
30	80.7479	2.2005	1.9203	1.777	1.441						
	N0140-A-W1.1		15.9183	0.0000	48.0000	23.5876	131	30	1.6419	131	
30	1.4818	2.5287	1.8335	0.307	0.133						
	R0540-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.5200	1.5000	.0000	.0000						
	R0290-P5		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	2.1200	2.1400	.0000	.0000						
	R0285-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	2.1200	0.4900	.0000	.0000						
	R0250-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	3.0000	3.0000	.0000	.0000						
	R0230-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	3.3100	3.0000	.0000	.0000						
	R0220-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	2.2200	2.0000	.0000	.0000						
	R0200-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	-0.0800	-0.0800	.0000	.0000						
	R0190-W4		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.3000	-0.0800	.0000	.0000						
	R0170-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.3000	-0.2000	.0000	.0000						
	R0180-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.3000	1.4100	.0000	.0000						
	R0140-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.4100	1.3000	.0000	.0000						
	R0150-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.4400	-0.0800	.0000	.0000						
	R0110-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.3000	-0.7200	.0000	.0000						
	R0130-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	-0.6000	-0.6000	.0000	.0000						
	R0100-W4		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	

0	0.0000	-0.6000	-0.6000	.0000	.0000					
	R0310-W5.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3000	-0.4200	.0000	.0000					
	R0430-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R0340-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R0350-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R0330-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R0360-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3300	.0000	.0000					
	R0550-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.0700	0.3000	.0000	.0000					
	R0560-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.0700	0.3000	.0000	.0000					
	R0780-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	0.1300	.0000	.0000					
	R0740-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	0.1300	.0000	.0000					
	R0870-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3800	1.3800	.0000	.0000					
	R0950-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	1.3800	.0000	.0000					
	R0960-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.9000	1.3800	.0000	.0000					
	R0990-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.5700	0.6000	.0000	.0000					
	R1010-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.6300	0.6000	.0000	.0000					
	R0980-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.7100	1.6300	.0000	.0000					
	R0850-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.7100	1.4600	.0000	.0000					
	R0770-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	0.1300	.0000	.0000					
	R0530-W4		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.6900	1.5200	.0000	.0000					
	R0380-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4900	2.1100	.0000	.0000					
	R0300-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3100	0.3300	.0000	.0000					
	R0290-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.3000	2.3000	.0000	.0000					
	R0655-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.1700	1.2001	.0000	.0000					
	R0140-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.4100	1.3000	.0000	.0000					
	R0120-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0

0	0.0000	1.3000	0.2401	.0000	.0000					
		R0160-W1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.4200	0.2401	.0000	.0000					
		R0400-W1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.2401	.0000	.0000					
		R0880-W2	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-6.9100	0.2401	.0000	.0000					
		R1010-W1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.6300	0.2401	.0000	.0000					
		R0490-W2	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3400	0.7300	.0000	.0000					
		R0050-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.0000	0.2401	.0000	.0000					
		R0050-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.0000	-0.7200	.0000	.0000					
		R0060-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.7200	0.2401	.0000	.0000					
		R0080-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.8000	0.2401	.0000	.0000					
		R0080-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.8000	2.0000	.0000	.0000					
		R0090-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.4900	-0.7200	.0000	.0000					
		R0090-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.4900	0.2401	.0000	.0000					
		R0090-W3.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.4900	1.3000	.0000	.0000					
		R0090-W4.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.4900	1.3000	.0000	.0000					
		R0100-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4600	0.8000	.0000	.0000					
		R0100-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4600	2.0000	.0000	.0000					
		R0100-W3.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4600	0.2401	.0000	.0000					
		R0110-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3000	1.4100	.0000	.0000					
		R0120-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3000	1.3000	.0000	.0000					
		R0130-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.6000	0.2401	.0000	.0000					
		R0150-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.4400	-0.7200	.0000	.0000					
		R0150-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.4400	1.3000	.0000	.0000					
		R0170-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.4400	1.4400	.0000	.0000					
		R0170-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3000	1.4100	.0000	.0000					
		R0190-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0

0	0.0000	1.3000	-0.2000	.0000	.0000					
		R0190-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3000	1.3000	.0000	.0000					
		R0190-W3.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3000	1.4100	.0000	.0000					
		R0200-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.0800	-0.2000	.0000	.0000					
		R0200-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.3100	3.3100	.0000	.0000					
		R0220-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.2200	3.0000	.0000	.0000					
		R0240-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	1.3000	.0000	.0000					
		R0240-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	1.4100	.0000	.0000					
		R0240-W3.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.3100	3.3100	.0000	.0000					
		R0240-W4.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	1.3000	.0000	.0000					
		R0240-W5.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	2.1200	.0000	.0000					
		R0240-W6.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	-0.0800	.0000	.0000					
		R0250-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	2.0000	.0000	.0000					
		R0250-W3.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	3.0000	.0000	.0000					
		R0260-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.0000	-0.2000	.0000	.0000					
		R0270-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	2.0000	.0000	.0000					
		R0270-W3	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	2.0000	.0000	.0000					
		R0270-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.0000	2.3000	.0000	.0000					
		R0275-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.3000	2.1200	.0000	.0000					
		R0280-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.1200	2.1200	.0000	.0000					
		R0285-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.1200	2.0000	.0000	.0000					
		R0290-W2.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.1200	1.3000	.0000	.0000					
		R0290-W3.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.1200	3.0000	.0000	.0000					
		R0290-W4.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	2.1200	3.0000	.0000	.0000					
		R0300-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3100	0.2401	.0000	.0000					
		R0310-W1.1	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0

0	0.0000	1.3000	0.3100	.0000	.0000						
	R0310-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.3000	1.4100	.0000	.0000						
	R0310-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.3000	0.2401	.0000	.0000						
	R0310-W4.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	1.3000	0.3200	.0000	.0000						
	R0325-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3300	0.2401	.0000	.0000						
	R0330-W2.1		0.0000	0.0000	0.0000	1.1989	182	43	0.7136	182	
43	0.0000	0.3200	0.3200	.0000	.0000						
	R0330-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.3200	.0000	.0000						
	R0340-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.3000	.0000	.0000						
	R0340-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.3200	.0000	.0000						
	R0350-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.3200	.0000	.0000						
	R0350-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.8000	.0000	.0000						
	R0360-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.3200	.0000	.0000						
	R0360-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.1100	.0000	.0000						
	R0370-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	2.1400	0.4900	.0000	.0000						
	R0370-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	2.1400	0.3200	.0000	.0000						
	R0370-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	2.1400	3.4500	.0000	.0000						
	R0380-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.4900	3.4500	.0000	.0000						
	R0380-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.4900	3.6900	.0000	.0000						
	R0380-W4.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.4900	3.5000	.0000	.0000						
	R0390-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.8000	0.3200	.0000	.0000						
	R0390-W2		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.8000	0.3200	.0000	.0000						
	R0400-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	0.3200	0.3000	.0000	.0000						
	R0410-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	-0.1700	1.2001	.0000	.0000						
	R0420-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	3.5000	-0.1700	.0000	.0000						
	R0420-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	
0	0.0000	3.5000	3.6900	.0000	.0000						
	R0430-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0	

0	0.0000	0.3200	1.3000	.0000	.0000					
	R0430-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	4.2400	.0000	.0000					
	R0440-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R0450-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.2401	.0000	.0000					
	R0450-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R0460-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R0460-W2.1		0.0000	0.0000	0.0000	321.4489	0	0	264.2107	0
1	0.0000	0.3200	0.3000	.0000	.0000					
	R0480-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.6900	-0.1700	.0000	.0000					
	R0480-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.6900	3.4500	.0000	.0000					
	R0480-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.6900	0.3400	.0000	.0000					
	R0490-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3400	-0.1700	.0000	.0000					
	R0490-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3400	-0.1700	.0000	.0000					
	R0500-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	4.2400	3.4500	.0000	.0000					
	R0510-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.1000	0.2401	.0000	.0000					
	R0520-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3000	0.3000	.0000	.0000					
	R0520-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3000	-0.1000	.0000	.0000					
	R0530-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.6900	0.3200	.0000	.0000					
	R0530-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.6900	3.4500	.0000	.0000					
	R0530-W3		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.6900	4.2400	.0000	.0000					
	R0540-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.5200	3.4500	.0000	.0000					
	R0540-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.5200	3.6900	.0000	.0000					
	R0550-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.0700	0.3200	.0000	.0000					
	R0550-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.0700	0.3000	.0000	.0000					
	R0560-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.0700	0.2401	.0000	.0000					
	R0560-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.0700	0.3600	.0000	.0000					
	R0560-W4.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0

0	0.0000	0.0700	0.1300	.0000	.0000					
	R0560-W5.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.0700	0.1300	.0000	.0000					
	R0570-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3800	0.5800	.0000	.0000					
	R0570-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.4600	1.4600	.0000	.0000					
	R0570-W4.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3800	0.1300	.0000	.0000					
	R0570-W5.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3800	1.3800	.0000	.0000					
	R0640-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.5000	1.3800	.0000	.0000					
	R0650-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.5000	3.6900	.0000	.0000					
	R0660-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.8200	1.3800	.0000	.0000					
	R0660-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.8200	0.1300	.0000	.0000					
	R0690-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.6200	0.5800	.0000	.0000					
	R0720-W1.1		0.0000	0.0000	0.0000	-1.3108	187	16	-0.1780	187
16	0.0000	0.5800	0.1300	.0000	.0000					
	R0730-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3800	1.3800	.0000	.0000					
	R0740-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	1.3800	.0000	.0000					
	R0740-W4.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	0.1300	.0000	.0000					
	R0775-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	0.1300	.0000	.0000					
	R0780-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	0.1300	.0000	.0000					
	R0790-W1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	1.3800	.0000	.0000					
	R0800-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.3500	1.3800	.0000	.0000					
	R0800-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	3.3500	1.3800	.0000	.0000					
	R0810-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3600	0.2401	.0000	.0000					
	R0830-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3000	0.4000	.0000	.0000					
	R0850-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.4600	1.3800	.0000	.0000					
	R0870-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3800	0.1300	.0000	.0000					
	R0885-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	-6.9100	.0000	.0000					
	R0910-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0

0	0.0000	0.1300	0.2401	.0000	.0000					
	R0930-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.3800	1.2001	.0000	.0000					
	R0940-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4000	0.2401	.0000	.0000					
	R0940-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4000	0.1500	.0000	.0000					
	R0945-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1500	0.2401	.0000	.0000					
	R0950-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1300	0.4000	.0000	.0000					
	R0960-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.9000	1.7100	.0000	.0000					
	R0960-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.9000	0.1300	.0000	.0000					
	R0960-W4.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.9000	0.1300	.0000	.0000					
	R0980-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.7100	0.2401	.0000	.0000					
	R0990-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.5700	0.4000	.0000	.0000					
	R0990-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.5700	1.7100	.0000	.0000					
	R1000-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4000	0.1500	.0000	.0000					
	R1020-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.6000	0.2401	.0000	.0000					
	R1030-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.5000	0.2401	.0000	.0000					
	R1030-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.5000	0.6000	.0000	.0000					
	R2002-W1.1		0.0000	0.0000	0.0000	-83.8258	173	29	-29880.9	186
59	0.0000	-0.2700	1.2001	.0000	.0000					
	R02040-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.1100	0.2401	.0000	.0000					
	R2090-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.5700	0.2401	.0000	.0000					
	R2370-W4.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.7300	1.2001	.0000	.0000					
	R2380-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3100	1.2001	.0000	.0000					
	R2380-W3.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3100	0.7300	.0000	.0000					
	R0440-W2.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.3200	0.3200	.0000	.0000					
	R015-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.1700	-0.1700	.0000	.0000					
	R020-W1.1		0.0000	0.0000	0.0000	-6.5663	131	30	-0.9620	135
22	0.0000	1.3800	1.1500	.0000	.0000					
	R021-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0

0	0.0000	1.1500	-0.6000	.0000	.0000					
	R030-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	0.4500	0.4500	.0000	.0000					
	R031-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.4000	-0.1700	.0000	.0000					
	R042-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.6000	-0.1700	.0000	.0000					
	R043-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	-0.6000	-0.6000	.0000	.0000					
	R0850-W1.1		0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0
0	0.0000	1.4600	1.3800	.0000	.0000					
	R0880-WPump	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0920-P2-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0920-P2-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0910-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0325-DS-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0400-WPump	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0880-WPump2	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0880-DS-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0520-DS-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0640-P1-W1	Undefnd	Undefnd	Undefnd	2.0038	131	20			
	R0640-P1-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0640-P2-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0690-P1-W1	Undefnd	Undefnd	Undefnd	2.4061	130	34			
	R0940-DS-W1	Undefnd	Undefnd	Undefnd	0.2735	157	21			
	R0945-DS-W1	Undefnd	Undefnd	Undefnd	0.0453	187	35			
	R1020-DS-W1	Undefnd	Undefnd	Undefnd	6.2351	140	11			
	R0205-W1	Undefnd	Undefnd	Undefnd	5.8626	118	41			
	R0205-W2	Undefnd	Undefnd	Undefnd	3.1115	118	41			
	R0205-W3	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0205-W4	Undefnd	Undefnd	Undefnd	9.1394	118	41			
	R0210-W1.1	Undefnd	Undefnd	Undefnd	-2.1681	192	0			
	R0515-W1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0515-W2.1	Undefnd	Undefnd	Undefnd	-6.1588	178	59			
	R0620-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0620-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0620-W3	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0650-W2.1	Undefnd	Undefnd	Undefnd	24.2432	131	29			
	R0660-W3.1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0742-W1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0890-W1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0915-W1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	RN-019-P1-W1	Undefnd	Undefnd	Undefnd	0.7279	136	41			
	R019-P1-W2	Undefnd	Undefnd	Undefnd	5.8815	131	35			
	R0830-P1-W1.1	Undefnd	Undefnd	Undefnd	-1.2767	0	0			
	R0830-P1-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R0970-P1-W1	Undefnd	Undefnd	Undefnd	-1.2767	0	0			
	R0970-P1-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0			
	R-0001A-W1.1	Undefnd	Undefnd	Undefnd	41.4556	136	29			
	R-0001A-W2	Undefnd	Undefnd	Undefnd	72.6062	136	3			

R0001C-W1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001C-W2	Undefnd	Undefnd	Undefnd	0.7708	133	14
R0001C-W3	Undefnd	Undefnd	Undefnd	0.1631	133	14
R0001E-W1	Undefnd	Undefnd	Undefnd	0.5356	132	1
R0001F-W1.1	Undefnd	Undefnd	Undefnd	2.3810	130	54
R0001F-W2	Undefnd	Undefnd	Undefnd	0.2800	130	54
R0001F-W3	Undefnd	Undefnd	Undefnd	2.3810	130	54
R0001F-W4	Undefnd	Undefnd	Undefnd	1.9433	130	54
R0001F-W5	Undefnd	Undefnd	Undefnd	2.3810	130	54
R001G-W1	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0930-W6.1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001J-W1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0
R000J-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0
R000J-W3	Undefnd	Undefnd	Undefnd	0.0000	0	0
R000J-W4	Undefnd	Undefnd	Undefnd	0.0000	0	0
R000J-W5	Undefnd	Undefnd	Undefnd	1.7381	131	24
R000J-W6	Undefnd	Undefnd	Undefnd	1.7381	131	24
R000J-W7	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001J-W8	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001J-W9	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001J-W10	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001J-W11	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001J-W12	Undefnd	Undefnd	Undefnd	1.7381	131	24
R0001J-W13	Undefnd	Undefnd	Undefnd	1.7381	131	24
R0001J-W14	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001I-W1.1	Undefnd	Undefnd	Undefnd	0.0000	0	0
R001I-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001I-W3	Undefnd	Undefnd	Undefnd	0.0000	0	0
R001I-W4	Undefnd	Undefnd	Undefnd	0.0000	0	0
R001I-W5	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001I-W7	Undefnd	Undefnd	Undefnd	1.3642	132	43
R0001I-W7.1	Undefnd	Undefnd	Undefnd	1.3642	132	43
R0001K-W1.1	Undefnd	Undefnd	Undefnd	0.2705	135	47
R0001K-W2	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0001K-W3	Undefnd	Undefnd	Undefnd	0.0000	0	0
R0880-PUMP	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE# 1	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE# 2	Undefnd	Undefnd	Undefnd	-16.5326	0	1
FREE# 3	Undefnd	Undefnd	Undefnd	-15.9547	0	1
FREE# 4	Undefnd	Undefnd	Undefnd	-15.8074	0	1
FREE# 5	Undefnd	Undefnd	Undefnd	18.6234	151	35
FREE# 6	Undefnd	Undefnd	Undefnd	23.5876	131	30
FREE# 7	Undefnd	Undefnd	Undefnd	11.7592	0	0
FREE# 8	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE# 9	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#10	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#11	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#12	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#13	Undefnd	Undefnd	Undefnd	2.0446	138	43
FREE#14	Undefnd	Undefnd	Undefnd	-38.2377	0	1

FREE#15	Undefnd	Undefnd	Undefnd	-57.1031	0	1
FREE#16	Undefnd	Undefnd	Undefnd	45.2849	118	7
FREE#17	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#18	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#19	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#20	Undefnd	Undefnd	Undefnd	-32.3870	0	1
FREE#21	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#22	Undefnd	Undefnd	Undefnd	11.8124	0	0
FREE#23	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#24	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#25	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#26	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#27	Undefnd	Undefnd	Undefnd	-2.1681	192	0
FREE#28	Undefnd	Undefnd	Undefnd	-6.1588	179	59
FREE#29	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#30	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#31	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#32	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#33	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#34	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#35	Undefnd	Undefnd	Undefnd	-16.4789	0	1
FREE#36	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#37	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#38	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#39	Undefnd	Undefnd	Undefnd	-83.8258	173	29
FREE#40	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#41	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#42	Undefnd	Undefnd	Undefnd	6.2351	140	11
FREE#43	Undefnd	Undefnd	Undefnd	0.2735	157	21
FREE#44	Undefnd	Undefnd	Undefnd	2.5296	138	43
FREE#45	Undefnd	Undefnd	Undefnd	0.0453	187	35
FREE#46	Undefnd	Undefnd	Undefnd	113.9657	136	29
FREE#47	Undefnd	Undefnd	Undefnd	0.5356	132	1
FREE#48	Undefnd	Undefnd	Undefnd	9.3662	130	54
FREE#49	Undefnd	Undefnd	Undefnd	0.0000	0	0
FREE#50	Undefnd	Undefnd	Undefnd	24.2176	136	30
FREE#51	Undefnd	Undefnd	Undefnd	3.4763	131	24
FREE#52	Undefnd	Undefnd	Undefnd	3.4763	131	24

=====
 | Table E11. Area assumptions used in the analysis |
 | Subcritical and Critical flow assumptions from |
 | Subroutine Head. See Figure 17-1 in the |
 | manual for further information. |
 =====

Maximum	Duration of	Duration of Sub-	Durat. of Upstream	Durat. of Downstream	Maximum	Maximum
---------	----------------	---------------------	-----------------------	-------------------------	---------	---------

Vel*D	Conduit Name	Dry Flow(min)	Critical Flow(min)	Critical Flow(min)	Critical Flow(min)	Hydraulic Radius-m	X-Sect
Area(ft^2)	(ft^2/s)						
20.507	R0870	0.00	11520.00	0.00	0.00	1.585	
8.380	R0770-P2	0.00	10434.60	1085.40	0.00	1.137	
20.508	R0900	0.00	11504.25	0.00	15.75	1.585	
5.111	R0370	5064.92	6404.80	0.00	50.28	0.781	
2.319	R0280	7702.44	883.58	2933.97	0.00	0.597	
20.580	R0202	0.00	11520.00	0.00	0.00	1.521	
0.935	RN-002	0.00	0.00	0.00	11520.00	0.392	
1.040	RN-003	2377.49	0.00	0.00	9142.51	0.409	
1.484	RN-006	6824.90	0.00	0.00	4695.10	0.484	
1.127	RN-007	3810.98	0.00	0.00	7709.02	0.427	
2.637	RN-009	6507.59	4948.83	0.00	63.58	0.645	
1.971	RN-009MH	2374.98	0.00	0.00	9145.02	0.594	
2.852	RN-011	2875.96	887.93	0.00	7756.12	0.699	
1.445	RN-014	2377.02	1781.43	449.82	6911.73	0.434	
5.104	RN-012	2367.29	9152.71	0.00	0.00	1.119	
1.702	RN-023	0.50	11470.42	0.00	49.08	0.456	
1.056	RN-021	1083.98	6718.29	3663.96	53.77	0.377	
5.134	RN-041	0.00	11520.00	0.00	0.00	0.760	
2.310	RN-020	4104.28	7415.72	0.00	0.00	0.552	
2.670	RN-022	15.06	10029.24	1.16	1474.54	0.669	
3.842	RN-024	1.18	11399.99	16.02	102.82	0.756	
0.997	RN-026	17.14	11492.37	0.00	10.50	0.407	

1.852	2.680	RN-027	0.00	11520.00	0.00	0.00	0.456
1.846	2.779	RN-028	1.26	11511.32	7.42	0.00	0.456
3.144	4.441	R0742-P3	0.00	11520.00	0.00	0.00	0.607
5.141	9.001	R0655-P2	0.00	11520.00	0.00	0.00	0.625
5.018	8.211	R0655-P3	0.00	11520.00	0.00	0.00	0.627
5.075	8.158	R0655-P4	0.00	11520.00	0.00	0.00	0.647
3.089	4.118	R0120-P2	0.00	11520.00	0.00	0.00	0.693
0.745	1.506	R1010-P2	7079.03	0.00	0.00	4440.97	0.376
7.065	13.872	RN-025-P1	0.00	11518.30	1.70	0.00	0.913
7.087	19.923	RN-025-P2	0.00	11520.00	0.00	0.00	0.912
4.796	16.477	R0155-P1	0.00	11520.00	0.00	0.00	0.969
22.318	2.218	R0386	0.00	11519.25	0.00	0.75	1.009
22.314	2.265	R0388	0.25	10915.26	0.00	604.49	1.009
29.712	2.165	R0385	0.00	11520.00	0.00	0.00	1.401
92.286	1.730	R0375	0.00	11520.00	0.00	0.00	2.176
8.367	1.769	R0335	0.00	11352.26	0.00	167.74	0.518
4.652	1.263	R-0001B-P1	2587.04	4277.51	4655.45	0.00	0.856
1.741	4.443	R0540-P1	5356.95	0.00	6163.05	0.00	0.546
1.518	3.784	R0540-P2	7112.32	0.00	0.00	4407.68	0.511
1.426	3.722	R0540-P3	8605.29	0.00	0.00	2914.71	0.491
4.723	4.041	R0290-P1	5104.88	4459.54	1955.58	0.00	0.759
3.080	7.378	R0285.1	0.00	4376.55	0.00	7143.45	0.662
3.128	6.847	R0250.1	2372.41	8221.47	926.12	0.00	0.598
2.891	7.922	R0230.1	4082.79	7200.44	0.00	236.77	0.607
7.017	4.381	R0220.1	0.00	11520.00	0.00	0.00	1.059

	R0200.1	0.00	11520.00	0.00	0.00	0.947
7.409	7.577					
	R0190.1	0.00	11520.00	0.00	0.00	0.606
3.221	12.570					
	R0170.1	0.00	11520.00	0.00	0.00	0.934
3.254	11.429					
	R0180-P1	0.00	11520.00	0.00	0.00	0.875
7.407	5.740					
	R0180-P2	0.00	11520.00	0.00	0.00	0.875
7.407	5.708					
	R0140.1	11199.88	0.00	0.00	320.12	0.148
0.196	0.437					
	R0140-P3.1	11199.88	0.00	0.00	320.12	0.148
0.196	0.437					
	R0150-P1	3506.00	0.00	0.00	8014.00	0.543
1.872	8.093					
	R0150-P2	11292.34	178.28	0.00	49.38	0.284
0.620	5.337					
	R0150-P3	11292.34	179.05	0.00	48.61	0.337
0.883	5.488					
	R0150-P4	3506.00	104.66	0.00	7909.34	0.543
1.872	10.420					
	R0150-P5	11110.32	0.00	0.00	409.68	0.349
0.782	4.371					
	R0110.1	1298.51	3225.82	6995.67	0.00	0.589
2.534	9.590					
	R0130-P1	6872.95	4353.98	0.00	293.07	1.049
6.316	4.864					
	R0130-P2	6872.95	4353.98	0.00	293.07	1.049
6.316	4.751					
	R0100-P1	6496.08	3645.40	1378.52	0.00	0.551
1.774	2.369					
	R0100-P2	6496.08	3645.45	1378.47	0.00	0.551
1.774	2.358					
	R0310.1	0.00	11420.75	99.25	0.00	0.756
4.634	16.020					
	R0430-P1	0.00	11520.00	0.00	0.00	0.563
1.873	2.222					
	R0430-P2	0.00	11520.00	0.00	0.00	0.563
1.873	2.222					
	R0430-P3	0.00	11520.00	0.00	0.00	0.563
1.873	2.222					
	R0430-P4	0.00	11520.00	0.00	0.00	0.563
1.873	2.214					
	R0340-P1	0.00	11520.00	0.00	0.00	1.061
7.727	4.866					
	R0340-P2	0.00	11520.00	0.00	0.00	1.023
6.346	3.677					
	R0350-P1	0.00	11520.00	0.00	0.00	1.040
9.784	7.120					

	R0350-P2	0.00	11520.00	0.00	0.00	1.040
9.784	7.120					
	R0330-P1	0.00	11520.00	0.00	0.00	0.875
9.865	1.376					
	R0330-P2	0.00	11520.00	0.00	0.00	0.875
9.865	1.376					
	R0450-P1	0.00	11520.00	0.00	0.00	0.730
3.416	5.453					
	R0450-P2	0.00	11520.00	0.00	0.00	0.730
3.416	5.453					
	P0360-P1	0.00	11520.00	0.00	0.00	0.454
1.391	1.048					
	P0360-P2	0.00	11520.00	0.00	0.00	0.456
1.698	1.831					
	R0550-P1	0.00	11520.00	0.00	0.00	1.001
6.470	9.622					
	R0550-P2	0.00	11516.81	0.00	3.19	0.995
6.332	7.970					
	R0560-P1	0.00	11520.00	0.00	0.00	1.172
8.051	8.682					
	R0560-P2	0.00	11520.00	0.00	0.00	1.164
7.937	10.838					
	R0560-P3	0.00	11520.00	0.00	0.00	1.169
8.003	10.959					
	R0780.1	0.00	11520.00	0.00	0.00	0.936
7.932	7.034					
	R0740.1	0.00	11197.10	322.90	0.00	0.605
3.145	3.318					
	R0730.1	0.00	11502.27	17.73	0.00	0.374
1.817	18.020					
	R0880.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
	R0950.1	0.00	11518.24	0.00	1.76	0.600
3.005	13.937					
	R0920.1	0.00	11457.31	58.41	4.28	0.873
4.506	21.869					
	R0960.1	6836.62	0.00	0.00	4683.38	0.414
1.131	2.544					
	R0990.1	6836.79	4305.83	0.00	377.38	0.591
2.291	1.973					
	R1010-P3	6976.68	4129.40	413.92	0.00	0.733
3.115	2.766					
	R1010-P4	6659.35	4124.37	736.29	0.00	0.741
3.211	2.916					
	R1010-P5	7054.15	4103.35	362.50	0.00	0.740
3.154	2.697					
	R0980-P1.1	6897.54	3226.63	1395.82	0.00	0.746
3.567	9.685					
	R0980-P2.1	7084.64	4435.36	0.00	0.00	0.729
3.088	4.920					

3.187	R0850-P1	7043.33	0.00	0.00	4476.67	0.744
	5.132					
3.043	R0850-P2	7056.67	0.00	0.00	4463.33	0.737
	4.906					
2.877	R0850-P3	7060.72	0.00	0.00	4459.28	0.726
	4.504					
11.795	R0570-P1	0.00	11511.40	0.00	8.60	1.217
	34.928					
11.618	R0570-P2	0.00	11520.00	0.00	0.00	1.217
	41.170					
11.693	R0570-P3	0.00	11510.74	0.00	9.26	1.217
	34.637					
7.326	R0770-P1.1	0.00	11520.00	0.00	0.00	0.901
	19.668					
12.676	R0770-P3	0.00	11501.84	0.00	18.16	1.217
	15.757					
12.726	R0770-P4	0.00	11502.10	0.00	17.90	1.216
	16.665					
19.421	R0790-P1	0.00	11520.00	0.00	0.00	1.584
	3.859					
12.781	R0790-P2	0.00	11520.00	0.00	0.00	1.217
	4.426					
1.712	R0530-P1	8445.58	3055.21	19.22	0.00	0.489
	4.073					
1.772	R0530-P2	7338.41	4181.59	0.00	0.00	0.530
	3.018					
1.760	R0530-P3	9027.10	2492.88	0.02	0.00	0.478
	5.184					
18.537	R0910-P1	0.00	11508.58	11.42	0.00	1.440
	35.059					
18.202	R0910-P2	0.00	11520.00	0.00	0.00	1.444
	35.881					
3.624	R0380-P1	7132.15	0.00	4387.85	0.00	0.674
	7.044					
3.624	R0380-P2	7132.15	0.00	4387.85	0.00	0.674
	7.044					
3.173	R0300-P1	0.00	11520.00	0.00	0.00	0.500
	6.349					
3.173	R0300-P2	0.00	11520.00	0.00	0.00	0.500
	6.349					
2.219	R0290-P2.1	3287.79	3545.90	0.00	4686.31	0.535
	4.688					
0.873	RN-004-P1	2370.25	0.00	0.00	9149.75	0.356
	1.869					
0.927	RN-004-P2	2370.25	0.00	0.00	9149.75	0.359
	2.634					
0.821	RN-004-P3	10305.32	0.00	0.00	1214.68	0.333
	2.372					
1.992	RN-001-P1	0.00	9823.46	338.38	1358.16	0.559
	3.431					

1.709	RN-001-P2	3901.51	7124.26	494.23	0.00	0.499
	3.017					
2.004	RN-001-P3	0.00	9686.57	319.48	1513.96	0.563
	3.428					
2.067	RN-005-P1	40.46	10253.70	9.71	1216.13	0.585
	3.808					
2.060	RN-005-P2	40.46	9662.63	4.48	1812.43	0.585
	4.923					
2.076	RN-005-P3	0.00	9797.23	1722.77	0.00	0.602
	4.055					
3.752	RN-008-P1.1	0.00	11259.32	260.68	0.00	0.781
	6.323					
3.524	RN-008-P2	255.09	11220.98	43.94	0.00	0.771
	6.241					
3.268	RN-008-P3	309.00	11200.13	10.87	0.00	0.749
	5.836					
5.452	RN-010-P1	0.00	11520.00	0.00	0.00	0.900
	7.509					
5.345	RN-010-P2	0.00	11520.00	0.00	0.00	0.893
	7.347					
5.304	RN-010-P3	0.00	11520.00	0.00	0.00	0.891
	6.904					
5.595	RN-013-P1	0.00	11433.74	86.26	0.00	0.907
	8.171					
5.595	RN-013-P2	0.00	11433.74	86.26	0.00	0.907
	8.171					
5.595	RN-013-P3	0.00	11433.74	86.26	0.00	0.907
	8.171					
6.051	RN-015-P1	9.76	11510.24	0.00	0.00	0.901
	4.380					
7.278	RN-015-P2	0.00	11520.00	0.00	0.00	0.913
	8.389					
7.205	RN-015-P3	0.00	11520.00	0.00	0.00	0.910
	9.983					
5.750	RN-029-P1	0.00	11520.00	0.00	0.00	0.900
	8.382					
6.834	RN-029-P2	0.00	11516.57	3.43	0.00	0.913
	10.109					
1.789	R0742-P1	5058.26	5204.89	329.18	927.68	0.584
	2.267					
1.789	R0742-P2	5058.26	5204.89	329.18	927.68	0.584
	2.267					
5.130	R0655-P1.1	0.00	11520.00	0.00	0.00	0.625
	8.956					
1.257	R0490-P8	0.00	11520.00	0.00	0.00	0.313
	14.704					
1.257	R0490-P7	0.00	11520.00	0.00	0.00	0.313
	14.704					
7.390	R0140-P2.1	0.00	11520.00	0.00	0.00	0.750
	7.473					

7.390	R0140-P1.1	0.00	11520.00	0.00	0.00	0.750
	7.607					
3.089	R0120-P1.1	0.00	11520.00	0.00	0.00	0.738
	4.106					
4.957	R0160-P1.1	0.00	11520.00	0.00	0.00	0.760
	14.011					
0.000	R0325-P1.1	11520.00	0.00	0.00	0.00	0.000
	0.000					
0.000	R0400-P1.1	11520.00	0.00	0.00	0.00	0.000
	0.000					
0.000	R0880-P2.1	11520.00	0.00	0.00	0.00	0.000
	0.000					
0.865	R1010-P1.1	7074.44	0.00	0.00	4445.56	0.403
	1.805					
1.848	R-0410-P4	0.00	11488.64	31.36	0.00	0.456
	10.580					
1.848	R-0410-P5	0.00	11488.64	31.36	0.00	0.456
	10.580					
1.848	R-0410-P6	0.00	11488.14	31.86	0.00	0.456
	10.645					
1.812	R-0410-P7	0.00	11483.72	36.28	0.00	0.448
	9.565					
6.824	R0410-P1	0.00	10703.09	816.91	0.00	0.978
	13.411					
6.824	R0410-P2	0.00	10703.09	816.91	0.00	0.978
	13.411					
6.824	R0410-P3	0.00	10703.09	816.91	0.00	0.978
	13.411					
1.812	498.1	0.00	11520.00	0.00	0.00	0.455
	9.075					
1.837	R0490-P1.1	0.00	11520.00	0.00	0.00	0.455
	9.797					
1.259	R0490-P3	0.00	11520.00	0.00	0.00	0.374
	6.611					
1.260	R0490-P4	0.00	11520.00	0.00	0.00	0.374
	7.027					
1.259	R0490-P5	0.00	11520.00	0.00	0.00	0.364
	7.044					
1.258	R0490-P6	0.00	11520.00	0.00	0.00	0.350
	6.844					
0.569	R0890-ORF-2	0.00	8770.17	21.77	2728.06	0.253
	12.794					
0.569	R0890-ORF-5	0.00	8770.17	21.77	2728.06	0.253
	12.794					
0.569	R0890ORF-3	0.00	8770.17	21.77	2728.06	0.253
	12.794					
0.569	R0890-ORF-4	0.00	8770.17	21.77	2728.06	0.253
	12.794					
10.239	N0140-A-W1.1	2.78	0.00	0.00	11517.22	0.937
	1.447					

0.000	R0540-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0290-P5	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0285-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0250-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0230-W1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0220-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0200-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0190-W4	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0170-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0180-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0140-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0150-W3	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0110-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0130-W1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0100-W4	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0310-W5.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0430-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0340-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0350-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0330-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0360-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0550-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0560-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0780-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0740-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					

0.000	R0870-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0950-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0960-W2	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0990-W2	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R1010-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0980-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0850-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0770-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0530-W4	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0380-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0300-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0290-W1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0655-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0140-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0120-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0160-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0400-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0880-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R1010-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0490-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0050-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0050-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0060-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0080-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0080-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					

0.000	R0090-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0090-W2.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0090-W3.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0090-W4.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0100-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0100-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0100-W3.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0110-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0120-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0130-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0150-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0150-W2.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0170-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0170-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0190-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0190-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0190-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0200-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0200-W2.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0220-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0240-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0240-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0240-W3.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0240-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0240-W5.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					

0.000	R0240-W6.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0250-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0250-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0260-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0270-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0270-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0270-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0275-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0280-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0285-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0290-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0290-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0290-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0300-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0310-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0310-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0310-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0310-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0325-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0330-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0330-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0340-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0340-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0350-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0350-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					

0.000	R0360-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0360-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0370-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0370-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0370-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0380-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0380-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0380-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0390-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0390-W2	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0400-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0410-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0420-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0420-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0430-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0430-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0440-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0450-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0450-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0460-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0460-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0480-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0480-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0480-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0490-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					

0.000	R0490-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0500-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0510-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0520-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0520-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0530-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0530-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0530-W3	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0540-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0540-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0550-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0550-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0560-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0560-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0560-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0560-W5.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0570-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0570-W3.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0570-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0570-W5.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0640-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0650-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0660-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0660-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0690-W2.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					

0.000	R0720-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0730-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0740-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0740-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0775-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0780-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0790-W1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0800-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0800-W2.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0810-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0830-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0850-W3.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0870-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0885-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0910-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0930-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0940-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0940-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0945-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0950-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0960-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0960-W3.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0960-W4.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0980-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0990-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					

0.000	R0990-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R1000-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R1020-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R1030-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R1030-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R2002-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R02040-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R2090-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R2370-W4.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R2380-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R2380-W3.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0440-W2.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R015-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R020-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R021-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R030-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					
0.000	R031-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R042-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R043-W1.1	0.00	11520.00	0.00	0.00	0.000
0.000	0.000					
0.000	R0850-W1.1	11520.00	0.00	0.00	0.00	0.000
0.000	0.000					

=====

User defined weir submergence information
Average Weir Submergence Constant and Weir Head

=====

Weir Name	Mean Constant	Mean Weir Head
R0540-W3	0.00000	0.00000
R0290-P5	0.00000	0.00000
R0285-W2	0.00000	0.00000

R0250-W1	0.00000	0.00000
R0230-W1	0.00000	0.00000
R0220-W2	0.00000	0.00000
R0200-W3	0.00000	0.00000
R0190-W4	0.00000	0.00000
R0170-W3	0.00000	0.00000
R0180-W1	0.00000	0.00000
R0140-W1	0.00000	0.00000
R0150-W3	0.00000	0.00000
R0110-W1	0.00000	0.00000
R0130-W1	0.00000	0.00000
R0100-W4	0.00000	0.00000
R0310-W5.1	0.00000	0.00000
R0430-W3	0.00000	0.00000
R0340-W3	0.00000	0.00000
R0350-W1	0.00000	0.00000
R0330-W1	0.00000	0.00000
R0360-W1	0.00000	0.00000
R0550-W2	0.00000	0.00000
R0560-W1	0.00000	0.00000
R0780-W1	0.00000	0.00000
R0740-W3	0.00000	0.00000
R0870-W1	0.00000	0.00000
R0950-W1	0.00000	0.00000
R0960-W2	0.00000	0.00000
R0990-W2	0.00000	0.00000
R1010-W2	0.00000	0.00000
R0980-W2	0.00000	0.00000
R0850-W2	0.00000	0.00000
R0770-W2	0.00000	0.00000
R0530-W4	0.00000	0.00000
R0380-W3	0.00000	0.00000
R0300-W2	0.00000	0.00000
R0290-W1	0.00000	0.00000
R0655-W2	0.00000	0.00000
R0140-W2	0.00000	0.00000
R0120-W2	0.00000	0.00000
R0160-W1	0.00000	0.00000
R0400-W1	0.00000	0.00000
R0880-W2	0.00000	0.00000
R1010-W1	0.00000	0.00000
R0490-W2	0.00000	0.00000
R0050-W1.1	0.00000	0.00000
R0050-W2.1	0.00000	0.00000
R0060-W1.1	0.00000	0.00000
R0080-W1.1	0.00000	0.00000
R0080-W2.1	0.00000	0.00000
R0090-W1.1	0.00000	0.00000
R0090-W2.1	0.00000	0.00000
R0090-W3.1	0.00000	0.00000

R0090-W4.1	0.00000	0.00000
R0100-W1.1	0.00000	0.00000
R0100-W2.1	0.00000	0.00000
R0100-W3.1	0.00000	0.00000
R0110-W2.1	0.00000	0.00000
R0120-W1.1	0.00000	0.00000
R0130-W2.1	0.00000	0.00000
R0150-W1.1	0.00000	0.00000
R0150-W2.1	0.00000	0.00000
R0170-W1.1	0.00000	0.00000
R0170-W2.1	0.00000	0.00000
R0190-W1.1	0.00000	0.00000
R0190-W2.1	0.00000	0.00000
R0190-W3.1	0.00000	0.00000
R0200-W1.1	0.00000	0.00000
R0200-W2.1	0.00000	0.00000
R0220-W1.1	0.00000	0.00000
R0240-W1.1	0.00000	0.00000
R0240-W2.1	0.00000	0.00000
R0240-W3.1	0.00000	0.00000
R0240-W4.1	0.00000	0.00000
R0240-W5.1	0.00000	0.00000
R0240-W6.1	0.00000	0.00000
R0250-W2.1	0.00000	0.00000
R0250-W3.1	0.00000	0.00000
R0260-W1.1	0.00000	0.00000
R0270-W1.1	0.00000	0.00000
R0270-W3	0.00000	0.00000
R0270-W2.1	0.00000	0.00000
R0275-W1.1	0.00000	0.00000
R0280-W1.1	0.00000	0.00000
R0285-W1.1	0.00000	0.00000
R0290-W2.1	0.00000	0.00000
R0290-W3.1	0.00000	0.00000
R0290-W4.1	0.00000	0.00000
R0300-W1.1	0.00000	0.00000
R0310-W1.1	0.00000	0.00000
R0310-W2.1	0.00000	0.00000
R0310-W3.1	0.00000	0.00000
R0310-W4.1	0.00000	0.00000
R0325-W2.1	0.00000	0.00000
R0330-W2.1	0.34412	0.02541
R0330-W3.1	0.00000	0.00000
R0340-W1.1	0.00000	0.00000
R0340-W2.1	0.00000	0.00000
R0350-W2.1	0.00000	0.00000
R0350-W3.1	0.00000	0.00000
R0360-W2.1	0.00000	0.00000
R0360-W3.1	0.00000	0.00000
R0370-W1.1	0.00000	0.00000

R0370-W2.1	0.00000	0.00000
R0370-W3.1	0.00000	0.00000
R0380-W1.1	0.00000	0.00000
R0380-W2.1	0.00000	0.00000
R0380-W4.1	0.00000	0.00000
R0390-W1.1	0.00000	0.00000
R0390-W2	0.00000	0.00000
R0400-W2.1	0.00000	0.00000
R0410-W1.1	0.00000	0.00000
R0420-W1.1	0.00000	0.00000
R0420-W2.1	0.00000	0.00000
R0430-W1.1	0.00000	0.00000
R0430-W2.1	0.00000	0.00000
R0440-W1.1	0.00000	0.00000
R0450-W1.1	0.00000	0.00000
R0450-W2.1	0.00000	0.00000
R0460-W1.1	0.00000	0.00000
R0460-W2.1	0.10001	1.21393
R0480-W1.1	0.00000	0.00000
R0480-W2.1	0.00000	0.00000
R0480-W3.1	0.00000	0.00000
R0490-W1.1	0.00000	0.00000
R0490-W3.1	0.00000	0.00000
R0500-W1.1	0.00000	0.00000
R0510-W2.1	0.00000	0.00000
R0520-W1.1	0.00000	0.00000
R0520-W2.1	0.00000	0.00000
R0530-W1.1	0.00000	0.00000
R0530-W2.1	0.00000	0.00000
R0530-W3	0.00000	0.00000
R0540-W1.1	0.00000	0.00000
R0540-W2.1	0.00000	0.00000
R0550-W1.1	0.00000	0.00000
R0550-W3.1	0.00000	0.00000
R0560-W2.1	0.00000	0.00000
R0560-W3.1	0.00000	0.00000
R0560-W4.1	0.00000	0.00000
R0560-W5.1	0.00000	0.00000
R0570-W1.1	0.00000	0.00000
R0570-W3.1	0.00000	0.00000
R0570-W4.1	0.00000	0.00000
R0570-W5.1	0.00000	0.00000
R0640-W1.1	0.00000	0.00000
R0650-W1.1	0.00000	0.00000
R0660-W1.1	0.00000	0.00000
R0660-W2.1	0.00000	0.00000
R0690-W2.1	0.00000	0.00000
R0720-W1.1	0.32888	0.01752
R0730-W1.1	0.00000	0.00000
R0740-W2.1	0.00000	0.00000

R0740-W4.1	0.00000	0.00000
R0775-W1.1	0.00000	0.00000
R0780-W2.1	0.00000	0.00000
R0790-W1	0.00000	0.00000
R0800-W1.1	0.00000	0.00000
R0800-W2.1	0.00000	0.00000
R0810-W1.1	0.00000	0.00000
R0830-W3.1	0.00000	0.00000
R0850-W3.1	0.00000	0.00000
R0870-W2.1	0.00000	0.00000
R0885-W1.1	0.00000	0.00000
R0910-W2.1	0.00000	0.00000
R0930-W1.1	0.00000	0.00000
R0940-W1.1	0.00000	0.00000
R0940-W2.1	0.00000	0.00000
R0945-W1.1	0.00000	0.00000
R0950-W2.1	0.00000	0.00000
R0960-W1.1	0.00000	0.00000
R0960-W3.1	0.00000	0.00000
R0960-W4.1	0.00000	0.00000
R0980-W1.1	0.00000	0.00000
R0990-W1.1	0.00000	0.00000
R0990-W3.1	0.00000	0.00000
R1000-W1.1	0.00000	0.00000
R1020-W1.1	0.00000	0.00000
R1030-W1.1	0.00000	0.00000
R1030-W2.1	0.00000	0.00000
R2002-W1.1	0.28544	0.84283
R02040-W1.1	0.00000	0.00000
R2090-W1.1	0.00000	0.00000
R2370-W4.1	0.00000	0.00000
R2380-W2.1	0.00000	0.00000
R2380-W3.1	0.00000	0.00000
R0440-W2.1	0.00000	0.00000
R015-W1.1	0.00000	0.00000
R020-W1.1	0.25422	0.03812
R021-W1.1	0.00000	0.00000
R030-W1.1	0.00000	0.00000
R031-W1.1	0.00000	0.00000
R042-W1.1	0.00000	0.00000
R043-W1.1	0.00000	0.00000
R0850-W1.1	0.00000	0.00000

=====

| Table E12. Mean Conduit Flow Information |

=====

Mean	Mean	Mean	Mean	Total	Mean	Low	Mean
Hydraulic	Conduit	Conduit	Flow	Flow	Percent	Flow	Froude

Radius	Area	Name Roughness	(cfs)	(ft^3)	Change	Weightng	Number
1.4404	19.4113	R0870	4.9205	3401015.9	0.0001	1.0000	0.0263
0.9356	9.0761	R0770-P2	-2.3565	-1628799.	0.0000	1.0000	0.0431
1.4353	19.5913	R0900	4.8120	3326062.3	0.0001	1.0000	0.0254
0.3487	2.0967	R0370	0.7628	527258.37	0.0000	0.6142	0.0454
0.1158	0.3134	R0280	-0.3673	-253864.5	0.0000	0.3980	0.0926
1.3883	18.3149	R0202	-0.3880	-268211.3	0.0000	1.0000	0.0016
0.0300	0.0386	RN-002	0.0651	45022.245	0.0000	0.9973	1.7438
0.0214	0.0279	RN-003	0.0586	40531.826	0.0000	0.6789	1.5010
0.0242	0.0463	RN-006	0.0820	56649.412	0.0000	0.4605	0.6446
0.0229	0.0356	RN-007	0.0598	41364.983	0.0000	0.5628	0.9698
0.0321	0.0636	RN-009	0.1044	72154.778	0.0000	0.4719	0.4080
0.0326	0.0593	RN-009MH	0.1044	72158.763	0.0000	0.6343	0.7676
0.0374	0.0811	RN-011	0.1629	112578.69	0.0000	0.6952	1.4162
0.0608	0.1176	RN-014	0.0886	61220.520	0.0000	0.8186	0.9595
0.2885	1.9508	RN-012	0.2593	179239.94	0.0000	0.8194	0.0602
0.4194	1.2096	RN-023	0.4350	300659.34	0.0000	1.0000	0.0941
0.1969	0.3458	RN-021	-0.4256	-294184.9	0.0000	0.9150	0.2692
0.5846	2.9907	RN-041	0.4005	276837.09	0.0000	1.0000	0.0120
0.1563	0.3772	RN-020	0.4037	279052.03	0.0000	0.6985	0.1612
0.3066	0.8750	RN-022	0.5091	351902.73	0.0000	0.9987	0.1125
0.6657	2.8993	RN-024	0.7328	506490.33	0.0000	1.0000	0.0910
0.2390	0.4494	RN-026	0.0068	4703.9170	0.0000	0.9985	0.0288
0.3804	1.7959	RN-027	-0.0681	-47078.80	0.0000	1.0000	0.0189

		RN-028	0.0788	54460.321	0.0000	1.0000	0.0226
0.3944	1.7600	0.0120					
		R0742-P3	-0.6759	-467156.3	0.0000	1.0000	0.0472
0.5517	2.3791	0.0130					
		R0655-P2	-0.3956	-273440.8	0.0000	1.0000	0.0106
0.6250	5.1399	0.0110					
		R0655-P3	-0.3879	-268112.9	0.0000	1.0000	0.0111
0.6250	5.0248	0.0110					
		R0655-P4	0.3934	271950.98	0.0000	1.0000	0.0110
0.6250	5.0576	0.0110					
		R0120-P2	0.1449	100180.16	0.0000	1.0000	0.0432
0.4364	1.3930	0.0120					
		R1010-P2	0.3447	238272.67	0.0000	0.4550	0.2224
0.1168	0.2260	0.0240					
		RN-025-P1	3.2861	2271366.8	0.0000	1.0000	0.0666
0.8794	6.5192	0.0120					
		RN-025-P2	2.1427	1481039.3	0.0000	1.0000	0.0655
0.8907	6.3759	0.0120					
		R0155-P1	0.6468	447053.39	0.0030	1.0000	0.3804
0.5336	2.4585	0.0240					
		R0386	2.8774	1988844.1	0.0001	1.0000	0.0431
0.4230	8.5292	0.0350					
		R0388	2.9142	2014307.7	0.0001	1.0000	0.0588
0.4137	8.2936	0.0350					
		R0385	2.8351	1959609.9	0.0000	1.0000	0.0374
0.4293	8.6888	0.0350					
		R0375	1.1287	780130.13	0.0000	1.0000	0.0025
1.1818	37.6016	0.0350					
		R0335	0.3938	272198.05	0.0000	1.0000	0.0191
0.3014	3.7373	0.0350					
		R-0001B-P1	-0.0979	-67695.50	0.0000	0.8111	0.1460
0.3730	1.8446	0.0140					
		R0540-P1	-0.3520	-243281.2	0.0000	0.5875	0.2999
0.0965	0.1918	0.0110					
		R0540-P2	0.2369	163714.36	0.0000	0.4485	0.2648
0.0640	0.1229	0.0110					
		R0540-P3	0.2005	138588.44	0.0000	0.3075	0.2044
0.0490	0.0941	0.0110					
		R0290-P1	-0.2254	-155814.8	0.0000	0.6114	0.0361
0.3742	1.4956	0.0120					
		R0285.1	1.4233	983801.17	0.0001	0.4629	0.2951
0.1790	0.5301	0.0120					
		R0250.1	0.1730	119544.73	0.0000	0.8190	0.1052
0.3464	1.5787	0.0120					
		R0230.1	0.2884	199369.76	0.0000	0.6873	0.0435
0.2732	1.2414	0.0240					
		R0220.1	0.3083	213094.86	0.0000	1.0000	0.0149
0.7516	4.6174	0.0120					
		R0200.1	0.3889	268815.18	0.0000	1.0000	0.0111
0.6259	4.6475	0.0120					

	R0190.1	0.1816	125525.10	0.0000	1.0000	0.0066
0.5257	2.8453	0.0240				
	R0170.1	0.4306	297653.87	0.0000	1.0000	0.0439
0.4333	1.5747	0.0120				
	R0180-P1	0.1923	132909.67	0.0000	1.0000	0.0070
0.8238	7.0084	0.0120				
	R0180-P2	0.1920	132735.26	0.0000	1.0000	0.0069
0.8238	7.0082	0.0120				
	R0140.1	0.0037	2577.9318	0.0000	0.0328	0.0248
0.0026	0.0030	0.0240				
	R0140-P3.1	0.0037	2577.9318	0.0000	0.0328	0.0248
0.0026	0.0030	0.0240				
	R0150-P1	0.2174	150241.07	0.0000	0.2540	0.5545
0.0284	0.0496	0.0110				
	R0150-P2	0.0214	14787.379	0.0000	0.0217	0.0347
0.0042	0.0046	0.0110				
	R0150-P3	0.0276	19067.297	0.0000	0.0217	0.0333
0.0046	0.0059	0.0120				
	R0150-P4	0.2798	193422.20	0.0000	0.2550	0.6813
0.0293	0.0502	0.0110				
	R0150-P5	0.0321	22204.441	0.0000	0.0380	0.0430
0.0051	0.0075	0.0110				
	R0110.1	-0.6340	-438199.1	0.0000	0.9027	0.1776
0.1930	0.4988	0.0240				
	R0130-P1	0.1683	116301.93	0.0000	0.4705	0.0409
0.4077	2.4799	0.0120				
	R0130-P2	0.1647	113865.98	0.0000	0.4705	0.0399
0.4075	2.4771	0.0120				
	R0100-P1	-0.0483	-33353.57	0.0000	0.4946	0.0516
0.2376	0.6381	0.0120				
	R0100-P2	-0.0480	-33168.74	0.0000	0.4946	0.0515
0.2410	0.6578	0.0120				
	R0310.1	-0.5571	-385081.3	0.0000	1.0000	0.0454
0.7311	3.7186	0.0120				
	R0430-P1	-0.0987	-68247.61	0.0000	1.0000	0.0142
0.3542	0.9759	0.0120				
	R0430-P2	-0.0987	-68247.61	0.0000	1.0000	0.0142
0.3542	0.9759	0.0120				
	R0430-P3	-0.0987	-68247.61	0.0000	1.0000	0.0142
0.3542	0.9759	0.0120				
	R0430-P4	-0.0984	-68047.51	0.0000	1.0000	0.0142
0.3565	0.9917	0.0120				
	R0340-P1	-1.3784	-952718.3	0.0000	1.0000	0.0262
0.9831	6.5667	0.0110				
	R0340-P2	-1.0627	-734557.7	0.0000	1.0000	0.0273
0.8687	5.0267	0.0110				
	R0350-P1	1.3850	957316.79	0.0000	1.0000	0.0166
0.9370	9.5400	0.0110				
	R0350-P2	1.3850	957316.79	0.0000	1.0000	0.0166
0.9370	9.5400	0.0110				

	R0330-P1	-0.0119	-8191.447	0.0000	1.0000	0.0020
0.8750	9.7050	0.0110				
	R0330-P2	-0.0119	-8191.447	0.0000	1.0000	0.0020
0.8750	9.7050	0.0110				
	R0450-P1	1.0837	749067.86	0.0000	1.0000	0.0743
0.5847	2.2813	0.0240				
	R0450-P2	1.0837	749067.86	0.0000	1.0000	0.0743
0.5847	2.2813	0.0240				
	P0360-P1	-0.0576	-39839.85	0.0000	1.0000	0.0154
0.3123	0.7934	0.0240				
	P0360-P2	-0.0961	-66402.30	0.0000	1.0000	0.0164
0.3860	1.1154	0.0240				
	R0550-P1	-0.1122	-77572.80	0.0000	1.0000	0.0078
0.9328	5.5185	0.0120				
	R0550-P2	-0.1054	-72861.95	0.0000	1.0000	0.0078
0.9185	5.3564	0.0120				
	R0560-P1	-0.2739	-189324.9	0.0000	1.0000	0.0123
1.0638	7.5257	0.0140				
	R0560-P2	-0.3350	-231566.5	0.0000	1.0000	0.0155
1.0566	7.3683	0.0110				
	R0560-P3	-0.3439	-237699.5	0.0000	1.0000	0.0155
1.0606	7.4567	0.0110				
	R0780.1	-0.3347	-231337.3	0.0000	1.0000	0.0059
0.7646	6.4890	0.0120				
	R0740.1	-0.8371	-578617.2	0.0000	1.0000	0.0590
0.5476	2.5555	0.0240				
	R0730.1	-1.4544	-1005304.	0.0000	1.0000	0.1397
0.3670	1.8116	0.0240				
	R0880.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0120				
	R0950.1	0.3328	230039.29	0.0002	1.0000	0.0485
0.5545	2.3213	0.0120				
	R0920.1	-0.0035	-2429.803	0.0001	1.0000	0.0182
0.6603	2.9678	0.0120				
	R0960.1	0.0786	54329.084	0.0000	0.4172	0.8675
0.0219	0.0369	0.0120				
	R0990.1	0.0577	39916.754	0.0000	0.4733	0.0321
0.2285	0.7539	0.0120				
	R1010-P3	-0.2334	-161308.1	0.0000	0.4627	0.0567
0.4243	1.0342	0.0120				
	R1010-P4	-0.2540	-175563.7	0.0000	0.4894	0.0584
0.4432	1.0767	0.0120				
	R1010-P5	-0.2494	-172386.8	0.0000	0.4568	0.0547
0.4503	1.0429	0.0120				
	R0980-P1.1	-1.4942	-1032812.	0.0000	0.4709	0.1329
0.2814	0.9400	0.0120				
	R0980-P2.1	0.7192	497081.72	0.0000	0.4546	0.2995
0.1312	0.3497	0.0240				
	R0850-P1	0.9292	642248.67	0.0000	0.4576	0.1820
0.1740	0.5599	0.0240				

		R0850-P2	0.7930	548110.12	0.0000	0.4566	0.1830
0.1531	0.4730	0.0240					
		R0850-P3	0.6498	449168.23	0.0000	0.4563	0.1812
0.1331	0.3994	0.0240					
		R0570-P1	0.3757	259703.03	0.0000	1.0000	0.0053
1.2128	10.9542	0.0120					
		R0570-P2	0.4208	290889.79	0.0001	1.0000	0.0057
1.2114	10.8305	0.0120					
		R0570-P3	0.4100	283360.00	0.0000	1.0000	0.0058
1.2086	10.5011	0.0120					
		R0770-P1.1	-1.8162	-1255344.	0.0000	1.0000	0.0350
0.7515	7.2080	0.0240					
		R0770-P3	-2.2264	-1538896.	0.0000	1.0000	0.0221
1.1321	11.7991	0.0120					
		R0770-P4	-2.1857	-1510730.	0.0000	1.0000	0.0218
1.1303	11.8358	0.0120					
		R0790-P1	-0.8045	-556056.1	0.0000	1.0000	0.0078
1.5520	17.5733	0.0120					
		R0790-P2	-0.4378	-302622.1	0.0000	1.0000	0.0061
1.1311	11.8743	0.0120					
		R0530-P1	0.1439	99471.663	0.0000	0.3199	0.1043
0.0756	0.1467	0.0110					
		R0530-P2	0.0397	27466.839	0.0000	0.4274	0.1027
0.0841	0.1712	0.0110					
		R0530-P3	0.2347	162190.22	0.0000	0.2668	0.1902
0.0568	0.1004	0.0110					
		R0910-P1	-0.2296	-158705.8	0.0001	1.0000	0.0017
1.1878	17.7637	0.0240					
		R0910-P2	0.2499	172704.60	0.0001	1.0000	0.0020
1.1878	17.7689	0.0240					
		R0380-P1	-1.3965	-965290.8	0.0000	0.4511	0.3111
0.1490	0.4866	0.0120					
		R0380-P2	-1.3965	-965290.8	0.0000	0.4511	0.3111
0.1490	0.4866	0.0120					
		R0300-P1	-0.0984	-68004.81	0.0000	1.0000	0.0045
0.5000	3.1689	0.0240					
		R0300-P2	-0.0984	-68004.81	0.0000	1.0000	0.0045
0.5000	3.1689	0.0240					
		R0290-P2.1	0.1211	83713.307	0.0000	0.5057	0.5016
0.0942	0.2236	0.0120					
		RN-004-P1	0.0413	28513.425	0.0000	0.4285	0.9847
0.0193	0.0235	0.0120					
		RN-004-P2	0.0587	40596.050	0.0000	0.4285	1.3243
0.0195	0.0240	0.0120					
		RN-004-P3	0.0410	28372.469	0.0000	0.1195	0.1173
0.0105	0.0162	0.0120					
		RN-001-P1	0.3196	220923.13	0.0000	1.0000	0.2512
0.2256	0.5290	0.0240					
		RN-001-P2	0.1935	133754.27	0.0000	0.7137	0.1591
0.1561	0.3480	0.0240					

	RN-001-P3	0.3273	226205.32	0.0000	1.0000	0.2335
0.2293	0.5384	0.0240				
	RN-005-P1	0.3010	208057.63	0.0000	0.9963	0.1525
0.3160	0.8287	0.0120				
	RN-005-P2	0.3751	259268.18	0.0000	0.9963	0.1903
0.3048	0.7824	0.0120				
	RN-005-P3	-0.3260	-225315.6	0.0000	1.0000	0.1518
0.3243	0.8570	0.0120				
	RN-008-P1.1	-0.4738	-327484.2	0.0000	1.0000	0.0712
0.5660	2.2095	0.0120				
	RN-008-P2	0.4668	322653.52	0.0000	0.9772	0.0727
0.5244	1.9623	0.0120				
	RN-008-P3	0.4071	281406.13	0.0000	0.9727	0.0768
0.4834	1.7261	0.0120				
	RN-010-P1	-0.5709	-394571.7	0.0000	1.0000	0.0307
0.7722	3.8920	0.0120				
	RN-010-P2	-0.5402	-373354.4	0.0000	1.0000	0.0308
0.7603	3.7678	0.0120				
	RN-010-P3	0.5292	365777.81	0.0000	1.0000	0.0314
0.7547	3.7121	0.0120				
	RN-013-P1	0.5994	414285.02	0.0000	1.0000	0.0447
0.7841	4.0178	0.0120				
	RN-013-P2	0.5994	414285.02	0.0000	1.0000	0.0447
0.7841	4.0178	0.0120				
	RN-013-P3	0.5994	414285.02	0.0000	1.0000	0.0447
0.7841	4.0178	0.0120				
	RN-015-P1	-0.1102	-76143.36	0.0000	0.9992	0.0575
0.8180	4.7180	0.0110				
	RN-015-P2	-0.0068	-4681.005	0.0000	1.0000	0.0501
0.8692	6.4909	0.0110				
	RN-015-P3	0.5451	376753.63	0.0000	1.0000	0.0596
0.8723	6.3375	0.0110				
	RN-029-P1	-0.3554	-245652.2	0.0000	1.0000	0.0243
0.8350	4.8493	0.0120				
	RN-029-P2	0.3799	262605.89	0.0000	1.0000	0.0222
0.9008	5.9705	0.0120				
	R0742-P1	0.3460	239185.18	0.0000	0.6050	0.1545
0.2305	0.6840	0.0130				
	R0742-P2	0.3460	239185.18	0.0000	0.6050	0.1545
0.2305	0.6840	0.0130				
	R0655-P1.1	-0.3957	-273514.3	0.0000	1.0000	0.0107
0.6250	5.1299	0.0110				
	R0490-P8	-3.7501	-2592052.	0.0000	1.0000	0.5416
0.3125	1.2449	0.0110				
	R0490-P7	-3.7501	-2592052.	0.0000	1.0000	0.5416
0.3125	1.2449	0.0110				
	R0140-P2.1	0.6435	444757.27	0.0000	1.0000	0.0096
0.7500	7.3285	0.0110				
	R0140-P1.1	0.6546	452489.74	0.0000	1.0000	0.0098
0.7500	7.3285	0.0110				

	R0120-P1.1	0.0727	50260.699	0.0000	1.0000	0.0350
0.5691	2.2585	0.0120				
	R0160-P1.1	-0.3128	-216191.2	0.0000	1.0000	0.0654
0.6766	4.8354	0.0240				
	R0325-P1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0120				
	R0400-P1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0120				
	R0880-P2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0120				
	R1010-P1.1	0.4700	324851.10	0.0000	0.4553	0.2273
0.1356	0.2856	0.0240				
	R-0410-P4	0.1416	97890.014	0.0000	1.0000	0.0280
0.4131	1.7034	0.0110				
	R-0410-P5	0.1416	97890.014	0.0000	1.0000	0.0280
0.4131	1.7034	0.0110				
	R-0410-P6	0.1427	98614.951	0.0000	1.0000	0.0282
0.4131	1.7034	0.0110				
	R-0410-P7	0.1775	122675.65	0.0000	1.0000	0.0300
0.4126	1.6259	0.0110				
	R0410-P1	-1.4505	-1002589.	0.0000	1.0000	0.0488
0.6550	5.9724	0.0120				
	R0410-P2	-1.4505	-1002589.	0.0000	1.0000	0.0488
0.6550	5.9724	0.0120				
	R0410-P3	-1.4505	-1002589.	0.0000	1.0000	0.0488
0.6550	5.9724	0.0120				
	498.1	1.7438	1205311.2	0.0000	1.0000	0.1901
0.4134	1.5107	0.0110				
	R0490-P1.1	-1.7623	-1218095.	0.0000	1.0000	0.1751
0.4115	1.6872	0.0110				
	R0490-P3	0.1819	125706.07	0.0000	1.0000	0.0612
0.3328	1.1473	0.0110				
	R0490-P4	0.1715	118531.19	0.0000	1.0000	0.0588
0.3326	1.1746	0.0110				
	R0490-P5	0.1640	113335.88	0.0000	1.0000	0.0562
0.3168	1.2308	0.0110				
	R0490-P6	0.1630	112650.65	0.0000	1.0000	0.0555
0.3146	1.2533	0.0110				
	R0890-ORF-2	0.6166	426206.38	0.0000	1.0000	0.7322
0.2289	0.4888	0.0120				
	R0890-ORF-5	0.6166	426206.38	0.0000	1.0000	0.7322
0.2289	0.4888	0.0120				
	R0890ORF-3	0.6166	426206.38	0.0000	1.0000	0.7322
0.2289	0.4888	0.0120				
	R0890-ORF-4	0.6166	426206.38	0.0000	1.0000	0.7322
0.2289	0.4888	0.0120				
	N0140-A-W1.1	1.2979	897083.92	0.0000	0.9997	0.3135
0.1692	2.0649	0.0400				
	R0540-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

	R0290-P5	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0285-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0250-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0230-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0220-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0200-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0190-W4	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0170-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0180-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0140-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0150-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0110-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0130-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0100-W4	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0310-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0430-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0340-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0350-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0330-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0360-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0550-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0560-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0780-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0740-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0870-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

	R0950-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0960-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0990-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R1010-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0980-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0850-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0770-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0530-W4	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0380-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0300-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0290-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0655-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0140-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0120-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0160-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0400-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0880-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R1010-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0490-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0050-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0050-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0060-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0080-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0080-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0090-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

	R0090-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0090-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0090-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0100-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0100-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0100-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0110-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0120-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0130-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0150-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0150-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0170-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0170-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0190-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0190-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0190-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0200-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0200-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0220-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0240-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0240-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0240-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0240-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0240-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0240-W6.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

0.0000	R0250-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0250-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0260-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0270-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0270-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0270-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0275-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0280-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0285-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0290-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0290-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0290-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0300-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0310-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0310-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0310-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0310-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0325-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0330-W2.1	0.2734	188971.34	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0330-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0340-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0340-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0350-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0350-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0360-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

0.0000	R0360-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0370-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0370-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0370-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0380-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0380-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0380-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0390-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0390-W2	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0400-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0410-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0420-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0420-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0430-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0430-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0440-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0450-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0450-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0460-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0460-W2.1	0.5485	379139.37	0.1094	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0480-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0480-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0480-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0490-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
0.0000	R0490-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

	R0500-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0510-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0520-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0520-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0530-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0530-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0530-W3	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0540-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0540-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0550-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0550-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0560-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0560-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0560-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0560-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0570-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0570-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0570-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0570-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0640-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0650-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0660-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0660-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0690-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0720-W1.1	-0.2623	-181336.3	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

	R0730-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0740-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0740-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0775-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0780-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0790-W1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0800-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0800-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0810-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0830-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0850-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0870-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0885-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0910-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0930-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0940-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0940-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0945-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0950-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0960-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0960-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0960-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0980-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0990-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0990-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				

	R1000-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R1020-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R1030-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R1030-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R2002-W1.1	-4.9138	-3396388.	0.0314	0.0000	0.0000
0.0000	0.0000	0.0000				
	R02040-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R2090-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R2370-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R2380-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R2380-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0440-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R015-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R020-W1.1	-0.3002	-207519.0	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R021-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R030-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R031-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R042-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R043-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0850-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000				
	R0880-WPump	0.0000	0.0000			
	R0920-P2-W1	0.0000	0.0000			
	R0920-P2-W2	0.0000	0.0000			
	R0910-W1	0.0000	0.0000			
	R0325-DS-W1	0.0000	0.0000			
	R0400-WPump	0.0000	0.0000			
	R0880-WPump2	0.0000	0.0000			
	R0880-DS-W1	0.0000	0.0000			
	R0520-DS-W1	0.0000	0.0000			
	R0640-P1-W1	0.1761	121707.06			
	R0640-P1-W2	0.0000	0.0000			
	R0640-P2-W1	0.0000	0.0000			

R0690-P1-W1	0.0277	19137.952
R0940-DS-W1	0.0641	44298.477
R0945-DS-W1	0.0076	5253.2501
R1020-DS-W1	1.0294	711522.59
R0205-W1	0.0766	52922.687
R0205-W2	0.0258	17837.802
R0205-W3	0.0000	0.0000
R0205-W4	0.2052	141855.56
R0210-W1.1	-0.0272	-18789.76
R0515-W1.1	0.0000	0.0000
R0515-W2.1	0.7951	549606.74
R0620-W1	0.0000	0.0000
R0620-W2	0.0000	0.0000
R0620-W3	0.0000	0.0000
R0650-W2.1	1.0198	704897.46
R0660-W3.1	0.0000	0.0000
R0742-W1.1	0.0000	0.0000
R0890-W1.1	0.0000	0.0000
R0915-W1.1	0.0000	0.0000
RN-019-P1-W1	0.2592	179177.14
R019-P1-W2	0.3085	213205.53
R0830-P1-W1.1	-0.0813	-56163.30
R0830-P1-W2	0.0000	0.0000
R0970-P1-W1	-0.0275	-18994.16
R0970-P1-W2	0.0000	0.0000
R-0001A-W1.1	6.7109	4638594.2
R-0001A-W2	7.0302	4859272.0
R0001C-W1.1	0.0000	0.0000
R0001C-W2	0.0427	29501.890
R0001C-W3	0.0524	36236.191
R0001E-W1	0.0105	7253.8513
R0001F-W1.1	0.0783	54086.595
R0001F-W2	0.0017	1171.9575
R0001F-W3	0.0783	54086.595
R0001F-W4	0.0426	29471.864
R0001F-W5	0.0783	54086.595
R001G-W1	0.0000	0.0000
R0930-W6.1.1	0.0000	0.0000
R0001J-W1.1	0.0000	0.0000
R000J-W2	0.0000	0.0000
R000J-W3	0.0000	0.0000
R000J-W4	0.0000	0.0000
R000J-W5	0.1463	101100.02
R000J-W6	0.1463	101100.02
R000J-W7	0.0000	0.0000
R0001J-W8	0.0000	0.0000
R0001J-W9	0.0000	0.0000
R0001J-W10	0.0000	0.0000
R0001J-W11	0.0000	0.0000
R0001J-W12	0.1463	101100.02

R0001J-W13	0.1463	101100.02
R0001J-W14	0.0000	0.0000
R0001I-W1.1	0.0000	0.0000
R001I-W2	0.0000	0.0000
R0001I-W3	0.0000	0.0000
R001I-W4	0.0000	0.0000
R001I-W5	0.0000	0.0000
R0001I-W7	0.2842	196420.01
R0001I-W7.1	0.2842	196420.01
R0001K-W1.1	0.0464	32049.351
R0001K-W2	0.0000	0.0000
R0001K-W3	0.0000	0.0000
R0880-PUMP	0.0000	0.0000
FREE# 1	0.0000	0.0000
FREE# 2	0.3956	273440.55
FREE# 3	0.3879	268112.63
FREE# 4	0.3934	271950.87
FREE# 5	7.5002	5184107.5
FREE# 6	1.2979	897097.41
FREE# 7	0.0728	50331.755
FREE# 8	0.0000	0.0000
FREE# 9	0.0000	0.0000
FREE#10	0.0000	0.0000
FREE#11	0.0000	0.0000
FREE#12	0.0000	0.0000
FREE#13	0.3447	238272.72
FREE#14	3.2861	2271358.7
FREE#15	-2.1428	-1481131.
FREE#16	0.6424	443997.75
FREE#17	0.0000	0.0000
FREE#18	0.0000	0.0000
FREE#19	0.0000	0.0000
FREE#20	0.3127	216165.79
FREE#21	0.0000	0.0000
FREE#22	0.1450	100252.22
FREE#23	0.0000	0.0000
FREE#24	0.0000	0.0000
FREE#25	0.0000	0.0000
FREE#26	0.0000	0.0000
FREE#27	-0.0272	-18788.59
FREE#28	0.7952	549608.66
FREE#29	0.0000	0.0000
FREE#30	0.0000	0.0000
FREE#31	0.0000	0.0000
FREE#32	0.0000	0.0000
FREE#33	0.0000	0.0000
FREE#34	0.0000	0.0000
FREE#35	0.3957	273514.00
FREE#36	0.0000	0.0000
FREE#37	0.0000	0.0000

FREE#38	0.0000	0.0000
FREE#39	-4.9452	-3418099.
FREE#40	0.0000	0.0000
FREE#41	0.0000	0.0000
FREE#42	1.0294	711524.53
FREE#43	0.0641	44298.240
FREE#44	0.4700	324851.11
FREE#45	0.0076	5253.2031
FREE#46	13.7412	9497904.5
FREE#47	0.0105	7254.2516
FREE#48	0.2791	192910.58
FREE#49	0.0000	0.0000
FREE#50	2.4665	1704836.3
FREE#51	0.2925	202202.63
FREE#52	0.2925	202202.63

=====

| Table E13. Channel losses(H), headwater depth (HW), tailwater |
| depth (TW), critical and normal depth (Yc and Yn). |
| Use this section for culvert comparisons |

=====

TW	Conduit	Maximum	Head	Friction	Critical	Normal	HW
Elevat	Name	Flow	Loss	Loss	Depth	Depth	Elevat
-0.7182	R0870	70.5176	0.0000	0.0415	1.9360	1.9133	-0.7088
	Max Flow						
1.2054	R0770-P2	0.0813	0.0000	0.3522	0.0416	0.0244	1.2054
	Max Flow						
-1.0911	R0900	73.4457	0.0000	0.2776	1.9888	3.4882	-0.7182
	Max Flow						
1.7517	R0370	34.1897	0.0000	0.7090	1.6193	1.4817	2.4629
	Max Flow						
2.6700	R0280	0.0000	0.0000	0.1545	0.0000	0.0000	2.2785
	Max Flow						
2.1307	R0202	0.0055	0.0000	0.0040	0.0020	0.0048	2.1307
	Max Flow						
3.9489	RN-002	3.1503	0.0000	0.1689	0.6189	0.7493	4.1681
	Max Flow						
3.0705	RN-003	4.0001	0.0000	0.2098	0.7005	0.7682	3.3139
	Max Flow						
3.3428	RN-006	5.3225	0.0000	0.1115	0.7228	1.0960	3.5119
	Max Flow						
3.0149	RN-007	3.7565	0.0000	0.1424	0.6349	0.8668	3.2187
	Max Flow						
3.5837	RN-009	7.7337	0.0000	0.2830	0.8744	1.2146	3.8822
	Max Flow						

	RN-009MH	7.5873	0.0000	0.2386	0.9142	1.4915	3.5837
3.2242	Max Flow						
	RN-011	12.1620	0.0000	0.4791	1.0559	1.3381	3.3403
2.6959	Max Flow						
	RN-014	5.1306	0.0000	0.0434	0.6780	0.7640	2.3123
2.2580	Max Flow						
	RN-012	9.0452	0.0000	1.2533	0.8718	0.8166	2.2977
1.5353	Max Flow						
	RN-023	4.7763	0.0000	0.2567	0.8398	1.5000	1.5636
1.1997	Max Flow						
	RN-021	-0.2258	0.0000	0.2867	0.1820	0.2602	1.7916
1.7949	Max Flow						
	RN-041	10.6575	0.0000	0.0495	1.0919	1.4076	3.8326
3.7789	Max Flow						
	RN-020	9.3125	0.0000	0.2589	0.9638	0.8718	2.3386
2.1795	Max Flow						
	RN-022	11.8127	0.0000	0.1288	1.0565	2.1157	2.2127
2.0065	Max Flow						
	RN-024	19.4357	0.0000	0.3009	1.4953	1.7281	1.6853
1.3353	Max Flow						
	RN-026	0.4863	0.0000	0.0969	0.2567	0.3204	1.5217
1.5135	Max Flow						
	RN-027	1.0580	0.0000	0.0264	0.3829	0.7188	1.5585
1.5540	Max Flow						
	RN-028	3.1471	0.0000	0.0580	0.6748	0.8836	1.4055
1.3495	Max Flow						
	R0742-P3	0.1309	0.0000	0.2540	0.1168	0.1903	1.1978
1.1977	Max Flow						
	R0655-P2	-0.0043	0.0000	0.0322	0.0044	0.0091	0.0100
0.0100	Max Flow						
	R0655-P3	-0.0040	0.0000	0.0319	0.0041	0.0081	0.0100
0.0100	Max Flow						
	R0655-P4	9.3372	0.0000	0.0323	1.0185	1.9056	0.0422
0.0100	Max Flow						
	R0120-P2	6.4297	0.0000	0.5407	0.8383	0.8013	0.5855
0.1137	Max Flow						
	R1010-P2	2.0427	0.0000	0.2690	0.5389	0.9086	2.9132
2.5189	Max Flow						
	RN-025-P1	27.7312	0.0000	0.1211	1.7020	2.3818	1.7913
1.6700	Max Flow						
	RN-025-P2	27.7940	0.0000	0.1227	1.7040	2.2367	1.9100
1.7874	Max Flow						
	R0155-P1	43.9055	0.0000	1.1710	2.0642	1.7143	1.5745
0.4044	Max Flow						
	R0386	30.0062	0.0000	0.0893	0.8204	2.6346	1.2753
1.1734	Max Flow						
	R0388	30.0519	0.0000	0.1679	0.8209	2.6366	1.1734
0.9839	Max Flow						
	R0385	29.9522	0.0000	0.0640	0.8199	2.6322	1.3475
1.2753	Max Flow						

	R0375	38.0565	0.0000	0.0175	0.5533	2.4715	1.7373
1.7243	Max Flow						
	R0335	15.6898	0.0000	0.1757	0.7517	2.1775	1.0453
0.7607	Max Flow						
	R-0001B-P1	0.1714	0.0000	0.7641	0.1250	0.3014	1.3977
1.3978	Max Flow						
	R0540-P1	-0.0083	0.0000	0.1461	0.0121	0.0340	1.5221
1.6403	Max Flow						
	R0540-P2	6.3794	0.0000	0.1333	0.8939	1.5871	2.6530
2.4539	Max Flow						
	R0540-P3	6.0662	0.0000	0.1502	0.8708	1.1335	2.6530
2.4508	Max Flow						
	R0290-P1	-0.0214	0.0000	0.1043	0.0221	0.0306	2.2393
2.2388	Max Flow						
	R0285.1	13.6214	0.0000	0.3498	1.2407	1.0637	3.3486
3.3085	Max Flow						
	R0250.1	9.9096	0.0000	0.3826	1.1258	0.9927	4.1514
3.9441	Max Flow						
	R0230.1	14.3385	0.0000	0.5803	1.3640	2.0000	4.9819
4.2740	Max Flow						
	R0220.1	16.5224	0.0000	0.2504	1.0004	1.1293	2.3007
2.0381	Max Flow						
	R0200.1	19.1635	0.0000	0.1855	1.1483	1.0766	2.3965
2.3528	Max Flow						
	R0190.1	11.2888	0.0000	0.7657	1.2053	2.0000	2.3986
1.6319	Max Flow						
	R0170.1	29.5974	0.0000	0.5195	1.6121	4.0000	0.6636
-0.1554	Max Flow						
	R0180-P1	6.9796	0.0000	0.0438	0.8303	1.4868	2.5430
2.5260	Max Flow						
	R0180-P2	6.9413	0.0000	0.0438	0.8278	1.4868	2.5430
2.5260	Max Flow						
	R0140.1	0.4024	0.0000	0.2755	0.2138	0.2310	2.5475
2.2338	Max Flow						
	R0140-P3.1	0.4024	0.0000	0.2755	0.2138	0.2310	2.5475
2.2338	Max Flow						
	R0150-P1	13.0261	0.0000	0.4127	1.2981	1.1432	2.5849
2.1732	Max Flow						
	R0150-P2	3.8268	0.0000	1.2316	0.8312	0.5962	2.5849
1.5131	Max Flow						
	R0150-P3	5.3114	0.0000	1.2324	0.8875	0.6043	2.5849
1.5131	Max Flow						
	R0150-P4	16.7720	0.0000	0.6945	1.4754	1.1432	2.5849
1.8932	Max Flow						
	R0150-P5	4.4274	0.0000	0.5110	0.8525	0.7535	2.5849
2.0835	Max Flow						
	R0110.1	0.0004	0.0000	3.0209	0.0006	0.0031	1.4653
1.4652	Max Flow						
	R0130-P1	12.3558	0.0000	0.3613	0.9896	0.8357	0.8822
0.7787	Max Flow						

0.7787	R0130-P2	12.0656	0.0000	0.3612	0.9776	0.8357	0.8822
	Max Flow						
1.4638	R0100-P1	0.0022	0.0000	0.1660	0.0017	0.0021	1.4638
	Max Flow						
1.4638	R0100-P2	0.0017	0.0000	0.1683	0.0013	0.0016	1.4638
	Max Flow						
0.4779	R0310.1	2.0233	0.0000	0.3989	0.4615	0.4254	0.4810
	Max Flow						
1.0420	R0430-P1	0.0000	0.0000	0.0778	0.0000	0.0001	1.0420
	Max Flow						
1.0420	R0430-P2	0.0000	0.0000	0.0778	0.0000	0.0001	1.0420
	Max Flow						
1.0420	R0430-P3	0.0000	0.0000	0.0778	0.0000	0.0001	1.0420
	Max Flow						
1.0404	R0430-P4	-0.0001	0.0000	0.0778	0.0002	0.0005	1.0404
	Max Flow						
1.0404	R0340-P1	-0.2434	0.0000	0.0087	0.1440	0.0950	1.0404
	Max Flow						
1.0404	R0340-P2	-0.1934	0.0000	0.0081	0.1207	0.0720	1.0404
	Max Flow						
0.7465	R0350-P1	17.8649	0.0000	0.0129	1.2897	0.8715	0.7510
	Max Flow						
0.7465	R0350-P2	17.8649	0.0000	0.0129	1.2897	0.8715	0.7510
	Max Flow						
0.7929	R0330-P1	3.1061	0.0000	0.0005	0.5228	0.3663	0.7936
	Max Flow						
0.7929	R0330-P2	3.1061	0.0000	0.0005	0.5228	0.3663	0.7936
	Max Flow						
0.7869	R0450-P1	11.2405	0.0000	0.1401	1.1223	1.6168	0.9226
	Max Flow						
0.7869	R0450-P2	11.2405	0.0000	0.1401	1.1223	1.6168	0.9226
	Max Flow						
1.0404	P0360-P1	0.0162	0.0000	0.0254	0.0361	0.0516	1.0404
	Max Flow						
1.0404	P0360-P2	0.0156	0.0000	0.0426	0.0347	0.1174	1.0404
	Max Flow						
0.3741	R0550-P1	8.4501	0.0000	0.0134	0.8425	0.8694	0.3862
	Max Flow						
0.3741	R0550-P2	8.3824	0.0000	0.0134	0.8392	1.0528	0.3862
	Max Flow						
0.4920	R0560-P1	3.2685	0.0000	0.1290	0.5169	0.4418	0.4955
	Max Flow						
0.4920	R0560-P2	3.3018	0.0000	0.1285	0.5194	0.3993	0.4955
	Max Flow						
0.4920	R0560-P3	3.3117	0.0000	0.1279	0.5201	0.3958	0.4955
	Max Flow						
0.9113	R0780.1	0.0049	0.0000	0.0611	0.0022	0.0011	0.9112
	Max Flow						
1.2054	R0740.1	-0.0554	0.0000	0.1089	0.0800	0.0876	1.2054
	Max Flow						

	R0730.1	5.2698	0.0000	1.5504	0.7057	0.6749	1.1385
0.9536	Max Flow						
	R0880.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0950.1	12.2659	0.0000	0.1943	1.2582	0.9218	1.0338
1.0072	Max Flow						
	R0920.1	5.3746	0.0000	0.0771	0.7262	0.5020	1.0792
1.0681	Max Flow						
	R0960.1	4.2281	0.0000	0.1502	0.6751	0.7450	2.6238
2.4451	Max Flow						
	R0990.1	2.8469	0.0000	0.0926	0.5872	0.7243	2.5524
2.5372	Max Flow						
	R1010-P3	1.2076	0.0000	0.2665	0.3533	0.3489	2.7744
2.7701	Max Flow						
	R1010-P4	1.2303	0.0000	0.2615	0.3568	0.3417	2.7710
2.7666	Max Flow						
	R1010-P5	1.1436	0.0000	0.2492	0.3435	0.3239	2.7744
2.7701	Max Flow						
	R0980-P1.1	1.0495	0.0000	0.1667	0.3292	0.4182	2.6636
2.6606	Max Flow						
	R0980-P2.1	8.0462	0.0000	0.3872	0.9420	0.9654	3.3975
3.1553	Max Flow						
	R0850-P1	12.8092	0.0000	0.6245	1.2022	2.5000	3.4182
2.5022	Max Flow						
	R0850-P2	12.1411	0.0000	0.6140	1.1683	2.5000	3.4182
2.5183	Max Flow						
	R0850-P3	11.0940	0.0000	0.5774	1.1148	2.5000	3.4182
2.5648	Max Flow						
	R0570-P1	88.5718	0.0000	0.3921	2.8520	4.0000	0.9150
0.4750	Max Flow						
	R0570-P2	89.3190	0.0000	0.4048	2.8644	4.0000	0.9150
0.4750	Max Flow						
	R0570-P3	87.4076	0.0000	0.4052	2.8327	4.0000	0.9150
0.4750	Max Flow						
	R0770-P1.1	44.0652	0.0000	0.2804	2.1623	2.3238	0.0505
-0.2272	Max Flow						
	R0770-P3	49.2138	0.0000	0.4245	2.1029	4.0000	-0.1675
-0.7971	Max Flow						
	R0770-P4	51.7342	0.0000	0.4732	2.1579	4.0000	-0.1675
-0.8321	Max Flow						
	R0790-P1	20.4311	0.0000	0.0267	1.1180	1.4713	0.0757
0.0505	Max Flow						
	R0790-P2	14.5694	0.0000	0.0266	1.1172	1.9752	0.0757
0.0505	Max Flow						
	R0530-P1	5.6997	0.0000	0.1435	0.8424	0.6991	2.6266
2.6312	Max Flow						
	R0530-P2	4.2467	0.0000	0.1644	0.7232	0.6164	2.5935
2.6048	Max Flow						
	R0530-P3	6.8471	0.0000	0.1542	0.9273	0.6895	2.6438
2.6530	Max Flow						

	R0910-P1	0.9085	0.0000	0.2172	0.2469	0.2976	1.0397
1.0401	Max Flow						
	R0910-P2	69.5646	0.0000	0.2404	2.3895	2.4638	-1.3615
-1.5720	Max Flow						
	R0380-P1	-0.2246	0.0000	0.0685	0.1401	0.0756	2.2101
2.2392	Max Flow						
	R0380-P2	-0.2246	0.0000	0.0685	0.1401	0.0756	2.2101
2.2392	Max Flow						
	R0300-P1	0.6350	0.0000	0.0446	0.2706	0.2876	0.9859
0.9848	Max Flow						
	R0300-P2	0.6350	0.0000	0.0446	0.2706	0.2876	0.9859
0.9848	Max Flow						
	R0290-P2.1	7.0001	0.0000	0.5612	0.9382	0.9039	3.2938
2.7340	Max Flow						
	RN-004-P1	2.8785	0.0000	0.1760	0.5534	0.6139	3.4853
3.2734	Max Flow						
	RN-004-P2	3.9335	0.0000	0.3125	0.6500	0.6042	3.4853
3.1742	Max Flow						
	RN-004-P3	3.4186	0.0000	0.3406	0.6061	0.5528	3.4853
3.1428	Max Flow						
	RN-001-P1	6.4282	0.0000	0.2410	0.8382	1.0685	2.2665
2.0052	Max Flow						
	RN-001-P2	5.1655	0.0000	0.2769	0.7483	0.8642	2.2665
2.0052	Max Flow						
	RN-001-P3	6.4685	0.0000	0.2366	0.8409	1.0866	2.2665
2.0052	Max Flow						
	RN-005-P1	7.4925	0.0000	0.1588	0.9084	1.3076	2.0651
1.8734	Max Flow						
	RN-005-P2	9.6186	0.0000	0.0893	1.0341	1.5685	2.0651
1.9341	Max Flow						
	RN-005-P3	0.1794	0.0000	0.1654	0.1288	0.2818	1.7685
1.7674	Max Flow						
	RN-008-P1.1	0.5277	0.0000	0.1468	0.2196	0.3089	1.7694
1.7685	Max Flow						
	RN-008-P2	13.8123	0.0000	0.1759	1.1820	1.3051	1.8520
1.6820	Max Flow						
	RN-008-P3	12.4349	0.0000	0.1869	1.1185	1.1822	1.8520
1.6820	Max Flow						
	RN-010-P1	0.6059	0.0000	0.1320	0.2402	0.3376	1.7701
1.7694	Max Flow						
	RN-010-P2	0.5992	0.0000	0.1344	0.2386	0.4182	1.7701
1.7694	Max Flow						
	RN-010-P3	17.0747	0.0000	0.1210	1.3213	3.0000	1.6935
1.5501	Max Flow						
	RN-013-P1	21.3906	0.0000	0.3105	1.4853	2.3751	1.6098
1.1873	Max Flow						
	RN-013-P2	21.3906	0.0000	0.3105	1.4853	2.3751	1.6098
1.1873	Max Flow						
	RN-013-P3	21.3906	0.0000	0.3105	1.4853	2.3751	1.6098
1.1873	Max Flow						

1.7880	RN-015-P1	5.5035	0.0000	0.0946	0.7345	0.5439	1.7954
	Max Flow						
1.1652	RN-015-P2	20.5347	0.0000	0.0631	1.4545	1.6446	1.2141
	Max Flow						
1.1652	RN-015-P3	23.8549	0.0000	0.0955	1.5731	1.4996	1.2141
	Max Flow						
1.5956	RN-029-P1	2.9362	0.0000	0.0160	0.5304	0.3951	1.5986
	Max Flow						
1.2076	RN-029-P2	10.8025	0.0000	0.0228	1.0395	1.7577	1.2279
	Max Flow						
0.6865	R0742-P1	3.7325	0.0000	0.4001	0.6028	0.5865	1.0875
	Max Flow						
0.6865	R0742-P2	3.7325	0.0000	0.4001	0.6028	0.5865	1.0875
	Max Flow						
0.0100	R0655-P1.1	-0.0042	0.0000	0.0322	0.0044	0.0069	0.0100
	Max Flow						
1.1572	R0490-P8	-8.4339	0.0000	1.3071	1.1320	1.2500	0.0800
	Max Flow						
1.1572	R0490-P7	-8.4339	0.0000	1.3071	1.1320	1.2500	0.0800
	Max Flow						
2.5287	R0140-P2.1	11.6891	0.0000	0.0188	1.0841	1.1567	2.5475
	Max Flow						
2.5287	R0140-P1.1	11.8988	0.0000	0.0188	1.0938	1.1567	2.5475
	Max Flow						
0.1137	R0120-P1.1	6.4103	0.0000	0.5409	0.8370	0.8014	0.5855
	Max Flow						
-0.2207	R0160-P1.1	28.5062	0.0000	0.4369	1.8196	2.5000	0.2415
	Max Flow						
0.0000	R0325-P1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Max Flow						
0.0000	R0400-P1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Max Flow						
0.0000	R0880-P2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Max Flow						
2.5020	R1010-P1.1	2.5276	0.0000	0.2793	0.6020	1.1189	2.9132
	Max Flow						
1.0941	R-0410-P4	1.2004	0.0000	0.5066	0.4090	0.5446	1.1004
	Max Flow						
1.0941	R-0410-P5	1.2004	0.0000	0.5066	0.4090	0.5446	1.1004
	Max Flow						
1.0941	R-0410-P6	1.2093	0.0000	0.5105	0.4107	0.5446	1.1004
	Max Flow						
1.0941	R-0410-P7	1.2018	0.0000	0.3975	0.4093	0.3575	1.1004
	Max Flow						
-0.0194	R0410-P1	14.3956	0.0000	0.7053	1.1529	0.6247	0.6822
	Max Flow						
-0.0194	R0410-P2	14.3956	0.0000	0.7053	1.1529	0.6247	0.6822
	Max Flow						
-0.0194	R0410-P3	14.3956	0.0000	0.7053	1.1529	0.6247	0.6822
	Max Flow						

	498.1	7.6287	0.0000	0.3286	1.0696	1.5000	0.6822
0.3547	Max Flow						
	R0490-P1.1	-7.0453	0.0000	0.2873	1.0274	1.5000	1.1572
1.4452	Max Flow						
	R0490-P3	3.7569	0.0000	0.2188	0.7830	0.6726	1.0857
0.8674	Max Flow						
	R0490-P4	3.7396	0.0000	0.2190	0.7811	0.6321	1.0857
0.8674	Max Flow						
	R0490-P5	3.7592	0.0000	0.2186	0.7832	0.7447	1.0857
0.8674	Max Flow						
	R0490-P6	3.7574	0.0000	0.2183	0.7830	0.9627	1.0857
0.8674	Max Flow						
	R0890-ORF-2	6.0544	0.0000	0.6462	1.3657	0.8330	2.2005
1.5530	Max Flow						
	R0890-ORF-5	6.0544	0.0000	0.6462	1.3657	0.8330	2.2005
1.5530	Max Flow						
	R0890ORF-3	6.0544	0.0000	0.6462	1.3657	0.8330	2.2005
1.5530	Max Flow						
	R0890-ORF-4	6.0544	0.0000	0.6462	1.3657	0.8330	2.2005
1.5530	Max Flow						
	N0140-A-W1.1	23.5867	0.0000	0.4262	0.5335	4.0000	2.5287
1.8335	Max Flow						
	R0540-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0290-P5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0285-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0250-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0230-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0220-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0200-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0190-W4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0170-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0180-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0140-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0150-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0110-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
	R0130-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R0100-W4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0310-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0430-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0340-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0350-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0330-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0360-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0550-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0560-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0780-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0740-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0870-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0950-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0960-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0990-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R1010-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0980-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0850-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0770-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0530-W4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0380-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0300-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0290-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0655-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0140-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R0120-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0160-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0400-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0880-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R1010-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0490-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0050-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0050-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0060-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0080-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0080-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0090-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0090-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0090-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0090-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0100-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0100-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0100-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0110-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0120-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0130-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0150-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0150-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0170-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0170-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R0190-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0190-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0190-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0200-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0200-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0220-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0240-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0240-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0240-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0240-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0240-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0240-W6.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0250-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0250-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0260-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0270-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0270-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0270-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0275-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0280-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0285-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0290-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0290-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0290-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0300-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R0310-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0310-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0310-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0310-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0325-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0330-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0330-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0340-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0340-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0350-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0350-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0360-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0360-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0370-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0370-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0370-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0380-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0380-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0380-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0390-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0390-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0400-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0410-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0420-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0420-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R0430-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0430-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0440-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0450-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0450-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0460-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0460-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0480-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0480-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0480-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0490-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0490-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0500-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0510-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0520-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0520-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0530-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0530-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0530-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0540-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0540-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0550-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0550-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0560-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0560-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R0560-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0560-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0570-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0570-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0570-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0570-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0640-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0650-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0660-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0660-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0690-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0720-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0730-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0740-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0740-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0775-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0780-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0790-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0800-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0800-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0810-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0830-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0850-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0870-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0885-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R0910-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0930-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0940-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0940-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0945-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0950-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0960-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0960-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0960-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0980-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0990-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0990-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R1000-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R1020-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R1030-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R1030-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R2002-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R02040-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R2090-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R2370-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R2380-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R2380-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0440-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R015-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R020-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

0.0000	R021-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R030-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R031-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R042-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R043-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						
0.0000	R0850-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	Max Flow						

 | Table E13a. CULVERT ANALYSIS CLASSIFICATION, |
 | and the time the culvert was in a particular |
 | classification during the simulation. The time is |
 | in minutes. The Dynamic Wave Equation is used for |
 | all conduit analysis but the culvert flow classification |
 | condition is based on the HW and TW depths. |

		Mild Slope Critical D	Mild Slope TW Control	Steep Slope TW Insignf	Slug Flow Outlet/	Mild Slope TW > D	Mild Slope TW <= D
Outlet Control	Conduit Inlet Name Control Configuration	Outlet Inlet Control	Outlet Control	Entrance Control	Entrance Control	Outlet Control	Outlet Control
0.0000	R0870 0.0000 None	0.0000	7005.0000	0.0000	870.0000	3000.0000	645.0000
45.0000	R0770-P2 0.0000 None	0.0000	0.0000	0.0000	11475.000	0.0000	0.0000
0.0000	R0900 0.0000 None	0.0000	7815.0000	0.0000	0.0000	3705.0000	0.0000
90.0000	R0370 0.0000 None	0.0000	2160.0000	5220.0000	1770.0000	1575.0000	705.0000
255.0000	R0280 0.0000 None	0.0000	0.0000	7065.0000	4200.0000	0.0000	0.0000
0.0000	R0202 0.0000 None	0.0000	7065.0000	0.0000	0.0000	4455.0000	0.0000
0.0000	RN-002 0.0000 None	2775.0000	8715.0000	30.0000	0.0000	0.0000	0.0000
0.0000	RN-003 0.0000 None	1920.0000	5505.0000	4095.0000	0.0000	0.0000	0.0000
0.0000	RN-006 0.0000 None	810.0000	3735.0000	6975.0000	0.0000	0.0000	0.0000

0.0000	RN-007	1050.0000	4830.0000	5640.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-009	75.0000	4935.0000	6510.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-009MH	1320.0000	5535.0000	4665.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-011	1230.0000	6465.0000	3825.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-014	975.0000	8175.0000	2370.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
90.0000	RN-012	0.0000	8205.0000	3225.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-023	45.0000	11475.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-021	45.0000	10410.000	1065.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-041	0.0000	6975.0000	0.0000	2355.0000	2190.0000	0.0000
0.0000	0.0000 None						
1170.0000	RN-020	0.0000	5475.0000	4455.0000	420.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-022	300.0000	11205.000	15.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-024	15.0000	11505.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-026	15.0000	11490.000	15.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-027	0.0000	870.0000	0.0000	0.0000	10650.000	0.0000
0.0000	0.0000 None						
0.0000	RN-028	0.0000	2640.0000	0.0000	0.0000	8880.0000	0.0000
0.0000	0.0000 None						
0.0000	R0742-P3	0.0000	11370.000	0.0000	0.0000	150.0000	0.0000
0.0000	0.0000 None						
0.0000	R0655-P2	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
0.0000	R0655-P3	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
0.0000	R0655-P4	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
300.0000	R0120-P2	0.0000	10755.000	0.0000	465.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R1010-P2	960.0000	3495.0000	7065.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-025-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-025-P2	0.0000	10905.000	0.0000	0.0000	615.0000	0.0000
0.0000	0.0000 None						
3945.0000	R0155-P1	0.0000	0.0000	0.0000	7575.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0386	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0388	255.0000	11265.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0385	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0375	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0335	45.0000	11475.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R-0001B-P1	0.0000	8925.0000	0.0000	2595.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0540-P1	0.0000	6165.0000	0.0000	5355.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0540-P2	780.0000	3645.0000	7095.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0540-P3	510.0000	2415.0000	8595.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0290-P1	0.0000	6420.0000	0.0000	5100.0000	0.0000	0.0000
0.0000	0.0000 None						
615.0000	R0285.1	0.0000	0.0000	7080.0000	3825.0000	0.0000	0.0000
0.0000	0.0000 None						
465.0000	R0250.1	0.0000	0.0000	0.0000	11055.000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0230.1	120.0000	7335.0000	4065.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0220.1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
30.0000	R0200.1	0.0000	6855.0000	0.0000	210.0000	4005.0000	420.0000
0.0000	0.0000 None						
0.0000	R0190.1	0.0000	2415.0000	0.0000	0.0000	9105.0000	0.0000
0.0000	0.0000 None						
0.0000	R0170.1	300.0000	11220.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0180-P1	0.0000	8700.0000	0.0000	0.0000	2820.0000	0.0000
0.0000	0.0000 None						
0.0000	R0180-P2	0.0000	8700.0000	0.0000	0.0000	2820.0000	0.0000
0.0000	0.0000 None						
0.0000	R0140.1	300.0000	30.0000	11190.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0140-P3.1	300.0000	30.0000	11190.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
375.0000	R0150-P1	0.0000	0.0000	11145.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0150-P2	0.0000	0.0000	11520.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0150-P3	0.0000	0.0000	11520.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
150.0000	R0150-P4	0.0000	0.0000	11370.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
60.0000	R0150-P5	0.0000	0.0000	11460.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

	R0110.1	0.0000	8850.0000	0.0000	1305.0000	1365.0000	0.0000
0.0000	0.0000 None						
	R0130-P1	0.0000	0.0000	7065.0000	4305.0000	0.0000	0.0000
150.0000	0.0000 None						
	R0130-P2	0.0000	0.0000	7065.0000	4305.0000	0.0000	0.0000
150.0000	0.0000 None						
	R0100-P1	0.0000	4995.0000	2430.0000	4095.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0100-P2	0.0000	5040.0000	2430.0000	4050.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0310.1	0.0000	3570.0000	0.0000	7920.0000	30.0000	0.0000
0.0000	0.0000 None						
	R0430-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0430-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0430-P3	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0430-P4	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0340-P1	0.0000	0.0000	0.0000	11520.000	0.0000	0.0000
0.0000	0.0000 None						
	R0340-P2	0.0000	0.0000	0.0000	11520.000	0.0000	0.0000
0.0000	0.0000 None						
	R0350-P1	0.0000	0.0000	0.0000	7890.0000	0.0000	3630.0000
0.0000	0.0000 None						
	R0350-P2	0.0000	0.0000	0.0000	7890.0000	0.0000	3630.0000
0.0000	0.0000 None						
	R0330-P1	0.0000	0.0000	0.0000	0.0000	0.0000	11520.000
0.0000	0.0000 None						
	R0330-P2	0.0000	0.0000	0.0000	0.0000	0.0000	11520.000
0.0000	0.0000 None						
	R0450-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0450-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	P0360-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	P0360-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0550-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0550-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0560-P1	0.0000	0.0000	0.0000	11505.000	0.0000	0.0000
15.0000	0.0000 None						
	R0560-P2	0.0000	0.0000	0.0000	11490.000	0.0000	0.0000
30.0000	0.0000 None						
	R0560-P3	0.0000	0.0000	0.0000	11490.000	0.0000	0.0000
30.0000	0.0000 None						

30.0000	R0780.1	0.0000	0.0000	0.0000	11490.000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0740.1	0.0000	7890.0000	0.0000	0.0000	3630.0000	0.0000
0.0000	0.0000 None						
0.0000	R0730.1	0.0000	0.0000	0.0000	0.0000	7725.0000	3795.0000
0.0000	0.0000 None						
0.0000	R0880.1	0.0000	0.0000	11520.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
15.0000	R0950.1	0.0000	0.0000	15.0000	11490.000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0920.1	0.0000	0.0000	0.0000	11520.000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0960.1	1395.0000	2685.0000	7440.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0990.1	135.0000	4560.0000	6825.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R1010-P3	0.0000	1920.0000	6960.0000	2640.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R1010-P4	0.0000	510.0000	0.0000	11010.000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R1010-P5	0.0000	60.0000	7050.0000	4410.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0980-P1.1	0.0000	4620.0000	0.0000	6900.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0980-P2.1	0.0000	4440.0000	7080.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0850-P1	1425.0000	3060.0000	7035.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0850-P2	1425.0000	3045.0000	7050.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0850-P3	1425.0000	3045.0000	7050.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0570-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0570-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0570-P3	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0770-P1.1	0.0000	30.0000	0.0000	1095.0000	5550.0000	4845.0000
0.0000	0.0000 None						
0.0000	R0770-P3	0.0000	7935.0000	0.0000	0.0000	3585.0000	0.0000
0.0000	0.0000 None						
0.0000	R0770-P4	0.0000	7860.0000	0.0000	0.0000	3660.0000	0.0000
0.0000	0.0000 None						
0.0000	R0790-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0790-P2	0.0000	7965.0000	0.0000	0.0000	3555.0000	0.0000
0.0000	0.0000 None						
450.0000	R0530-P1	0.0000	0.0000	8865.0000	2205.0000	0.0000	0.0000
	0.0000 None						

	R0530-P2	0.0000	0.0000	8520.0000	2520.0000	0.0000	0.0000
480.0000	0.0000 None						
	R0530-P3	0.0000	0.0000	9240.0000	180.0000	0.0000	0.0000
2100.0000	0.0000 None						
	R0910-P1	0.0000	15.0000	0.0000	0.0000	11505.000	0.0000
0.0000	0.0000 None						
	R0910-P2	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
	R0380-P1	0.0000	0.0000	7125.0000	4395.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0380-P2	0.0000	0.0000	7125.0000	4395.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0300-P1	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
	R0300-P2	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
	R0290-P2.1	600.0000	3975.0000	6345.0000	315.0000	0.0000	0.0000
285.0000	0.0000 None						
	RN-004-P1	945.0000	3585.0000	6990.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-004-P2	1065.0000	2760.0000	7515.0000	0.0000	0.0000	0.0000
180.0000	0.0000 None						
	RN-004-P3	210.0000	390.0000	10800.000	0.0000	0.0000	0.0000
120.0000	0.0000 None						
	RN-001-P1	210.0000	11310.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-001-P2	0.0000	7620.0000	3900.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-001-P3	210.0000	11310.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-005-P1	375.0000	11100.000	45.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-005-P2	465.0000	11010.000	45.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-005-P3	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-008-P1.1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-008-P2	0.0000	11265.000	255.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-008-P3	0.0000	11220.000	300.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-010-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-010-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-010-P3	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	RN-013-P1	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	RN-013-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-013-P3	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
120.0000	RN-015-P1	0.0000	0.0000	0.0000	11400.000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-015-P2	0.0000	10080.000	0.0000	0.0000	1440.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-015-P3	0.0000	645.0000	0.0000	10860.000	15.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-029-P1	0.0000	0.0000	0.0000	11520.000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	RN-029-P2	0.0000	11520.000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
630.0000	R0742-P1	0.0000	4620.0000	5220.0000	1050.0000	0.0000	0.0000
0.0000	0.0000 None						
630.0000	R0742-P2	0.0000	4620.0000	5220.0000	1050.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0655-P1.1	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
0.0000	R0490-P8	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
0.0000	R0490-P7	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
0.0000	R0140-P2.1	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
0.0000	R0140-P1.1	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
300.0000	R0120-P1.1	0.0000	10995.000	0.0000	225.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0160-P1.1	0.0000	5805.0000	0.0000	0.0000	5715.0000	0.0000
0.0000	0.0000 None						
0.0000	R0325-P1.1	0.0000	0.0000	11520.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0400-P1.1	0.0000	0.0000	11520.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0880-P2.1	0.0000	0.0000	11520.000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R1010-P1.1	960.0000	3495.0000	7065.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R-0410-P4	0.0000	6300.0000	0.0000	0.0000	5220.0000	0.0000
0.0000	0.0000 None						
0.0000	R-0410-P5	0.0000	6300.0000	0.0000	0.0000	5220.0000	0.0000
0.0000	0.0000 None						
0.0000	R-0410-P6	0.0000	6300.0000	0.0000	0.0000	5220.0000	0.0000
0.0000	0.0000 None						
0.0000	R-0410-P7	0.0000	0.0000	0.0000	7485.0000	15.0000	4020.0000
0.0000	0.0000 None						
435.0000	R0410-P1	0.0000	0.0000	15.0000	11070.000	0.0000	0.0000
0.0000	0.0000 None						

	R0410-P2	0.0000	0.0000	15.0000	11070.000	0.0000	0.0000
435.0000	0.0000 None						
	R0410-P3	0.0000	0.0000	15.0000	11070.000	0.0000	0.0000
435.0000	0.0000 None						
	498.1	0.0000	7485.0000	0.0000	0.0000	4035.0000	0.0000
0.0000	0.0000 None						
	R0490-P1.1	0.0000	6225.0000	0.0000	0.0000	5295.0000	0.0000
0.0000	0.0000 None						
	R0490-P3	0.0000	0.0000	0.0000	7545.0000	0.0000	3975.0000
0.0000	0.0000 None						
	R0490-P4	0.0000	0.0000	0.0000	7380.0000	0.0000	4140.0000
0.0000	0.0000 None						
	R0490-P5	0.0000	0.0000	0.0000	1680.0000	4185.0000	5655.0000
0.0000	0.0000 None						
	R0490-P6	0.0000	0.0000	0.0000	0.0000	11520.000	0.0000
0.0000	0.0000 None						
	R0890-ORF-2	480.0000	8055.0000	0.0000	0.0000	2160.0000	825.0000
0.0000	0.0000 None						
	R0890-ORF-5	480.0000	8055.0000	0.0000	0.0000	2160.0000	825.0000
0.0000	0.0000 None						
	R0890ORF-3	480.0000	8055.0000	0.0000	0.0000	2160.0000	825.0000
0.0000	0.0000 None						
	R0890-ORF-4	480.0000	8055.0000	0.0000	0.0000	2160.0000	825.0000
0.0000	0.0000 None						
	N0140-A-W1.1	1785.0000	9735.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0540-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0290-P5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0285-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0250-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0230-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0220-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0200-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0190-W4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0170-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0180-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0140-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0150-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0110-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0130-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0100-W4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0310-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0430-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0340-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0350-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0330-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0360-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0550-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0560-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0780-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0740-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0870-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0950-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0960-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0990-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R1010-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0980-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0850-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0770-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0530-W4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0380-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0300-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0290-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0655-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0140-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0120-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0160-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0400-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0880-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R1010-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0490-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0050-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0050-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0060-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0080-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0080-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0090-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0090-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0090-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0090-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0100-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0100-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0100-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0110-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0120-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0130-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0150-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0150-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0170-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0170-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0190-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0190-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0190-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0200-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0200-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0220-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0240-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0240-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0240-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0240-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0240-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0240-W6.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0250-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0250-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0260-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0270-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0270-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0270-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0275-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0280-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0285-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0290-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0290-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0290-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0300-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0310-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0310-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0310-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0310-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0325-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0330-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0330-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0340-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0340-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0350-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0350-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0360-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0360-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0370-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0370-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0370-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0380-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0380-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0380-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0390-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0390-W2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0400-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0410-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0420-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0420-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0430-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0430-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0440-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0450-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0450-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0460-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0460-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0480-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0480-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0480-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0490-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0490-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0500-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0510-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0520-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0520-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0530-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0530-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0530-W3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0540-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0540-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0550-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0550-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0560-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0560-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0560-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0560-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0570-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0570-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0570-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0570-W5.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0640-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0650-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0660-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0660-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0690-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0720-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0730-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0740-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0740-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0775-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0780-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0790-W1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0800-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0800-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0810-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0830-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0850-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R0870-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0885-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0910-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0930-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0940-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0940-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0945-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0950-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0960-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0960-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0960-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0980-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0990-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0990-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R1000-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R1020-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R1030-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R1030-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R2002-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R02040-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R2090-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R2370-W4.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R2380-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R2380-W3.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
	R0440-W2.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

0.0000	R015-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R020-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R021-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R030-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R031-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R042-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R043-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						
0.0000	R0850-W1.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000 None						

=====

Kinematic Wave Approximations
Time in Minutes for Each Condition

=====

Conduit Name	Duration of Normal Flow	Slope Criteria	Super-Critical	Roll Waves
R0870	0.1400	9053.7645	0.0000	0.0000
R0770-P2	0.0000	410.2260	0.0000	0.0000
R0900	0.1176	9014.0316	0.0000	0.0000
R0370	7008.1193	11253.346	79.6180	0.0000
R0280	0.0000	0.0000	0.0000	0.0000
R0202	0.0000	4341.1296	0.0000	0.0000
RN-002	0.0000	0.0000	6116.0708	0.0000
RN-003	0.0000	0.0000	6401.0635	0.0000
RN-006	0.0000	0.0000	1713.3364	0.0000
RN-007	0.0000	0.0000	5072.2661	0.0000
RN-009	318.9722	8902.7404	0.0000	0.0000
RN-009MH	0.0000	0.0000	4372.5334	0.0000
RN-011	1370.6333	1378.0333	5137.3376	0.0000
RN-014	1.9098	967.2879	2854.1371	0.0000
RN-012	6023.0614	7523.0185	0.0000	0.0000
RN-023	0.1509	8130.3759	0.0000	0.0000
RN-021	419.0457	1138.1204	0.0000	0.0000
RN-041	0.0000	9144.2558	0.0000	0.0000
RN-020	521.8645	4723.2155	0.0000	0.0000
RN-022	0.1565	5135.5983	0.0000	0.0000
RN-024	0.3636	5862.3911	0.0000	0.0000
RN-026	152.0116	5972.2683	0.0000	0.0000
RN-027	0.0400	5547.6604	0.0000	0.0000
RN-028	0.0000	5836.0184	0.0000	0.0000
R0742-P3	0.0000	2875.8422	0.0000	0.0000

R0655-P2	0.0000	3541.2723	0.0000	0.0000
R0655-P3	0.0000	3525.7605	0.0000	0.0000
R0655-P4	0.0000	8029.6188	0.0000	0.0000
R0120-P2	0.7300	10246.538	0.0000	0.0000
R1010-P2	0.0000	0.0000	0.1538	0.0000
RN-025-P1	0.0000	7274.8109	0.0000	0.0000
RN-025-P2	0.0200	5879.0355	1.9900	0.0000
R0155-P1	1060.8634	7595.4206	173.9412	0.0000
R0386	0.0000	0.8800	0.0000	0.0000
R0388	0.0000	25.5434	0.2500	0.0000
R0385	0.0200	1.8100	0.0000	0.0000
R0375	0.0000	3921.7964	0.0000	0.0000
R0335	0.0000	94.0806	0.0000	0.0000
R-0001B-P1	0.0000	1810.5275	0.0000	0.0000
R0540-P1	0.0000	0.0000	0.0000	0.0000
R0540-P2	0.0000	0.0000	12.2821	0.0000
R0540-P3	0.0000	0.0000	652.0016	0.0000
R0290-P1	0.0000	315.2756	0.0000	0.0000
R0285.1	0.0000	3956.9473	7148.2276	0.0000
R0250.1	154.6588	5532.7671	0.0000	0.0000
R0230.1	4417.5401	7543.5029	0.0000	0.0000
R0220.1	0.3750	10549.216	0.0000	0.0000
R0200.1	0.0000	7642.0544	0.0000	0.0000
R0190.1	0.0256	7754.7401	0.0000	0.0000
R0170.1	0.6256	9074.9617	145.0971	0.0000
R0180-P1	0.0000	9319.3952	0.0000	0.0000
R0180-P2	0.0000	9348.7823	0.0000	0.0000
R0140.1	0.0000	0.0000	586.6834	0.0000
R0140-P3.1	0.0000	0.0000	586.6834	0.0000
R0150-P1	32.8356	32.8356	7353.4554	0.0000
R0150-P2	4378.3913	4430.1255	4880.1113	0.0000
R0150-P3	4384.5828	4430.0999	5476.9703	0.0000
R0150-P4	1268.0989	1269.0752	6647.0084	0.0000
R0150-P5	27.3693	27.3693	9053.6252	0.0000
R0110.1	0.0000	1606.7221	0.0000	0.0000
R0130-P1	0.8805	2066.0419	279.6586	0.0000
R0130-P2	0.7591	2084.3967	210.1465	0.0000
R0100-P1	0.0000	2097.5389	0.0000	0.0000
R0100-P2	0.0000	1661.4573	0.0000	0.0000
R0310.1	0.0000	4638.4614	0.0000	0.0000
R0430-P1	0.0000	90.1278	0.0000	0.0000
R0430-P2	0.0000	90.1278	0.0000	0.0000
R0430-P3	0.0000	90.1278	0.0000	0.0000
R0430-P4	0.0000	90.1278	0.0000	0.0000
R0340-P1	0.0000	2084.3691	0.0000	0.0000
R0340-P2	0.0000	5413.0083	0.0000	0.0000
R0350-P1	0.0000	8065.7028	0.0000	0.0000
R0350-P2	0.0000	8065.7028	0.0000	0.0000
R0330-P1	0.0000	4951.6148	0.0000	0.0000
R0330-P2	0.0000	4951.6148	0.0000	0.0000

R0450-P1	0.0000	5968.4460	0.0000	0.0000
R0450-P2	0.0000	5968.4460	0.0000	0.0000
P0360-P1	0.0000	5218.6674	0.0000	0.0000
P0360-P2	0.0000	3795.4708	0.0000	0.0000
R0550-P1	0.0400	3939.0193	0.0000	0.0000
R0550-P2	0.0400	3934.0569	0.0000	0.0000
R0560-P1	0.0000	4436.4680	0.0000	0.0000
R0560-P2	0.0000	4028.3264	0.0000	0.0000
R0560-P3	0.0000	4028.1104	0.0000	0.0000
R0780.1	0.0000	4019.5679	0.0000	0.0000
R0740.1	0.0000	4925.7901	0.0000	0.0000
R0730.1	0.0000	4326.3647	0.0000	0.0000
R0880.1	0.0000	0.0000	0.0000	0.0000
R0950.1	10.0871	6352.2544	3.9663	0.0000
R0920.1	3.4200	8393.9127	6.7000	0.0000
R0960.1	0.0000	0.0000	2907.7222	0.0000
R0990.1	0.0408	3343.7316	0.0000	0.0000
R1010-P3	0.0000	2602.7000	0.0000	0.0000
R1010-P4	0.0000	2602.7000	0.0000	0.0000
R1010-P5	0.0000	2602.7000	0.0000	0.0000
R0980-P1.1	0.0000	1885.0000	0.0000	0.0000
R0980-P2.1	2573.3450	4356.2064	0.0000	0.0000
R0850-P1	0.0000	0.0000	3.5385	0.0000
R0850-P2	0.0000	0.0000	0.2051	0.0000
R0850-P3	0.0000	0.0000	0.1795	0.0000
R0570-P1	0.0588	7374.6891	0.0000	0.0000
R0570-P2	0.0392	7488.7247	8.0700	0.0000
R0570-P3	0.0392	7542.1842	0.0000	0.0000
R0770-P1.1	0.0000	5502.4245	0.0000	0.0000
R0770-P3	0.0392	380.8999	0.0000	0.0000
R0770-P4	0.0392	4680.2579	0.0000	0.0000
R0790-P1	0.0000	2118.4205	0.0000	0.0000
R0790-P2	0.0000	6720.0103	0.0000	0.0000
R0530-P1	1967.8441	2770.5732	0.0976	0.0000
R0530-P2	8495.4089	9494.9672	0.0000	0.0000
R0530-P3	2093.4000	4654.1220	0.0000	0.0000
R0910-P1	0.0000	6626.1114	0.0000	0.0000
R0910-P2	0.0200	9634.0314	7.8800	0.0000
R0380-P1	0.0000	0.0488	0.0000	0.0000
R0380-P2	0.0000	0.0488	0.0000	0.0000
R0300-P1	0.0000	5794.4477	0.0000	0.0000
R0300-P2	0.0000	5794.4477	0.0000	0.0000
R0290-P2.1	1458.3917	4306.8539	0.0000	0.0000
RN-004-P1	0.0000	0.0000	6719.8891	0.0000
RN-004-P2	3.9100	3.9100	6816.3458	0.0000
RN-004-P3	2.4588	2.4588	6089.1055	0.0000
RN-001-P1	202.5227	4647.2190	314.8029	0.0000
RN-001-P2	487.0035	5224.6888	0.0000	0.0000
RN-001-P3	164.7977	4877.7439	0.0000	0.0000
RN-005-P1	30.5803	5374.6136	0.0000	0.0000

RN-005-P2	0.0750	4603.1672	0.0000	0.0000
RN-005-P3	0.0000	4142.5860	0.0000	0.0000
RN-008-P1.1	0.0000	5216.3476	0.0000	0.0000
RN-008-P2	0.0000	6474.2953	0.0000	0.0000
RN-008-P3	0.0000	6655.8721	0.0000	0.0000
RN-010-P1	0.0000	5243.7809	0.0000	0.0000
RN-010-P2	0.0000	5242.7831	0.0000	0.0000
RN-010-P3	0.9381	6092.5263	0.0000	0.0000
RN-013-P1	0.3760	5771.1254	0.0000	0.0000
RN-013-P2	0.3760	5771.1254	0.0000	0.0000
RN-013-P3	0.3760	5771.1254	0.0000	0.0000
RN-015-P1	11.8478	5837.0078	0.0000	0.0000
RN-015-P2	0.0000	5815.9527	0.0000	0.0000
RN-015-P3	0.0000	5947.2696	0.0000	0.0000
RN-029-P1	0.0000	5364.4907	2.4400	0.0000
RN-029-P2	0.0000	6149.7971	0.0000	0.0000
R0742-P1	6118.6833	8397.6398	0.0000	0.0000
R0742-P2	6118.6833	8397.6398	0.0000	0.0000
R0655-P1.1	0.0000	3281.3960	0.0000	0.0000
R0490-P8	0.0000	4048.0825	0.0000	0.0000
R0490-P7	0.0000	4048.0825	0.0000	0.0000
R0140-P2.1	0.0000	11100.444	0.0000	0.0000
R0140-P1.1	0.0000	11095.242	0.0000	0.0000
R0120-P1.1	0.7300	2618.8536	0.0000	0.0000
R0160-P1.1	0.0408	4294.0415	0.0000	0.0000
R0325-P1.1	0.0000	0.0000	0.0000	0.0000
R0400-P1.1	0.0000	0.0000	0.0000	0.0000
R0880-P2.1	0.0000	0.0000	0.0000	0.0000
R1010-P1.1	0.0000	0.0000	0.1026	0.0000
R-0410-P4	0.0000	11155.862	0.0000	0.0000
R-0410-P5	0.0000	11155.862	0.0000	0.0000
R-0410-P6	0.0000	11156.306	0.0000	0.0000
R-0410-P7	0.0000	11177.401	0.0000	0.0000
R0410-P1	0.0000	346.6763	65.1786	0.0000
R0410-P2	0.0000	346.6763	65.1786	0.0000
R0410-P3	0.0000	346.6763	65.1786	0.0000
498.1	0.0408	9124.4347	0.0000	0.0000
R0490-P1.1	0.0000	594.5780	0.0000	0.0000
R0490-P3	0.0000	2153.3205	0.0000	0.0000
R0490-P4	0.0000	2151.5288	0.0000	0.0000
R0490-P5	0.0000	2150.5497	0.0000	0.0000
R0490-P6	0.0000	2150.5705	0.0000	0.0000
R0890-ORF-2	0.0000	27.9957	1428.5833	0.0000
R0890-ORF-5	0.0000	27.9957	1428.5833	0.0000
R0890ORF-3	0.0000	27.9957	1428.5833	0.0000
R0890-ORF-4	0.0000	27.9957	1428.5833	0.0000
N0140-A-W1.1	0.0000	0.0000	0.0000	0.0000
R0540-W3	0.0000	0.0000	0.0000	0.0000
R0290-P5	0.0000	0.0000	0.0000	0.0000
R0285-W2	0.0000	0.0000	0.0000	0.0000

R0250-W1	0.0000	0.0000	0.0000	0.0000
R0230-W1	0.0000	0.0000	0.0000	0.0000
R0220-W2	0.0000	0.0000	0.0000	0.0000
R0200-W3	0.0000	0.0000	0.0000	0.0000
R0190-W4	0.0000	0.0000	0.0000	0.0000
R0170-W3	0.0000	0.0000	0.0000	0.0000
R0180-W1	0.0000	0.0000	0.0000	0.0000
R0140-W1	0.0000	0.0000	0.0000	0.0000
R0150-W3	0.0000	0.0000	0.0000	0.0000
R0110-W1	0.0000	0.0000	0.0000	0.0000
R0130-W1	0.0000	0.0000	0.0000	0.0000
R0100-W4	0.0000	0.0000	0.0000	0.0000
R0310-W5.1	0.0000	0.0000	0.0000	0.0000
R0430-W3	0.0000	0.0000	0.0000	0.0000
R0340-W3	0.0000	0.0000	0.0000	0.0000
R0350-W1	0.0000	0.0000	0.0000	0.0000
R0330-W1	0.0000	0.0000	0.0000	0.0000
R0360-W1	0.0000	0.0000	0.0000	0.0000
R0550-W2	0.0000	0.0000	0.0000	0.0000
R0560-W1	0.0000	0.0000	0.0000	0.0000
R0780-W1	0.0000	0.0000	0.0000	0.0000
R0740-W3	0.0000	0.0000	0.0000	0.0000
R0870-W1	0.0000	0.0000	0.0000	0.0000
R0950-W1	0.0000	0.0000	0.0000	0.0000
R0960-W2	0.0000	0.0000	0.0000	0.0000
R0990-W2	0.0000	0.0000	0.0000	0.0000
R1010-W2	0.0000	0.0000	0.0000	0.0000
R0980-W2	0.0000	0.0000	0.0000	0.0000
R0850-W2	0.0000	0.0000	0.0000	0.0000
R0770-W2	0.0000	0.0000	0.0000	0.0000
R0530-W4	0.0000	0.0000	0.0000	0.0000
R0380-W3	0.0000	0.0000	0.0000	0.0000
R0300-W2	0.0000	0.0000	0.0000	0.0000
R0290-W1	0.0000	0.0000	0.0000	0.0000
R0655-W2	0.0000	0.0000	0.0000	0.0000
R0140-W2	0.0000	0.0000	0.0000	0.0000
R0120-W2	0.0000	0.0000	0.0000	0.0000
R0160-W1	0.0000	0.0000	0.0000	0.0000
R0400-W1	0.0000	0.0000	0.0000	0.0000
R0880-W2	0.0000	0.0000	0.0000	0.0000
R1010-W1	0.0000	0.0000	0.0000	0.0000
R0490-W2	0.0000	0.0000	0.0000	0.0000
R0050-W1.1	0.0000	0.0000	0.0000	0.0000
R0050-W2.1	0.0000	0.0000	0.0000	0.0000
R0060-W1.1	0.0000	0.0000	0.0000	0.0000
R0080-W1.1	0.0000	0.0000	0.0000	0.0000
R0080-W2.1	0.0000	0.0000	0.0000	0.0000
R0090-W1.1	0.0000	0.0000	0.0000	0.0000
R0090-W2.1	0.0000	0.0000	0.0000	0.0000
R0090-W3.1	0.0000	0.0000	0.0000	0.0000

R0090-W4.1	0.0000	0.0000	0.0000	0.0000
R0100-W1.1	0.0000	0.0000	0.0000	0.0000
R0100-W2.1	0.0000	0.0000	0.0000	0.0000
R0100-W3.1	0.0000	0.0000	0.0000	0.0000
R0110-W2.1	0.0000	0.0000	0.0000	0.0000
R0120-W1.1	0.0000	0.0000	0.0000	0.0000
R0130-W2.1	0.0000	0.0000	0.0000	0.0000
R0150-W1.1	0.0000	0.0000	0.0000	0.0000
R0150-W2.1	0.0000	0.0000	0.0000	0.0000
R0170-W1.1	0.0000	0.0000	0.0000	0.0000
R0170-W2.1	0.0000	0.0000	0.0000	0.0000
R0190-W1.1	0.0000	0.0000	0.0000	0.0000
R0190-W2.1	0.0000	0.0000	0.0000	0.0000
R0190-W3.1	0.0000	0.0000	0.0000	0.0000
R0200-W1.1	0.0000	0.0000	0.0000	0.0000
R0200-W2.1	0.0000	0.0000	0.0000	0.0000
R0220-W1.1	0.0000	0.0000	0.0000	0.0000
R0240-W1.1	0.0000	0.0000	0.0000	0.0000
R0240-W2.1	0.0000	0.0000	0.0000	0.0000
R0240-W3.1	0.0000	0.0000	0.0000	0.0000
R0240-W4.1	0.0000	0.0000	0.0000	0.0000
R0240-W5.1	0.0000	0.0000	0.0000	0.0000
R0240-W6.1	0.0000	0.0000	0.0000	0.0000
R0250-W2.1	0.0000	0.0000	0.0000	0.0000
R0250-W3.1	0.0000	0.0000	0.0000	0.0000
R0260-W1.1	0.0000	0.0000	0.0000	0.0000
R0270-W1.1	0.0000	0.0000	0.0000	0.0000
R0270-W3	0.0000	0.0000	0.0000	0.0000
R0270-W2.1	0.0000	0.0000	0.0000	0.0000
R0275-W1.1	0.0000	0.0000	0.0000	0.0000
R0280-W1.1	0.0000	0.0000	0.0000	0.0000
R0285-W1.1	0.0000	0.0000	0.0000	0.0000
R0290-W2.1	0.0000	0.0000	0.0000	0.0000
R0290-W3.1	0.0000	0.0000	0.0000	0.0000
R0290-W4.1	0.0000	0.0000	0.0000	0.0000
R0300-W1.1	0.0000	0.0000	0.0000	0.0000
R0310-W1.1	0.0000	0.0000	0.0000	0.0000
R0310-W2.1	0.0000	0.0000	0.0000	0.0000
R0310-W3.1	0.0000	0.0000	0.0000	0.0000
R0310-W4.1	0.0000	0.0000	0.0000	0.0000
R0325-W2.1	0.0000	0.0000	0.0000	0.0000
R0330-W2.1	0.0000	0.0000	0.0000	0.0000
R0330-W3.1	0.0000	0.0000	0.0000	0.0000
R0340-W1.1	0.0000	0.0000	0.0000	0.0000
R0340-W2.1	0.0000	0.0000	0.0000	0.0000
R0350-W2.1	0.0000	0.0000	0.0000	0.0000
R0350-W3.1	0.0000	0.0000	0.0000	0.0000
R0360-W2.1	0.0000	0.0000	0.0000	0.0000
R0360-W3.1	0.0000	0.0000	0.0000	0.0000
R0370-W1.1	0.0000	0.0000	0.0000	0.0000

R0370-W2.1	0.0000	0.0000	0.0000	0.0000
R0370-W3.1	0.0000	0.0000	0.0000	0.0000
R0380-W1.1	0.0000	0.0000	0.0000	0.0000
R0380-W2.1	0.0000	0.0000	0.0000	0.0000
R0380-W4.1	0.0000	0.0000	0.0000	0.0000
R0390-W1.1	0.0000	0.0000	0.0000	0.0000
R0390-W2	0.0000	0.0000	0.0000	0.0000
R0400-W2.1	0.0000	0.0000	0.0000	0.0000
R0410-W1.1	0.0000	0.0000	0.0000	0.0000
R0420-W1.1	0.0000	0.0000	0.0000	0.0000
R0420-W2.1	0.0000	0.0000	0.0000	0.0000
R0430-W1.1	0.0000	0.0000	0.0000	0.0000
R0430-W2.1	0.0000	0.0000	0.0000	0.0000
R0440-W1.1	0.0000	0.0000	0.0000	0.0000
R0450-W1.1	0.0000	0.0000	0.0000	0.0000
R0450-W2.1	0.0000	0.0000	0.0000	0.0000
R0460-W1.1	0.0000	0.0000	0.0000	0.0000
R0460-W2.1	0.0000	0.0000	0.0000	0.0000
R0480-W1.1	0.0000	0.0000	0.0000	0.0000
R0480-W2.1	0.0000	0.0000	0.0000	0.0000
R0480-W3.1	0.0000	0.0000	0.0000	0.0000
R0490-W1.1	0.0000	0.0000	0.0000	0.0000
R0490-W3.1	0.0000	0.0000	0.0000	0.0000
R0500-W1.1	0.0000	0.0000	0.0000	0.0000
R0510-W2.1	0.0000	0.0000	0.0000	0.0000
R0520-W1.1	0.0000	0.0000	0.0000	0.0000
R0520-W2.1	0.0000	0.0000	0.0000	0.0000
R0530-W1.1	0.0000	0.0000	0.0000	0.0000
R0530-W2.1	0.0000	0.0000	0.0000	0.0000
R0530-W3	0.0000	0.0000	0.0000	0.0000
R0540-W1.1	0.0000	0.0000	0.0000	0.0000
R0540-W2.1	0.0000	0.0000	0.0000	0.0000
R0550-W1.1	0.0000	0.0000	0.0000	0.0000
R0550-W3.1	0.0000	0.0000	0.0000	0.0000
R0560-W2.1	0.0000	0.0000	0.0000	0.0000
R0560-W3.1	0.0000	0.0000	0.0000	0.0000
R0560-W4.1	0.0000	0.0000	0.0000	0.0000
R0560-W5.1	0.0000	0.0000	0.0000	0.0000
R0570-W1.1	0.0000	0.0000	0.0000	0.0000
R0570-W3.1	0.0000	0.0000	0.0000	0.0000
R0570-W4.1	0.0000	0.0000	0.0000	0.0000
R0570-W5.1	0.0000	0.0000	0.0000	0.0000
R0640-W1.1	0.0000	0.0000	0.0000	0.0000
R0650-W1.1	0.0000	0.0000	0.0000	0.0000
R0660-W1.1	0.0000	0.0000	0.0000	0.0000
R0660-W2.1	0.0000	0.0000	0.0000	0.0000
R0690-W2.1	0.0000	0.0000	0.0000	0.0000
R0720-W1.1	0.0000	0.0000	0.0000	0.0000
R0730-W1.1	0.0000	0.0000	0.0000	0.0000
R0740-W2.1	0.0000	0.0000	0.0000	0.0000

R0740-W4.1	0.0000	0.0000	0.0000	0.0000
R0775-W1.1	0.0000	0.0000	0.0000	0.0000
R0780-W2.1	0.0000	0.0000	0.0000	0.0000
R0790-W1	0.0000	0.0000	0.0000	0.0000
R0800-W1.1	0.0000	0.0000	0.0000	0.0000
R0800-W2.1	0.0000	0.0000	0.0000	0.0000
R0810-W1.1	0.0000	0.0000	0.0000	0.0000
R0830-W3.1	0.0000	0.0000	0.0000	0.0000
R0850-W3.1	0.0000	0.0000	0.0000	0.0000
R0870-W2.1	0.0000	0.0000	0.0000	0.0000
R0885-W1.1	0.0000	0.0000	0.0000	0.0000
R0910-W2.1	0.0000	0.0000	0.0000	0.0000
R0930-W1.1	0.0000	0.0000	0.0000	0.0000
R0940-W1.1	0.0000	0.0000	0.0000	0.0000
R0940-W2.1	0.0000	0.0000	0.0000	0.0000
R0945-W1.1	0.0000	0.0000	0.0000	0.0000
R0950-W2.1	0.0000	0.0000	0.0000	0.0000
R0960-W1.1	0.0000	0.0000	0.0000	0.0000
R0960-W3.1	0.0000	0.0000	0.0000	0.0000
R0960-W4.1	0.0000	0.0000	0.0000	0.0000
R0980-W1.1	0.0000	0.0000	0.0000	0.0000
R0990-W1.1	0.0000	0.0000	0.0000	0.0000
R0990-W3.1	0.0000	0.0000	0.0000	0.0000
R1000-W1.1	0.0000	0.0000	0.0000	0.0000
R1020-W1.1	0.0000	0.0000	0.0000	0.0000
R1030-W1.1	0.0000	0.0000	0.0000	0.0000
R1030-W2.1	0.0000	0.0000	0.0000	0.0000
R2002-W1.1	0.0000	0.0000	0.0000	0.0000
R02040-W1.1	0.0000	0.0000	0.0000	0.0000
R2090-W1.1	0.0000	0.0000	0.0000	0.0000
R2370-W4.1	0.0000	0.0000	0.0000	0.0000
R2380-W2.1	0.0000	0.0000	0.0000	0.0000
R2380-W3.1	0.0000	0.0000	0.0000	0.0000
R0440-W2.1	0.0000	0.0000	0.0000	0.0000
R015-W1.1	0.0000	0.0000	0.0000	0.0000
R020-W1.1	0.0000	0.0000	0.0000	0.0000
R021-W1.1	0.0000	0.0000	0.0000	0.0000
R030-W1.1	0.0000	0.0000	0.0000	0.0000
R031-W1.1	0.0000	0.0000	0.0000	0.0000
R042-W1.1	0.0000	0.0000	0.0000	0.0000
R043-W1.1	0.0000	0.0000	0.0000	0.0000
R0850-W1.1	0.0000	0.0000	0.0000	0.0000

=====

| Table E14 - Natural Channel Overbank Flow Information |

=====

<----- Maximum Area -----> <----- Maximum Velocity -----> <----- Maximum Flow ----->

<----- Max. Storage Volume ----->

Conduit Left Center Right Left Center Right

Left Area	Center Area	Right Area	Left Velocity	Center Velocity	Right Velocity	Maximum Flow Depth	Flow	Flow
0.0000	22.2939	0.0000	2.4469	0.0000	0.0000	54.5512	0.0000	0.0000
				735.6982		1.5368		
0.0000	22.2900	0.0000	1.3492	0.0000	0.0000	30.0745	0.0000	0.0000
				735.5715		1.5367		
0.0000	29.6892	0.0000	1.0091	0.0000	0.0000	29.9603	0.0000	0.0000
				979.7442		1.8695		
0.0000	91.9631	0.2612	0.4159	0.0553	0.0000	38.2495	0.0144	0.0144
				3034.7814	8.6185	3.3136		
0.0000	8.2707	0.0000	1.9059	0.0000	0.0000	15.7629	0.0000	0.0000
				272.9326		1.0420		

=====

| Table E14a - Natural Channel Encroachment Information |

=====

<----- Existing Conveyance Condition -----> <-----
 Encroachment Conveyance Condition -----> <--- % Volume --> <--- Encroachment Data
 -->

Centre Channel	Conduit Right Bank	Left Total	Left Channel Station	Centre Channel Station	Right Bank Left	Total Reduction	Left Station	Right Station	Left Bank Method
953.0034	0.0000	953.0034	27.0382	48.6497	0.0000	0.0000	27.0382	48.6497	0.0000
952.7516	0.0000	952.7516	27.0384	48.6493	0.0000	0.0000	27.0384	48.6493	0.0000

1473.991 R0385 0.0000 1473.991 0.0000 1473.991 26.5435 49.3944 0.0000
 1473.991 0.0000 1473.991 26.5435 49.3944 0.0000 0.0000 0.0000 None

6794.967 R0375 0.0000 6794.967 2.5655 6797.532 22.9189 64.3361 0.0000
 6794.967 2.5655 6797.532 22.9189 64.3361 0.0000 0.0000 0.0000 None

226.0151 R0335 0.0000 226.0151 0.0000 226.0151 46.6849 62.5596 0.0000
 226.0151 0.0000 226.0151 46.6849 62.5596 0.0000 0.0000 0.0000 None

=====

| Table E14b - Floodplain Mapping |

=====

		Conduit		Upstream	Downstream	Channel	Center	<----- Left Offsets	
----->		<----- Right Offsets		----->		<- Channel Widths->			
Bank	Natural	Encroach	WS Elev.	WS Elev.	Length	Station	Natural	Encroach	
			Bank	Bank	Total	Encroach.			

15.0000			R0386	1.5369	1.5368	33.0000	33.0000	5.9618	5.9618
	15.6497	15.6497		30.0000	21.6115	21.6115			
15.0000			R0388	1.5368	1.5366	33.0000	33.0000	5.9616	5.9616
	15.6493	15.6493		30.0000	21.6108	21.6108			
15.0000			R0385	1.5381	1.5369	33.0000	33.0000	6.4565	6.4565
	16.3944	16.3944		30.0000	22.8509	22.8509			
13.0000			R0375	3.3136	3.3136	33.0000	31.0000	8.0811	8.0811
	33.3361	33.3361		31.0000	41.4172	41.4172			
40.0000			R0335	1.0453	1.0420	33.0000	53.0000	6.3151	6.3151
	9.5596	9.5596		23.0000	15.8747	15.8747			

=====

| Table E15 - SPREADSHEET INFO LIST |

| Conduit Flow and Junction Depth Information for use in |

| spreadsheets. The maximum values in this table are the |

| true maximum values because they sample every time step. |
 | The values in the review results may only be the |
 | maximum of a subset of all the time steps in the run. |
 | Note: These flows are only the flows in a single barrel. |

Conduit Junction Name	Maximum Invert Elevation (ft)	Total Maximum Flow Elevation (ft)	Maximum Velocity (ft/s)	Maximum Volume (ft^3)	##
R0870	200.0116	3.401E+06	9.7545	635.6920	##
N0335	0.0000	1.0453			
R0770-P2	23.0974	1.629E+06	-2.9694	1749.3621	##
N0550	-1.3300	0.7822			
R0900	202.2871	3.326E+06	9.9755	3466.0283	##
N0690	0.6200	4.9411			
R0370	34.3259	527258.3698	8.2175	588.4003	##
N0640	-2.7800	2.4257			
R0280	9.3587	253864.5319	4.0487	118.2769	##
N0780	-4.3900	0.9113			
R0202	19.3561	268211.3091	0.9468	1934.8763	##
N0830	-2.0500	1.2056			
RN-002	3.2667	45022.2454	3.2531	56.0665	##
N0790	-2.9800	1.2057			
RN-003	4.0395	40531.8263	3.7348	72.7824	##
N0800	3.3500	5.6082			
RN-006	5.3448	56649.4118	3.2913	88.9929	##
N0870	-2.9200	1.3637			
RN-007	3.7964	41364.9828	3.0576	84.5170	##
N0510	-1.4300	0.8605			
RN-009	7.8247	72154.7779	2.9385	738.2277	##
N0520	-2.8300	1.0629			
RN-009MH	7.8161	72158.7626	3.4975	299.4898	##
N0390	-1.7000	1.0569			
RN-011	12.2386	112578.6881	3.8471	883.9883	##
N0350	-2.6900	1.0420			
RN-014	5.3038	61220.5197	3.7714	21.6720	##
N0450	-1.3000	1.0420			
RN-012	9.3946	179239.9365	3.6298	3342.7656	##
N0770	-3.0500	1.2056			
RN-023	4.7924	300659.3405	3.4981	187.1944	##
N0720	-0.6500	1.0757			
RN-021	4.4691	294184.9194	3.7525	73.8932	##
N0960	1.9000	2.6266			
RN-041	10.7384	276837.0901	2.1460	463.1353	##
N0920	-1.5700	1.2056			

RN-020	9.3180	279052.0334	4.6386	184.7858	##
N0950	-0.4200	1.2056			
RN-022	11.8385	351902.7291	4.0651	186.9321	##
N0970	-1.2100	1.2056			
RN-024	19.4496	506490.3302	5.8851	326.5333	##
N0915	-6.0000	1.2057			
RN-026	0.5004	4703.9170	1.5961	49.8432	##
N0885	-6.9100	1.2056			
RN-027	2.7304	47078.7952	-2.0698	92.6271	##
N0560	-2.8200	0.7820			
RN-028	-3.3301	54460.3213	-2.6431	144.4982	##
N0810	-1.8500	0.7798			
R0742-P3	-7.6211	-467156.2694	-2.4096	763.9356	##
N0570	-2.6700	1.3771			
R0655-P2	-16.5318	273440.8176	-3.2189	478.5486	##
N0990	1.5700	2.9091			
R0655-P3	-15.9538	268112.9103	-3.2176	472.3924	##
N1000	-1.3600	0.5554			
R0655-P4	-15.8080	271950.9836	-3.1205	472.2453	##
N1020	-1.0000	2.9091			
R0120-P2	9.4799	100180.1612	4.4402	481.8367	##
N1030	-1.0500	1.7204			
R1010-P2	2.0446	238272.6654	2.2773	40.2549	##
N0890	-1.5400	2.2005			
RN-025-P1	-38.2376	2.271E+06	-6.1399	586.4067	##
N0850	1.4600	3.4184			
RN-025-P2	-57.0953	-1481039.296	-9.4448	588.5332	##
N0930	-3.5700	2.0561			
R0155-P1	45.2849	447053.3886	9.4394	201.4111	##
N0980	1.6200	3.4620			
R0386	54.5512	1.989E+06	1.8339	735.6982	##
N1010	1.0400	2.9136			
R0388	30.0745	2.014E+06	2.2119	735.5715	##
N0430	-0.1300	1.1342			
R0385	29.9603	1.960E+06	1.6591	979.7442	##
N0500	2.2500	4.8763			
R0375	38.2640	780130.1338	1.3758	3043.3999	##
N0230	3.3100	4.9840			
R0335	15.7629	272198.0527	1.9683	272.9326	##
N0220	1.1800	2.6218			
R-0001B-P1	3.0652	67695.4965	1.5231	2353.7415	##
N0200	-1.6100	2.4428			
R0540-P1	7.7599	243281.2450	4.0867	114.8780	##
N0190	-0.9600	2.8814			
R0540-P2	6.3973	163714.3629	3.8817	100.1782	##
N0130	-0.6000	1.4670			
R0540-P3	6.0835	138588.4430	4.0092	94.1340	##
N0100	0.4600	1.4671			
R0290-P1	8.9207	155814.8095	2.9978	373.1400	##
N0090	2.4900	5.4159			

R0285.1	13.6240	983801.1686	4.9290	163.2358	##
N0120	-0.2400	1.2068			
R0250.1	9.9120	119544.7309	5.2496	282.9895	##
N0110	0.7700	4.8496			
R0230.1	14.3650	199369.7631	5.2133	121.4324	##
N0170	-0.7100	1.2366			
R0220.1	16.6132	213094.8554	3.9481	1150.7141	##
N0210	-0.7200	0.2899			
R0200.1	19.3638	268815.1836	4.0468	489.1660	##
N0260	-0.2300	2.6218			
R0190.1	11.4479	125525.0986	3.6269	290.9588	##
N0250	2.3000	4.8885			
R0170.1	51.9438	297653.8721	10.9440	240.7315	##
N0240	1.4400	4.8886			
R0180-P1	-11.9906	132909.6662	-1.6263	1348.6500	##
N0140	-1.9000	2.5475			
R0180-P2	-11.9249	132735.2564	-1.6174	1363.4703	##
N0150	1.4400	2.5912			
R0140.1	0.4025	2577.9318	1.9373	3.1827	##
N0270	1.5700	4.1238			
R0140-P3.1	0.4025	2577.9318	1.9373	3.1827	##
N0290	1.0100	3.4495			
R0150-P1	13.1648	150241.0710	7.0341	125.3889	##
N0180	-1.4600	2.5604			
R0150-P2	3.8451	14787.3788	7.3498	29.9043	##
N0370	0.9800	3.4331			
R0150-P3	5.3744	19067.2968	7.4732	42.6599	##
N0285	2.0000	3.3514			
R0150-P4	16.9508	193422.2005	9.0572	127.2557	##
N0420	3.0800	4.6817			
R0150-P5	4.4943	22204.4406	5.7459	53.1840	##
N0490	-1.2600	1.3908			
R0110.1	11.0758	438199.0974	3.7945	882.6326	##
N0410	-2.6100	1.5366			
R0130-P1	-12.5091	-116301.9283	-5.9384	391.5784	##
N0380	0.0000	3.3136			
R0130-P2	-12.2167	-113865.9775	-5.7997	410.5257	##
N0660	-0.8400	1.4578			
R0100-P1	3.1601	33353.5722	3.1840	111.7482	##
N0740	-1.2400	1.2056			
R0100-P2	3.1351	33168.7376	3.1740	113.5220	##
N0730	-2.1000	1.3800			
R0310.1	33.4635	385081.2916	6.6330	445.6102	##
N0940	-1.0100	1.5970			
R0430-P1	3.9441	68247.6094	1.9247	282.7507	##
N0530	1.6600	2.6445			
R0430-P2	3.9441	68247.6094	1.9247	282.7507	##
N0060	-1.2900	1.4670			
R0430-P3	3.9441	68247.6094	1.9247	282.7507	##
N0050	-0.8600	2.7158			

R0430-P4	3.9311	68047.5130	1.9183	284.6232	##
N0325	-4.3700	1.0420			
R0340-P1	15.2979	952718.3030	2.0682	301.3711	##
N0160	-2.0900	0.5103			
R0340-P2	11.5396	734557.6830	1.9108	247.5128	##
N0470	1.8100	4.1287			
R0350-P1	17.9250	957316.7929	1.8638	610.4971	##
N0540	1.3500	2.6545			
R0350-P2	17.9250	957316.7929	1.8638	610.4971	##
N0650	-0.4900	2.1013			
R0330-P1	3.1145	-8191.4468	0.3102	723.7397	##
N0400	-2.9000	0.7463			
R0330-P2	3.1145	-8191.4468	0.3102	723.7397	##
N0360	-1.1800	1.0420			
R0450-P1	-11.2406	-749067.8620	-3.7996	75.1514	##
N0480	2.2600	4.3409			
R0450-P2	-11.2406	-749067.8620	-3.7996	75.1514	##
N0080	0.4800	3.0561			
P0360-P1	-1.4923	-39839.8489	-1.2230	29.2166	##
N0310	-1.5900	1.2987			
P0360-P2	-2.3601	-66402.3020	-1.6437	35.6612	##
N0300	-3.8500	1.0420			
R0550-P1	-27.9495	77572.7953	-6.5802	310.5765	##
N0460	-2.1500	1.0629			
R0550-P2	-23.2858	72861.9518	-5.4794	303.9248	##
N0440	-1.3700	0.9792			
R0560-P1	35.2929	189324.8676	4.0643	933.9679	##
N0330	-3.4300	1.0420			
R0560-P2	43.5665	231566.5310	5.1544	920.7355	##
N0655	-2.9100	0.0422			
R0560-P3	44.3448	237699.4862	5.1632	928.3026	##
N0375	0.0000	3.3136			
R0780.1	22.6292	231337.3055	2.3721	1343.9771	##
N0385	-1.0900	1.5382			
R0740.1	6.0328	578617.2396	2.8114	80.1893	##
N0275	2.3000	3.4801			
R0730.1	15.4724	1.005E+06	8.5288	40.0097	##
N0280	2.0000	3.8547			
R0880.1	0.0000	0.0000	0.0000	0.0000	##
N0202	-3.5700	2.4057			
R0950.1	-26.0521	230039.2860	-8.1306	143.2289	##
N0340	-1.7900	1.0420			
R0920.1	-53.0876	2429.8031	-12.9689	135.1744	##
N0515	-1.2000	0.7822			
R0960.1	4.2581	54329.0839	3.6239	61.0532	##
N-001	0.2300	2.2825			
R0990.1	2.9621	39916.7540	3.2198	80.1720	##
N-002	3.0000	4.1814			
R1010-P3	5.9879	161308.0612	2.9325	386.2423	##
N-003	2.5600	3.3179			

R1010-P4	6.3069	175563.7352	2.9414	401.4178	##
N-004	2.8800	3.4901			
R1010-P5	6.1915	172386.7616	2.7600	400.5075	##
N-005	0.8700	2.0729			
R0980-P1.1	21.5972	1.033E+06	5.6616	192.6200	##
N-008	-0.0400	1.9231			
R0980-P2.1	8.0463	497081.7189	3.7810	179.1274	##
N-010	-0.2900	1.9228			
R0850-P1	12.8108	642248.6691	3.2476	487.6316	##
N-013	-1.1600	1.9224			
R0850-P2	12.1428	548110.1183	3.2421	453.3890	##
N-015	-1.1900	1.9215			
R0850-P3	11.0957	449168.2337	3.1240	425.8064	##
N-006	2.6600	3.5139			
R0570-P1	119.1113	259703.0315	9.5988	1591.5264	##
N-007	2.4600	3.2232			
R0570-P2	146.6131	290889.7861	11.9898	1568.4269	##
N-009	2.6800	3.8897			
R0570-P3	119.2204	283359.9970	9.7605	1577.9038	##
N-011	2.0400	3.3425			
R0770-P1.1	-48.9767	1.255E+06	-7.4010	155.6135	##
N-014	1.5500	2.3335			
R0770-P3	58.0465	-1538896.497	6.0746	3093.3988	##
N-012	1.4800	2.3130			
R0770-P4	60.7483	-1510729.687	6.3874	3112.4504	##
N-025	-1.2400	1.7913			
R0790-P1	-20.6973	556056.0943	-1.5649	5185.2856	##
N-023	0.4500	1.7916			
R0790-P2	-14.7826	302622.0820	-1.4705	3160.4943	##
N-021	-0.4700	2.3896			
R0530-P1	5.7055	99471.6632	3.9188	65.0418	##
N-019	-0.2200	3.9083			
R0530-P2	4.2475	27466.8392	3.4267	69.1161	##
N-041	0.7800	3.9114			
R0530-P3	6.8486	162190.2178	4.7038	68.6355	##
N-020	1.3800	2.3426			
R0910-P1	131.6042	158705.7680	9.5906	613.0340	##
N-022	0.9600	2.2140			
R0910-P2	192.3875	172704.5998	13.3807	1552.3670	##
N-024	-0.2700	1.7913			
R0380-P1	14.9465	965290.8354	4.9808	90.6049	##
N-029	-0.9800	1.7913			
R0380-P2	14.9465	965290.8354	4.9808	90.6049	##
N-026	1.0100	1.7913			
R0300-P1	-4.1386	-68004.8130	-1.3045	127.0285	##
N-027	-0.3300	1.7913			
R0300-P2	-4.1386	-68004.8130	-1.3045	127.0285	##
N-028	-0.3100	1.7913			
R0290-P2.1	-7.1871	-83713.3066	-5.1092	268.5527	##
N-030	-0.0700	0.1191			

RN-004-P1	2.9323	28513.4251	3.1982	58.5149	##
N-043	-1.1600	0.1142			
RN-004-P2	4.0073	40596.0500	4.3208	60.2635	##
N-042	-0.6300	0.5962			
RN-004-P3	3.4884	28372.4693	4.2417	55.0244	##
N-031	-0.8500	0.0822			
RN-001-P1	6.4663	220923.1344	3.3330	75.6797	##
N-040	-1.4800	1.0202			
RN-001-P2	5.1979	133754.2654	3.3159	64.9456	##
N0620	-0.6000	0.2124			
RN-001-P3	6.5037	226205.3172	3.3173	76.1475	##
N0900	-3.0000	1.2056			
RN-005-P1	7.5241	208057.6250	3.6130	190.1370	##
N-009mh	0.0000	3.5980			
RN-005-P2	9.7463	259268.1818	4.5087	67.9674	##
N0205	-3.5000	2.4032			
RN-005-P3	8.4303	225315.6215	3.7506	190.9930	##
N0386	-1.0900	1.5369			
RN-008-P1.1	16.0272	327484.1972	4.3946	300.1934	##
N0388	-1.0900	1.5368			
RN-008-P2	14.1896	322653.5156	4.5512	281.9407	##
N0775	-0.6500	0.9112			
RN-008-P3	12.8419	281406.1294	4.5292	261.4678	##
N2040	-1.1000	0.7652			
RN-010-P1	19.7362	394571.7062	4.0059	577.8742	##
N2380	-1.8100	1.3909			
RN-010-P2	19.0029	373354.3852	4.0026	566.6052	##
N0155	-0.1400	1.6064			
RN-010-P3	17.4527	365777.8083	3.7774	556.9220	##
N0945	-0.8100	1.5232			
RN-013-P1	21.3940	414285.0199	4.8283	895.1882	##
N2002	-1.8000	1.9203			
RN-013-P2	21.3940	414285.0199	4.8283	895.1882	##
N2090	-1.8900	0.3420			
RN-013-P3	21.3940	414285.0199	4.8283	895.1882	##
N0742	-0.5100	1.2944			
RN-015-P1	13.2163	76143.3643	2.5256	544.6261	##
N0910	-6.0000	1.2056			
RN-015-P2	20.7355	-4681.0051	3.4111	662.3484	##
N0880	-6.9100	1.2056			
RN-015-P3	24.0365	376753.6315	4.1694	661.6196	##
N9004	-2.7400	1.9203			
RN-029-P1	-15.4696	245652.1702	-6.5613	431.2618	##
N9004-B	-2.7900	1.9203			
RN-029-P2	-26.9931	262605.8942	-5.4354	512.5718	##
N9004-C	-2.5400	1.9203			
R0742-P1	4.1283	239185.1768	3.8366	160.9984	##
N9004-D	-2.6800	1.9203			
R0742-P2	4.1283	239185.1768	3.8366	160.9984	##
N9004-F	-1.1700	1.9203			

R0655-P1.1	-16.4782	273514.3125	-3.2199	478.5475	##
N9001-B	-2.0900	0.9603			
R0490-P8	9.3113	2.592E+06	7.5393	114.4973	##
N9001-D	-0.9000	0.9603			
R0490-P7	9.3113	2.592E+06	7.5393	114.4973	##
N9001-F	-0.9000	0.9603			
R0140-P2.1	11.6898	444757.2698	1.6486	637.2742	##
N9000	-1.9900	0.9603			
R0140-P1.1	11.8996	452489.7435	1.6782	615.0437	##
N9003	0.0000	0.9603			
R0120-P1.1	9.4319	50260.6987	4.4268	484.9254	##
N9005	0.0000	0.9603			
R0160-P1.1	-32.3875	216191.2300	-7.1813	145.1320	##
N9005-E	0.0000	0.9603			
R0325-P1.1	0.0000	0.0000	0.0000	0.0005	##
N9005-G	0.0000	0.9603			
R0400-P1.1	0.0000	0.0000	0.0000	0.0004	##
N9004-J	-1.3300	1.9203			
R0880-P2.1	0.0000	0.0000	0.0000	0.0000	##
N9004-G	-1.0900	1.9203			
R1010-P1.1	2.5296	324851.0971	2.4303	46.6879	##
N9002	-1.3100	0.9603			
R-0410-P4	-11.4810	97890.0138	-6.5417	125.9728	##
N2370	-1.5600	1.5356			
R-0410-P5	-11.4810	97890.0138	-6.5417	125.9728	##
N9000-B	-1.9900	0.9603			
R-0410-P6	-11.5439	98614.9513	-6.5764	124.1203	##
N9000-C	-1.9900	0.9603			
R-0410-P7	-9.9043	122675.6500	-5.6663	123.5822	##
N9000-E	-1.9900	0.9603			
R0410-P1	-17.0423	1.003E+06	-8.4260	563.7746	##
N9000-F	-1.9900	0.9603			
R0410-P2	-17.0423	1.003E+06	-8.4260	563.7746	##
N9001-E	-2.0900	0.9603			
R0410-P3	-17.0423	1.003E+06	-8.4260	563.7746	##
N9001-G	-0.9000	0.9603			
498.1	-8.1231	-1205311.192	-4.5324	164.7405	##
N9001-H	-0.9000	0.9603			
R0490-P1.1	-7.4651	-1218094.633	-4.2243	166.7287	##
N9001-J	-0.1730	0.9603			
R0490-P3	3.7577	125706.0725	3.0513	112.6127	##
N9001-K	-0.1730	0.9603			
R0490-P4	3.7404	118531.1922	3.0359	113.9825	##
N9002-A	-1.3100	0.9603			
R0490-P5	3.7601	113335.8808	3.0498	114.4246	##
N9002-B	-1.3100	0.9603			
R0490-P6	3.7583	112650.6479	3.0478	116.3581	##
N9003-A	0.0000	0.9603			
R0890-ORF-2	6.0544	426206.3847	11.0602	5.7131	##
N9003-B	0.0000	0.9603			

R0890-ORF-5	6.0544	426206.3847	11.0602	5.7131	##
N9003-C	0.0000	0.9603			
R0890ORF-3	6.0544	426206.3847	11.0602	5.7131	##
N9003-D	0.0000	0.9603			
R0890-ORF-4	6.0544	426206.3847	11.0602	5.7131	##
N9003-E	0.0000	0.9603			
N0140-A-W1.1	23.5876	897083.9237	1.6419	0.0020	##
N9003-F	0.0000	0.9603			
R0540-W3	0.0000	0.0000	0.0000	0.0100	##
N9003-G	0.0000	0.9603			
R0290-P5	0.0000	0.0000	0.0000	0.0100	##
N9004-A	-2.7400	1.9203			
R0285-W2	0.0000	0.0000	0.0000	0.0100	##
N9004-E	-2.6800	1.9203			
R0250-W1	0.0000	0.0000	0.0000	0.0100	##
N9004-H	-1.1700	1.9203			
R0230-W1	0.0000	0.0000	0.0000	0.0069	##
N9004-I	-1.1700	1.9203			
R0220-W2	0.0000	0.0000	0.0000	0.0100	##
N9004-K	-1.3300	1.9203			
R0200-W3	0.0000	0.0000	0.0000	0.0100	##
N9005-A	0.0000	0.9603			
R0190-W4	0.0000	0.0000	0.0000	0.0100	##
N9005-B	0.0000	0.9603			
R0170-W3	0.0000	0.0000	0.0000	0.0100	##
N9005-C	0.0000	0.9603			
R0180-W1	0.0000	0.0000	0.0000	0.0100	##
N9005-D	0.0000	0.9603			
R0140-W1	0.0000	0.0000	0.0000	0.0100	##
N9005-F	0.0000	0.9603			
R0150-W3	0.0000	0.0000	0.0000	0.0004	##
N9005-H	0.0000	0.9603			
R0110-W1	0.0000	0.0000	0.0000	0.0100	##
N9000-D	-2.2500	0.9603			
R0130-W1	0.0000	0.0000	0.0000	0.0000	##
N-0001A	-8.0000	1.1692			
R0100-W4	0.0000	0.0000	0.0000	0.0000	##
N-0001B	-0.5000	1.4673			
R0310-W5.1	0.0000	0.0000	0.0000	0.0100	##
N0001-C	2.1500	2.8861			
R0430-W3	0.0000	0.0000	0.0000	0.0100	##
N-0001-E	4.8000	5.3650			
R0340-W3	0.0000	0.0000	0.0000	0.0100	##
N-0001E-OF	3.1300	3.1300			
R0350-W1	0.0000	0.0000	0.0000	0.0100	##
N-0001-F	3.5000	4.1948			
R0330-W1	0.0000	0.0000	0.0000	0.0100	##
N-0001-G	4.0000	4.7992			
R0360-W1	0.0000	0.0000	0.0000	0.0100	##
N-0001F-OF-A	3.1300	3.1300			

R0550-W2	0.0000	0.0000	0.0000	0.0100	##
N-0001F-OF-B	3.1300	3.1300			
R0560-W1	0.0000	0.0000	0.0000	0.0100	##
N9004-L	-2.7400	1.9203			
R0780-W1	0.0000	0.0000	0.0000	0.0100	##
N0001-J	1.1900	1.8073			
R0740-W3	0.0000	0.0000	0.0000	0.0100	##
N9005-J	0.0000	0.9603			
R0870-W1	0.0000	0.0000	0.0000	0.0100	##
N9005-K	0.0000	0.9603			
R0950-W1	0.0000	0.0000	0.0000	0.0100	##
N0001-I	1.1300	2.3120			
R0960-W2	0.0000	0.0000	0.0000	0.0089	##
N-0001K	2.0300	2.9760			
R0990-W2	0.0000	0.0000	0.0000	0.0062	##
N0140-A	-2.1000	2.5287			
R1010-W2	0.0000	0.0000	0.0000	0.0100	##
R0980-W2	0.0000	0.0000	0.0000	0.0100	##
R0850-W2	0.0000	0.0000	0.0000	0.0000	##
R0770-W2	0.0000	0.0000	0.0000	0.0100	##
R0530-W4	0.0000	0.0000	0.0000	0.0100	##
R0380-W3	0.0000	0.0000	0.0000	0.0100	##
R0300-W2	0.0000	0.0000	0.0000	0.0100	##
R0290-W1	0.0000	0.0000	0.0000	0.0000	##
R0655-W2	0.0000	0.0000	0.0000	0.0100	##
R0140-W2	0.0000	0.0000	0.0000	0.0100	##
R0120-W2	0.0000	0.0000	0.0000	0.0100	##
R0160-W1	0.0000	0.0000	0.0000	0.0100	##
R0400-W1	0.0000	0.0000	0.0000	0.0100	##
R0880-W2	0.0000	0.0000	0.0000	0.0000	##
R1010-W1	0.0000	0.0000	0.0000	0.0100	##
R0490-W2	0.0000	0.0000	0.0000	0.0100	##
R0050-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0050-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0060-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0080-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0080-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0090-W1.1	0.0000	0.0000	0.0000	0.0015	##
R0090-W2.1	0.0000	0.0000	0.0000	0.0034	##
R0090-W3.1	0.0000	0.0000	0.0000	0.0031	##
R0090-W4.1	0.0000	0.0000	0.0000	0.0056	##
R0100-W1.1	0.0000	0.0000	0.0000	0.0000	##
R0100-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0100-W3.1	0.0000	0.0000	0.0000	0.0084	##
R0110-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0120-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0130-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0150-W1.1	0.0000	0.0000	0.0000	0.0021	##
R0150-W2.1	0.0000	0.0000	0.0000	0.0079	##
R0170-W1.1	0.0000	0.0000	0.0000	0.0000	##

R0170-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0190-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0190-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0190-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0200-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0200-W2.1	0.0000	0.0000	0.0000	0.0000	##
R0220-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0240-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0240-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0240-W3.1	0.0000	0.0000	0.0000	0.0000	##
R0240-W4.1	0.0000	0.0000	0.0000	0.0100	##
R0240-W5.1	0.0000	0.0000	0.0000	0.0100	##
R0240-W6.1	0.0000	0.0000	0.0000	0.0100	##
R0250-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0250-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0260-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0270-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0270-W3	0.0000	0.0000	0.0000	0.0100	##
R0270-W2.1	0.0000	0.0000	0.0000	0.0000	##
R0275-W1.1	0.0000	0.0000	0.0000	0.0040	##
R0280-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0285-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0290-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0290-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0290-W4.1	0.0000	0.0000	0.0000	0.0100	##
R0300-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0310-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0310-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0310-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0310-W4.1	0.0000	0.0000	0.0000	0.0100	##
R0325-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0330-W2.1	1.1989	188971.3388	0.7136	0.0100	##
R0330-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0340-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0340-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0350-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0350-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0360-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0360-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0370-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0370-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0370-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0380-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0380-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0380-W4.1	0.0000	0.0000	0.0000	0.0100	##
R0390-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0390-W2	0.0000	0.0000	0.0000	0.0100	##
R0400-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0410-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0420-W1.1	0.0000	0.0000	0.0000	0.0100	##

R0420-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0430-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0430-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0440-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0450-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0450-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0460-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0460-W2.1	321.4489	379139.3678	264.2107	0.0100	##
R0480-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0480-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0480-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0490-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0490-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0500-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0510-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0520-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0520-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0530-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0530-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0530-W3	0.0000	0.0000	0.0000	0.0100	##
R0540-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0540-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0550-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0550-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0560-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0560-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0560-W4.1	0.0000	0.0000	0.0000	0.0100	##
R0560-W5.1	0.0000	0.0000	0.0000	0.0100	##
R0570-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0570-W3.1	0.0000	0.0000	0.0000	0.0000	##
R0570-W4.1	0.0000	0.0000	0.0000	0.0100	##
R0570-W5.1	0.0000	0.0000	0.0000	0.0100	##
R0640-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0650-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0660-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0660-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0690-W2.1	0.0000	0.0000	0.0000	0.0097	##
R0720-W1.1	-1.3108	-181336.2594	-0.1780	0.0100	##
R0730-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0740-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0740-W4.1	0.0000	0.0000	0.0000	0.0100	##
R0775-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0780-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0790-W1	0.0000	0.0000	0.0000	0.0100	##
R0800-W1.1	0.0000	0.0000	0.0000	0.0067	##
R0800-W2.1	0.0000	0.0000	0.0000	0.0064	##
R0810-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0830-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0850-W3.1	0.0000	0.0000	0.0000	0.0098	##
R0870-W2.1	0.0000	0.0000	0.0000	0.0100	##

R0885-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0910-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0930-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0940-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0940-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0945-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0950-W2.1	0.0000	0.0000	0.0000	0.0100	##
R0960-W1.1	0.0000	0.0000	0.0000	0.0032	##
R0960-W3.1	0.0000	0.0000	0.0000	0.0049	##
R0960-W4.1	0.0000	0.0000	0.0000	0.0024	##
R0980-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0990-W1.1	0.0000	0.0000	0.0000	0.0055	##
R0990-W3.1	0.0000	0.0000	0.0000	0.0000	##
R1000-W1.1	0.0000	0.0000	0.0000	0.0100	##
R1020-W1.1	0.0000	0.0000	0.0000	0.0100	##
R1030-W1.1	0.0000	0.0000	0.0000	0.0100	##
R1030-W2.1	0.0000	0.0000	0.0000	0.0100	##
R2002-W1.1	-83.8258	-3396388.254	-29880.9205	0.0100	##
R02040-W1.1	0.0000	0.0000	0.0000	0.0100	##
R2090-W1.1	0.0000	0.0000	0.0000	0.0100	##
R2370-W4.1	0.0000	0.0000	0.0000	0.0100	##
R2380-W2.1	0.0000	0.0000	0.0000	0.0100	##
R2380-W3.1	0.0000	0.0000	0.0000	0.0100	##
R0440-W2.1	0.0000	0.0000	0.0000	0.0100	##
R015-W1.1	0.0000	0.0000	0.0000	0.0100	##
R020-W1.1	-6.5663	-207518.9880	-0.9620	0.0088	##
R021-W1.1	0.0000	0.0000	0.0000	0.0100	##
R030-W1.1	0.0000	0.0000	0.0000	0.0000	##
R031-W1.1	0.0000	0.0000	0.0000	0.0100	##
R042-W1.1	0.0000	0.0000	0.0000	0.0100	##
R043-W1.1	0.0000	0.0000	0.0000	0.0100	##
R0850-W1.1	0.0000	0.0000	0.0000	0.0097	##
R0880-WPump	0.0000	0.0000	0.0000	0.0000	##
R0920-P2-W1	0.0000	0.0000	0.0000	0.0000	##
R0920-P2-W2	0.0000	0.0000	0.0000	0.0000	##
R0910-W1	0.0000	0.0000	0.0000	0.0000	##
R0325-DS-W1	0.0000	0.0000	0.0000	0.0000	##
R0400-WPump	0.0000	0.0000	0.0000	0.0000	##
R0880-WPump2	0.0000	0.0000	0.0000	0.0000	##
R0880-DS-W1	0.0000	0.0000	0.0000	0.0000	##
R0520-DS-W1	0.0000	0.0000	0.0000	0.0000	##
R0640-P1-W1	2.0038	121707.0570	0.0000	0.0000	##
R0640-P1-W2	0.0000	0.0000	0.0000	0.0000	##
R0640-P2-W1	0.0000	0.0000	0.0000	0.0000	##
R0690-P1-W1	2.4061	19137.9518	0.0000	0.0000	##
R0940-DS-W1	0.2735	44298.4768	0.0000	0.0000	##
R0945-DS-W1	0.0453	5253.2501	0.0000	0.0000	##
R1020-DS-W1	6.2351	711522.5922	0.0000	0.0000	##
R0205-W1	5.8626	52922.6871	0.0000	0.0000	##
R0205-W2	3.1115	17837.8019	0.0000	0.0000	##

R0205-W3	0.0000	0.0000	0.0000	0.0000	##
R0205-W4	9.1394	141855.5595	0.0000	0.0000	##
R0210-W1.1	-2.1681	-18789.7607	0.0000	0.0000	##
R0515-W1.1	0.0000	0.0000	0.0000	0.0000	##
R0515-W2.1	-6.1588	549606.7426	0.0000	0.0000	##
R0620-W1	0.0000	0.0000	0.0000	0.0000	##
R0620-W2	0.0000	0.0000	0.0000	0.0000	##
R0620-W3	0.0000	0.0000	0.0000	0.0000	##
R0650-W2.1	24.2432	704897.4558	0.0000	0.0000	##
R0660-W3.1	0.0000	0.0000	0.0000	0.0000	##
R0742-W1.1	0.0000	0.0000	0.0000	0.0000	##
R0890-W1.1	0.0000	0.0000	0.0000	0.0000	##
R0915-W1.1	0.0000	0.0000	0.0000	0.0000	##
RN-019-P1-W1	0.7279	179177.1402	0.0000	0.0000	##
R019-P1-W2	5.8815	213205.5340	0.0000	0.0000	##
R0830-P1-W1.1	-1.2767	-56163.3043	0.0000	0.0000	##
R0830-P1-W2	0.0000	0.0000	0.0000	0.0000	##
R0970-P1-W1	-1.2767	-18994.1610	0.0000	0.0000	##
R0970-P1-W2	0.0000	0.0000	0.0000	0.0000	##
R-0001A-W1.1	41.4556	4.639E+06	0.0000	0.0000	##
R-0001A-W2	72.6062	4.859E+06	0.0000	0.0000	##
R0001C-W1.1	0.0000	0.0000	0.0000	0.0000	##
R0001C-W2	0.7708	29501.8895	0.0000	0.0000	##
R0001C-W3	0.1631	36236.1910	0.0000	0.0000	##
R0001E-W1	0.5356	7253.8513	0.0000	0.0000	##
R0001F-W1.1	2.3810	54086.5954	0.0000	0.0000	##
R0001F-W2	0.2800	1171.9575	0.0000	0.0000	##
R0001F-W3	2.3810	54086.5954	0.0000	0.0000	##
R0001F-W4	1.9433	29471.8639	0.0000	0.0000	##
R0001F-W5	2.3810	54086.5954	0.0000	0.0000	##
R001G-W1	0.0000	0.0000	0.0000	0.0000	##
R0930-W6.1.1	0.0000	0.0000	0.0000	0.0000	##
R0001J-W1.1	0.0000	0.0000	0.0000	0.0000	##
R000J-W2	0.0000	0.0000	0.0000	0.0000	##
R000J-W3	0.0000	0.0000	0.0000	0.0000	##
R000J-W4	0.0000	0.0000	0.0000	0.0000	##
R000J-W5	1.7381	101100.0164	0.0000	0.0000	##
R000J-W6	1.7381	101100.0164	0.0000	0.0000	##
R000J-W7	0.0000	0.0000	0.0000	0.0000	##
R0001J-W8	0.0000	0.0000	0.0000	0.0000	##
R0001J-W9	0.0000	0.0000	0.0000	0.0000	##
R0001J-W10	0.0000	0.0000	0.0000	0.0000	##
R0001J-W11	0.0000	0.0000	0.0000	0.0000	##
R0001J-W12	1.7381	101100.0164	0.0000	0.0000	##
R0001J-W13	1.7381	101100.0164	0.0000	0.0000	##
R0001J-W14	0.0000	0.0000	0.0000	0.0000	##
R0001I-W1.1	0.0000	0.0000	0.0000	0.0000	##
R001I-W2	0.0000	0.0000	0.0000	0.0000	##
R0001I-W3	0.0000	0.0000	0.0000	0.0000	##
R001I-W4	0.0000	0.0000	0.0000	0.0000	##

R001I-W5	0.0000	0.0000	0.0000	0.0000	##
R0001I-W7	1.3642	196420.0059	0.0000	0.0000	##
R0001I-W7.1	1.3642	196420.0059	0.0000	0.0000	##
R0001K-W1.1	0.2705	32049.3512	0.0000	0.0000	##
R0001K-W2	0.0000	0.0000	0.0000	0.0000	##
R0001K-W3	0.0000	0.0000	0.0000	0.0000	##
R0880-PUMP	0.0000	0.0000	0.0000	0.0000	##
FREE# 1	0.0000	0.0000	0.0000	0.0000	##
FREE# 2	-16.5326	273440.5477	0.0000	0.0000	##
FREE# 3	-15.9547	268112.6251	0.0000	0.0000	##
FREE# 4	-15.8074	271950.8732	0.0000	0.0000	##
FREE# 5	18.6234	5.184E+06	0.0000	0.0000	##
FREE# 6	23.5876	897097.4090	0.0000	0.0000	##
FREE# 7	11.7592	50331.7552	0.0000	0.0000	##
FREE# 8	0.0000	0.0000	0.0000	0.0000	##
FREE# 9	0.0000	0.0000	0.0000	0.0000	##
FREE#10	0.0000	0.0000	0.0000	0.0000	##
FREE#11	0.0000	0.0000	0.0000	0.0000	##
FREE#12	0.0000	0.0000	0.0000	0.0000	##
FREE#13	2.0446	238272.7184	0.0000	0.0000	##
FREE#14	-38.2377	2.271E+06	0.0000	0.0000	##
FREE#15	-57.1031	-1481131.047	0.0000	0.0000	##
FREE#16	45.2849	443997.7460	0.0000	0.0000	##
FREE#17	0.0000	0.0000	0.0000	0.0000	##
FREE#18	0.0000	0.0000	0.0000	0.0000	##
FREE#19	0.0000	0.0000	0.0000	0.0000	##
FREE#20	-32.3870	216165.7856	0.0000	0.0000	##
FREE#21	0.0000	0.0000	0.0000	0.0000	##
FREE#22	11.8124	100252.2249	0.0000	0.0000	##
FREE#23	0.0000	0.0000	0.0000	0.0000	##
FREE#24	0.0000	0.0000	0.0000	0.0000	##
FREE#25	0.0000	0.0000	0.0000	0.0000	##
FREE#26	0.0000	0.0000	0.0000	0.0000	##
FREE#27	-2.1681	-18788.5917	0.0000	0.0000	##
FREE#28	-6.1588	549608.6578	0.0000	0.0000	##
FREE#29	0.0000	0.0000	0.0000	0.0000	##
FREE#30	0.0000	0.0000	0.0000	0.0000	##
FREE#31	0.0000	0.0000	0.0000	0.0000	##
FREE#32	0.0000	0.0000	0.0000	0.0000	##
FREE#33	0.0000	0.0000	0.0000	0.0000	##
FREE#34	0.0000	0.0000	0.0000	0.0000	##
FREE#35	-16.4789	273514.0031	0.0000	0.0000	##
FREE#36	0.0000	0.0000	0.0000	0.0000	##
FREE#37	0.0000	0.0000	0.0000	0.0000	##
FREE#38	0.0000	0.0000	0.0000	0.0000	##
FREE#39	-83.8258	-3418099.123	0.0000	0.0000	##
FREE#40	0.0000	0.0000	0.0000	0.0000	##
FREE#41	0.0000	0.0000	0.0000	0.0000	##
FREE#42	6.2351	711524.5276	0.0000	0.0000	##
FREE#43	0.2735	44298.2400	0.0000	0.0000	##

FREE#44	2.5296	324851.1107	0.0000	0.0000	##
FREE#45	0.0453	5253.2031	0.0000	0.0000	##
FREE#46	113.9657	9.498E+06	0.0000	0.0000	##
FREE#47	0.5356	7254.2516	0.0000	0.0000	##
FREE#48	9.3662	192910.5771	0.0000	0.0000	##
FREE#49	0.0000	0.0000	0.0000	0.0000	##
FREE#50	24.2176	1.705E+06	0.0000	0.0000	##
FREE#51	3.4763	202202.6330	0.0000	0.0000	##
FREE#52	3.4763	202202.6330	0.0000	0.0000	##

=====
 | Table E15a - SPREADSHEET REACH LIST |
 | Peak flow and Total Flow listed by Reach or those |
 | conduits or diversions having the same |
 | upstream and downstream nodes. |
 =====

Upstream Node	Downstream Node	Maximum Flow (cfs)	Total Flow (ft^3)
N0870	N0900	200.0116	3401015.92
N0885	N0770	23.0974	1628798.94
N0900	N0910	202.2871	3326062.33
N0370	N0375	34.3259	527258.370
N0375	N0280	9.3587	253864.532
N0205	N0202	19.3561	268211.309
N-002	N-001	3.2667	45022.2454
N-003	N-001	4.0395	40531.8263
N-006	N-005	5.3448	56649.4118
N-007	N-008	3.7964	41364.9828
N-009	N-009mh	7.8247	72154.7779
N-009mh	N-008	7.8161	72158.7626
N-011	N-010	12.2386	112578.688
N-014	N-012	5.3038	61220.5197
N-012	N-013	9.3946	179239.936
N-023	N-025	4.7924	300659.341
N-023	N-021	4.4691	294184.919
N-041	N-019	10.7384	276837.090
N-020	N-022	9.3180	279052.033
N-022	N-024	11.8385	351902.729
N-024	N-029	19.4496	506490.330
N-026	N-024	0.5004	4703.9170
N-028	N-027	2.7304	47078.7952
N-028	N-024	-3.3301	54460.3213
N0742	N0730	-7.6211	-467156.27
N9004-B	N0655	-16.5318	273440.818
N9004-C	N0655	-15.9538	268112.910
N0655	N9004-D	-15.8080	271950.984
N0120	N9001-G	9.4799	100180.161

N1010	N9005-G	2.0446	238272.665
N-025	N9004-J	-38.2376	2271366.82
N9004-G	N-025	-57.0953	-1481039.3
N0155	N9002	45.2849	447053.389
N0386	N0388	54.5512	1988844.07
N0388	N0410	30.0745	2014307.68
N0385	N0386	29.9603	1959609.90
N0375	N0380	38.2640	780130.134
N0335	N0340	15.7629	272198.053
N0060	N-0001B	3.0652	67695.4965
N0650	N0540	20.2408	545584.051
N0370	N0290	8.9207	155814.810
N0285	N0380	13.6240	983801.169
N0250	N0240	9.9120	119544.731
N0230	N0250	14.3650	199369.763
N0220	N0260	16.6132	213094.855
N0200	N0202	19.3638	268815.184
N0190	N0200	11.4479	125525.099
N0170	N0210	51.9438	297653.872
N0180	N0140	-23.9155	265644.923
N0140	N0120	0.8049	5155.8635
N0150	N0155	43.8097	399722.388
N0060	N0110	11.0758	438199.097
N0130	N0060	-24.7258	-230167.91
N0130	N0100	6.2952	66522.3099
N0160	N0310	33.4635	385081.292
N0335	N0430	15.7634	272790.341
N0350	N0340	26.8355	1687275.99
N0350	N0330	35.8500	1914633.59
N0330	N0325	6.2291	-16382.894
N0330	N0450	-22.4813	-1498135.7
N0360	N0325	-3.8493	-106242.15
N0515	N0550	-51.1975	150434.747
N0515	N0560	123.2016	658590.885
N0775	N0780	22.6292	231337.305
N0770	N0740	6.0328	578617.240
N0870	N0730	15.4724	1005303.82
N0950	N0870	-26.0521	230039.286
N0870	N0920	-53.0876	2429.8031
N0960	N0870	4.2581	54329.0839
N0990	N1020	2.9621	39916.7540
N1020	N1010	18.4858	509258.558
N1010	N0980	21.5972	1032811.68
N0980	N0850	8.0463	497081.719
N0850	N0870	36.0493	1639527.02
N0570	N0560	384.8146	833952.815
N0790	N0770	-48.9767	1255344.09
N0770	N0910	118.7942	-3049626.2
N0915	N0790	-35.4754	858678.176
N0530	N0540	16.1220	289128.720

N0880	N0910	320.0328	331410.368
N0385	N0380	29.8930	1930581.67
N0300	N0325	-8.2772	-136009.63
N0275	N0290	-7.1871	-83713.307
N-004	N-001	10.4280	97481.9445
N-001	N-005	18.1678	580882.717
N-005	N-008	25.6898	692641.428
N-010	N-008	43.0407	931543.842
N-013	N-010	56.1885	1133703.90
N-013	N-015	64.1820	1242855.06
N2002	N-015	57.9865	448215.991
N-025	N-029	-42.0562	508258.064
N0742	N0740	8.2567	478370.354
N9004-A	N0655	-16.4782	273514.312
N9004-F	N0490	18.6225	5184104.89
N0140	N0140-A	23.5894	897247.013
N0120	N9001-D	9.4319	50260.6987
N9000-F	N0160	-32.3875	216191.230
N1010	N9005-F	2.5296	324851.097
N0410	N2370	-95.4446	3424838.26
N2370	N0490	-15.5881	-2423405.8
N0490	N2380	15.0166	470223.793
N0890	N9004-L	24.2176	1704825.54
N0140-A	N9001-B	23.5876	897083.924
N0330	N0400	1.1989	188971.339
N0460	N0520	321.4489	379139.368
N0720	N0770	-1.3108	-181336.26
N2002	N9004-K	-83.8258	-3396388.3
N-020	N-021	-6.5663	-207518.99
N0640	N0570	2.0038	121707.057
N0690	N0720	2.4061	19137.9518
N0940	N9005-D	0.2735	44298.4768
N0945	N9005-H	0.0453	5253.2501
N1020	N9005-C	6.2351	711522.592
N0205	N0210	18.1135	212616.048
N0210	N9002-B	-2.1681	-18789.761
N0515	N9003-A	-6.1588	549606.743
N0650	N0655	24.2432	704897.456
N-019	N-021	6.5668	392382.674
N0830	N0900	-1.2767	-56163.304
N0970	N0900	-1.2767	-18994.161
N-0001A	N9000-D	113.9657	9497866.20
N0001-C	N0460	0.9338	65738.0806
N-0001-E	N-0001E-OF	0.5356	7253.8513
N-0001-F	N-0001F-OF-A	9.3662	192903.608
N0001-J	N9005-J	3.4763	202200.033
N0001-J	N9005-K	3.4763	202200.033
N0001-I	N0915	2.7284	392840.012
N-0001K	N0870	0.2705	32049.3512

Table E16. New Conduit Information Section #
Conduit Invert (IE) Elevation and Conduit #
Maximum Water Surface (WS) Elevations #
#####

Dn	Conduit Name WS Up	Upstream Node WS Dn Conduit Type	Downstream Node	IE Up	IE
	R0870	N0870	N0900	-2.920	-2.990
1.364	1.206	H Ellipse			
	R0770-P2	N0885	N0770	-0.3630	-3.010
1.206	1.206	Circular			
	R0900	N0900	N0910	-2.990	-3.080
1.206	1.206	H Ellipse			
	R0370	N0370	N0375	0.9800	0.2700
3.433	3.314	H Ellipse			
	R0280	N0375	N0280	2.670	2.090
3.762	3.855	Circular			
	R0202	N0205	N0202	-3.500	-3.570
2.403	2.406	Circular			
	RN-002	N-002	N-001	3.460	3.330
4.181	3.961	Circular			
	RN-003	N-003	N-001	2.560	2.370
3.318	3.074	Circular			
	RN-006	N-006	N-005	2.660	2.620
3.514	3.344	Circular			
	RN-007	N-007	N-008	2.460	2.380
3.223	3.018	Circular			
	RN-009	N-009	N-009mh	2.680	2.410
3.890	3.598	Circular			
	RN-009MH	N-009mh	N-008	2.410	2.310
3.598	3.238	Circular			
	RN-011	N-011	N-010	2.040	1.640
3.342	2.699	Circular			
	RN-014	N-014	N-012	1.610	1.580
2.334	2.313	Circular			
	RN-012	N-012	N-013	1.480	-1.160
2.313	1.922	Circular			
	RN-023	N-023	N-025	0.4500	0.3600
1.792	1.791	Circular			
	RN-021	N-023	N-021	1.230	1.150
2.086	2.390	Circular			
	RN-041	N-041	N-019	0.7800	0.6400
3.911	3.908	Circular			
	RN-020	N-020	N-022	1.380	0.9900
2.343	2.214	Circular			
	RN-022	N-022	N-024	0.9700	0.9500
2.214	2.008	Circular			

		RN-024		N-024	N-029	8.0000E-02	-0.1600
1.791	1.791	Circular					
		RN-026		N-026	N-024	1.010	0.9200
1.791	1.791	Circular					
		RN-027		N-028	N-027	-0.3100	-0.3300
1.791	1.791	Circular					
		RN-028		N-028	N-024	-0.1300	-0.2700
1.791	1.791	Circular					
		R0742-P3		N0742	N0730	-0.5100	-0.7200
1.294	1.380	Circular					
		R0655-P2		N9004-B	N0655	-2.790	-2.890
1.0000E-02	4.2232E-02	Circular					
		R0655-P3		N9004-C	N0655	-2.540	-2.650
1.0000E-02	4.2232E-02	Circular					
		R0655-P4		N0655	N9004-D	-2.640	-2.680
4.2232E-02	1.0000E-02	Circular					
		R0120-P2		N0120	N9001-G	-0.2400	-0.9000
1.207	0.9603	Circular					
		R1010-P2		N1010	N9005-G	2.130	1.980
2.914	2.519	Circular					
		RN-025-P1		N-025	N9004-J	-1.200	-1.330
1.791	1.670	Circular					
		RN-025-P2		N9004-G	N-025	-1.090	-1.240
1.910	1.791	Circular					
		R0155-P1		N0155	N9002	-0.1400	-1.310
1.606	0.9603	Circular					
		R0386		N0386	N0388	0.0000	
0.0000	1.537	1.537	Natural				
		R0388		N0388	N0410	0.0000	
0.0000	1.537	1.537	Natural				
		R0385		N0385	N0386	0.0000	
0.0000	1.538	1.537	Natural				
		R0375		N0375	N0380	0.0000	
0.0000	3.314	3.314	Natural				
		R0335		N0335	N0340	0.0000	
0.0000	1.045	1.042	Natural				
		R-0001B-P1		N0060	N-0001B	-0.3700	-0.4500
1.467	1.467	Circular					
		R0540-P1		N0650	N0540	1.510	1.470
2.500	2.655	Circular					
		R0540-P2		N0540	N0650	1.600	1.560
2.655	2.455	Circular					
		R0540-P3		N0540	N0650	1.670	1.580
2.655	2.452	Circular					
		R0290-P1		N0370	N0290	1.230	1.010
3.433	3.450	Circular					
		R0285.1		N0285	N0380	2.000	1.650
3.351	3.314	Circular					
		R0250.1		N0250	N0240	3.000	2.410
4.888	4.889	Circular					

	R0230.1		N0230	N0250	3.310	2.910
4.984	4.888	Circular				
	R0220.1		N0220	N0260	1.180	0.9400
2.622	2.622	H Ellipse				
	R0200.1		N0200	N0202	-0.3600	-0.6300
2.443	2.406	H Ellipse				
	R0190.1		N0190	N0200	-0.9600	-1.610
2.881	2.443	Circular				
	R0170.1		N0170	N0210	-0.7100	-0.7200
1.237	0.2899	Circular				
	R0180-P1		N0180	N0140	-1.460	-1.530
2.560	2.547	Circular				
	R0180-P2		N0180	N0140	-1.460	-1.530
2.560	2.547	Circular				
	R0140.1		N0140	N0120	2.310	2.020
2.547	2.234	Circular				
	R0140-P3.1		N0140	N0120	2.310	2.020
2.547	2.234	Circular				
	R0150-P1		N0150	N0155	1.440	1.030
2.591	2.181	Circular				
	R0150-P2		N0150	N0155	1.970	0.7000
2.591	1.606	Circular				
	R0150-P3		N0150	N0155	1.970	0.7000
2.591	1.606	Circular				
	R0150-P4		N0150	N0155	1.440	0.7500
2.591	1.901	Circular				
	R0150-P5		N0150	N0155	1.830	1.330
2.591	2.091	Circular				
	R0110.1		N0060	N0110	1.020	0.7700
2.213	4.850	Circular				
	R0130-P1		N0130	N0060	-0.2400	-0.6000
1.467	1.467	Circular				
	R0130-P2		N0130	N0060	-0.2400	-0.6000
1.467	1.467	Circular				
	R0100-P1		N0130	N0100	0.6800	0.4600
1.467	1.467	Circular				
	R0100-P2		N0130	N0100	0.6800	0.4600
1.467	1.467	Circular				
	R0310.1		N0160	N0310	-1.140	-1.590
0.8265	1.299	Circular				
	R0430-P1		N0335	N0430	0.0000-0.1300	
1.045	1.134	Circular				
	R0430-P2		N0335	N0430	0.0000-0.1300	
1.045	1.134	Circular				
	R0430-P3		N0335	N0430	0.0000-0.1300	
1.045	1.134	Circular				
	R0430-P4		N0335	N0430	0.0000-0.1300	
1.045	1.134	Circular				
	R0340-P1		N0350	N0340	-1.390	-1.790
1.042	1.042	Circular				

	R0340-P2		N0350	N0340	-0.9400	-1.380
1.042	1.042	Circular				
	R0350-P1		N0350	N0330	-2.690	-3.430
1.042	1.042	Circular				
	R0350-P2		N0350	N0330	-2.690	-3.430
1.042	1.042	Circular				
	R0330-P1		N0330	N0325	-3.200	-4.100
1.042	1.042	Circular				
	R0330-P2		N0330	N0325	-3.200	-4.100
1.042	1.042	Circular				
	R0450-P1		N0330	N0450	-0.5500	-0.6500
1.042	1.042	Circular				
	R0450-P2		N0330	N0450	-0.5500	-0.6500
1.042	1.042	Circular				
	P0360-P1		N0360	N0325	6.0000E-02-0.2000	
1.042	1.042	Circular				
	P0360-P2		N0360	N0325	-0.3300	-0.3400
1.042	1.042	Circular				
	R0550-P1		N0515	N0550	-1.200	-1.330
0.7822	0.7822	Circular				
	R0550-P2		N0515	N0550	-1.200	-1.260
0.7822	0.7822	Circular				
	R0560-P1		N0515	N0560	-1.200	-2.200
0.7822	0.7820	Circular				
	R0560-P2		N0515	N0560	-1.200	-2.130
0.7822	0.7820	Circular				
	R0560-P3		N0515	N0560	-1.200	-2.170
0.7822	0.7820	Circular				
	R0780.1		N0775	N0780	-0.6500	-4.390
0.9112	0.9113	H Ellipse				
	R0740.1		N0770	N0740	-0.6400	-0.9700
1.206	1.206	Circular				
	R0730.1		N0870	N0730	-1.300	-1.730
1.364	1.380	H Ellipse				
	R0880.1		N0880	N0810	999.1	999.0
0.7798	0.7798	Circular				
	R0950.1		N0950	N0870	-0.4200	-1.030
1.206	1.364	Circular				
	R0920.1		N0870	N0920	-0.4100	-0.8500
1.364	1.206	Circular				
	R0960.1		N0960	N0870	1.900	1.770
2.627	2.448	Circular				
	R0990.1		N0990	N1020	1.570	1.510
2.909	2.909	Circular				
	R1010-P3		N1020	N1010	1.630	1.130
2.909	2.914	Circular				
	R1010-P4		N1020	N1010	1.620	1.050
2.909	2.914	Circular				
	R1010-P5		N1020	N1010	1.670	1.040
2.909	2.914	Circular				

	R0980-P1.1		N1010	N0980	1.700	1.620
3.279	3.462	Circular				
	R0980-P2.1		N0980	N0850	2.280	1.520
3.462	3.418	Circular				
	R0850-P1		N0850	N0870	1.460	1.300
3.418	2.502	Circular				
	R0850-P2		N0850	N0870	1.560	1.350
3.418	2.518	Circular				
	R0850-P3		N0850	N0870	1.650	1.450
3.418	2.565	Circular				
	R0570-P1		N0570	N0560	-2.670	-2.810
1.377	0.7820	Circular				
	R0570-P2		N0570	N0560	-2.600	-2.820
1.377	0.7820	Circular				
	R0570-P3		N0570	N0560	-2.490	-2.730
1.377	0.7820	Circular				
	R0770-P1.1		N0790	N0770	-2.590	-2.940
1.206	1.206	Circular				
	R0770-P3		N0770	N0910	-2.830	-2.900
1.206	1.206	Circular				
	R0770-P4		N0770	N0910	-2.810	-2.990
1.206	1.206	Circular				
	R0790-P1		N0915	N0790	-2.300	-2.490
1.206	1.206	H Ellipse				
	R0790-P2		N0915	N0790	-2.890	-2.980
1.206	1.206	Circular				
	R0530-P1		N0530	N0540	1.700	1.450
2.644	2.655	Circular				
	R0530-P2		N0530	N0540	1.660	1.430
2.644	2.655	Circular				
	R0530-P3		N0530	N0540	1.740	1.350
2.644	2.655	Circular				
	R0910-P1		N0880	N0910	-5.760	-6.000
1.206	1.206	Circular				
	R0910-P2		N0910	N0880	-5.960	-6.910
1.206	1.206	Circular				
	R0380-P1		N0385	N0380	2.070	1.660
3.245	3.314	Circular				
	R0380-P2		N0385	N0380	2.070	1.660
3.245	3.314	Circular				
	R0300-P1		N0300	N0325	-3.850	-4.370
1.042	1.042	Circular				
	R0300-P2		N0300	N0325	-3.850	-4.370
1.042	1.042	Circular				
	R0290-P2.1		N0275	N0290	2.390	1.830
3.480	3.450	Circular				
	RN-004-P1		N-004	N-001	2.880	2.720
3.490	3.279	Circular				
	RN-004-P2		N-004	N-001	2.880	2.570
3.490	3.180	Circular				

3.490	RN-004-P3 3.148	Circular	N-004	N-001	2.930	2.590
2.283	RN-001-P1 2.073	Circular	N-001	N-005	1.220	1.000
2.283	RN-001-P2 2.073	Circular	N-001	N-005	1.380	1.070
2.283	RN-001-P3 2.073	Circular	N-001	N-005	1.210	1.000
2.073	RN-005-P1 1.923	Circular	N-005	N-008	0.9300	0.8400
2.073	RN-005-P2 1.941	Circular	N-005	N-008	0.9300	0.9000
1.923	RN-005-P3 2.073	Circular	N-008	N-005	0.8900	0.8700
1.923	RN-008-P1.1 1.923	Circular	N-010	N-008	0.3900	0.3100
1.923	RN-008-P2 1.923	Circular	N-008	N-010	0.5200	0.3300
1.923	RN-008-P3 1.923	Circular	N-008	N-010	0.6200	0.4000
1.922	RN-010-P1 1.923	Circular	N-013	N-010	-0.1900	-0.2900
1.922	RN-010-P2 1.923	Circular	N-013	N-010	-0.1800	-0.2200
1.923	RN-010-P3 1.922	Circular	N-010	N-013	-0.1600	-0.2100
1.922	RN-013-P1 1.922	Circular	N-013	N-015	-0.2200	-0.3700
1.922	RN-013-P2 1.922	Circular	N-013	N-015	-0.2200	-0.3700
1.922	RN-013-P3 1.922	Circular	N-013	N-015	-0.2200	-0.3700
1.920	RN-015-P1 1.922	Circular	N2002	N-015	-0.1370	-0.9700
1.922	RN-015-P2 1.920	Circular	N-015	N2002	-1.190	-1.370
1.922	RN-015-P3 1.920	Circular	N-015	N2002	-1.050	-1.380
1.791	RN-029-P1 1.791	Circular	N-025	N-029	-0.1170	-0.9800
1.791	RN-029-P2 1.791	Circular	N-029	N-025	-0.9700	-1.010
1.294	R0742-P1 1.206	Circular	N0742	N0740	0.5000	0.1000
1.294	R0742-P2 1.206	Circular	N0742	N0740	0.5000	0.1000
1.0000E-02	R0655-P1.1 4.2232E-02	Circular	N9004-A	N0655	-2.740	-2.910
8.0000E-02	R0490-P8 1.391	Circular	N9004-F	N0490	-1.170	-1.260

R0490-P7			N9004-F	N0490	-1.170	-1.260
8.0000E-02	1.391	Circular				
R0140-P2.1			N0140	N0140-A	-1.900	-2.090
2.547	2.529	Circular				
R0140-P1.1			N0140	N0140-A	-1.900	-2.090
2.547	2.529	Circular				
R0120-P1.1			N0120	N9001-D	-0.2400	-0.9000
1.207	0.9603	Circular				
R0160-P1.1			N9000-F	N0160	-1.990	-2.090
0.5100	0.5103	Circular				
R0325-P1.1			N0325	N9003-D	999.1	999.0
0.9603	0.9603	Circular				
R0400-P1.1			N0400	N9003-G	999.1	999.0
0.9603	0.9603	Circular				
R0880-P2.1			N0880	N9005-A	999.1	999.0
0.9603	0.9603	Circular				
R1010-P1.1			N1010	N9005-F	2.030	1.900
2.914	2.502	Circular				
R-0410-P4			N0410	N2370	-1.140	-1.220
1.537	1.536	Circular				
R-0410-P5			N0410	N2370	-1.140	-1.220
1.537	1.536	Circular				
R-0410-P6			N0410	N2370	-1.140	-1.220
1.537	1.536	Circular				
R-0410-P7			N0410	N2370	-1.030	-1.440
1.537	1.536	Circular				
R0410-P1			N2370	N0410	0.0000	-2.610
1.536	1.537	Circular				
R0410-P2			N2370	N0410	0.0000	-2.610
1.536	1.537	Circular				
R0410-P3			N2370	N0410	0.0000	-2.610
1.536	1.537	Circular				
	498.1		N2370	N0490	-0.8300	-1.070
1.536	1.391	Circular				
R0490-P1.1			N0490	N2370	-1.070	-1.230
1.391	1.536	Circular				
R0490-P3			N0490	N2380	-0.8200	-1.510
1.391	1.391	Circular				
R0490-P4			N0490	N2380	-0.8900	-1.740
1.391	1.391	Circular				
R0490-P5			N0490	N2380	-1.060	-1.560
1.391	1.391	Circular				
R0490-P6			N0490	N2380	-1.120	-1.370
1.391	1.391	Circular				
R0890-ORF-2			N0890	N9004-L	0.7200	0.7200
2.201	1.920	Circular				
R0890-ORF-5			N0890	N9004-L	0.7200	0.7200
2.201	1.920	Circular				
R0890ORF-3			N0890	N9004-L	0.7200	0.7200
2.201	1.920	Circular				

	R0890-ORF-4		N0890	N9004-L	0.7200	0.7200
2.201	1.920	Circular				
	N0140-A-W1.1		N0140-A	N9001-B	1.300	1.300
2.529	1.834	Trapezoid				
	R0540-W3		N0540	N0650	1.350	-0.4900
1.520	1.500	Closd Cnd				
	R0290-P5		N0290	N0370	1.010	0.9800
2.120	2.140	Closd Cnd				
	R0285-W2		N0285	N0380	2.000	
0.0000	2.120	0.4900	Closd Cnd			
	R0250-W1		N0250	N0240	2.300	1.440
3.000	3.000	Closd Cnd				
	R0230-W1		N0230	N0250	3.310	2.300
3.310	3.000	Closd Cnd				
	R0220-W2		N0220	N0260	1.180	-0.2300
2.220	2.000	Closd Cnd				
	R0200-W3		N0200	N0202	-1.610	-3.570
-8.0000E-02	-8.0000E-02	Closd Cnd				
	R0190-W4		N0190	N0200	-0.9600	-1.610
1.300	-8.0000E-02	Closd Cnd				
	R0170-W3		N0170	N0210	-0.7100	-0.7200
1.300	-0.2000	Closd Cnd				
	R0180-W1		N0180	N0140	-1.460	-1.900
1.300	1.410	Closd Cnd				
	R0140-W1		N0140	N0120	-1.900	-0.2400
1.410	1.300	Closd Cnd				
	R0150-W3		N0150	N0155	1.440	-0.1400
1.440	-8.0000E-02	Closd Cnd				
	R0110-W1		N0110	N0060	0.7700	-1.290
1.300	-0.7200	Closd Cnd				
	R0130-W1		N0060	N0130	-1.290	-0.6000
-0.6000	-0.6000	Closd Cnd				
	R0100-W4		N0100	N0130	0.4600	-0.6000
-0.6000	-0.6000	Closd Cnd				
	R0310-W5.1		N0310	N0160	-1.590	-2.090
1.300	-0.4200	Closd Cnd				
	R0430-W3		N0430	N0335	-0.1300	
0.0000	0.3200	0.3200	Closd Cnd			
	R0340-W3		N0340	N0350	-1.790	-2.690
0.3200	0.3200	Closd Cnd				
	R0350-W1		N0350	N0330	-2.690	-3.430
0.3200	0.3200	Closd Cnd				
	R0330-W1		N0450	N0330	-1.300	-3.430
0.3200	0.3200	Closd Cnd				
	R0360-W1		N0360	N0325	-1.180	-4.370
0.3200	0.3300	Closd Cnd				
	R0550-W2		N0550	N0515	-1.330	-1.200
7.0000E-02	0.3000	Closd Cnd				
	R0560-W1		N0560	N0515	-2.820	-1.200
7.0000E-02	0.3000	Closd Cnd				

	R0780-W1		N0780	N0775	-4.390	-0.6500
0.1300	0.1300	Closd Cnd				
	R0740-W3		N0740	N0770	-1.240	-3.050
0.1300	0.1300	Closd Cnd				
	R0870-W1		N0730	N0870	-2.100	-2.920
1.380	1.380	Closd Cnd				
	R0950-W1		N0950	N0870	-0.4200	-2.920
0.1300	1.380	Closd Cnd				
	R0960-W2		N0960	N0870	1.900	-2.920
1.900	1.380	Closd Cnd				
	R0990-W2		N0990	N1020	1.570	-1.000
1.570	0.6000	Closd Cnd				
	R1010-W2		N1010	N1020	1.040	-1.000
1.630	0.6000	Closd Cnd				
	R0980-W2		N0980	N1010	1.620	1.040
1.710	1.630	Closd Cnd				
	R0850-W2		N0980	N0850	1.620	1.460
1.710	1.460	Closd Cnd				
	R0770-W2		N0770	N0790	-3.050	-2.980
0.1300	0.1300	Closd Cnd				
	R0530-W4		N0530	N0540	1.660	1.350
1.690	1.520	Closd Cnd				
	R0380-W3		N0380	N0385	0.0000	-1.090
0.4900	2.110	Closd Cnd				
	R0300-W2		N0300	N0325	-3.850	-4.370
0.3100	0.3300	Closd Cnd				
	R0290-W1		N0290	N0275	1.010	2.300
2.300	2.300	Closd Cnd				
	R0655-W2		N0655	N9004-A	-2.910	-2.740
-0.1700	1.200	Closd Cnd				
	R0140-W2		N0140	N0140-A	-1.900	-2.100
1.410	1.300	Closd Cnd				
	R0120-W2		N0120	N9001-D	-0.2400	-0.9000
1.300	0.2401	Closd Cnd				
	R0160-W1		N0160	N9000-F	-2.090	-1.990
-0.4200	0.2401	Closd Cnd				
	R0400-W1		N0400	N9003-G	-2.900	
0.0000	0.3200	0.2401	Closd Cnd			
	R0880-W2		N0880	N9005-A	-6.910	
0.0000	-6.910	0.2401	Closd Cnd			
	R1010-W1		N1010	N9005-F	1.040	
0.0000	1.630	0.2401	Closd Cnd			
	R0490-W2		N0490	N2370	-1.260	-1.560
0.3400	0.7300	Closd Cnd				
	R0050-W1.1		N0050	N9001-J	-0.8600	-0.1730
2.000	0.2401	Closd Cnd				
	R0050-W2.1		N0050	N0060	-0.8600	-1.290
2.000	-0.7200	Closd Cnd				
	R0060-W1.1		N0060	N9001-K	-1.290	-0.1730
-0.7200	0.2401	Closd Cnd				

0.8000	R0080-W1.1 0.2401	Closd Cnd	N0080	N9001-E	0.4800	-2.090
0.8000	R0080-W2.1 2.000	Closd Cnd	N0080	N0050	0.4800	-0.8600
2.490	R0090-W1.1 -0.7200	Closd Cnd	N0090	N0060	2.490	-1.290
2.490	R0090-W2.1 0.2401	Closd Cnd	N0090	N9001-F	2.490	-0.9000
2.490	R0090-W3.1 1.300	Closd Cnd	N0090	N0110	2.490	0.7700
2.490	R0090-W4.1 1.300	Closd Cnd	N0090	N0120	2.490	-0.2400
0.4600	R0100-W1.1 0.8000	Closd Cnd	N0100	N0080	0.4600	0.4800
0.4600	R0100-W2.1 2.000	Closd Cnd	N0100	N0050	0.4600	-0.8600
0.4600	R0100-W3.1 0.2401	Closd Cnd	N0100	N9001-H	0.4600	-0.9000
1.300	R0110-W2.1 1.410	Closd Cnd	N0110	N0140	0.7700	-1.900
1.300	R0120-W1.1 1.300	Closd Cnd	N0120	N0110	-0.2400	0.7700
-0.6000	R0130-W2.1 0.2401	Closd Cnd	N0130	N9002-A	-0.6000	-1.310
1.440	R0150-W1.1 -0.7200	Closd Cnd	N0150	N0060	1.440	-1.290
1.440	R0150-W2.1 1.300	Closd Cnd	N0150	N0110	1.440	0.7700
1.440	R0170-W1.1 1.440	Closd Cnd	N0170	N0150	-0.7100	1.440
1.300	R0170-W2.1 1.410	Closd Cnd	N0170	N0140	-0.7100	-1.900
1.300	R0190-W1.1 -0.2000	Closd Cnd	N0190	N0210	-0.9600	-0.7200
1.300	R0190-W2.1 1.300	Closd Cnd	N0190	N0170	-0.9600	-0.7100
1.300	R0190-W3.1 1.410	Closd Cnd	N0190	N0140	-0.9600	-1.900
-8.0000	R0200-W1.1 E-02-0.2000	Closd Cnd	N0200	N0210	-1.610	-0.7200
3.310	R0200-W2.1 3.310	Closd Cnd	N0200	N0230	-1.610	3.310
2.220	R0220-W1.1 3.000	Closd Cnd	N0220	N0250	1.180	2.300
3.000	R0240-W1.1 1.300	Closd Cnd	N0240	N0190	1.440	-0.9600
3.000	R0240-W2.1 1.410	Closd Cnd	N0240	N0140	1.440	-1.900
3.310	R0240-W3.1 3.310	Closd Cnd	N0240	N0230	1.440	3.310

	R0240-W4.1		N0240	N0180	1.440	-1.460
3.000	1.300	Closd Cnd				
	R0240-W5.1		N0240	N0290	1.440	1.010
3.000	2.120	Closd Cnd				
	R0240-W6.1		N0240	N0200	1.440	-1.610
3.000	-8.0000E-02	Closd Cnd				
	R0250-W2.1		N0250	N0260	2.300	-0.2300
3.000	2.000	Closd Cnd				
	R0250-W3.1		N0250	N0270	2.300	1.570
3.000	3.000	Closd Cnd				
	R0260-W1.1		N0260	N0210	-0.2300	-0.7200
2.000	-0.2000	Closd Cnd				
	R0270-W1.1		N0270	N0260	1.570	-0.2300
3.000	2.000	Closd Cnd				
	R0270-W3		N0270	N0260	1.570	-0.2300
3.000	2.000	Closd Cnd				
	R0270-W2.1		N0270	N0275	1.570	2.300
3.000	2.300	Closd Cnd				
	R0275-W1.1		N0275	N0280	2.300	2.000
2.300	2.120	Closd Cnd				
	R0280-W1.1		N0280	N0285	2.000	2.000
2.120	2.120	Closd Cnd				
	R0285-W1.1		N0285	N0260	2.000	-0.2300
2.120	2.000	Closd Cnd				
	R0290-W2.1		N0290	N0180	1.010	-1.460
2.120	1.300	Closd Cnd				
	R0290-W3.1		N0290	N0250	1.010	2.300
2.120	3.000	Closd Cnd				
	R0290-W4.1		N0290	N0270	1.010	1.570
2.120	3.000	Closd Cnd				
	R0300-W1.1		N0300	N9000-C	-3.850	-1.990
0.3100	0.2401	Closd Cnd				
	R0310-W1.1		N0310	N0300	-1.590	-3.850
1.300	0.3100	Closd Cnd				
	R0310-W2.1		N0310	N0140	-1.590	-1.900
1.300	1.410	Closd Cnd				
	R0310-W3.1		N0310	N9000-E	-1.590	-1.990
1.300	0.2401	Closd Cnd				
	R0310-W4.1		N0310	N0335	-1.590	
0.0000	1.300	0.3200	Closd Cnd			
	R0325-W2.1		N0325	N9000-B	-4.370	-1.990
0.3300	0.2401	Closd Cnd				
	R0330-W2.1		N0330	N0400	-3.430	-2.900
0.3200	0.3200	Closd Cnd				
	R0330-W3.1		N0330	N0440	-3.430	-1.370
0.3200	0.3200	Closd Cnd				
	R0340-W1.1		N0340	N0520	-1.790	-2.830
0.3200	0.3000	Closd Cnd				
	R0340-W2.1		N0340	N0460	-1.790	-2.150
0.3200	0.3200	Closd Cnd				

	R0350-W2.1		N0350	N0460	-2.690	-2.150
0.3200	0.3200	Closd Cnd				
	R0350-W3.1		N0350	N0390	-2.690	-1.700
0.3200	0.8000	Closd Cnd				
	R0360-W2.1		N0360	N0450	-1.180	-1.300
0.3200	0.3200	Closd Cnd				
	R0360-W3.1		N0360	N2040	-1.180	-1.100
0.3200	0.1100	Closd Cnd				
	R0370-W1.1		N0370	N0380	0.9800	
0.0000	2.140	0.4900	Closd Cnd			
	R0370-W2.1		N0370	N0430	0.9800	-0.1300
2.140	0.3200	Closd Cnd				
	R0370-W3.1		N0370	N0470	0.9800	1.810
2.140	3.450	Closd Cnd				
	R0380-W1.1		N0380	N0470	0.0000	1.810
0.4900	3.450	Closd Cnd				
	R0380-W2.1		N0380	N0480	0.0000	2.260
0.4900	3.690	Closd Cnd				
	R0380-W4.1		N0380	N0420	0.0000	3.080
0.4900	3.500	Closd Cnd				
	R0390-W1.1		N0390	N0460	-1.700	-2.150
0.8000	0.3200	Closd Cnd				
	R0390-W2		N0390	N0440	-1.700	-1.370
0.8000	0.3200	Closd Cnd				
	R0400-W2.1		N0400	N0520	-2.900	-2.830
0.3200	0.3000	Closd Cnd				
	R0410-W1.1		N0410	N9004-H	-2.610	-1.170
-0.1700	1.200	Closd Cnd				
	R0420-W1.1		N0420	N0410	3.080	-2.610
3.500	-0.1700	Closd Cnd				
	R0420-W2.1		N0420	N0480	3.080	2.260
3.500	3.690	Closd Cnd				
	R0430-W1.1		N0430	N0180	-0.1300	-1.460
0.3200	1.300	Closd Cnd				
	R0430-W2.1		N0430	N0500	-0.1300	2.250
0.3200	4.240	Closd Cnd				
	R0440-W1.1		N0440	N0400	-1.370	-2.900
0.3200	0.3200	Closd Cnd				
	R0450-W1.1		N0450	N9003-C	-1.300	
0.0000	0.3200	0.2401	Closd Cnd			
	R0450-W2.1		N0450	N0400	-1.300	-2.900
0.3200	0.3200	Closd Cnd				
	R0460-W1.1		N0460	N0400	-2.150	-2.900
0.3200	0.3200	Closd Cnd				
	R0460-W2.1		N0460	N0520	-2.150	-2.830
0.3200	0.3000	Closd Cnd				
	R0480-W1.1		N0480	N0410	2.260	-2.610
3.690	-0.1700	Closd Cnd				
	R0480-W2.1		N0480	N0470	2.260	1.810
3.690	3.450	Closd Cnd				

	R0480-W3.1		N0480	N0490	2.260	-1.260
3.690	0.3400	Closd Cnd				
	R0490-W1.1		N0490	N0410	-1.260	-2.610
0.3400	-0.1700	Closd Cnd				
	R0490-W3.1		N0490	N0655	-1.260	-2.910
0.3400	-0.1700	Closd Cnd				
	R0500-W1.1		N0500	N0470	2.250	1.810
4.240	3.450	Closd Cnd				
	R0510-W2.1		N0510	N9003	-1.430	
0.0000-0.1000	0.2401	Closd Cnd				
	R0520-W1.1		N0520	N0515	-2.830	-1.200
0.3000	0.3000	Closd Cnd				
	R0520-W2.1		N0520	N0510	-2.830	-1.430
0.3000	-0.1000	Closd Cnd				
	R0530-W1.1		N0530	N0430	1.660	-0.1300
1.690	0.3200	Closd Cnd				
	R0530-W2.1		N0530	N0470	1.660	1.810
1.690	3.450	Closd Cnd				
	R0530-W3		N0530	N0500	1.660	2.250
1.690	4.240	Closd Cnd				
	R0540-W1.1		N0540	N0470	1.350	1.810
1.520	3.450	Closd Cnd				
	R0540-W2.1		N0540	N0480	1.350	2.260
1.520	3.690	Closd Cnd				
	R0550-W1.1		N0550	N0335	-1.330	
0.0000	7.0000E-02	0.3200	Closd Cnd			
	R0550-W3.1		N0550	N0520	-1.330	-2.830
7.0000E-02	0.3000	Closd Cnd				
	R0560-W2.1		N0560	N9003-B	-2.820	
0.0000	7.0000E-02	0.2401	Closd Cnd			
	R0560-W3.1		N0560	N0810	-2.820	-1.850
7.0000E-02	0.3600	Closd Cnd				
	R0560-W4.1		N0560	N0770	-2.820	-3.050
7.0000E-02	0.1300	Closd Cnd				
	R0560-W5.1		N0560	N0885	-2.820	-6.910
7.0000E-02	0.1300	Closd Cnd				
	R0570-W1.1		N0570	N0720	-2.670	-0.6500
1.380	0.5800	Closd Cnd				
	R0570-W3.1		N0570	N0850	-2.670	1.460
1.460	1.460	Closd Cnd				
	R0570-W4.1		N0570	N0770	-2.670	-3.050
1.380	0.1300	Closd Cnd				
	R0570-W5.1		N0570	N0870	-2.670	-2.920
1.380	1.380	Closd Cnd				
	R0640-W1.1		N0640	N0570	-2.780	-2.670
1.500	1.380	Closd Cnd				
	R0650-W1.1		N0650	N0480	-0.4900	2.260
1.500	3.690	Closd Cnd				
	R0660-W1.1		N0660	N0730	-0.8400	-2.100
0.8200	1.380	Closd Cnd				

	R0660-W2.1		N0660	N0740	-0.8400	-1.240
0.8200	0.1300	Closd Cnd				
	R0690-W2.1		N0690	N0720	0.6200	-0.6500
0.6200	0.5800	Closd Cnd				
	R0720-W1.1		N0720	N0770	-0.6500	-3.050
0.5800	0.1300	Closd Cnd				
	R0730-W1.1		N0730	N0570	-2.100	-2.670
1.380	1.380	Closd Cnd				
	R0740-W2.1		N0740	N0730	-1.240	-2.100
0.1300	1.380	Closd Cnd				
	R0740-W4.1		N0740	N0790	-1.240	-2.980
0.1300	0.1300	Closd Cnd				
	R0775-W1.1		N0775	N0770	-0.6500	-3.050
0.1300	0.1300	Closd Cnd				
	R0780-W2.1		N0780	N0740	-4.390	-1.240
0.1300	0.1300	Closd Cnd				
	R0790-W1		N0790	N0730	-2.980	-2.100
0.1300	1.380	Closd Cnd				
	R0800-W1.1		N0800	N0570	3.350	-2.670
3.350	1.380	Closd Cnd				
	R0800-W2.1		N0800	N0730	3.350	-2.100
3.350	1.380	Closd Cnd				
	R0810-W1.1		N0810	N9003-F	-1.850	
0.0000	0.3600	0.2401	Closd Cnd			
	R0830-W3.1		N0830	N0970	-2.050	-1.210
0.3000	0.4000	Closd Cnd				
	R0850-W3.1		N0850	N0930	1.460	-3.570
1.460	1.380	Closd Cnd				
	R0870-W2.1		N0870	N0790	-2.920	-2.980
1.380	0.1300	Closd Cnd				
	R0885-W1.1		N0885	N0880	-6.910	-6.910
0.1300	-6.910	Closd Cnd				
	R0910-W2.1		N0910	N9005-B	-6.000	
0.0000	0.1300	0.2401	Closd Cnd			
	R0930-W1.1		N0930	N9004	-3.570	-2.740
1.380	1.200	Closd Cnd				
	R0940-W1.1		N0940	N9005-D	-1.010	
0.0000	0.4000	0.2401	Closd Cnd			
	R0940-W2.1		N0940	N0945	-1.010	-0.8100
0.4000	0.1500	Closd Cnd				
	R0945-W1.1		N0945	N9005-H	-0.8100	
0.0000	0.1500	0.2401	Closd Cnd			
	R0950-W2.1		N0950	N0970	-0.4200	-1.210
0.1300	0.4000	Closd Cnd				
	R0960-W1.1		N0960	N0980	1.900	1.620
1.900	1.710	Closd Cnd				
	R0960-W3.1		N0960	N0920	1.900	-1.570
1.900	0.1300	Closd Cnd				
	R0960-W4.1		N0960	N0950	1.900	-0.4200
1.900	0.1300	Closd Cnd				

0.0000	1.710	0.2401	Closd Cnd	N0980	N9005-E	1.620	
				N0990	N0940	1.570	-1.010
	1.570	0.4000	Closd Cnd	N0990	N0980	1.570	1.620
	1.570	1.710	Closd Cnd	N1000	N0945	-1.360	-0.8100
	0.4000	0.1500	Closd Cnd	N1020	N9005-C	-1.000	
0.0000	0.6000	0.2401	Closd Cnd	N1030	N9005	-1.050	
0.0000	0.5000	0.2401	Closd Cnd	N1030	N1020	-1.050	-1.000
	0.5000	0.6000	Closd Cnd	N2002	N9004-K	-1.800	-1.330
	-0.2700	1.200	Closd Cnd	N2040	N9003-E	-1.100	
0.0000	0.1100	0.2401	Closd Cnd	N2090	N9000	-1.890	-1.990
	-0.5700	0.2401	Closd Cnd	N2370	N9004-E	-1.560	-2.680
	0.7300	1.200	Closd Cnd	N2380	N9004-I	-1.810	-1.170
	0.3100	1.200	Closd Cnd	N2380	N2370	-1.810	-1.560
	0.3100	0.7300	Closd Cnd	N0440	N0460	-1.370	-2.150
	0.3200	0.3200	Closd Cnd	N-015	N-040	-1.190	-1.480
	-0.1700	-0.1700	Closd Cnd	N-020	N-021	1.380	-0.4700
	1.380	1.150	Closd Cnd	N-021	N-042	-0.4700	-0.6300
	1.150	-0.6000	Closd Cnd	N-030	N-023	-7.0000E-02	0.4500
	0.4500	0.4500	Closd Cnd	N-031	N-025	-0.8500	-1.240
	-0.4000	-0.1700	Closd Cnd	N-042	N-040	-0.6300	-1.480
	-0.6000	-0.1700	Closd Cnd	N-043	N-042	-1.160	-0.6300
	-0.6000	-0.6000	Closd Cnd	N0850	N0890	1.460	-1.540
	1.460	1.380	Closd Cnd				

Table E17. Pump Operation Section #
#####

Pump Operating Time and Pump General Results

Max HGL feet	Min Q Pump Name cfs	Max Q cfs	Upstream Totl Q Node ft^3	Downstream Node	Time in hours Pump On	# of Times Pump Goes On	Min HGL feet
0.0000	P{481.4} 0.0000	0.0000	345 0.0000	779	0.0000	0	0.0000

```

*=====
| Table E18 - Junction Continuity Error. Division by Volume added 11/96 |
| Continuity Error = Net Flow + Beginning Volume - Ending Volume |
| ----- |
| Total Flow + (Beginning Volume+ Ending Volume)/2 |
| Net Flow = Node Inflow - Node Outflow |
| Total Flow = absolute (Inflow + Outflow) |
| Intermediate column is a judgement on the node continuity error. |
| Excellent < 1 percent Great 1 to 2 percent Good 2 to 5 percent |
| Fair 5 to 10 percent Poor 10 to 25 percent Bad 25 to 50 percent |
| Terrible > 50 percent |
*=====

```

Net Flow Thru Node	Junction Total Flow Thru Node	<-----Continuity Error -----> Failed to Name Converge	Volume	% of Node	% of Inflow	Remaining Volume	Beginning Volume
589.6214	544988.3940	N0335	11.4289	0.0021	0.0000	734.2848	156.0922
110498.3186	411253.4578	N0550	87.8186	0.0149	0.0001	232218.9873	121808.4873
20564.4955	58840.1984	N0690	-53.4796	-0.0773	0.0000	20617.9750	0.0000
35677.4570	279090.0047	N0640	-57.4882	-0.0132	0.0001	175010.4838	139275.5386
17471.4269	480145.9847	N0780	-217.4722	-0.0442	0.0002	20726.3540	3037.4549
126545.5849	126538.5970	N0830	58.6778	0.0208	0.0001	219446.4838	92959.5768
953382.4522	2670723.662	N0790	-30.4203	-0.0009	0.0000	1104217.719	150804.8469

	N0800	-42.1105	-0.0224	0.0000	125158.2718	0.0000
125116.1613	125116.2718	0				
	N0870	-409.4016	-0.0059	0.0004	129134.4913	151789.6659
-23064.5762	6779780.434	0				
	N0510	-119.8127	-0.0033	0.0001	2410721.008	29954.4548
2380646.740	2380648.968	0				
	N0520	-38121.5877	-0.4783	0.0342	5733481.287	1830830.298
3864529.401	4187676.103	33442				
	N0390	-6711.2170	-0.1422	0.0060	4269144.421	3357487.005
904946.1980	904948.1998	0				
	N0350	-9.0803	-0.0002	0.0000	148039.7126	55195.4650
92835.1673	3922097.815	0				
	N0450	-59.5589	-0.0011	0.0001	3652667.861	536921.3401
3115686.962	3115679.803	0				
	N0770	-283.4683	-0.0038	0.0003	993325.7450	148059.3854
844982.8913	6976192.899	0				
	N0720	118.8425	0.0112	0.0001	789694.7856	248085.1629
541728.4652	541728.1820	0				
	N0960	-0.3994	-0.0004	0.0000	0.0071	0.0000
-0.3923	108658.1600	0				
	N0920	139.2813	0.1158	0.0001	82172.2028	15630.4920
66680.9920	71350.1092	0				
	N0950	500.0225	0.1064	0.0004	6426.3673	281.4733
6644.9165	466534.7910	0				
	N0970	29.2007	0.0184	0.0000	122662.4849	50666.0442
72025.6414	72017.8441	0				
	N0915	-14.0785	-0.0003	0.0000	2990228.514	331670.4410
2658543.994	2658532.185	0				
	N0885	-316.4854	-0.0082	0.0003	2623479.870	165841.6126
2457321.772	2457317.428	0				
	N0560	1072.8136	0.0477	0.0010	655333.6555	102707.3817
553699.0874	1869903.008	0				
	N0810	-44.1195	-0.0006	0.0000	5698383.570	2545291.996
3153047.454	3153048.528	0				
	N0570	-346.9868	-0.0172	0.0003	543941.1322	925388.4967
-381794.351	1286971.052	0				
	N0990	-7.8328	-0.0087	0.0000	6473.2634	0.0000
6465.4306	86299.3049	0				
	N1000	-1046.6286	-0.1895	0.0009	493997.1009	375407.9739
117542.4984	117542.7120	0				
	N1020	-265.3544	-0.0121	0.0002	517627.8128	23572.4325
493790.0259	1916825.308	0				
	N1030	-79.7294	-0.0599	0.0001	98273.8876	28648.8790
69545.2792	69545.4007	0				
	N0890	-75.7299	-0.0013	0.0001	2010132.564	1421690.981
588365.8538	3998040.091	0				
	N0850	41.2880	0.0013	0.0000	47.5990	0.0000
88.8870	3279159.993	0				
	N0930	-571.5562	-0.0311	0.0005	1568734.409	1026166.688
541996.1639	541996.6304	0				

	N0980	38.2029	0.0012	0.0000	1562.2903	8.1942
1592.2989	3061383.792	0				
	N1010	201.9968	0.0094	0.0002	1029.0179	303.9267
927.0880	2145693.239	0				
	N0430	-12.0614	-0.0022	0.0000	1067.5725	182.7184
872.7926	546454.5286	0				
	N0500	-35.1294	-0.0027	0.0000	972697.0579	309221.8567
663440.0719	663440.2187	0				
	N0230	28.6167	0.0067	0.0000	17202.7522	0.0000
17231.3689	415970.8639	0				
	N0220	-87.3624	-0.0204	0.0001	1883.3357	859.2604
936.7129	427133.9574	0				
	N0200	16.5017	0.0029	0.0000	18273.6671	1624.2719
16665.8970	554241.5536	0				
	N0190	-85.0460	-0.0336	0.0001	1987.7746	1117.6760
785.0526	251863.7076	0				
	N0130	-122.2999	-0.0210	0.0001	80757.8856	0.0000
80635.5857	540970.0596	1				
	N0100	46.8166	0.0348	0.0000	966.4558	0.0000
1013.2723	134058.0506	0				
	N0090	-62.5399	-0.0254	0.0001	164362.4076	0.0000
164299.8678	164299.9388	0				
	N0120	-126.2201	-0.0418	0.0001	1041.9651	1426.5514
-510.8063	300411.5000	0				
	N0110	101.1387	0.0115	0.0001	411.2895	260.8090
251.6192	876647.3000	0				
	N0170	-29.0935	-0.0049	0.0000	923.6343	5747.1782
-4852.6374	590586.5512	2				
	N0210	658.7129	0.0437	0.0006	1070970.432	198573.4157
873055.7293	872797.7776	0				
	N0260	15.0685	0.0004	0.0000	3254818.145	1485377.804
1769455.409	1769429.009	0				
	N0250	-91.8384	-0.0164	0.0001	215648.4962	4244.3078
211312.3500	450393.7615	0				
	N0240	-71.8172	-0.0272	0.0001	185220.1266	28259.1650
156889.1444	156896.3148	0				
	N0140	-95.0955	-0.0052	0.0001	13665.0069	14669.5452
-1099.6338	1803827.582	0				
	N0150	26.4536	0.0033	0.0000	6.8635	0.0000
33.3171	799472.5680	24				
	N0270	-43.5527	-0.0050	0.0000	595755.4838	56582.9620
539128.9691	539129.5589	0				
	N0290	-119.1847	-0.0375	0.0001	5144.0810	3368.6063
1656.2900	313278.2448	0				
	N0180	-12.9248	-0.0020	0.0000	117580.1283	107967.4450
9599.7586	540860.9054	0				
	N0370	22.1126	0.0021	0.0000	2301.3751	1863.6634
459.8243	1055021.719	0				
	N0285	5.3730	0.0003	0.0000	44.3284	12.5844
37.1170	1967608.433	0				

	N0420	-285.0220	-0.0343	0.0003	571858.8143	50945.6997
520628.0926	520628.8821	0				
	N0490	-3.5711	-0.0000	0.0000	117326.1917	9109.9623
108212.6583	11416861.94	0				
	N0410	390.6451	0.0038	0.0004	2363759.007	129481.6655
2234667.986	9084051.598	7797				
	N0380	489.4342	0.0118	0.0004	192147.0922	892.5834
191743.9430	4052929.024	0				
	N0660	-29.0648	-0.0082	0.0000	293795.4187	172297.1516
121469.2023	121469.3733	0				
	N0740	99.8333	0.0067	0.0001	236816.8133	30981.3978
205935.2488	1363106.230	0				
	N0730	-70.0940	-0.0016	0.0001	1538353.368	1855461.336
-317178.062	2627749.464	0				
	N0940	-45.4149	-0.0027	0.0000	1079125.579	89019.1746
990060.9899	1078658.566	0				
	N0530	-6.0868	-0.0011	0.0000	3.9997	3.2260
-5.3131	578254.9974	0				
	N0060	-841.7884	-0.0366	0.0008	1534643.922	6665.4130
1527136.721	1527131.697	7				
	N0050	-47.1760	-0.0153	0.0000	227414.0493	64958.3024
162408.5709	162408.7798	0				
	N0325	-65.1150	-0.0126	0.0001	1196.7923	1066.3290
65.3483	517295.4835	2				
	N0160	-411.6717	-0.0425	0.0004	380618.2385	66351.6789
313854.8879	746065.3685	0				
	N0470	-116.3090	-0.0017	0.0001	4703736.913	725904.2255
3977716.379	3977721.443	0				
	N0540	-1.1371	-0.0001	0.0000	154.9473	40.5920
113.2182	1091284.241	0				
	N0650	-23.1797	-0.0016	0.0000	42620.8695	42351.9916
245.6983	1410033.012	0				
	N0400	-8.1556	-0.0002	0.0000	3920808.363	1145590.760
2775209.447	2775211.804	0				
	N0360	-28.3473	-0.0063	0.0000	340736.0795	126031.7795
214675.9527	214670.1063	0				
	N0480	-102.0408	-0.0018	0.0001	4028675.874	577246.8686
3451326.964	3451332.006	0				
	N0080	-49.0960	-0.0270	0.0000	121542.8442	504.6254
120989.1227	120989.3429	0				
	N0310	-247.1321	-0.0327	0.0002	58421.0940	203475.0054
-145301.044	624934.6493	0				
	N0300	-60.0644	-0.0093	0.0001	488614.0829	169079.4658
319474.5527	319460.7635	0				
	N0460	-27997.6462	-0.6244	0.0252	2476788.148	422994.5869
2025795.914	3034002.521	30254				
	N0440	-48.6388	-0.0025	0.0000	1336756.162	135774.7588
1200932.764	1200933.803	0				
	N0330	-1274.3351	-0.0281	0.0011	912197.6834	412514.7460
498408.6023	3872597.830	0				

	N0655	217.7735	0.0098	0.0002	30805.1012	17150.9547
13871.9200	2187786.585	0				
	N0375	-329.9933	-0.0211	0.0003	1259.2506	758.0212
171.2361	1561253.035	0				
	N0385	-266.1032	-0.0068	0.0002	446.6466	375.5859
-195.0425	3918577.599	0				
	N0275	43.1549	0.0258	0.0000	19.5382	0.0000
62.6931	167489.2178	0				
	N0280	39.2230	0.0077	0.0000	405.3783	8.4806
436.1208	508164.6150	0				
	N0202	-73.6655	-0.0137	0.0001	1531.1283	857.7089
599.7539	537026.4927	0				
	N0340	-56.7310	-0.0016	0.0001	61248.2905	7978.8067
53212.7528	3427763.053	0				
	N0515	-280.4034	-0.0127	0.0003	878361.5033	403308.1730
474772.9269	1574199.753	0				
	N-001	-69.1130	-0.0057	0.0001	29648.9855	7389.9636
22189.9089	1183963.837	64				
	N-002	-6.4594	-0.0071	0.0000	1123.6856	1116.8753
0.3509	90045.3979	0				
	N-003	-0.3326	-0.0004	0.0000	0.0089	0.0000
-0.3237	81063.8236	0				
	N-004	-0.5697	-0.0003	0.0000	0.0078	0.0000
-0.5619	194963.9798	67				
	N-005	-80.5635	-0.0058	0.0001	7765.2825	23.1677
7661.5512	1392955.097	0				
	N-008	128.3202	0.0068	0.0001	21360.8422	323.6289
21165.5334	1884261.627	0				
	N-010	-26.5294	-0.0011	0.0000	29860.9121	27.1510
29807.2317	2297218.915	0				
	N-013	845.4658	0.0319	0.0008	113495.0935	6164.1115
108176.4478	2593887.239	0				
	N-015	80.6904	0.0034	0.0001	957774.0278	4174.6217
953680.0965	1859478.299	0				
	N-006	-0.3287	-0.0003	0.0000	0.0060	0.0000
-0.3227	113299.0919	0				
	N-007	-0.1757	-0.0002	0.0000	0.0072	0.0000
-0.1685	82730.3230	0				
	N-009	83.4251	0.0578	0.0001	0.0015	0.0000
83.4266	144393.9451	0				
	N-011	-13.2506	-0.0059	0.0000	18.8105	0.0000
5.5600	225164.0168	0				
	N-014	-36.1353	-0.0270	0.0000	7568.6748	187.1129
7345.4266	129786.1475	0				
	N-012	-1092.7280	-0.3036	0.0010	1725.2553	0.0000
632.5273	359114.7848	0				
	N-025	880.5841	0.0191	0.0008	47559.3917	1169.8245
47270.1513	4589846.547	0				
	N-023	-14.1420	-0.0023	0.0000	7108.3873	0.0000
7094.2453	608413.2236	0				

	N-021	-16.9452	-0.0017	0.0000	1036.7003	705.6770
314.0781	1003723.399	0				
	N-019	-28.7180	-0.0037	0.0000	1380.6276	798.2868
553.6227	785319.6819	0				
	N-041	-14.4844	-0.0024	0.0000	41672.1822	3238.7635
38418.9343	592092.2036	0				
	N-020	-9.5707	-0.0017	0.0000	479.8764	0.0000
470.3057	558577.0429	0				
	N-022	10.5041	0.0015	0.0000	1752.1930	0.3029
1762.3942	705571.6947	0				
	N-024	-42.4438	-0.0039	0.0000	57146.8043	8.6145
57095.7460	1070078.989	0				
	N-029	93.8804	0.0087	0.0001	42649.7870	622.0681
42121.5992	1058703.005	0				
	N-026	-9.8934	-0.0993	0.0000	375.0828	0.0000
365.1894	9773.0637	0				
	N-027	-25.3263	-0.0206	0.0000	19078.7009	13.9976
19039.3770	113197.3673	0				
	N-028	-48.8643	-0.0436	0.0000	2126.4157	78.1758
1999.3756	110920.3828	0				
	N-030	-26.2682	-0.0160	0.0000	109192.2686	0.0000
109166.0003	109166.2003	0				
	N-043	-22.9664	-0.0218	0.0000	70574.2518	1174.8099
69376.4755	69376.6007	0				
	N-042	-301.7749	-0.0813	0.0003	247778.5576	1.7165
247475.0662	247475.1207	0				
	N-031	-586.7007	-0.3877	0.0005	101551.4999	840.5380
100124.2613	100124.4254	0				
	N-040	-47.6178	-0.0022	0.0000	1440390.912	73827.2177
1366516.076	1366516.360	0				
	N0620	-9.6376	-0.0390	0.0000	16477.8461	0.0000
16468.2085	16468.2354	0				
	N0900	-419.5325	-0.0062	0.0004	2655.4548	1871.2778
364.6444	6802276.266	0				
	N-009mh	-35.3781	-0.0245	0.0000	135.2668	104.9804
-5.0917	144313.5405	0				
	N0205	-48.7807	-0.0091	0.0000	75374.8682	3509.9042
71816.1833	497047.9463	0				
	N0386	558.2790	0.0140	0.0005	1301.4690	420.1352
1439.6128	3976839.995	5				
	N0388	37.0215	0.0009	0.0000	2725.3617	533.5721
2228.8110	4031537.776	0				
	N0775	-56.6862	-0.0066	0.0001	625801.5606	172372.1987
453372.6757	453371.3330	0				
	N2040	-44.5071	-0.0026	0.0000	1180941.962	96785.2540
1084112.201	1084113.460	0				
	N2380	-36.9623	-0.0026	0.0000	1043320.837	295901.9071
747381.9672	747372.4413	0				
	N0155	2207.6541	0.2448	0.0020	3349.0917	45.1028
5511.6430	900100.9615	166				

	N0945	-42.4103	-0.0047	0.0000	601311.7906	14564.3545
586705.0258	597211.9185	0				
	N2002	90.6785	0.0014	0.0001	4337983.523	78512.0236
4259562.178	4287115.445	13708				
	N2090	-42.9990	-0.0053	0.0000	549130.1055	34333.4510
514753.6555	514754.3321	0				
	N0742	-308.1959	-0.0322	0.0003	896.9284	877.9799
-289.2474	956475.5204	0				
	N0910	-62.2084	-0.0009	0.0001	53097.4649	4262.8485
48772.4079	6811582.521	6				
	N0880	162.3967	0.0305	0.0001	357559.1575	0.0000
357721.5542	354253.4001	0				
	N9004	-9.0455	0.0000	0.0000	58.5617	49.5162
0.0000	0.0000	0				
	N9004-B	-15.3097	-0.0027	0.0000	294.1996	283.2161
-4.3262	557268.6105	0				
	N9004-C	-17.2933	-0.0032	0.0000	288.3623	275.3086
-4.2396	546175.0740	0				
	N9004-D	-17.7404	-0.0032	0.0000	290.3923	276.9554
-4.3035	553705.1251	0				
	N9004-F	-10.4444	-0.0001	0.0000	148.8122	139.4108
-1.0430	10369304.70	0				
	N9001-B	-61.1580	-0.0034	0.0001	76.2297	29.2810
-14.2093	1794181.333	0				
	N9001-D	-42.7140	-0.0347	0.0000	265.8404	223.1701
-0.0437	122922.4335	0				
	N9001-F	-9.0505	0.0000	0.0000	23.3769	14.3264
0.0000	0.0000	0				
	N9000	-9.0455	0.0000	0.0000	37.0739	28.0284
0.0000	0.0000	0				
	N9003	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9005	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9005-E	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9005-G	-13.8917	-0.0029	0.0000	16.7583	3.0173
-0.1507	476545.3839	0				
	N9004-J	-139.3793	-0.0030	0.0001	338.6545	200.6414
-1.3663	4708239.289	0				
	N9004-G	-151.4799	-0.0030	0.0001	332.1499	190.2338
-9.5638	4969038.121	0				
	N9002	-63.4332	-0.0036	0.0001	122.5239	51.9837
7.1070	1762092.002	0				
	N2370	-414.3079	-0.0046	0.0004	3161106.825	1060321.897
2100370.620	6947457.234	8732				
	N9000-B	-9.0455	0.0000	0.0000	37.0739	28.0284
0.0000	0.0000	0				
	N9000-C	-9.0455	0.0000	0.0000	37.0739	28.0284
0.0000	0.0000	0				

	N9000-E	-9.0455	0.0000	0.0000	37.0739	28.0284
0.0000	0.0000	0				
	N9000-F	-24.0657	-0.0020	0.0000	110.2674	86.5846
-0.3829	1222717.910	0				
	N9001-E	-9.0455	0.0000	0.0000	38.3305	29.2850
0.0000	0.0000	0				
	N9001-G	-43.1412	-0.0214	0.0000	264.2960	221.8349
-0.6801	201616.5728	0				
	N9001-H	-9.0505	0.0000	0.0000	23.3769	14.3264
0.0000	0.0000	0				
	N9001-J	-9.0455	0.0000	0.0000	14.2415	5.1960
0.0000	0.0000	0				
	N9001-K	-9.0455	0.0000	0.0000	14.2415	5.1960
0.0000	0.0000	0				
	N9002-A	-9.0505	0.0000	0.0000	28.5290	19.4785
0.0000	0.0000	0				
	N9002-B	-9.1502	-0.0162	0.0000	28.5290	19.4785
-0.0997	56366.9440	0				
	N9003-A	-11.8356	-0.0006	0.0000	12.0675	3.0170
-2.7851	1890625.871	0				
	N9003-B	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9003-C	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9003-D	-9.0505	0.0000	0.0000	12.0678	3.0173
0.0000	0.0000	0				
	N9003-E	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9003-F	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9003-G	-9.0455	0.0000	0.0000	12.0677	3.0222
0.0000	0.0000	0				
	N9004-A	-14.8321	-0.0027	0.0000	293.3614	282.8493
-4.3201	557088.7907	0				
	N9004-E	-9.0455	0.0000	0.0000	57.8078	48.7623
0.0000	0.0000	0				
	N9004-H	-9.0455	0.0000	0.0000	38.8331	29.7876
0.0000	0.0000	0				
	N9004-I	-9.0455	0.0000	0.0000	38.8331	29.7876
0.0000	0.0000	0				
	N9004-K	-50.1797	-0.0003	0.0000	40.8437	31.7982
-41.1342	16928006.41	0				
	N9005-A	-9.0508	0.0000	0.0000	12.0678	3.0170
0.0000	0.0000	0				
	N9005-B	-9.0455	0.0000	0.0000	12.0675	3.0220
0.0000	0.0000	0				
	N9005-C	-11.1234	-0.0008	0.0000	12.0675	3.0220
-2.0779	1423047.120	0				
	N9005-D	-8.8412	-0.0100	0.0000	12.0675	3.0220
0.2044	88596.7168	0				

	N9005-F	-16.5029	-0.0025	0.0000	19.3496	3.0223
-0.1756	649702.2078	0				
	N9005-H	-9.0049	-0.0856	0.0000	12.0675	3.0220
0.0406	10506.4533	0				
	N9000-D	-44.9943	-0.0002	0.0000	40.3410	31.2905
-35.9438	24546973.32	0				
	N-0001A	136.7562	0.0004	0.0001	15544419.07	8675608.497
6868947.330	25864758.08	0				
	N-0001B	-601.4056	-0.3474	0.0005	27278.7392	5162.5823
21514.7513	156908.0470	0				
	N0001-C	-241.1712	-0.1040	0.0002	67178.7113	0.0000
66937.5400	198413.6436	0				
	N-0001-E	-7.3162	-0.0201	0.0000	14583.7273	0.0000
14576.4111	29083.9167	0				
	N-0001E-OF	-0.3402	-0.0023	0.0000	0.0000	0.0000
-0.3402	14508.1029	0				
	N-0001-F	7.0803	0.0014	0.0000	78527.0849	0.0000
78534.1652	464337.6851	0				
	N-0001-G	-9.6757	-0.0103	0.0000	62416.7501	0.0000
62407.0744	62407.2360	0				
	N-0001F-OF-A	-6.0361	-0.0016	0.0000	0.0000	0.0000
-6.0361	385814.1846	0				
	N-0001F-OF-B	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0				
	N9004-L	-17.7298	-0.0004	0.0000	69.4908	57.3527
-5.5917	4765018.410	0				
	N0001-J	16.0855	0.0019	0.0000	22342.9359	0.0000
22359.0214	831155.6655	0				
	N9005-J	-11.2458	-0.0028	0.0000	12.0675	3.0170
-2.1952	404402.6658	0				
	N9005-K	-11.2458	-0.0028	0.0000	12.0675	3.0170
-2.1952	404402.6658	0				
	N0001-I	-243.8834	-0.0241	0.0002	150044.1115	0.0000
149800.2281	935478.9296	0				
	N-0001K	-6.9312	-0.0030	0.0000	109133.8982	0.0000
109126.9670	173225.7999	0				
	N0140-A	109.4059	0.0061	0.0001	6784.9052	6548.4634
345.8477	1794493.419	0				

The total continuity error was -78901. cubic feet
The remaining total volume was 1.03572E+08 cubic feet
Your mean node continuity error was Excellent
Your worst node continuity error was Excellent

```

*=====
| Table E19 - Junction Inflow & Outflow Listing |
|           Units are either ft^3 or m^3         |
|           depending on the units in your model. |
*=====

```

Constant User Interface DWF Inflow

RNF Layer	Inflow Junction	Inflow	Inflow	Inflow	Inflow	through
Inflow	from	Outflow	Evaporation	Basin		
to Node	Name	to Node	to Node	to Node	to Node	Outfall
	2D Layer	from Node	from Node	to Node	Infil.	
0.0000	N0550	0.0000	0.0000	260817.3650	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0690	0.0000	0.0000	39702.1644	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0640	0.0000	0.0000	157382.6036	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0780	0.0000	0.0000	248808.6257	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0830	0.0000	0.0000	70374.8819	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0790	0.0000	0.0000	556700.1416	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0800	0.0000	0.0000	125115.9587	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0870	0.0000	0.0000	415084.5535	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0510	0.0000	0.0000	2.381E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0520	0.0000	0.0000	3.809E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0390	0.0000	0.0000	904942.5282	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0350	0.0000	0.0000	320186.8643	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0450	0.0000	0.0000	1.618E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0770	0.0000	0.0000	282469.4456	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0720	0.0000	0.0000	341252.4331	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0960	0.0000	0.0000	54328.8073	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0920	0.0000	0.0000	68920.0109	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0950	0.0000	0.0000	236494.6812	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0970	0.0000	0.0000	53023.4019	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0915	0.0000	0.0000	1.407E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0885	0.0000	0.0000	828515.7105	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
0.0000	N0560	0.0000	0.0000	377360.0068	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.00		
	N0810	0.0000	0.0000	3.153E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0570	0.0000	0.0000	331309.2704	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0990	0.0000	0.0000	46382.3145	0.0000	0.0000
0.0000	0.0000	-4.7227	0.0000	0.0000	0.00	
	N1000	0.0000	0.0000	117542.1069	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N1020	0.0000	0.0000	656124.8820	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N1030	0.0000	0.0000	69545.0565	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0890	0.0000	0.0000	2.293E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0850	0.0000	0.0000	1.143E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0930	0.0000	0.0000	541995.6334	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0980	0.0000	0.0000	1.531E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N1010	0.0000	0.0000	40499.0475	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0430	0.0000	0.0000	273662.5434	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0500	0.0000	0.0000	663456.1543	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0230	0.0000	0.0000	216600.8902	0.0000	0.0000
0.0000	0.0000	-0.0224	0.0000	0.0000	0.00	
	N0220	0.0000	0.0000	214038.2937	0.0000	0.0000
0.0000	0.0000	0.0538	0.0000	0.0000	0.00	
	N0200	0.0000	0.0000	159900.7454	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0190	0.0000	0.0000	126338.5575	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0130	0.0000	0.0000	244278.7109	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0100	0.0000	0.0000	67535.4562	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0090	0.0000	0.0000	164299.7377	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0120	0.0000	0.0000	144814.1480	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0110	0.0000	0.0000	438446.0640	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0170	0.0000	0.0000	292932.5964	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0210	0.0000	0.0000	343737.5033	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0260	0.0000	0.0000	1.556E+06	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.00	0.0000	0.0000
	N0250	0.0000	0.0000	131478.6019	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0240	0.0000	0.0000	37351.4238	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0140	0.0000	0.0000	635776.9341	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0150	0.0000	0.0000	399749.6080	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0270	0.0000	0.0000	539127.8877	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0290	0.0000	0.0000	73749.6713	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0180	0.0000	0.0000	275214.4293	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0370	0.0000	0.0000	371946.5335	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0285	0.0000	0.0000	983808.7973	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0420	0.0000	0.0000	520626.6453	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0490	0.0000	0.0000	3.339E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0410	0.0000	0.0000	3.645E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0380	0.0000	0.0000	358414.7710	0.0000	0.0000
0.0000	0.0000	-43.8139	0.0000	0.00	0.00	0.0000
	N0660	0.0000	0.0000	121468.8888	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0740	0.0000	0.0000	306117.0681	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0730	0.0000	0.0000	1.155E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0940	0.0000	0.0000	1.034E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0530	0.0000	0.0000	289124.4655	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0060	0.0000	0.0000	791066.5452	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0050	0.0000	0.0000	162408.1878	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0325	0.0000	0.0000	258660.2571	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0160	0.0000	0.0000	144792.1358	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0470	0.0000	0.0000	3.978E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0540	0.0000	0.0000	256571.4334	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.0000
	N0650	0.0000	0.0000	159550.9747	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.00		
	N0400	0.0000	0.0000	2.586E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0360	0.0000	0.0000	108427.4816	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0480	0.0000	0.0000	3.451E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0080	0.0000	0.0000	120988.7192	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0310	0.0000	0.0000	239851.8729	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0300	0.0000	0.0000	183450.7523	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0460	0.0000	0.0000	2.589E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0440	0.0000	0.0000	1.201E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0330	0.0000	0.0000	254473.2650	0.0000	0.0000
0.0000	0.0000	-0.1143	0.0000	0.00		
	N0655	0.0000	0.0000	395868.6471	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0385	0.0000	0.0000	28385.9091	0.0000	0.0000
0.0000	0.0000	-0.0075	0.0000	0.00		
	N0275	0.0000	0.0000	83775.5596	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0280	0.0000	0.0000	254298.7762	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0340	0.0000	0.0000	1.468E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0515	0.0000	0.0000	215566.9086	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-001	0.0000	0.0000	420044.1572	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-002	0.0000	0.0000	45022.9618	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-003	0.0000	0.0000	40531.8629	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-004	0.0000	0.0000	97481.9015	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-005	0.0000	0.0000	62781.2701	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-008	0.0000	0.0000	146551.9696	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-010	0.0000	0.0000	119391.9219	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-013	0.0000	0.0000	38088.1791	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-015	0.0000	0.0000	159044.4498	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-006	0.0000	0.0000	56649.4310	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.00		
	N-007	0.0000	0.0000	41365.1631	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-009	0.0000	0.0000	72238.9864	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-011	0.0000	0.0000	112585.4083	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-014	0.0000	0.0000	68565.2096	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-012	0.0000	0.0000	118654.2803	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-025	0.0000	0.0000	28522.9054	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-023	0.0000	0.0000	13568.9020	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-021	0.0000	0.0000	109636.3128	0.0000	0.0000
0.0000	0.0000	-0.0143	0.0000	0.0000	0.00	
	N-019	0.0000	0.0000	116099.2503	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-041	0.0000	0.0000	315254.7128	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-020	0.0000	0.0000	72005.7202	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-022	0.0000	0.0000	74616.5441	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-024	0.0000	0.0000	152520.8199	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-029	0.0000	0.0000	43954.4228	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-026	0.0000	0.0000	5069.1250	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-027	0.0000	0.0000	66118.2284	0.0000	0.0000
0.0000	0.0000	33.1889	0.0000	0.0000	0.00	
	N-028	0.0000	0.0000	9381.2268	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-030	0.0000	0.0000	109165.6338	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-043	0.0000	0.0000	69376.2459	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-042	0.0000	0.0000	247477.3247	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-031	0.0000	0.0000	100123.9604	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N-040	0.0000	0.0000	1.367E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0620	0.0000	0.0000	16468.1591	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0900	0.0000	0.0000	40.5513	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.00	
	N0205	0.0000	0.0000	16220.5195	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.00		
	N0386	0.0000	0.0000	28385.9091	0.0000	0.0000
0.0000	0.0000	-0.0311	0.0000	0.00		
	N0388	0.0000	0.0000	28385.9091	0.0000	0.0000
0.0000	0.0000	-0.0448	0.0000	0.00		
	N0775	0.0000	0.0000	222033.8933	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N2040	0.0000	0.0000	1.084E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N2380	0.0000	0.0000	277147.3003	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0155	0.0000	0.0000	53324.9577	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0945	0.0000	0.0000	591958.1315	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N2002	0.0000	0.0000	433146.9750	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N2090	0.0000	0.0000	514752.4153	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0742	0.0000	0.0000	10948.8506	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0910	0.0000	0.0000	104483.1006	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0880	0.0000	0.0000	22842.9212	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N9004-B	0.0000	0.0000	0.0000	0.0000	10387.2452
0.0000	0.0000	283825.7658	0.0000	0.00		
	N9004-C	0.0000	0.0000	0.0000	0.0000	9949.5386
0.0000	0.0000	278060.1875	0.0000	0.00		
	N9004-D	0.0000	0.0000	0.0000	0.0000	9803.2683
0.0000	0.0000	281752.0460	0.0000	0.00		
	N9004-F	0.0000	0.0000	0.0000	0.0000	1092.3053
0.0000	0.0000	5.185E+06	0.0000	0.00		
	N9001-B	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	897097.4090	0.0000	0.00		
	N9001-D	0.0000	0.0000	0.0000	0.0000	22329.0234
0.0000	0.0000	72661.7348	0.0000	0.00		
	N9005-G	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	238272.7184	0.0000	0.00		
	N9004-J	0.0000	0.0000	0.0000	0.0000	165513.7580
0.0000	0.0000	2.437E+06	0.0000	0.00		
	N9004-G	0.0000	0.0000	0.0000	0.0000	2.005E+06
0.0000	0.0000	525736.9850	0.0000	0.00		
	N9002	0.0000	0.0000	0.0000	0.0000	870818.0892
0.0000	0.0000	1.315E+06	0.0000	0.00		
	N2370	0.0000	0.0000	1.099E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N9000-F	0.0000	0.0000	0.0000	0.0000	790360.8496
0.0000	0.0000	1.007E+06	0.0000	0.00		
	N9001-G	0.0000	0.0000	0.0000	0.0000	1184.1867

0.0000	0.0000	101436.4117	0.0000	0.00		
	N9002-B	0.0000	0.0000	0.0000	0.0000	18659.1541
0.0000	0.0000	0.0000	0.0000	0.00		
	N9003-A	0.0000	0.0000	0.0000	0.0000	791065.5657
0.0000	0.0000	1.341E+06	0.0000	0.00		
	N9004-A	0.0000	0.0000	0.0000	0.0000	10060.4750
0.0000	0.0000	283572.4738	0.0000	0.00		
	N9004-K	0.0000	0.0000	0.0000	0.0000	10.113E+06
0.0000	0.0000	6.696E+06	0.0000	0.00		
	N9005-C	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	711524.5276	0.0000	0.00		
	N9005-D	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	44298.2400	0.0000	0.00		
	N9005-F	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	324851.1107	0.0000	0.00		
	N9005-H	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	5253.2031	0.0000	0.00		
	N9000-D	0.0000	0.0000	0.0000	0.0000	5.549E+06
0.0000	0.0000	15.049E+06	0.0000	0.00		
	N-0001A	0.0000	0.0000	16.367E+06	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-0001B	0.0000	0.0000	89212.0143	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0001-C	0.0000	0.0000	132674.7567	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-0001-E	0.0000	0.0000	21829.9230	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-0001E-OF	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	7254.2516	0.0000	0.00		
	N-0001-F	0.0000	0.0000	271432.9322	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-0001-G	0.0000	0.0000	62406.7781	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-0001F-OF-A	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	192910.5771	0.0000	0.00		
	N9004-L	0.0000	0.0000	0.0000	0.0000	1.355E+06
0.0000	0.0000	3.060E+06	0.0000	0.00		
	N0001-J	0.0000	0.0000	426753.7674	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N9005-J	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	202202.6330	0.0000	0.00		
	N9005-K	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	202202.6330	0.0000	0.00		
	N0001-I	0.0000	0.0000	542636.6573	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N-0001K	0.0000	0.0000	141175.8802	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		
	N0140-A	0.0000	0.0000	162.4818	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.00		

=====

| Table E20 - Junction Flooding and Volume Listing. |
 | The maximum volume is the total volume |
 | in the node including the volume in the |
 | flooded storage area. This is the max |
 | volume at any time. The volume in the |
 | flooded storage area is the total volume |
 | above the ground elevation, where the |
 | flooded pond storage area starts. |
 | The fourth column is instantaneous, the fifth is the |
 | sum of the flooded volume over the entire simulation |
 | Units are either ft^3 or m^3 depending on the units. |

=====

2D cell				Out of		Passed to
Stored	Junction	Surcharged	Flooded	1D-System	Maximum	OR Volume
allowed Flood	Name	Time (min)	Time(min)	(Flooded	Volume	in
1D-System				Volume)		Pond of
	N0335	0.000	0.000	0.000	45.5	0.000
	N0550	0.000	0.000	0.000	2.319E+05	0.000
	N0690	9.148E+03	0.000	0.000	2.411E+04	0.000
	N0640	1.152E+04	0.000	0.000	2.417E+05	0.000
	N0780	1.152E+04	0.000	0.000	2.010E+04	0.000
	N0830	1.152E+04	0.000	0.000	2.194E+05	0.000
	N0790	0.000	0.000	0.000	1.100E+06	0.000
	N0800	9.147E+03	0.000	0.000	1.251E+05	0.000
	N0870	0.000	0.000	0.000	1.491E+05	0.000
	N0510	1.152E+04	0.000	0.000	2.411E+06	0.000
	N0520	1.152E+04	0.000	0.000	5.733E+06	0.000
	N0390	1.152E+04	0.000	0.000	4.269E+06	0.000
	N0350	0.000	0.000	0.000	1.474E+05	0.000
	N0450	0.000	0.000	0.000	3.664E+06	0.000
	N0770	0.000	0.000	0.000	9.895E+05	0.000
	N0720	1.152E+04	0.000	0.000	7.897E+05	0.000
	N0960	0.000	0.000	0.000	2.702E+03	0.000
	N0920	0.000	0.000	0.000	8.208E+04	0.000
	N0950	0.000	0.000	0.000	6.340E+03	0.000
	N0970	1.152E+04	0.000	0.000	1.226E+05	0.000
	N0915	0.000	0.000	0.000	2.987E+06	0.000
	N0885	0.000	0.000	0.000	2.623E+06	0.000
	N0560	0.000	0.000	0.000	6.516E+05	0.000
	N0810	0.000	0.000	0.000	5.698E+06	0.000
	N0570	0.000	0.000	0.000	9.213E+05	0.000
	N0990	0.000	0.000	0.000	2.353E+04	0.000

N1000	1.152E+04	0.000	0.000	4.940E+05	0.000
N1020	0.000	0.000	0.000	1.331E+06	0.000
N1030	1.152E+04	0.000	0.000	9.824E+04	0.000
N0890	3.184E+03	0.000	0.000	2.434E+06	0.000
N0850	0.000	0.000	0.000	2.016E+04	0.000
N0930	1.152E+04	0.000	0.000	1.569E+06	0.000
N0980	0.000	0.000	0.000	7.724E+04	0.000
N1010	0.000	0.000	0.000	1.130E+03	0.000
N0430	0.000	0.000	0.000	627.	0.000
N0500	1.152E+04	0.000	0.000	9.727E+05	0.000
N0230	0.000	0.000	0.000	2.256E+04	0.000
N0220	0.000	0.000	0.000	1.290E+03	0.000
N0200	4.425E+03	0.000	0.000	2.246E+04	0.000
N0190	4.621E+03	0.000	0.000	5.092E+03	0.000
N0130	0.000	0.000	0.000	8.022E+04	0.000
N0100	0.000	0.000	0.000	841.	0.000
N0090	9.151E+03	0.000	0.000	1.643E+05	0.000
N0120	0.000	0.000	0.000	848.	0.000
N0110	1.373E+03	0.000	0.000	1.802E+05	0.000
N0170	0.000	0.000	0.000	5.139E+03	0.000
N0210	0.000	0.000	0.000	1.071E+06	0.000
N0260	0.000	0.000	0.000	3.254E+06	0.000
N0250	0.000	0.000	0.000	2.154E+05	0.000
N0240	3.760E+03	0.000	0.000	1.851E+05	0.000
N0140	0.000	0.000	0.000	9.481E+04	0.000
N0150	0.000	0.000	0.000	2.457E+03	0.000
N0270	1.152E+04	0.000	0.000	5.957E+05	0.000
N0290	0.000	0.000	0.000	4.811E+04	0.000
N0180	1.971E+03	0.000	0.000	3.009E+05	0.000
N0370	0.000	0.000	0.000	2.342E+04	0.000
N0285	0.000	0.000	0.000	9.569E+03	0.000
N0420	1.152E+04	0.000	0.000	5.718E+05	0.000
N0490	4.035E+03	0.000	0.000	2.660E+05	0.000
N0410	0.000	0.000	0.000	2.632E+06	0.000
N0380	0.000	0.000	0.000	6.886E+05	0.000
N0660	1.152E+04	0.000	0.000	2.938E+05	0.000
N0740	0.000	0.000	0.000	2.366E+05	0.000
N0730	152.	0.000	0.000	1.855E+06	0.000
N0940	1.152E+04	0.000	0.000	1.090E+06	0.000
N0530	0.000	0.000	0.000	6.068E+03	0.000
N0060	0.000	0.000	0.000	1.533E+06	0.000
N0050	1.152E+04	0.000	0.000	2.274E+05	0.000
N0325	0.000	0.000	0.000	236.	0.000
N0160	0.000	0.000	0.000	3.805E+05	0.000
N0470	1.152E+04	0.000	0.000	4.704E+06	0.000
N0540	0.000	0.000	0.000	9.292E+03	0.000
N0650	0.000	0.000	0.000	7.566E+04	0.000
N0400	0.000	0.000	0.000	3.921E+06	0.000
N0360	0.000	0.000	0.000	3.413E+05	0.000
N0480	1.152E+04	0.000	0.000	4.029E+06	0.000

N0080	1.152E+04	0.000	0.000	1.215E+05	0.000
N0310	41.6	0.000	0.000	2.031E+05	0.000
N0300	1.152E+04	0.000	0.000	4.892E+05	0.000
N0460	1.152E+04	0.000	0.000	2.477E+06	0.000
N0440	1.152E+04	0.000	0.000	1.337E+06	0.000
N0330	0.000	0.000	0.000	9.119E+05	0.000
N0655	1.152E+04	0.000	0.000	3.301E+04	0.000
N0375	0.000	0.000	0.000	144.	0.000
N0385	0.000	0.000	0.000	68.7	0.000
N0275	0.000	0.000	0.000	8.091E+03	0.000
N0280	0.000	0.000	0.000	4.198E+04	0.000
N0202	4.434E+03	0.000	0.000	260.	0.000
N0340	0.000	0.000	0.000	6.104E+04	0.000
N0515	0.000	0.000	0.000	8.766E+05	0.000
N-001	0.000	0.000	0.000	4.910E+04	0.000
N-002	0.000	0.000	0.000	7.846E+03	0.000
N-003	0.000	0.000	0.000	818.	0.000
N-004	0.000	0.000	0.000	516.	0.000
N-005	0.000	0.000	0.000	1.014E+04	0.000
N-008	0.000	0.000	0.000	2.077E+04	0.000
N-010	0.000	0.000	0.000	2.861E+04	0.000
N-013	0.000	0.000	0.000	1.098E+05	0.000
N-015	0.000	0.000	0.000	9.561E+05	0.000
N-006	0.000	0.000	0.000	390.	0.000
N-007	0.000	0.000	0.000	332.	0.000
N-009	0.000	0.000	0.000	529.	0.000
N-011	0.000	0.000	0.000	567.	0.000
N-014	0.000	0.000	0.000	1.944E+04	0.000
N-012	0.000	0.000	0.000	363.	0.000
N-025	0.000	0.000	0.000	4.636E+04	0.000
N-023	0.000	0.000	0.000	6.978E+03	0.000
N-021	0.000	0.000	0.000	5.063E+03	0.000
N-019	2.189E+03	0.000	0.000	9.676E+04	0.000
N-041	1.741E+03	0.000	0.000	1.758E+05	0.000
N-020	0.000	0.000	0.000	6.313E+03	0.000
N-022	0.000	0.000	0.000	9.299E+03	0.000
N-024	0.000	0.000	0.000	5.680E+04	0.000
N-029	0.000	0.000	0.000	4.198E+04	0.000
N-026	0.000	0.000	0.000	340.	0.000
N-027	1.066E+04	0.000	0.000	1.901E+04	0.000
N-028	6.037E+03	0.000	0.000	1.987E+03	0.000
N-030	4.477E+03	0.000	0.000	1.092E+05	0.000
N-043	1.152E+04	0.000	0.000	7.056E+04	0.000
N-042	1.152E+04	0.000	0.000	2.478E+05	0.000
N-031	1.152E+04	0.000	0.000	1.015E+05	0.000
N-040	1.152E+04	0.000	0.000	1.440E+06	0.000
N0620	4.686E+03	0.000	0.000	1.647E+04	0.000
N0900	3.676E+03	0.000	0.000	552.	0.000
N-009mh	0.000	0.000	0.000	157.	0.000
N0205	4.444E+03	0.000	0.000	8.648E+04	0.000

N0386	0.000	0.000	0.000	669.	0.000
N0388	0.000	0.000	0.000	2.136E+03	0.000
N0775	0.000	0.000	0.000	6.252E+05	0.000
N2040	1.152E+04	0.000	0.000	1.181E+06	0.000
N2380	1.152E+04	0.000	0.000	1.294E+06	0.000
N0155	0.000	0.000	0.000	9.057E+03	0.000
N0945	1.152E+04	0.000	0.000	6.015E+05	0.000
N2002	0.000	0.000	0.000	4.337E+06	0.000
N2090	1.152E+04	0.000	0.000	5.491E+05	0.000
N0742	0.000	0.000	0.000	395.	0.000
N0910	3.579E+03	0.000	0.000	4.716E+04	0.000
N0880	0.000	0.000	0.000	3.564E+05	0.000
N9004	1.152E+04	0.000	0.000	58.6	0.000
N9004-B	1.152E+04	0.000	0.000	59.2	0.000
N9004-C	1.152E+04	0.000	0.000	56.0	0.000
N9004-D	1.152E+04	0.000	0.000	57.8	0.000
N9004-F	1.152E+04	0.000	0.000	38.8	0.000
N9001-B	0.000	0.000	0.000	38.3	0.000
N9001-D	0.000	0.000	0.000	23.4	0.000
N9001-F	1.152E+04	0.000	0.000	23.4	0.000
N9000	1.152E+04	0.000	0.000	37.1	0.000
N9003	1.152E+04	0.000	0.000	12.1	0.000
N9005	1.152E+04	0.000	0.000	12.1	0.000
N9005-E	1.152E+04	0.000	0.000	12.1	0.000
N9005-G	0.000	0.000	0.000	12.1	0.000
N9004-J	1.395E+03	0.000	0.000	40.8	0.000
N9004-G	91.0	0.000	0.000	37.8	0.000
N9002	0.000	0.000	0.000	28.5	0.000
N2370	0.000	0.000	0.000	3.524E+06	0.000
N9000-B	1.152E+04	0.000	0.000	37.1	0.000
N9000-C	1.152E+04	0.000	0.000	37.1	0.000
N9000-E	1.152E+04	0.000	0.000	37.1	0.000
N9000-F	3.699E+03	0.000	0.000	37.1	0.000
N9001-E	1.152E+04	0.000	0.000	38.3	0.000
N9001-G	0.000	0.000	0.000	23.4	0.000
N9001-H	1.152E+04	0.000	0.000	23.4	0.000
N9001-J	1.152E+04	0.000	0.000	14.2	0.000
N9001-K	1.152E+04	0.000	0.000	14.2	0.000
N9002-A	1.152E+04	0.000	0.000	28.5	0.000
N9002-B	1.152E+04	0.000	0.000	28.5	0.000
N9003-A	1.152E+04	0.000	0.000	12.1	0.000
N9003-B	1.152E+04	0.000	0.000	12.1	0.000
N9003-C	1.152E+04	0.000	0.000	12.1	0.000
N9003-D	0.000	0.000	0.000	12.1	0.000
N9003-E	1.152E+04	0.000	0.000	12.1	0.000
N9003-F	1.152E+04	0.000	0.000	12.1	0.000
N9003-G	0.000	0.000	0.000	12.1	0.000
N9004-A	1.152E+04	0.000	0.000	58.6	0.000
N9004-E	1.152E+04	0.000	0.000	57.8	0.000
N9004-H	1.152E+04	0.000	0.000	38.8	0.000

N9004-I	1.152E+04	0.000	0.000	38.8	0.000
N9004-K	1.152E+04	0.000	0.000	40.8	0.000
N9005-A	0.000	0.000	0.000	12.1	0.000
N9005-B	1.152E+04	0.000	0.000	12.1	0.000
N9005-C	1.152E+04	0.000	0.000	12.1	0.000
N9005-D	1.152E+04	0.000	0.000	12.1	0.000
N9005-F	0.000	0.000	0.000	12.1	0.000
N9005-H	1.152E+04	0.000	0.000	12.1	0.000
N9000-D	1.152E+04	0.000	0.000	40.3	0.000
N-0001A	1.152E+04	0.000	0.000	2.026E+07	0.000
N-0001B	0.000	0.000	0.000	2.610E+04	0.000
N0001-C	4.706E+03	0.000	0.000	1.127E+05	0.000
N-0001-E	9.100E+03	0.000	0.000	1.723E+04	0.000
N-0001E-OF	0.000	0.000	0.000	0.000	0.000
N-0001-F	4.717E+03	0.000	0.000	1.801E+05	0.000
N-0001-G	9.142E+03	0.000	0.000	6.241E+04	0.000
N-0001F-OF-A	0.000	0.000	0.000	0.000	0.000
N-0001F-OF-B	0.000	0.000	0.000	0.000	0.000
N9004-L	2.147E+03	0.000	0.000	58.6	0.000
N0001-J	4.680E+03	0.000	0.000	2.723E+05	0.000
N9005-J	1.152E+04	0.000	0.000	12.1	0.000
N9005-K	1.152E+04	0.000	0.000	12.1	0.000
N0001-I	9.131E+03	0.000	0.000	4.428E+05	0.000
N-0001K	9.136E+03	0.000	0.000	1.343E+05	0.000
N0140-A	0.000	0.000	0.000	8.065E+03	0.000

=====

| Simulation Specific Information |

=====

Number of Input Conduits.....	494	367	Number of Simulated Conduits.....
Number of Natural Channels.....	201	5	Number of Junctions.....
Number of Storage Junctions.....	74	149	Number of Weirs.....
Number of Orifices.....	1	0	Number of Pumps.....
Number of Free Outfalls.....	0	52	Number of Tide Gate Outfalls.....

=====

| Average % Change in Junction or Conduit is defined as: |

| Conduit % Change ==> 100.0 (Q(n+1) - Q(n)) / Qfull |

| Junction % Change ==> 100.0 (Y(n+1) - Y(n)) / Yfull |

=====

The Conduit with the largest average change was.. R0460-W2.1 with
0.109 percent

The Junction with the largest average change was. N0155 with

0.132 percent

The Conduit with the largest sinuosity was.....
1060.157

R0890-ORF-2 with

```

*=====
| Table E21. Continuity balance at the end of the simulation
|           Junction Inflow, Outflow or Street Flooding
| Error = Inflow + Initial Volume - Outflow - Final Volume
*=====
  
```

Inflow Junction	Inflow Volume,ft^3	Average Inflow, cfs
N0550	260818.7107	0.3773
N0690	39702.2466	0.0574
N0640	157382.9476	0.2277
N0780	248808.6792	0.3600
N0830	70375.2927	0.1018
N0790	556701.3961	0.8054
N0800	125116.2718	0.1810
N0870	415086.1488	0.6005
N0510	2.3806E+06	3.4442
N0520	3.8085E+06	5.5100
N0390	904948.1998	1.3092
N0350	320188.2434	0.4632
N0450	1.6175E+06	2.3402
N0770	282470.1901	0.4087
N0720	341253.9708	0.4937
N0960	54329.0761	0.0786
N0920	68920.3061	0.0997
N0950	236495.5050	0.3422
N0970	53023.6831	0.0767
N0915	1.4070E+06	2.0356
N0885	828518.4919	1.1987
N0560	377359.3082	0.5459
N0810	3.1530E+06	4.5617
N0570	331311.1802	0.4793
N0990	46382.5509	0.0671
N1000	117542.7120	0.1701
N1020	656127.4036	0.9493
N1030	69545.4007	0.1006
N0890	2.2932E+06	3.3177
N0850	1.1426E+06	1.6530
N0930	541996.6304	0.7841
N0980	1.5315E+06	2.2157
N1010	40499.2376	0.0586
N0430	273664.1873	0.3959
N0500	663440.2187	0.9598
N0230	216601.1008	0.3134

N0220	214039.1020	0.3097
N0200	159901.2714	0.2313
N0190	126338.6090	0.1828
N0130	244279.8440	0.3534
N0100	67535.7407	0.0977
N0090	164299.9388	0.2377
N0120	144814.7766	0.2095
N0110	438448.2026	0.6343
N0170	292932.6791	0.4238
N0210	343738.0964	0.4973
N0260	1.5563E+06	2.2516
N0250	131479.2674	0.1902
N0240	37351.5838	0.0540
N0140	635779.7830	0.9198
N0150	399750.1803	0.5783
N0270	539129.5589	0.7800
N0290	73750.1286	0.1067
N0180	275215.9828	0.3982
N0370	371948.5401	0.5381
N0285	983807.2641	1.4233
N0420	520628.8821	0.7532
N0490	3.3391E+06	4.8309
N0410	3.6449E+06	5.2733
N0380	358416.0505	0.5185
N0660	121469.3733	0.1757
N0740	306118.6366	0.4429
N0730	1.1553E+06	1.6714
N0940	1.0344E+06	1.4965
N0530	289126.2771	0.4183
N0060	791069.1973	1.1445
N0050	162408.7798	0.2350
N0325	258660.8129	0.3742
N0160	144792.8469	0.2095
N0470	3.9777E+06	5.7548
N0540	256571.4697	0.3712
N0650	159551.5049	0.2308
N0400	2.5862E+06	3.7417
N0360	108427.9554	0.1569
N0480	3.4513E+06	4.9932
N0080	120989.3429	0.1750
N0310	239853.3578	0.3470
N0300	183451.1375	0.2654
N0460	2.5891E+06	3.7458
N0440	1.2009E+06	1.7375
N0330	254474.2878	0.3682
N0655	395870.1054	0.5727
N0385	28386.0302	0.0411
N0275	83775.9112	0.1212
N0280	254300.0832	0.3679
N0340	1.4683E+06	2.1243

N0515	215567.3782	0.3119
N-001	420045.1037	0.6077
N-002	45023.1525	0.0651
N-003	40531.9973	0.0586
N-004	97482.0353	0.1410
N-005	62781.5397	0.0908
N-008	146552.6116	0.2120
N-010	119392.4852	0.1727
N-013	38088.3429	0.0551
N-015	159045.2381	0.2301
N-006	56649.6802	0.0820
N-007	41365.3402	0.0598
N-009	72239.1672	0.1045
N-011	112585.3287	0.1629
N-014	68565.6278	0.0992
N-012	118654.3287	0.1717
N-025	28523.0276	0.0413
N-023	13568.9637	0.0196
N-021	109636.8169	0.1586
N-019	116099.9177	0.1680
N-041	315255.1136	0.4561
N-020	72006.0214	0.1042
N-022	74616.9322	0.1080
N-024	152521.6916	0.2207
N-029	43954.6099	0.0636
N-026	5069.1468	0.0073
N-027	66118.5721	0.0957
N-028	9381.2663	0.0136
N-030	109166.2003	0.1579
N-043	69376.6007	0.1004
N-042	247475.1207	0.3580
N-031	100124.4254	0.1449
N-040	1.3665E+06	1.9770
N0620	16468.2354	0.0238
N0900	40.5515	0.0001
N0205	16220.5887	0.0235
N0386	28386.0302	0.0411
N0388	28386.0302	0.0411
N0775	222034.0275	0.3212
N2040	1.0841E+06	1.5685
N2380	277148.6479	0.4010
N0155	53325.1853	0.0771
N0945	591958.6683	0.8564
N2002	433149.1900	0.6267
N2090	514754.3321	0.7447
N0742	10948.8974	0.0158
N0910	104483.6376	0.1512
N0880	22843.0323	0.0330
N9004-B	10387.2452	0.0150
N9004-C	9949.5386	0.0144

N9004-D	9803.2683	0.0142
N9004-F	1092.3053	0.0016
N9001-D	22329.9796	0.0323
N9004-J	165513.7580	0.2395
N9004-G	2.0069E+06	2.9035
N9002	871040.8677	1.2602
N2370	1.0992E+06	1.5903
N9000-F	790360.8942	1.1435
N9001-G	1184.1867	0.0017
N9002-B	18788.5917	0.0272
N9003-A	791410.4706	1.1450
N9004-A	10060.4750	0.0146
N9004-K	10.1135E+06	14.6318
N9000-D	5.5512E+06	8.0313
N-0001A	16.3669E+06	23.6790
N-0001B	89212.5505	0.1291
N0001-C	132675.5631	0.1919
N-0001-E	21830.0654	0.0316
N-0001-F	271434.0775	0.3927
N-0001-G	62407.2360	0.0903
N9004-L	1.3554E+06	1.9609
N0001-J	426755.5999	0.6174
N0001-I	542638.9178	0.7851
N-0001K	141176.4487	0.2042
N0140-A	162.4825	0.0002
N0220	-0.0538	-0.0000
N-027	-33.1889	-0.0000
N9004-B	-283825.7658	-0.4106
N9004-C	-278060.1875	-0.4023
N9004-D	-281752.0460	-0.4076
N9004-F	-5.185E+06	-7.5017
N9001-B	-897097.4090	-1.2979
N9001-D	-72661.7348	-0.1051
N9005-G	-238272.7184	-0.3447
N9004-J	-2.437E+06	-3.5256
N9004-G	-525736.9850	-0.7606
N9002	-1.315E+06	-1.9025
N9000-F	-1.007E+06	-1.4562
N9001-G	-101436.4117	-0.1468
N9003-A	-1.341E+06	-1.9401
N9004-A	-283572.4738	-0.4103
N9004-K	-6.696E+06	-9.6877
N9005-C	-711524.5276	-1.0294
N9005-D	-44298.2400	-0.0641
N9005-F	-324851.1107	-0.4700
N9005-H	-5253.2031	-0.0076
N9000-D	-15.049E+06	-21.7724
N-0001E-OF	-7254.2516	-0.0105
N-0001F-OF-A	-192910.5771	-0.2791
N9004-L	-3.060E+06	-4.4274

N9005-J -202202.6330 -0.2925
 N9005-K -202202.6330 -0.2925

Outflow Junction	Outflow Volume,ft^3	Average Outflow, cfs
N0220	0.0538	0.0000
N-027	33.1889	0.0000
N9004-B	283825.7658	0.4106
N9004-C	278060.1875	0.4023
N9004-D	281752.0460	0.4076
N9004-F	5.1852E+06	7.5017
N9001-B	897097.4090	1.2979
N9001-D	72661.7348	0.1051
N9005-G	238272.7184	0.3447
N9004-J	2.4369E+06	3.5256
N9004-G	525736.9850	0.7606
N9002	1.3150E+06	1.9025
N9000-F	1.0065E+06	1.4562
N9001-G	101436.4117	0.1468
N9003-A	1.3410E+06	1.9401
N9004-A	283572.4738	0.4103
N9004-K	6.6961E+06	9.6877
N9005-C	711524.5276	1.0294
N9005-D	44298.2400	0.0641
N9005-F	324851.1107	0.4700
N9005-H	5253.2031	0.0076
N9000-D	15.0491E+06	21.7724
N-0001E-OF	7254.2516	0.0105
N-0001F-OF-A	192910.5771	0.2791
N9004-L	3.0602E+06	4.4274
N9005-J	202202.6330	0.2925
N9005-K	202202.6330	0.2925

```

*=====
| Initial system volume      = 33.52662E+06 Cu Ft |
| Total system inflow volume = 111.31441E+06 Cu Ft |
| Inflow + Initial volume   = 144.84103E+06 Cu Ft |
*=====
| Total system outflow       = 40.74305E+06 Cu Ft |
| Volume left (Final volume) = 103.57157E+06 Cu Ft |
| Evaporation                = 0.0000 Cu Ft |
| Basin Infiltration         = 0.0000 Cu Ft |
| Outflow + Final Volume     = 144.31462E+06 Cu Ft |
*=====

```

```

*=====
| Total Model Continuity Error |
| Error in Continuity, Percent = 0.3634 |

```

```
| Error in Continuity, ft^3    =    526407.1465 |
| + Error means a continuity loss, - a gain    |
*=====*
```

```
#####
# Table E22. Numerical Model judgement section #
#####
```

```
Overall error was (minimum of Table E18 & E21)           -0.0545 percent
Worst nodal error was in node N0520                      with    -0.7470 percent
Of the total inflow this loss was                        0.0342 percent
Your overall continuity error was                          Excellent
                                                           Excellent Efficiency
Efficiency of the simulation                              1.74
Most Number of Non Convergences at one Node              33442.
Total Number Non Convergences at all Nodes               94277.
Total Number of Nodes with Non Convergences              15.
```

```
#####
# Table E23. New Basin Design Information                #
#           Maximum Hydraulic Grade Line,                #
#           Out Conduit Sizes and Maximum Flow           #
#####
```

- A) Resize d/s Pipes based on given HGL
- B) Resize Basin based on given HGL
- C) Resize d/s Pipes and Basin based on HGL and max discharge
- D) Resize d/s pipes based on given max discharge

Basin Name	Type	Max.HGL	Conduit	Depth	Width
Barrels	Max.Flow	(ft)		(ft)	(ft)
	(ft^3/s)				

```
*=====*
| Hydraulics Layer Water Quality Analysis |
*=====*
```

Pollutant Name	Decay (lbs)	Influent Load(lbs)	Output Load(lbs)	Remaining Load(lbs)	Flooded Load(kgs)	Error (%)
PFOS		0.0000	9.1632E+04	132.7	6.7446E+04	26.25
PFOS	0.000	91632.327	132.6672	67446.374	0.0000	26.2498

 # Hydraulics Layer NODE Water Quality Summary #
 #####

Load Lost (lbs)	Junction Decay (lbs)	Pollutant ConstLoad (lbs)	Peak Conc. Interface (lbs)	Total Load UserDWFLoad (lbs)	Final Conc.	Final Load (lbs)
0.0000	N0335 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0550 0.0000	0.0000	PFOS 0.0000	61.7372 1352.2279 0.0000	55.6595	0.0921
0.0000	N0690 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0640 0.0000	0.0000	PFOS 0.0000	59.6735 1056.3018 0.0000	59.6735	0.2157
0.0000	N0780 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0830 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0790 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0800 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0870 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0510 0.0000	0.0000	PFOS 0.0000	5.0431 758.2490 0.0000	5.0431	0.0091

0.0000	N0520	0.0000	PFOS	3.7093	1521.7456	3.7093	0.0113
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0390	0.0000	PFOS	1.8740	498.5165	1.8740	0.0040
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0350	0.0000	PFOS	2.7826	176.4160	0.2513	0.0007
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0450	0.0000	PFOS	5.0247	1103.5653	4.8234	0.0088
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0770	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0720	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0960	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0920	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0950	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0970	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0915	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0885	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
	N0560		PFOS	2.5670	132.7320	1.8471	0.0052

0.0000	0.0000	0.0000	0.0000	0.0000			
0.0000	N0810 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0570 0.0000	0.0000	PFOS 0.0000	13.2386 0.0000	514.4685 0.0000	11.4656	0.0310
0.0000	N0990 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N1000 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N1020 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N1030 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0890 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0850 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0930 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0980 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N1010 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0430 0.0000	0.0000	PFOS 0.0000	87.2872 0.0000	1417.8233 0.0000	82.4528	0.0756

0.0000	N0500	0.0000	PFOS	5.3830	326.5687	5.3830	0.0111
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0230	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0220	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0200	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0190	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0130	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0100	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0090	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0120	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0110	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0170	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0210	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
	N0260		PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.0000			
0.0000	N0250 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0240 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0140 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0150 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0270 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0290 0.0000	0.0000	PFOS 0.0000	58.3992 0.0000	382.1685 0.0000	40.6689	0.0392
0.0000	N0180 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0370 0.0000	0.0000	PFOS 0.0000	5.7664 0.0000	107.0733 0.0000	1.1187	0.0011
0.0000	N0285 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0420 0.0000	0.0000	PFOS 0.0000	4.1733 0.0000	148.8097 0.0000	4.1733	0.0052
0.0000	N0490 0.0000	0.0000	PFOS 0.0000	83.5149 0.0000	17957.829 0.0000	6.0974	0.0116
0.0000	N0410 0.0000	0.0000	PFOS 0.0000	57.2091 0.0000	19196.539 0.0000	57.2091	0.1818

0.0000	N0380		PFOS	3.3813	106.6035	0.2825	0.0005
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0660		PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0740		PFOS	0.9168	10.9024	0.2369	0.0005
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0730		PFOS	0.8286	63.5261	0.4982	0.0013
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0940		PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0530		PFOS	11.5722	142.3738	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0060		PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0050		PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0325		PFOS	9.5378	159.4205	3.4742	0.0147
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0160		PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0470		PFOS	70.2551	20610.948	70.2551	0.1277
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0540		PFOS	8.4512	268.5520	8.1751	0.0019
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
	N0650		PFOS	5.4280	219.5066	3.3577	0.0053

0.0000	0.0000	0.0000	0.0000	0.0000			
0.0000	N0400 0.0000	0.0000	PFOS 0.0000	6.0380 0.0000	1442.9697 0.0000	5.9006	0.0169
0.0000	N0360 0.0000	0.0000	PFOS 0.0000	2.8957 0.0000	59.7359 0.0000	2.8055	0.0049
0.0000	N0480 0.0000	0.0000	PFOS 0.0000	71.1719 0.0000	17883.272 0.0000	71.1719	0.1161
0.0000	N0080 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0310 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0300 0.0000	0.0000	PFOS 0.0000	3.1628 0.0000	101.1404 0.0000	3.1466	0.0121
0.0000	N0460 0.0000	0.0000	PFOS 0.0000	8.1177 0.0000	1513.6847 0.0000	7.6822	0.0193
0.0000	N0440 0.0000	0.0000	PFOS 0.0000	7.9367 0.0000	661.7028 0.0000	7.9367	0.0146
0.0000	N0330 0.0000	0.0000	PFOS 0.0000	2.8858 0.0000	314.7601 0.0000	1.2761	0.0045
0.0000	N0655 0.0000	0.0000	PFOS 0.0000	6.3408 0.0000	405.4212 0.0000	4.7003	0.0108
0.0000	N0375 0.0000	0.0000	PFOS 0.0000	5.2158 0.0000	106.6464 0.0000	1.3839	0.0024
0.0000	N0385 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000

0.0000	N0275	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0280	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0202	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0340	0.0000	PFOS	9.1472	811.9250	9.1472	0.0203
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0515	0.0000	PFOS	1.0266	68.6601	0.4656	0.0007
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-001	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-002	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-003	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-004	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-005	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-008	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-010	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
	N-013		PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.0000			
0.0000	N-015 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-006 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-007 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-009 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-011 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-014 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-012 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-025 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-023 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-021 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-019 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-041 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000

0.0000	N-020	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-022	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-024	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-029	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-026	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-027	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-028	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-030	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-043	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-042	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-031	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N-040	0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000		
	N0620		PFOS	176.7230	110.5001	107.5779	0.0685

0.0000	0.0000	0.0000	0.0000	0.0000			
0.0000	N0900 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-009mh 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0205 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0386 0.0000	0.0000	PFOS 0.0000	49.5314 0.0000	147.0689 0.0000	0.0000	0.0000
0.0000	N0388 0.0000	0.0000	PFOS 0.0000	56.3266 0.0000	294.1364 0.0000	0.0000	0.0000
0.0000	N0775 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N2040 0.0000	0.0000	PFOS 0.0000	8.1101 0.0000	597.3470 0.0000	8.1101	0.0119
0.0000	N2380 0.0000	0.0000	PFOS 0.0000	70.6121 0.0000	5721.9943 0.0000	70.5860	0.1643
0.0000	N0155 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0945 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N2002 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N2090 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000

0.0000	N0742 0.0000	0.0000	PFOS 0.0000	112.6733 0.0000	75.6218 0.0000	0.0780	0.0001
0.0000	N0910 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0880 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9004 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9004-B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9004-C 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
99.0946	N9004-D 0.0000	0.0000	PFOS 0.0000	6.3406 0.0000	98.9720 0.0000	4.7289	0.0171
0.0000	N9004-F 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9001-B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9001-D 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9001-F 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9000 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
	N9003		PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.0000			
0.0000	N9005 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9005-E 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9005-G 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9004-J 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9004-G 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9002 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N2370 0.0000	0.0000	PFOS 0.0000	11.6682 0.0000	3263.5120 0.0000	9.8933	0.0233
0.0000	N9000-B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9000-C 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9000-E 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9000-F 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9001-E 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000

0.0000	N9001-G 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9001-H 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9001-J 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9001-K 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9002-A 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9002-B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
33.7310	N9003-A 0.0000	0.0000	PFOS 0.0000	1.0266 0.0000	33.6962 0.0000	0.0000	0.0000
0.0000	N9003-B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9003-C 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9003-D 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9003-E 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9003-F 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
	N9003-G		PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.0000			
0.0000	N9004-A 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9004-E 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9004-H 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9004-I 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9004-K 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9005-A 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9005-B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9005-C 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9005-D 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9005-F 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9005-H 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000
0.0000	N9000-D 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000	0.0000

0.0000	N-0001A 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-0001B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0001-C 0.0000	0.0000	PFOS 0.0000	11.8944 0.0000	73.0911 0.0000	8.8389	0.0032
0.0000	N-0001-E 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-0001E-OF 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-0001-F 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-0001-G 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-0001F-OF-A 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-0001F-OF-B 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9004-L 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0001-J 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N9005-J 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000	0.0000
	N9005-K		PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	0.0000	0.0000	0.0000	0.0000		
0.0000	N0001-I 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N-0001K 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000
0.0000	N0140-A 0.0000	0.0000	PFOS 0.0000	0.0000 0.0000	0.0000	0.0000

Hydraulics Layer LINK Water Quality Summary #
#####

Decay (lbs)	Conduit	Pollutant	Peak Conc.	Total Load (lbs)	Final Conc.	Final Load (lbs)
0.0000	R0870	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0770-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0900	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0370	PFOS	5.2587	106.5165	1.3322	0.0350
0.0000	R0280	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0202	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	RN-002	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-003	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-006	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-007	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-009	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-009MH	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-011	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-014	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-012	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-023	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-021	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-041	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-020	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	RN-022	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-024	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-026	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-027	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-028	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0742-P3	PFOS	102.3766	62.8005	0.0413	0.0019
0.0000	R0655-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0655-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0655-P4	PFOS	6.3406	98.9720	4.7289	0.1383
0.0000	R0120-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1010-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-025-P1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	RN-025-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0155-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0386	PFOS	49.1653	147.0675	0.0000	0.0000
0.0000	R0388	PFOS	56.3269	293.9362	0.0000	0.0000
0.0000	R0385	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0375	PFOS	4.2921	106.5905	1.6817	0.1852
0.0000	R0335	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R-0001B-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0540-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0540-P2	PFOS	8.4223	76.1974	8.1751	0.0007
0.0000	R0540-P3	PFOS	8.3707	64.7990	8.1459	0.0000
0.0000	R0290-P1	PFOS	3.4393	-0.0042	0.0304	0.0004
0.0000	R0285.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0250.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0230.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0220.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0200.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0190.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0170.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0180-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0180-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0140.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0140-P3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0150-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0150-P2	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0150-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0150-P4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0150-P5	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0110.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0130-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0130-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0100-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0100-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0310.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0430-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0430-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0430-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0430-P4	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0340-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0340-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0350-P1	PFOS	2.7826	87.0438	0.2533	0.0095
0.0000	R0350-P2	PFOS	2.7826	87.0438	0.2533	0.0095
0.0000	R0330-P1	PFOS	2.7574	5.5785	0.0518	0.0023
0.0000	R0330-P2	PFOS	2.7574	5.5785	0.0518	0.0023
0.0000	R0450-P1	PFOS	2.8858	106.1655	0.0000	0.0000
0.0000	R0450-P2	PFOS	2.8858	106.1655	0.0000	0.0000
0.0000	P0360-P1	PFOS	2.8055	0.0555	2.8055	0.0046
0.0000	P0360-P2	PFOS	2.8053	0.0532	2.8053	0.0062
0.0000	R0550-P1	PFOS	0.7146	0.4481	0.4706	0.0088
0.0000	R0550-P2	PFOS	0.7146	0.4453	0.4706	0.0088

0.0000	R0560-P1	PFOS	0.7449	2.4352	0.4682	0.0224
0.0000	R0560-P2	PFOS	0.7447	3.0427	0.4676	0.0222
0.0000	R0560-P3	PFOS	0.7447	3.0508	0.4676	0.0223
0.0000	R0780.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0740.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0730.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0880.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0950.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0920.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0960.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0990.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1010-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1010-P4	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R1010-P5	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0980-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0980-P2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0850-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0850-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0850-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0570-P1	PFOS	13.1380	37.8335	0.0000	0.0000
0.0000	R0570-P2	PFOS	13.1434	40.9952	0.0000	0.0000
0.0000	R0570-P3	PFOS	13.1460	41.6083	0.0000	0.0000
0.0000	R0770-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0770-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0770-P4	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0790-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0790-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0530-P1	PFOS	8.8696	51.4773	8.0921	0.0003
0.0000	R0530-P2	PFOS	9.3551	25.5666	2.9096	0.0001
0.0000	R0530-P3	PFOS	8.4503	65.2238	8.1052	0.0006
0.0000	R0910-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0910-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0380-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0380-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0300-P1	PFOS	3.1381	2.5451	3.1381	0.0248
0.0000	R0300-P2	PFOS	3.1381	2.5451	3.1381	0.0248
0.0000	R0290-P2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-004-P1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	RN-004-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-004-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-001-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-001-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-001-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-005-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-005-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-005-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-008-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-008-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-008-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-010-P1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	RN-010-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-010-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-013-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-013-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-013-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-015-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-015-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-015-P3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-029-P1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-029-P2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0742-P1	PFOS	102.0933	4.7314	0.1166	0.0009
0.0000	R0742-P2	PFOS	102.0933	4.7314	0.1166	0.0009
0.0000	R0655-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0490-P8	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0490-P7	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0140-P2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0140-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0120-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0160-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0325-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0400-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0880-P2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1010-P1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R-0410-P4	PFOS	57.2016	448.2872	57.2016	0.4311
0.0000	R-0410-P5	PFOS	57.2016	448.2872	57.2016	0.4311

0.0000	R-0410-P6	PFOS	57.2018	451.6421	57.2018	0.4248
0.0000	R-0410-P7	PFOS	57.2016	451.0111	57.2016	0.4310
0.0000	R0410-P1	PFOS	6.4004	0.4558	0.0000	0.0000
0.0000	R0410-P2	PFOS	6.4004	0.4558	0.0000	0.0000
0.0000	R0410-P3	PFOS	6.4004	0.4558	0.0000	0.0000
0.0000	498.1	PFOS	11.5011	653.3070	9.8933	0.0975
0.0000	R0490-P1.1	PFOS	83.5215	920.9768	0.0000	0.0000
0.0000	R0490-P3	PFOS	83.5216	1089.4169	0.0000	0.0000
0.0000	R0490-P4	PFOS	83.5216	1067.6183	0.0000	0.0000
0.0000	R0490-P5	PFOS	83.5216	1063.4506	0.0000	0.0000
0.0000	R0490-P6	PFOS	83.5216	1063.8518	0.0000	0.0000
0.0000	R0890-ORF-2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0890-ORF-5	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0890ORF-3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0890-ORF-4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	N0140-A-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0540-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0290-P5	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0285-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0250-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0230-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0220-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0200-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0190-W4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0170-W3	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0180-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0140-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0150-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0110-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0130-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0100-W4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0310-W5.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0430-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0340-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0350-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0330-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0360-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0550-W2	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0560-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0780-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0740-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0870-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0950-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0960-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0990-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1010-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0980-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0850-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0770-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0530-W4	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0380-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0300-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0290-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0655-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0140-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0120-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0160-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0400-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0880-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1010-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0490-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0050-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0050-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0060-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0080-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0080-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0090-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0090-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0090-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0090-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0100-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0100-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0100-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0110-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0120-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0130-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0150-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0150-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0170-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0170-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0190-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0190-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0190-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0200-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0200-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0220-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0240-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0240-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0240-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0240-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0240-W5.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0240-W6.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0250-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0250-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0260-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0270-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0270-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0270-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0275-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0280-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0285-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0290-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0290-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0290-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0300-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0310-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0310-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0310-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0310-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0325-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0330-W2.1	PFOS	2.8792	17.9917	1.2782	0.1320
0.0000	R0330-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0340-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0340-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0350-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0350-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0360-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0360-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0370-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0370-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0370-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0380-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0380-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0380-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0390-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0390-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0400-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0410-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0420-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0420-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0430-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0430-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0440-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0450-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0450-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0460-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0460-W2.1	PFOS	8.0949	258.5752	7.6822	400.0056
0.0000	R0480-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0480-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0480-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0490-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0490-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0500-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0510-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0520-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0520-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0530-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0530-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0530-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0540-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0540-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0550-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0550-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0560-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0560-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0560-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0560-W5.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0570-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0570-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0570-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0570-W5.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0640-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0650-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0660-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0660-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0690-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0720-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0730-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0740-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0740-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0775-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0780-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0790-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0800-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0800-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0810-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0830-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0850-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0870-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0885-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0910-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0930-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0940-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0940-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0945-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0950-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0960-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0960-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0960-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0980-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0990-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0990-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1000-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1020-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1030-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1030-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R2002-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R02040-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R2090-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R2370-W4.1	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R2380-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R2380-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0440-W2.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R015-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R020-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R021-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R030-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R031-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R042-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R043-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0850-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0880-WPump	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0920-P2-W1	PFOS	0.0000	0.0000	0.0000	0.0000

R0920-P2-W2 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0910-W1 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0325-DS-W1 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0400-WPump 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0880-WPump2 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0880-DS-W1 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0520-DS-W1 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0640-P1-W1 0.0000	PFOS	59.6735	405.1946	59.6735	0.1475
R0640-P1-W2 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0640-P2-W1 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0690-P1-W1 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000
R0940-DS-W1 0.0000	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0945-DS-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R1020-DS-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0205-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0205-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0205-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0205-W4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0210-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0515-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0515-W2.1	PFOS	1.0266	33.6962	0.0000	0.0000
0.0000	R0620-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0620-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0620-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0650-W2.1	PFOS	5.4280	210.6302	3.3577	0.0000

0.0000	R0660-W3.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0742-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0890-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0915-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	RN-019-P1-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R019-P1-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0830-P1-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0830-P1-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0970-P1-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0970-P1-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R-0001A-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R-0001A-W2	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0001C-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001C-W2	PFOS	8.8518	16.2357	0.0000	0.0000
0.0000	R0001C-W3	PFOS	10.8880	19.9553	8.8389	0.0016
0.0000	R0001E-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001F-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001F-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001F-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001F-W4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001F-W5	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R001G-W1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0930-W6.1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R000J-W2	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R000J-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R000J-W4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R000J-W5	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R000J-W6	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R000J-W7	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W8	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W9	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W10	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W11	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W12	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W13	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	R0001J-W14	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	R0001I-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R001I-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R0001I-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R001I-W4	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R001I-W5	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R0001I-W7	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R0001I-W7.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R0001K-W1.1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R0001K-W2	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R0001K-W3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	R0880-PUMP	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	FREE# 1	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000						
0.0000	FREE# 2	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	FREE# 3	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE# 4	PFOS	6.3406	98.9712	4.7289	0.0000
0.0000	FREE# 5	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE# 6	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE# 7	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE# 8	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE# 9	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#10	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#11	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#12	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#13	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#14	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	FREE#15	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#16	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#17	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#18	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#19	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#20	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#21	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#22	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#23	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#24	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#25	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#26	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#27	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	FREE#28	PFOS	1.0266	33.6960	0.0000	0.0000
0.0000	FREE#29	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#30	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#31	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#32	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#33	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#34	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#35	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#36	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#37	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#38	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#39	PFOS	0.0000	0.0000	0.0000	0.0000

0.0000	FREE#40	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#41	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#42	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#43	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#44	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#45	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#46	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#47	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#48	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#49	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#50	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#51	PFOS	0.0000	0.0000	0.0000	0.0000
0.0000	FREE#52	PFOS	0.0000	0.0000	0.0000	0.0000

 # Erosion - Deposition Mean Particle Sizes #
 #####

Element Name	WQ Parameter	Mean Suspended	Mean Deposited
R0870	PFOS	0.0000	0.0000
R0770-P2	PFOS	0.0000	0.0000
R0900	PFOS	0.0000	0.0000
R0370	PFOS	0.0000	0.0000
R0280	PFOS	0.0000	0.0000
R0202	PFOS	0.0000	0.0000
RN-002	PFOS	0.0000	0.0000
RN-003	PFOS	0.0000	0.0000
RN-006	PFOS	0.0000	0.0000
RN-007	PFOS	0.0000	0.0000

RN-009	PFOS	0.0000	0.0000
RN-009MH	PFOS	0.0000	0.0000
RN-011	PFOS	0.0000	0.0000
RN-014	PFOS	0.0000	0.0000
RN-012	PFOS	0.0000	0.0000
RN-023	PFOS	0.0000	0.0000
RN-021	PFOS	0.0000	0.0000
RN-041	PFOS	0.0000	0.0000
RN-020	PFOS	0.0000	0.0000
RN-022	PFOS	0.0000	0.0000
RN-024	PFOS	0.0000	0.0000
RN-026	PFOS	0.0000	0.0000
RN-027	PFOS	0.0000	0.0000

RN-028	PFOS	0.0000	0.0000
R0742-P3	PFOS	0.0000	0.0000
R0655-P2	PFOS	0.0000	0.0000
R0655-P3	PFOS	0.0000	0.0000
R0655-P4	PFOS	0.0000	0.0000
R0120-P2	PFOS	0.0000	0.0000
R1010-P2	PFOS	0.0000	0.0000
RN-025-P1	PFOS	0.0000	0.0000
RN-025-P2	PFOS	0.0000	0.0000
R0155-P1	PFOS	0.0000	0.0000
R0386	PFOS	0.0000	0.0000
R0388	PFOS	0.0000	0.0000

R0385	PFOS	0.0000	0.0000
R0375	PFOS	0.0000	0.0000
R0335	PFOS	0.0000	0.0000
R-0001B-P1	PFOS	0.0000	0.0000
R0540-P1	PFOS	0.0000	0.0000
R0540-P2	PFOS	0.0000	0.0000
R0540-P3	PFOS	0.0000	0.0000
R0290-P1	PFOS	0.0000	0.0000
R0285.1	PFOS	0.0000	0.0000
R0250.1	PFOS	0.0000	0.0000
R0230.1	PFOS	0.0000	0.0000
R0220.1	PFOS	0.0000	0.0000
R0200.1	PFOS	0.0000	0.0000

R0190.1	PFOS	0.0000	0.0000
R0170.1	PFOS	0.0000	0.0000
R0180-P1	PFOS	0.0000	0.0000
R0180-P2	PFOS	0.0000	0.0000
R0140.1	PFOS	0.0000	0.0000
R0140-P3.1	PFOS	0.0000	0.0000
R0150-P1	PFOS	0.0000	0.0000
R0150-P2	PFOS	0.0000	0.0000
R0150-P3	PFOS	0.0000	0.0000
R0150-P4	PFOS	0.0000	0.0000
R0150-P5	PFOS	0.0000	0.0000
R0110.1	PFOS	0.0000	0.0000

R0130-P1	PFOS	0.0000	0.0000
R0130-P2	PFOS	0.0000	0.0000
R0100-P1	PFOS	0.0000	0.0000
R0100-P2	PFOS	0.0000	0.0000
R0310.1	PFOS	0.0000	0.0000
R0430-P1	PFOS	0.0000	0.0000
R0430-P2	PFOS	0.0000	0.0000
R0430-P3	PFOS	0.0000	0.0000
R0430-P4	PFOS	0.0000	0.0000
R0340-P1	PFOS	0.0000	0.0000
R0340-P2	PFOS	0.0000	0.0000
R0350-P1	PFOS	0.0000	0.0000
R0350-P2	PFOS	0.0000	0.0000

R0330-P1	PFOS	0.0000	0.0000
R0330-P2	PFOS	0.0000	0.0000
R0450-P1	PFOS	0.0000	0.0000
R0450-P2	PFOS	0.0000	0.0000
P0360-P1	PFOS	0.0000	0.0000
P0360-P2	PFOS	0.0000	0.0000
R0550-P1	PFOS	0.0000	0.0000
R0550-P2	PFOS	0.0000	0.0000
R0560-P1	PFOS	0.0000	0.0000
R0560-P2	PFOS	0.0000	0.0000
R0560-P3	PFOS	0.0000	0.0000
R0780.1	PFOS	0.0000	0.0000

R0740.1	PFOS	0.0000	0.0000
R0730.1	PFOS	0.0000	0.0000
R0880.1	PFOS	0.0000	0.0000
R0950.1	PFOS	0.0000	0.0000
R0920.1	PFOS	0.0000	0.0000
R0960.1	PFOS	0.0000	0.0000
R0990.1	PFOS	0.0000	0.0000
R1010-P3	PFOS	0.0000	0.0000
R1010-P4	PFOS	0.0000	0.0000
R1010-P5	PFOS	0.0000	0.0000
R0980-P1.1	PFOS	0.0000	0.0000
R0980-P2.1	PFOS	0.0000	0.0000
R0850-P1	PFOS	0.0000	0.0000

R0850-P2	PFOS	0.0000	0.0000
R0850-P3	PFOS	0.0000	0.0000
R0570-P1	PFOS	0.0000	0.0000
R0570-P2	PFOS	0.0000	0.0000
R0570-P3	PFOS	0.0000	0.0000
R0770-P1.1	PFOS	0.0000	0.0000
R0770-P3	PFOS	0.0000	0.0000
R0770-P4	PFOS	0.0000	0.0000
R0790-P1	PFOS	0.0000	0.0000
R0790-P2	PFOS	0.0000	0.0000
R0530-P1	PFOS	0.0000	0.0000
R0530-P2	PFOS	0.0000	0.0000

R0530-P3	PFOS	0.0000	0.0000
R0910-P1	PFOS	0.0000	0.0000
R0910-P2	PFOS	0.0000	0.0000
R0380-P1	PFOS	0.0000	0.0000
R0380-P2	PFOS	0.0000	0.0000
R0300-P1	PFOS	0.0000	0.0000
R0300-P2	PFOS	0.0000	0.0000
R0290-P2.1	PFOS	0.0000	0.0000
RN-004-P1	PFOS	0.0000	0.0000
RN-004-P2	PFOS	0.0000	0.0000
RN-004-P3	PFOS	0.0000	0.0000
RN-001-P1	PFOS	0.0000	0.0000
RN-001-P2	PFOS	0.0000	0.0000

RN-001-P3	PFOS	0.0000	0.0000
RN-005-P1	PFOS	0.0000	0.0000
RN-005-P2	PFOS	0.0000	0.0000
RN-005-P3	PFOS	0.0000	0.0000
RN-008-P1.1	PFOS	0.0000	0.0000
RN-008-P2	PFOS	0.0000	0.0000
RN-008-P3	PFOS	0.0000	0.0000
RN-010-P1	PFOS	0.0000	0.0000
RN-010-P2	PFOS	0.0000	0.0000
RN-010-P3	PFOS	0.0000	0.0000
RN-013-P1	PFOS	0.0000	0.0000
RN-013-P2	PFOS	0.0000	0.0000

RN-013-P3	PFOS	0.0000	0.0000
RN-015-P1	PFOS	0.0000	0.0000
RN-015-P2	PFOS	0.0000	0.0000
RN-015-P3	PFOS	0.0000	0.0000
RN-029-P1	PFOS	0.0000	0.0000
RN-029-P2	PFOS	0.0000	0.0000
R0742-P1	PFOS	0.0000	0.0000
R0742-P2	PFOS	0.0000	0.0000
R0655-P1.1	PFOS	0.0000	0.0000
R0490-P8	PFOS	0.0000	0.0000
R0490-P7	PFOS	0.0000	0.0000
R0140-P2.1	PFOS	0.0000	0.0000
R0140-P1.1	PFOS	0.0000	0.0000

R0120-P1.1	PFOS	0.0000	0.0000
R0160-P1.1	PFOS	0.0000	0.0000
R0325-P1.1	PFOS	0.0000	0.0000
R0400-P1.1	PFOS	0.0000	0.0000
R0880-P2.1	PFOS	0.0000	0.0000
R1010-P1.1	PFOS	0.0000	0.0000
R-0410-P4	PFOS	0.0000	0.0000
R-0410-P5	PFOS	0.0000	0.0000
R-0410-P6	PFOS	0.0000	0.0000
R-0410-P7	PFOS	0.0000	0.0000
R0410-P1	PFOS	0.0000	0.0000
R0410-P2	PFOS	0.0000	0.0000

R0410-P3	PFOS	0.0000	0.0000
498.1	PFOS	0.0000	0.0000
R0490-P1.1	PFOS	0.0000	0.0000
R0490-P3	PFOS	0.0000	0.0000
R0490-P4	PFOS	0.0000	0.0000
R0490-P5	PFOS	0.0000	0.0000
R0490-P6	PFOS	0.0000	0.0000
R0890-ORF-2	PFOS	0.0000	0.0000
R0890-ORF-5	PFOS	0.0000	0.0000
R0890ORF-3	PFOS	0.0000	0.0000
R0890-ORF-4	PFOS	0.0000	0.0000
N0140-A-W1.1	PFOS	0.0000	0.0000
R0540-W3	PFOS	0.0000	0.0000

R0290-P5	PFOS	0.0000	0.0000
R0285-W2	PFOS	0.0000	0.0000
R0250-W1	PFOS	0.0000	0.0000
R0230-W1	PFOS	0.0000	0.0000
R0220-W2	PFOS	0.0000	0.0000
R0200-W3	PFOS	0.0000	0.0000
R0190-W4	PFOS	0.0000	0.0000
R0170-W3	PFOS	0.0000	0.0000
R0180-W1	PFOS	0.0000	0.0000
R0140-W1	PFOS	0.0000	0.0000
R0150-W3	PFOS	0.0000	0.0000
R0110-W1	PFOS	0.0000	0.0000

R0130-W1	PFOS	0.0000	0.0000
R0100-W4	PFOS	0.0000	0.0000
R0310-W5.1	PFOS	0.0000	0.0000
R0430-W3	PFOS	0.0000	0.0000
R0340-W3	PFOS	0.0000	0.0000
R0350-W1	PFOS	0.0000	0.0000
R0330-W1	PFOS	0.0000	0.0000
R0360-W1	PFOS	0.0000	0.0000
R0550-W2	PFOS	0.0000	0.0000
R0560-W1	PFOS	0.0000	0.0000
R0780-W1	PFOS	0.0000	0.0000
R0740-W3	PFOS	0.0000	0.0000
R0870-W1	PFOS	0.0000	0.0000

R0950-W1	PFOS	0.0000	0.0000
R0960-W2	PFOS	0.0000	0.0000
R0990-W2	PFOS	0.0000	0.0000
R1010-W2	PFOS	0.0000	0.0000
R0980-W2	PFOS	0.0000	0.0000
R0850-W2	PFOS	0.0000	0.0000
R0770-W2	PFOS	0.0000	0.0000
R0530-W4	PFOS	0.0000	0.0000
R0380-W3	PFOS	0.0000	0.0000
R0300-W2	PFOS	0.0000	0.0000
R0290-W1	PFOS	0.0000	0.0000
R0655-W2	PFOS	0.0000	0.0000

R0140-W2	PFOS	0.0000	0.0000
R0120-W2	PFOS	0.0000	0.0000
R0160-W1	PFOS	0.0000	0.0000
R0400-W1	PFOS	0.0000	0.0000
R0880-W2	PFOS	0.0000	0.0000
R1010-W1	PFOS	0.0000	0.0000
R0490-W2	PFOS	0.0000	0.0000
R0050-W1.1	PFOS	0.0000	0.0000
R0050-W2.1	PFOS	0.0000	0.0000
R0060-W1.1	PFOS	0.0000	0.0000
R0080-W1.1	PFOS	0.0000	0.0000
R0080-W2.1	PFOS	0.0000	0.0000
R0090-W1.1	PFOS	0.0000	0.0000

R0090-W2.1	PFOS	0.0000	0.0000
R0090-W3.1	PFOS	0.0000	0.0000
R0090-W4.1	PFOS	0.0000	0.0000
R0100-W1.1	PFOS	0.0000	0.0000
R0100-W2.1	PFOS	0.0000	0.0000
R0100-W3.1	PFOS	0.0000	0.0000
R0110-W2.1	PFOS	0.0000	0.0000
R0120-W1.1	PFOS	0.0000	0.0000
R0130-W2.1	PFOS	0.0000	0.0000
R0150-W1.1	PFOS	0.0000	0.0000
R0150-W2.1	PFOS	0.0000	0.0000
R0170-W1.1	PFOS	0.0000	0.0000

R0170-W2.1	PFOS	0.0000	0.0000
R0190-W1.1	PFOS	0.0000	0.0000
R0190-W2.1	PFOS	0.0000	0.0000
R0190-W3.1	PFOS	0.0000	0.0000
R0200-W1.1	PFOS	0.0000	0.0000
R0200-W2.1	PFOS	0.0000	0.0000
R0220-W1.1	PFOS	0.0000	0.0000
R0240-W1.1	PFOS	0.0000	0.0000
R0240-W2.1	PFOS	0.0000	0.0000
R0240-W3.1	PFOS	0.0000	0.0000
R0240-W4.1	PFOS	0.0000	0.0000
R0240-W5.1	PFOS	0.0000	0.0000
R0240-W6.1	PFOS	0.0000	0.0000

R0250-W2.1	PFOS	0.0000	0.0000
R0250-W3.1	PFOS	0.0000	0.0000
R0260-W1.1	PFOS	0.0000	0.0000
R0270-W1.1	PFOS	0.0000	0.0000
R0270-W3	PFOS	0.0000	0.0000
R0270-W2.1	PFOS	0.0000	0.0000
R0275-W1.1	PFOS	0.0000	0.0000
R0280-W1.1	PFOS	0.0000	0.0000
R0285-W1.1	PFOS	0.0000	0.0000
R0290-W2.1	PFOS	0.0000	0.0000
R0290-W3.1	PFOS	0.0000	0.0000
R0290-W4.1	PFOS	0.0000	0.0000

R0300-W1.1	PFOS	0.0000	0.0000
R0310-W1.1	PFOS	0.0000	0.0000
R0310-W2.1	PFOS	0.0000	0.0000
R0310-W3.1	PFOS	0.0000	0.0000
R0310-W4.1	PFOS	0.0000	0.0000
R0325-W2.1	PFOS	0.0000	0.0000
R0330-W2.1	PFOS	0.0000	0.0000
R0330-W3.1	PFOS	0.0000	0.0000
R0340-W1.1	PFOS	0.0000	0.0000
R0340-W2.1	PFOS	0.0000	0.0000
R0350-W2.1	PFOS	0.0000	0.0000
R0350-W3.1	PFOS	0.0000	0.0000
R0360-W2.1	PFOS	0.0000	0.0000

R0360-W3.1	PFOS	0.0000	0.0000
R0370-W1.1	PFOS	0.0000	0.0000
R0370-W2.1	PFOS	0.0000	0.0000
R0370-W3.1	PFOS	0.0000	0.0000
R0380-W1.1	PFOS	0.0000	0.0000
R0380-W2.1	PFOS	0.0000	0.0000
R0380-W4.1	PFOS	0.0000	0.0000
R0390-W1.1	PFOS	0.0000	0.0000
R0390-W2	PFOS	0.0000	0.0000
R0400-W2.1	PFOS	0.0000	0.0000
R0410-W1.1	PFOS	0.0000	0.0000
R0420-W1.1	PFOS	0.0000	0.0000

R0420-W2.1	PFOS	0.0000	0.0000
R0430-W1.1	PFOS	0.0000	0.0000
R0430-W2.1	PFOS	0.0000	0.0000
R0440-W1.1	PFOS	0.0000	0.0000
R0450-W1.1	PFOS	0.0000	0.0000
R0450-W2.1	PFOS	0.0000	0.0000
R0460-W1.1	PFOS	0.0000	0.0000
R0460-W2.1	PFOS	0.0000	0.0000
R0480-W1.1	PFOS	0.0000	0.0000
R0480-W2.1	PFOS	0.0000	0.0000
R0480-W3.1	PFOS	0.0000	0.0000
R0490-W1.1	PFOS	0.0000	0.0000
R0490-W3.1	PFOS	0.0000	0.0000

R0500-W1.1	PFOS	0.0000	0.0000
R0510-W2.1	PFOS	0.0000	0.0000
R0520-W1.1	PFOS	0.0000	0.0000
R0520-W2.1	PFOS	0.0000	0.0000
R0530-W1.1	PFOS	0.0000	0.0000
R0530-W2.1	PFOS	0.0000	0.0000
R0530-W3	PFOS	0.0000	0.0000
R0540-W1.1	PFOS	0.0000	0.0000
R0540-W2.1	PFOS	0.0000	0.0000
R0550-W1.1	PFOS	0.0000	0.0000
R0550-W3.1	PFOS	0.0000	0.0000
R0560-W2.1	PFOS	0.0000	0.0000

R0560-W3.1	PFOS	0.0000	0.0000
R0560-W4.1	PFOS	0.0000	0.0000
R0560-W5.1	PFOS	0.0000	0.0000
R0570-W1.1	PFOS	0.0000	0.0000
R0570-W3.1	PFOS	0.0000	0.0000
R0570-W4.1	PFOS	0.0000	0.0000
R0570-W5.1	PFOS	0.0000	0.0000
R0640-W1.1	PFOS	0.0000	0.0000
R0650-W1.1	PFOS	0.0000	0.0000
R0660-W1.1	PFOS	0.0000	0.0000
R0660-W2.1	PFOS	0.0000	0.0000
R0690-W2.1	PFOS	0.0000	0.0000
R0720-W1.1	PFOS	0.0000	0.0000

R0730-W1.1	PFOS	0.0000	0.0000
R0740-W2.1	PFOS	0.0000	0.0000
R0740-W4.1	PFOS	0.0000	0.0000
R0775-W1.1	PFOS	0.0000	0.0000
R0780-W2.1	PFOS	0.0000	0.0000
R0790-W1	PFOS	0.0000	0.0000
R0800-W1.1	PFOS	0.0000	0.0000
R0800-W2.1	PFOS	0.0000	0.0000
R0810-W1.1	PFOS	0.0000	0.0000
R0830-W3.1	PFOS	0.0000	0.0000
R0850-W3.1	PFOS	0.0000	0.0000
R0870-W2.1	PFOS	0.0000	0.0000

R0885-W1.1	PFOS	0.0000	0.0000
R0910-W2.1	PFOS	0.0000	0.0000
R0930-W1.1	PFOS	0.0000	0.0000
R0940-W1.1	PFOS	0.0000	0.0000
R0940-W2.1	PFOS	0.0000	0.0000
R0945-W1.1	PFOS	0.0000	0.0000
R0950-W2.1	PFOS	0.0000	0.0000
R0960-W1.1	PFOS	0.0000	0.0000
R0960-W3.1	PFOS	0.0000	0.0000
R0960-W4.1	PFOS	0.0000	0.0000
R0980-W1.1	PFOS	0.0000	0.0000
R0990-W1.1	PFOS	0.0000	0.0000
R0990-W3.1	PFOS	0.0000	0.0000

R1000-W1.1	PFOS	0.0000	0.0000
R1020-W1.1	PFOS	0.0000	0.0000
R1030-W1.1	PFOS	0.0000	0.0000
R1030-W2.1	PFOS	0.0000	0.0000
R2002-W1.1	PFOS	0.0000	0.0000
R02040-W1.1	PFOS	0.0000	0.0000
R2090-W1.1	PFOS	0.0000	0.0000
R2370-W4.1	PFOS	0.0000	0.0000
R2380-W2.1	PFOS	0.0000	0.0000
R2380-W3.1	PFOS	0.0000	0.0000
R0440-W2.1	PFOS	0.0000	0.0000
R015-W1.1	PFOS	0.0000	0.0000

R020-W1.1	PFOS	0.0000	0.0000
R021-W1.1	PFOS	0.0000	0.0000
R030-W1.1	PFOS	0.0000	0.0000
R031-W1.1	PFOS	0.0000	0.0000
R042-W1.1	PFOS	0.0000	0.0000
R043-W1.1	PFOS	0.0000	0.0000
R0850-W1.1	PFOS	0.0000	0.0000

==> Hydraulic model simulation ended normally.

==> XP-SWMM Simulation ended normally.

==> Your input file was named :

C:\Users\james.condon\Documents\Work\KSA\KSA_Models\KSA_Model_Copy_V22_A\1D\KSA_Model
1_Sept 2020\KSA_Model_Sept 2020.DAT

==> Your output file was named :

C:\Users\james.condon\Documents\Work\KSA\KSA_Models\KSA_Model_Copy_V22_A\1D\KSA_Model
1_Sept 2020\KSA_Model_Sept 2020.out

```

*=====
|           XPSWMM/XPSTORM Simulation Date and Time Summary           |
*=====
| Starting Date... June          7, 2021  Time... 11:04:15.651  |
| Ending Date...  June          7, 2021  Time... 11:14:02.438  |
| Elapsed Time...   9.73229 minutes or   583.93750 seconds  |
*=====

```

This page intentionally left blank.

APPENDIX E

SUBMARINE GROUNDWATER DISCHARGE CALCULATION

This page intentionally left blank.

Appendix E
Terrestrial Submarine Groundwater Discharge vs. Stormwater Discharge

PARAMETER	VALUE	UNITS	SOURCE
Average PFOS Concentration	25	ng/L	Approximate surface water PFOS concentration along Banana River
Length of Shoreline	17,250	feet	Approximate distance along Banana River
Terrestrial SGD - Low	0.02	m ³ /d/m	Martin et al. (2007)
Terrestrial SGD - High	0.9	m ³ /d/m	Martin et al. (2007)
Length of Storm Event	7	days	XPSWMM Simulation (Section 4.0)
PFOS Discharge - Terrestrial SGD - Low	0.018	grams	
PFOS Discharge - Terrestrial SGD - High	0.828	grams	
Basins Discharging to Banana River - PFOS Discharge			
655	0.19	grams	Table 4-1
490	8.16	grams	Table 4-1
025	0.16	grams	Table 4-1
410	8.71	grams	Table 4-1
930	0.25	grams	Table 4-1
2002	0.25	grams	Table 4-1
2370	1.49	grams	Table 4-1
2380	2.6	grams	Table 4-1
Total Discharge	21.81	grams	
Percentage of PFOS Discharge via Surface Water - Low	99.9%		
Percentage of PFOS Discharge via Surface Water - High	96.3%		

This page intentionally left blank.

APPENDIX F

JUNE 2021 KSCRT MEETING MINUTES

This page intentionally left blank.

Revision 0 Meeting Minutes for June 22 and 23, 2021

Attendees:

- | | |
|------------------------------|--------------------------------|
| 1. Bruce Moore/FDEP | 13. Howard Fowler/Tetra Tech |
| 2. Mike Deliz/NASA | 14. Chris Pike/Tetra Tech |
| 3. Ryan O’Meara/NASA | 15. James Lloyd/Tetra Tech |
| 4. Deda Johansen/NASA | 16. Scott Anderson/Tetra Tech |
| 5. Anne Chrest/NASA | 17. Sarah Dampousse/Tetra Tech |
| 6. Natasha Darre/NASA | 18. Jennifer Joyal/AECOM |
| 7. Dinh Vo/NASA | 19. Linnea King/AECOM |
| 8. Rosaly Santos-Ebaugh/NASA | 20. Steve Cobert/AECOM |
| 9. Glenn Semmel/NASA | 21. Matthew Zenker/AECOM |
| 10. Michelle Moore/NEMCON | 22. Richard Smith/HGL |
| 11. Mark Jonnet/Tetra Tech | |
| 12. Jennifer Buel/Tetra Tech | |

2106-M01 Team

Meeting Minutes and Miscellaneous Items

Team consensus was reached that Revision 1 of the meeting minutes and action/decision items for the April 2021 Team meeting will become final. Team members acknowledged and did not object to the fact that these meeting minutes may become public as part of a final report at a later date **(2106-D01)**.

Open action items were reviewed by the Team. The following action item was closed out:

Area South of K7-0516 and Eastern Component Cleaning Facility (SWMU #030) Interim Measure, Operation, Maintenance, & Monitoring, and Performance Monitoring and Interim Groundwater Monitoring, April 2021: An action item to incorporate surface water sampling into the CCF monitoring program was assigned to NASA and Tetra Tech.

This surface water sampling was incorporated in the barge canal area sampling program moving forward **(Closed 2104-A01)**.

Results: Decision Items 2106-D01

2106-M02 Bruce Moore /FDEP

FDEP Program Update, June 2021

Goal: The objective is to summarize any changes at FDEP and provide pertinent news since the last Kennedy Space Center (KSC) Remediation Team (KSCRT) meeting.

Discussion: Bruce Moore provided a quick update on the program. He has been having discussions with the RCRA folks regarding scheduling workshops for affected parties to be able to attend. Bruce appreciates the Team's assistance with providing background information, as well as their patience as he gets up to speed. Bruce has been assigned additional responsibility, with the Homestead Base Realignment and Closure (BRAC) locations, in addition to being assigned to KSC, the Cape, and Patrick Space Force Base.

2106-M03 Mike Deliz/NASA

NASA Remediation Program Updates, June 2021

Goal: The objective is to provide an overview of the RCRA site management process for NASA's Solid Waste Management Units (SWMU) and Potential Release Locations (PRL) at KSC and Cape Canaveral Space Force Station (CCSFS) and to exchange general program information with FDEP.

Discussion: NASA is awaiting response from FDEP on a Site Rehabilitation Completion Order (SRCO) for the Digital Air Surveillance Tower Site (DAST) PRL #197. NASA's last status update from FDEP on this site was correspondence from Kirk Johnson stating the SRCO submittal looked good back in February of 2021. NASA mentioned that closing this site is very important to their program.

NASA would like to get clarification on what should be submitted for site closures. Is FDEP looking for the Memorandum of Decision writeup from NASA for these sites similar to that produced by the Air Force for CCSFS? FDEP responded they are looking for succinct write ups that represent all contaminants that existed at a site and how these contaminants were addressed (removed). FDEP is not necessarily looking for the lengthy write up.

NASA informed FDEP that SRCO request letters for the following sites will be forthcoming: Manhole Dewatering Operations (Locations of Concern [LOCs] 7A, 7B, and 10) PRL #204, Area 3 Repeater Building PRL #210, Stand-Alone Electrical Equipment (LOC 16) PRL #227b, and Stand-Alone Electrical Equipment (LOC 29) PRL #227c.

NASA stated that they have not had to produce a Statement of Basis (SB) in about seven years. They want to ensure the existing template is still acceptable. The template NASA uses was developed in conjunction with the Air Force in the late 1990's/early 2000's, and the Air Force later diverged from the developed template and added more and more information to their documents. NASA maintained a concise SB format. Also, is it the expectation of the State that these SBs are updated once Interim Measures (IMs) are completed at sites? Sites like SWMU #77 (Vertical Processing Facility) and SWMU #104 (KSC Headquarters Building) have had remedies implemented (e.g., air sparge, soil removal), since the first SB iteration was published. NASA has not updated SBs for many sites that have had remedies implemented. Is this update more of an administrative thing?

FDEP stated that, regarding the existing SB template being acceptable, it would be best for FDEP and NASA to have a follow up meeting to review the current template. FDEP and NASA can decide from there **(2106-A01)**.

Regarding updating the SB after an IM has taken place at a site after initial SB publication, FDEP agrees that this is an administrative item and it does have significance. For the Federal Facilities Branch, it may not be critical to see the change in SB post IM, but the RCRA Program may have a different perspective. We need an understanding of what are considered significant changes on the permit, what triggers public notification, etc. That is a conversation NASA and FDEP should have to provide firmer ground on what is required going forward **(2106-A02)**.

NASA stated they were interviewed by Florida Today a couple of weeks ago as a follow-up to a Freedom of Information Act request for KSC plume shape files. NASA directed the reporter to its public facing website with links to documents related to per- and polyfluoroalkyl substances (PFAS) for KSC. The interviewer is searching for other NASA documents in FDEP's Oculus. Bruce

noted that he had received an email today where Florida Today requested assistance locating these documents. NASA stated they will provide the Oculus names to Bruce to assist with the inquiry (2106-A03). FDEP appreciates the assistance.

Results: Action Item 2106-A01, A02, A03

2106-M04 Matt Zenker /AECOM

Predictive Integrated Stratigraphic Modeling (PRISM) Report Center-Wide Per- and Polyfluoroalkyl Substances (PFAS) PRL #237, June 2021

Goal: The purpose of the ADP is to present an updated center-wide conceptual site model (CSM) specific to the fate and transport of per- and polyfluoroalkyl substances (PFAS) in groundwater and surface water.

Discussion: An update to KSC's existing CSM was performed through evaluations of regional, intermediate, and local subsurface stratigraphy, a hydrogeological investigation, a stormwater investigation, and a forensic investigation. This information will allow KSC to better understand and predict fate and transport of PFAS compounds in groundwater and surface water.

Subsurface Stratigraphy

The heterogeneity and varying dispositional environments within the stratigraphy influence the fate and transport of PFAS. Eight cross sections were developed using geophysical logs derived from newly installed and existing monitoring wells. Cross sections were reviewed with the Team. Direct push technology (DPT) and surface water sampling points were overlaid on some of the cross sections to show the relation of perfluorooctanesulfonic acid (PFOS) concentrations in surface water and groundwater in relation to stratigraphy. As more soil, groundwater and surface water data is collected, continued interpretation of these data in combination with the detailed cross section will help guide if and where the Team chooses to implement remediation.

The PFAS plumes at KSC appear to be limited in size while surface water impacts are more extensive laterally. The Center as a whole is well drained (many ditches, surface water bodies, channels, etc.), and it may be that groundwater/surface water interaction helps keep plume sizes relatively small. Based on literature reports, PFAS tend to preferentially accumulate within the capillary fringe (i.e., vadose

zone) of the subsurface. As the vadose zone is most likely to contribute to groundwater/surface water interaction, this phenomena may be important at KSC for addressing PFAS in surface water. The accumulation of PFAS in the capillary fringe has not been directly observed at KSC, but is a data gap that should be addressed in subsequent investigations.

Hydrogeological Investigation

Two synoptic rounds of water level measurements were completed to evaluate seasonal differences in upper and lower aquifers (wet and dry) and to evaluate Center-wide groundwater flow patterns . Transducers were also deployed at 15 groundwater and 3 surface water locations to measure water level, salinity/conductivity and temperature.

Elevations at outfall transducer locations were generally lower than shallow groundwater elevation. Groundwater recharges primarily in the higher, central portions of the Center. Shallow and deep wells water levels respond to precipitation events. There is a fresh groundwater lens under KSC, which discharges at the boundaries between land and the Indian or Banana Rivers. This freshwater lens shrinks during dry conditions due to saltwater encroachment. There is a potential for localized shallow groundwater discharge to smaller surface water basins (in addition to the larger, overall discharge to estuarine bodies).

Stormwater Investigation

The objective of this investigation was to create a stormwater PFAS loading model to estimate mass flux within surface water. If areas of high surface water PFAS mass flux could be identified, off-site PFAS migration could be reduced by targeting remediation within these areas. AECOM noted that stormwater modeling does have limitations with regards to actual PFAS mass discharge into surface water but does allow comparison of mass discharge between basins and/or between wet and dry seasons.

NASA inquired when was the PFAS data collected? AECOM stated the PFAS data was collected near the end of the wet season and again a few months later for the dry season. It was found that 19 basins contribute 76% of the surface water PFAS load. Example, preliminary calculations suggest that PFAS discharge from surface water to the Banana River lagoon contributes more PFAS than does groundwater discharge to the lagoon.

First flush mechanism was illustrated showing that pollutant loading is generally highest at the beginning of a rain event. To confirm the accuracy of the numbers used in calculating pollutant loading, it requires auto samplers to obtain first flush data. FDEP inquired about loading and flushing and requested AECOM to expand on the topic of buildup/washout. What is the mechanism of buildup?

AECOM explained a first flush event using stormwater run-off and oil/grease distribution as an illustration. Leaks occur on the roadway and oil/grease builds up in dry periods. As rain comes it washes off and the oil/grease concentration spikes at the beginning of a rain event. For PFAS, what is that mechanism? It may be that PFAS concentrations in surface water rises the more groundwater discharges into the basin. Not definitive; this is a data gap. Another example is that PFAS has been shown to be retained in concrete and can be washed out by rainfall. This is another data gap to fill as we go along.

Recommendations moving forward: based on outfalls of concern, identify where to take continuous sampling to determine buildup/washout of the pollutant and to determine the exponent (the 'exponent' is an input parameter used to predict the first flush loading), examine the seasonal fluctuation of the discharge; and evaluate the correlation of annual rainfall with discharges to the lagoons once more sampling data is obtained. A key point to take away is that groundwater baseflow (groundwater recharge of surface water) is likely an important mechanism for off-site PFAS transport.

Forensic Investigation

Principal component analysis of PFAS groundwater and surface water data can be utilized to evaluate different source signatures. The objective is to determine if chemical patterns are present in PFAS distribution on the Center. Discernable fingerprints exist within the limited PFAS analyte list. There is a complex geospatial distribution of fingerprints, consistent with high number of potential sources. Several distinct potential source fingerprints were identified at KSC. The aqueous film forming foam (AFFF) signature is most prevalent to date.

PFAS CSM Synopsis

Thus far, ground application of PFAS appears to be the major release mechanism, with smaller contributions from the release of treated water and residuals from wastewater treatment plants. In surface

water and groundwater, PFAS mass flux to the east is predominant. We will look further at what the anthropogenic sources of PFAS there are. For storage and flux, there will be additional evaluation of sorption in the vadose zone and in concrete, and in clay lenses in the saturated zone.

NASA provided historical information on how the PFAS investigation came about and the Conceptual Site Model. In 2019, CS results from a Phase I investigation were submitted for the Hydrocarbon Burn Facility site. FDEP's prior representative requested a better understanding of PFAS transport and its groundwater and surface water interface. Hence, the beginning of this Center-wide investigation and the PRISM effort for KSC. NASA is continuing the Center-wide PFAS SWMU Assessment to identify more potential areas of concern. The plan is to expand sampling at a number of sites to help us better understand the groundwater and surface water interface. FDEP responded this is a worthwhile effort and this research has applications both here and elsewhere.

2106-M05 Steve Cobert/AECOM

Q6 Radar Station (SWMU #112) Soil Interim Measure (IM) Work Plan, June 2021

Goal: The purpose is to present the results of the RCRA Facility Investigation for Location of Concern (LOC) 3, Radar Antenna Refurbishment Area.

Discussion: On February 22, 2021, five soil borings (Q6RS-SB0058 through Q6RS-SB0062) were advanced via hand-auger with soil samples collected at surface (0-0.5' below land surface [bls]) and subsurface (0.5-2.0' bls) depth intervals. Soil samples collected at 0.5' interval, were analyzed by fixed lab for barium and copper by EPA Method SW6010D. The 2.0' interval samples were held pending analysis. Results revealed that barium exceeded the residential soil cleanup target level (rSCTL) in the Q6RS-SB0059 at the 0.5' interval; copper exceeded the rSCTL in the Q6RS-SB0062 at the 0.5' interval. The 2.0' interval samples collected from Q6RS-SB0059 and Q6RS-SB0058 were then analyzed for barium and copper and neither barium nor copper were detected in the 2.0' interval samples at concentrations exceeding rSCTL criteria.

This page intentionally left blank.

Appendix E

Non-Potable Well Sampling Memorandum

Phase II and III SWMU Assessment and Confirmatory Sampling Report
Center-Wide PFAS PRL 237
Revision: 0
May 2022

This page intentionally left blank.

To: Michael Deliz (NASA)

Cc:

From: Mark Speranza (Tetra Tech), Chris Pike (Tetra Tech), and Jen Buel (Tetra Tech)

Date: 2 July 2021

Subject: Non-Potable Well Sampling for Per- and Polyfluoroalkyl Substances
Kennedy Space Center, Florida

This Technical Memorandum has been prepared by Tetra Tech, Inc. (Tetra Tech) to summarize the sampling of eleven non-potable wells for the presence of per- and polyfluoroalkyl substances (PFAS) at Kennedy Space Center (KSC), Florida. Sampling activities were conducted on May 30-31, 2019 and June 5, 2019. The location of each well sampled is included on Figure 1 as an attachment to this memo. The wells are labeled with the number of the structure associated with the well. Each sample ID includes the structure number identifier as shown on Figure 1. Photos of each well and the surrounding area are provided as an attachment to this memo.

Samples were collected per the Tetra Tech Standard Operating Procedure SA – 1.8, titled “Sample Acquisition for PFAS Analysis” and analyzed for 18 PFAS compounds by liquid chromatography and tandem mass spectrometry (LC-MS/MS) following EPA Method 537.1. Sample results are included in Table 1 as an attachment to this memo. Laboratory packages for the samples are provided as an attachment to this memo. The results for each sample are summarized in the table below. All results are less than the provisional Florida Groundwater Cleanup Target Levels of 70 nanograms per liter (ng/L) for PFOA and PFOS, as well as 70 ng/L for PFOA and PFOS combined.

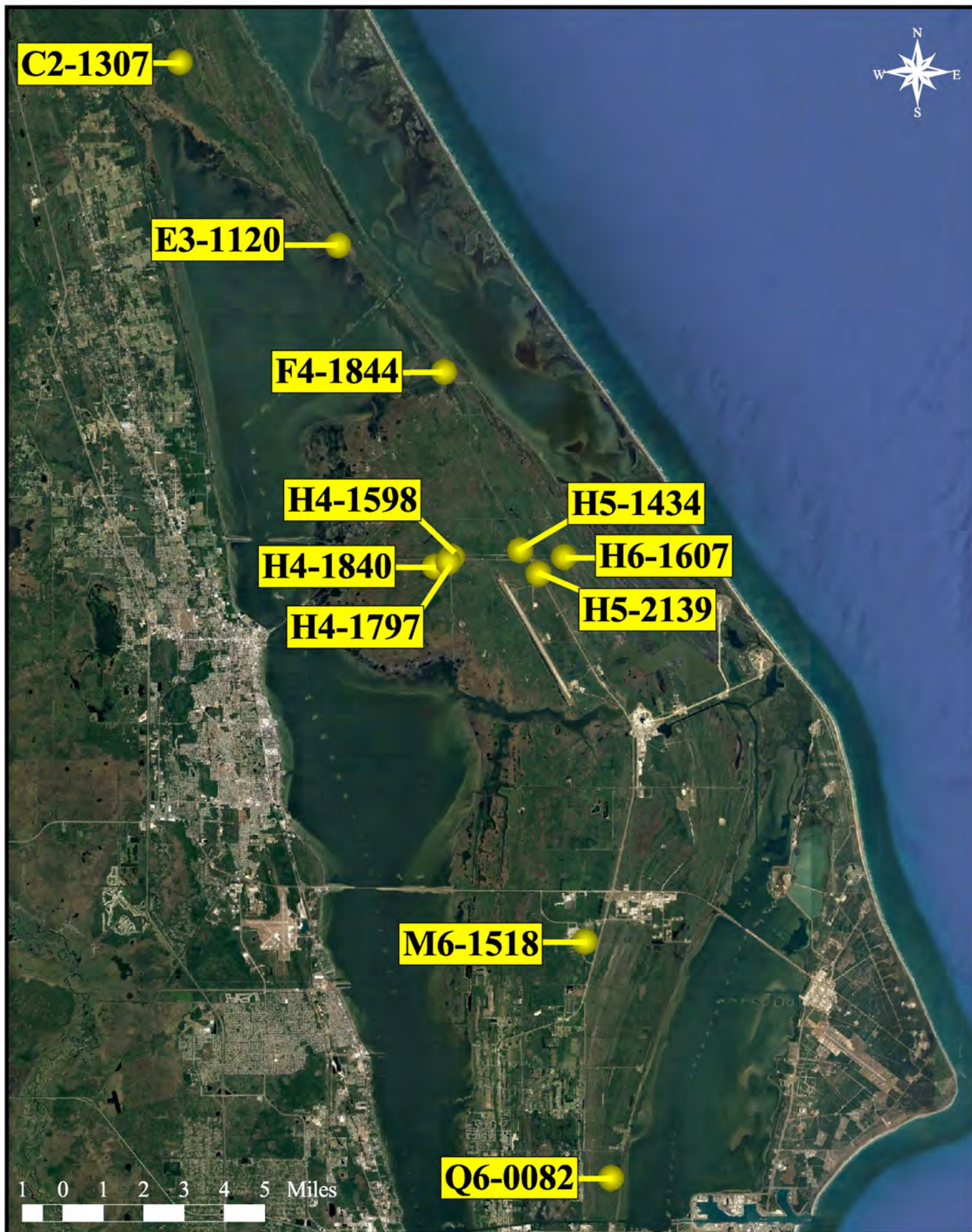
Sample ID	Results
Q6-0082-DW0001-20190530	All analytes below laboratory detection limits.
H6-1607-DW0001-20190530	All analytes below laboratory detection limits.
M6-1518-DW0001-20190531	All analytes below laboratory detection limits.
H5-2139-DW0001-20190531	All analytes below laboratory detection limits.
H5-1434-DW0001-20190531	All analytes below laboratory detection limits.
H4-1598-DW0001-20190531	PFHxS = 1.02 ng/L; PFOS = 0.34 ng/L;
F4-1844-DW0001-20190531	PFOA = 0.2 ng/L; PFBS = 0.17 ng/L; PFOS = 0.21 ng/L
E3-1120-DW0001-20190531	PFBS = 1.94 ng/L; PFHxS = 2.6 ng/L; PFOS = 1.19 ng/L
H4-1797-DW0001-20190531	PFHxA = 2.54 ng/L; PFHpA = 1.39 ng/L; PFOA = 0.8 ng/L; PFHxS = 2.53 ng/L; PFOS = 1.52 ng/L
H4-1840A-DW0001-20190531	PFHxA = 3.62 ng/L; PFHpA = 1.95 ng/L; PFOA = 3.43 ng/L; PFNA = 0.24 ng/L; PFDA = 0.14 ng/L; PFBS = 39.39 ng/L; PFHxS = 13.31 ng/L; PFOS = 10.55 ng/L
C2-1307-DW0001-20190605	PFBS = 0.22 ng/L; PFHxS = 1.38 ng/L; PFOS = 2.49 ng/L

This page intentionally left blank.

Figures

This page intentionally left blank.

FIGURE 1 NON-POTABLE WELL SAMPLING LOCATIONS
KENNEDY SPACE CENTER, FLORIDA



This page intentionally left blank.

Tables

This page intentionally left blank.

Table 1. Non-Potable Well Sampling Results

Sample ID	Q6-0082-DW0001-20190530	H6-1607-DW0001-20190530	M6-1518-DW0001-20190531	H5-2139-DW0001-20190531	H5-1434-DW0001-20190531	H4-1598-DW0001-20190531	F4-1844-DW0001-20190531	E3-1120-DW0001-20190531	H4-1797-DW0001-20190531	H4-1840A-DW0001-20190531	C2-1307-DW0001-20190605
Collection Date	05/30/2019	05/30/2019	05/31/2019	05/31/2019	05/31/2019	05/31/2019	05/31/2019	05/31/2019	05/31/2019	05/31/2019	06/05/2019
Analyte	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)	Result (ng/L)
PFHxA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.54	3.62	0.21 U
PFHpA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	1.39 I	1.95 I	0.21 U
PFOA	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.2 I	0.18 U	0.8 I	3.43	0.18 U
PFNA	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.24 I	0.11 U
PFDA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 I	0.1 U
PFUnA	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
PFDoA	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
PFTTrDA	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
PFTeDA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
NMeFOSAA	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.18 U
NEtFOSAA	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U	0.16 U	0.15 U
PFBS	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.17 I	1.94 I	0.11 U	39.39	0.22 I
PFHxS	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	1.02 I	0.11 U	2.6	2.53	13.31	1.38 I
PFOS	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.34 I	0.21 I	1.19 I	1.52 I	10.55	2.49
HFPO-DA	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Adona	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
11Cl-PF3OUdS	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
9Cl-PF3ONS	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U

ng/L - nanogram per liter

U - Analyte not detected or detected below the Detection Limit.

I - Reported value is greater than or equal to the laboratory Detection Limit but less than the laboratory Limit of Quantitation

This page intentionally left blank.

Photos

This page intentionally left blank.



Photo 1: 05/30/2019 Q6-0082



Photo 2: 05/30/2019 Q6-0082 Sampling Port and Setup



Photo 3: 05/30/2019 H6-1607



Photo 4: 05/30/2019 H6-1607 Interior and Sampling Port



Photo 5: 05/31/2019 M6-1518



Photo 6: 05/31/2019 M6-1518 Interior



Photo 7: 05/31/2019 H5-2139



Photo 8: 05/31/2019 H5-2139 Interior



Photo 9: 05/31/2019 H5-1434 area



Photo 10: 05/31/2019 H5-1434 Interior



Photo 11: 05/31/2019 H4-1598



Photo 12: 05/31/2019 H4-1598 Interior



Photo 13: 05/31/2019 F4-1844 Interior



Photo 14: 05/31/2019 F4-1844 Interior



Photo 15: 05/31/2019 E3-1120



Photo 16: 05/31/2019 F4-1844 Interior



Photo 17: 05/31/2019 H4-1797



Photo 18: 05/31/2019 H4-1797 Interior



Photo 19: 05/31/2019 H4-1840A



Photo 20: 05/31/2019 H4-1840A Interior



Photo 21: 06/05/2019 C2-1307



Photo 22: 06/05/2019 Well Located near C2-1307

This page intentionally left blank.

Laboratory Packages

This page intentionally left blank.



National Aeronautics and
Space Administration

PERMISSION TO PUBLISH

Battelle Memorial Institute grants NASA and the U.S. Government permission to reproduce, publish, and distribute Resource Conservation and Recovery Act (RCRA) Program Documents, submitted in 2019 or beyond, hereinafter referred to as “the Work,” in any form, language, or manner, now or hereafter known or developed, throughout the world, and to authorize others to do so on its behalf; provided, however, that (i) any intellectual property identification and copyright protection marks of Battelle Memorial Institute shall not be removed from the Work, and (ii) the Work may only be published in a complete form that includes details and the date of issue.

Battelle Memorial Institute certifies that the Work does not infringe any existing copyright, proprietary right, or other right of a third party; and all clearance permissions, if necessary, to use materials of third parties have been obtained.

A handwritten signature in black ink, appearing to read "H. Jones", written over a horizontal line.

Signature

06/24/2021

Date

Battelle Memorial Institute
Harrison Jones
Contracts Associate
505 King Avenue
Columbus, Ohio 43201-2696
614-424-3168
Jonesh@battelle.org

PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
DW, QC
Batch 19-0465
Package DP-19-0407

Submitted to:
Tetra Tech
661 Anderson Drive Foster Plaza 7
Pittsburgh, PA 15220 USA

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

BATTELLE

It can be done


PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
DW, QC
Batch 19-0465
Package DP-19-0407

Submitted to:
Tetra Tech
661 Anderson Drive Foster Plaza 7
Pittsburgh, PA 15220 USA

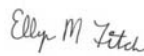
NELAP Accreditation Number: E87856 (Florida Department of Health)
DoD-ELAP Accreditation Number: 91667

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

Analyst Approval:


Digitally signed by
Lauren Griffith
Date: 2019.06.05
13:05:36 -04'00'

QC Chemist Approval:



Digitally signed by Ellyn M. Fitch
Date: 2019.06.06 09:37:25 -04'00'

Project Manager Approval:




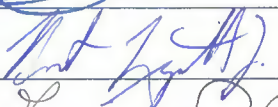
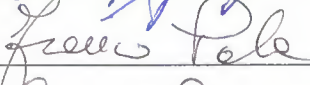





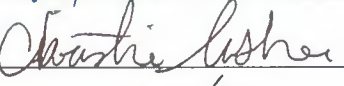

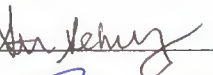

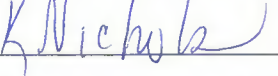



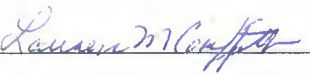
Digitally signed by Jonathan Thorn
Date: 2019.06.07 06:42:43 -04'00'

BATTELLE
It can be done

PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
DW, QC
Batch 19-0465
Package DP-19-0407

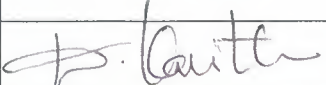

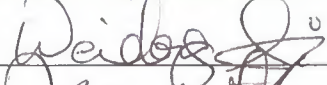
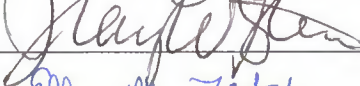
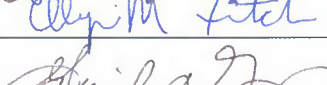
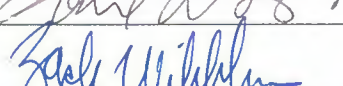
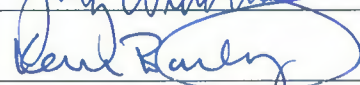
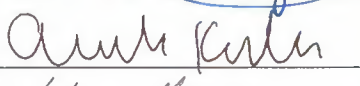


1	<i>Work Plan</i> Laboratory Work Plan, Addendums To Work Plan, Memos From Project Manager, Special Instructions, Chain-of-Custody Reports.	1
2	<i>Tables</i> Analytical Data Tables, Qualifier Definitions.	19
3	<i>Miscellaneous Documentation</i> Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	38
4	<i>Sample Preparation Records</i> Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	108
5	<i>Analytical Calibrations</i> Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	123
6	<i>Analytical Data</i> Raw Data Quantification Reports.	204
7	<i>Chromatograms</i> Sample And Standard Chromatograms.	245
8	<i>Unused Data</i>	316

Signature Page

Battelle 2018 (1 of 2) Signature Page			
Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4-4-2018
FRANC PALA		FP	4-4-2018
Carla Devine		CRD	4/4/18
Denise Schumitz		DNS	4/4/18
Carolus Peummeay		CPM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mena		MM	4/4/2018
Christie Usher		CU	4/4/18
Kevin Matroney		KM	4/4/18
Stephanie Schmitz		SAS	4/4/18
Jordan Tower		JT	4/4/18
KRISTEN NICHOLS		KN	4/4/18
Quimiao H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith		LMG	4.4.18

Signature Page

Battelle 2018 (2 of 2)
Signature Page

Name (Printed)	Signature	Initials	Date
KAVITHA DASU		KD	04/04/18
Kayla Lamarre		KAL	04/04/18
Weidong Li		W.L	04/04/18
Tracy W Stenner		TWS	04/04/18
Ellyn M Fitch		EF	12-April-2018
Gail DeRuzzo		GD	4/18/18
Zachary Willenberg		Z/W	4/20/18
Kevin Bailey		KB	10/25/18
Andrea Kulda		AK	10/25/18
William Mendelsohn		WM	10/25/18

Sample Summary

Client: Tetra Tech, Inc

SDG: 19-0465

Project/Site: Nasa Kennedy Space Center

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CU242PB-FS	Procedural Blank	WATER	6/3/2019	6/3/2019
CU243LCS-FS	Laboratory Control Sample	WATER	6/3/2019	6/3/2019
I3451-FS	Q6-0082-DW0001-20190530	DW	5/30/2019	6/1/2019
I3453-FS	H6-1607-DW0001-20190530	DW	5/30/2019	6/1/2019
I3455-FS	M6-1518-DW0001-20190531	DW	5/31/2019	6/1/2019
I3457-FS	H5-2139-DW0001-20190531	DW	5/31/2019	6/1/2019
I3459-FS	H5-1434-DW0001-20190531	DW	5/31/2019	6/1/2019
I3461-FS	H4-1598-DW0001-20190531	DW	5/31/2019	6/1/2019
I3463-FS	F4-1844-DW0001-20190531	DW	5/31/2019	6/1/2019
I3463MS-FS	F4-1844-DW0001-20190531	DW	5/31/2019	6/1/2019
I3463MSD-FS	F4-1844-DW0001-20190531	DW	5/31/2019	6/1/2019
I3465-FS	E3-1120-DW0001-20190531	DW	5/31/2019	6/1/2019
I3466-FS	E3-1120-FD-20190531-01	QC	5/31/2019	6/1/2019
I3468-FS	H4-1797-DW0001-20190531	DW	5/31/2019	6/1/2019
I3470-FS	H4-1840A-DW0001-20190531	DW	5/31/2019	6/1/2019

Work Plan



WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title: Nasa: PFAS Drinking Water
Project Number: 100123260
Client: Tetra Tech
 661 Anderson Drive Foster Plaza 7
 Pittsburgh, PA 15220
 USA

Client Contact Information: Chris Pike
 Project Manager
 (412) 921-8861(V)
 NA
 chris.pike@tetrattech.com

Effective Date of QAPP: 6/3/2019
Version Number: 100123260(L)-02
Project Manager: Thorn, Jonathan
Laboratory Task Manager: Thorn, Jonathan
Deliverable Due Date: 6/5/2019

2.0 SCOPE OF WORK

Overview: Analysis of drinking water samples at Nasa Kennedy Space Center.
Matrix: Water

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

The list of samples for this project plan are presented in Attachment 1.

Storage Directions: Store refrigerated.
Sub_Sampling: None
Procedures: NA
Contact: NA
Comment: NA
Archiving: Dispose of samples six months after final report has been delivered. Notify client prior to disposal of samples.
Disposal: Dispose of samples in proper waste stream.



WORK/QUALITY ASSURANCE PROJECT PLAN

2.1.2 Sample Preparation

NA

Samples Expected:	Samples Per Batch:	Batches Expected:
30	20	2

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

Type:	Description:	Count:	Rgt:	Reference:	Comment:
PB	Laboratory control reagent blank.	1 per batch	--	NA	
LCS	Laboratory Control Sample	1 per batch	No	NA	
MS	Spiked field sample for determining method accuracy in the presence of matrix.	1 per batch	--	NA	MS/MSD defined on custody records
MSD	Spiked field sample for determining method accuracy and precision in the presence of matrix.	1 per batch	--	NA	MS/MSD defined on custody records

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

SOP No.-Rev:	5-371-04
SOP Title:	<i>ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1</i>
Sample Size:	250 mL
SIS and LCS/MS Compounds:	Defined in Table 2.
Deviations:	None
Comments:	None

Table 2: SIS and LCS/MS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Surrogate Solution	KJ90 SIS	~ 0.100 - 0.40 ng	50 uL	NA



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Second Source LCS/MS Solution	KJ91 LCS/MS	~ 5.0 - 6.3 ng	125 uL	NA

2.1.3.2 Cleanup

None.

RIS spiking levels are presented in Table 3.

Extract PIV (uL): 1000

Table 3: RIS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Internal Standard Solution	KJ92 RIS	~ 0.100 - 0.40 ng	50 uL	NA

2.1.4 Instrumental Analysis

The list of analytes along with data quality criteria are presented in Attachment 2.

- 1) SOP_No-Rev: **5-371-04**
- SOP_Title: *ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1*
- Deviations: None
- Comments: None

2.2. DELIVERABLES

Deliverables Due:	6/5/2019
LIMS Reports:	No
Histograms:	No
Excel Tables:	No
EICs:	No
Chromatograms:	No



WORK/QUALITY ASSURANCE PROJECT PLAN

EDDs: *No*

Comments:

- Excel tables for rush samples to Project Manager within 3-business days (full data package within 10 days).
- L2 validation package not required
- Tetra Tech EDD format
- Full validation packages (see SOW for details)
- Florida reporting template and qualifiers (see SOW for details)

3.0 QUALITY

The Method Quality Objectives are defined in Attachment 3.

4.0 ORGANIZATION AND COMMUNICATION

4.1 ORGANIZATION

The project team is defined in Table 4. Supervisors may make substitutions with Project Manager concurrence.

Table 4: Project Team and Roles

Staff Member	Role	Comment
Jonathan R. Thorn	Project Manager	NA
Stephanie A. Schultz	Sample Preparation	NA
Denise M. Schumitz	LC-MS/MS Analysis	NA
Matt D. Schumitz	Sample Custody	NA
Carla R. Devine	Quality Control Officer	NA
Zachary J. Willenberg	Quality Assurance Officer	NA

4.2 COMMUNICATION

A kick-off meeting will be held to discuss project scope and goals.

5.0 SCHEDULE

The project schedule is presented in Table 5.

Table 5. Schedule of Laboratory Activities

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Receipt	06/01/2019	06/01/2019	0	NA



WORK/QUALITY ASSURANCE PROJECT PLAN

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Preparation	06/03/2019	06/04/2019	1	NA
Instrument Analysis	06/04/2019	06/05/2019	1	NA
Quality Control Review	06/05/2019	06/05/2019	0	NA
Quality Assurance Review	06/05/2019	06/05/2019	0	NA

6.0 BUDGET

The labor budget for the analytical task is presented in Table 6.

Table 6. Labor Budget (Laboratory Analytical Task)

Labor Activity:	Hours/ Batch:	Batches:	Total Hours:	Comment:
Sample Receipt	2	1	2	hours per batch of 20 samples
Sample Preparation	9	1	9	NA
Instrument Analysis	8	1	8	NA
Quality Control Review	3	1	3	NA
Quality Assurance Review	1	1	1	NA

7.0 STAFF DEVELOPMENT

None anticipated.



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: SHP-190603-01
Status: Pending
Description: NASA
Range: I3451-I3471
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	I3451	Q6-0082-DW0001-20190530	05/30/2019 12:50 pm	DW	R0119	(NA)		
2	I3452	Q6-0082-FRB-20190530-01	05/30/2019 1:00 pm	QC	R0119	(NA)		
3	I3453	H6-1607-DW0001-20190530	05/30/2019 4:50 pm	DW	R0119	(NA)		
4	I3454	H6-1607-FRB-20190530-01	05/30/2019 5:00 pm	QC	R0119	(NA)		
5	I3455	M6-1518-DW0001-20190531	05/31/2019 8:35 am	DW	R0119	(NA)		
6	I3456	M6-1518-FRB-20190531-01	05/31/2019 8:45 am	QC	R0119	(NA)		
7	I3457	H5-2139-DW0001-20190531	05/31/2019 10:10 am	DW	R0119	(NA)		
8	I3458	H5-2139-FRB-20190531-01	05/31/2019 10:20 am	QC	R0119	(NA)		
9	I3459	H5-1434-DW0001-20190531	05/31/2019 11:15 am	DW	R0119	(NA)		
10	I3460	H5-1434-FRB-20190531-01	05/31/2019 11:20 am	QC	R0119	(NA)		
11	I3461	H4-1598-DW0001-20190531	05/31/2019 12:10 pm	DW	R0119	(NA)		
12	I3462	H4-1598-FRB-20190531-01	05/31/2019 12:15 pm	QC	R0119	(NA)		
13	I3463	F4-1844-DW0001-20190531	05/31/2019 1:00 pm	DW	R0119	(NA)		
14	I3464	F4-1844-FRB-20190531-01	05/31/2019 1:05 pm	QC	R0119	(NA)		
15	I3465	E3-1120-DW0001-20190531	05/31/2019 2:15 pm	DW	R0119	(NA)		
16	I3466	E3-1120-FD-20190531-01	05/31/2019 2:20 pm	QC	R0119	(NA)		
17	I3467	E3-1120-FRB-20190531-01	05/31/2019 2:25 pm	QC	R0119	(NA)		
18	I3468	H4-1797-DW0001-20190531	05/31/2019 3:45 pm	DW	R0119	(NA)		
19	I3469	H4-1797-FRB-20190531-01	05/31/2019 3:50 pm	QC	R0119	(NA)		
20	I3470	H4-1840A-DW0001-20190531	05/31/2019 4:25 pm	DW	R0119	(NA)		
21	I3471	H4-1840A-FRB-20190531-01	05/31/2019 4:30 pm	QC	R0119	(NA)		



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name:	Master_371.1
SOP Reference:	5-371 - ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1
Description:	PFAS in drinking water
Matrix:	L - Liquid Samples, like water or sea water, prepared and analyzed under the same class of detection limits.
Detection Limit Study:	5-371
Instrument:	LC-MS/MS
MQO Criteria	Universal_LC
Standard Report:	Standard Result Report

Method Specific Reporting		Holding Times (days)		Data Flags
Result Units:	ng/L	Unit Conversion:	(none)	Sample: 14 DL_Flag: U
Weight Basis:	LIQUID	Result Format:	Fixed Digits	Frozen: 14 RL_Flag: J
Standard Basis:	RIS	# of Figures/Digits:	2	Extract: 28 PB_Flag: B
Oil Weight Basis:	No	Oil Weight Source:	Oil Weight	DIL_Flag: D
U-Value Substitution:	U-Flag=MD	Histograms:	No	HT_Flag: T
ECD_Reporting:	No			

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
1	Perfluoro-n-hexanoic acid	PFHxA	T	13C2-PFOA		No	No
2	Perfluoro-n-heptanoic Acid	PFHpA	T	13C2-PFOA		No	No
3	Perfluoro-n-octanoic Acid	PFOA	T	13C2-PFOA		No	No
4	Perfluorononanoic Acid	PFNA	T	13C2-PFOA		No	No
5	Perfluoro-n-decanoic Acid	PFDA	T	13C2-PFOA		No	No
6	Perfluoro-n-undecanoic acid	PFUnA	T	13C2-PFOA		No	No
7	Perfluoro-n-dodecanoic acid	PFDoA	T	13C2-PFOA		No	No
8	Perfluoro-n-tridecanoic acid	PFTTrDA	T	13C2-PFOA		No	No
9	Perfluoro-n-tetradecanoic acid	PFTeDA	T	13C2-PFOA		No	No
10	N-methylperfluoro-1-octanesulfonamidoacetic acid	NMeFOSAA	T	d3-MeFOSAA		No	No
11	N-ethylperfluoro-octanesulfonamidoacetic acid	NEtFOSAA	T	d3-MeFOSAA		No	No
12	Perfluoro-1-butanefulfonate	PFBS	T	13C4-PFOS		No	No
13	Perfluoro-1-octanesulfonate	PFOS	T	13C4-PFOS		No	No
14	Perfluoro-1-hexanesulfonate	PFHxS	T	13C4-PFOS		No	No
15	Hexafluoropropylene oxide dimer acid	HFPO-DA	T	13C2-PFOA		No	No



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_371.1

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
16	Adona	Adona	T	13C2-PFOA		No	No
17	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	T	13C4-PFOS		No	No
18	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	T	13C4-PFOS		No	No
1	13C2-PFHxA	13C2-PFHxA	SIS	13C2-PFOA		No	No
2	13C2-PFDA	13C2-PFDA	SIS	13C2-PFOA		No	No
3	d5-EtFOSAA	d5-EtFOSAA	SIS	d3-MeFOSAA		No	No
4	13C3-HFPO-DA	13C3-HFPO-DA	SIS	13C2-PFOA		No	No
Total Analytes:						22	

Subtract Peaks:

None

Sum Peaks:

None



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_371.1

ICAL Acceptance Criteria:

Curve Fit:	Limit Mean(%):	Mean Qual:	Limit Ind.:	Ind. Qual:	Min Points:	Points Qual:	Comments:
Linear	NA	NA	0.995	N	5	N	NA
Average RF	15	N	25	N	5	N	NA
Linear (0,0)	NA	NA	0.995	N	5	N	NA
Quadratic	NA	NA	0.995	N	6	N	NA
Quadratic (0,0)	NA	NA	0.995	N	6	N	NA

Continuing Calibration Verification Criteria:

CCV Name: Standard

Frequency Hrs:	Mean PD(%):	Individual PD(%):	RIS/SIS RT Window (min):	Area Limit Low(%):	Area Limit High(%):	Comment:
12 (N)	20 (N)	25 (N)	0.07 (N)	-50	100 (N)	Lab Default Continuing Calibration Verification Criteria

Independent Calibration Verification:

ICC Name: Standard

Mean PD Limit(%):	Ind. PD Limit(%):	RIS/SIS Window Limit (Secs):	Area Limit High(%):	Area Limit Low(%):	Comment:
15 (N)	20 (N)	0.07 (N)	-50	100 (N)	Standard laboratory criteria for ICCs

Mass Discrimination Criteria:

None

Degradation Check Criteria:

None



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application: <i>Universal_LC</i>			
MQO:	Acceptance Criteria:	Qual:	Corrective Action:
Procedural Blank	Samples must be greater than five times the blank concentration (>5xPB).	B	Review with Project Manager; re-analyze or justify results in project records.
PB Measurement Quality Objective	Organic results in the Procedural Blank are less than 1/2 times the LOQ (<1/2xLOQ)	N	Review with Project Manager; re-analyze or justify results in project records.
Laboratory Control Sample	Recovery values 70-130%.	N	Review with project manager; re-analyze or justify reporting the results in project records.
Matrix Spike / Matrix Spike Duplicate Recovery	Organics 70-130%. Analyte concentration in MS/MSD must be greater than five times reported background concentration.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the Original	n	
Matrix Spike/Spike Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration in MS/MSD must be greater than five times reported background concentration.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the Original	n	
Standard Reference Material Accuracy	Organics Percent Difference less than 30% from a range of certified values on average. Analyte concentration must be greater than five times the Method Detection Limit (>5xMDL).	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the MDL	n	
Analytical Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration must be > 5x MDL.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Original is less than 5 times the MDL	n	



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application: <i>Universal_LC</i>			
MQO:	Acceptance Criteria:	Qual:	Corrective Action:
Analytical Triplicate Precision	Organics results less than 30% Relative Standard Deviation (RSD). Analyte concentration must be > 5x MDL.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Original is less than 5 times the MDL	n	
Surrogate Compound Recovery	Recovery results between 50% and 150%.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
Control Oil	RPD < 30% for at least 90% of analytes	N	Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Instrument Calibration	5-371-4: R-squared greater than or equal to 0.995 Mean RSD less than or equal to 15%, Individual RSD less than or equal to 25%	N	Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Independent Calibration Check Solution	5-371-4: Individual PD less than or equal to 20%. Mean Percent Difference less than or equal to 15%.	N	Review with Project Manager; re-analyze or justify in project records.
Continuing Calibration Verification	5-371-4: Individual PD less than or equal to 25%. Mean Percent Difference less than or equal to 20%.	N	Review with Project Manager; re-analyze or justify in project records.

ShpNo SHP-190603-01

It can be done

Battelle Project No: _____

Sample Receipt Form

Approved: Authorized:

Project Number: 112G08079 Client: Tetra Tech
 Received by: Schumitz, Matt Date/Time Received: Saturday, June 01, 2019 12:00 PM
 No. of Shipping Containers: 2

SHIPMENT

Method of Delivery: Commercial Carrier Tracking Number: Fed Ex
 COC Forms: Shipped with samples No Forms

Cooler(s)/Box(es)

Cntr	Type	Tracking No.	Seal	Seal	Container	Therm.	Temp C	Smpls
1 of 2	Cooler	7753 6291 3097	Custody Seal	Intact	Intact	Therm_1	1.0	10
2 of 2	Cooler	7753 6291 2860	Custody Seal	Intact	Intact	Therm_1	1.3	11

Samples

Sample Labels: Sample labels agree with COC forms
 Discrepancies (see Sample Custody Corrective Action Form)

Container Seals: Tape Custody Seals Other Seals (See sample Log)
 Seals intact for each shipping container
 Seals broken (See sample log for impacted samples)

Condition of Samples: Sample containers intact
 Sample containers broken/leaking (See Custody Corrective Action Form)

Temperature upon receipt (°C): 1.3 Temperature Blank used Yes No
(Note: If temperature upon receipt differs from required conditions, see sample log comment field)

Samples Acidified: Yes No Unknown

Initial pH 5-9?: Yes No NA
If no, individual sample adjustments on the Auxiliary Sample Receipt Form

Total Residual Chlorine Present?: Yes No NA
If yes, individual sample adjustments on the Auxiliary Sample Receipt Form

Head Space <1% in samples for water VOC analysis: Yes No NA
Individual sample deviations noted on sample log

Samples Containers:

Samples returned in PC-grade jars: Yes No Unknown /Lot No.: Unknown

Storage Location: Custody: Refrigerator - R0119 (NA) BDO IDs Assigned: I3451 - I3471

Samples logged in by: Schumitz, Matt Date/Time: 06/01/2019 12:00 PM

Approved By: _____ Approved On: _____

Authorized By: _____ Authorized On: _____



It can be done

ShpNo SHP-190603-01

Battelle Project No: _____

Sample Receipt Form Details

Approved: Authorized Project Number: 112G08079Client: Tetra TechReceived by: Schumitz, MattDate/Time Received: Saturday, June 01, 2019 12:00 PMNo. of Shipping Containers: 2

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
I3451	Q6-0082-DW0001-20190530	05/30/19 12:50	06/03/19 9:57	2	DW	1	NA	NA	NA	R0119 (NA)			
I3452	Q6-0082-FRB-20190530-01	05/30/19 13:00	06/03/19 9:57	2	QC	1	NA	NA	NA	R0119 (NA)			
I3453	H6-1607-DW0001-20190530	05/30/19 16:50	06/03/19 9:59	2	DW	1	NA	NA	NA	R0119 (NA)			
I3454	H6-1607-FRB-20190530-01	05/30/19 17:00	06/03/19 10:00	2	QC	1	NA	NA	NA	R0119 (NA)			
I3455	M6-1518-DW0001-20190531	05/31/19 8:35	06/03/19 10:01	2	DW	1	NA	NA	NA	R0119 (NA)			
I3456	M6-1518-FRB-20190531-01	05/31/19 8:45	06/03/19 10:01	2	QC	1	NA	NA	NA	R0119 (NA)			
I3457	H5-2139-DW0001-20190531	05/31/19 10:10	06/03/19 10:02	2	DW	1	NA	NA	NA	R0119 (NA)			
I3458	H5-2139-FRB-20190531-01	05/31/19 10:20	06/03/19 10:02	2	QC	1	NA	NA	NA	R0119 (NA)			
I3459	H5-1434-DW0001-20190531	05/31/19 11:15	06/03/19 10:06	2	DW	1	NA	NA	NA	R0119 (NA)			
I3460	H5-1434-FRB-20190531-01	05/31/19 11:20	06/03/19 10:06	2	QC	1	NA	NA	NA	R0119 (NA)			
I3461	H4-1598-DW0001-20190531	05/31/19 12:10	06/03/19 10:06	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3462	H4-1598-FRB-20190531-01	05/31/19 12:15	06/03/19 10:07	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3463	F4-1844-DW0001-20190531	05/31/19 13:00	06/03/19 10:07	6	DW	1.3	NA	NA	NA	R0119 (NA)			
I3464	F4-1844-FRB-20190531-01	05/31/19 13:05	06/03/19 10:08	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3465	E3-1120-DW0001-20190531	05/31/19 14:15	06/03/19 10:08	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3466	E3-1120-FD-20190531-01	05/31/19 14:20	06/03/19 10:08	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3467	E3-1120-FRB-20190531-01	05/31/19 14:25	06/03/19 10:09	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3468	H4-1797-DW0001-20190531	05/31/19 15:45	06/03/19 10:09	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3469	H4-1797-FRB-20190531-01	05/31/19 15:50	06/03/19 10:10	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3470	H4-1840A-DW0001-20190531	05/31/19 16:25	06/03/19 10:10	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3471	H4-1840A-FRB-20190531-01	05/31/19 16:30	06/03/19 10:10	2	QC	1.3	NA	NA	NA	R0119 (NA)			

Total Samples: 21

PROJECT NO: 12G-08079	FACILITY: Multi Site Well Serv	PROJECT MANAGER Chris Pike	PHONE NUMBER (412) 921-7090	LABORATORY NAME AND CONTACT: Batelle - Jon Thorn
SAMPLERS (SIGNATURE) 		FIELD OPERATIONS LEADER Chuck Sorden	PHONE NUMBER (321) 591-7580	ADDRESS 141 Longwater Dr.
		CARRIER/WAYBILL NUMBER		CITY, STATE Norwell, MA 02061

STANDARD TAT
RUSH TAT
 24 hr. 48 hr. 72 hr. 7 day 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G)	P
PRESERVATIVE USED	Fr. 2mm
TYPE OF ANALYSIS	USEPA 537 AAS

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	COMMENTS
05/30	1250	QC-0082-DW0001-2019 0530		-	-	DW	G	2	I 3451
	1300	QC-0082-FRB-2019 0530-01		-	-	QC			52
	1650	H6-1607-DW0001-2019 0530				DW			53
05/30	1700	H6-1607-FRB-2019 0530-01				QC			54
05/31	0835	M6-1518-DW0001-2019 0531				DW			55
	0845	M6-1518-FRB-2019 0531-01				QC			56
	1010	H5-2139-DW0001-2019 0531				DW			57
	1020	H5-2139-FRB-2019 0531-01				QC			58
	1115	H5-1434-DW0001-2019 0531				DW			59
	1120	H5-1434-FRB-2019 0531-01				QC			60
	1210	H4-1548-DW0001-2019 0531				DW			61
	1215	H4-1548-FRB-2019 0531-01				QC		2	I 3462
05/31	1300	F4-1844-DW0001-2019 0531		-	-	DW	G	6	I 3463 MS/MSD Collected

1. RELINQUISHED BY 	DATE 05/31/19	TIME 1750	1. RECEIVED BY 	DATE 6-1-19	TIME 1200
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

PROJECT NO: 112 G-08079	FACILITY: Multi Site Well Survey	PROJECT MANAGER Chris Pike	PHONE NUMBER (412) 921-7090	LABORATORY NAME AND CONTACT: Battelle - San Thom
SAMPLERS (SIGNATURE) 	FIELD OPERATIONS LEADER Chuck Sarda	PHONE NUMBER (321) 591-7580	ADDRESS 141 Longwater Dr.	CITY, STATE Norwell Ma, 02061
CARRIER/WAYBILL NUMBER				

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED	TYPE OF ANALYSIS	COMMENTS
05/31	1305	F4-1844-FRB-20190531-01		-	-	QC	G	2	X			USEPAS37 PEAS Trizma P	I3464
	1415	E3-1120-DW0001-20190531				DW							65
	1420	E3-1120-FD-20190531-01				QC							66
	1425	F3-1120-FRB-20190531-01				QC							67
	1545	H4-1797-DW0001-20190531				DW							68
	1550	H4-1797-FRB-20190531-01				QC							67
	1625	H4-1840A-DW0001-20190531				DW							70
05/31	1630	H4-1840A-FRB-20190531-01		-	-	QC	G	2	X				I3471

1. RELINQUISHED BY 	DATE 05/31/15	TIME 1730	1. RECEIVED BY 	DATE 6-1-19	TIME 1200
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

ORIGIN ID:COIA (321) 591-7580
CHARLES SORDEN
TETRA TECH, INC.
11 RIVERSIDE DRIVE
SUITE 204
COCOA, FL 32922
UNITED STATES US

SHIP DATE: 31MAY19
ACTWGT: 60.00 LB
CAD: 100864341/NET4100

BILL SENDER

TO **MATT SCHUMITZ**

29 NICKERSON ST

PLYMOUTH MA 02360

(781) 810-9964

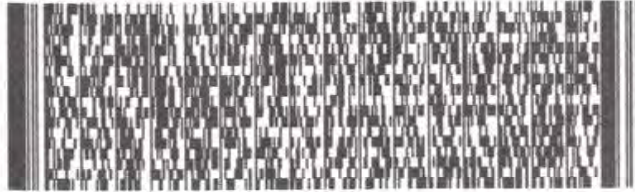
REF: 112G08079 3063

INV:
PO:

DEPT:

1.0

565.11/D66C/23AD



1 of 2
TRK# 7753 6291 3097
0201
MASTER

SATURDAY 12:00P
PRIORITY OVERNIGHT

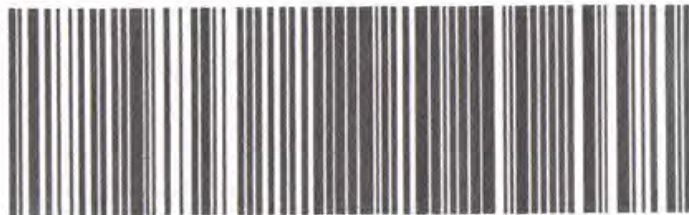
RES

X0 UWAA

02360

MA-US

BOS



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ORIGIN ID:COIA (321) 591-7580
CHARLES SORDEN
TETRA TECH, INC.
11 RIVERSIDE DRIVE
SUITE 204
COCOA, FL 32922
UNITED STATES US

SHIP DATE: 31MAY19
ACTWGT: 80.00 LB
CAD: 100864341/NET4100

BILL SENDER

TO **MATT SCHUMITZ**

29 NICKERSON ST

1.3

PLYMOUTH MA 02360

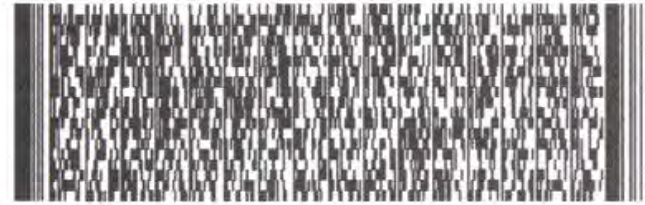
(781) 810-9964

REF: 112G08079.3063

INV.
PO

DEPT

565J1D66CZ3AD



2 of 2

MPS#
0263

7753 6291 2860

Mstr# 7753 6291 3097

0201

**SATURDAY 12:00P
PRIORITY OVERNIGHT**

RES

02360

X0 UWAA

MA-US

BOS



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Raw Analytical Data



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID Q6-0082-DW0001-20190530
 Battelle ID I3451-FS
 Sample Type SA
 Collection Date 05/30/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.275
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3451-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFHpA	375-85-9	0.21 U	I3451-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFOA	335-67-1	0.18 U	I3451-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
PFNA	375-95-1	0.11 U	I3451-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFDA	335-76-2	0.10 U	I3451-FS(0)	1.000	6/4/2019	0.10	0.36	2.27
PFUnA	2058-94-8	0.09 U	I3451-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFDoA	307-55-1	0.13 U	I3451-FS(0)	1.000	6/4/2019	0.13	0.45	2.27
PFTTrDA	72629-94-8	0.09 U	I3451-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFTeDA	376-06-7	0.20 U	I3451-FS(0)	1.000	6/4/2019	0.20	0.45	2.27
NMeFOSAA	2355-31-9	0.18 U	I3451-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
NEtFOSAA	2991-50-6	0.15 U	I3451-FS(0)	1.000	6/4/2019	0.15	0.45	2.27
PFBS	375-73-5	0.11 U	I3451-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFHxS	355-46-4	0.11 U	I3451-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFOS	1763-23-1	0.14 U	I3451-FS(0)	1.000	6/4/2019	0.14	0.45	2.27
HFPO-DA	13252-13-6	0.08 U	I3451-FS(0)	1.000	6/4/2019	0.08	0.36	2.27
Adona	919005-14-4	0.11 U	I3451-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
11Cl-PF3OUdS	763051-92-9	0.09 U	I3451-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
9Cl-PF3ONS	756426-58-1	0.11 U	I3451-FS(0)	1.000	6/4/2019	0.11	0.36	2.27

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	128	I3451-FS(0)	6/4/2019
13C2-PFDA	117	I3451-FS(0)	6/4/2019
d5-EtFOSAA	90	I3451-FS(0)	6/4/2019
13C3-HFPO-DA	119	I3451-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID H6-1607-DW0001-20190530
 Battelle ID I3453-FS
 Sample Type SA
 Collection Date 05/30/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.275
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3453-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFHpA	375-85-9	0.21 U	I3453-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFOA	335-67-1	0.18 U	I3453-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
PFNA	375-95-1	0.11 U	I3453-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFDA	335-76-2	0.10 U	I3453-FS(0)	1.000	6/4/2019	0.10	0.36	2.27
PFUnA	2058-94-8	0.09 U	I3453-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFDoA	307-55-1	0.13 U	I3453-FS(0)	1.000	6/4/2019	0.13	0.45	2.27
PFTTrDA	72629-94-8	0.09 U	I3453-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFTeDA	376-06-7	0.20 U	I3453-FS(0)	1.000	6/4/2019	0.20	0.45	2.27
NMeFOSAA	2355-31-9	0.18 U	I3453-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
NEtFOSAA	2991-50-6	0.15 U	I3453-FS(0)	1.000	6/4/2019	0.15	0.45	2.27
PFBS	375-73-5	0.11 U	I3453-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFHxS	355-46-4	0.11 U	I3453-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFOS	1763-23-1	0.14 U	I3453-FS(0)	1.000	6/4/2019	0.14	0.45	2.27
HFPO-DA	13252-13-6	0.08 U	I3453-FS(0)	1.000	6/4/2019	0.08	0.36	2.27
Adona	919005-14-4	0.11 U	I3453-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
11Cl-PF3OUdS	763051-92-9	0.09 U	I3453-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
9Cl-PF3ONS	756426-58-1	0.11 U	I3453-FS(0)	1.000	6/4/2019	0.11	0.36	2.27

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	122	I3453-FS(0)	6/4/2019
13C2-PFDA	117	I3453-FS(0)	6/4/2019
d5-EtFOSAA	106	I3453-FS(0)	6/4/2019
13C3-HFPO-DA	108	I3453-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID M6-1518-DW0001-20190531
 Battelle ID I3455-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.275
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3455-FS(0)	1.000	6/5/2019	0.21	0.45	2.27
PFHpA	375-85-9	0.21 U	I3455-FS(0)	1.000	6/5/2019	0.21	0.45	2.27
PFOA	335-67-1	0.18 U	I3455-FS(0)	1.000	6/5/2019	0.18	0.45	2.27
PFNA	375-95-1	0.11 U	I3455-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
PFDA	335-76-2	0.10 U	I3455-FS(0)	1.000	6/5/2019	0.10	0.36	2.27
PFUnA	2058-94-8	0.09 U	I3455-FS(0)	1.000	6/5/2019	0.09	0.36	2.27
PFDoA	307-55-1	0.13 U	I3455-FS(0)	1.000	6/5/2019	0.13	0.45	2.27
PFTTrDA	72629-94-8	0.09 U	I3455-FS(0)	1.000	6/5/2019	0.09	0.36	2.27
PFTeDA	376-06-7	0.20 U	I3455-FS(0)	1.000	6/5/2019	0.20	0.45	2.27
NMeFOSAA	2355-31-9	0.18 U	I3455-FS(0)	1.000	6/5/2019	0.18	0.45	2.27
NEtFOSAA	2991-50-6	0.15 U	I3455-FS(0)	1.000	6/5/2019	0.15	0.45	2.27
PFBS	375-73-5	0.11 U	I3455-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
PFHxS	355-46-4	0.11 U	I3455-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
PFOS	1763-23-1	0.14 U	I3455-FS(0)	1.000	6/5/2019	0.14	0.45	2.27
HFPO-DA	13252-13-6	0.08 U	I3455-FS(0)	1.000	6/5/2019	0.08	0.36	2.27
Adona	919005-14-4	0.11 U	I3455-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
11Cl-PF3OUdS	763051-92-9	0.09 U	I3455-FS(0)	1.000	6/5/2019	0.09	0.36	2.27
9Cl-PF3ONS	756426-58-1	0.11 U	I3455-FS(0)	1.000	6/5/2019	0.11	0.36	2.27

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	103	I3455-FS(0)	6/5/2019
13C2-PFDA	94	I3455-FS(0)	6/5/2019
d5-EtFOSAA	79	I3455-FS(0)	6/5/2019
13C3-HFPO-DA	83	I3455-FS(0)	6/5/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID H5-2139-DW0001-20190531
 Battelle ID I3457-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.275
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3457-FS(0)	1.000	6/5/2019	0.21	0.45	2.27
PFHpA	375-85-9	0.21 U	I3457-FS(0)	1.000	6/5/2019	0.21	0.45	2.27
PFOA	335-67-1	0.18 U	I3457-FS(0)	1.000	6/5/2019	0.18	0.45	2.27
PFNA	375-95-1	0.11 U	I3457-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
PFDA	335-76-2	0.10 U	I3457-FS(0)	1.000	6/5/2019	0.10	0.36	2.27
PFUnA	2058-94-8	0.09 U	I3457-FS(0)	1.000	6/5/2019	0.09	0.36	2.27
PFDoA	307-55-1	0.13 U	I3457-FS(0)	1.000	6/5/2019	0.13	0.45	2.27
PFTTrDA	72629-94-8	0.09 U	I3457-FS(0)	1.000	6/5/2019	0.09	0.36	2.27
PFTeDA	376-06-7	0.20 U	I3457-FS(0)	1.000	6/5/2019	0.20	0.45	2.27
NMeFOSAA	2355-31-9	0.18 U	I3457-FS(0)	1.000	6/5/2019	0.18	0.45	2.27
NEtFOSAA	2991-50-6	0.15 U	I3457-FS(0)	1.000	6/5/2019	0.15	0.45	2.27
PFBS	375-73-5	0.11 U	I3457-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
PFHxS	355-46-4	0.11 U	I3457-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
PFOS	1763-23-1	0.14 U	I3457-FS(0)	1.000	6/5/2019	0.14	0.45	2.27
HFPO-DA	13252-13-6	0.08 U	I3457-FS(0)	1.000	6/5/2019	0.08	0.36	2.27
Adona	919005-14-4	0.11 U	I3457-FS(0)	1.000	6/5/2019	0.11	0.36	2.27
11Cl-PF3OUdS	763051-92-9	0.09 U	I3457-FS(0)	1.000	6/5/2019	0.09	0.36	2.27
9Cl-PF3ONS	756426-58-1	0.11 U	I3457-FS(0)	1.000	6/5/2019	0.11	0.36	2.27

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	92	I3457-FS(0)	6/5/2019
13C2-PFDA	106	I3457-FS(0)	6/5/2019
d5-EtFOSAA	94	I3457-FS(0)	6/5/2019
13C3-HFPO-DA	92	I3457-FS(0)	6/5/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID H5-1434-DW0001-20190531
 Battelle ID I3459-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.275
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3459-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFHpA	375-85-9	0.21 U	I3459-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFOA	335-67-1	0.18 U	I3459-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
PFNA	375-95-1	0.11 U	I3459-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFDA	335-76-2	0.10 U	I3459-FS(0)	1.000	6/4/2019	0.10	0.36	2.27
PFUnA	2058-94-8	0.09 U	I3459-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFDoA	307-55-1	0.13 U	I3459-FS(0)	1.000	6/4/2019	0.13	0.45	2.27
PFTTrDA	72629-94-8	0.09 U	I3459-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFTeDA	376-06-7	0.20 U	I3459-FS(0)	1.000	6/4/2019	0.20	0.45	2.27
NMeFOSAA	2355-31-9	0.18 U	I3459-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
NEtFOSAA	2991-50-6	0.15 U	I3459-FS(0)	1.000	6/4/2019	0.15	0.45	2.27
PFBS	375-73-5	0.11 U	I3459-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFHxS	355-46-4	0.11 U	I3459-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFOS	1763-23-1	0.14 U	I3459-FS(0)	1.000	6/4/2019	0.14	0.45	2.27
HFPO-DA	13252-13-6	0.08 U	I3459-FS(0)	1.000	6/4/2019	0.08	0.36	2.27
Adona	919005-14-4	0.11 U	I3459-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
11Cl-PF3OUdS	763051-92-9	0.09 U	I3459-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
9Cl-PF3ONS	756426-58-1	0.11 U	I3459-FS(0)	1.000	6/4/2019	0.11	0.36	2.27

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	114	I3459-FS(0)	6/4/2019
13C2-PFDA	97	I3459-FS(0)	6/4/2019
d5-EtFOSAA	79	I3459-FS(0)	6/4/2019
13C3-HFPO-DA	103	I3459-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID H4-1598-DW0001-20190531
 Battelle ID I3461-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.270
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3461-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFHpA	375-85-9	0.21 U	I3461-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFOA	335-67-1	0.19 U	I3461-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
PFNA	375-95-1	0.11 U	I3461-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFDA	335-76-2	0.10 U	I3461-FS(0)	1.000	6/4/2019	0.10	0.37	2.31
PFUnA	2058-94-8	0.09 U	I3461-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFDoA	307-55-1	0.13 U	I3461-FS(0)	1.000	6/4/2019	0.13	0.46	2.31
PFTTrDA	72629-94-8	0.09 U	I3461-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFTeDA	376-06-7	0.20 U	I3461-FS(0)	1.000	6/4/2019	0.20	0.46	2.31
NMeFOSAA	2355-31-9	0.19 U	I3461-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
NEtFOSAA	2991-50-6	0.16 U	I3461-FS(0)	1.000	6/4/2019	0.16	0.46	2.31
PFBS	375-73-5	0.11 U	I3461-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFHxS	355-46-4	1.02 I	I3461-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFOS	1763-23-1	0.34 I	I3461-FS(0)	1.000	6/4/2019	0.14	0.46	2.31
HFPO-DA	13252-13-6	0.08 U	I3461-FS(0)	1.000	6/4/2019	0.08	0.37	2.31
Adona	919005-14-4	0.11 U	I3461-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
11Cl-PF3OUdS	763051-92-9	0.09 U	I3461-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
9Cl-PF3ONS	756426-58-1	0.11 U	I3461-FS(0)	1.000	6/4/2019	0.11	0.37	2.31

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	86	I3461-FS(0)	6/4/2019
13C2-PFDA	111	I3461-FS(0)	6/4/2019
d5-EtFOSAA	83	I3461-FS(0)	6/4/2019
13C3-HFPO-DA	89	I3461-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID F4-1844-DW0001-20190531

Battelle ID I3463-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.270
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3463-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFHpA	375-85-9	0.21 U	I3463-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFOA	335-67-1	0.20 I	I3463-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
PFNA	375-95-1	0.11 U	I3463-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFDA	335-76-2	0.10 U	I3463-FS(0)	1.000	6/4/2019	0.10	0.37	2.31
PFUnA	2058-94-8	0.09 U	I3463-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFDoA	307-55-1	0.13 U	I3463-FS(0)	1.000	6/4/2019	0.13	0.46	2.31
PFTTrDA	72629-94-8	0.09 U	I3463-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFTeDA	376-06-7	0.20 U	I3463-FS(0)	1.000	6/4/2019	0.20	0.46	2.31
NMeFOSAA	2355-31-9	0.19 U	I3463-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
NEtFOSAA	2991-50-6	0.16 U	I3463-FS(0)	1.000	6/4/2019	0.16	0.46	2.31
PFBS	375-73-5	0.17 I	I3463-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFHxS	355-46-4	0.11 U	I3463-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFOS	1763-23-1	0.21 I	I3463-FS(0)	1.000	6/4/2019	0.14	0.46	2.31
HFPO-DA	13252-13-6	0.08 U	I3463-FS(0)	1.000	6/4/2019	0.08	0.37	2.31
Adona	919005-14-4	0.11 U	I3463-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
11Cl-PF3OUdS	763051-92-9	0.09 U	I3463-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
9Cl-PF3ONS	756426-58-1	0.11 U	I3463-FS(0)	1.000	6/4/2019	0.11	0.37	2.31

Surrogate Recoveries (%)	Analysis		
	Recovery	Extract ID	Date
13C2-PFHxA	124	I3463-FS(0)	6/4/2019
13C2-PFDA	100	I3463-FS(0)	6/4/2019
d5-EtFOSAA	109	I3463-FS(0)	6/4/2019
13C3-HFPO-DA	105	I3463-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID E3-1120-DW0001-20190531

Battelle ID I3465-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.275
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3465-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFHpA	375-85-9	0.21 U	I3465-FS(0)	1.000	6/4/2019	0.21	0.45	2.27
PFOA	335-67-1	0.18 U	I3465-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
PFNA	375-95-1	0.11 U	I3465-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFDA	335-76-2	0.10 U	I3465-FS(0)	1.000	6/4/2019	0.10	0.36	2.27
PFUnA	2058-94-8	0.09 U	I3465-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFDoA	307-55-1	0.13 U	I3465-FS(0)	1.000	6/4/2019	0.13	0.45	2.27
PFTTrDA	72629-94-8	0.09 U	I3465-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
PFTeDA	376-06-7	0.20 U	I3465-FS(0)	1.000	6/4/2019	0.20	0.45	2.27
NMeFOSAA	2355-31-9	0.18 U	I3465-FS(0)	1.000	6/4/2019	0.18	0.45	2.27
NEtFOSAA	2991-50-6	0.15 U	I3465-FS(0)	1.000	6/4/2019	0.15	0.45	2.27
PFBS	375-73-5	1.94 I	I3465-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFHxS	355-46-4	2.60	I3465-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
PFOS	1763-23-1	1.19 I	I3465-FS(0)	1.000	6/4/2019	0.14	0.45	2.27
HFPO-DA	13252-13-6	0.08 U	I3465-FS(0)	1.000	6/4/2019	0.08	0.36	2.27
Adona	919005-14-4	0.11 U	I3465-FS(0)	1.000	6/4/2019	0.11	0.36	2.27
11Cl-PF3OUdS	763051-92-9	0.09 U	I3465-FS(0)	1.000	6/4/2019	0.09	0.36	2.27
9Cl-PF3ONS	756426-58-1	0.11 U	I3465-FS(0)	1.000	6/4/2019	0.11	0.36	2.27

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	125	I3465-FS(0)	6/4/2019
13C2-PFDA	103	I3465-FS(0)	6/4/2019
d5-EtFOSAA	88	I3465-FS(0)	6/4/2019
13C3-HFPO-DA	117	I3465-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID E3-1120-FD-20190531-01

Battelle ID I3466-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix QC
 Sample Size 0.270
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3466-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFHpA	375-85-9	0.21 U	I3466-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFOA	335-67-1	0.19 U	I3466-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
PFNA	375-95-1	0.11 U	I3466-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFDA	335-76-2	0.10 U	I3466-FS(0)	1.000	6/4/2019	0.10	0.37	2.31
PFUnA	2058-94-8	0.09 U	I3466-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFDoA	307-55-1	0.13 U	I3466-FS(0)	1.000	6/4/2019	0.13	0.46	2.31
PFTTrDA	72629-94-8	0.09 U	I3466-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFTeDA	376-06-7	0.20 U	I3466-FS(0)	1.000	6/4/2019	0.20	0.46	2.31
NMeFOSAA	2355-31-9	0.19 U	I3466-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
NEtFOSAA	2991-50-6	0.16 U	I3466-FS(0)	1.000	6/4/2019	0.16	0.46	2.31
PFBS	375-73-5	2.04 I	I3466-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFHxS	355-46-4	2.84	I3466-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFOS	1763-23-1	1.26 I	I3466-FS(0)	1.000	6/4/2019	0.14	0.46	2.31
HFPO-DA	13252-13-6	0.08 U	I3466-FS(0)	1.000	6/4/2019	0.08	0.37	2.31
Adona	919005-14-4	0.11 U	I3466-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
11Cl-PF3OUdS	763051-92-9	0.09 U	I3466-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
9Cl-PF3ONS	756426-58-1	0.11 U	I3466-FS(0)	1.000	6/4/2019	0.11	0.37	2.31

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	122	I3466-FS(0)	6/4/2019
13C2-PFDA	95	I3466-FS(0)	6/4/2019
d5-EtFOSAA	96	I3466-FS(0)	6/4/2019
13C3-HFPO-DA	111	I3466-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

H4-1797-DW0001-
 Client ID 20190531
 Battelle ID I3468-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.270
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	2.54	I3468-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFHpA	375-85-9	1.39 I	I3468-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFOA	335-67-1	0.80 I	I3468-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
PFNA	375-95-1	0.11 U	I3468-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFDA	335-76-2	0.10 U	I3468-FS(0)	1.000	6/4/2019	0.10	0.37	2.31
PFUnA	2058-94-8	0.09 U	I3468-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFDoA	307-55-1	0.13 U	I3468-FS(0)	1.000	6/4/2019	0.13	0.46	2.31
PFTTrDA	72629-94-8	0.09 U	I3468-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFTeDA	376-06-7	0.20 U	I3468-FS(0)	1.000	6/4/2019	0.20	0.46	2.31
NMeFOSAA	2355-31-9	0.19 U	I3468-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
NEtFOSAA	2991-50-6	0.16 U	I3468-FS(0)	1.000	6/4/2019	0.16	0.46	2.31
PFBS	375-73-5	0.11 U	I3468-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFHxS	355-46-4	2.53	I3468-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFOS	1763-23-1	1.52 I	I3468-FS(0)	1.000	6/4/2019	0.14	0.46	2.31
HFPO-DA	13252-13-6	0.08 U	I3468-FS(0)	1.000	6/4/2019	0.08	0.37	2.31
Adona	919005-14-4	0.11 U	I3468-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
11Cl-PF3OUdS	763051-92-9	0.09 U	I3468-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
9Cl-PF3ONS	756426-58-1	0.11 U	I3468-FS(0)	1.000	6/4/2019	0.11	0.37	2.31

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	119	I3468-FS(0)	6/4/2019
13C2-PFDA	111	I3468-FS(0)	6/4/2019
d5-EtFOSAA	93	I3468-FS(0)	6/4/2019
13C3-HFPO-DA	105	I3468-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID H4-1840A-DW0001-20190531
 Battelle ID I3470-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.270
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	3.62	I3470-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFHpA	375-85-9	1.95 I	I3470-FS(0)	1.000	6/4/2019	0.21	0.46	2.31
PFOA	335-67-1	3.43	I3470-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
PFNA	375-95-1	0.24 I	I3470-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFDA	335-76-2	0.14 I	I3470-FS(0)	1.000	6/4/2019	0.10	0.37	2.31
PFUnA	2058-94-8	0.09 U	I3470-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFDoA	307-55-1	0.13 U	I3470-FS(0)	1.000	6/4/2019	0.13	0.46	2.31
PFTTrDA	72629-94-8	0.09 U	I3470-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
PFTeDA	376-06-7	0.20 U	I3470-FS(0)	1.000	6/4/2019	0.20	0.46	2.31
NMeFOSAA	2355-31-9	0.19 U	I3470-FS(0)	1.000	6/4/2019	0.19	0.46	2.31
NEtFOSAA	2991-50-6	0.16 U	I3470-FS(0)	1.000	6/4/2019	0.16	0.46	2.31
PFBS	375-73-5	39.39	I3470-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFHxS	355-46-4	13.31	I3470-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
PFOS	1763-23-1	10.55	I3470-FS(0)	1.000	6/4/2019	0.14	0.46	2.31
HFPO-DA	13252-13-6	0.08 U	I3470-FS(0)	1.000	6/4/2019	0.08	0.37	2.31
Adona	919005-14-4	0.11 U	I3470-FS(0)	1.000	6/4/2019	0.11	0.37	2.31
11Cl-PF3OUdS	763051-92-9	0.09 U	I3470-FS(0)	1.000	6/4/2019	0.09	0.37	2.31
9Cl-PF3ONS	756426-58-1	0.11 U	I3470-FS(0)	1.000	6/4/2019	0.11	0.37	2.31

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	111	I3470-FS(0)	6/4/2019
13C2-PFDA	97	I3470-FS(0)	6/4/2019
d5-EtFOSAA	76	I3470-FS(0)	6/4/2019
13C3-HFPO-DA	108	I3470-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID KL73 IB

Battelle ID KL73 IB_06/04/2019

Sample Type IB

Collection Date NA

Extraction Date NA

Analysis Date 06/04/2019

Analytical Instrument Sciex 5500 LC/MS/MS

% Moisture NA

Matrix Water

Sample Size 0.250

Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	0.14	0.50	2.50
PFTrDA	72629-94-8	0.10 U	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	0.12	0.40	2.50
11CI-PF3OUdS	763051-92-9	0.10 U	0.10	0.40	2.50
9CI-PF3ONS	756426-58-1	0.12 U	0.12	0.40	2.50

Surrogate Recoveries (%)

13C2-PFHxA	95
13C2-PFDA	92
d5-EtFOSAA	107
13C3-HFPO-DA	91



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID KL73 IB

Battelle ID KL73 IB_06/05/2019
 Sample Type IB
 Collection Date NA
 Extraction Date NA
 Analysis Date 06/05/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix Water
 Sample Size 0.250
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	0.14	0.50	2.50
PFTrDA	72629-94-8	0.10 U	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	0.12	0.40	2.50
11CI-PF3OUdS	763051-92-9	0.10 U	0.10	0.40	2.50
9CI-PF3ONS	756426-58-1	0.12 U	0.12	0.40	2.50

Surrogate Recoveries (%)

13C2-PFHxA	86
13C2-PFDA	84
d5-EtFOSAA	111
13C3-HFPO-DA	85



It can be done

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID Procedural Blank

Battelle ID CU242PB-FS
 Sample Type PB
 Collection Date 06/03/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix WATER
 Sample Size 0.250
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	CU242PB-FS(0)	1.000	6/4/2019	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	CU242PB-FS(0)	1.000	6/4/2019	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	CU242PB-FS(0)	1.000	6/4/2019	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	CU242PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	CU242PB-FS(0)	1.000	6/4/2019	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	CU242PB-FS(0)	1.000	6/4/2019	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	CU242PB-FS(0)	1.000	6/4/2019	0.14	0.50	2.50
PFTTrDA	72629-94-8	0.10 U	CU242PB-FS(0)	1.000	6/4/2019	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	CU242PB-FS(0)	1.000	6/4/2019	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	CU242PB-FS(0)	1.000	6/4/2019	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	CU242PB-FS(0)	1.000	6/4/2019	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	CU242PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	CU242PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	CU242PB-FS(0)	1.000	6/4/2019	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	CU242PB-FS(0)	1.000	6/4/2019	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	CU242PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
11Cl-PF3OUdS	763051-92-9	0.10 U	CU242PB-FS(0)	1.000	6/4/2019	0.10	0.40	2.50
9Cl-PF3ONS	756426-58-1	0.12 U	CU242PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50

<i>Surrogate Recoveries (%)</i>	Recovery	Extract ID	Analysis Date
13C2-PFHxA	113	CU242PB-FS(0)	6/4/2019
13C2-PFDA	110	CU242PB-FS(0)	6/4/2019
d5-EtFOSAA	114	CU242PB-FS(0)	6/4/2019
13C3-HFPO-DA	93	CU242PB-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



It can be done

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID		Laboratory Control Sample								
Battelle ID		CU243LCS-FS								
Sample Type		LCS								
Collection Date		06/03/2019								
Extraction Date		06/03/2019								
Analytical Instrument		Sciex 5500 LC/MS/MS								
% Moisture		NA								
Matrix		WATER								
Sample Size		0.250								
Size Unit-Basis		L								
Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	Target	Recovery	Qual	Control Limits Lower	Upper
PFHxA	307-24-4	21.30 D	CU243LCS-FS-D(3)	5.000	6/5/2019	20.00	107		70	130
PFHpA	375-85-9	22.37	CU243LCS-FS(0)	1.000	6/4/2019	20.00	112		70	130
PFOA	335-67-1	23.16	CU243LCS-FS(0)	1.000	6/4/2019	20.00	116		70	130
PFNA	375-95-1	23.07	CU243LCS-FS(0)	1.000	6/4/2019	20.00	115		70	130
PFDA	335-76-2	23.18	CU243LCS-FS(0)	1.000	6/4/2019	20.00	116		70	130
PFUnA	2058-94-8	22.83	CU243LCS-FS(0)	1.000	6/4/2019	20.00	114		70	130
PFDoA	307-55-1	23.54	CU243LCS-FS(0)	1.000	6/4/2019	20.00	118		70	130
PFTTrDA	72629-94-8	22.01	CU243LCS-FS(0)	1.000	6/4/2019	20.00	110		70	130
PFTeDA	376-06-7	22.98	CU243LCS-FS(0)	1.000	6/4/2019	20.00	115		70	130
NMeFOSAA	2355-31-9	23.96	CU243LCS-FS(0)	1.000	6/4/2019	20.00	120		70	130
NEtFOSAA	2991-50-6	23.94	CU243LCS-FS(0)	1.000	6/4/2019	20.00	120		70	130
PFBS	375-73-5	17.99	CU243LCS-FS(0)	1.000	6/4/2019	17.70	102		70	130
PFHxS	355-46-4	19.48	CU243LCS-FS(0)	1.000	6/4/2019	18.90	103		70	130
PFOS	1763-23-1	17.44	CU243LCS-FS(0)	1.000	6/4/2019	19.10	91		70	130
HFPO-DA	13252-13-6	20.20 D	CU243LCS-FS-D(3)	5.000	6/5/2019	20.00	101		70	130
Adona	919005-14-4	21.90	CU243LCS-FS(0)	1.000	6/4/2019	18.90	116		70	130
11Cl-PF3OUdS	763051-92-9	18.79	CU243LCS-FS(0)	1.000	6/4/2019	18.80	100		70	130
9Cl-PF3ONS	756426-58-1	19.47	CU243LCS-FS(0)	1.000	6/4/2019	18.60	105		70	130
Surrogate Recoveries (%)				Analysis						
		Recovery	Extract ID	Date						
13C2-PFHxA		110	CU243LCS-FS(0)	6/4/2019						
13C2-PFDA		108	CU243LCS-FS(0)	6/4/2019						
d5-EtFOSAA		89	CU243LCS-FS(0)	6/4/2019						
13C3-HFPO-DA		110	CU243LCS-FS(0)	6/4/2019						



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

**MS/MSD Background
 Sample**

Client ID		F4-1844-DW0001-20190531	F4-1844-DW0001-20190531								
Battelle ID		I3463MS-FS	I3463-FS								
Sample Type		MS	SA								
Collection Date		05/31/2019	05/31/2019								
Extraction Date		06/03/2019	06/03/2019								
Analytical Instrument		Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS								
% Moisture		NA	NA								
Matrix		DW	DW								
Sample Size		0.275	0.270								
Size Unit-Basis		L	L								
Analyte	CAS No.	Result (ng/L)	Result (ng/L)	Extract ID	DF	Analysis Date	Target	Recovery	Qual	Control Limits	
										Lower	Upper
PFHxA	307-24-4	19.12 D	0.21 U	I3463MS-FS-D(3)	5.000	6/5/2019	18.18	105		70	130
PFHpA	375-85-9	18.15	0.21 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	100		70	130
PFOA	335-67-1	18.43	0.20 I	I3463MS-FS(0)	1.000	6/4/2019	18.18	100		70	130
PFNA	375-95-1	17.38	0.11 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	96		70	130
PFDA	335-76-2	17.43	0.10 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	96		70	130
PFUnA	2058-94-8	17.83	0.09 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	98		70	130
PFDoA	307-55-1	17.28	0.13 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	95		70	130
PFTrDA	72629-94-8	16.20	0.09 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	89		70	130
PFTeDA	376-06-7	17.98	0.20 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	99		70	130
NMeFOSAA	2355-31-9	19.61	0.19 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	108		70	130
NEtFOSAA	2991-50-6	17.61	0.16 U	I3463MS-FS(0)	1.000	6/4/2019	18.18	97		70	130
PFBS	375-73-5	15.95	0.17 I	I3463MS-FS(0)	1.000	6/4/2019	16.09	98		70	130
PFHxS	355-46-4	18.01	0.11 U	I3463MS-FS(0)	1.000	6/4/2019	17.18	105		70	130
PFOS	1763-23-1	15.07	0.21 I	I3463MS-FS(0)	1.000	6/4/2019	17.36	86		70	130
HFPO-DA	13252-13-6	18.52 D	0.08 U	I3463MS-FS-D(3)	5.000	6/5/2019	18.18	102		70	130
Adona	919005-14-4	17.12	0.11 U	I3463MS-FS(0)	1.000	6/4/2019	17.18	100		70	130
11CI-PF3OUdS	763051-92-9	16.03	0.09 U	I3463MS-FS(0)	1.000	6/4/2019	17.09	94		70	130
9CI-PF3ONS	756426-58-1	16.74	0.11 U	I3463MS-FS(0)	1.000	6/4/2019	16.91	99		70	130
<i>Surrogate Recoveries (%)</i>		Recovery		Extract ID	Analysis Date						
13C2-PFHxA		108		I3463MS-FS(0)	6/4/2019						
13C2-PFDA		100		I3463MS-FS(0)	6/4/2019						
d5-EtFOSAA		90		I3463MS-FS(0)	6/4/2019						
13C3-HFPO-DA		108		I3463MS-FS(0)	6/4/2019						



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

**MS/MSD Background
 Sample**

Client ID	F4-1844-DW0001-20190531	F4-1844-DW0001-20190531
Battelle ID	I3463MSD-FS	I3463-FS
Sample Type	MSD	SA
Collection Date	05/31/2019	05/31/2019
Extraction Date	06/03/2019	06/03/2019
Analytical Instrument	Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS
% Moisture	NA	NA
Matrix	DW	DW
Sample Size	0.275	0.270
Size Unit-Basis	L	L

Analyte	CAS No.	Result (ng/L)	Result (ng/L)	Extract ID	DF	Analysis Date	Target	Recovery	Qual	Control Limits		RPD	Qual	RPD Limit
										Lower	Upper			
PFHxA	307-24-4	17.63 D	0.21 U	I3463MSD-FS-D(3)	5.000	6/5/2019	18.18	97		70	130	7.9		≤ 30
PFHpA	375-85-9	19.02	0.21 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	105		70	130	4.9		≤ 30
PFOA	335-67-1	20.91 D	0.20 I	I3463MSD-FS-D(3)	5.000	6/5/2019	18.18	114		70	130	13.1		≤ 30
PFNA	375-95-1	18.36	0.11 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	101		70	130	5.1		≤ 30
PFDA	335-76-2	19.09	0.10 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	105		70	130	9.0		≤ 30
PFUnA	2058-94-8	18.00	0.09 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	99		70	130	1.0		≤ 30
PFDoA	307-55-1	18.31	0.13 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	101		70	130	6.1		≤ 30
PFTrDA	72629-94-8	17.50	0.09 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	96		70	130	7.6		≤ 30
PFTeDA	376-06-7	18.79	0.20 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	103		70	130	4.0		≤ 30
NMeFOSAA	2355-31-9	21.05	0.19 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	116		70	130	7.1		≤ 30
NEtFOSAA	2991-50-6	19.46	0.16 U	I3463MSD-FS(0)	1.000	6/4/2019	18.18	107		70	130	9.8		≤ 30
PFBS	375-73-5	15.37	0.17 I	I3463MSD-FS(0)	1.000	6/4/2019	16.09	94		70	130	4.2		≤ 30
PFHxS	355-46-4	17.36	0.11 U	I3463MSD-FS(0)	1.000	6/4/2019	17.18	101		70	130	3.9		≤ 30
PFOS	1763-23-1	14.81	0.21 I	I3463MSD-FS(0)	1.000	6/4/2019	17.36	84		70	130	2.4		≤ 30
HFPO-DA	13252-13-6	17.12 D	0.08 U	I3463MSD-FS-D(3)	5.000	6/5/2019	18.18	94		70	130	8.2		≤ 30
Adona	919005-14-4	17.80	0.11 U	I3463MSD-FS(0)	1.000	6/4/2019	17.18	104		70	130	3.9		≤ 30
11CI-PF3OUdS	763051-92-9	15.97	0.09 U	I3463MSD-FS(0)	1.000	6/4/2019	17.09	93		70	130	1.1		≤ 30
9CI-PF3ONS	756426-58-1	16.13	0.11 U	I3463MSD-FS(0)	1.000	6/4/2019	16.91	95		70	130	4.1		≤ 30

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis Date
13C2-PFDA	108	I3463MSD-FS(0)	6/4/2019
d5-EtFOSAA	103	I3463MSD-FS(0)	6/4/2019
13C3-HFPO-DA	111	I3463MSD-FS(0)	6/4/2019



Glossary of Data Qualifiers

Flag: Application:

V	Analyte found in the sample at a concentration <10x the level found in the procedural blank
D	Dilution Run. Initial run outside the initial calibration range of the instrument
L	Estimate, result is greater than the highest concentration level in the calibration
I	The reported value is greater than or equal to the laboratory Detection Limit (DL) but less than the laboratory Limit of Quantitation (LOQ)
*	Significant Matrix Interference - value could not be determined.
J	Quality Control (QC) value is outside the accuracy or precision Data Quality Objective (DQO)
NA	Not Applicable
Q	Holding Time (HT) exceeded
U	Analyte not detected or detected below the Detection Limit (DL) value, DL reported

Miscellaneous Documentation

QA/QC Summary
Batch 19-0465

Project:	Nasa Kennedy Space Center
Client Project Manager:	Chris Pike
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	DW, QC
Data Set:	DP-19-0407
Analytical SOP:	5-371
Method Reference:	USEPA 537.11 (November 2018), QSM 5.1

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
5/30 and 31/2019	6/1/2019	1.0, 1.3

Corrective Actions	None.
Sample Storage	The water samples were stored refrigerated until extraction.
Related samples	Select FRB samples included in SDG 19-0466 for samples with hits above the LOQ

METHOD SUMMARIES	
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a solid phase extraction (SPE) cartridge and eluted from the SPE with methanol. Extracts were concentrated to dryness under nitrogen with a water bath set between 60 °C and 65 °C, reconstituted with 96:4 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	pH verified at 7 prior to extraction. Samples I3455-FS (M6-1518-DW0001-20190531), I3457-FS (H5-2139-DW0001-20190531), I3461-FS (H4-1598-DW0001-20190531), I3468-FS (H4-1797-DW0001-20190531), and I3470-FS (H4-1840A-DW0001-20190531) were yellow in color prior to extraction.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	Samples analyzed on Sciex 5500 LC-MS/MS. PFHxS and PFOA in the field samples, when detected, was found and reported as a combination of both linear and branched isomers.

Holding Times	Extraction Date(s)	Analysis Date(s)
	6/3/2019	6/4 – 5/2019

QA/QC Summary
Batch 19-0465

Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.
$\leq 1/3$ the LOQ	No exceedances noted. No comments.
Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
70-130% of true value	No exceedances noted. No comments.
Matrix Spike (MS) / Duplicate (MSD)	A MS/MSD were prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy. The relative percent difference was calculated to measure precision.
70-130% of true value, RPD $\leq 30\%$	No exceedances noted. No comments.
Surrogates Standard Analytes	Labelled surrogate compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.
70-130% of true value	No exceedances noted. No comments.
Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
ICAL high and low points RPD $\leq 20\%$, 50-150% of average area of the ICAL and 70-140% of most recent CCV	No exceedances noted. No comments.
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.
R ² >0.99 Target and SIS compounds +/- 30% of true value, Low point 50-150% of true value	No exceedances noted. No comments.
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.
Target and SIS compounds +/- 30% of true value	No exceedances noted. No comments.

QA/QC Summary
Batch 19-0465

Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
Target and SIS compounds +/- 30% of true value	No exceedances noted.
Low point 50-150% of true value	No comments.



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project Number: 100123260
 Preparation Batch: 19-0465
 Data Set: DP-19-0407
 Test Code: Master_371.1

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	0	None
Matrix Spike / Matrix Spike Duplicate Precision	0	None
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None



It can be done

BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

Project Title:	PFAS: Nasa Kennedy Space Center	Data Set Number:	DP-19-0407
Project Number:	100123260	Prep Batch Number:	19-0465
Entered By:	Lauren Griffith	Entered On:	06/05/2019
Test Code (Matrix Type):	Master_371.1(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 6/05/2019

KL64 is not being used in the calibration curve for PFHxA, PFHpA, PFOA, PFNA, PFDA, PFDoA, NMeFOSAA, NEtFOSAA, HFPO-DA and d5-EtFOSAA. There is no impact on the data once this point of the calibration is removed.
LMG 6/05/2019

KL65 is not being used in the calibration curve for PFHpA, PFHxA and d5-EtFOSAA. There is no impact on the data once this point of the calibration is removed.
LMG 6/05/2019

KL71 and KL72 are not being used in the calibration curve for 13C2-PFHxA. There is no impact on the data once these points of the calibration are removed.
LMG 6/05/2019

KL72 is not being used in the calibration curve for PFHxA, PFHpA, PFOA, PFNA, PFDA, PFUnA, PFDoA, PFTrDA, PFTeDA, ADONA, HFPO-DA, 13C2-PFHxA, 13C2-PFDA and 13C3-HFPO-DA. There is no impact on the data once this point of the calibration is removed.
LMG 6/05/2019

Task Leader Approval:

Supervisor Approval:

PM Approval:

lizzotte@battelle.org
2019.06.05 14:39:45 -04'00'



Example Calculation for PFAS

Calculation of final concentration from area:

$$\text{Concentration} = \left[\frac{PA - b}{m} \right] * C_{IS} * PIV * DF / S$$

Where:

PA = Area of target / area of internal standard
 b = y intercept from calibration curve
 CIS = concentration of internal standard (ng/L)
 m = slope of calibration
 DF = dilution factor
 S = Sample Size
 PIV = Pre-injection volume (L)

Sample ID: I3466-FS(0)
 Client Sample ID: E3-1120-FD-20190531-01
 Sample Size: 0.27
 Units: L
 Dilution Factor: 1.000
 PIV (L): 0.001
 Target Analyte: PFHxS
 MRM Transition: 399.0 / 80.0
 Data file: AC_06042019_5-371.wiff
 Result table: 19-0465_DW
 Area: 265,232.94
 IS Name: 13C4-PFOS
 IS Area: 129,196.05
 IS Amount (ng/L): 287
 y-intercept: 0
 slope: 0.76855

$$\text{Concentration} = \frac{[(265232.94/129196.05) - 0]}{0.76855} * 287 * 0.001 * 1 / 0.27$$

$$\text{ng/L} = 2.84$$

*Final concentration may vary based on rounding.



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260
 Preparation Batch: 19-0465
 Data Set: DP-19-0407

		CU242PB-FS (Procedural Blank)	CU243LCS-FS (Laboratory Control Sample)	I3463MS-FS (F4-1844-DW0001-20190531)	I3463MSD-FS (F4-1844-DW0001-20190531)	I3451-FS (O6-0082-DW0001-20190530)	I3453-FS (H6-1607-DW0001-20190530)	I3455-FS (M6-1518-DW0001-20190531)	I3457-FS (H5-2139-DW0001-20190531)	I3459-FS (H5-1434-DW0001-20190531)	I3461-FS (H4-1598-DW0001-20190531)	I3463-FS (F4-1844-DW0001-20190531)	I3465-FS (E3-1120-DW0001-20190531)	I3466-FS (E3-1120-FD-20190531-01)	I3468-FS (H4-1797-DW0001-20190531)	I3470-FS (H4-1840A-DW0001-20190531)
PFHxA	307-24-4	-	L	L	L	-	-	-	-	-	-	-	-	-	L	L
PFHpA	375-85-9	-	L	L	L	-	-	-	-	-	-	-	-	-	L	L
PFOA	335-67-1	-	L	L	L	-	-	-	-	-	-	L	-	-	L	L
PFNA	375-95-1	-	L	L	L	-	-	-	-	-	-	-	-	-	-	L
PFDA	335-76-2	-	L	L	L	-	-	-	-	-	-	-	-	-	-	L
PFUnA	2058-94-8	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
PFDoA	307-55-1	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
PFTTrDA	72629-94-8	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
PFTeDA	376-06-7	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
NMeFOSAA	2355-31-9	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
NEtFOSAA	2991-50-6	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
PFBS	375-73-5	-	L	L	L	-	-	-	-	-	-	L	L	L	-	L
PFHxS	355-46-4	-	L	L	L	-	-	-	-	-	L/Br	-	L/Br	L/Br	L/Br	L/Br
PFOS	1763-23-1	-	L	L	L	-	-	-	-	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br
HFPO-DA	13252-13-6	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
Adona	919005-14-4	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
11CI-PF3OUds	763051-92-9	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-
9CI-PF3ONS	756426-58-1	-	L	L	L	-	-	-	-	-	-	-	-	-	-	-

"L": Linear
 "Br": branched
 "L/Br": Linear/Branched
 "-": Not detected



Preparation Batch: 19-0465
 Matrix: Drinking Water

Sample Name	Sample ID	Analysis Date	Passing criteria: 70% - 130%			
			13C3-HFPO-DA	13C2-PFHxA	13C2-PFDA	d5-EtFOSAA
CU242PB-FS(0)	Procedural Blank	6/4/19 19:57	93	113	110	114
CU243LCS-FS(0)	Laboratory Control Sample	6/4/19 20:06	110	110	108	89
I3451-FS(0)	Q6-0082-DW0001-20190530	6/4/19 20:15	119	128	117	90
I3453-FS(0)	H6-1607-DW0001-20190530	6/4/19 20:24	108	122	117	106
I3455-FS(0)	M6-1518-DW0001-20190531	6/4/19 20:33	97	106	94	68
I3457-FS(0)	H5-2139-DW0001-20190531	6/4/19 20:42	111	117	122	104
I3459-FS(0)	H5-1434-DW0001-20190531	6/4/19 20:51	103	114	97	79
I3461-FS(0)	H4-1598-DW0001-20190531	6/4/19 21:00	89	86	111	83
I3463-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:09	105	124	100	109
I3463MS-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:36	108	108	100	90
I3463MSD-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:45	111	119	108	103
I3465-FS(0)	E3-1120-DW0001-20190531	6/4/19 21:54	117	125	103	88
I3466-FS(0)	E3-1120-FD-20190531-01	6/4/19 22:03	111	122	95	96
I3468-FS(0)	H4-1797-DW0001-20190531	6/4/19 22:12	105	119	111	93
I3470-FS(0)	H4-1840A-DW0001-20190531	6/4/19 22:21	108	111	97	76
CU243LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:03	NQ	NQ	NQ	NQ
I3463MS-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:21	NQ	NQ	NQ	NQ
I3463MSD-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:30	NQ	NQ	NQ	NQ
I3455-FS(0)	M6-1518-DW0001-20190531	6/5/19 11:39	83	103	94	79
I3457-FS(0)	H5-2139-DW0001-20190531	6/5/19 11:48	92	92	106	94

NQ - Not quantified (dilution run and not needed)

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/4/19 16:14	13C4-PFOS	148,267.69	-
KL65	L2	6/4/19 16:23	13C4-PFOS	148,445.88	-
KL66	L3	6/4/19 16:32	13C4-PFOS	155,176.73	-
KL67	L4	6/4/19 16:41	13C4-PFOS	167,269.91	-
KL68	L5	6/4/19 16:50	13C4-PFOS	187,046.73	-
KL69	L6	6/4/19 16:59	13C4-PFOS	186,285.09	-
KL70	L7	6/4/19 17:07	13C4-PFOS	171,231.97	-
KL71	L8	6/4/19 17:16	13C4-PFOS	160,982.47	-
KL72	L9	6/4/19 17:25	13C4-PFOS	164,123.79	10.2

PASS

Average 165,425.58 Lower 82,712.79 Upper 248,138.37

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/4/19 16:14	13C4-PFOS	148,267.69	82,712.79	248,138.37		130,399.56	260,799.13	
KL65	L2	6/4/19 16:23	13C4-PFOS	148,445.88	82,712.79	248,138.37		130,399.56	260,799.13	
KL66	L3	6/4/19 16:32	13C4-PFOS	155,176.73	82,712.79	248,138.37		130,399.56	260,799.13	
KL67	L4	6/4/19 16:41	13C4-PFOS	167,269.91	82,712.79	248,138.37		130,399.56	260,799.13	
KL68	L5	6/4/19 16:50	13C4-PFOS	187,046.73	82,712.79	248,138.37		130,399.56	260,799.13	
KL69	L6	6/4/19 16:59	13C4-PFOS	186,285.09	82,712.79	248,138.37		130,399.56	260,799.13	
KL70	L7	6/4/19 17:07	13C4-PFOS	171,231.97	82,712.79	248,138.37		130,399.56	260,799.13	
KL71	L8	6/4/19 17:16	13C4-PFOS	160,982.47	82,712.79	248,138.37		130,399.56	260,799.13	
KL72	L9	6/4/19 17:25	13C4-PFOS	164,123.79	82,712.79	248,138.37		130,399.56	260,799.13	
KL73 IB	IB	6/4/19 17:34	13C4-PFOS	158,011.40	82,712.79	248,138.37		130,399.56	260,799.13	
KL74 ICC	ICC	6/4/19 17:43	13C4-PFOS	174,896.40	82,712.79	248,138.37		130,399.56	260,799.13	
KL69 CCV	CCV	6/4/19 19:39	13C4-PFOS	156,315.38	82,712.79	248,138.37		130,399.56	260,799.13	
CU242PB-FS(0)	Procedural Blank	6/4/19 19:57	13C4-PFOS	155,217.24	82,712.79	248,138.37		109,420.77	218,841.53	
CU243LCS-FS(0)	Laboratory Control Sample	6/4/19 20:06	13C4-PFOS	151,950.99	82,712.79	248,138.37		109,420.77	218,841.53	
I3451-FS(0)	Q6-0082-DW0001-20190530	6/4/19 20:15	13C4-PFOS	139,754.02	82,712.79	248,138.37		109,420.77	218,841.53	
I3453-FS(0)	H6-1607-DW0001-20190530	6/4/19 20:24	13C4-PFOS	143,929.27	82,712.79	248,138.37		109,420.77	218,841.53	
I3455-FS(0)	M6-1518-DW0001-20190531	6/4/19 20:33	13C4-PFOS	122,486.77	82,712.79	248,138.37		109,420.77	218,841.53	1
I3457-FS(0)	H5-2139-DW0001-20190531	6/4/19 20:42	13C4-PFOS	124,041.77	82,712.79	248,138.37		109,420.77	218,841.53	2
I3459-FS(0)	H5-1434-DW0001-20190531	6/4/19 20:51	13C4-PFOS	147,460.46	82,712.79	248,138.37		109,420.77	218,841.53	
I3461-FS(0)	H4-1598-DW0001-20190531	6/4/19 21:00	13C4-PFOS	136,949.37	82,712.79	248,138.37		109,420.77	218,841.53	
I3463-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:09	13C4-PFOS	152,581.28	82,712.79	248,138.37		109,420.77	218,841.53	
KL68 CCV	CCV	6/4/19 21:18	13C4-PFOS	157,715.04	82,712.79	248,138.37		109,420.77	218,841.53	
I3463MS-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:36	13C4-PFOS	148,159.83	82,712.79	248,138.37		110,400.53	220,801.06	
I3463MSD-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:45	13C4-PFOS	155,110.16	82,712.79	248,138.37		110,400.53	220,801.06	
I3465-FS(0)	E3-1120-DW0001-20190531	6/4/19 21:54	13C4-PFOS	138,469.54	82,712.79	248,138.37		110,400.53	220,801.06	
I3466-FS(0)	E3-1120-FD-20190531-01	6/4/19 22:03	13C4-PFOS	129,196.05	82,712.79	248,138.37		110,400.53	220,801.06	
I3468-FS(0)	H4-1797-DW0001-20190531	6/4/19 22:12	13C4-PFOS	120,694.94	82,712.79	248,138.37		110,400.53	220,801.06	
I3470-FS(0)	H4-1840A-DW0001-20190531	6/4/19 22:21	13C4-PFOS	116,739.42	82,712.79	248,138.37		110,400.53	220,801.06	
KL69 CCV	CCV	6/4/19 22:30	13C4-PFOS	152,791.97	82,712.79	248,138.37		110,400.53	220,801.06	
KL67 ISC	ISC	6/5/19 10:36	13C4-PFOS	144,908.58	82,712.79	248,138.37		106,954.38	213,908.76	
KL73 IB	IB	6/5/19 10:54	13C4-PFOS	160,081.69	82,712.79	248,138.37		101,436.01	202,872.01	
CU243LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:03	13C4-PFOS	144,225.91	82,712.79	248,138.37		101,436.01	202,872.01	
I3463MS-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:21	13C4-PFOS	133,096.68	82,712.79	248,138.37		101,436.01	202,872.01	
I3463MSD-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:30	13C4-PFOS	141,920.49	82,712.79	248,138.37		101,436.01	202,872.01	
I3455-FS(0)	M6-1518-DW0001-20190531	6/5/19 11:39	13C4-PFOS	114,251.68	82,712.79	248,138.37		101,436.01	202,872.01	
I3457-FS(0)	H5-2139-DW0001-20190531	6/5/19 11:48	13C4-PFOS	120,241.44	82,712.79	248,138.37		101,436.01	202,872.01	
KL68 CCV	CCV	6/5/19 12:15	13C4-PFOS	148,694.23	82,712.79	248,138.37		101,436.01	202,872.01	

1 Sample was realiquoted and reanalyzed due to a low surrogate recovery. The reanalysis was acceptable and was reported. LMG 6/5/19

2 Sample was realiquoted and reanalyzed due to an exceedance for the secondary criteria for 13C2-PFOA. The reanalysis was acceptable and was reported. LMG 6/5/19

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/4/19 16:14	13C2-PFOA	30,597.09	-
KL65	L2	6/4/19 16:23	13C2-PFOA	32,851.43	-
KL66	L3	6/4/19 16:32	13C2-PFOA	32,166.13	-
KL67	L4	6/4/19 16:41	13C2-PFOA	34,557.71	-
KL68	L5	6/4/19 16:50	13C2-PFOA	38,290.37	-
KL69	L6	6/4/19 16:59	13C2-PFOA	36,421.90	-
KL70	L7	6/4/19 17:07	13C2-PFOA	39,181.02	-
KL71	L8	6/4/19 17:16	13C2-PFOA	35,879.69	15.9
KL72	L9	6/4/19 17:25	13C2-PFOA	41,606.45	-

PASS

1

Average 34,993.17 Lower 17,496.59 Upper 52,489.76

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/4/19 16:14	13C2-PFOA	30,597.09	17,496.59	52,489.76		25,495.33	50,990.66	
KL65	L2	6/4/19 16:23	13C2-PFOA	32,851.43	17,496.59	52,489.76		25,495.33	50,990.66	
KL66	L3	6/4/19 16:32	13C2-PFOA	32,166.13	17,496.59	52,489.76		25,495.33	50,990.66	
KL67	L4	6/4/19 16:41	13C2-PFOA	34,557.71	17,496.59	52,489.76		25,495.33	50,990.66	
KL68	L5	6/4/19 16:50	13C2-PFOA	38,290.37	17,496.59	52,489.76		25,495.33	50,990.66	
KL69	L6	6/4/19 16:59	13C2-PFOA	36,421.90	17,496.59	52,489.76		25,495.33	50,990.66	
KL70	L7	6/4/19 17:07	13C2-PFOA	39,181.02	17,496.59	52,489.76		25,495.33	50,990.66	
KL71	L8	6/4/19 17:16	13C2-PFOA	35,879.69	17,496.59	52,489.76		25,495.33	50,990.66	
KL72	L9	6/4/19 17:25	13C2-PFOA	41,606.45	17,496.59	52,489.76		25,495.33	50,990.66	
KL73 IB	IB	6/4/19 17:34	13C2-PFOA	34,749.37	17,496.59	52,489.76		25,495.33	50,990.66	
KL74 ICC	ICC	6/4/19 17:43	13C2-PFOA	35,076.75	17,496.59	52,489.76		25,495.33	50,990.66	
KL69 CCV	CCV	6/4/19 19:39	13C2-PFOA	34,051.73	17,496.59	52,489.76		25,495.33	50,990.66	
CU242PB-FS(0)	Procedural Blank	6/4/19 19:57	13C2-PFOA	32,585.79	17,496.59	52,489.76		23,836.21	47,672.42	
CU243LCS-FS(0)	Laboratory Control Sample	6/4/19 20:06	13C2-PFOA	30,050.19	17,496.59	52,489.76		23,836.21	47,672.42	
I3451-FS(0)	Q6-0082-DW0001-20190530	6/4/19 20:15	13C2-PFOA	28,045.16	17,496.59	52,489.76		23,836.21	47,672.42	
I3453-FS(0)	H6-1607-DW0001-20190530	6/4/19 20:24	13C2-PFOA	26,924.43	17,496.59	52,489.76		23,836.21	47,672.42	
I3455-FS(0)	M6-1518-DW0001-20190531	6/4/19 20:33	13C2-PFOA	25,943.45	17,496.59	52,489.76		23,836.21	47,672.42	2
I3457-FS(0)	H5-2139-DW0001-20190531	6/4/19 20:42	13C2-PFOA	23,630.00	17,496.59	52,489.76		23,836.21	47,672.42	N 3
I3459-FS(0)	H5-1434-DW0001-20190531	6/4/19 20:51	13C2-PFOA	28,534.23	17,496.59	52,489.76		23,836.21	47,672.42	
I3461-FS(0)	H4-1598-DW0001-20190531	6/4/19 21:00	13C2-PFOA	26,174.11	17,496.59	52,489.76		23,836.21	47,672.42	
I3463-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:09	13C2-PFOA	32,915.75	17,496.59	52,489.76		23,836.21	47,672.42	
KL68 CCV	CCV	6/4/19 21:18	13C2-PFOA	33,384.31	17,496.59	52,489.76		23,836.21	47,672.42	
I3463MS-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:36	13C2-PFOA	34,145.24	17,496.59	52,489.76		23,369.02	46,738.03	
I3463MSD-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:45	13C2-PFOA	33,038.73	17,496.59	52,489.76		23,369.02	46,738.03	
I3465-FS(0)	E3-1120-DW0001-20190531	6/4/19 21:54	13C2-PFOA	29,226.05	17,496.59	52,489.76		23,369.02	46,738.03	
I3466-FS(0)	E3-1120-FD-20190531-01	6/4/19 22:03	13C2-PFOA	28,822.42	17,496.59	52,489.76		23,369.02	46,738.03	
I3468-FS(0)	H4-1797-DW0001-20190531	6/4/19 22:12	13C2-PFOA	24,171.99	17,496.59	52,489.76		23,369.02	46,738.03	
I3470-FS(0)	H4-1840A-DW0001-20190531	6/4/19 22:21	13C2-PFOA	24,062.32	17,496.59	52,489.76		23,369.02	46,738.03	
KL69 CCV	CCV	6/4/19 22:30	13C2-PFOA	33,637.45	17,496.59	52,489.76		23,369.02	46,738.03	
KL67 ISC	ISC	6/5/19 10:36	13C2-PFOA	35,169.09	17,496.59	52,489.76		23,546.22	47,092.43	
KL73 IB	IB	6/5/19 10:54	13C2-PFOA	37,108.76	17,496.59	52,489.76		24,618.36	49,236.73	
CU243LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:03	13C2-PFOA	31,064.56	17,496.59	52,489.76		24,618.36	49,236.73	
I3463MS-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:21	13C2-PFOA	31,966.96	17,496.59	52,489.76		24,618.36	49,236.73	
I3463MSD-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:30	13C2-PFOA	32,743.87	17,496.59	52,489.76		24,618.36	49,236.73	
I3455-FS(0)	M6-1518-DW0001-20190531	6/5/19 11:39	13C2-PFOA	24,921.75	17,496.59	52,489.76		24,618.36	49,236.73	
I3457-FS(0)	H5-2139-DW0001-20190531	6/5/19 11:48	13C2-PFOA	25,475.38	17,496.59	52,489.76		24,618.36	49,236.73	
KL68 CCV	CCV	6/5/19 12:15	13C2-PFOA	34,064.15	17,496.59	52,489.76		24,618.36	49,236.73	

1 L9 not used in initial calibration. LMG 6/5/19

2 Sample was realiquoted and reanalyzed due to a low surrogate recovery. The reanalysis was acceptable and was reported. LMG 6/5/19

3 Sample was realiquoted and reanalyzed due to an exceedence for the secondary criteria for 13C2-PFOA. The reanalysis was acceptable and was reported. LMG 6/5/19

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/4/19 16:14	d3-MeFOSAA	12,728.23	-
KL65	L2	6/4/19 16:23	d3-MeFOSAA	13,756.33	-
KL66	L3	6/4/19 16:32	d3-MeFOSAA	15,010.56	-
KL67	L4	6/4/19 16:41	d3-MeFOSAA	15,076.19	-
KL68	L5	6/4/19 16:50	d3-MeFOSAA	16,404.06	-
KL69	L6	6/4/19 16:59	d3-MeFOSAA	15,945.51	-
KL70	L7	6/4/19 17:07	d3-MeFOSAA	14,899.66	-
KL71	L8	6/4/19 17:16	d3-MeFOSAA	13,750.57	-
KL72	L9	6/4/19 17:25	d3-MeFOSAA	16,555.66	18.5

PASS

Average 15,174.82 Lower 7,587.41 Upper 22,762.23

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/4/19 16:14	d3-MeFOSAA	12,728.23	7,587.41	22,762.23		11,161.86	22,323.71	
KL65	L2	6/4/19 16:23	d3-MeFOSAA	13,756.33	7,587.41	22,762.23		11,161.86	22,323.71	
KL66	L3	6/4/19 16:32	d3-MeFOSAA	15,010.56	7,587.41	22,762.23		11,161.86	22,323.71	
KL67	L4	6/4/19 16:41	d3-MeFOSAA	15,076.19	7,587.41	22,762.23		11,161.86	22,323.71	
KL68	L5	6/4/19 16:50	d3-MeFOSAA	16,404.06	7,587.41	22,762.23		11,161.86	22,323.71	
KL69	L6	6/4/19 16:59	d3-MeFOSAA	15,945.51	7,587.41	22,762.23		11,161.86	22,323.71	
KL70	L7	6/4/19 17:07	d3-MeFOSAA	14,899.66	7,587.41	22,762.23		11,161.86	22,323.71	
KL71	L8	6/4/19 17:16	d3-MeFOSAA	13,750.57	7,587.41	22,762.23		11,161.86	22,323.71	
KL72	L9	6/4/19 17:25	d3-MeFOSAA	16,555.66	7,587.41	22,762.23		11,161.86	22,323.71	
KL73 IB	IB	6/4/19 17:34	d3-MeFOSAA	13,174.88	7,587.41	22,762.23		11,161.86	22,323.71	
KL74 ICC	ICC	6/4/19 17:43	d3-MeFOSAA	14,352.25	7,587.41	22,762.23		11,161.86	22,323.71	
KL69 CCV	CCV	6/4/19 19:39	d3-MeFOSAA	13,603.95	7,587.41	22,762.23		11,161.86	22,323.71	
CU242PB-FS(0)	Procedural Blank	6/4/19 19:57	d3-MeFOSAA	12,549.52	7,587.41	22,762.23		9,522.77	19,045.53	
CU243LCS-FS(0)	Laboratory Control Sample	6/4/19 20:06	d3-MeFOSAA	13,582.64	7,587.41	22,762.23		9,522.77	19,045.53	
I3451-FS(0)	Q6-0082-DW0001-20190530	6/4/19 20:15	d3-MeFOSAA	12,717.10	7,587.41	22,762.23		9,522.77	19,045.53	
I3453-FS(0)	H6-1607-DW0001-20190530	6/4/19 20:24	d3-MeFOSAA	12,227.16	7,587.41	22,762.23		9,522.77	19,045.53	
I3455-FS(0)	M6-1518-DW0001-20190531	6/4/19 20:33	d3-MeFOSAA	12,499.68	7,587.41	22,762.23		9,522.77	19,045.53	1
I3457-FS(0)	H5-2139-DW0001-20190531	6/4/19 20:42	d3-MeFOSAA	11,083.05	7,587.41	22,762.23		9,522.77	19,045.53	2
I3459-FS(0)	H5-1434-DW0001-20190531	6/4/19 20:51	d3-MeFOSAA	13,645.70	7,587.41	22,762.23		9,522.77	19,045.53	
I3461-FS(0)	H4-1598-DW0001-20190531	6/4/19 21:00	d3-MeFOSAA	12,236.40	7,587.41	22,762.23		9,522.77	19,045.53	
I3463-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:09	d3-MeFOSAA	13,530.94	7,587.41	22,762.23		9,522.77	19,045.53	
KL68 CCV	CCV	6/4/19 21:18	d3-MeFOSAA	12,789.07	7,587.41	22,762.23		9,522.77	19,045.53	
I3463MS-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:36	d3-MeFOSAA	14,505.34	7,587.41	22,762.23		8,952.35	17,904.70	
I3463MSD-FS(0)	F4-1844-DW0001-20190531	6/4/19 21:45	d3-MeFOSAA	13,324.12	7,587.41	22,762.23		8,952.35	17,904.70	
I3465-FS(0)	E3-1120-DW0001-20190531	6/4/19 21:54	d3-MeFOSAA	12,831.25	7,587.41	22,762.23		8,952.35	17,904.70	
I3466-FS(0)	E3-1120-FD-20190531-01	6/4/19 22:03	d3-MeFOSAA	11,782.88	7,587.41	22,762.23		8,952.35	17,904.70	
I3468-FS(0)	H4-1797-DW0001-20190531	6/4/19 22:12	d3-MeFOSAA	10,945.35	7,587.41	22,762.23		8,952.35	17,904.70	
I3470-FS(0)	H4-1840A-DW0001-20190531	6/4/19 22:21	d3-MeFOSAA	10,343.27	7,587.41	22,762.23		8,952.35	17,904.70	
KL69 CCV	CCV	6/4/19 22:30	d3-MeFOSAA	14,618.41	7,587.41	22,762.23		8,952.35	17,904.70	
KL67 ISC	ISC	6/5/19 10:36	d3-MeFOSAA	10,404.27	7,587.41	22,762.23		10,232.89	20,465.77	
KL73 IB	IB	6/5/19 10:54	d3-MeFOSAA	11,240.55	7,587.41	22,762.23		7,282.99	14,565.98	
CU243LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:03	d3-MeFOSAA	11,216.00	7,587.41	22,762.23		7,282.99	14,565.98	
I3463MS-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:21	d3-MeFOSAA	10,527.14	7,587.41	22,762.23		7,282.99	14,565.98	
I3463MSD-FS-D(3)	F4-1844-DW0001-20190531	6/5/19 11:30	d3-MeFOSAA	10,720.53	7,587.41	22,762.23		7,282.99	14,565.98	
I3455-FS(0)	M6-1518-DW0001-20190531	6/5/19 11:39	d3-MeFOSAA	9,992.02	7,587.41	22,762.23		7,282.99	14,565.98	
I3457-FS(0)	H5-2139-DW0001-20190531	6/5/19 11:48	d3-MeFOSAA	10,754.07	7,587.41	22,762.23		7,282.99	14,565.98	
KL68 CCV	CCV	6/5/19 12:15	d3-MeFOSAA	12,226.35	7,587.41	22,762.23		7,282.99	14,565.98	

1 Sample was realiquoted and reanalyzed due to a low surrogate recovery. The reanalysis was acceptable and was reported. LMG 6/5/19

2 Sample was realiquoted and reanalyzed due to an exceedance for the secondary criteria for 13C2-PFOA. The reanalysis was acceptable and was reported. LMG 6/5/19

Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Asymmetry Factor	Passing Range
PFBS_1	298.9 / 80.0	1.47	0.97	0.8 – 1.5
PFHxA_1	313.0 / 269.0	1.80	0.95	0.8 – 1.5

Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.47	85	>10
PFBS_2	298.9 / 99.0	1.47	106	>10
PFHxA_1	313.0 / 269.0	1.80	28	>10
PFHxA_2	313.0 / 119.0	1.80	33	>10
PFHpA_1	363.0 / 319.0	2.22	27	>10
PFHpA_2	363.0 / 169.0	2.22	24	>10
PFHxS_1	399.0 / 80.0	2.24	44	>10
PFHxS_2	399.0 / 99.0	2.24	27	>10
PFOA_1	413.0 / 369.0	2.64	39	>10
PFOA_2	413.0 / 169.0	2.64	32	>10
PFNA_1	463.0 / 419.0	3.04	30	>10
PFNA_2	463.0 / 219.0	3.03	27	>10
PFOS_1	499.0 / 80.0	3.03	39	>10
PFOS_2	499.0 / 99.0	3.03	28	>10
PFDA_1	513.0 / 469.0	3.40	27	>10
PFDA_2	513.0 / 219.0	3.40	23	>10
PFUnA_1	563.0 / 519.0	3.73	26	>10
PFUnA_2	563.0 / 269.0	3.73	25	>10
PFDoA_1	613.0 / 569.0	4.01	23	>10
PFDoA_2	613.0 / 319.0	4.01	22	>10
PFTTrDA_1	663.0 / 619.0	4.27	24	>10
PFTTrDA_2	663.0 / 169.0	4.26	22	>10
PFTeDA_1	713.0 / 669.0	4.49	28	>10
PFTeDA_2	713.0 / 169.0	4.48	28	>10
NMeFOSAA_1	570.0 / 419.0	3.56	35	>10
NMeFOSAA_2	570.0 / 512.0	3.56	24	>10
NEtFOSAA_1	584.0 / 419.0	3.73	32	>10
NEtFOSAA_2	584.0 / 483.0	3.73	26	>10
13C2-PFHxA	315.0 / 270.0	1.80	32	>10
13C2-PFDA	515.0 / 470.0	3.39	30	>10
d5-EtFOSAA	589.0 / 419.0	3.71	13	>10
HFPO-DA_1	285.0 / 169.0	1.93	35	>10
HFPO-DA_2	285.0 / 118.8	1.93	30	>10
ADONA_1	377.0 / 251.0	2.26	34	>10
ADONA_2	377.0 / 85.0	2.26	27	>10
13C3-HFPO-DA	287.0 / 169.0	1.93	31	>10
9CI-PF3ONS_1	531.0 / 351.0	3.24	26	>10
9CI-PF3ONS_2	531.0 / 83.0	3.24	25	>10
11CI-PF3OUdS_1	631.0 / 451.0	3.87	23	>10
11CI-PF3OUdS_2	631.0 / 83.0	3.86	26	>10

BATTELLE DETECTION LIMITS FOR PFAS IN DRINKING WATER

EPA Method 537.1

Analyte	CAS No.	MDL (ng/L)	LOD (ng/L)	LOQ (ng/L)	MRL (ng/L)
PFHxA	307-24-4	0.23	0.5	2.5	2.5
PFHpA	375-85-9	0.23	0.5	2.5	2.5
PFOA	335-67-1	0.20	0.5	2.5	2.5
PFNA	375-95-1	0.12	0.4	2.5	2.5
PFDA	335-76-2	0.11	0.4	2.5	2.5
PFUnA	2058-94-8	0.10	0.4	2.5	2.5
PFDoA	307-55-1	0.14	0.5	2.5	2.5
PFTTrDA	72629-94-8	0.10	0.4	2.5	2.5
PFTeDA	376-06-7	0.22	0.5	2.5	2.5
NMeFOSAA	2355-31-9	0.20	0.5	2.5	2.5
NEtFOSAA	2991-50-6	0.17	0.5	2.5	2.5
PFBS	375-73-5	0.12	0.4	2.5	2.5
PFHxS	355-46-4	0.12	0.4	2.5	2.5
PFOS	1763-23-1	0.15	0.5	2.5	2.5
HFPO-DA	13252-13-6	0.09	0.4	2.5	2.5
Adona	919005-14-4	0.12	0.4	2.5	2.5
9CI-PF3ONS	756426-58-1	0.12	0.4	2.5	2.5
11CI-PF3OUdS	763051-92-9	0.10	0.4	2.5	2.5

Analytes on ELAP QSM 5.1 Scope of accreditation

Analytical Transitions for PFAS in drinking water

SOP 5-371 (EPA 537.1 November 2019)

Analyte	CAS No.	Type	Primary Transition	Secondary Transition
PFHxA	307-24-4	Target	313.0 / 269.0	313.0 / 119.0
PFHpA	375-85-9	Target	363.0 / 319.0	363.0 / 169.0
PFOA	335-67-1	Target	413.0 / 369.0	413.0 / 169.0
PFNA	375-95-1	Target	463.0 / 419.0	463.0 / 219.0
PFDA	335-76-2	Target	513.0 / 469.0	513.0 / 219.0
PFUnA	2058-94-8	Target	563.0 / 519.0	563.0 / 269.0
PFDoA	307-55-1	Target	613.0 / 569.0	613.0 / 319.0
PFTTrDA	72629-94-8	Target	663.0 / 619.0	663.0 / 169.0
PFTeDA	376-06-7	Target	713.0 / 669.0	713.0 / 169.0
NMeFOSAA	2355-31-9	Target	570.0 / 419.0	570.0 / 512.0
NEtFOSAA	2991-50-6	Target	584.0 / 419.0	584.0 / 483.0
PFBS	375-73-5	Target	299.0 / 80.0	299.0 / 99.0
PFHxS	355-46-4	Target	399.0 / 80.0	399.0 / 99.0
PFOS	1763-23-1	Target	499.0 / 80.0	499.0 / 99.0
HFPO-DA	13252-13-6	Target	285.0 / 169.0	285.0 / 118.8
Adona	919005-14-4	Target	377.0 / 251.0	377.0 / 85.0
9Cl-PF3ONS	756426-58-1	Target	531.0 / 351.0	531.0 / 83.0
11Cl-PF3OUdS	763051-92-9	Target	631.0 / 451.0	631.0 / 83.0
¹³C₂-PFHxA	NA	SIS	315.0 / 270.0	NA
¹³C₂-PFDA	NA	SIS	515.0 / 470.0	NA
d₅-EtFOSAA	NA	SIS	589.0 / 419.0	NA
¹³C₃-HFPO-DA	NA	SIS	287.0 / 169.0	NA
¹³C₂-PFOA	NA	IS	415.0 / 270.0	NA
¹³C₄-PFOS	NA	IS	503.0 / 80.0	NA
d₃-MeFOSAA	NA	IS	573.0 / 419.0	NA



Drinking Water Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF ¹	Sample Size (L)	Sample Equivalent (ng/L) ²
25	1	1	0.250	0.1
50	1	1	0.250	0.2
100	1	1	0.250	0.4
250	1	1	0.250	1.0
500	1	1	0.250	2.0
1,000	1	1	0.250	4.0
2,500	1	1	0.250	10.0
5,000	1	1	0.250	20.0
10,000	1	1	0.250	40.0

¹ - base level dilution as part of the extraction procedure

² - calculated equivalent of a sample based on the ICAL concentration



Zef Scientific Inc.

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

QTRAP 5500 Preventive Maintenance Checklist

Preventive Maintenance Date:	13-Dec-2018
Request ID:	12358
Company Name:	Battelle Memorial Institute
Instrument ID:	Instrument AC
Instrument Model:	QTrap 5500
Instrument Serial Number:	AU 23051004

PASS **FAIL**

Any failure will lead to an automatic Service Call being open to investigate fault.

Preventive Maintenance is performed twice every year unless specified in the Service Contract. It is designed to help maintain optimum system performance and to help diagnose any system deficiencies.

Engineer is required the assigned Request ID for this PM otherwise making this job invalid.

Comments: _____

Performed By: Kaustubh Dhayagude **Date:** 13-Dec-2018

Approved By : *[Signature]* **Date:** 13-Dec-2018

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

- Consult Customer concerning the unit overall performance.
- Check Logbook for Services recently performed.
- Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.5	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.2	Read Only
<input checked="" type="checkbox"/> CAD Medium	3.3	Read Only
<input checked="" type="checkbox"/> CAD High	4.1	Read Only
<input checked="" type="checkbox"/> CAD 12	4.1	2.4 to 4.5 x10 ⁻⁵ Torr

- Check for Front end contamination symptoms. Run Q1 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop
- Check for Q3 contamination symptoms. Run Q3 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop

Pre PM PPG Test: Perform each of the following tests. Optimize ion source position only. The specifications listed for these Pre PM tests are guidelines only, not required to be met.

- Perform Q1 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 175.133	3.02 e6	Read Only	0.9336	Read Only
Q1 500.380	1.70 e7	Read Only	0.9827	Read Only
Q1 906.673	2.56 e7	Read Only	1.0305	Read Only

- Perform Q3 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 175.133	2.90 e6	Read Only	0.6413	Read Only
Q3 500.380	1.43 e7	Read Only	0.7689	Read Only
Q3 906.673	2.17 e7	Read Only	0.7984	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

Perform MSMS POS in Product Ion scan with 609.3 parent and record daughter 195.1 using Reserpine 0.167 pmol/ul at the scan rate of 10 Da/s for 10 MCA. Calculate transmission efficiency comparing Q1POS 609 intensity. Transmission Efficiency: : 31.42% (Read Only)

Mass	MSMS Intensity		MSMS Width Value	Width Specs
	Value	Spec		
Q1 609.3	2.18 e7	Read Only	0.8899	Read Only
MS/MS 195.1	6.85 e6	Read Only	0.6696	Read Only

Perform Q1 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 933.636	4.27 e6	Read Only	0.7598	Read Only

Perform Q3 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 933.636	5.71 e6	Read Only	0.7457	Read Only

Perform Product Ion scan using NEG PPG 3e-5M. Record 10mca.

Mass	Scan Rate	MCA	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	8.82 e5	Read Only	0.6745	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

- Check Cooling Fans for Turbo Pumps while MS is ON.
- Check QJet and QPS tuning voltage for reference.
- Record AC input Voltage while MS is OFF: _____(200-240VAC).
If Out-of-Range, notify customer.

- Clean Interface
 - Curtain Plate
 - Orifice Plate
 - QJet
 - Q0 Rods.

- Replace Roughing Pump Oil.
- Inspect Oil Exhaust Filter, if Applicable. N/A
- Clean and inspect built-in divert valve if used. N/A
- Check Multiplier Voltage, optimize if necessary.
- Replace four Air Filters at the bottom of the mass spectrometer.

- Pump down overnight if possible. N/A

- Perform Maintenance on Turbo V source.

- Replace Electrode, if necessary. N/A
- Check Turbo heaters resistances.
- Check if Temperature is reached at 500C with TIS Probe installed.
- Check if Temperature is reached at 500C with APCI Probe installed. N/A

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

- Set-up Sample for Infusion.
- Check spray and adjust sprayer's position of the TIS source.
- Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.6	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.2	Read Only
<input checked="" type="checkbox"/> CAD Medium	3.3	Read Only
<input checked="" type="checkbox"/> CAD High	4.1	Read Only
<input checked="" type="checkbox"/> CAD 12	4.1	2.4 to 4.5 x10 ⁻⁵ Torr

- Perform Q1 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Scan Rate 10 Da/s Record 10 mca				
Q1 175.133	4.47 e6	≥1.2 ^{e6}	0.7356	0.6 to 0.8
Q1 500.380	2.51 e7	≥9.0 ^{e6}	0.7263	0.6 to 0.8
Q1 906.673	3.04 e7	≥1.4 ^{e7}	0.7080	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q1 906.673	1.57 e8	≥6.8 ^{e7}	0.6639	0.6 to 0.8

- Perform Q3 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Scan Rate 10 Da/s Record 10 mca				
Q3 175.133	4.30 e6	≥1.2 ^{e6}	0.6905	0.6 to 0.8
Q3 500.380	2.33 e7	≥9.0 ^{e6}	0.7752	0.6 to 0.8
Q3 906.673	3.51 e7	≥1.4 ^{e7}	0.7682	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q3 906.673	1.58 e8	≥6.8 ^{e7}	0.7088	0.6 to 0.8

- Perform "Product of 609.3" POS and record product ion 195.1 using Reserpine 0.167pmol/uL. Record 10 mca. Calculate Transmission efficiency comparing Q1POS 609 intensity.

Transmission Efficiency: 16.76% (≥ 10.0%)

Mass	MSMS Intensity		Width Value	Width Specs
	Value	Spec		
Q1 609.3	6.74 e7	N/A	0.7430	Read Only
MS/MS 195.1	1.13 e7	N/A	0.7152	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

- Perform Q1 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q1 Intensity		Q1 Width Value	Width Specs
			Value	Spec		
Q1 933.636	10	10	1.25 e7	$\geq 1.0^{e7}$	0.7544	0.6 to 0.8
Q1 933.636	1000	50	7.51 e7	$\geq 4.0^{e7}$	0.7671	0.6 to 0.8

- Perform Q3 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q3 Intensity		Q3 Width Value	Width Specs
			Value	Spec		
Q3 933.636	10	10	2.10 e7	$\geq 8.0^{e6}$	0.7313	0.6 to 0.8
Q3 933.636	1000	50	8.17 e7	$\geq 4.0^{e7}$	0.7088	0.6 to 0.8

- Perform Product Ion scan using NEG PPG 3e-5M.

Mass	Scan Rate	Mca	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	2.97 e6	Read Only	0.6850	Read Only

- Perform ER POS 118.087 and 922.01 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 118.087	0.05	1.03 e7	$\geq 7.2^{e6}$	0.1483	<0.35
ER 922.010	0.05	5.37 e7	$\geq 2.8^{e6}$	0.2138	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 118.087	0.05	2.80 e7	$\geq 2.4^{e7}$	0.4635	<0.65
ER 922.010	0.05	1.33 e8	$\geq 6.8^{e7}$	0.6022	<0.65

- Perform ER NEG 431.982 and 601.978 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 431.982	0.05	3.53 e8	$\geq 4.4^{e7}$	0.1869	<0.35
ER 601.978	0.05	3.46 e8	$\geq 5.6^{e7}$	0.1883	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 431.982	0.05	1.08 e9	$\geq 1.2^{e8}$	0.4373	<0.65
ER 601.978	0.05	1.25 e9	$\geq 1.6^{e8}$	0.4196	<0.65

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

- Perform EPI POS 397.2 using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Q0 Trapping OFF		Q0 Trapping ON	
		Intensity	Spec	Intensity	Spec
EPI 397.2	10000	> 2.8 e6	≥2.0 e6	> 1.0 e7	≥6.4 e6

- Perform MS3 POS full scan Fragmentation ON & OFF using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Fragamentation OFF		Fragmentation ON	
		Intensity	Spec	Intensity	Spec
MS3 397.2	1000	Yes	Contains only 397.2	N/A	N/A
<input type="checkbox"/> 236 OR <input checked="" type="checkbox"/> 365	1000	Yes	Fragment Intensity	> 4.5 e6	≥1.6x 10 ^{e6}

REVIEW:

- Attach all spectrums printouts to this procedure.
- If any parameter setting access modes were changed during the PM, ensure they are returned to their normal access mode and that their offsets are adjusted to match optimized values from the post-PM acquisition files.
- Empty tuning cache folder, if necessary. N/A
- Update Service Work Order status
- Fill and replace PM Label.

END OF PREVENTIVE MAINTENANCE CHECKLIST**Document history:**

06 OCT 2016: Appendix ZEFPM003-2L: Removed requirements to fit Manufacturer's testing criteria.

Battelle Standard ID	Description	Intermediate Solutions			Battelle Reagent ID (purchased solutions)
KJ90	PFAS - 537.1 Surrogate Solution	KJ86	-	-	190410-04
KJ91	PFAS - 537.1 Second Source LCS/MS Solution	-	-	-	190410-03
KJ92	PFAS - 537.1 Internal Standard Solution	KJ89	-	-	180810-02
KL64	PFAS - EPA 537.1 ICAL L1	KJ88	-	-	190410-02
KL64	PFAS - EPA 537.1 ICAL L1	KL62	KJ86	-	190410-04
KL64	PFAS - EPA 537.1 ICAL L1	KL63	KJ89	-	180810-02
KL65	PFAS - EPA 537.1 ICAL L2	KJ88	-	-	190410-02
KL65	PFAS - EPA 537.1 ICAL L2	KL62	KJ86	-	190410-04
KL65	PFAS - EPA 537.1 ICAL L2	KL63	KJ89	-	180810-02
KL66	PFAS - EPA 537.1 ICAL L3	KJ88	-	-	190410-02
KL66	PFAS - EPA 537.1 ICAL L3	KL62	KJ86	-	190410-04
KL66	PFAS - EPA 537.1 ICAL L3	KL63	KJ89	-	180810-02
KL67	PFAS - EPA 537.1 ICAL L4	KJ88	-	-	190410-02
KL67	PFAS - EPA 537.1 ICAL L4	KL62	KJ86	-	190410-04
KL67	PFAS - EPA 537.1 ICAL L4	KL63	KJ89	-	180810-02
KL68	PFAS - EPA 537.1 ICAL L5	KJ88	-	-	190410-02
KL68	PFAS - EPA 537.1 ICAL L5	KL62	KJ86	-	190410-04
KL68	PFAS - EPA 537.1 ICAL L5	KL63	KJ89	-	180810-02
KL69	PFAS - EPA 537.1 ICAL L6	KJ87	-	-	190410-02
KL69	PFAS - EPA 537.1 ICAL L6	KL62	KJ86	-	190410-04
KL69	PFAS - EPA 537.1 ICAL L6	KL63	KJ89	-	180810-02
KL70	PFAS - EPA 537.1 ICAL L7	KJ87	-	-	190410-02
KL70	PFAS - EPA 537.1 ICAL L7	KL62	KJ86	-	190410-04
KL70	PFAS - EPA 537.1 ICAL L7	KL63	KJ89	-	180810-02
KL71	PFAS - EPA 537.1 ICAL L8	KJ87	-	-	190410-02
KL71	PFAS - EPA 537.1 ICAL L8	KL62	KJ86	-	190410-04
KL71	PFAS - EPA 537.1 ICAL L8	KL63	KJ89	-	180810-02
KL72	PFAS - EPA 537.1 ICAL L9	KJ87	-	-	190410-02
KL72	PFAS - EPA 537.1 ICAL L9	KL62	KJ86	-	190410-04
KL72	PFAS - EPA 537.1 ICAL L9	KL63	KJ89	-	180810-02
KL74	PFAS - EPA 537.1 ICC	KJ91	-	-	190410-03
KL74	PFAS - EPA 537.1 ICC	KL62	KJ86	-	190410-04
KL74	PFAS - EPA 537.1 ICC	KL63	KJ89	-	180810-02



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ86**

Description: PFAS - 537.1 Surrogate Standard Stock

Stock Id: **190410-04**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	1000	1.00	1	100.000	1	10	0.10000
13C2-PFHxA	1000	1.00	1	100.000	1	10	0.10000
13C3-HFPO-DA	1000	1.00	1	100.000	1	10	0.10000
d5-EtFOSAA	1000	4.00	1	100.000	1	10	0.40000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.10000
13C2-PFHxA	.10000
13C3-HFPO-DA	.10000
d5-EtFOSAA	.40000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-04	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ87**

Description: PFAS - 537.1 High ICAL Stock

Stock Id: **190410-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	1.88	1	100.000	1	20	0.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	1.86	1	100.000	1	20	0.04650
Adona	500	1.89	1	100.000	1	20	0.04725
Hexafluoropropylene oxide dimer acid	500	2.00	1	100.000	1	20	0.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	500	2.00	1	100.000	1	20	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-1-butanefluorinate	500	1.77	1	100.000	1	20	0.04425
Perfluoro-1-hexanesulfonate	500	1.82	1	100.000	1	20	0.04560
Perfluoro-1-octanesulfonate	500	1.85	1	100.000	1	20	0.04628
Perfluoro-n-decanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-dodecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-heptanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-hexanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-octanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluorononanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-tetradecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-tridecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-undecanoic acid	500	2.00	1	100.000	1	20	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.04650
Adona	.04725
Hexafluoropropylene oxide dimer acid	.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanefluorinate	.04425
Perfluoro-1-hexanesulfonate	.04560
Perfluoro-1-octanesulfonate	.04628
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05000
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KJ87

Description: PFAS - 537.1 High ICAL Stock

Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-02	Pipette	B820865811

Solution Prepared By: Schumitz, Denise **Date Prepared:** 4/11/2019 **Expiration Date:** 4/11/2020

Solution Volume 40 mL X 1 **Vials Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ88**

Description: PFAS - 537.1 Low ICAL Stock

Stock Id: **190410-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	250	1.88	1	100.000	1	100	0.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	250	1.86	1	100.000	1	100	0.00465
Adona	250	1.89	1	100.000	1	100	0.00473
Hexafluoropropylene oxide dimer acid	250	2.00	1	100.000	1	100	0.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	250	2.00	1	100.000	1	100	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-1-butanefluoride	250	1.77	1	100.000	1	100	0.00443
Perfluoro-1-hexanesulfonate	250	1.82	1	100.000	1	100	0.00456
Perfluoro-1-octanesulfonate	250	1.85	1	100.000	1	100	0.00463
Perfluoro-n-decanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-dodecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-heptanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-hexanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-octanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluorononanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-tetradecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-tridecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-undecanoic acid	250	2.00	1	100.000	1	100	0.00500

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00465
Adona	.00473
Hexafluoropropylene oxide dimer acid	.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-butanefluoride	.00443
Perfluoro-1-hexanesulfonate	.00456
Perfluoro-1-octanesulfonate	.00463
Perfluoro-n-decanoic Acid	.00500
Perfluoro-n-dodecanoic acid	.00500
Perfluoro-n-heptanoic Acid	.00500
Perfluoro-n-hexanoic acid	.00500
Perfluoro-n-octanoic Acid	.00500
Perfluorononanoic Acid	.00500

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 4 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: **KJ88**

Description: PFAS - 537.1 Low ICAL Stock

Perfluoro-n-tetradecanoic acid	.00500
Perfluoro-n-tridecanoic acid	.00500
Perfluoro-n-undecanoic acid	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-02	Pipette	B814657482

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
---	---------------------------------	-----------------------------------

Solution Volume 40 mL X 4 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107
--	---

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KJ89

Description: PFAS - 537.1 Internal Standard Stock

Stock Id: 180810-02

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	1000	1.00	1	100.000	1	10	0.10000
13C4-PFOS	1000	2.87	1	100.000	1	10	0.28700
d3-MeFOSAA	1000	4.00	1	100.000	1	10	0.40000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.10000
13C4-PFOS	.28700
d3-MeFOSAA	.40000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180810-02	Pipette	B820865811

Solution Prepared By: Schumitz, Denise **Date Prepared:** 4/11/2019 **Expiration Date:** 4/11/2020

Solution Volume 40 mL X 1 **Vials Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ90**

Description: PFAS - 537.1 Surrogate Solution

Stock Id: **KJ86**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	500	0.10	---	---	1	25	0.00200
13C2-PFHxA	500	0.10	---	---	1	25	0.00200
13C3-HFPO-DA	500	0.10	---	---	1	25	0.00200
d5-EtFOSAA	500	0.40	---	---	1	25	0.00800

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.00200
13C2-PFHxA	.00200
13C3-HFPO-DA	.00200
d5-EtFOSAA	.00800

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ86	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ91**

Description: PFAS - 537.1 Second Source LCS/MS Solution

Stock Id: **190410-03**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	1000	1.88	1	100.000	1	40	0.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	1000	1.86	1	100.000	1	40	0.04650
Adona	1000	1.89	1	100.000	1	40	0.04725
Hexafluoropropylene oxide dimer acid	1000	2.00	1	100.000	1	40	0.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	2.00	1	100.000	1	40	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-1-butanefluorinate	1000	1.77	1	100.000	1	40	0.04425
Perfluoro-1-hexanesulfonate	1000	1.89	1	100.000	1	40	0.04725
Perfluoro-1-octanesulfonate	1000	1.91	1	100.000	1	40	0.04775
Perfluoro-n-decanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-dodecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-heptanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-hexanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-octanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluorononanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-tetradecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-tridecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-undecanoic acid	1000	2.00	1	100.000	1	40	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.04650
Adona	.04725
Hexafluoropropylene oxide dimer acid	.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanefluorinate	.04425
Perfluoro-1-hexanesulfonate	.04725
Perfluoro-1-octanesulfonate	.04775
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05000
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KJ91

Description: PFAS - 537.1 Second Source LCS/MS Solution

Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-03	Pipette	B1100330B

Solution Prepared By: Schumitz, Denise **Date Prepared:** 4/11/2019 **Expiration Date:** 4/11/2020

Solution Volume 40 mL X 1 **Vials Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ92**

Description: PFAS - 537.1 Internal Standard Solution

Stock Id: **KJ89**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	500	0.10	---	---	1	25	0.00200
13C4-PFOS	500	0.29	---	---	1	25	0.00574
d3-MeFOSAA	500	0.40	---	---	1	25	0.00800

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.00200
13C4-PFOS	.00574
d3-MeFOSAA	.00800

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ89	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:32:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL62

Description: PFAS - 537.1 Surrogate Standard Stock II

Stock Id: KJ86	Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
	13C2-PFDA	1000	0.10	---	---	1	5	0.02000
	13C2-PFHxA	1000	0.10	---	---	1	5	0.02000
	13C3-HFPO-DA	1000	0.10	---	---	1	5	0.02000
	d5-EtFOSAA	1000	0.40	---	---	1	5	0.08000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.02000
13C2-PFHxA	.02000
13C3-HFPO-DA	.02000
d5-EtFOSAA	.08000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ86	Pipette	B909301606

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL63**

Description: PFAS - 537.1 Internal Standard Stock II

Stock Id: **KJ89**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	1000	0.10	---	---	1	5	0.02000
13C4-PFOS	1000	0.29	---	---	1	5	0.05740
d3-MeFOSAA	1000	0.40	---	---	1	5	0.08000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.02000
13C4-PFOS	.05740
d3-MeFOSAA	.08000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ89	Pipette	B909301606

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL64**

Description: PFAS - EPA 537.1 ICAL L1

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	50	0.00	---	---	1	10	0.00002
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	50	0.00	---	---	1	10	0.00002
Adona	50	0.00	---	---	1	10	0.00002
Hexafluoropropylene oxide dimer acid	50	0.01	---	---	1	10	0.00003
N-ethylperfluoro-octanesulfonamidoacetic acid	50	0.01	---	---	1	10	0.00003
N-methylperfluoro-1-octanesulfonamidoacetic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-1-butanefluoride	50	0.00	---	---	1	10	0.00002
Perfluoro-1-hexanesulfonate	50	0.00	---	---	1	10	0.00002
Perfluoro-1-octanesulfonate	50	0.00	---	---	1	10	0.00002
Perfluoro-n-decanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-dodecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-heptanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-hexanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-octanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluorononanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-tetradecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-tridecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-undecanoic acid	50	0.01	---	---	1	10	0.00003

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00002

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL64**

Description: PFAS - EPA 537.1 ICAL L1

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00002
Adona	.00002
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00003
N-ethylperfluoro-octanesulfonamidoacetic acid	.00003
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00003
Perfluoro-1-butanedisulfonate	.00002
Perfluoro-1-hexanedisulfonate	.00002
Perfluoro-1-octanedisulfonate	.00002
Perfluoro-n-decanoic Acid	.00003
Perfluoro-n-dodecanoic acid	.00003
Perfluoro-n-heptanoic Acid	.00003
Perfluoro-n-hexanoic acid	.00003
Perfluoro-n-octanoic Acid	.00003
Perfluorononanoic Acid	.00003
Perfluoro-n-tetradecanoic acid	.00003
Perfluoro-n-tridecanoic acid	.00003
Perfluoro-n-undecanoic acid	.00003

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	I0793912B
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL65**

Description: PFAS - EPA 537.1 ICAL L2

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	100	0.00	---	---	1	10	0.00005
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	100	0.00	---	---	1	10	0.00005
Adona	100	0.00	---	---	1	10	0.00005
Hexafluoropropylene oxide dimer acid	100	0.01	---	---	1	10	0.00005
N-ethylperfluoro-octanesulfonamidoacetic acid	100	0.01	---	---	1	10	0.00005
N-methylperfluoro-1-octanesulfonamidoacetic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-1-butanefluoride	100	0.00	---	---	1	10	0.00004
Perfluoro-1-hexanesulfonate	100	0.00	---	---	1	10	0.00005
Perfluoro-1-octanesulfonate	100	0.00	---	---	1	10	0.00005
Perfluoro-n-decanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-dodecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-heptanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-hexanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-octanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluorononanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-tetradecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-tridecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-undecanoic acid	100	0.01	---	---	1	10	0.00005

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00005

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL65

Description: PFAS - EPA 537.1 ICAL L2

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00005
Adona	.00005
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00005
N-ethylperfluoro-octanesulfonamidoacetic acid	.00005
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00005
Perfluoro-1-butanefluoride	.00004
Perfluoro-1-hexanesulfonate	.00005
Perfluoro-1-octanesulfonate	.00005
Perfluoro-n-decanoic Acid	.00005
Perfluoro-n-dodecanoic acid	.00005
Perfluoro-n-heptanoic Acid	.00005
Perfluoro-n-hexanoic acid	.00005
Perfluoro-n-octanoic Acid	.00005
Perfluorononanoic Acid	.00005
Perfluoro-n-tetradecanoic acid	.00005
Perfluoro-n-tridecanoic acid	.00005
Perfluoro-n-undecanoic acid	.00005

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	I0793912B
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie		Date Prepared: 5/28/2019		Expiration Date: 4/11/2020	
Solution Volume	40 mL X 1	Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		
Comment: 96/4 methanol/milli-q water (RP-190528-1)					

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL66**

Description: PFAS - EPA 537.1 ICAL L3

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	200	0.00	---	---	1	10	0.00009
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	200	0.00	---	---	1	10	0.00009
Adona	200	0.00	---	---	1	10	0.00009
Hexafluoropropylene oxide dimer acid	200	0.01	---	---	1	10	0.00010
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-1-butanefluoride	200	0.00	---	---	1	10	0.00009
Perfluoro-1-hexanesulfonate	200	0.00	---	---	1	10	0.00009
Perfluoro-1-octanesulfonate	200	0.00	---	---	1	10	0.00009
Perfluoro-n-decanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-dodecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-heptanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-hexanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-octanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluorononanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tetradecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tridecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-undecanoic acid	200	0.01	---	---	1	10	0.00010

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00009

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL66**

Description: PFAS - EPA 537.1 ICAL L3

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00009
Adona	.00009
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00010
N-ethylperfluoro-octanesulfonamidoacetic acid	.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00010
Perfluoro-1-butanefluoride	.00009
Perfluoro-1-hexanesulfonate	.00009
Perfluoro-1-octanesulfonate	.00009
Perfluoro-n-decanoic Acid	.00010
Perfluoro-n-dodecanoic acid	.00010
Perfluoro-n-heptanoic Acid	.00010
Perfluoro-n-hexanoic acid	.00010
Perfluoro-n-octanoic Acid	.00010
Perfluorononanoic Acid	.00010
Perfluoro-n-tetradecanoic acid	.00010
Perfluoro-n-tridecanoic acid	.00010
Perfluoro-n-undecanoic acid	.00010

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	B909301860
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL67**

Description: PFAS - EPA 537.1 ICAL L4

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	0.00	---	---	1	10	0.00024
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	0.00	---	---	1	10	0.00023
Adona	500	0.00	---	---	1	10	0.00024
Hexafluoropropylene oxide dimer acid	500	0.01	---	---	1	10	0.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-1-butanefluoride	500	0.00	---	---	1	10	0.00022
Perfluoro-1-hexanesulfonate	500	0.00	---	---	1	10	0.00023
Perfluoro-1-octanesulfonate	500	0.00	---	---	1	10	0.00023
Perfluoro-n-decanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-dodecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-heptanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-hexanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-octanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluorononanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tetradecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tridecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-undecanoic acid	500	0.01	---	---	1	10	0.00025

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00024

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL67**

Description: PFAS - EPA 537.1 ICAL L4

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00023
Adona	.00024
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00025
Perfluoro-1-butanefluoride	.00022
Perfluoro-1-hexanesulfonate	.00023
Perfluoro-1-octanesulfonate	.00023
Perfluoro-n-decanoic Acid	.00025
Perfluoro-n-dodecanoic acid	.00025
Perfluoro-n-heptanoic Acid	.00025
Perfluoro-n-hexanoic acid	.00025
Perfluoro-n-octanoic Acid	.00025
Perfluorononanoic Acid	.00025
Perfluoro-n-tetradecanoic acid	.00025
Perfluoro-n-tridecanoic acid	.00025
Perfluoro-n-undecanoic acid	.00025

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL68**

Description: PFAS - EPA 537.1 ICAL L5

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	2000	0.00	---	---	1	20	0.00047
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	2000	0.00	---	---	1	20	0.00047
Adona	2000	0.00	---	---	1	20	0.00047
Hexafluoropropylene oxide dimer acid	2000	0.01	---	---	1	20	0.00050
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.01	---	---	1	20	0.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-1-butanefluoride	2000	0.00	---	---	1	20	0.00044
Perfluoro-1-hexanesulfonate	2000	0.00	---	---	1	20	0.00046
Perfluoro-1-octanesulfonate	2000	0.00	---	---	1	20	0.00046
Perfluoro-n-decanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-dodecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-heptanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-hexanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-octanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluorononanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-tetradecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-tridecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-undecanoic acid	2000	0.01	---	---	1	20	0.00050

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	100	0.02	---	---	1	20	0.00010
13C2-PFHxA	100	0.02	---	---	1	20	0.00010
13C3-HFPO-DA	100	0.02	---	---	1	20	0.00010
d5-EtFOSAA	100	0.08	---	---	1	20	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	100	0.02	---	---	1	20	0.00010
13C4-PFOS	100	0.06	---	---	1	20	0.00029
d3-MeFOSAA	100	0.08	---	---	1	20	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00047

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1).

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: **KL68**

Description: PFAS - EPA 537.1 ICAL L5

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00047
Adona	.00047
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00050
N-ethylperfluoro-octanesulfonamidoacetic acid	.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00050
Perfluoro-1-butanedisulfonate	.00044
Perfluoro-1-hexanesulfonate	.00046
Perfluoro-1-octanesulfonate	.00046
Perfluoro-n-decanoic Acid	.00050
Perfluoro-n-dodecanoic acid	.00050
Perfluoro-n-heptanoic Acid	.00050
Perfluoro-n-hexanoic acid	.00050
Perfluoro-n-octanoic Acid	.00050
Perfluorononanoic Acid	.00050
Perfluoro-n-tetradecanoic acid	.00050
Perfluoro-n-tridecanoic acid	.00050
Perfluoro-n-undecanoic acid	.00050

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1).

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL69**

Description: PFAS - EPA 537.1 ICAL L6

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	400	0.05	---	---	1	20	0.00094
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	400	0.05	---	---	1	20	0.00093
Adona	400	0.05	---	---	1	20	0.00095
Hexafluoropropylene oxide dimer acid	400	0.05	---	---	1	20	0.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	400	0.05	---	---	1	20	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-1-butanefluoride	400	0.04	---	---	1	20	0.00089
Perfluoro-1-hexanesulfonate	400	0.05	---	---	1	20	0.00091
Perfluoro-1-octanesulfonate	400	0.05	---	---	1	20	0.00093
Perfluoro-n-decanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-dodecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-heptanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-hexanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-octanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluorononanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-tetradecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-tridecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-undecanoic acid	400	0.05	---	---	1	20	0.00100

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	100	0.02	---	---	1	20	0.00010
13C2-PFHxA	100	0.02	---	---	1	20	0.00010
13C3-HFPO-DA	100	0.02	---	---	1	20	0.00010
d5-EtFOSAA	100	0.08	---	---	1	20	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	100	0.02	---	---	1	20	0.00010
13C4-PFOS	100	0.06	---	---	1	20	0.00029
d3-MeFOSAA	100	0.08	---	---	1	20	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00094

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL69**

Description: PFAS - EPA 537.1 ICAL L6

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00093
Adona	.00095
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanedisulfonate	.00089
Perfluoro-1-hexanesulfonate	.00091
Perfluoro-1-octanesulfonate	.00093
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00100
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL70**

Description: PFAS - EPA 537.1 ICAL L7

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	0.05	---	---	1	10	0.00235
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	0.05	---	---	1	10	0.00232
Adona	500	0.05	---	---	1	10	0.00236
Hexafluoropropylene oxide dimer acid	500	0.05	---	---	1	10	0.00250
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-1-butanefluoride	500	0.04	---	---	1	10	0.00221
Perfluoro-1-hexanesulfonate	500	0.05	---	---	1	10	0.00228
Perfluoro-1-octanesulfonate	500	0.05	---	---	1	10	0.00231
Perfluoro-n-decanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-dodecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-heptanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-hexanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-octanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluorononanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tetradecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tridecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-undecanoic acid	500	0.05	---	---	1	10	0.00250

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00235

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL70

Description: PFAS - EPA 537.1 ICAL L7

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00232
Adona	.00236
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00250
N-ethylperfluoro-octanesulfonamidoacetic acid	.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00250
Perfluoro-1-butanedisulfonate	.00221
Perfluoro-1-hexanedisulfonate	.00228
Perfluoro-1-octanedisulfonate	.00231
Perfluoro-n-decanoic Acid	.00250
Perfluoro-n-dodecanoic acid	.00250
Perfluoro-n-heptanoic Acid	.00250
Perfluoro-n-hexanoic acid	.00250
Perfluoro-n-octanoic Acid	.00250
Perfluorononanoic Acid	.00250
Perfluoro-n-tetradecanoic acid	.00250
Perfluoro-n-tridecanoic acid	.00250
Perfluoro-n-undecanoic acid	.00250

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		
Comment: 96/4 methanol/milli-q water (RP-190528-1)		

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL71**

Description: PFAS - EPA 537.1 ICAL L8

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	1000	0.05	---	---	1	10	0.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	1000	0.05	---	---	1	10	0.00465
Adona	1000	0.05	---	---	1	10	0.00473
Hexafluoropropylene oxide dimer acid	1000	0.05	---	---	1	10	0.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	0.05	---	---	1	10	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-1-butanefluoride	1000	0.04	---	---	1	10	0.00443
Perfluoro-1-hexanesulfonate	1000	0.05	---	---	1	10	0.00456
Perfluoro-1-octanesulfonate	1000	0.05	---	---	1	10	0.00463
Perfluoro-n-decanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-dodecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-heptanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-hexanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-octanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluorononanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-tetradecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-tridecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-undecanoic acid	1000	0.05	---	---	1	10	0.00500

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00470

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL71**

Description: PFAS - EPA 537.1 ICAL L8

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00465
Adona	.00473
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-butanefluoride	.00443
Perfluoro-1-hexanesulfonate	.00456
Perfluoro-1-octanesulfonate	.00463
Perfluoro-n-decanoic Acid	.00500
Perfluoro-n-dodecanoic acid	.00500
Perfluoro-n-heptanoic Acid	.00500
Perfluoro-n-hexanoic acid	.00500
Perfluoro-n-octanoic Acid	.00500
Perfluorononanoic Acid	.00500
Perfluoro-n-tetradecanoic acid	.00500
Perfluoro-n-tridecanoic acid	.00500
Perfluoro-n-undecanoic acid	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL72**

Description: PFAS - EPA 537.1 ICAL L9

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	2000	0.05	---	---	1	10	0.00940
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	2000	0.05	---	---	1	10	0.00930
Adona	2000	0.05	---	---	1	10	0.00945
Hexafluoropropylene oxide dimer acid	2000	0.05	---	---	1	10	0.01000
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-1-butanefluoride	2000	0.04	---	---	1	10	0.00885
Perfluoro-1-hexanesulfonate	2000	0.05	---	---	1	10	0.00912
Perfluoro-1-octanesulfonate	2000	0.05	---	---	1	10	0.00925
Perfluoro-n-decanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-dodecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-heptanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-hexanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-octanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluorononanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-tetradecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-tridecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-undecanoic acid	2000	0.05	---	---	1	10	0.01000

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00940

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL72

Description: PFAS - EPA 537.1 ICAL L9

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00930
Adona	.00945
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.01000
N-ethylperfluoro-octanesulfonamidoacetic acid	.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.01000
Perfluoro-1-butanedisulfonate	.00885
Perfluoro-1-hexanedisulfonate	.00912
Perfluoro-1-octanedisulfonate	.00925
Perfluoro-n-decanoic Acid	.01000
Perfluoro-n-dodecanoic acid	.01000
Perfluoro-n-heptanoic Acid	.01000
Perfluoro-n-hexanoic acid	.01000
Perfluoro-n-octanoic Acid	.01000
Perfluorononanoic Acid	.01000
Perfluoro-n-tetradecanoic acid	.01000
Perfluoro-n-tridecanoic acid	.01000
Perfluoro-n-undecanoic acid	.01000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL74**

Description: PFAS - EPA 537.1 ICC

Stock Id: KJ91

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	200	0.05	---	---	1	10	0.00094
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	200	0.05	---	---	1	10	0.00093
Adona	200	0.05	---	---	1	10	0.00095
Hexafluoropropylene oxide dimer acid	200	0.05	---	---	1	10	0.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-1-butanefluoride	200	0.04	---	---	1	10	0.00089
Perfluoro-1-hexanesulfonate	200	0.05	---	---	1	10	0.00095
Perfluoro-1-octanesulfonate	200	0.05	---	---	1	10	0.00095
Perfluoro-n-decanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-dodecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-heptanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-hexanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-octanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluorononanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tetradecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tridecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-undecanoic acid	200	0.05	---	---	1	10	0.00100

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00094

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: **KL74**

Description: PFAS - EPA 537.1 ICC

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00093
Adona	.00095
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanefulfonate	.00089
Perfluoro-1-hexanesulfonate	.00095
Perfluoro-1-octanesulfonate	.00095
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00100
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ91	Pipette	B814657482
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

BDO Id: 180810-02

Reagent Receipt Report

 Approved: Authorized

Name: <u>EPA-537IS</u> Vendor: <u>Wellington Laboratories</u> Catalogue No: <u>EPA-537IS</u> Type: <u>Solution</u> Lot No: <u>537IS1217</u> Quantity: <u>2 ea</u> ml % Moisture: _____ Description: <u>EPA-537IS</u>	Received: <u>8/10/2018</u> Custodian: <u>Schumitz, Denise</u> Expires: <u>12/13/2022</u> Consumed: _____ Stored In: <u>AqChem Laboratory - R0124</u>
--	---

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFOA	BDO-2107	1.0000	100.00	--	--	<input type="checkbox"/>		
13C4-PFOS	BDO-2121	2.8700	100.00	--	--	<input type="checkbox"/>		1
d3-MeFOSAA	BDO-1838	4.0000	100.00	--	--	<input type="checkbox"/>		

Total Analytes: 3
Notes:

Analyte:	Comment:
1 13C4-PFOS	3.0 as the salt

Approved by: _____	Approved on: _____
Authorized by: _____	Authorized on: _____

1808 10-2



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537IS

Internal Standard
Primary Dilution Standard

<u>PRODUCT CODE:</u>	EPA-537IS
<u>LOT NUMBER:</u>	537IS1217
<u>SOLVENT(S):</u>	Methanol / Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	12/13/2017
<u>LAST TESTED:</u> (mm/dd/yyyy)	12/13/2017
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	12/13/2022
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

EPA-537IS is a solution/mixture of a mass-labelled (¹³C) perfluoroalkylcarboxylic acid, a mass-labelled (¹³C) perfluoroalkylsulfonate, and a mass-labelled (²H) perfluorooctanesulfonamidoacetic acid. The components and their concentrations are given in Table A.

The mass-labelled perfluoroalkylcarboxylic acid and the mass-labelled perfluoroalkylsulfonate both have chemical purities of >98% and isotopic purities of ≥99%. The mass-labelled perfluorooctanesulfonamidoacetic acid has a chemical purity of >98% and an isotopic purity of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (TIC)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

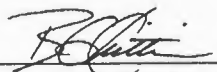
FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid	M2PFOA	1000		A
N-methyl-d ₃ -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	4000		C
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate	MPFOS	3000	2870	B

Certified By:



B.G. Chittim, General Manager
Date: 12/22/2017
(mm/dd/yyyy)

It can be done

BDO Id: 190410-02

Reagent Receipt Report

Approved: Authorized

Name: EPA-537PDS-R1 Received: 4/10/2019
Vendor: Wellington Laboratories Custodian: Schumitz, Matt
Catalogue No: EPA-537PDS-R1 Expires: 3/19/2022
Type: Solution Consumed: _____
Lot No: 537PDSR10119 Stored In: VOC Laboratory - R0123
Quantity: 1 ea ml % Moisture: _____
Description: EPA-537PDS-R1

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
11-chloroeicosafuoro-3-oxaundecan	763051-92-9	1.8800	100.00	--	--	<input type="checkbox"/>			
9-chlorohexadecafluoro-3-oxanonane	756426-58-1	1.8600	100.00	--	--	<input type="checkbox"/>			
Adona	919005-14-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Hexafluoropropylene oxide dimer aci	13252-13-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	2.0000	100.00	--	--	<input type="checkbox"/>			1
N-methylperfluoro-1-octanesulfonami	2355-31-9	2.0000	100.00	--	--	<input type="checkbox"/>			2
Perfluoro-1-butanefulfonate	375-73-5	1.7700	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonate	355-46-4	1.8240	100.00	--	--	<input type="checkbox"/>			3
Perfluoro-1-octanesulfonate	1763-23-1	1.8510	100.00	--	--	<input type="checkbox"/>			4
Perfluoro-n-decanoic Acid	335-76-2	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 18

Notes:

Analyte:	Comment:
1 N-ethylperfluoro-octanesulfonamidoacetic acid	Sum of branched and linear isomers
2 N-methylperfluoro-1-octanesulfonamidoacetic acid	Sum of branched and linear isomers
3 Perfluoro-1-hexanesulfonate	Sum of branched and linear isomers
4 Perfluoro-1-octanesulfonate	Sum of branched and linear isomers

Approved by: _____ Approved on: _____
Authorized by: _____ Authorized on: _____



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537PDS-R1

Native PFAS Primary Dilution Standard Solution/Mixture

PRODUCT CODE: EPA-537PDS-R1
LOT NUMBER: 537PDSR10119
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 02/14/2019
LAST TESTED: (mm/dd/yyyy) 03/19/2019
EXPIRY DATE: (mm/dd/yyyy) 03/19/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

EPA-537PDS-R1 is a solution/mixture of native linear perfluoroalkylcarboxylic acids (PFCAs; C₆-C₁₄), native perfluoroalkylsulfonates (PFSAs; C₄ linear; C₆ and C₈ linear and branched), native N-substituted perfluoro-octanesulfonamidoacetic acids (N-MeFOSAA and N-EtFOSAA; linear and branched), GenX (HFPO-DA), the main components of F-53B (9Cl-PF3ONS and 11Cl-PF3OUDS), and the sodium salt of ADONA (NaDONA). The components and their concentrations are given in Table A.

The components of this solution/mixture all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

- Table A: Components and Concentrations of the Solution/Mixture
- Table B: Isomeric Components and Percent Composition of N-MeFOSAA
- Table C: Isomeric Components and Percent Composition of N-EtFOSAA
- Table D: Isomeric Components and Percent Composition of PFHxSK
- Table E: Isomeric Components and Percent Composition of PFOSK
- Figure 1: LC/MS Data (SIR)
- Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537PDS-R1; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-hexanoic acid	PFHxA	2000		B
Perfluoro-n-heptanoic acid	PFHpA	2000		D
Perfluoro-n-octanoic acid	PFOA	2000		H
Perfluoro-n-nonanoic acid	PFNA	2000		I
Perfluoro-n-decanoic acid	PFDA	2000		M
Perfluoro-n-undecanoic acid	PFUdA	2000		R
Perfluoro-n-dodecanoic acid	PFDoA	2000		T
Perfluoro-n-tridecanoic acid	PFTrDA	2000		U
Perfluoro-n-tetradecanoic acid	PFTeDA	2000		V
2,3,3,3-Tetrafluoro-2-(1,1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		C
N-methylperfluorooctanesulfonamidoacetic acid ^a	N-MeFOSAA: linear isomer	1520		O
	N-MeFOSAA: Σ branched isomers	480		N
N-ethylperfluorooctanesulfonamidoacetic acid ^b	N-EtFOSAA: linear isomer	1550		Q
	N-EtFOSAA: Σ branched isomers	450		P
Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000	1770	A
Potassium perfluorohexanesulfonate ^c	PFHxSK: linear isomer	1620	1480	G
	PFHxSK: Σ branched isomers	378	344	F
Potassium perfluorooctanesulfonate ^d	PFOSK: linear isomer	1580	1460	K
	PFOSK: Σ branched isomers	422	391	J
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	2000	1890	E
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1860	L
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1880	S

^a See Table B for percent composition of linear and branched N-MeFOSAA isomers.

^b See Table C for percent composition of linear and branched N-EtFOSAA isomers.

^c See Table D for percent composition of linear and branched PFHxSK isomers.

^d See Table E for percent composition of linear and branched PFOSK isomers.

* Concentrations have been rounded to three significant figures.



It can be done

BDO Id: 190410-03

Reagent Receipt Report

 Approved: Authorized

Name: <u>EPA-537PDSL-R1</u>	Received: <u>4/10/2019</u>
Vendor: <u>Wellington Laboratories</u>	Custodian: <u>Schumitz, Matt</u>
Catalogue No: <u>EPA-537PDSL-R1</u>	Expires: <u>2/14/2022</u>
Type: <u>Solution</u>	Consumed: _____
Lot No: <u>537PDSL-R10119</u>	Stored In: <u>VOC Laboratory - R0123</u>
Quantity: <u>1 ea</u> <u>ml</u> % Moisture: _____	
Description: <u>EPA-537PDSL-R1</u>	

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
11-chloroeicosafuoro-3-oxaundecan	763051-92-9	1.8800	100.00	--	--	<input type="checkbox"/>			
9-chlorohexadecafluoro-3-oxanonane	756426-58-1	1.8600	100.00	--	--	<input type="checkbox"/>			
Adona	919005-14-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Hexafluoropropylene oxide dimer aci	13252-13-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-methylperfluoro-1-octanesulfonami	2355-31-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-butanefulfonate	375-73-5	1.7700	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonate	355-46-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-octanesulfonate	1763-23-1	1.9100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-decanoic Acid	335-76-2	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 18

Notes:

Approved by: _____	Approved on: _____
Authorized by: _____	Authorized on: _____



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537PDSL-R1

Native PFAS Linear Primary Dilution Standard Solution/Mixture

PRODUCT CODE: EPA-537PDSL-R1
LOT NUMBER: 537PDSL10119
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 01/30/2019
LAST TESTED: (mm/dd/yyyy) 02/14/2019
EXPIRY DATE: (mm/dd/yyyy) 02/14/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

EPA-537PDSL-R1 is a solution/mixture of native linear perfluoroalkylcarboxylic acids (PFCAs; C₆-C₁₄), native linear perfluoroalkylsulfonates (PFSAs; C₆, C₈, and C₁₀), native linear N-substituted perfluorooctanesulfonamidoacetic acids (N-MeFOSAA and N-EtFOSAA), GenX (HFPO-DA), the main components of F-53B (9Cl-PF3ONS and 11Cl-PF3OUdS), and the sodium salt of ADONA (NaDONA). The components and their concentrations are given in Table A.

The components of this solution all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

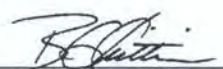
Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537PDSL-R1; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		(ng/ml)		
Perfluoro-n-hexanoic acid	PFHxA	2000		B
Perfluoro-n-heptanoic acid	PFHpA	2000		D
Perfluoro-n-octanoic acid	PFOA	2000		G
Perfluoro-n-nonanoic acid	PFNA	2000		H
Perfluoro-n-decanoic acid	PFDA	2000		K
Perfluoro-n-undecanoic acid	PFUdA	2000		N
Perfluoro-n-dodecanoic acid	PFDoA	2000		P
Perfluoro-n-tridecanoic acid	PFTrDA	2000		Q
Perfluoro-n-tetradecanoic acid	PFTeDA	2000		R
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		C
N-methylperfluoro-1-octanesulfonamidoacetic acid	N-MeFOSAA	2000		L
N-ethylperfluoro-1-octanesulfonamidoacetic acid	N-EtFOSAA	2000		M
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000	1770	A
Sodium perfluoro-1-hexanesulfonate	L-PFHxS	2000	1890	F
Sodium perfluoro-1-octanesulfonate	L-PFOS	2000	1910	I
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	2000	1890	E
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1860	J
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1880	O

* Concentrations have been rounded to three significant figures.

Certified By:


B.G. Chittim, General Manager

Date: 03/26/2019
(mm/dd/yyyy)

It can be done

BDO Id: 190410-04

Reagent Receipt Report

Approved: Authorized

Name: EPA-537SS-R1 Received: 4/10/2019
Vendor: Wellington Laboratories Custodian: Schumitz, Matt
Catalogue No: EPA-537SS-R1 Expires: 3/29/2022
Type: Solution Consumed: _____
Lot No: 537SSR10119 Stored In: VOC Laboratory - R0123
Quantity: 1 ea ml % Moisture: _____
Description: EPA-537SS-R1

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFDA	BDO-2110	1.0000	100.00	--	--	<input type="checkbox"/>			
13C2-PFHxA	BDO-2106	1.0000	100.00	--	--	<input type="checkbox"/>			
13C3-HFPO-DA	BDO-2276	1.0000	100.00	--	--	<input type="checkbox"/>			
d5-EtFOSAA	BDO-1839	4.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 4

Notes:

Approved by: _____ Approved on: _____
Authorized by: _____ Authorized on: _____

190410-04



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-537SS-R1

Surrogate Primary Dilution Standard

<u>PRODUCT CODE:</u>	EPA-537SS-R1
<u>LOT NUMBER:</u>	537SSR10119
<u>SOLVENT(S):</u>	Methanol / Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	01/30/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	03/29/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	03/29/2022
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

EPA-537SS-R1 is a solution/mixture of two mass-labelled (¹³C) perfluoroalkylcarboxylic acids (MPFHxA and MPFDA), a mass-labelled (²H) N-ethyl-perfluorooctanesulfonamidoacetic acid (d5-N-EtFOSAA), and mass-labelled (¹³C) 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (M3HFPO-DA). The components and their concentrations are given in Table A.

The mass-labelled (¹³C) perfluoroalkylcarboxylic acids and mass-labelled (¹³C) 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid have chemical purities of >98% and isotopic purities of ≥99%. The mass-labelled (²H) N-ethyl-perfluorooctanesulfonamidoacetic acid has a chemical purity of >98% and an isotopic purity of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.
- Contains ~ 1.9% of the linear M3HFPO-DA isomer (determined by ¹⁹F NMR) relative to the M3HFPO-DA analyte and ~ 0.1% of perfluoro-n-hexanoic acid (PFHxA) relative to the MPFHxA analyte.

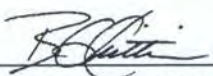
FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537SS-R1; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)	Peak Assignment in Figure 1
Perfluoro-n-[1,2- ¹³ C ₂]hexanoic acid	MPFHxA	1000	A
Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid	MPFDA	1000	C
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)- ¹³ C ₃ -propanoic acid	M3HFPO-DA	1000	B
N-ethyl-d ₅ -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	4000	D

Certified By:


 B.G. Chittim, General Manager
Date: 04/01/2019
(mm/dd/yyyy)

ACCREDITATIONS

Accrediting Authority	Laboratory ID
U.S. Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP)	91667
State of Florida Department of Health	E87856
State of New York Department of Health	12105
Commonwealth of Pennsylvania Department of Environmental Protection	68-05687
State of Washington Department of Ecology	C1050
State of California	3045
Commonwealth of Massachusetts	E87856

Current certificates and lists of accredited parameters are available upon request.



Sample Preparation



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS**

<p><u>Project Title(s)</u> PFAS: Nasa Kennedy Space Center 19-0465 Nasa: PFAS Drinking Water DW, QC SOP Numbers (see workplan for modifications) VOASOP No. 5-371</p>	<p><u>Project No.(s)</u> 100123260</p>
--	--

This Batch Contains The Following Samples:		
CU242PB-FS	I3459-FS	I3466-FS
CU243LCS-FS	I3461-FS	I3468-FS
I3451-FS	I3463-FS	I3470-FS
I3453-FS	I3463MS-FS	
I3455-FS	I3463MSD-FS	
I3457-FS	I3465-FS	

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	06/05/2019	DMS



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465

**Nasa: PFAS Drinking Water
DW, QC**

Sample ID	Description
CU242PB-FS	Procedural Blank
CU243LCS-FS	Laboratory Control Sample
I3451-FS	Q6-0082-DW0001-20190530
I3453-FS	H6-1607-DW0001-20190530
I3455-FS	M6-1518-DW0001-20190531
I3457-FS	H5-2139-DW0001-20190531
I3459-FS	H5-1434-DW0001-20190531
I3461-FS	H4-1598-DW0001-20190531
I3463-FS	F4-1844-DW0001-20190531
I3463MS-FS	Matrix Spike of F4-1844-DW0001-20190531
I3463MSD-FS	Matrix Spike Duplicate of F4-1844-DW0001-20190531
I3465-FS	E3-1120-DW0001-20190531
I3466-FS	E3-1120-FD-20190531-01
I3468-FS	H4-1797-DW0001-20190531
I3470-FS	H4-1840A-DW0001-20190531

Samples Assigned By:

Jonathan Thorn

Date :

June 3, 2019

Comments:



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE CUSTODY LOG

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465**Nasa: PFAS Drinking Water****DW, QC**

Requested On/By: 06/03/2019 SAS	Purpose: Sample Preparation
Relinquished On/By: 06/03/2019 MDS	Last Activity: Transfer
Accepted On/By: 06/03/2019 SAS Stored In Facility: Sample Preparation Stored Until: 06/03/2019 Stored Comment: NA	Returned On/To: Returned To Facility: Returned Comment: NA

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	I3451	1	C	Consumed	NA
2	I3453	1	C	Consumed	NA
3	I3455	1	C	Consumed	NA
4	I3457	1	C	Consumed	NA
5	I3459	1	C	Consumed	NA
6	I3461	1	C	Consumed	NA
7	I3463	1	C	Consumed	NA
8	I3465	1	C	Consumed	NA
9	I3466	1	C	Consumed	NA
10	I3468	1	C	Consumed	NA
11	I3470	1	C	Consumed	NA
Total Samples		11		* "C" = Consumed Container	



It can be done

**BATTELLE - NORWELL OPERATIONS
LIQUID SAMPLE ID FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465

Nasa: PFAS Drinking Water

DW, QC

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CU242PB-FS	Procedural Blank	250.0	NA	--	06/03/19 SAS
CU243LCS-FS	Laboratory Control Sample	250.0	NA	--	06/03/19 SAS
I3451-FS	Q6-0082-DW0001-20190530	275.0	1	C	06/04/19 SAS
I3453-FS	H6-1607-DW0001-20190530	275.0	1	C	06/04/19 SAS
I3455-FS	M6-1518-DW0001-20190531	275.0	1	C	06/04/19 SAS
I3457-FS	H5-2139-DW0001-20190531	275.0	1	C	06/04/19 SAS
I3459-FS	H5-1434-DW0001-20190531	275.0	1	C	06/04/19 SAS
I3461-FS	H4-1598-DW0001-20190531	270.0	1	C	06/04/19 SAS
I3463-FS	F4-1844-DW0001-20190531	270.0	1	C	06/04/19 SAS
I3463MS-FS	Matrix Spike	275.0	3	C	06/04/19 SAS
I3463MSD-FS	Matrix Spike Duplicate	275.0	5	C	06/04/19 SAS
I3465-FS	E3-1120-DW0001-20190531	275.0	1	C	06/04/19 SAS
I3466-FS	E3-1120-FD-20190531-01	270.0	1	C	06/04/19 SAS
I3468-FS	H4-1797-DW0001-20190531	270.0	1	C	06/04/19 SAS
I3470-FS	H4-1840A-DW0001-20190531	270.0	1	C	06/04/19 SAS

Comments:

Sample ID:	Comments:
CU242PB-FS	1.26g of Trizma 190131-01 weighed on BAL-009.
CU243LCS-FS	1.23g of Trizma 190131-01 weighed on BAL-009.

Samples Assigned By:

Jonathan Thorn

Date :

June 3, 2019

* - "C" = Sample is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465

Nasa: PFAS Drinking Water

DW, QC

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CU242PB-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
CU243LCS-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
CU243LCS-FS	KJ91	LCS/MS	1	100	06/03/19 SAS	CV	NA
I3451-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3453-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3455-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3457-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3459-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3461-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3463-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3463MS-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3463MS-FS	KJ91	LCS/MS	1	100	06/03/19 SAS	CV	NA
I3463MSD-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3463MSD-FS	KJ91	LCS/MS	1	100	06/03/19 SAS	CV	NA
I3465-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3466-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3468-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3470-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KJ90	Pipette	B814659662
KJ91	Pipette	B814659662



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE EXTRACTION FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465**Nasa: PFAS Drinking Water****DW, QC**

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CU242PB-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
CU243LCS-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3451-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3453-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3455-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3457-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3459-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3461-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3463-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3463MS-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3463MSD-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3465-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3466-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3468-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3470-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
Pre-packed SPE Column	RP-190603-9	06/04/19	S214-0085/S19-001455	Pre-packed SPE Column	

Solvents/Reagents:

Name	Lot No	Comments
Methanol (HPLC) (190521-09)	187803	



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465**Nasa: PFAS Drinking Water****DW, QC****(N/A Fraction)**

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
CU242PB-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
CU243LCS-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
CU243LCS-FS-D(3)	960	40	KJ92	50	1	1000	5.000	06/05/19 SAS	JRS
I3451-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3453-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3455-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3457-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3459-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3461-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3463-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3463MS-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3463MS-FS-D(3)	960	40	KJ92	50	1	1000	5.000	06/05/19 SAS	JRS
I3463MSD-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3463MSD-FS-D(3)	960	40	KJ92	50	1	1000	5.000	06/05/19 SAS	JRS
I3465-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3466-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3468-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3470-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.



It can be done

**BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465

**Nasa: PFAS Drinking Water
DW, QC**

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KJ92	Pipette	B814659662

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465**Nasa: PFAS Drinking Water****DW, QC**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CU242PB-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
CU243LCS-FS	0	C	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
CU243LCS-FS	2	--	6/5/2019 9:16:00 AM	CU243LCS-FS	0	1000	800	1.250	1.250	06/05/19 SAS
CU243LCS-FS-D	3	--	6/5/2019 9:16:00 AM	CU243LCS-FS	0	1000	200	5.000	5.000	06/05/19 SAS
I3451-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3453-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3455-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3457-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3459-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3461-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3463-FS	0	--	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3463MS-FS	0	C	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3463MS-FS	2	--	6/5/2019 9:16:00 AM	I3463MS-FS	0	1000	800	1.250	1.250	06/05/19 SAS
I3463MS-FS-D	3	--	6/5/2019 9:16:00 AM	I3463MS-FS	0	1000	200	5.000	5.000	06/05/19 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465**Nasa: PFAS Drinking Water****DW, QC**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
I3463MSD-FS	0	C	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3463MSD-FS	2	--	6/5/2019 9:16:00 AM	I3463MSD-FS	0	1000	800	1.250	1.250	06/05/19 SAS
I3463MSD-FS-D	3	--	6/5/2019 9:16:00 AM	I3463MSD-FS	0	1000	200	5.000	5.000	06/05/19 SAS
I3465-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3466-FS	0	--	6/3/2019 1:21:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3468-FS	0	--	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3470-FS	0	--	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465**Nasa: PFAS Drinking Water****DW, QC**

Purpose: LC-MS/MS TRANSFER		Last Activity: Prep->Inst			
Relinquished On/By: Jun 4 2019 1:46PM SAS		Received On/By: Jun 4 2019 1:46PM DMS			
Relinquished From: Sample Preparation: NA		Received Location: LC Laboratory: NA			
Relinquish Comment: NA		Received Comment: Samples reconstituted in 96/4 methanol/milli-q water (RP-190604-2).			
No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CU242PB-FS(0)	1000	1	Intact	NA
2	CU243LCS-FS(0)	1000	1	Intact	NA
3	I3451-FS(0)	1000	1	Intact	NA
4	I3453-FS(0)	1000	1	Intact	NA
5	I3455-FS(0)	1000	1	Intact	NA
6	I3457-FS(0)	1000	1	Intact	NA
7	I3459-FS(0)	1000	1	Intact	NA
8	I3461-FS(0)	1000	1	Intact	NA
9	I3463-FS(0)	1000	1	Intact	NA
10	I3463MS-FS(0)	1000	1	Intact	NA
11	I3463MSD-FS(0)	1000	1	Intact	NA
12	I3465-FS(0)	1000	1	Intact	NA
13	I3466-FS(0)	1000	1	Intact	NA
14	I3468-FS(0)	1000	1	Intact	NA
15	I3470-FS(0)	1000	1	Intact	NA
Total Extracts:		15			



It can be done

**BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465

Nasa: PFAS Drinking Water

DW, QC

Purpose: LC-MS/MS TRANSFER		Last Activity: Prep->Inst			
Relinquished On/By: Jun 5 2019 9:59AM SAS		Received On/By: Jun 5 2019 10:27AM LMG			
Relinquished From: Sample Preparation: NA		Received Location: LC Laboratory: NA			
Relinquish Comment: NA		Received Comment: Dilutions made in 96/4 methanol/milli-q water (RP-190605-3).			
No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CU243LCS-FS-D(3)	1000	5	Intact	NA
2	I3463MS-FS-D(3)	1000	5	Intact	NA
3	I3463MSD-FS-D(3)	1000	5	Intact	NA
Total Extracts:		3			



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE SPECIFIC COMMENTS

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465**Nasa: PFAS Drinking Water****DW, QC**

Sample ID:	Comment:	Date/Initials:
CU242PB-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:50pm.	06/03/19 SAS
CU243LCS-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:53pm.	06/03/19 SAS
I3451-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:54pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3453-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:56pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3455-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:55pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3455-FS	Sample was yellow in color.	06/03/19 SAS
I3457-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:55pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3457-FS	Sample was yellow in color.	06/03/19 SAS
I3459-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:56pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3461-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:56pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3461-FS	Sample was yellow in color.	06/03/19 SAS
I3463-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:58pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3463MS-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:57pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3463MSD-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:59pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3465-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:56pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3466-FS	Extraction began at 1:21pm, DW only extraction block, ended at 1:57pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3468-FS	Sample was yellow in color.	06/03/19 SAS
I3468-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:59pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS
I3470-FS	Sample was yellow in color.	06/03/19 SAS
I3470-FS	Extraction began at 2:26pm, extraction block 1, ended at 3:00pm. Prior to extraction, pH was checked and was 7.	06/03/19 SAS



It can be done

**BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0465

Nasa: PFAS Drinking Water

DW, QC

Entered By:

On:

Task Leader Approval:

On:

SupervisorApproval:

On:

PM Approval:

On:

Analytical Calibrations



Sequence Report

Created with Analyst Reporter
Printed: 05/06/2019 1:18:31 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MeOH		6/4/2019 4:05:20 PM	5-0371.dam	AC 06042019 5-371.wiff
2	KL64	L1	6/4/2019 4:14:18 PM	5-0371.dam	AC 06042019 5-371.wiff
3	KL65	L2	6/4/2019 4:23:13 PM	5-0371.dam	AC 06042019 5-371.wiff
4	KL66	L3	6/4/2019 4:32:11 PM	5-0371.dam	AC 06042019 5-371.wiff
5	KL67	L4	6/4/2019 4:41:08 PM	5-0371.dam	AC 06042019 5-371.wiff
6	KL68	L5	6/4/2019 4:50:04 PM	5-0371.dam	AC 06042019 5-371.wiff
7	KL69	L6	6/4/2019 4:59:00 PM	5-0371.dam	AC 06042019 5-371.wiff
8	KL70	L7	6/4/2019 5:07:56 PM	5-0371.dam	AC 06042019 5-371.wiff
9	KL71	L8	6/4/2019 5:16:53 PM	5-0371.dam	AC 06042019 5-371.wiff
10	KL72	L9	6/4/2019 5:25:48 PM	5-0371.dam	AC 06042019 5-371.wiff
11	KL73 IB	IB	6/4/2019 5:34:45 PM	5-0371.dam	AC 06042019 5-371.wiff
12	KL74 ICC	ICC	6/4/2019 5:43:42 PM	5-0371.dam	AC 06042019 5-371.wiff
13	MeOH		6/4/2019 5:52:40 PM	5-0371.dam	AC 06042019 5-371.wiff
14	CU246PB-FS(0)		6/4/2019 6:01:36 PM	5-0371.dam	AC 06042019 5-371.wiff
15	CU247LCS-FS(0)		6/4/2019 6:10:32 PM	5-0371.dam	AC 06042019 5-371.wiff
16	I3472-FS(0)		6/4/2019 6:19:30 PM	5-0371.dam	AC 06042019 5-371.wiff
17	I3473-FS(0)		6/4/2019 6:28:25 PM	5-0371.dam	AC 06042019 5-371.wiff
18	KL38-CCV		6/4/2019 6:37:21 PM	5-0371.dam	AC 06042019 5-371.wiff
19	MeOH		6/4/2019 6:46:10 PM	5-0371.dam	AC 06042019 5-371.wiff
20	CU163PB-FS(0)		6/4/2019 6:55:16 PM	5-0371.dam	AC 06042019 5-371.wiff
21	CU164LCS-FS(0)		6/4/2019 7:04:12 PM	5-0371.dam	AC 06042019 5-371.wiff
22	I3146-FS1(0)		6/4/2019 7:13:09 PM	5-0371.dam	AC 06042019 5-371.wiff
23	I3146-FS1-D(3)		6/4/2019 7:22:05 PM	5-0371.dam	AC 06042019 5-371.wiff
24	I3146-FS1-D(5)		6/4/2019 7:31:01 PM	5-0371.dam	AC 06042019 5-371.wiff
25	KL69 CCV	CCV	6/4/2019 7:39:58 PM	5-0371.dam	AC 06042019 5-371.wiff
26	MeOH		6/4/2019 7:48:55 PM	5-0371.dam	AC 06042019 5-371.wiff
27	CU242PB-FS(0)	Procedural Blank	6/4/2019 7:57:53 PM	5-0371.dam	AC 06042019 5-371.wiff
28	CU243LCS-FS(0)	Laboratory Control Sample	6/4/2019 8:06:49 PM	5-0371.dam	AC 06042019 5-371.wiff
29	I3451-FS(0)	Q6-0082-DW0001-20190530	6/4/2019 8:15:46 PM	5-0371.dam	AC 06042019 5-371.wiff
30	I3453-FS(0)	H6-1607-DW0001-20190530	6/4/2019 8:24:43 PM	5-0371.dam	AC 06042019 5-371.wiff
31	I3455-FS(0)	M6-1518-DW0001-20190531	6/4/2019 8:33:40 PM	5-0371.dam	AC 06042019 5-371.wiff
32	I3457-FS(0)	H5-2139-DW0001-20190531	6/4/2019 8:42:38 PM	5-0371.dam	AC 06042019 5-371.wiff
33	I3459-FS(0)	H5-1434-DW0001-20190531	6/4/2019 8:51:33 PM	5-0371.dam	AC 06042019 5-371.wiff
34	I3461-FS(0)	H4-1598-DW0001-20190531	6/4/2019 9:00:32 PM	5-0371.dam	AC 06042019 5-371.wiff
35	I3463-FS(0)	F4-1844-DW0001-20190531	6/4/2019 9:09:28 PM	5-0371.dam	AC 06042019 5-371.wiff
36	KL68 CCV	CCV	6/4/2019 9:18:25 PM	5-0371.dam	AC 06042019 5-371.wiff
37	MeOH		6/4/2019 9:27:22 PM	5-0371.dam	AC 06042019 5-371.wiff
38	I3463MS-FS(0)	F4-1844-DW0001-20190531	6/4/2019 9:36:20 PM	5-0371.dam	AC 06042019 5-371.wiff
39	I3463MSD-FS(0)	F4-1844-DW0001-20190531	6/4/2019 9:45:17 PM	5-0371.dam	AC 06042019 5-371.wiff



Sequence Report

Created with Analyst Reporter
Printed: 05/06/2019 1:18:31 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
40	I3465-FS(0)	E3-1120-DW0001-20190531	6/4/2019 9:54:14 PM	5-0371.dam	AC_06042019_5-371.wiff
41	I3466-FS(0)	E3-1120-FD-20190531-01	6/4/2019 10:03:12 PM	5-0371.dam	AC_06042019_5-371.wiff
42	I3468-FS(0)	H4-1797-DW0001-20190531	6/4/2019 10:12:08 PM	5-0371.dam	AC_06042019_5-371.wiff
43	I3470-FS(0)	H4-1840A-DW0001-20190531	6/4/2019 10:21:04 PM	5-0371.dam	AC_06042019_5-371.wiff
44	KL69 CCV	CCV	6/4/2019 10:30:02 PM	5-0371.dam	AC_06042019_5-371.wiff

1 Samples do not apply to this batch. LMG 6/5/19

2 Sample was realiquoted and reanalyzed due to a low surrogate recovery. The reanalysis was acceptable and was reported. LMG 6/5/19

3 Sample was realiquoted and reanalyzed due to an exceedence for the secondary criteria for 13C2-PFOA. The reanalysis was acceptable and was reported. LMG 6/5/19



Sequence Report

Created with Analyst Reporter
Printed: 05/06/2019 1:16:24 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
2	KL67 ISC	ISC	6/5/2019 10:36:45 AM	5-0371.dam	AC_06052019_5-371.wiff
3	L9	L9	6/5/2019 10:45:42 AM	5-0371.dam	AC_06052019_5-371.wiff
4	KL73 IB	IB	6/5/2019 10:54:41 AM	5-0371.dam	AC_06052019_5-371.wiff
5	CU243LCS-FS-D(3)	Laboratory Control Sample	6/5/2019 11:03:37 AM	5-0371.dam	AC_06052019_5-371.wiff
1	CU245LCS-FS-D(3)		6/5/2019 11:12:35 AM	5-0371.dam	AC_06052019_5-371.wiff
7	I3463MS-FS-D(3)	F4-1844-DW0001-20190531	6/5/2019 11:21:33 AM	5-0371.dam	AC_06052019_5-371.wiff
8	I3463MSD-FS-D(3)	F4-1844-DW0001-20190531	6/5/2019 11:30:31 AM	5-0371.dam	AC_06052019_5-371.wiff
9	I3455-FS(0)	M6-1518-DW0001-20190531	6/5/2019 11:39:28 AM	5-0371.dam	AC_06052019_5-371.wiff
10	I3457-FS(0)	H5-2139-DW0001-20190531	6/5/2019 11:48:24 AM	5-0371.dam	AC_06052019_5-371.wiff
1	CU164LCS-FS-D(3)		6/5/2019 11:57:23 AM	5-0371.dam	AC_06052019_5-371.wiff
1	CU247LCS-FS-D(3)		6/5/2019 12:06:21 PM	5-0371.dam	AC_06052019_5-371.wiff
13	KL68 CCV	CCV	6/5/2019 12:15:19 PM	5-0371.dam	AC_06052019_5-371.wiff

1 Samples do not apply to this batch. LMG 6/5/19



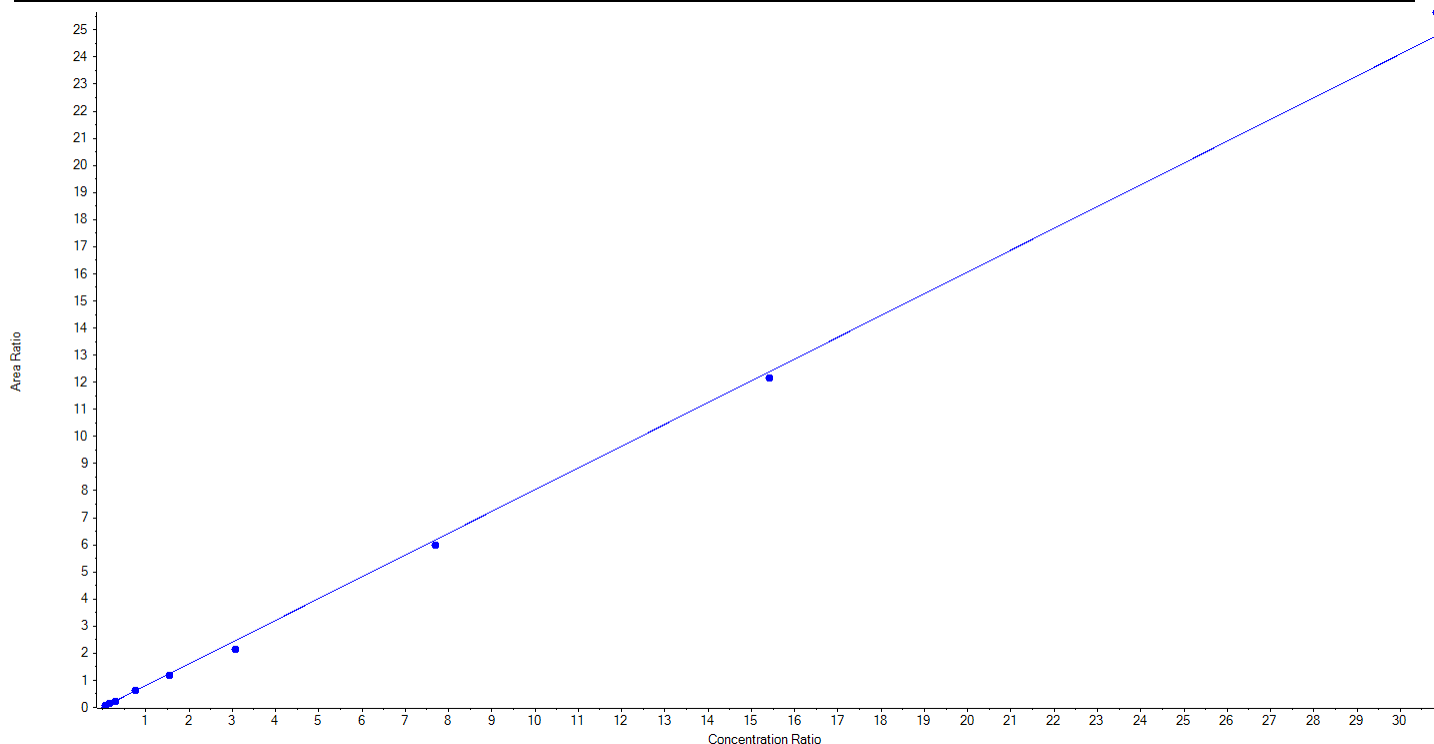
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFBS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	298.9 / 80.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.80352 x$ ($r = 0.99893$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	22.15	25.12	113.4
3	KL65	L2	True	44.30	50.08	113.1
4	KL66	L3	True	88.60	82.05	92.6
5	KL67	L4	True	221.50	219.43	99.1
6	KL68	L5	True	443.00	421.74	95.2
7	KL69	L6	True	885.00	761.32	86.0
8	KL70	L7	True	2212.50	2135.18	96.5
9	KL71	L8	True	4425.00	4339.29	98.1
10	KL72	L9	True	8850.00	9157.83	103.5





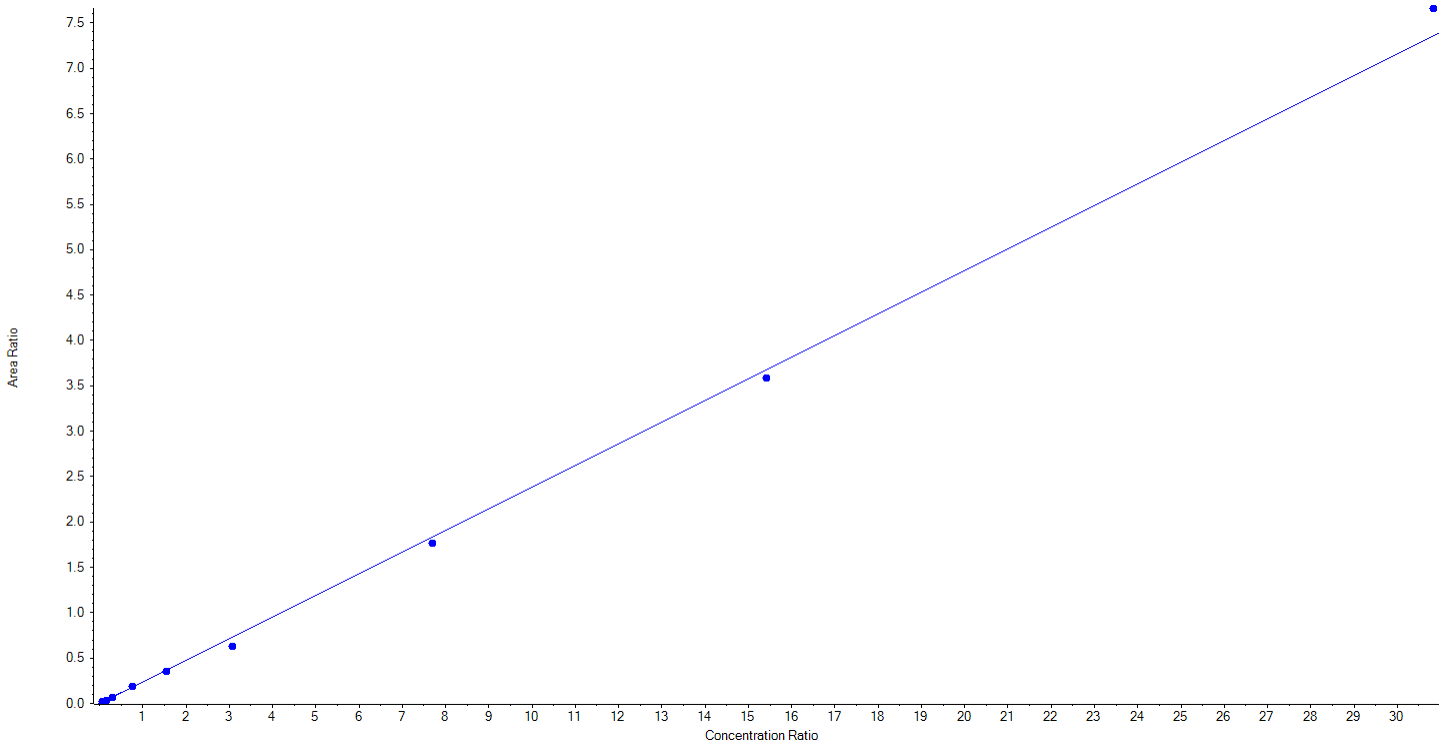
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFBS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	298.9 / 99.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.23859 x$ ($r = 0.99874$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	22.15	22.05	99.6
3	KL65	L2	True	44.30	45.63	103.0
4	KL66	L3	True	88.60	75.49	85.2
5	KL67	L4	True	221.50	228.28	103.1
6	KL68	L5	True	443.00	420.59	94.9
7	KL69	L6	True	885.00	761.99	86.1
8	KL70	L7	True	2212.50	2119.53	95.8
9	KL71	L8	True	4425.00	4307.08	97.3
10	KL72	L9	True	8850.00	9211.40	104.1





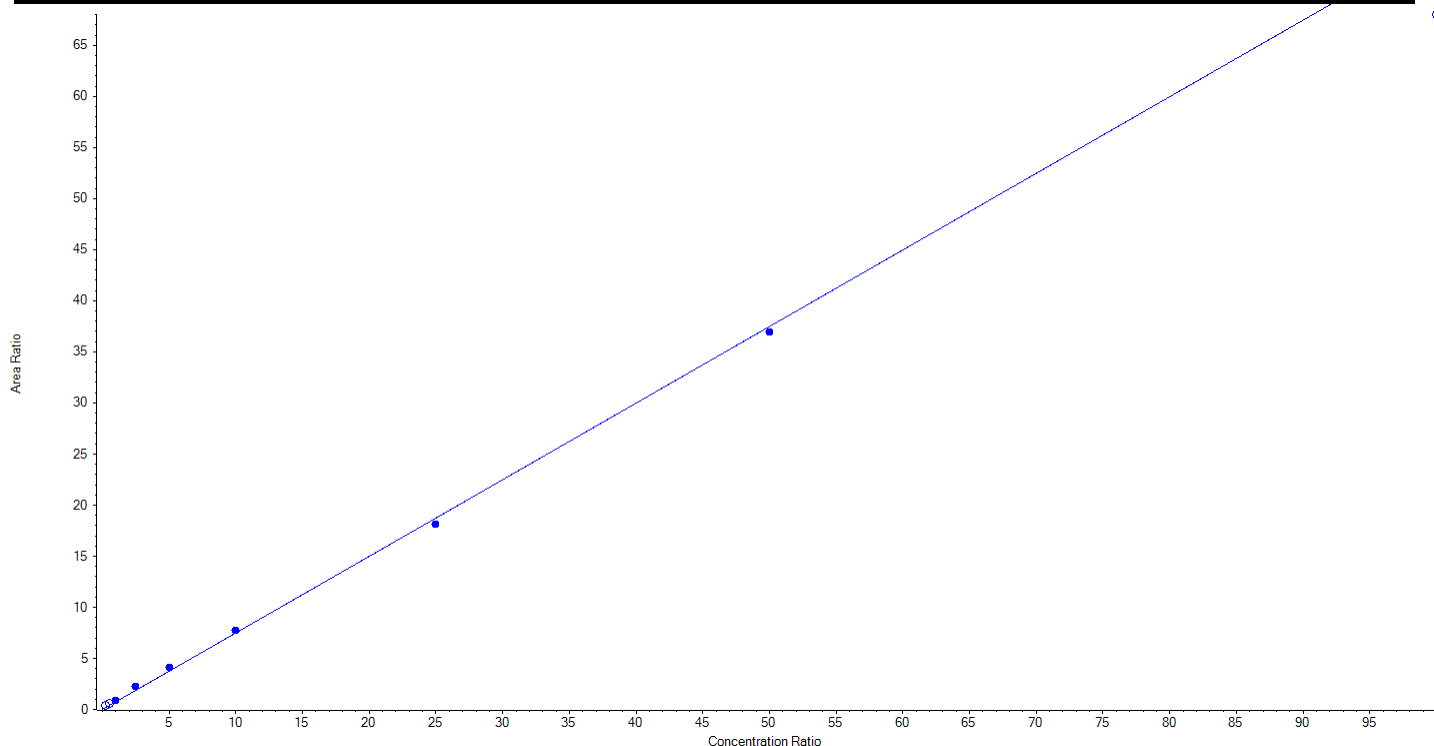
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFHxA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	313.0 / 269.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.74953 x$ ($r = 0.99958$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	51.63	206.5
3	KL65	L2	False	50.00	80.88	161.8
4	KL66	L3	True	100.00	120.25	120.3
5	KL67	L4	True	250.00	301.61	120.6
6	KL68	L5	True	500.00	543.33	108.7
7	KL69	L6	True	1000.00	1032.75	103.3
8	KL70	L7	True	2500.00	2423.71	97.0
9	KL71	L8	True	5000.00	4928.35	98.6
10	KL72	L9	False	10000.00	9073.58	90.7





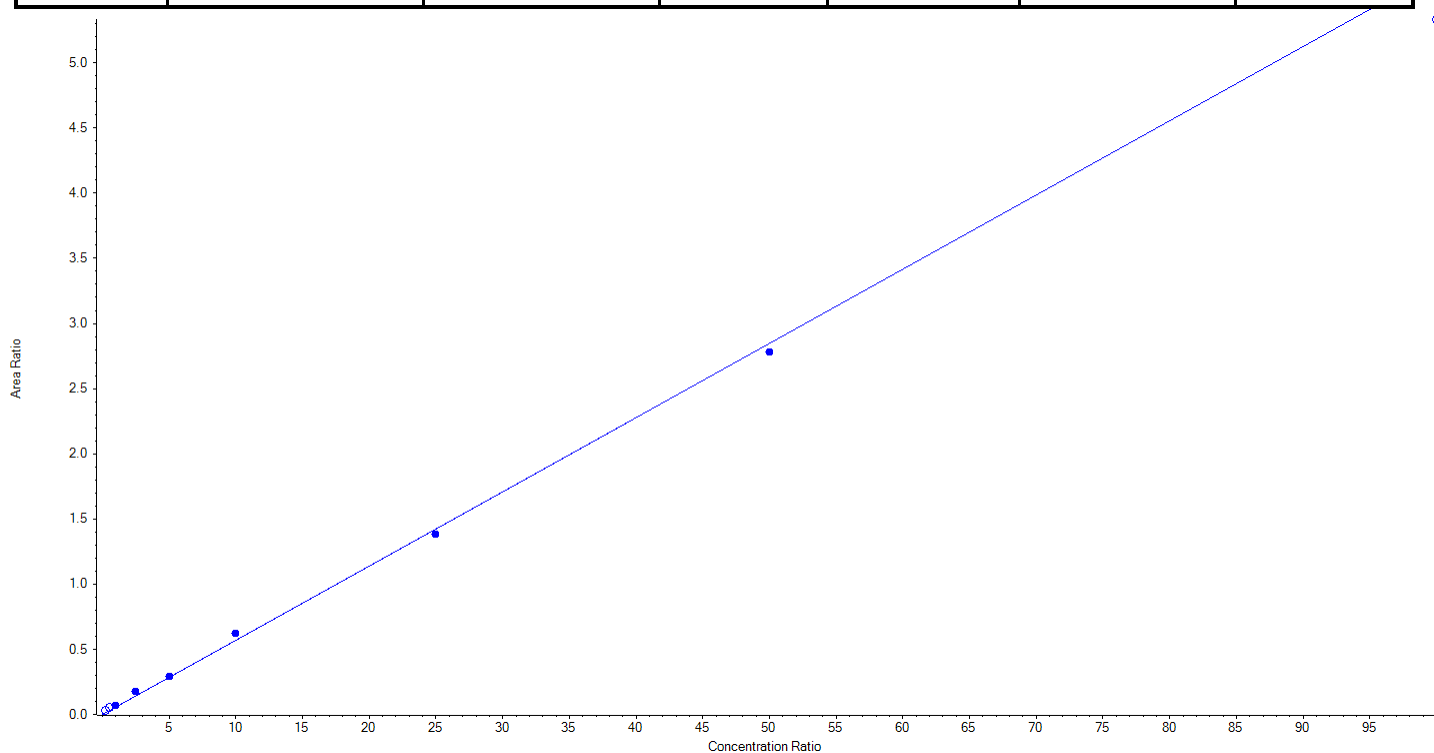
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFHxA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	313.0 / 119.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.05694 x$ ($r = 0.99908$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	49.95	199.8
3	KL65	L2	False	50.00	95.44	190.9
4	KL66	L3	True	100.00	117.56	117.6
5	KL67	L4	True	250.00	310.03	124.0
6	KL68	L5	True	500.00	513.54	102.7
7	KL69	L6	True	1000.00	1086.91	108.7
8	KL70	L7	True	2500.00	2431.63	97.3
9	KL71	L8	True	5000.00	4890.33	97.8
10	KL72	L9	False	10000.00	9364.17	93.6





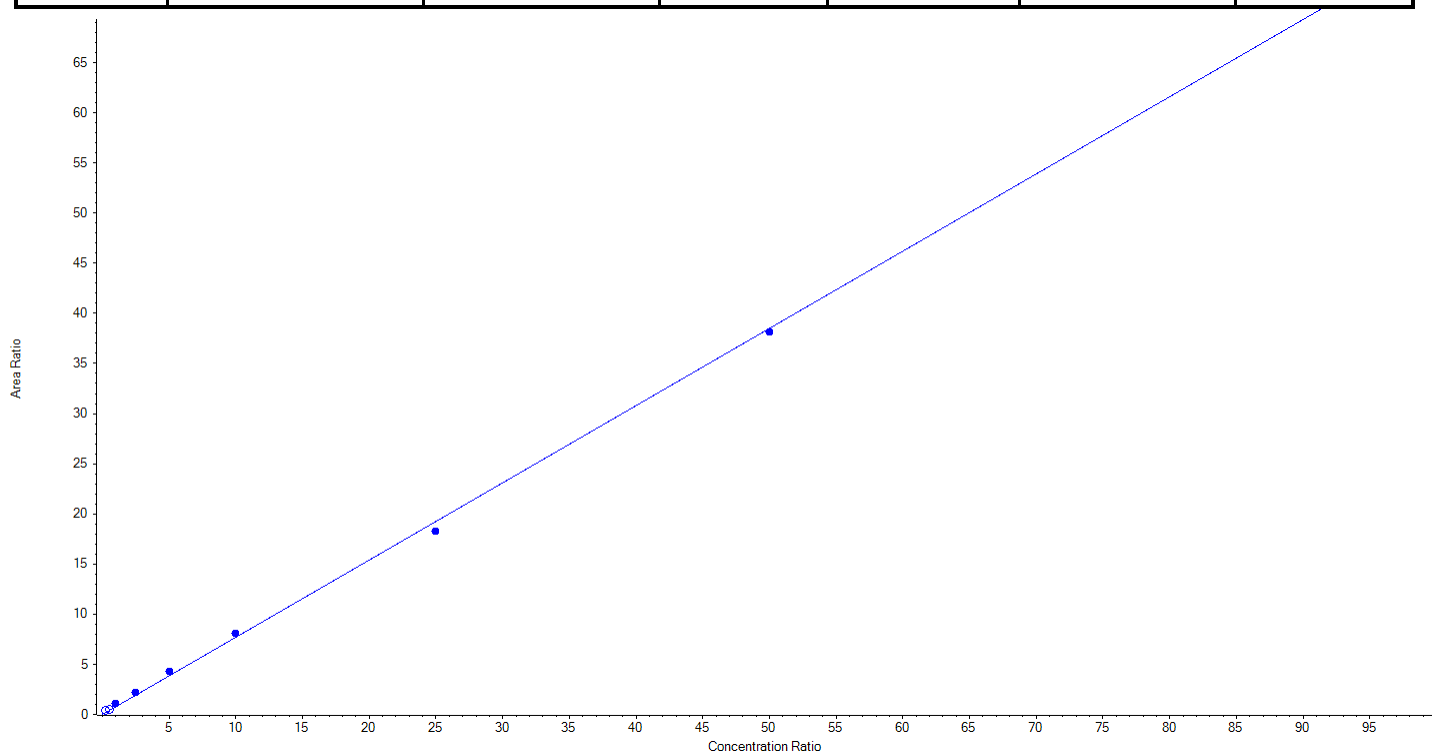
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFHpA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	363.0 / 319.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.76998 x$ ($r = 0.99948$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	57.17	228.7
3	KL65	L2	False	50.00	68.58	137.2
4	KL66	L3	True	100.00	138.33	138.3
5	KL67	L4	True	250.00	279.70	111.9
6	KL68	L5	True	500.00	556.31	111.3
7	KL69	L6	True	1000.00	1051.90	105.2
8	KL70	L7	True	2500.00	2376.02	95.0
9	KL71	L8	True	5000.00	4947.75	99.0
10	KL72	L9	False	10000.00	8999.45	90.0





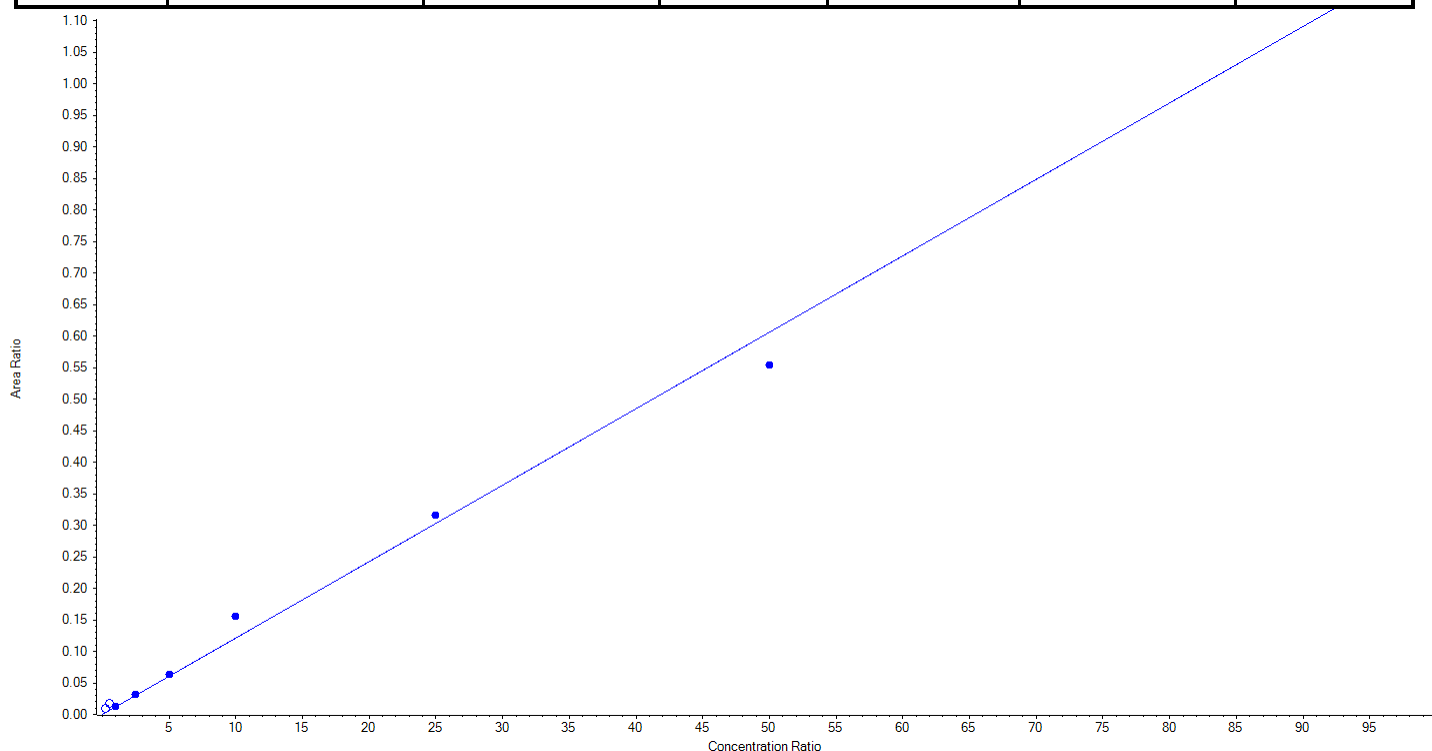
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFHpA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	363.0 / 169.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01212 x$ ($r = 0.99203$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	80.56	322.3
3	KL65	L2	False	50.00	137.58	275.2
4	KL66	L3	True	100.00	99.16	99.2
5	KL67	L4	True	250.00	266.68	106.7
6	KL68	L5	True	500.00	517.46	103.5
7	KL69	L6	True	1000.00	1281.17	128.1
8	KL70	L7	True	2500.00	2612.60	104.5
9	KL71	L8	True	5000.00	4572.93	91.5
10	KL72	L9	False	10000.00	9090.38	90.9





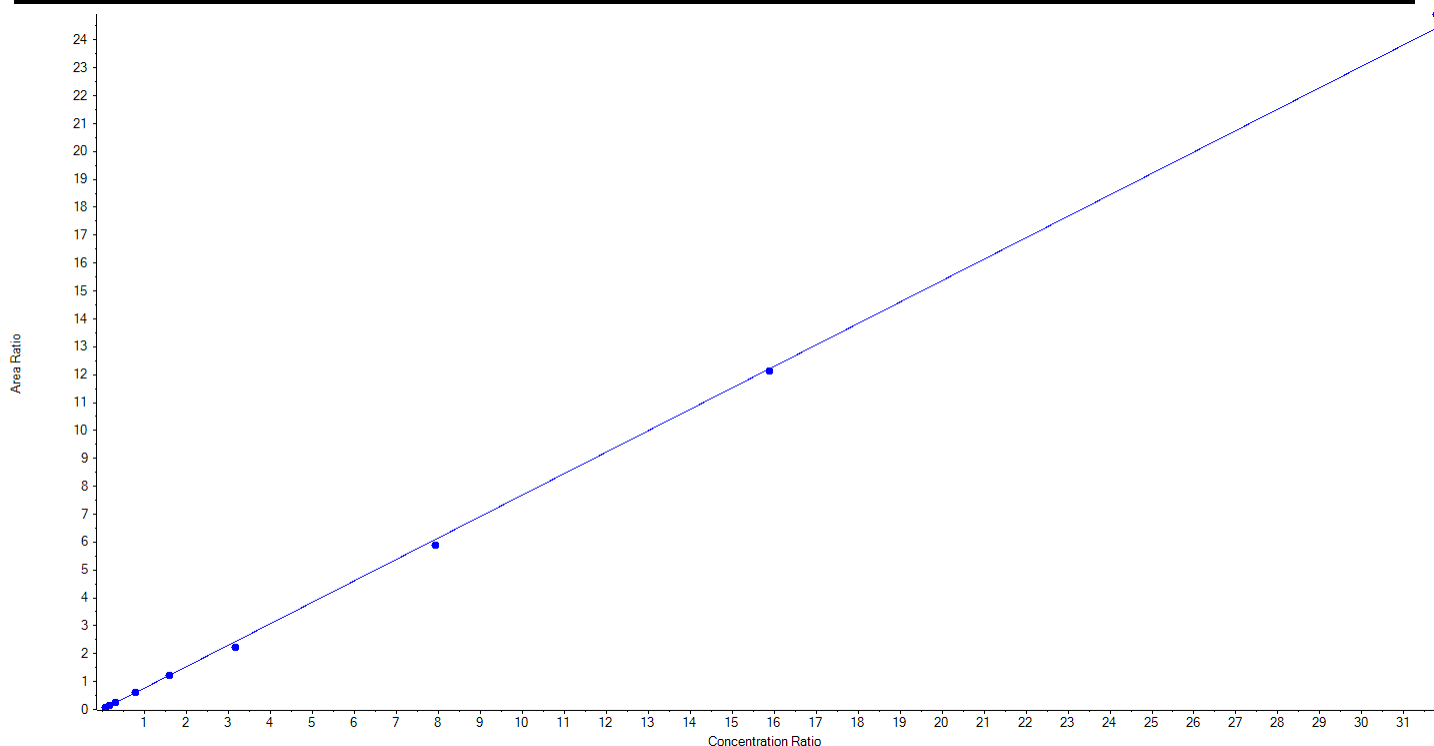
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFHxS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	399.0 / 80.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.76855 x$ ($r = 0.99956$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	22.80	25.89	113.6
3	KL65	L2	True	45.60	50.77	111.3
4	KL66	L3	True	91.20	91.14	99.9
5	KL67	L4	True	228.00	226.38	99.3
6	KL68	L5	True	456.00	458.42	100.5
7	KL69	L6	True	912.00	829.27	90.9
8	KL70	L7	True	2280.00	2202.36	96.6
9	KL71	L8	True	4560.00	4529.70	99.3
10	KL72	L9	True	9120.00	9301.67	102.0





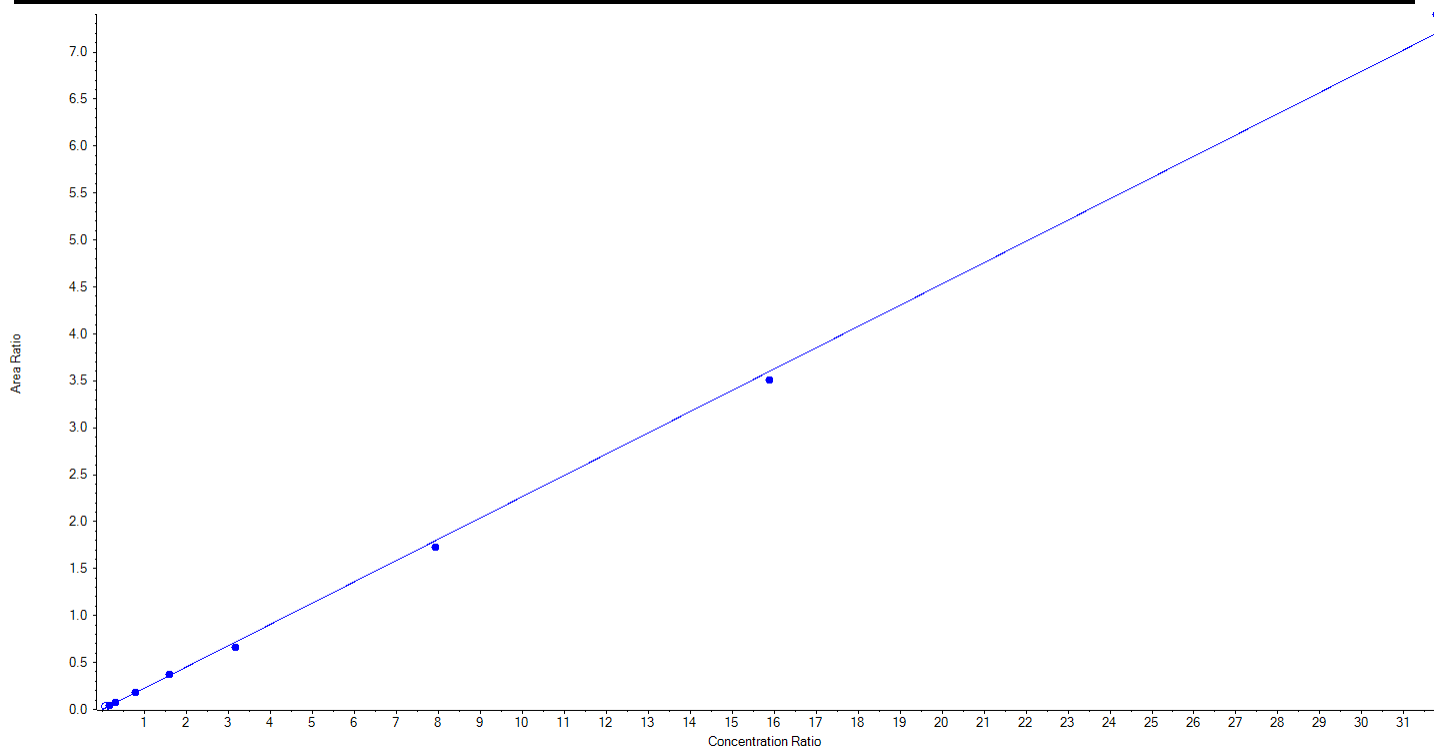
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFHxS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	399.0 / 99.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.22658 x$ ($r = 0.99935$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	22.80	36.67	160.8
3	KL65	L2	True	45.60	50.83	111.5
4	KL66	L3	True	91.20	91.11	99.9
5	KL67	L4	True	228.00	234.42	102.8
6	KL68	L5	True	456.00	470.12	103.1
7	KL69	L6	True	912.00	834.23	91.5
8	KL70	L7	True	2280.00	2191.50	96.1
9	KL71	L8	True	4560.00	4446.84	97.5
10	KL72	L9	True	9120.00	9373.75	102.8





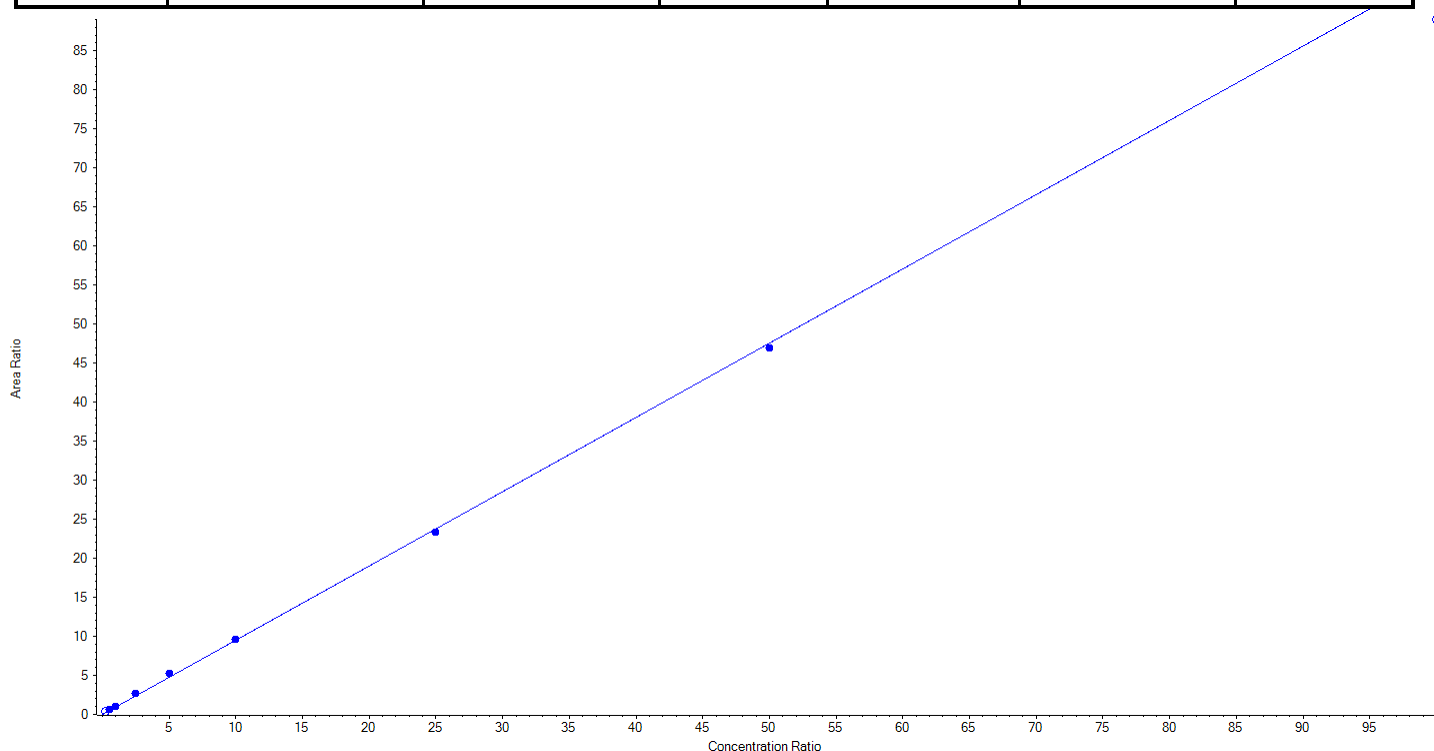
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFOA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	413.0 / 369.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.95114 x$ ($r = 0.99965$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	42.22	168.9
3	KL65	L2	True	50.00	65.51	131.0
4	KL66	L3	True	100.00	106.45	106.5
5	KL67	L4	True	250.00	279.69	111.9
6	KL68	L5	True	500.00	548.34	109.7
7	KL69	L6	True	1000.00	1017.67	101.8
8	KL70	L7	True	2500.00	2450.85	98.0
9	KL71	L8	True	5000.00	4931.49	98.6
10	KL72	L9	False	10000.00	9357.27	93.6





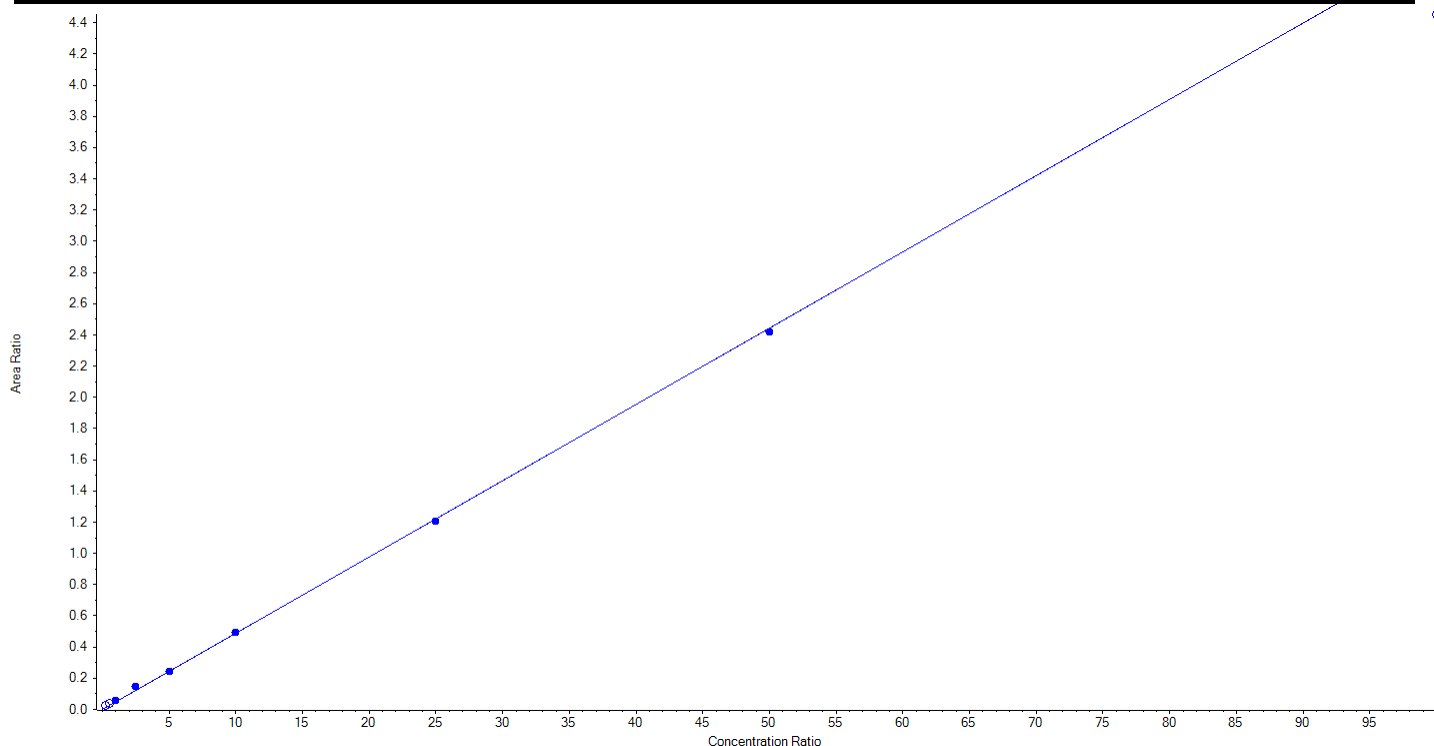
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFOA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	413.0 / 169.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.04886 x$ ($r = 0.99968$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	56.18	224.7
3	KL65	L2	False	50.00	83.38	166.8
4	KL66	L3	True	100.00	120.21	120.2
5	KL67	L4	True	250.00	301.62	120.7
6	KL68	L5	True	500.00	499.18	99.8
7	KL69	L6	True	1000.00	1011.79	101.2
8	KL70	L7	True	2500.00	2465.10	98.6
9	KL71	L8	True	5000.00	4952.10	99.0
10	KL72	L9	False	10000.00	9111.99	91.1





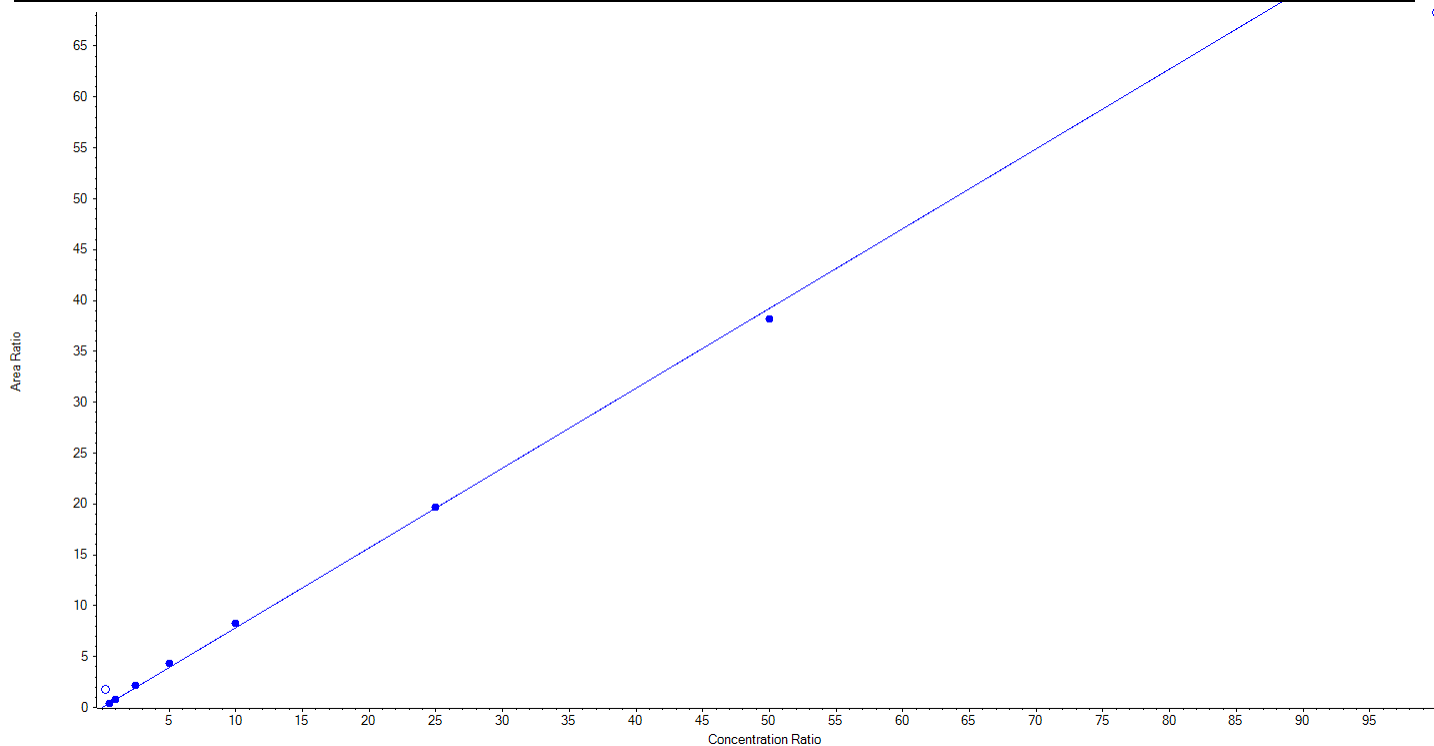
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFNA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	463.0 / 419.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.78431 x$ ($r = 0.99930$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	219.87	879.5
3	KL65	L2	True	50.00	54.51	109.0
4	KL66	L3	True	100.00	98.85	98.9
5	KL67	L4	True	250.00	275.74	110.3
6	KL68	L5	True	500.00	547.49	109.5
7	KL69	L6	True	1000.00	1053.23	105.3
8	KL70	L7	True	2500.00	2505.18	100.2
9	KL71	L8	True	5000.00	4865.00	97.3
10	KL72	L9	False	10000.00	8707.26	87.1





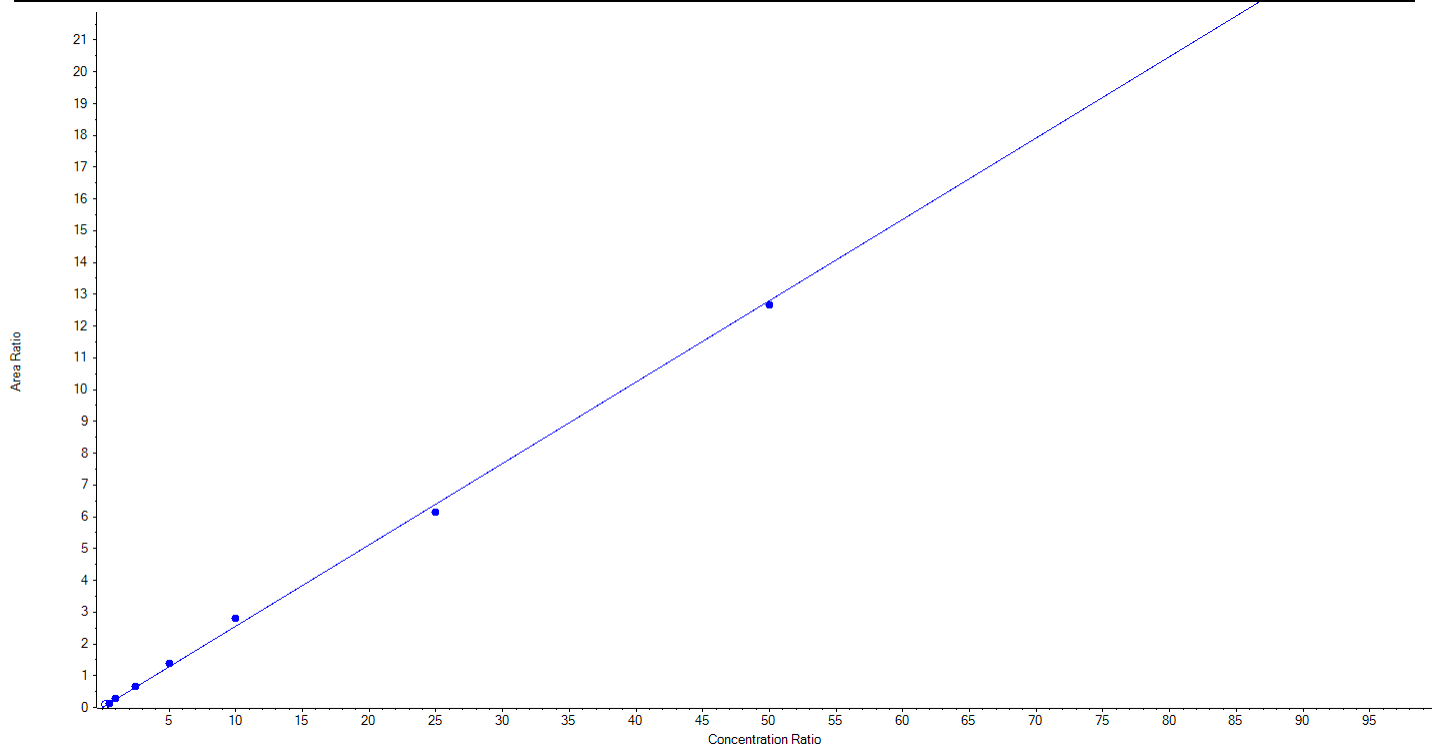
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFNA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	463.0 / 219.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.25598 x$ ($r = 0.99910$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	37.81	151.2
3	KL65	L2	True	50.00	54.40	108.8
4	KL66	L3	True	100.00	111.08	111.1
5	KL67	L4	True	250.00	262.92	105.2
6	KL68	L5	True	500.00	541.10	108.2
7	KL69	L6	True	1000.00	1089.31	108.9
8	KL70	L7	True	2500.00	2395.67	95.8
9	KL71	L8	True	5000.00	4945.53	98.9
10	KL72	L9	False	10000.00	8541.22	85.4





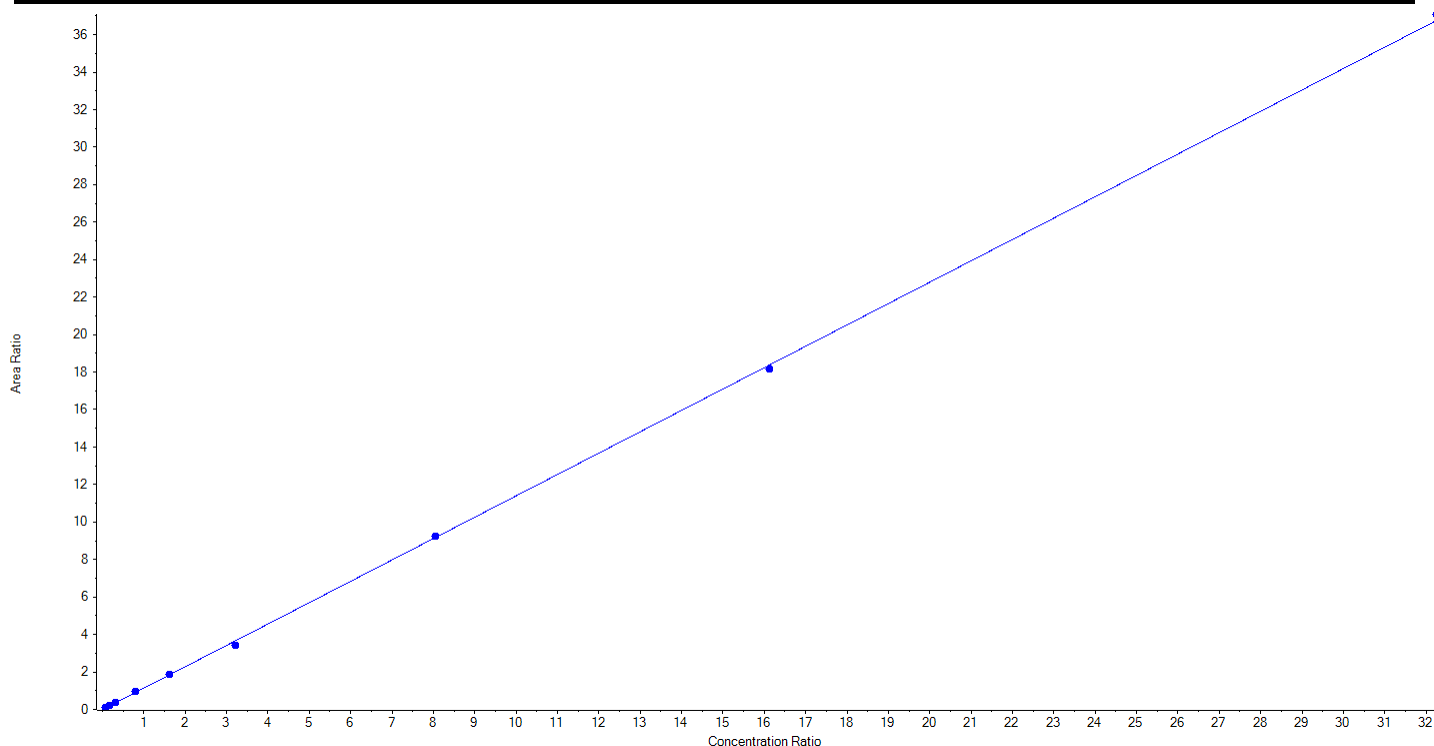
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFOS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	499.0 / 80.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.13968 x$ ($r = 0.99977$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.15	24.90	107.5
3	KL65	L2	True	46.30	49.59	107.1
4	KL66	L3	True	92.60	98.21	106.1
5	KL67	L4	True	231.50	245.83	106.2
6	KL68	L5	True	463.00	470.22	101.6
7	KL69	L6	True	925.60	857.12	92.6
8	KL70	L7	True	2314.00	2328.72	100.6
9	KL71	L8	True	4628.00	4569.76	98.7
10	KL72	L9	True	9256.00	9335.80	100.9





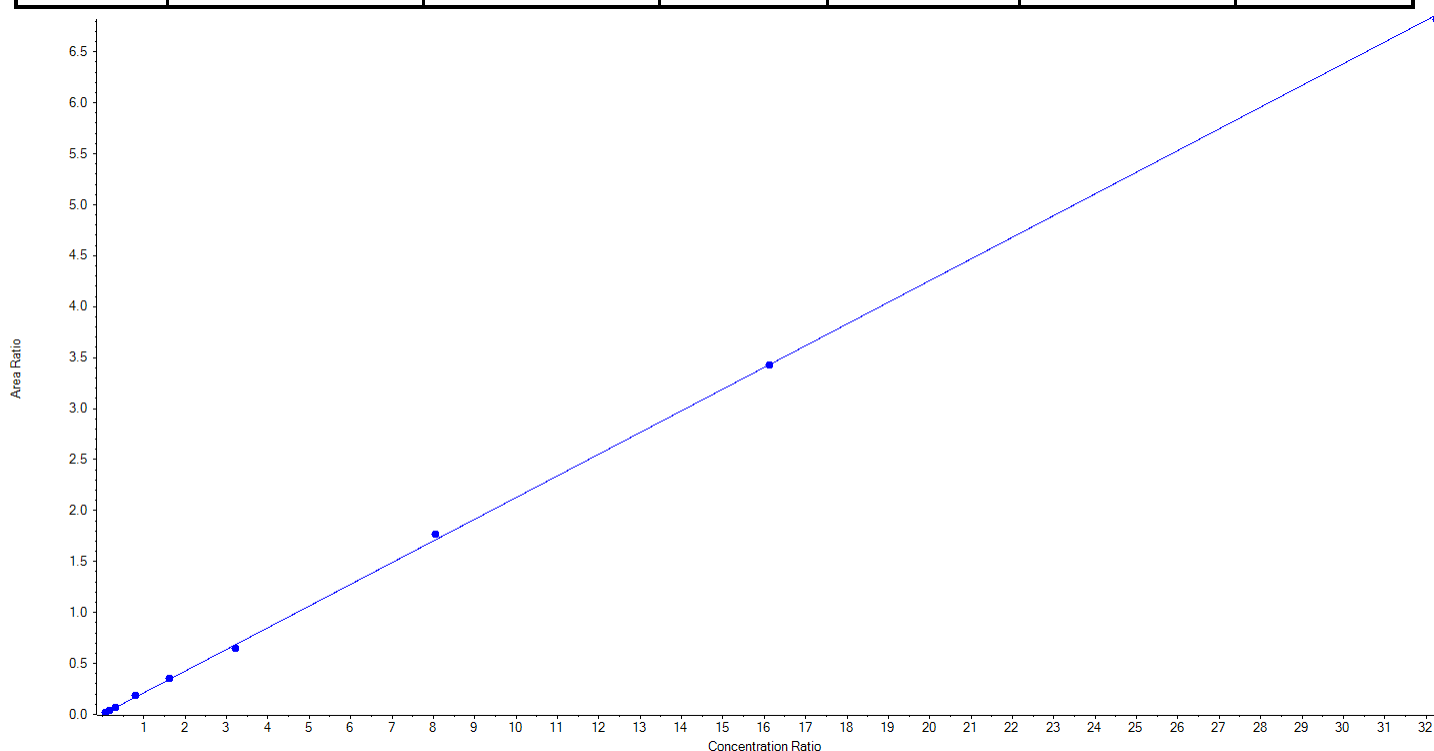
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFOS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	499.0 / 99.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.21277 x$ ($r = 0.99980$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.15	24.34	105.1
3	KL65	L2	True	46.30	55.47	119.8
4	KL66	L3	True	92.60	98.09	105.9
5	KL67	L4	True	231.50	248.05	107.2
6	KL68	L5	True	463.00	478.96	103.5
7	KL69	L6	True	925.60	878.62	94.9
8	KL70	L7	True	2314.00	2382.82	103.0
9	KL71	L8	True	4628.00	4619.65	99.8
10	KL72	L9	True	9256.00	9194.16	99.3





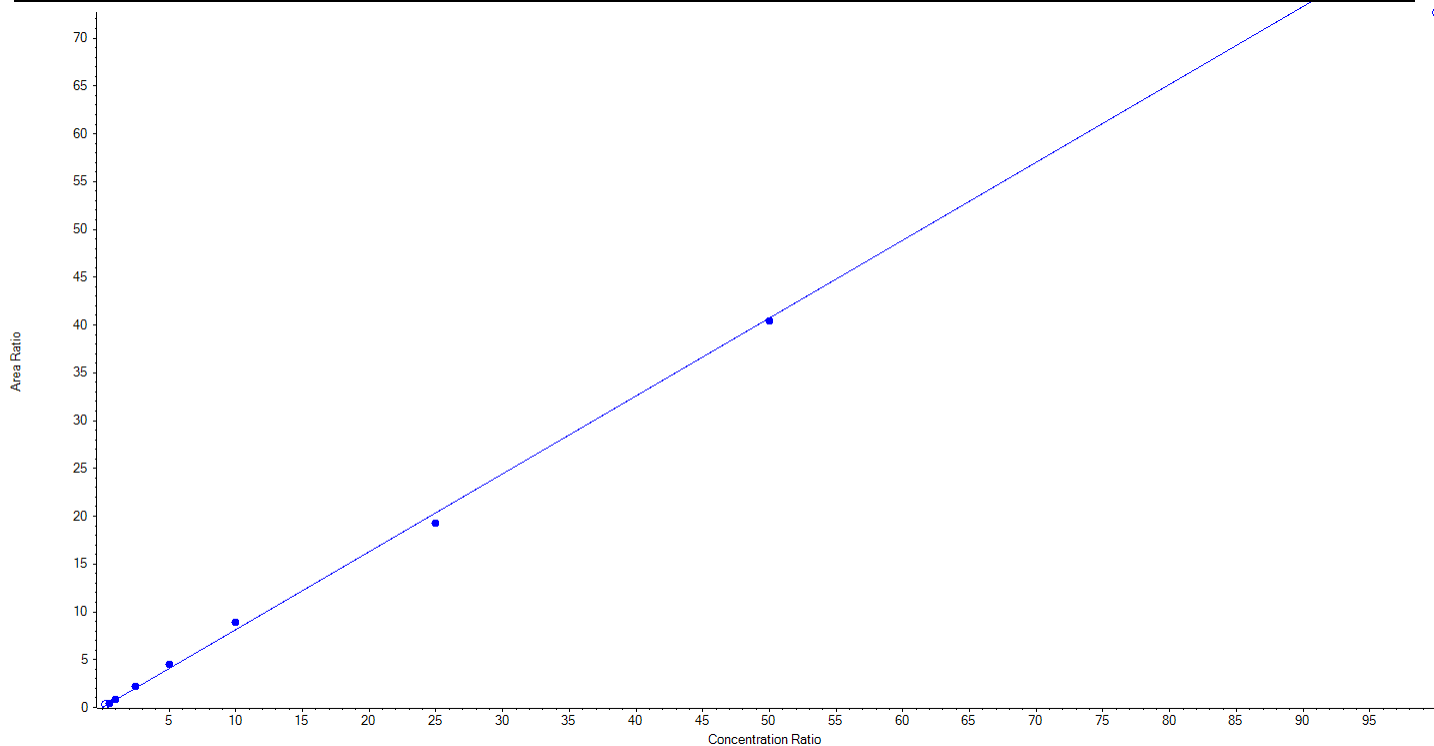
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFDA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	513.0 / 469.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.81460 x$ ($r = 0.99881$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	35.75	143.0
3	KL65	L2	True	50.00	56.17	112.3
4	KL66	L3	True	100.00	107.13	107.1
5	KL67	L4	True	250.00	276.29	110.5
6	KL68	L5	True	500.00	546.81	109.4
7	KL69	L6	True	1000.00	1088.20	108.8
8	KL70	L7	True	2500.00	2359.38	94.4
9	KL71	L8	True	5000.00	4966.03	99.3
10	KL72	L9	False	10000.00	8921.93	89.2





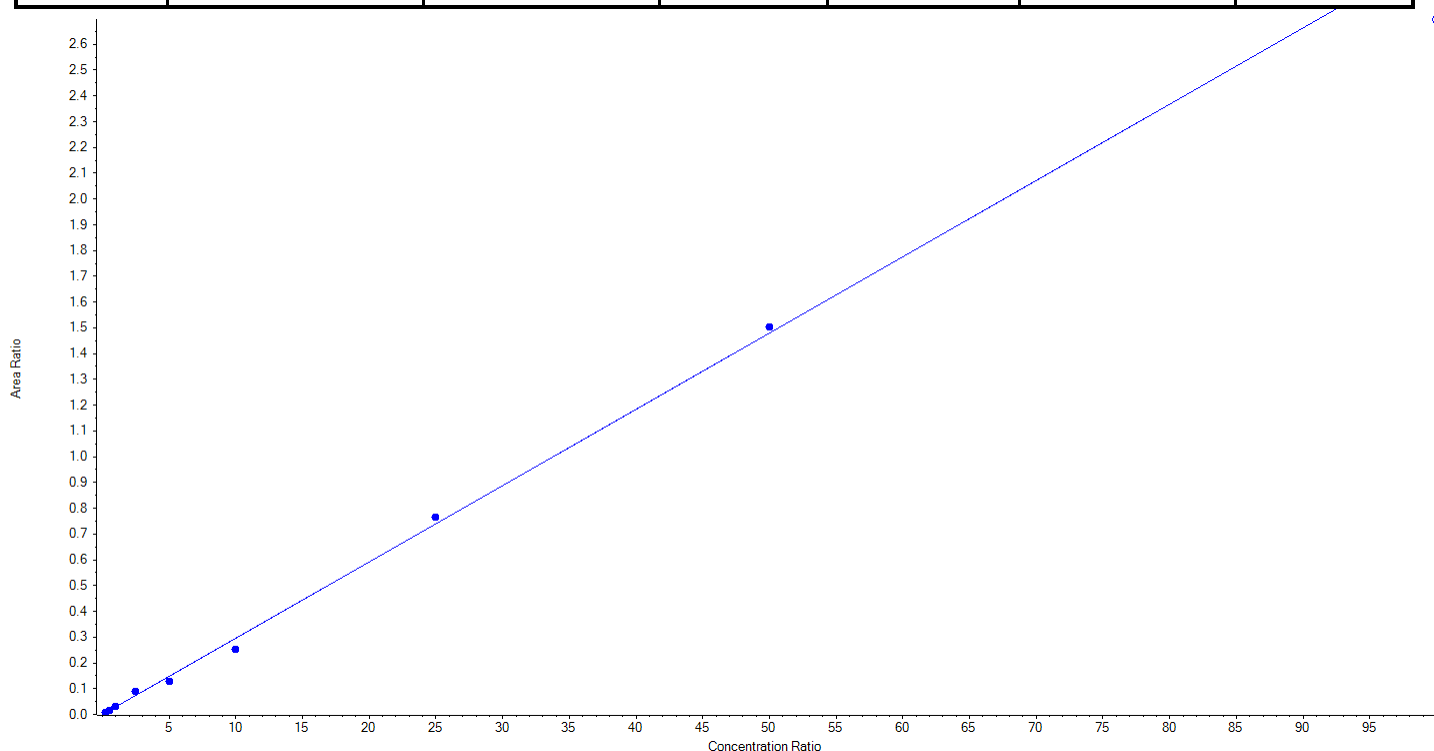
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFDA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	513.0 / 219.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.02959 x$ ($r = 0.99713$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	27.55	110.2
3	KL65	L2	True	50.00	50.48	101.0
4	KL66	L3	True	100.00	101.44	101.4
5	KL67	L4	True	250.00	305.53	122.2
6	KL68	L5	True	500.00	427.70	85.5
7	KL69	L6	True	1000.00	850.04	85.0
8	KL70	L7	True	2500.00	2582.70	103.3
9	KL71	L8	True	5000.00	5079.56	101.6
10	KL72	L9	False	10000.00	9109.66	91.1





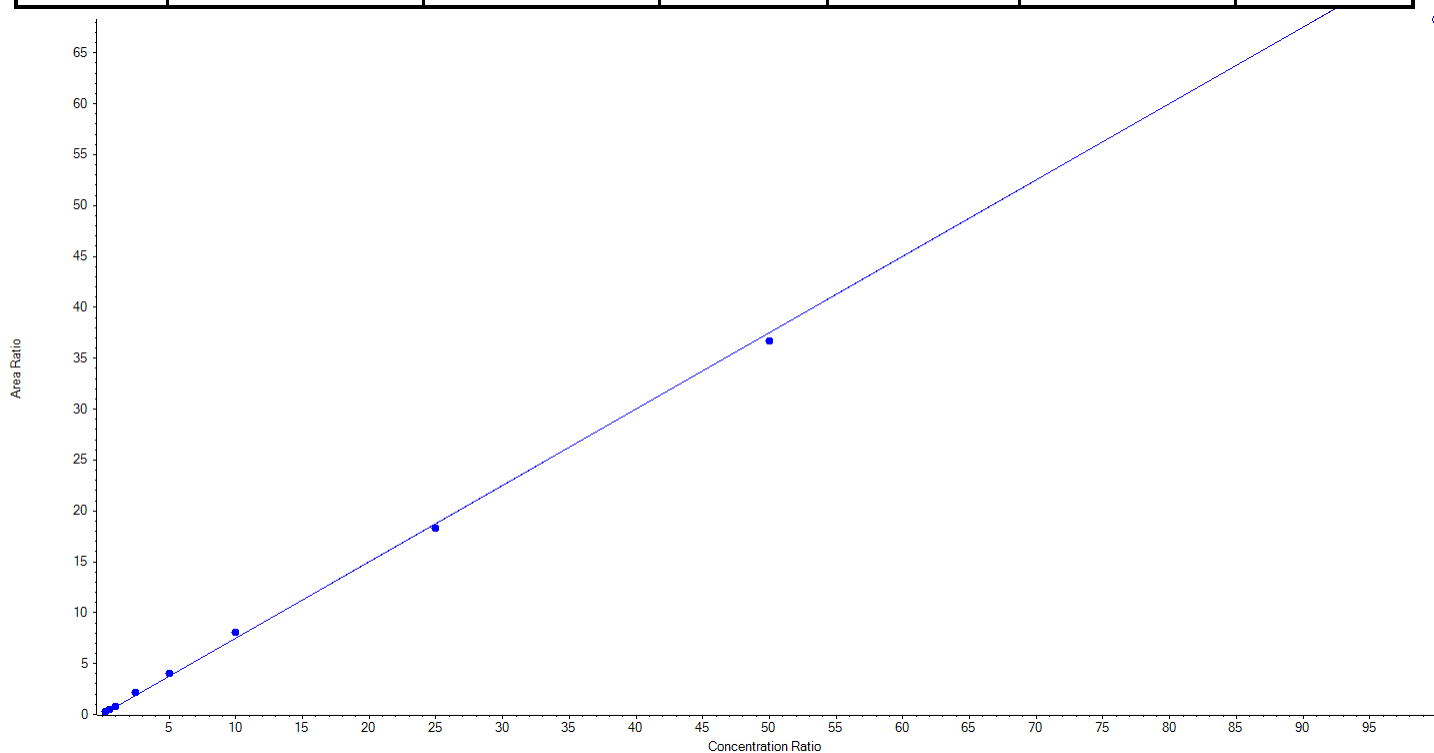
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFUnA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	563.0 / 519.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.75020 x$ ($r = 0.99921$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	35.17	140.7
3	KL65	L2	True	50.00	60.02	120.0
4	KL66	L3	True	100.00	103.34	103.3
5	KL67	L4	True	250.00	293.59	117.4
6	KL68	L5	True	500.00	533.02	106.6
7	KL69	L6	True	1000.00	1071.00	107.1
8	KL70	L7	True	2500.00	2443.33	97.7
9	KL71	L8	True	5000.00	4885.53	97.7
10	KL72	L9	False	10000.00	9099.49	91.0





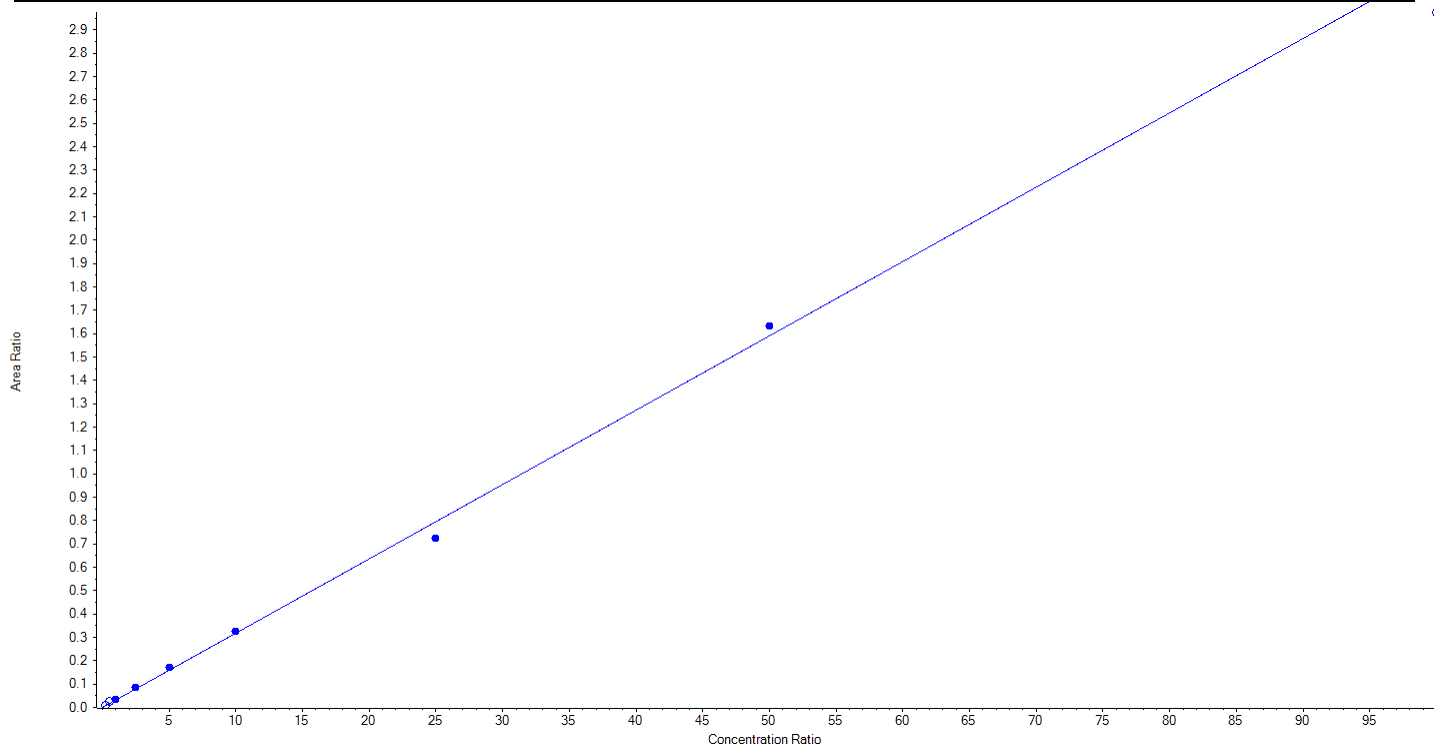
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFUnA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	563.0 / 269.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.03181 x$ ($r = 0.99811$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	25.40	101.6
3	KL65	L2	False	50.00	76.93	153.9
4	KL66	L3	True	100.00	113.39	113.4
5	KL67	L4	True	250.00	275.95	110.4
6	KL68	L5	True	500.00	538.01	107.6
7	KL69	L6	True	1000.00	1022.56	102.3
8	KL70	L7	True	2500.00	2270.45	90.8
9	KL71	L8	True	5000.00	5129.64	102.6
10	KL72	L9	False	10000.00	9349.78	93.5





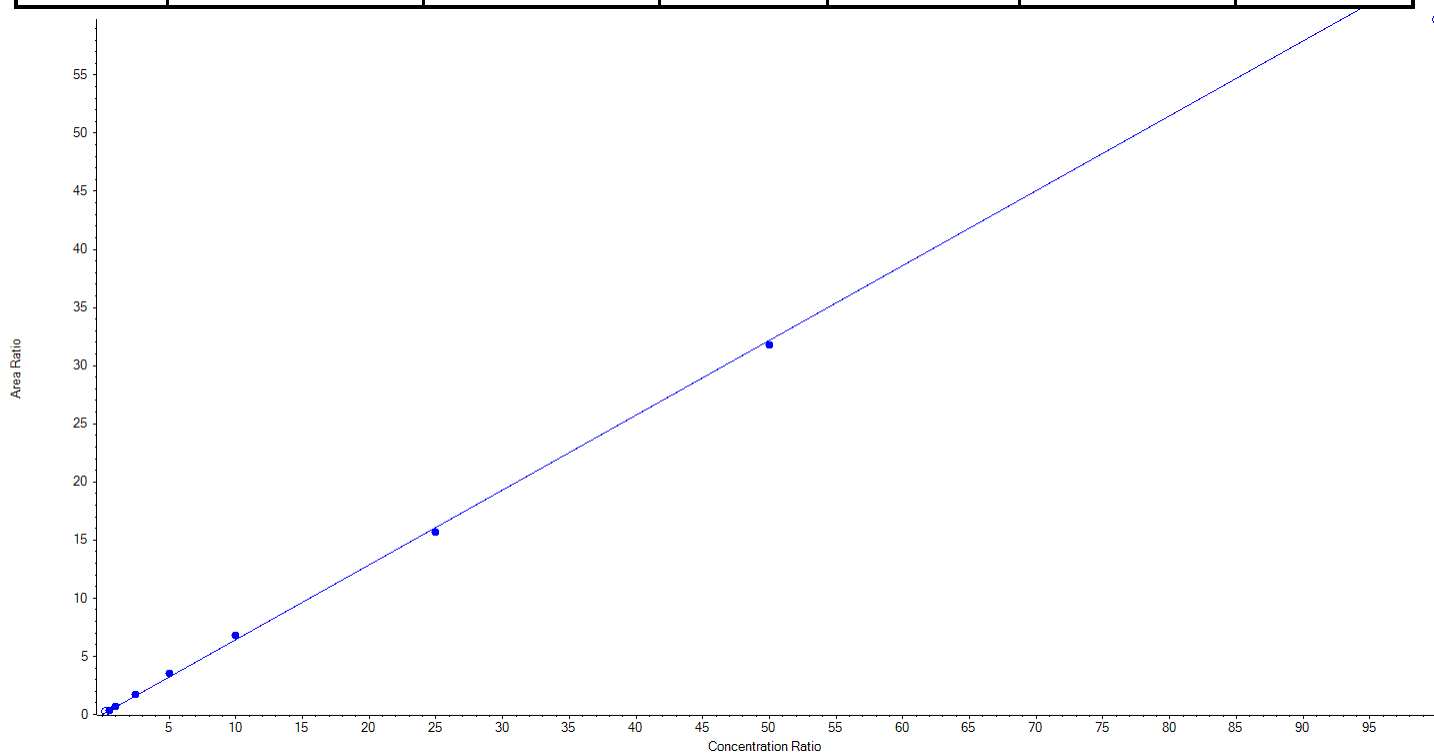
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFD _o A_1	Data File	AC_06042019_5-371.wiff
MRM Transition	613.0 / 569.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.64357 x$ ($r = 0.99939$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	39.25	157.0
3	KL65	L2	True	50.00	51.15	102.3
4	KL66	L3	True	100.00	109.81	109.8
5	KL67	L4	True	250.00	263.70	105.5
6	KL68	L5	True	500.00	552.28	110.5
7	KL69	L6	True	1000.00	1050.51	105.1
8	KL70	L7	True	2500.00	2429.86	97.2
9	KL71	L8	True	5000.00	4942.70	98.9
10	KL72	L9	False	10000.00	9286.79	92.9





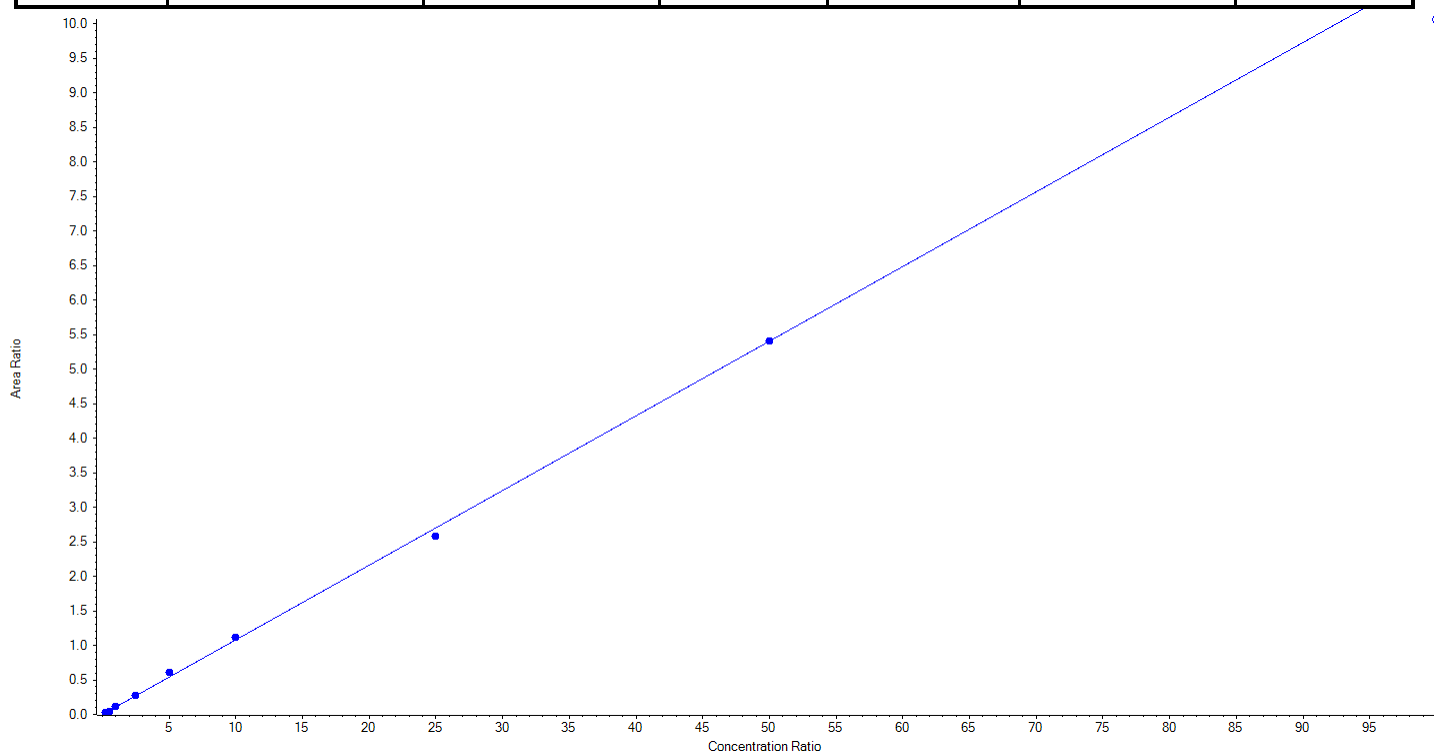
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFD _o A_2	Data File	AC_06042019_5-371.wiff
MRM Transition	613.0 / 319.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.10811 x$ ($r = 0.99908$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	28.32	113.3
3	KL65	L2	True	50.00	45.94	91.9
4	KL66	L3	True	100.00	113.14	113.1
5	KL67	L4	True	250.00	256.80	102.7
6	KL68	L5	True	500.00	560.64	112.1
7	KL69	L6	True	1000.00	1039.06	103.9
8	KL70	L7	True	2500.00	2380.89	95.2
9	KL71	L8	True	5000.00	5000.19	100.0
10	KL72	L9	False	10000.00	9307.34	93.1





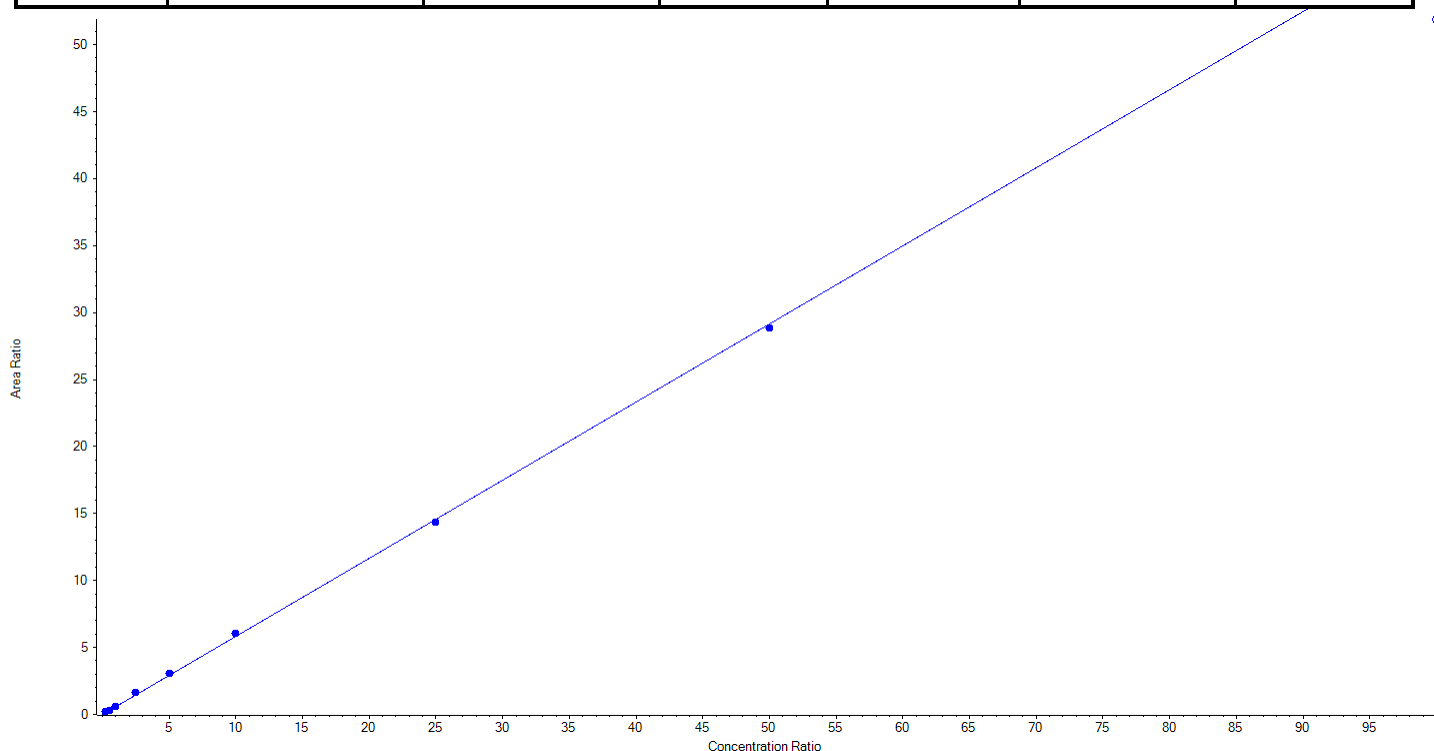
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFTrDA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	663.0 / 619.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.58295 x$ ($r = 0.99960$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	32.31	129.3
3	KL65	L2	True	50.00	50.02	100.0
4	KL66	L3	True	100.00	104.97	105.0
5	KL67	L4	True	250.00	285.16	114.1
6	KL68	L5	True	500.00	521.24	104.3
7	KL69	L6	True	1000.00	1032.55	103.3
8	KL70	L7	True	2500.00	2456.26	98.3
9	KL71	L8	True	5000.00	4942.49	98.9
10	KL72	L9	False	10000.00	8897.71	89.0





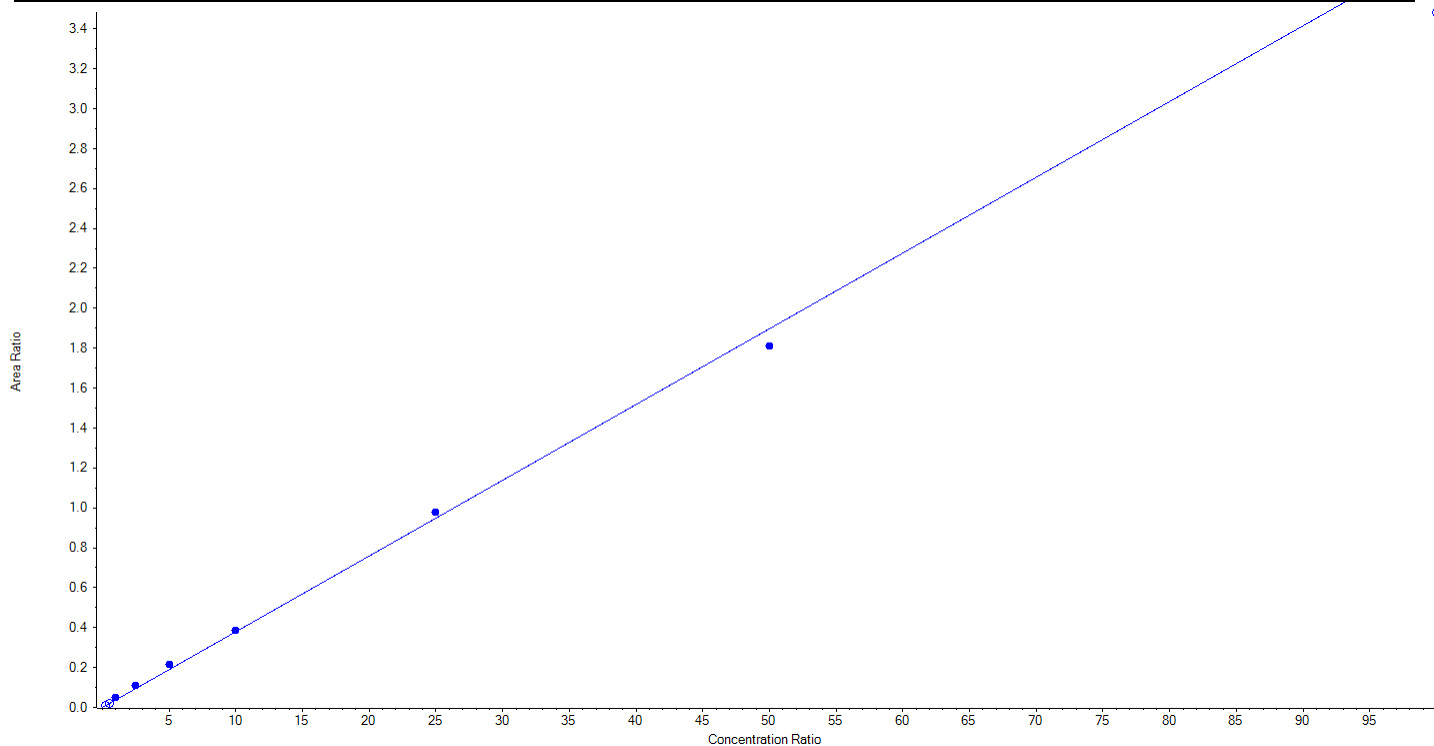
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFTTrDA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	663.0 / 169.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.03795 x$ ($r = 0.99904$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	31.04	124.2
3	KL65	L2	False	50.00	47.13	94.3
4	KL66	L3	True	100.00	126.62	126.6
5	KL67	L4	True	250.00	296.70	118.7
6	KL68	L5	True	500.00	571.44	114.3
7	KL69	L6	True	1000.00	1012.08	101.2
8	KL70	L7	True	2500.00	2572.24	102.9
9	KL71	L8	True	5000.00	4770.93	95.4
10	KL72	L9	False	10000.00	9174.77	91.8





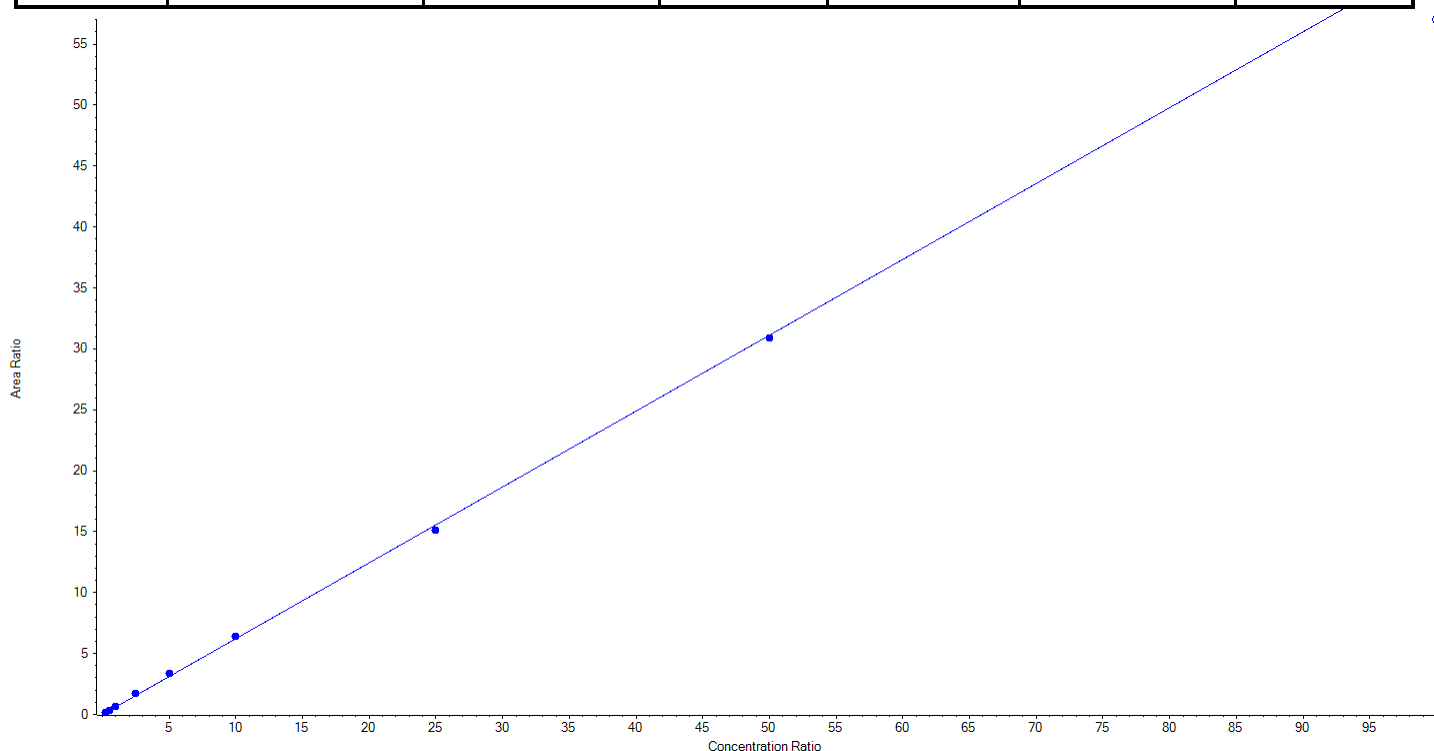
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFTeDA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	713.0 / 669.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.62236 x$ ($r = 0.99942$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	26.24	105.0
3	KL65	L2	True	50.00	48.58	97.2
4	KL66	L3	True	100.00	100.94	100.9
5	KL67	L4	True	250.00	277.07	110.8
6	KL68	L5	True	500.00	547.63	109.5
7	KL69	L6	True	1000.00	1028.17	102.8
8	KL70	L7	True	2500.00	2429.10	97.2
9	KL71	L8	True	5000.00	4967.27	99.4
10	KL72	L9	False	10000.00	9161.94	91.6





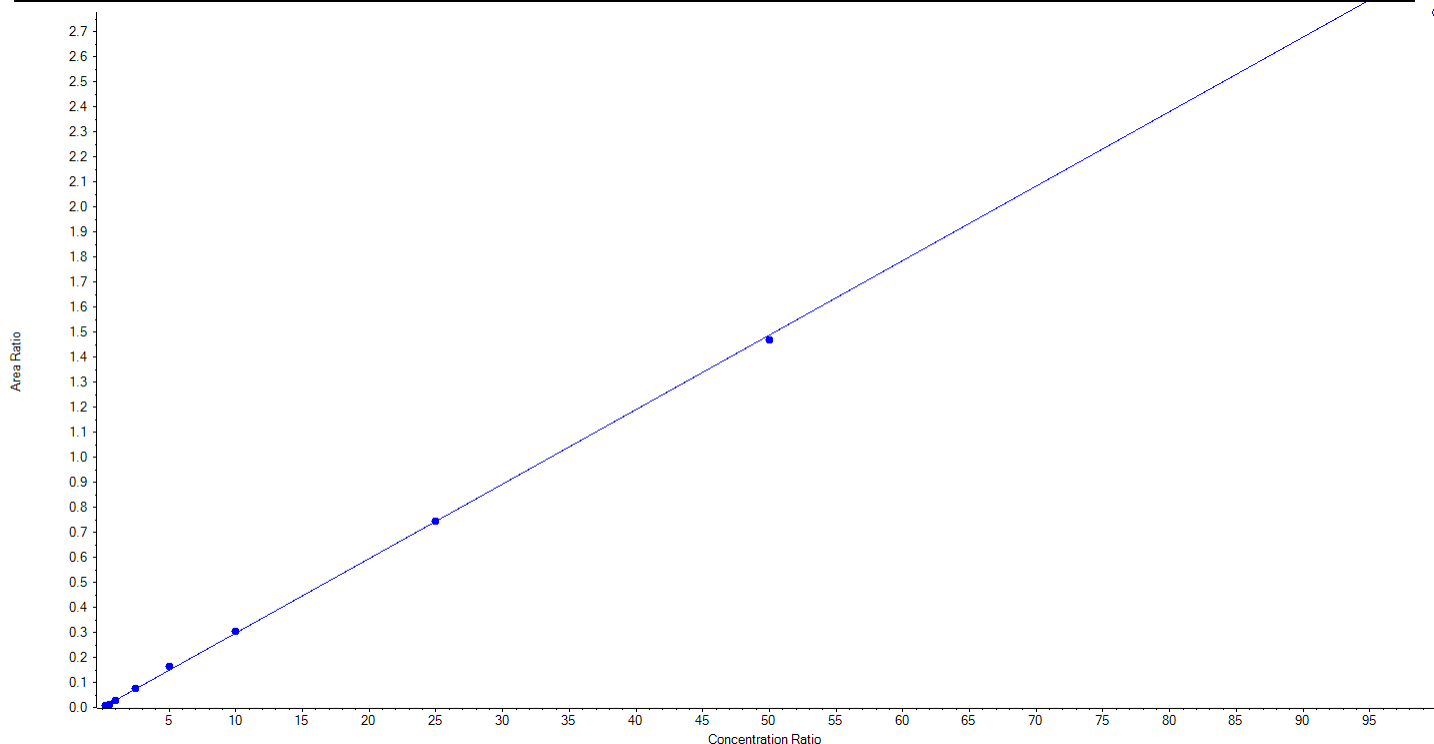
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	PFTeDA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	713.0 / 169.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.02976 x$ ($r = 0.99952$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	30.55	122.2
3	KL65	L2	True	50.00	41.32	82.7
4	KL66	L3	True	100.00	98.75	98.8
5	KL67	L4	True	250.00	261.75	104.7
6	KL68	L5	True	500.00	545.97	109.2
7	KL69	L6	True	1000.00	1015.94	101.6
8	KL70	L7	True	2500.00	2494.45	99.8
9	KL71	L8	True	5000.00	4936.26	98.7
10	KL72	L9	False	10000.00	9329.56	93.3





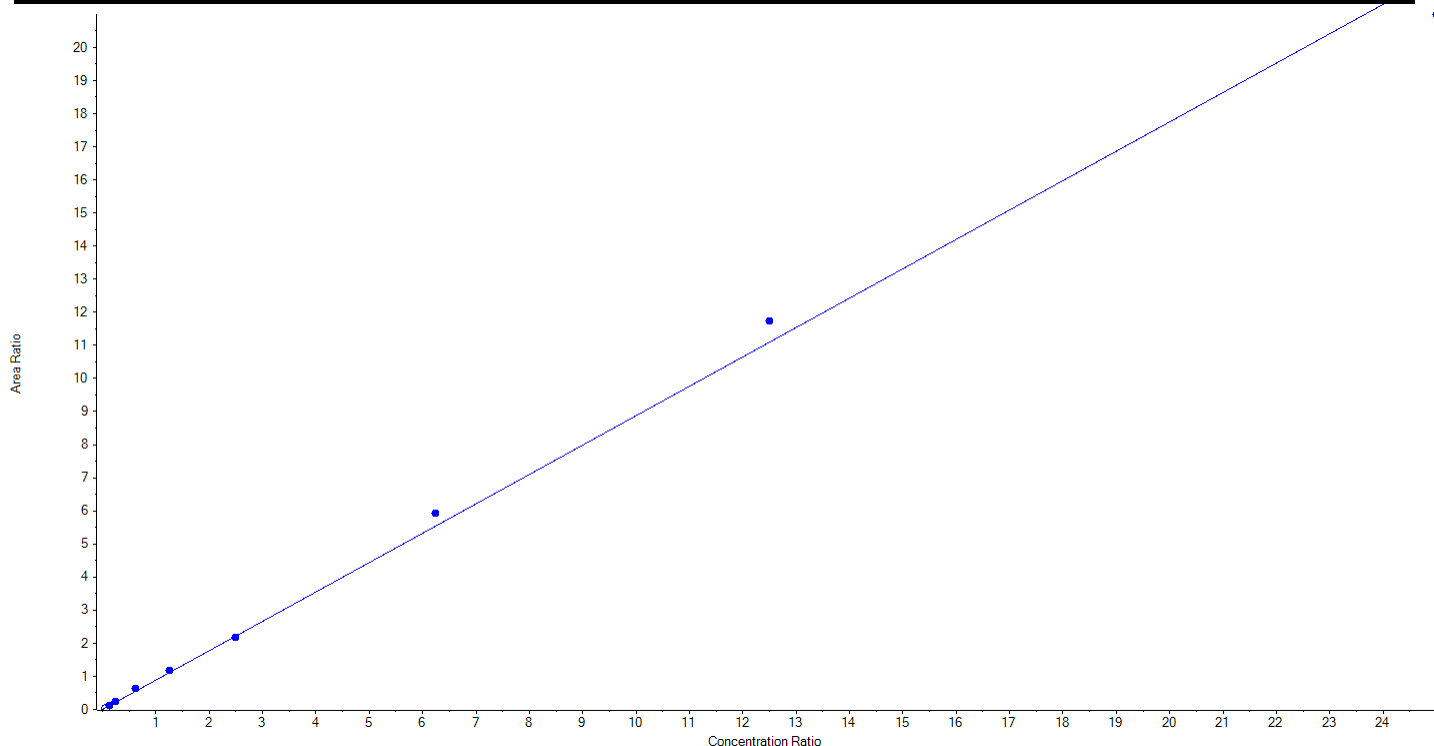
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	NMeFOSAA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	570.0 / 419.0	Result Table	19-0465_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.88760 x$ ($r = 0.99833$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	17.93	71.7
3	KL65	L2	True	50.00	60.85	121.7
4	KL66	L3	True	100.00	113.48	113.5
5	KL67	L4	True	250.00	279.48	111.8
6	KL68	L5	True	500.00	537.32	107.5
7	KL69	L6	True	1000.00	983.16	98.3
8	KL70	L7	True	2500.00	2678.79	107.2
9	KL71	L8	True	5000.00	5285.54	105.7
10	KL72	L9	True	10000.00	9461.39	94.6





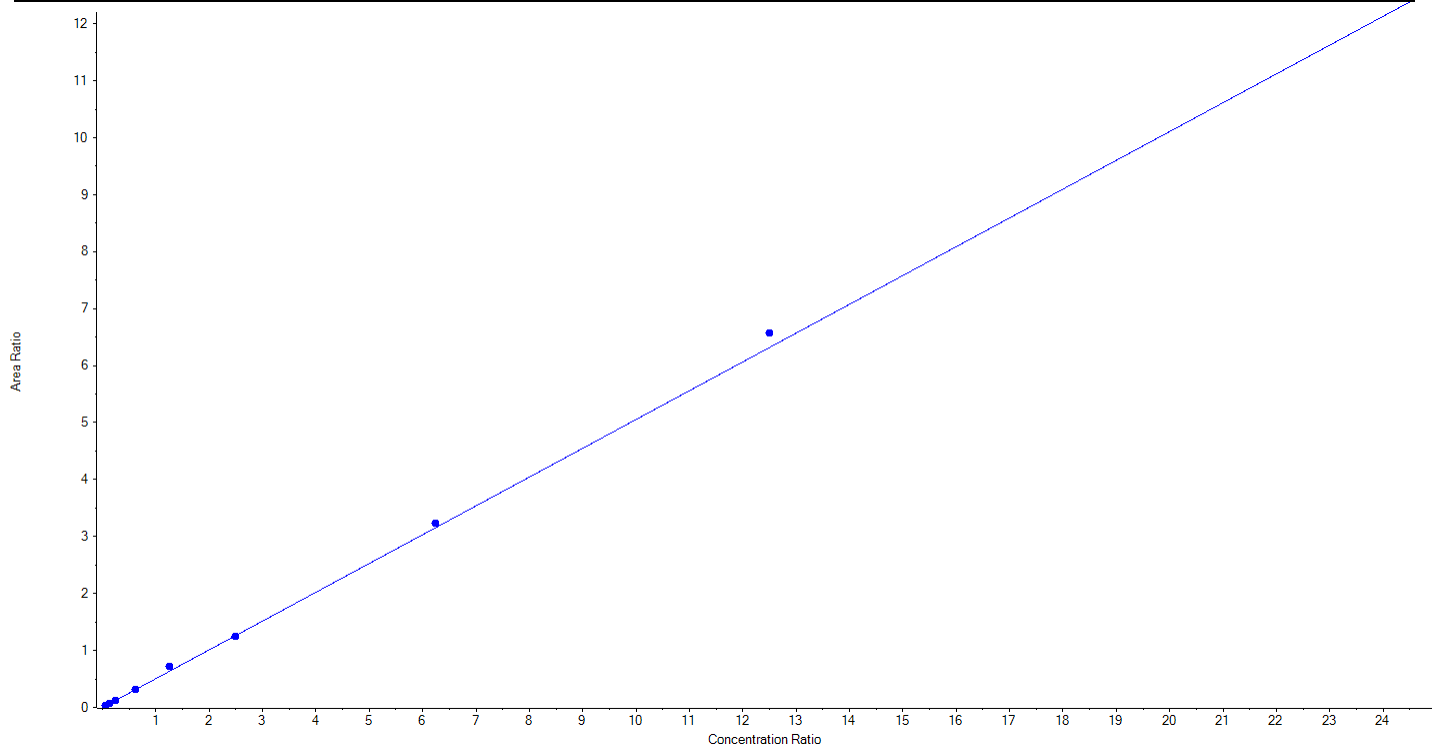
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	NMeFOSAA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	570.0 / 512.0	Result Table	19-0465_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.50544 x$ ($r = 0.99907$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	23.46	93.8
3	KL65	L2	True	50.00	60.40	120.8
4	KL66	L3	True	100.00	101.03	101.0
5	KL67	L4	True	250.00	248.65	99.5
6	KL68	L5	True	500.00	574.77	115.0
7	KL69	L6	True	1000.00	994.07	99.4
8	KL70	L7	True	2500.00	2565.32	102.6
9	KL71	L8	True	5000.00	5204.85	104.1
10	KL72	L9	True	10000.00	9652.44	96.5





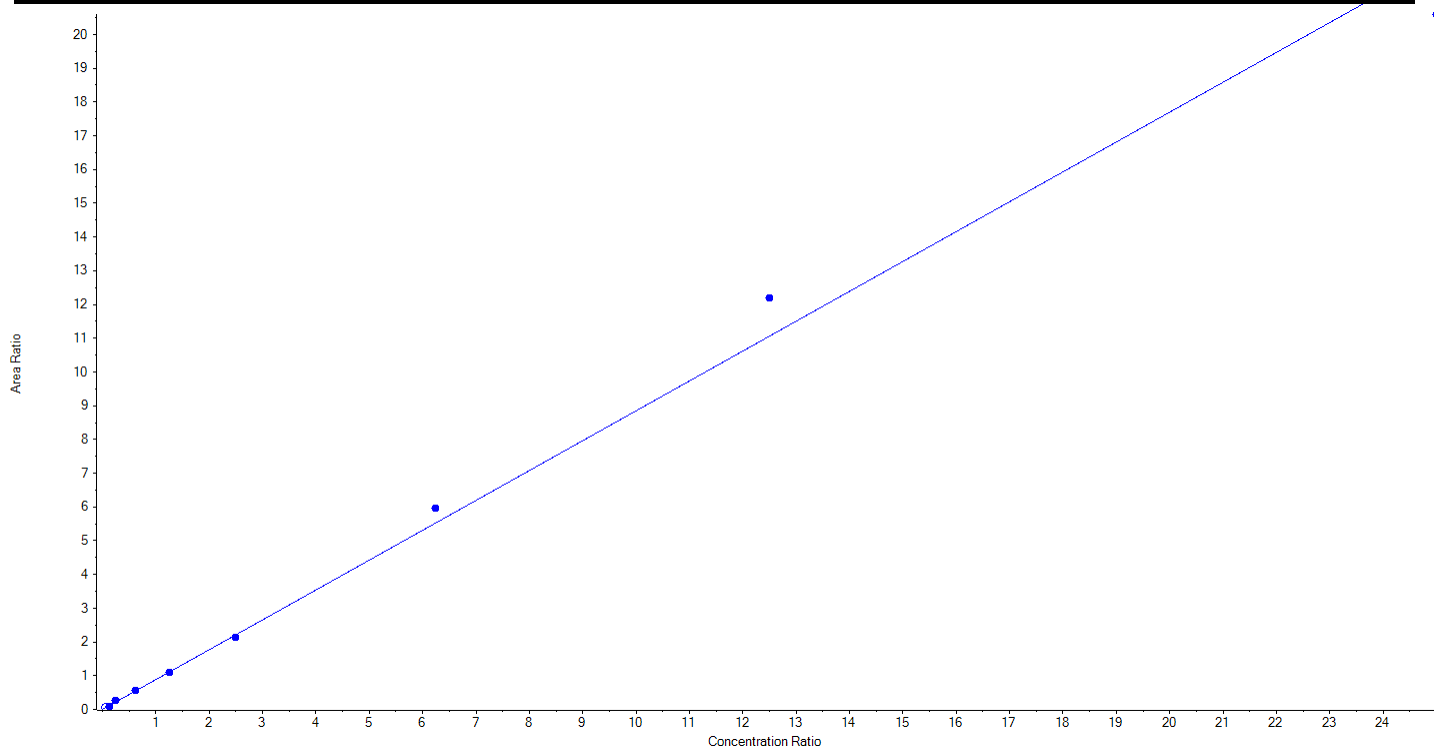
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	NEtFOSAA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	584.0 / 419.0	Result Table	19-0465_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.88498 x$ ($r = 0.99653$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	21.70	86.8
3	KL65	L2	True	50.00	39.69	79.4
4	KL66	L3	True	100.00	118.88	118.9
5	KL67	L4	True	250.00	260.10	104.0
6	KL68	L5	True	500.00	497.10	99.4
7	KL69	L6	True	1000.00	966.04	96.6
8	KL70	L7	True	2500.00	2698.09	107.9
9	KL71	L8	True	5000.00	5512.83	110.3
10	KL72	L9	True	10000.00	9307.27	93.1





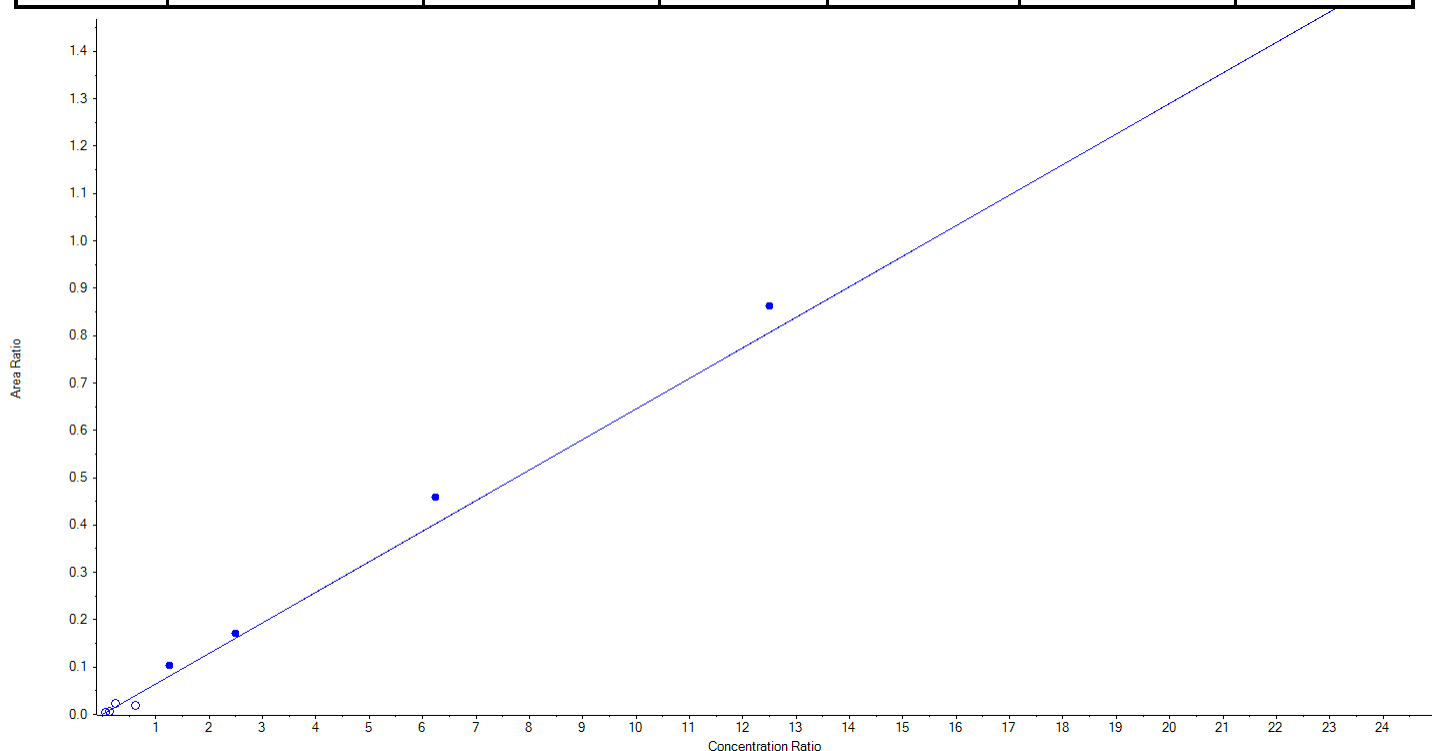
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	NEtFOSAA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	584.0 / 483.0	Result Table	19-0465_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.06451 x$ ($r = 0.99507$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	32.60	130.4
3	KL65	L2	False	50.00	39.50	79.0
4	KL66	L3	False	100.00	145.93	145.9
5	KL67	L4	False	250.00	120.44	48.2
6	KL68	L5	True	500.00	637.99	127.6
7	KL69	L6	True	1000.00	1058.96	105.9
8	KL70	L7	True	2500.00	2849.38	114.0
9	KL71	L8	True	5000.00	5354.87	107.1
10	KL72	L9	True	10000.00	9098.79	91.0





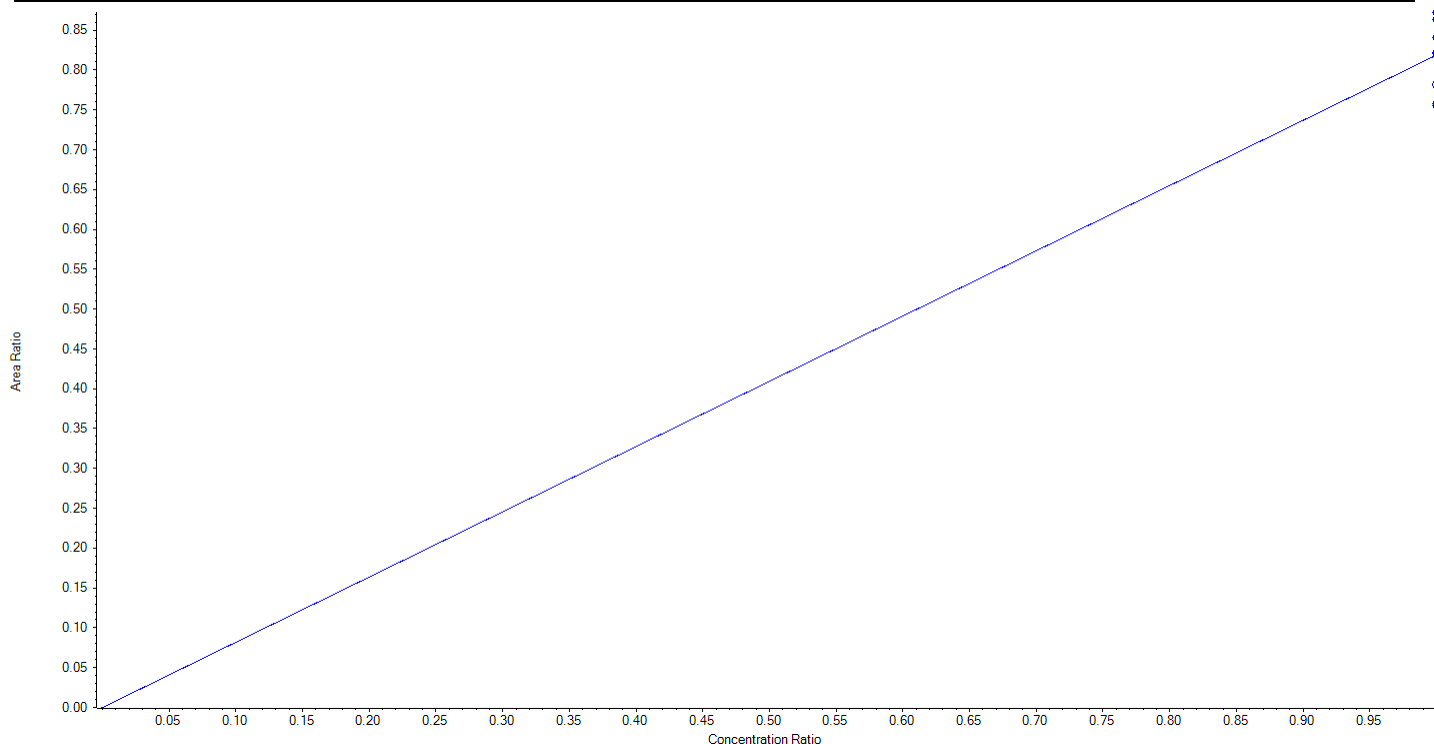
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	13C2-PFHxA	Data File	AC_06042019_5-371.wiff
MRM Transition	315.0 / 270.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.81874 x$ (std. dev. = 0.04652) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	100.00	105.37	105.4
3	KL65	L2	True	100.00	102.66	102.7
4	KL66	L3	True	100.00	92.23	92.2
5	KL67	L4	True	100.00	100.35	100.4
6	KL68	L5	True	100.00	100.25	100.3
7	KL69	L6	True	100.00	106.52	106.5
8	KL70	L7	True	100.00	92.61	92.6
9	KL71	L8	False	100.00	95.42	95.4
10	KL72	L9	False	100.00	95.50	95.5





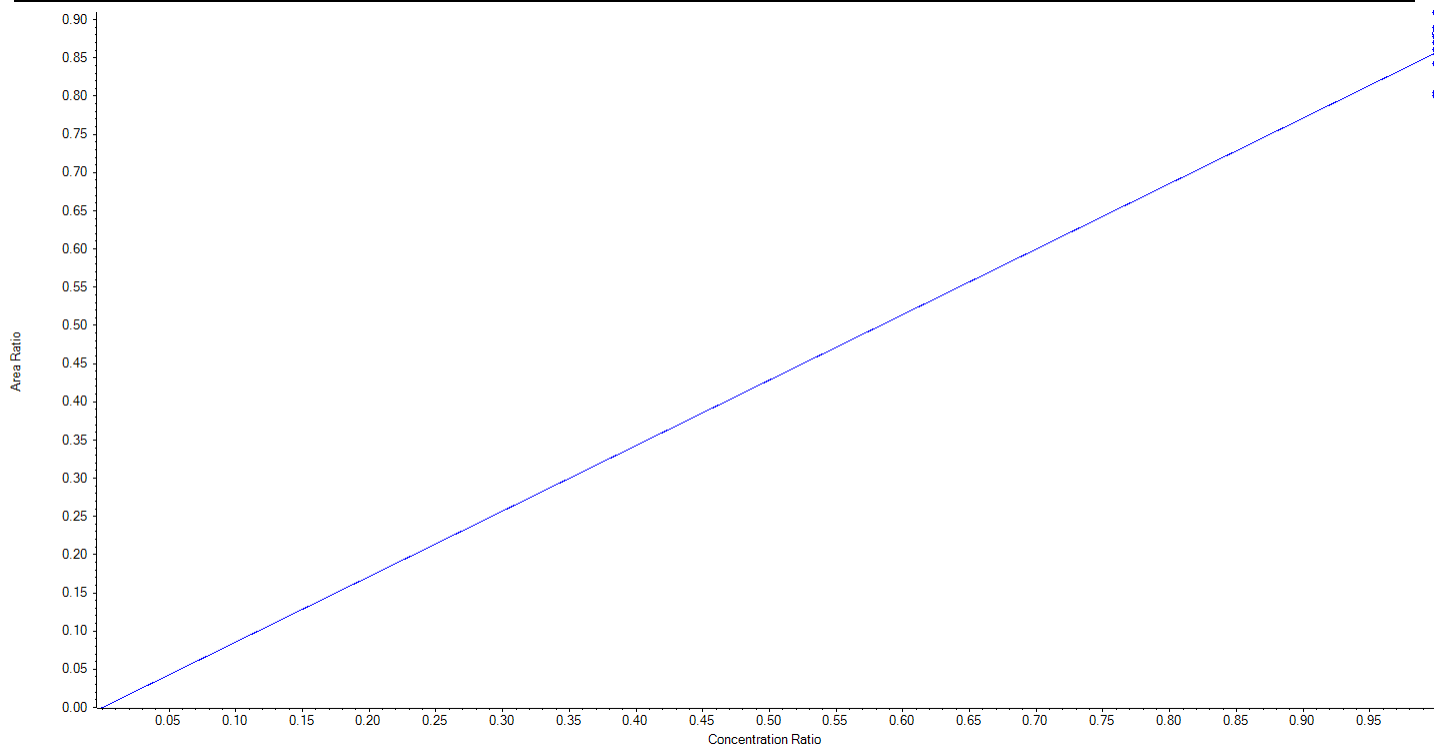
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	13C2-PFDA	Data File	AC_06042019_5-371.wiff
MRM Transition	515.0 / 470.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.85702 x$ (std. dev. = 0.03880) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	100.00	98.32	98.3
3	KL65	L2	True	100.00	100.51	100.5
4	KL66	L3	True	100.00	106.11	106.1
5	KL67	L4	True	100.00	101.54	101.5
6	KL68	L5	True	100.00	103.78	103.8
7	KL69	L6	True	100.00	102.42	102.4
8	KL70	L7	True	100.00	93.83	93.8
9	KL71	L8	True	100.00	93.48	93.5
10	KL72	L9	False	100.00	102.96	103.0





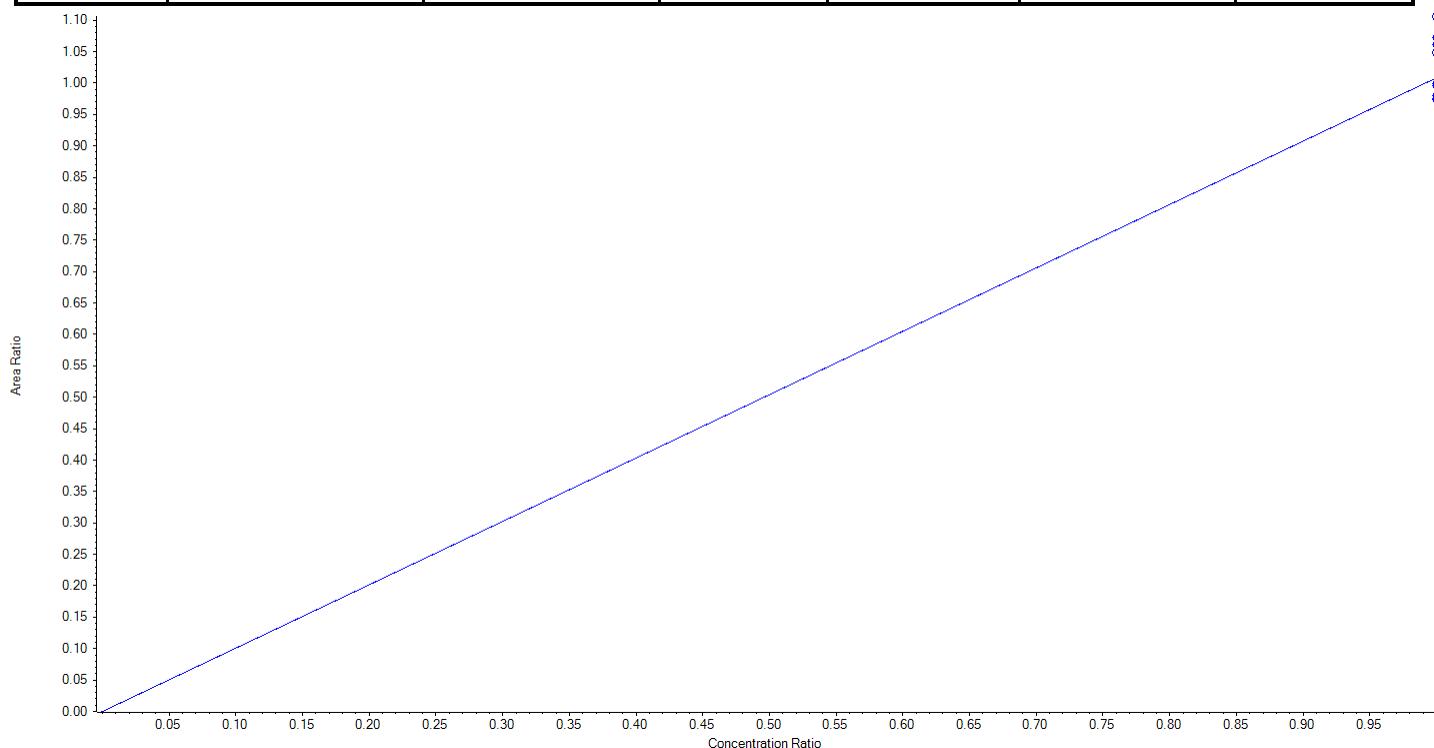
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	d5-EtFOSAA	Data File	AC_06042019_5-371.wiff
MRM Transition	589.0 / 419.0	Result Table	19-0465_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.00840 x$ (std. dev. = 0.04125) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	400.00	415.87	104.0
3	KL65	L2	False	400.00	438.67	109.7
4	KL66	L3	True	400.00	386.69	96.7
5	KL67	L4	True	400.00	388.96	97.2
6	KL68	L5	True	400.00	425.14	106.3
7	KL69	L6	True	400.00	421.20	105.3
8	KL70	L7	True	400.00	395.36	98.8
9	KL71	L8	True	400.00	386.15	96.5
10	KL72	L9	True	400.00	396.50	99.1





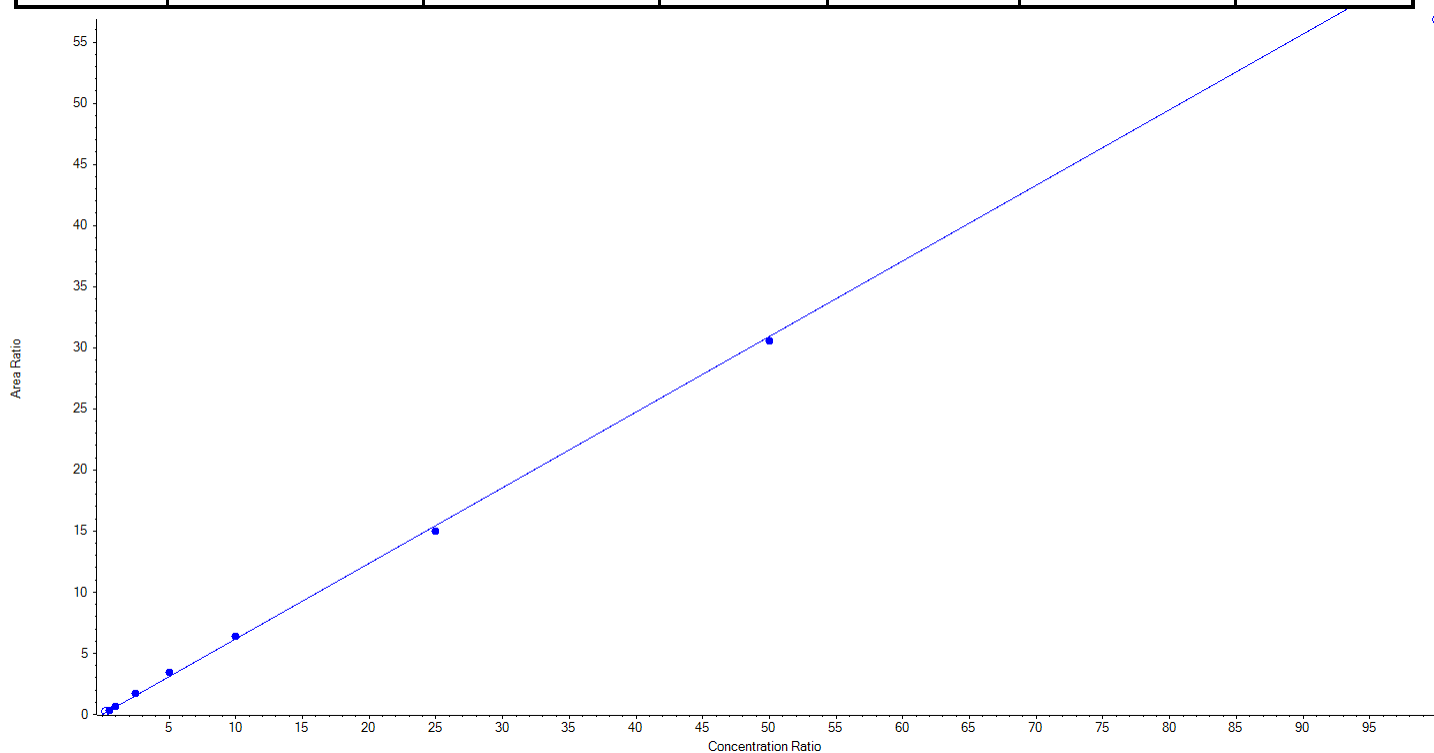
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	HFPO-DA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	285.0 / 169.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.61843 x$ ($r = 0.99935$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	43.47	173.9
3	KL65	L2	True	50.00	56.93	113.9
4	KL66	L3	True	100.00	104.40	104.4
5	KL67	L4	True	250.00	282.63	113.1
6	KL68	L5	True	500.00	555.49	111.1
7	KL69	L6	True	1000.00	1032.90	103.3
8	KL70	L7	True	2500.00	2421.11	96.8
9	KL71	L8	True	5000.00	4946.54	98.9
10	KL72	L9	False	10000.00	9192.01	91.9





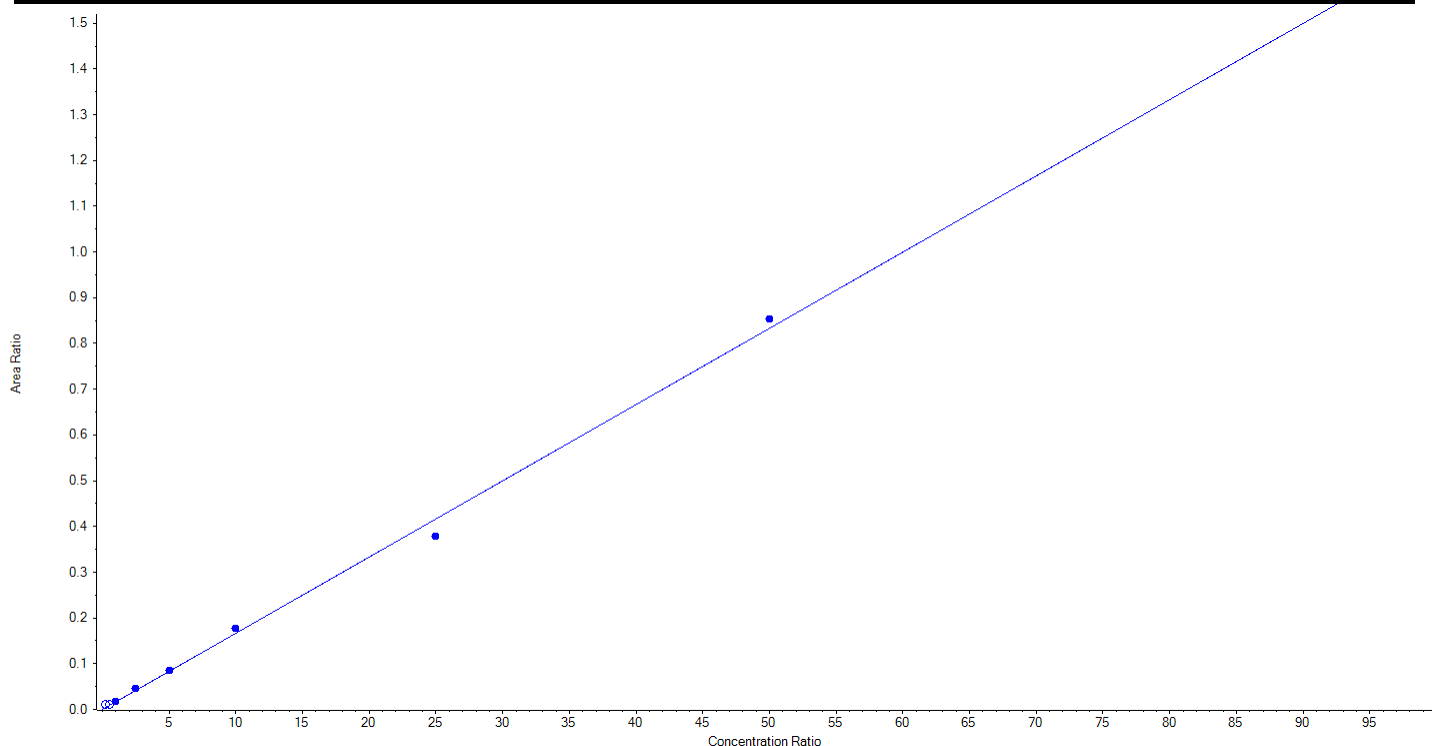
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	HFPO-DA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	285.0 / 118.8	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01666 x$ ($r = 0.99799$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	67.61	270.4
3	KL65	L2	False	50.00	71.07	142.1
4	KL66	L3	True	100.00	107.66	107.7
5	KL67	L4	True	250.00	271.59	108.6
6	KL68	L5	True	500.00	513.91	102.8
7	KL69	L6	True	1000.00	1068.38	106.8
8	KL70	L7	True	2500.00	2269.28	90.8
9	KL71	L8	True	5000.00	5119.18	102.4
10	KL72	L9	False	10000.00	9116.76	91.2





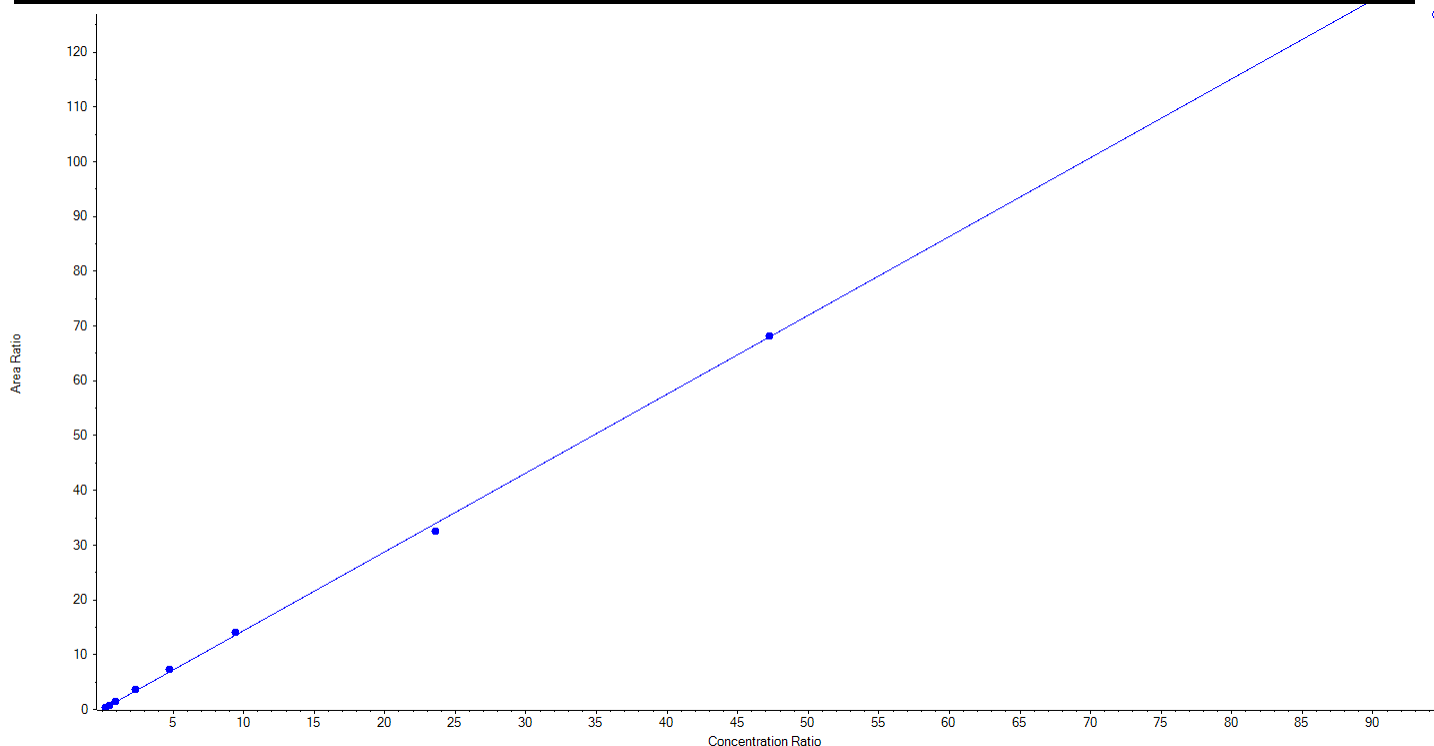
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	ADONA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	377.0 / 251.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.43916 x$ ($r = 0.99955$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.65	24.86	105.1
3	KL65	L2	True	47.30	49.16	103.9
4	KL66	L3	True	94.60	98.47	104.1
5	KL67	L4	True	236.50	249.52	105.5
6	KL68	L5	True	473.00	504.75	106.7
7	KL69	L6	True	945.00	975.56	103.2
8	KL70	L7	True	2362.50	2266.75	96.0
9	KL71	L8	True	4725.00	4738.48	100.3
10	KL72	L9	False	9450.00	8815.41	93.3





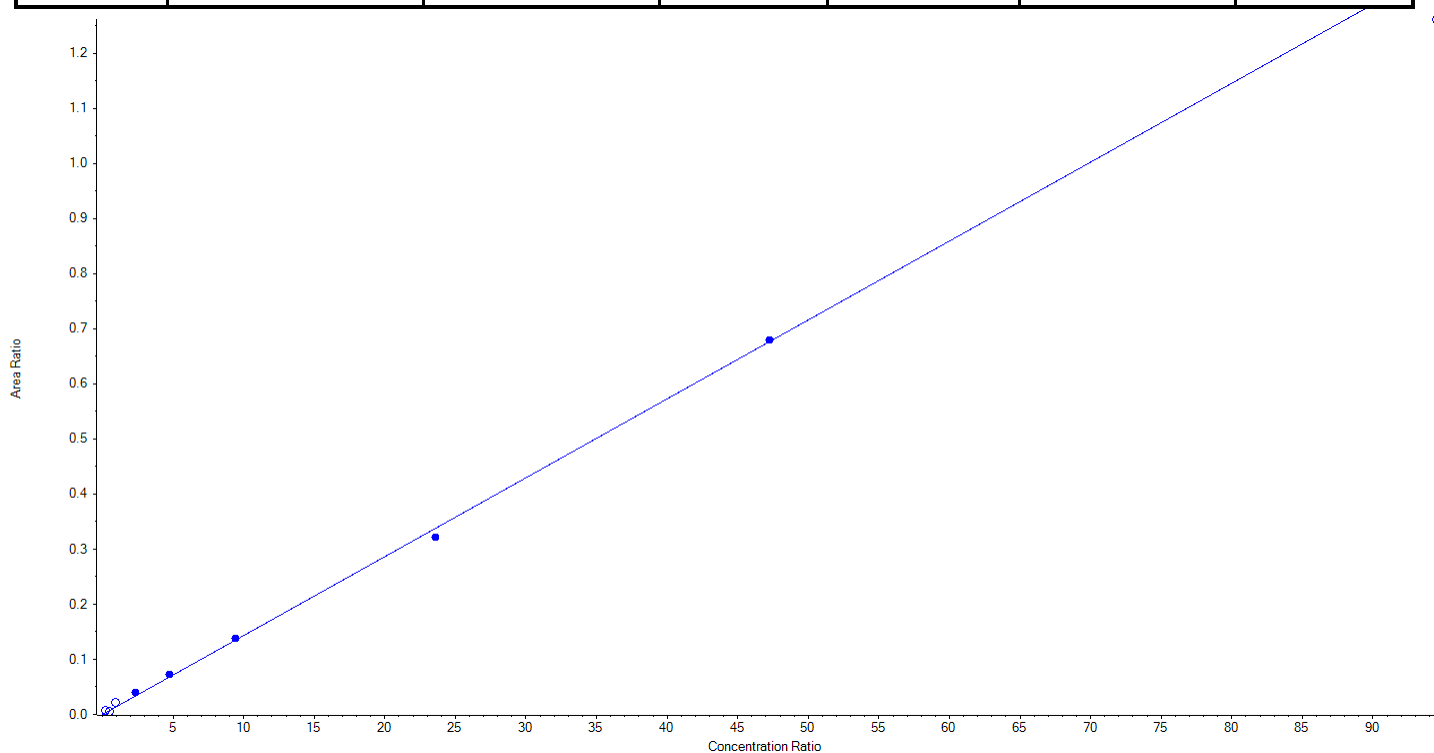
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	ADONA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	377.0 / 85.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01432 x$ ($r = 0.99938$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	23.65	55.01	232.6
3	KL65	L2	False	47.30	40.45	85.5
4	KL66	L3	False	94.60	158.61	167.7
5	KL67	L4	True	236.50	278.39	117.7
6	KL68	L5	True	473.00	505.26	106.8
7	KL69	L6	True	945.00	960.95	101.7
8	KL70	L7	True	2362.50	2245.07	95.0
9	KL71	L8	True	4725.00	4752.33	100.6
10	KL72	L9	False	9450.00	8807.35	93.2





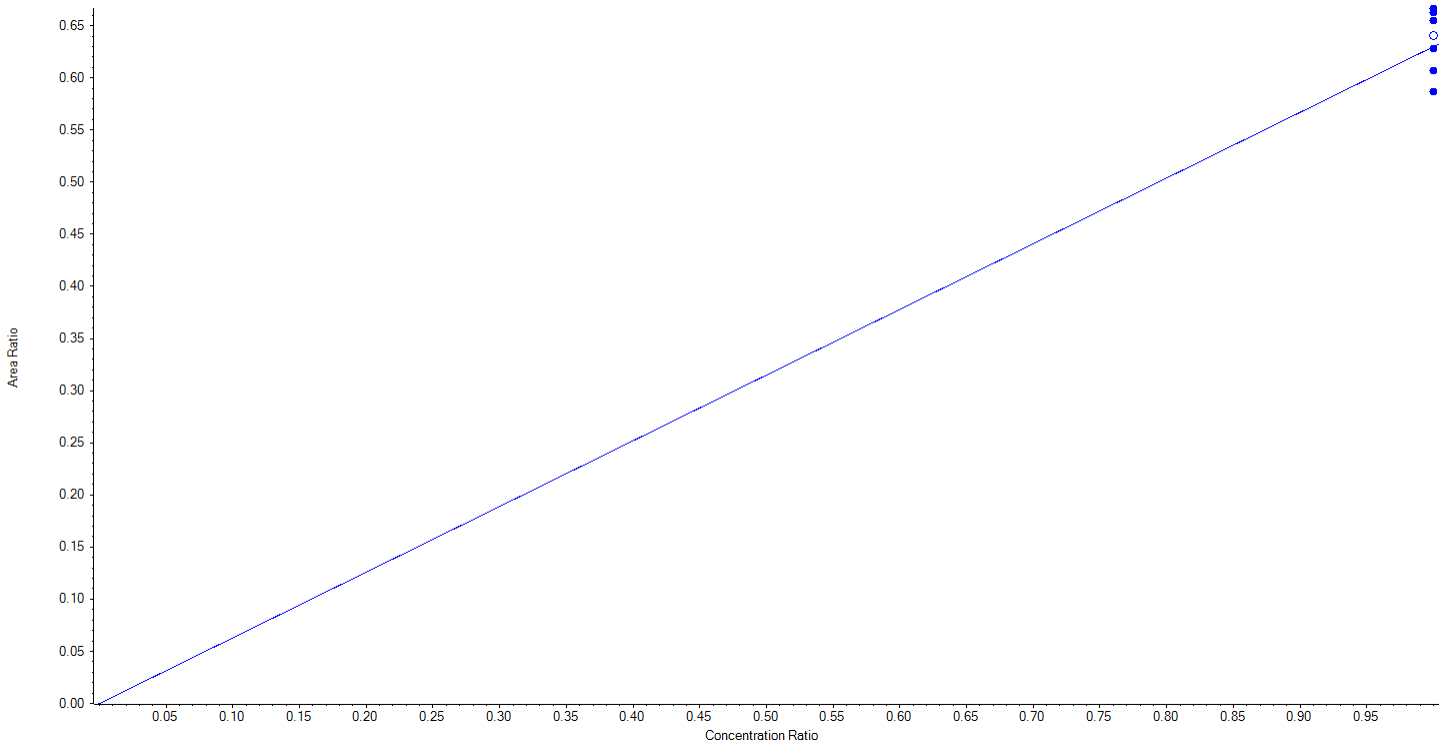
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	13C3-HFPO-DA	Data File	AC_06042019_5-371.wiff
MRM Transition	287.0 / 169.0	Result Table	19-0465_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.62989 x$ (std. dev. = 0.02922) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	100.00	105.17	105.2
3	KL65	L2	True	100.00	99.73	99.7
4	KL66	L3	True	100.00	96.28	96.3
5	KL67	L4	True	100.00	93.12	93.1
6	KL68	L5	True	100.00	99.63	99.6
7	KL69	L6	True	100.00	103.92	103.9
8	KL70	L7	True	100.00	96.33	96.3
9	KL71	L8	True	100.00	105.81	105.8
10	KL72	L9	False	100.00	101.65	101.7





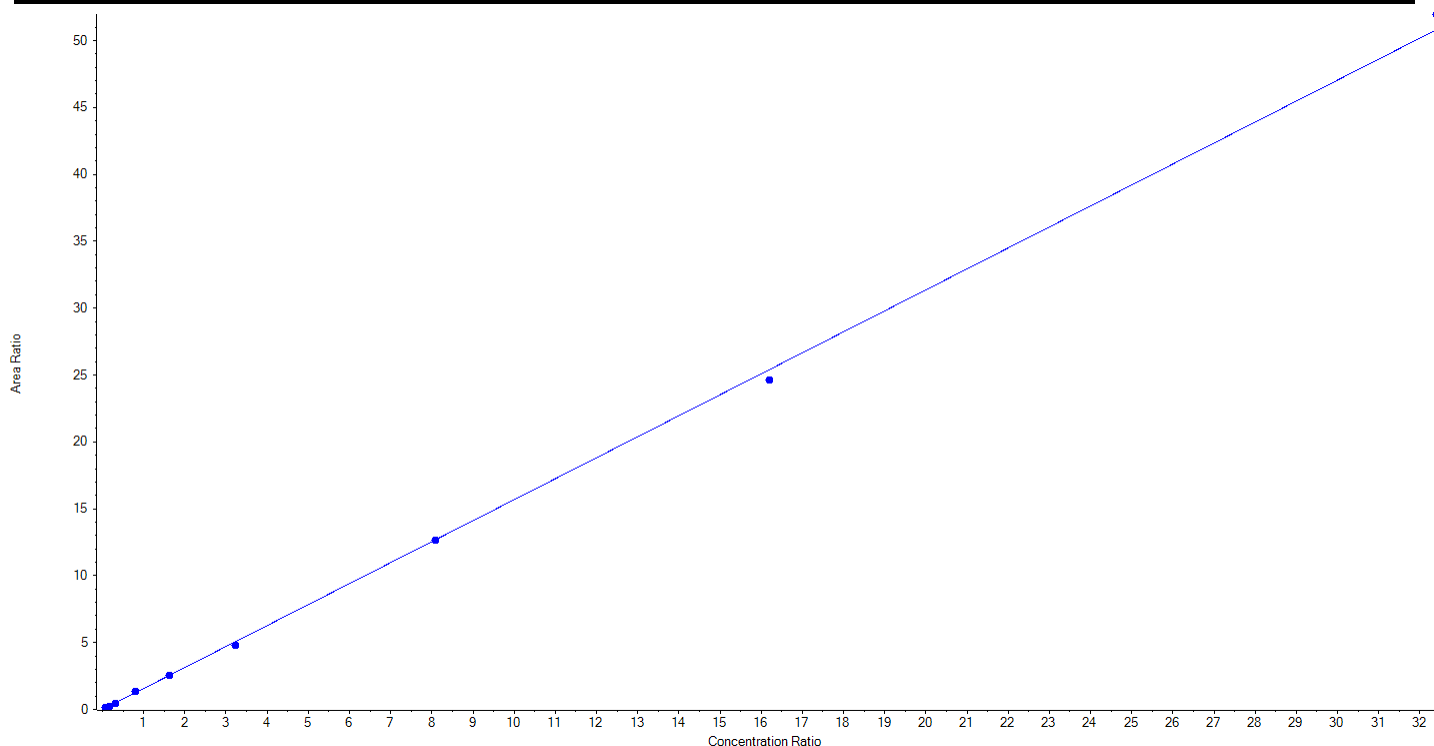
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	9CI-PF3ONS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	531.0 / 351.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.56817 x$ ($r = 0.99959$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.25	25.56	109.9
3	KL65	L2	True	46.50	46.52	100.0
4	KL66	L3	True	93.00	87.65	94.3
5	KL67	L4	True	232.50	245.84	105.7
6	KL68	L5	True	465.00	463.14	99.6
7	KL69	L6	True	930.00	871.83	93.8
8	KL70	L7	True	2325.00	2309.81	99.4
9	KL71	L8	True	4650.00	4507.79	96.9
10	KL72	L9	True	9300.00	9507.11	102.2





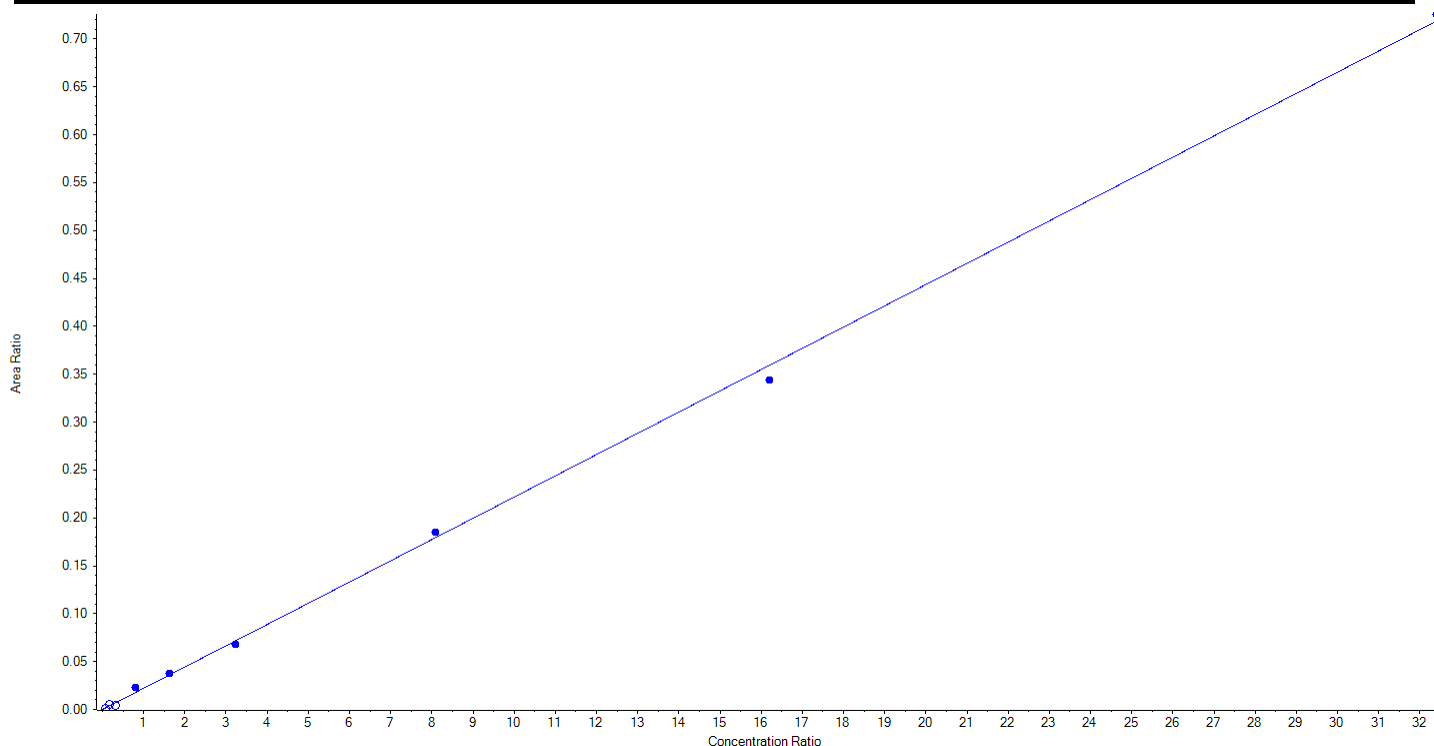
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	9CI-PF3ONS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	531.0 / 83.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.02218 x$ ($r = 0.99917$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	23.25	8.85	38.1
3	KL65	L2	False	46.50	64.80	139.4
4	KL66	L3	False	93.00	56.99	61.3
5	KL67	L4	True	232.50	299.65	128.9
6	KL68	L5	True	465.00	491.22	105.6
7	KL69	L6	True	930.00	882.08	94.9
8	KL70	L7	True	2325.00	2395.20	103.0
9	KL71	L8	True	4650.00	4445.30	95.6
10	KL72	L9	True	9300.00	9389.06	101.0





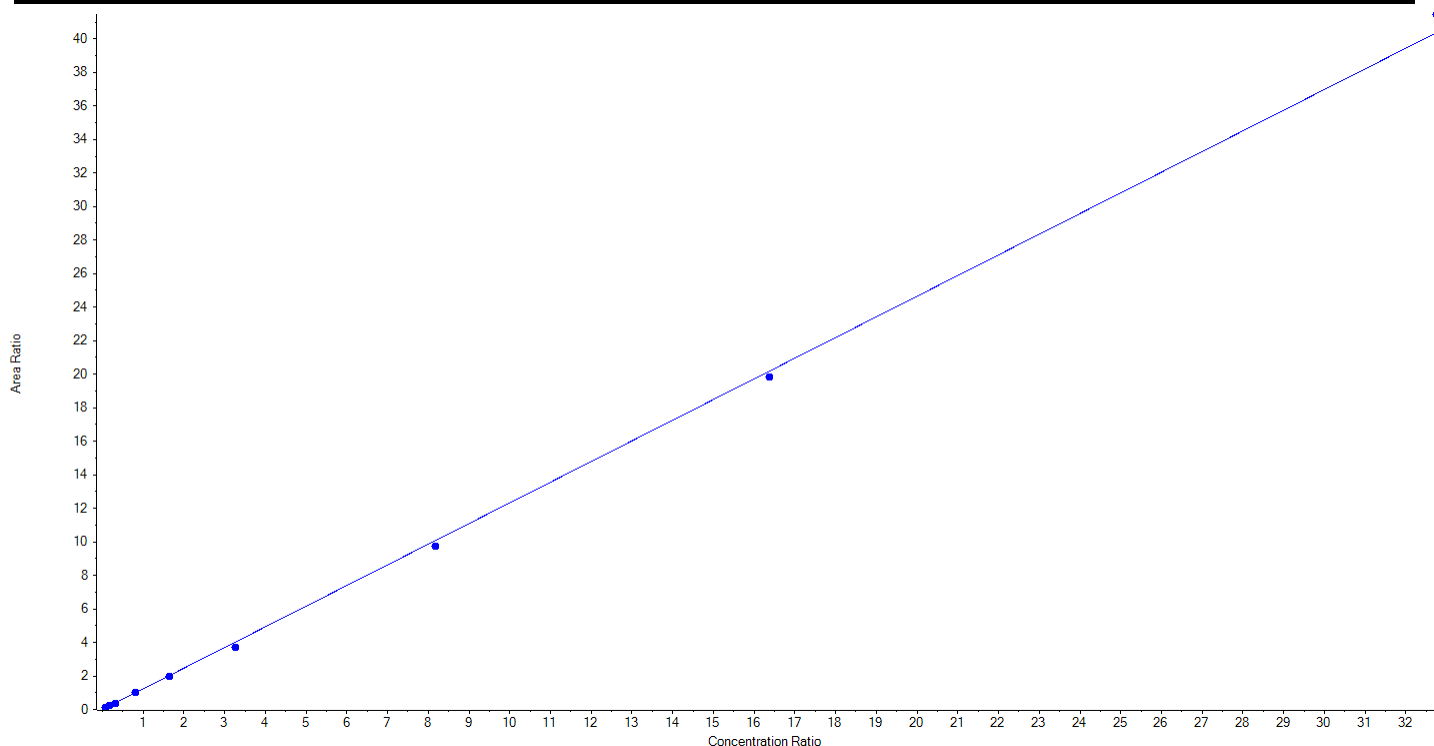
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	11CI-PF3OUdS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	631.0 / 451.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.23256 x$ ($r = 0.99940$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.50	26.77	113.9
3	KL65	L2	True	47.00	54.78	116.6
4	KL66	L3	True	94.00	86.98	92.5
5	KL67	L4	True	235.00	232.46	98.9
6	KL68	L5	True	470.00	462.18	98.3
7	KL69	L6	True	940.00	856.76	91.1
8	KL70	L7	True	2350.00	2271.67	96.7
9	KL71	L8	True	4700.00	4615.78	98.2
10	KL72	L9	True	9400.00	9652.12	102.7





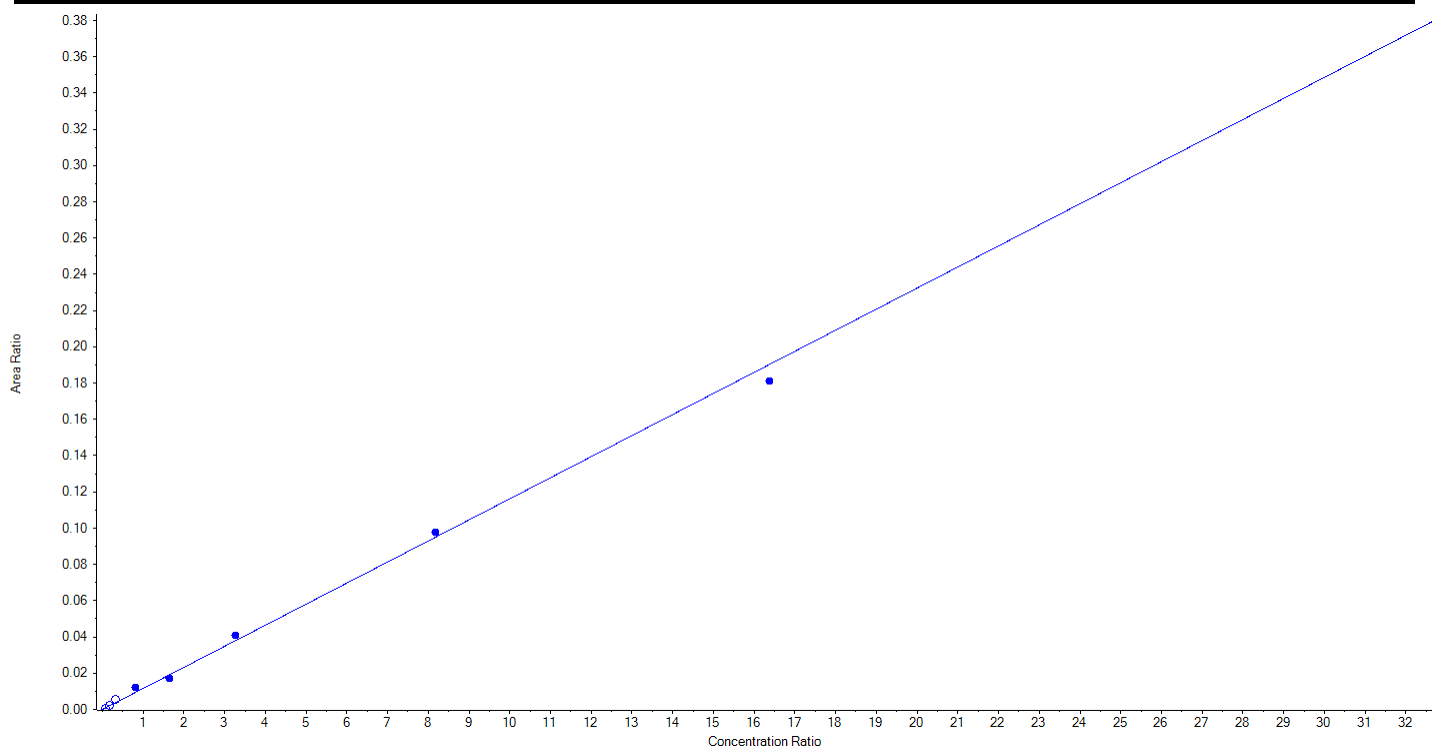
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 7:48:32 AM

Analyte Name	11CI-PF3OUdS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	631.0 / 83.0	Result Table	19-0465_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01162 x$ ($r = 0.99885$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	23.50	16.27	69.2
3	KL65	L2	False	47.00	53.55	113.9
4	KL66	L3	False	94.00	136.49	145.2
5	KL67	L4	True	235.00	300.03	127.7
6	KL68	L5	True	470.00	427.86	91.0
7	KL69	L6	True	940.00	1015.81	108.1
8	KL70	L7	True	2350.00	2412.48	102.7
9	KL71	L8	True	4700.00	4472.47	95.2
10	KL72	L9	True	9400.00	9466.35	100.7





	Drinking Water Calibration Curve Concentrations (ng/L)									ICC (ng/L)
	KL64	KL65	KL66	KL67	KL68	KL69	KL70	KL71	KL72	KL74
PFHxA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFHpA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFOA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFNA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFUnA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFDoA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFTTrDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFTeDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
NMeFOSAA (branched)	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
NEtFOSAA (branched)	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFBS	22.15	44.30	88.60	221.50	443.00	885.00	2,212.50	4,425.00	8,850.00	885.00
PFHxS (branched)	22.80	45.60	91.20	228.00	456.00	912.00	2,280.00	4,560.00	9,120.00	945.00
PFOS (branched)	23.15	46.30	92.60	231.50	463.00	925.60	2,314.00	4,628.00	9,256.00	955.00
HFPO-DA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
Adona	23.65	47.30	94.60	236.50	473.00	945.00	2,362.50	4,725.00	9,450.00	945.00
9CI-PF3ONS	23.25	46.50	93.00	232.50	465.00	930.00	2,325.00	4,650.00	9,300.00	930.00
11CI-PF3OUdS	23.50	47.00	94.00	235.00	470.00	940.00	2,350.00	4,700.00	9,400.00	940.00
	Surrogates									
13C2-PFHxA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
13C2-PFDA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
d5-EtFOSAA	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00
13C3-HFPO-DA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Internal Standards									
13C2-PFOA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
13C4-PFOS	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00
d3-MeFOSAA	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00

ICC only contains linear isomers.

Sample Name	KL64	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.51	10428.49	25.12	815.4	False	13C4-PFOS	148267.69	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.50	2718.45	22.05	343.0	True	13C4-PFOS	148267.69	287.00	PFBS	0.261	0.288	✓
PFHxA_1	313.0 / 269.0	1.85	11839.55	51.63	26.2	True	13C2-PFOA	30597.09	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	870.28	49.95	14.4	True	13C2-PFOA	30597.09	100.00	PFHxA	0.074	0.076	✓
PFHpA_1	363.0 / 319.0	2.27	13468.76	57.17	19.3	True	13C2-PFOA	30597.09	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	298.87	80.56	12.0	True	13C2-PFOA	30597.09	100.00	PFHpA	0.022	0.015	✓
PFHxS_1	399.0 / 80.0	2.28	10279.67	25.89	201.8	False	13C4-PFOS	148267.69	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	4291.86	36.67	51.5	False	13C4-PFOS	148267.69	287.00	PFHxS	0.418	0.297	✓
PFOA_1	413.0 / 369.0	2.69	12287.42	42.22	48.8	True	13C2-PFOA	30597.09	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.70	839.89	56.18	44.3	True	13C2-PFOA	30597.09	100.00	PFOA	0.068	0.052	✓
PFNA_1	463.0 / 419.0	3.48	52763.25	219.87	173.0	False	13C2-PFOA	30597.09	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.09	2960.96	37.81	27.4	True	13C2-PFOA	30597.09	100.00	PFNA	0.056	0.330	✓
PFOS_1	499.0 / 80.0	3.09	14658.17	24.90	139.8	True	13C4-PFOS	148267.69	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.08	2675.19	24.34	81.1	False	13C4-PFOS	148267.69	287.00	PFOS	0.183	0.190	✓
PFDA_1	513.0 / 469.0	3.46	8910.33	35.75	85.8	True	13C2-PFOA	30597.09	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.46	249.49	27.55	20.5	True	13C2-PFOA	30597.09	100.00	PFDA	0.028	0.034	✓
PFUnA_1	563.0 / 519.0	3.79	8073.06	35.17	55.8	True	13C2-PFOA	30597.09	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.81	247.23	25.40	21.5	False	13C2-PFOA	30597.09	100.00	PFUnA	0.031	0.042	✓
PFDoA_1	613.0 / 569.0	4.07	7729.77	39.25	114.1	False	13C2-PFOA	30597.09	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.07	936.92	28.32	49.1	False	13C2-PFOA	30597.09	100.00	PFDoA	0.121	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.33	5763.57	32.31	88.6	False	13C2-PFOA	30597.09	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.32	360.41	31.04	33.6	False	13C2-PFOA	30597.09	100.00	PFTTrDA	0.063	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.56	4996.44	26.24	90.8	False	13C2-PFOA	30597.09	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.55	278.20	30.55	31.1	False	13C2-PFOA	30597.09	100.00	PFTTeDA	0.056	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.62	506.48	17.93	287.7	True	d3-MeFOSAA	12728.23	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.60	377.30	23.46	40.5	False	d3-MeFOSAA	12728.23	400.00	NMeFOSAA	0.745	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.78	611.19	21.70	164.4	False	d3-MeFOSAA	12728.23	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.80	66.92	32.60	4354.4	False	d3-MeFOSAA	12728.23	400.00	NEtFOSAA	0.109	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.84	26397.17	105.37	806.6	False	13C2-PFOA	30597.09	100.00				
13C2-PFDA	515.0 / 470.0	3.45	25782.58	98.32	5907.2	False	13C2-PFOA	30597.09	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.77	13344.51	415.87	319.6	False	d3-MeFOSAA	12728.23	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.98	8225.33	43.47	96.3	False	13C2-PFOA	30597.09	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.97	344.65	67.61	18.6	False	13C2-PFOA	30597.09	100.00	HFPO-DA	0.042	0.027	✓
ADONA_1	377.0 / 251.0	2.31	10948.65	24.86	196.3	False	13C2-PFOA	30597.09	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.37	240.98	55.01	25.0	False	13C2-PFOA	30597.09	100.00	ADONA	0.022	0.010	
13C3-HFPO-DA	287.0 / 169.0	1.97	20269.38	105.17	265.8	False	13C2-PFOA	30597.09	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.29	20704.44	25.56	410.6	False	13C4-PFOS	148267.69	287.00	9CI-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.33	101.44	8.85	4.6	True	13C4-PFOS	148267.69	287.00	9CI-PF3ONS	0.005	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.92	17048.95	26.77	319.5	False	13C4-PFOS	148267.69	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.97	97.65	16.27	6.1	True	13C4-PFOS	148267.69	287.00	11CI-PF3OUdS	0.006	0.010	✓

Sample Name	KL65	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:23:13 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.49	20814.55	50.08	1204.9	False	13C4-PFOS	148445.88	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.49	5631.39	45.63	422.9	True	13C4-PFOS	148445.88	287.00	PFBS	0.271	0.288	✓
PFHxA_1	313.0 / 269.0	1.83	19915.88	80.88	36.1	True	13C2-PFOA	32851.43	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	1785.26	95.44	23.0	True	13C2-PFOA	32851.43	100.00	PFHxA	0.090	0.076	✓
PFHpA_1	363.0 / 319.0	2.25	17347.76	68.58	23.5	True	13C2-PFOA	32851.43	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	548.00	137.58	14.1	True	13C2-PFOA	32851.43	100.00	PFHpA	0.032	0.015	
PFHxS_1	399.0 / 80.0	2.27	20183.16	50.77	301.2	False	13C4-PFOS	148445.88	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	5957.18	50.83	112.8	False	13C4-PFOS	148445.88	287.00	PFHxS	0.295	0.297	✓
PFOA_1	413.0 / 369.0	2.67	20469.41	65.51	82.7	True	13C2-PFOA	32851.43	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.67	1338.39	83.38	73.0	True	13C2-PFOA	32851.43	100.00	PFOA	0.065	0.052	✓
PFNA_1	463.0 / 419.0	3.07	14045.41	54.51	70.4	True	13C2-PFOA	32851.43	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.07	4574.61	54.40	49.0	True	13C2-PFOA	32851.43	100.00	PFNA	0.326	0.330	✓
PFOS_1	499.0 / 80.0	3.07	29233.43	49.59	158.1	True	13C4-PFOS	148445.88	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.07	6103.93	55.47	135.7	False	13C4-PFOS	148445.88	287.00	PFOS	0.209	0.190	✓
PFDA_1	513.0 / 469.0	3.43	15030.80	56.17	142.4	False	13C2-PFOA	32851.43	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.44	490.81	50.48	62.4	True	13C2-PFOA	32851.43	100.00	PFDA	0.033	0.034	✓
PFUnA_1	563.0 / 519.0	3.76	14791.45	60.02	101.6	False	13C2-PFOA	32851.43	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	803.94	76.93	76.3	False	13C2-PFOA	32851.43	100.00	PFUnA	0.054	0.042	✓
PFDoA_1	613.0 / 569.0	4.05	10814.43	51.15	124.1	False	13C2-PFOA	32851.43	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.05	1631.66	45.94	95.5	False	13C2-PFOA	32851.43	100.00	PFDoA	0.151	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.31	9579.39	50.02	129.5	False	13C2-PFOA	32851.43	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.30	587.60	47.13	67.7	False	13C2-PFOA	32851.43	100.00	PFTTrDA	0.061	0.069	✓
PFTeDA_1	713.0 / 669.0	4.53	9933.01	48.58	222.6	False	13C2-PFOA	32851.43	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.53	404.03	41.32	74.5	False	13C2-PFOA	32851.43	100.00	PFTeDA	0.041	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.59	1857.38	60.85	4535.8	True	d3-MeFOSAA	13756.33	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	1049.90	60.40	25597.1	False	d3-MeFOSAA	13756.33	400.00	NMeFOSAA	0.565	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.76	1208.08	39.69	615.9	False	d3-MeFOSAA	13756.33	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	87.64	39.50	27.7	False	d3-MeFOSAA	13756.33	400.00	NEtFOSAA	0.073	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.82	27613.26	102.66	1237.1	False	13C2-PFOA	32851.43	100.00				
13C2-PFDA	515.0 / 470.0	3.43	28296.91	100.51	891.2	False	13C2-PFOA	32851.43	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.75	15213.13	438.67	385.4	False	d3-MeFOSAA	13756.33	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.96	11566.25	56.93	133.7	False	13C2-PFOA	32851.43	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.95	388.98	71.07	37.2	False	13C2-PFOA	32851.43	100.00	HFPO-DA	0.034	0.027	✓
ADONA_1	377.0 / 251.0	2.29	23240.56	49.16	285.7	False	13C2-PFOA	32851.43	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.29	190.22	40.45	12.1	False	13C2-PFOA	32851.43	100.00	ADONA	0.008	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.95	20637.70	99.73	277.9	False	13C2-PFOA	32851.43	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.27	37731.00	46.52	430.5	False	13C4-PFOS	148445.88	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.28	743.28	64.80	33.0	False	13C4-PFOS	148445.88	287.00	9CI-PF3ONS	0.020	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.90	34922.76	54.78	613.9	False	13C4-PFOS	148445.88	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.90	321.84	53.55	11.5	True	13C4-PFOS	148445.88	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL66	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:32:11 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.49	35648.49	82.05	1415.9	False	13C4-PFOS	155176.73	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.49	9738.82	75.49	628.3	True	13C4-PFOS	155176.73	287.00	PFBS	0.273	0.288	✓
PFHxA_1	313.0 / 269.0	1.83	28991.28	120.25	48.6	True	13C2-PFOA	32166.13	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	2153.12	117.56	37.6	True	13C2-PFOA	32166.13	100.00	PFHxA	0.074	0.076	✓
PFHpA_1	363.0 / 319.0	2.25	34259.74	138.33	35.4	True	13C2-PFOA	32166.13	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	386.72	99.16	13.9	True	13C2-PFOA	32166.13	100.00	PFHpA	0.011	0.015	✓
PFHxS_1	399.0 / 80.0	2.26	37871.30	91.14	383.5	False	13C4-PFOS	155176.73	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	11162.35	91.11	161.6	False	13C4-PFOS	155176.73	287.00	PFHxS	0.295	0.297	✓
PFOA_1	413.0 / 369.0	2.67	32568.60	106.45	125.2	True	13C2-PFOA	32166.13	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.67	1889.42	120.21	79.2	True	13C2-PFOA	32166.13	100.00	PFOA	0.058	0.052	✓
PFNA_1	463.0 / 419.0	3.06	24938.29	98.85	108.8	True	13C2-PFOA	32166.13	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.06	9146.13	111.08	83.9	True	13C2-PFOA	32166.13	100.00	PFNA	0.367	0.330	✓
PFOS_1	499.0 / 80.0	3.06	60519.17	98.21	305.9	True	13C4-PFOS	155176.73	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.06	11284.43	98.09	250.0	False	13C4-PFOS	155176.73	287.00	PFOS	0.186	0.190	✓
PFDA_1	513.0 / 469.0	3.43	28069.87	107.13	147.6	False	13C2-PFOA	32166.13	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.42	965.61	101.44	83.7	True	13C2-PFOA	32166.13	100.00	PFDA	0.034	0.034	✓
PFUnA_1	563.0 / 519.0	3.75	24936.10	103.34	156.7	False	13C2-PFOA	32166.13	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	1160.27	113.39	89.9	False	13C2-PFOA	32166.13	100.00	PFUnA	0.047	0.042	✓
PFDoA_1	613.0 / 569.0	4.04	22731.56	109.81	176.8	False	13C2-PFOA	32166.13	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.04	3934.53	113.14	142.6	False	13C2-PFOA	32166.13	100.00	PFDoA	0.173	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.29	19683.13	104.97	151.4	False	13C2-PFOA	32166.13	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.29	1545.62	126.62	124.0	False	13C2-PFOA	32166.13	100.00	PFTTrDA	0.079	0.069	✓
PFTeDA_1	713.0 / 669.0	4.52	20207.44	100.94	288.7	False	13C2-PFOA	32166.13	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	945.32	98.75	133.2	False	13C2-PFOA	32166.13	100.00	PFTeDA	0.047	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.58	3779.74	113.48	404.4	False	d3-MeFOSAA	15010.56	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	1916.26	101.03	226.8	False	d3-MeFOSAA	15010.56	400.00	NMeFOSAA	0.507	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.75	3947.97	118.88	391.6	False	d3-MeFOSAA	15010.56	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	353.26	145.93	51.9	True	d3-MeFOSAA	15010.56	400.00	NEtFOSAA	0.089	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.82	24290.06	92.23	1141.3	False	13C2-PFOA	32166.13	100.00				
13C2-PFDA	515.0 / 470.0	3.42	29252.34	106.11	888.7	False	13C2-PFOA	32166.13	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.74	14633.10	386.69	366.5	False	d3-MeFOSAA	15010.56	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.95	20767.32	104.40	177.0	False	13C2-PFOA	32166.13	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.95	577.00	107.66	52.1	False	13C2-PFOA	32166.13	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.29	45583.19	98.47	376.9	False	13C2-PFOA	32166.13	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.29	730.41	158.61	52.4	False	13C2-PFOA	32166.13	100.00	ADONA	0.016	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.95	19507.70	96.28	318.9	False	13C2-PFOA	32166.13	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.27	74320.25	87.65	609.7	False	13C4-PFOS	155176.73	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.26	683.33	56.99	25.6	False	13C4-PFOS	155176.73	287.00	9CI-PF3ONS	0.009	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.89	57967.99	86.98	530.6	False	13C4-PFOS	155176.73	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.90	857.50	136.49	15.4	True	13C4-PFOS	155176.73	287.00	11CI-PF3OUdS	0.015	0.010	✓

Sample Name	KL67	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:41:08 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	102762.97	219.43	2514.0	False	13C4-PFOS	167269.91	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	31744.24	228.28	829.0	False	13C4-PFOS	167269.91	287.00	PFBS	0.309	0.288	✓
PFHxA_1	313.0 / 269.0	1.82	78123.35	301.61	81.2	True	13C2-PFOA	34557.71	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	6100.67	310.03	63.7	True	13C2-PFOA	34557.71	100.00	PFHxA	0.078	0.076	✓
PFHpA_1	363.0 / 319.0	2.24	74423.96	279.70	52.0	False	13C2-PFOA	34557.71	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	1117.41	266.68	32.7	True	13C2-PFOA	34557.71	100.00	PFHpA	0.015	0.015	✓
PFHxS_1	399.0 / 80.0	2.26	101404.23	226.38	612.7	False	13C4-PFOS	167269.91	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	30957.03	234.42	229.4	False	13C4-PFOS	167269.91	287.00	PFHxS	0.305	0.297	✓
PFOA_1	413.0 / 369.0	2.66	91932.62	279.69	215.2	True	13C2-PFOA	34557.71	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.66	5093.12	301.62	134.9	False	13C2-PFOA	34557.71	100.00	PFOA	0.055	0.052	✓
PFNA_1	463.0 / 419.0	3.05	74736.91	275.74	228.1	False	13C2-PFOA	34557.71	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.06	23257.55	262.92	152.2	False	13C2-PFOA	34557.71	100.00	PFNA	0.311	0.330	✓
PFOS_1	499.0 / 80.0	3.05	163287.18	245.83	368.7	True	13C4-PFOS	167269.91	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.05	30758.91	248.05	467.5	True	13C4-PFOS	167269.91	287.00	PFOS	0.188	0.190	✓
PFDA_1	513.0 / 469.0	3.42	77776.69	276.29	317.8	False	13C2-PFOA	34557.71	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.42	3124.65	305.53	251.7	True	13C2-PFOA	34557.71	100.00	PFDA	0.040	0.034	✓
PFUnA_1	563.0 / 519.0	3.74	76112.53	293.59	225.7	False	13C2-PFOA	34557.71	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	3033.50	275.95	149.6	False	13C2-PFOA	34557.71	100.00	PFUnA	0.040	0.042	✓
PFDoA_1	613.0 / 569.0	4.03	58647.21	263.70	221.6	False	13C2-PFOA	34557.71	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	9594.21	256.80	249.8	False	13C2-PFOA	34557.71	100.00	PFDoA	0.164	0.166	✓
PFTrDA_1	663.0 / 619.0	4.29	57446.01	285.16	206.5	False	13C2-PFOA	34557.71	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	3891.12	296.70	175.8	False	13C2-PFOA	34557.71	100.00	PFTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.51	59589.35	277.07	354.2	False	13C2-PFOA	34557.71	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	2692.12	261.75	278.0	False	13C2-PFOA	34557.71	100.00	PFTeDA	0.045	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.58	9349.76	279.48	388.9	False	d3-MeFOSAA	15076.19	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	4736.92	248.65	1335.5	False	d3-MeFOSAA	15076.19	400.00	NMeFOSAA	0.507	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.74	8675.55	260.10	3330.8	False	d3-MeFOSAA	15076.19	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	292.83	120.44	588.7	True	d3-MeFOSAA	15076.19	400.00	NEtFOSAA	0.034	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.81	28392.93	100.35	1066.8	False	13C2-PFOA	34557.71	100.00				
13C2-PFDA	515.0 / 470.0	3.41	30074.30	101.54	787.0	False	13C2-PFOA	34557.71	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.73	14783.24	388.96	426.9	False	d3-MeFOSAA	15076.19	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.94	60402.17	282.63	408.1	False	13C2-PFOA	34557.71	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.94	1563.78	271.59	78.7	False	13C2-PFOA	34557.71	100.00	HFPO-DA	0.026	0.027	✓
ADONA_1	377.0 / 251.0	2.28	124095.65	249.52	570.1	False	13C2-PFOA	34557.71	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.28	1377.32	278.39	119.4	False	13C2-PFOA	34557.71	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.94	20270.02	93.12	310.6	False	13C2-PFOA	34557.71	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.26	224692.33	245.84	996.9	False	13C4-PFOS	167269.91	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.25	3872.77	299.65	108.9	False	13C4-PFOS	167269.91	287.00	9CI-PF3ONS	0.017	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.88	166987.79	232.46	768.8	False	13C4-PFOS	167269.91	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.88	2031.87	300.03	56.8	False	13C4-PFOS	167269.91	287.00	11CI-PF3OUdS	0.012	0.010	✓

Sample Name	KL68	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:50:04 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	220854.07	421.74	3363.4	False	13C4-PFOS	187046.73	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	65401.49	420.59	1077.1	False	13C4-PFOS	187046.73	287.00	PFBS	0.296	0.288	✓
PFHxA_1	313.0 / 269.0	1.81	155936.04	543.33	132.5	True	13C2-PFOA	38290.37	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	11196.72	513.54	93.2	False	13C2-PFOA	38290.37	100.00	PFHxA	0.072	0.076	✓
PFHpA_1	363.0 / 319.0	2.23	164017.88	556.31	87.1	False	13C2-PFOA	38290.37	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	2402.40	517.46	68.3	False	13C2-PFOA	38290.37	100.00	PFHpA	0.015	0.015	✓
PFHxS_1	399.0 / 80.0	2.25	229617.15	458.42	904.4	False	13C4-PFOS	187046.73	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.25	69422.21	470.12	490.2	False	13C4-PFOS	187046.73	287.00	PFHxS	0.302	0.297	✓
PFOA_1	413.0 / 369.0	2.65	199701.07	548.34	272.9	False	13C2-PFOA	38290.37	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.65	9339.58	499.18	190.8	False	13C2-PFOA	38290.37	100.00	PFOA	0.047	0.052	✓
PFNA_1	463.0 / 419.0	3.05	164419.96	547.49	450.0	False	13C2-PFOA	38290.37	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.05	53034.93	541.10	259.2	False	13C2-PFOA	38290.37	100.00	PFNA	0.323	0.330	✓
PFOS_1	499.0 / 80.0	3.05	349264.51	470.22	474.1	True	13C4-PFOS	187046.73	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.05	66416.41	478.96	550.9	True	13C4-PFOS	187046.73	287.00	PFOS	0.190	0.190	✓
PFDA_1	513.0 / 469.0	3.41	170556.30	546.81	310.8	False	13C2-PFOA	38290.37	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.41	4846.61	427.70	329.8	False	13C2-PFOA	38290.37	100.00	PFDA	0.028	0.034	✓
PFUnA_1	563.0 / 519.0	3.74	153112.53	533.02	284.2	False	13C2-PFOA	38290.37	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	6553.24	538.01	364.6	False	13C2-PFOA	38290.37	100.00	PFUnA	0.043	0.042	✓
PFDoA_1	613.0 / 569.0	4.03	136094.75	552.28	319.7	False	13C2-PFOA	38290.37	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	23208.27	560.64	436.8	False	13C2-PFOA	38290.37	100.00	PFDoA	0.171	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.28	116348.12	521.24	282.7	False	13C2-PFOA	38290.37	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.28	8303.83	571.44	260.3	False	13C2-PFOA	38290.37	100.00	PFTTrDA	0.071	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.50	130501.39	547.63	560.2	False	13C2-PFOA	38290.37	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.50	6221.85	545.97	437.1	False	13C2-PFOA	38290.37	100.00	PFTTeDA	0.048	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.57	19558.60	537.32	286.6	False	d3-MeFOSAA	16404.06	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	11913.85	574.77	282.9	False	d3-MeFOSAA	16404.06	400.00	NMeFOSAA	0.609	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.74	18041.48	497.10	2182.4	False	d3-MeFOSAA	16404.06	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	1687.83	637.99	504.2	True	d3-MeFOSAA	16404.06	400.00	NEtFOSAA	0.094	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.81	31427.58	100.25	1139.0	False	13C2-PFOA	38290.37	100.00				
13C2-PFDA	515.0 / 470.0	3.41	34057.11	103.78	1070.6	False	13C2-PFOA	38290.37	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.73	17581.52	425.14	681.9	True	d3-MeFOSAA	16404.06	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.94	131540.32	555.49	584.8	False	13C2-PFOA	38290.37	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.94	3278.61	513.91	143.7	False	13C2-PFOA	38290.37	100.00	HFPO-DA	0.025	0.027	✓
ADONA_1	377.0 / 251.0	2.28	278149.52	504.75	771.0	False	13C2-PFOA	38290.37	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.28	2769.72	505.26	179.7	False	13C2-PFOA	38290.37	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.94	24029.67	99.63	350.7	False	13C2-PFOA	38290.37	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.25	473337.05	463.14	1343.7	False	13C4-PFOS	187046.73	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.25	7099.31	491.22	170.0	False	13C4-PFOS	187046.73	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.88	371269.25	462.18	1144.6	False	13C4-PFOS	187046.73	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.88	3240.19	427.86	60.8	False	13C4-PFOS	187046.73	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL69	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:59:00 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	397063.94	761.32	5314.5	False	13C4-PFOS	186285.09	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	118005.72	761.99	1652.1	False	13C4-PFOS	186285.09	287.00	PFBS	0.297	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	281935.17	1032.75	186.2	True	13C2-PFOA	36421.90	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	22541.43	1086.91	125.0	False	13C2-PFOA	36421.90	100.00	PFHxA	0.080	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	294997.58	1051.90	114.6	False	13C2-PFOA	36421.90	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	5657.80	1281.17	93.6	False	13C2-PFOA	36421.90	100.00	PFHpA	0.019	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	413680.42	829.27	1065.8	False	13C4-PFOS	186285.09	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	122689.99	834.23	528.3	False	13C4-PFOS	186285.09	287.00	PFHxS	0.297	0.297	✓
PFOA_1	413.0 / 369.0	2.64	352542.03	1017.67	321.7	False	13C2-PFOA	36421.90	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	18006.70	1011.79	276.1	False	13C2-PFOA	36421.90	100.00	PFOA	0.051	0.052	✓
PFNA_1	463.0 / 419.0	3.03	300866.72	1053.23	657.1	False	13C2-PFOA	36421.90	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.04	101557.55	1089.31	393.0	False	13C2-PFOA	36421.90	100.00	PFNA	0.338	0.330	✓
PFOS_1	499.0 / 80.0	3.03	634047.81	857.12	497.7	True	13C4-PFOS	186285.09	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	121338.95	878.62	612.6	True	13C4-PFOS	186285.09	287.00	PFOS	0.191	0.190	✓
PFDA_1	513.0 / 469.0	3.40	322860.75	1088.20	407.7	False	13C2-PFOA	36421.90	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.40	9162.36	850.04	471.9	False	13C2-PFOA	36421.90	100.00	PFDA	0.028	0.034	✓
PFUnA_1	563.0 / 519.0	3.73	292634.50	1071.00	326.3	False	13C2-PFOA	36421.90	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	11847.44	1022.56	467.9	False	13C2-PFOA	36421.90	100.00	PFUnA	0.040	0.042	✓
PFDoA_1	613.0 / 569.0	4.01	246239.51	1050.51	319.2	False	13C2-PFOA	36421.90	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	40914.05	1039.06	305.1	False	13C2-PFOA	36421.90	100.00	PFDoA	0.166	0.166	✓
PFTrDA_1	663.0 / 619.0	4.27	219233.82	1032.55	270.7	False	13C2-PFOA	36421.90	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	13989.11	1012.08	342.1	False	13C2-PFOA	36421.90	100.00	PFTrDA	0.064	0.069	✓
PFTeDA_1	713.0 / 669.0	4.49	233058.09	1028.17	599.1	False	13C2-PFOA	36421.90	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	11012.61	1015.94	448.3	False	13C2-PFOA	36421.90	100.00	PFTeDA	0.047	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.56	34787.13	983.16	1223.5	False	d3-MeFOSAA	15945.51	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	20029.25	994.07	3160.4	False	d3-MeFOSAA	15945.51	400.00	NMeFOSAA	0.576	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.73	34080.43	966.04	816.0	False	d3-MeFOSAA	15945.51	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	2723.20	1058.96	32754.4	True	d3-MeFOSAA	15945.51	400.00	NEtFOSAA	0.080	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	31765.53	106.52	753.7	False	13C2-PFOA	36421.90	100.00				
13C2-PFDA	515.0 / 470.0	3.39	31968.36	102.42	868.0	False	13C2-PFOA	36421.90	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	16931.91	421.20	488.8	True	d3-MeFOSAA	15945.51	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	232656.65	1032.90	748.1	False	13C2-PFOA	36421.90	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	6483.37	1068.38	224.0	False	13C2-PFOA	36421.90	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.27	511358.04	975.56	828.6	False	13C2-PFOA	36421.90	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.27	5010.73	960.95	334.7	False	13C2-PFOA	36421.90	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	23841.98	103.92	342.0	False	13C2-PFOA	36421.90	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.24	887403.00	871.83	1352.4	False	13C4-PFOS	186285.09	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.24	12696.32	882.08	222.6	False	13C4-PFOS	186285.09	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.86	685428.80	856.76	890.9	False	13C4-PFOS	186285.09	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.86	7661.42	1015.81	85.1	False	13C4-PFOS	186285.09	287.00	11CI-PF3OUdS	0.011	0.010	✓

Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	1023608.59	2135.18	7630.4	False	13C4-PFOS	171231.97	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	301719.85	2119.53	2730.6	False	13C4-PFOS	171231.97	287.00	PFBS	0.295	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	711784.21	2423.71	273.7	False	13C2-PFOA	39181.02	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	54249.69	2431.63	220.5	False	13C2-PFOA	39181.02	100.00	PFHxA	0.076	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	716815.33	2376.02	168.7	False	13C2-PFOA	39181.02	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	12411.54	2612.60	162.3	False	13C2-PFOA	39181.02	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	1009871.07	2202.36	1509.3	False	13C4-PFOS	171231.97	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	296257.45	2191.50	763.7	False	13C4-PFOS	171231.97	287.00	PFHxS	0.293	0.297	✓
PFOA_1	413.0 / 369.0	2.64	913343.37	2450.85	488.0	False	13C2-PFOA	39181.02	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	47194.41	2465.10	444.0	False	13C2-PFOA	39181.02	100.00	PFOA	0.052	0.052	✓
PFNA_1	463.0 / 419.0	3.04	769849.34	2505.18	882.0	False	13C2-PFOA	39181.02	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.03	240270.45	2395.67	652.4	False	13C2-PFOA	39181.02	100.00	PFNA	0.312	0.330	✓
PFOS_1	499.0 / 80.0	3.03	1583448.60	2328.72	704.9	True	13C4-PFOS	171231.97	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	302481.24	2382.82	1069.4	True	13C4-PFOS	171231.97	287.00	PFOS	0.191	0.190	✓
PFDA_1	513.0 / 469.0	3.40	753036.29	2359.38	616.9	False	13C2-PFOA	39181.02	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.40	29947.17	2582.70	761.7	False	13C2-PFOA	39181.02	100.00	PFDA	0.040	0.034	✓
PFUnA_1	563.0 / 519.0	3.73	718178.58	2443.33	505.4	False	13C2-PFOA	39181.02	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	28298.25	2270.45	542.2	False	13C2-PFOA	39181.02	100.00	PFUnA	0.039	0.042	✓
PFDoA_1	613.0 / 569.0	4.01	612705.52	2429.86	497.9	False	13C2-PFOA	39181.02	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	100851.47	2380.89	434.1	False	13C2-PFOA	39181.02	100.00	PFDoA	0.165	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.27	561026.96	2456.26	407.3	False	13C2-PFOA	39181.02	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.26	38247.35	2572.24	436.8	False	13C2-PFOA	39181.02	100.00	PFTTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.49	592324.62	2429.10	910.7	False	13C2-PFOA	39181.02	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	29087.58	2494.45	715.5	False	13C2-PFOA	39181.02	100.00	PFTeDA	0.049	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.56	88567.06	2678.79	1448.9	False	d3-MeFOSAA	14899.66	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	48297.58	2565.32	650.1	True	d3-MeFOSAA	14899.66	400.00	NMeFOSAA	0.545	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.73	88941.71	2698.09	1278.0	False	d3-MeFOSAA	14899.66	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	6846.82	2849.38	1615938.8	True	d3-MeFOSAA	14899.66	400.00	NEtFOSAA	0.077	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	29708.37	92.61	781.4	False	13C2-PFOA	39181.02	100.00				
13C2-PFDA	515.0 / 470.0	3.39	31508.71	93.83	40994.6	False	13C2-PFOA	39181.02	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	14850.50	395.36	449.8	False	d3-MeFOSAA	14899.66	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	586657.14	2421.11	1219.3	False	13C2-PFOA	39181.02	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	14814.13	2269.28	373.7	False	13C2-PFOA	39181.02	100.00	HFPO-DA	0.025	0.027	✓
ADONA_1	377.0 / 251.0	2.26	1278165.91	2266.75	1078.8	False	13C2-PFOA	39181.02	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	12593.34	2245.07	349.9	False	13C2-PFOA	39181.02	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	23774.01	96.33	380.5	False	13C2-PFOA	39181.02	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.24	2161088.27	2309.81	1717.4	False	13C4-PFOS	171231.97	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.24	31689.81	2395.20	315.5	False	13C4-PFOS	171231.97	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.87	1670541.98	2271.67	1237.4	False	13C4-PFOS	171231.97	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.86	16725.06	2412.48	148.7	False	13C4-PFOS	171231.97	287.00	11CI-PF3OUdS	0.010	0.010	✓

Sample Name	KL71	Injection Vial	9
Sample ID	L8	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:16:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	1955740.82	4339.29	8809.7	False	13C4-PFOS	160982.47	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	576421.01	4307.08	3474.5	False	13C4-PFOS	160982.47	287.00	PFBS	0.295	0.288	✓
PFHxA_1	313.0 / 269.0	1.81	1325385.40	4928.35	454.7	False	13C2-PFOA	35879.69	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	99910.66	4890.33	391.3	False	13C2-PFOA	35879.69	100.00	PFHxA	0.075	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	1366904.05	4947.75	259.8	False	13C2-PFOA	35879.69	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	19893.94	4572.93	221.0	False	13C2-PFOA	35879.69	100.00	PFHpA	0.015	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	1952721.06	4529.70	1518.5	False	13C4-PFOS	160982.47	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	565162.23	4446.84	1032.8	False	13C4-PFOS	160982.47	287.00	PFHxS	0.289	0.297	✓
PFOA_1	413.0 / 369.0	2.64	1682943.36	4931.49	809.3	False	13C2-PFOA	35879.69	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	86819.73	4952.10	618.6	False	13C2-PFOA	35879.69	100.00	PFOA	0.052	0.052	✓
PFNA_1	463.0 / 419.0	3.04	1369057.66	4865.00	1012.7	False	13C2-PFOA	35879.69	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.04	454213.38	4945.53	809.7	False	13C2-PFOA	35879.69	100.00	PFNA	0.332	0.330	✓
PFOS_1	499.0 / 80.0	3.03	2921283.61	4569.76	562.5	True	13C4-PFOS	160982.47	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	551327.17	4619.65	790.7	True	13C4-PFOS	160982.47	287.00	PFOS	0.189	0.190	✓
PFDA_1	513.0 / 469.0	3.40	1451447.80	4966.03	873.6	False	13C2-PFOA	35879.69	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.40	64962.30	5079.56	812.2	False	13C2-PFOA	35879.69	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.72	1315028.17	4885.53	707.9	False	13C2-PFOA	35879.69	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	58547.42	5129.64	680.9	False	13C2-PFOA	35879.69	100.00	PFUnA	0.045	0.042	✓
PFDoA_1	613.0 / 569.0	4.01	1141321.79	4942.70	687.6	False	13C2-PFOA	35879.69	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	193955.78	5000.19	549.1	False	13C2-PFOA	35879.69	100.00	PFDoA	0.170	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.26	1033778.32	4942.49	552.5	False	13C2-PFOA	35879.69	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.26	64962.97	4770.93	649.0	False	13C2-PFOA	35879.69	100.00	PFTTrDA	0.063	0.069	✓
PFTeDA_1	713.0 / 669.0	4.48	1109187.91	4967.27	1140.7	False	13C2-PFOA	35879.69	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	52711.34	4936.26	955.7	False	13C2-PFOA	35879.69	100.00	PFTeDA	0.048	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.56	161274.89	5285.54	766.3	False	d3-MeFOSAA	13750.57	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	90435.07	5204.85	748.2	True	d3-MeFOSAA	13750.57	400.00	NMeFOSAA	0.561	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.72	167713.64	5512.83	1249.6	False	d3-MeFOSAA	13750.57	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	11874.94	5354.87	709.1	False	d3-MeFOSAA	13750.57	400.00	NEtFOSAA	0.071	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	28031.56	95.42	1002.4	False	13C2-PFOA	35879.69	100.00				
13C2-PFDA	515.0 / 470.0	3.39	28744.93	93.48	1616.9	False	13C2-PFOA	35879.69	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	13385.89	386.15	406.9	False	d3-MeFOSAA	13750.57	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	1097598.27	4946.54	1181.7	False	13C2-PFOA	35879.69	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	30602.87	5119.18	511.2	False	13C2-PFOA	35879.69	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.27	2446784.87	4738.48	1459.9	False	13C2-PFOA	35879.69	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.27	24411.31	4752.33	599.5	False	13C2-PFOA	35879.69	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	23912.09	105.81	310.9	False	13C2-PFOA	35879.69	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.24	3965086.96	4507.79	2433.1	False	13C4-PFOS	160982.47	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.24	55293.43	4445.30	463.6	False	13C4-PFOS	160982.47	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.86	3191175.66	4615.78	1349.4	False	13C4-PFOS	160982.47	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.86	29150.39	4472.47	205.4	False	13C4-PFOS	160982.47	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL72	Injection Vial	10
Sample ID	L9	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:25:48 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	4208024.43	9157.83	13868.1	False	13C4-PFOS	164123.79	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	1256827.78	9211.40	4775.6	False	13C4-PFOS	164123.79	287.00	PFBS	0.299	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	2829638.05	9073.58	624.5	False	13C2-PFOA	41606.45	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	221847.64	9364.17	509.7	False	13C2-PFOA	41606.45	100.00	PFHxA	0.078	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	2883090.87	8999.45	326.7	False	13C2-PFOA	41606.45	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	45858.55	9090.38	317.8	False	13C2-PFOA	41606.45	100.00	PFHpA	0.016	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	4088131.26	9301.67	1337.7	False	13C4-PFOS	164123.79	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	1214585.44	9373.75	994.5	False	13C4-PFOS	164123.79	287.00	PFHxS	0.297	0.297	✓
PFOA_1	413.0 / 369.0	2.64	3702986.70	9357.27	909.3	False	13C2-PFOA	41606.45	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	185248.28	9111.99	853.3	False	13C2-PFOA	41606.45	100.00	PFOA	0.050	0.052	✓
PFNA_1	463.0 / 419.0	3.03	2841400.96	8707.26	1287.3	False	13C2-PFOA	41606.45	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.03	909660.19	8541.22	1119.3	False	13C2-PFOA	41606.45	100.00	PFNA	0.320	0.330	✓
PFOS_1	499.0 / 80.0	3.03	6084499.62	9335.80	746.4	True	13C4-PFOS	164123.79	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	1118678.39	9194.16	1178.7	False	13C4-PFOS	164123.79	287.00	PFOS	0.184	0.190	✓
PFDA_1	513.0 / 469.0	3.39	3023866.59	8921.93	1159.9	False	13C2-PFOA	41606.45	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.39	112168.01	9109.66	1425.2	False	13C2-PFOA	41606.45	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.72	2840219.98	9099.49	1091.1	False	13C2-PFOA	41606.45	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	123746.93	9349.78	764.5	False	13C2-PFOA	41606.45	100.00	PFUnA	0.044	0.042	✓
PFDoA_1	613.0 / 569.0	4.00	2486689.49	9286.79	794.8	False	13C2-PFOA	41606.45	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	418652.42	9307.34	804.3	False	13C2-PFOA	41606.45	100.00	PFDoA	0.168	0.166	✓
PFTrDA_1	663.0 / 619.0	4.25	2158102.13	8897.71	729.2	False	13C2-PFOA	41606.45	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	144867.27	9174.77	771.9	False	13C2-PFOA	41606.45	100.00	PFTrDA	0.067	0.069	✓
PFTeDA_1	713.0 / 669.0	4.47	2372391.74	9161.94	1506.2	False	13C2-PFOA	41606.45	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	115525.89	9329.56	1256.2	False	13C2-PFOA	41606.45	100.00	PFTeDA	0.049	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.55	347582.87	9461.39	2478.9	False	d3-MeFOSAA	16555.66	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	201925.56	9652.44	1178.3	False	d3-MeFOSAA	16555.66	400.00	NMeFOSAA	0.581	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.71	340911.87	9307.27	1399.5	False	d3-MeFOSAA	16555.66	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	24293.61	9098.79	3462.9	False	d3-MeFOSAA	16555.66	400.00	NEtFOSAA	0.071	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	32530.89	95.50	917.3	False	13C2-PFOA	41606.45	100.00				
13C2-PFDA	515.0 / 470.0	3.39	36712.10	102.96	1491.6	False	13C2-PFOA	41606.45	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	16548.84	396.50	476.3	False	d3-MeFOSAA	16555.66	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	2365180.45	9192.01	2342.4	False	13C2-PFOA	41606.45	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	63199.58	9116.76	641.8	False	13C2-PFOA	41606.45	100.00	HFPO-DA	0.027	0.027	✓
ADONA_1	377.0 / 251.0	2.26	5278507.68	8815.41	1785.3	False	13C2-PFOA	41606.45	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	52461.56	8807.35	699.1	False	13C2-PFOA	41606.45	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	26639.61	101.65	356.5	False	13C2-PFOA	41606.45	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.23	8525711.05	9507.11	2289.0	False	13C4-PFOS	164123.79	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.23	119065.97	9389.06	697.7	False	13C4-PFOS	164123.79	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.85	6803322.57	9652.12	1232.4	False	13C4-PFOS	164123.79	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.85	62903.18	9466.35	231.3	False	13C4-PFOS	164123.79	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL74 ICC	Injection Vial	12
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:43:42 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.47	768.30	885.00	86.81
PFBS_2	298.9 / 99.0	1.47	762.24	885.00	86.13
PFHxA_1	313.0 / 269.0	1.80	1028.25	1000.00	102.82
PFHxA_2	313.0 / 119.0	1.80	980.02	1000.00	98.00
PFHpA_1	363.0 / 319.0	2.21	967.11	1000.00	96.71
PFHpA_2	363.0 / 169.0	2.21	1034.83	1000.00	103.48
PFHxS_1	399.0 / 80.0	2.23	816.93	945.00	86.45
PFHxS_2	399.0 / 99.0	2.23	795.16	945.00	84.14
PFOA_1	413.0 / 369.0	2.63	1049.20	1000.00	104.92
PFOA_2	413.0 / 169.0	2.63	1076.52	1000.00	107.65
PFNA_1	463.0 / 419.0	3.03	1098.23	1000.00	109.82
PFNA_2	463.0 / 219.0	3.02	1098.65	1000.00	109.87
PFOS_1	499.0 / 80.0	3.02	803.88	955.00	84.18
PFOS_2	499.0 / 99.0	3.02	925.46	955.00	96.91
PFDA_1	513.0 / 469.0	3.39	1045.41	1000.00	104.54
PFDA_2	513.0 / 219.0	3.39	1041.94	1000.00	104.19
PFUnA_1	563.0 / 519.0	3.71	1026.36	1000.00	102.64
PFUnA_2	563.0 / 269.0	3.71	1022.66	1000.00	102.27
PFDoA_1	613.0 / 569.0	4.00	1048.86	1000.00	104.89
PFDoA_2	613.0 / 319.0	4.00	1003.92	1000.00	100.39
PFTrDA_1	663.0 / 619.0	4.25	996.27	1000.00	99.63
PFTrDA_2	663.0 / 169.0	4.25	1076.66	1000.00	107.67
PFTeDA_1	713.0 / 669.0	4.47	987.75	1000.00	98.77
PFTeDA_2	713.0 / 169.0	4.47	1011.08	1000.00	101.11
NMeFOSAA_1	570.0 / 419.0	3.55	1283.70	1000.00	128.37
NMeFOSAA_2	570.0 / 512.0	3.55	939.15	1000.00	93.91
NEtFOSAA_1	584.0 / 419.0	3.71	1166.79	1000.00	116.68
NEtFOSAA_2	584.0 / 483.0	3.71	812.50	1000.00	81.25
13C2-PFHxA	315.0 / 270.0	1.79	98.32	100.00	98.32
13C2-PFDA	515.0 / 470.0	3.38	97.53	100.00	97.53
d5-EtFOSAA	589.0 / 419.0	3.70	406.72	400.00	101.68
HFPO-DA_1	285.0 / 169.0	1.92	1019.96	1000.00	102.00
HFPO-DA_2	285.0 / 118.8	1.93	1047.06	1000.00	104.71
ADONA_1	377.0 / 251.0	2.26	923.60	945.00	97.74
ADONA_2	377.0 / 85.0	2.26	921.56	945.00	97.52
13C3-HFPO-DA	287.0 / 169.0	1.92	98.57	100.00	98.57
9Cl-PF3ONS_1	531.0 / 351.0	3.23	883.05	930.00	94.95
9Cl-PF3ONS_2	531.0 / 83.0	3.23	911.68	930.00	98.03
11Cl-PF3OUdS_1	631.0 / 451.0	3.85	833.97	940.00	88.72
11Cl-PF3OUdS_2	631.0 / 83.0	3.85	906.30	940.00	96.41

Sample Name	KL69 CCV	Injection Vial	25
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 7:39:58 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.46	783.98	885.00	88.59
PFBS_2	298.9 / 99.0	1.46	797.56	885.00	90.12
PFHxA_1	313.0 / 269.0	1.79	944.30	1000.00	94.43
PFHxA_2	313.0 / 119.0	1.79	968.69	1000.00	96.87
PFHpA_1	363.0 / 319.0	2.20	949.51	1000.00	94.95
PFHpA_2	363.0 / 169.0	2.20	996.08	1000.00	99.61
PFHxS_1	399.0 / 80.0	2.22	827.71	912.00	90.76
PFHxS_2	399.0 / 99.0	2.22	853.31	912.00	93.56
PFOA_1	413.0 / 369.0	2.62	1032.80	1000.00	103.28
PFOA_2	413.0 / 169.0	2.62	993.13	1000.00	99.31
PFNA_1	463.0 / 419.0	3.01	1054.56	1000.00	105.46
PFNA_2	463.0 / 219.0	3.01	1027.49	1000.00	102.75
PFOS_1	499.0 / 80.0	3.01	912.10	925.60	98.54
PFOS_2	499.0 / 99.0	3.01	885.32	925.60	95.65
PFDA_1	513.0 / 469.0	3.37	949.27	1000.00	94.93
PFDA_2	513.0 / 219.0	3.37	963.85	1000.00	96.39
PFUnA_1	563.0 / 519.0	3.69	942.40	1000.00	94.24
PFUnA_2	563.0 / 269.0	3.69	1038.31	1000.00	103.83
PFDoA_1	613.0 / 569.0	3.97	966.56	1000.00	96.66
PFDoA_2	613.0 / 319.0	3.97	946.20	1000.00	94.62
PFTrDA_1	663.0 / 619.0	4.22	908.23	1000.00	90.82
PFTrDA_2	663.0 / 169.0	4.22	999.05	1000.00	99.90
PFTeDA_1	713.0 / 669.0	4.44	879.39	1000.00	87.94
PFTeDA_2	713.0 / 169.0	4.43	922.88	1000.00	92.29
NMeFOSAA_1	570.0 / 419.0	3.53	1013.50	1000.00	101.35
NMeFOSAA_2	570.0 / 512.0	3.53	1000.82	1000.00	100.08
NEtFOSAA_1	584.0 / 419.0	3.69	1025.44	1000.00	102.54
NEtFOSAA_2	584.0 / 483.0	3.68	1058.71	1000.00	105.87
13C2-PFHxA	315.0 / 270.0	1.78	92.50	100.00	92.50
13C2-PFDA	515.0 / 470.0	3.36	97.86	100.00	97.86
d5-EtFOSAA	589.0 / 419.0	3.67	380.79	400.00	95.20
HFPO-DA_1	285.0 / 169.0	1.91	916.72	1000.00	91.67
HFPO-DA_2	285.0 / 118.8	1.91	1027.86	1000.00	102.79
ADONA_1	377.0 / 251.0	2.25	887.68	945.00	93.93
ADONA_2	377.0 / 85.0	2.25	971.08	945.00	102.76
13C3-HFPO-DA	287.0 / 169.0	1.91	88.45	100.00	88.45
9Cl-PF3ONS_1	531.0 / 351.0	3.21	909.54	930.00	97.80
9Cl-PF3ONS_2	531.0 / 83.0	3.21	867.97	930.00	93.33
11Cl-PF3OUdS_1	631.0 / 451.0	3.83	846.99	940.00	90.11
11Cl-PF3OUdS_2	631.0 / 83.0	3.83	932.69	940.00	99.22

Sample Name	KL68 CCV	Injection Vial	36
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:18:25 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.45	418.45	443.00	94.46
PFBS_2	298.9 / 99.0	1.45	421.06	443.00	95.05
PFHxA_1	313.0 / 269.0	1.78	508.92	500.00	101.78
PFHxA_2	313.0 / 119.0	1.78	482.44	500.00	96.49
PFHpA_1	363.0 / 319.0	2.19	543.35	500.00	108.67
PFHpA_2	363.0 / 169.0	2.18	559.22	500.00	111.84
PFHxS_1	399.0 / 80.0	2.21	457.90	456.00	100.42
PFHxS_2	399.0 / 99.0	2.21	444.38	456.00	97.45
PFOA_1	413.0 / 369.0	2.60	548.69	500.00	109.74
PFOA_2	413.0 / 169.0	2.61	542.41	500.00	108.48
PFNA_1	463.0 / 419.0	2.99	540.92	500.00	108.18
PFNA_2	463.0 / 219.0	3.00	541.46	500.00	108.29
PFOS_1	499.0 / 80.0	2.99	461.04	463.00	99.58
PFOS_2	499.0 / 99.0	2.99	451.18	463.00	97.45
PFDA_1	513.0 / 469.0	3.36	479.81	500.00	95.96
PFDA_2	513.0 / 219.0	3.36	567.80	500.00	113.56
PFUnA_1	563.0 / 519.0	3.68	500.13	500.00	100.03
PFUnA_2	563.0 / 269.0	3.68	497.86	500.00	99.57
PFDoA_1	613.0 / 569.0	3.96	518.16	500.00	103.63
PFDoA_2	613.0 / 319.0	3.96	521.97	500.00	104.39
PFTrDA_1	663.0 / 619.0	4.21	463.29	500.00	92.66
PFTrDA_2	663.0 / 169.0	4.21	493.36	500.00	98.67
PFTeDA_1	713.0 / 669.0	4.42	477.28	500.00	95.46
PFTeDA_2	713.0 / 169.0	4.42	510.43	500.00	102.09
NMeFOSAA_1	570.0 / 419.0	3.51	559.98	500.00	112.00
NMeFOSAA_2	570.0 / 512.0	3.51	492.01	500.00	98.40
NEtFOSAA_1	584.0 / 419.0	3.67	575.90	500.00	115.18
NEtFOSAA_2	584.0 / 483.0	3.68	456.79	500.00	91.36
13C2-PFHxA	315.0 / 270.0	1.77	94.35	100.00	94.35
13C2-PFDA	515.0 / 470.0	3.35	98.19	100.00	98.19
d5-EtFOSAA	589.0 / 419.0	3.67	478.17	400.00	119.54
HFPO-DA_1	285.0 / 169.0	1.90	504.04	500.00	100.81
HFPO-DA_2	285.0 / 118.8	1.89	584.42	500.00	116.88
ADONA_1	377.0 / 251.0	2.24	484.45	473.00	102.42
ADONA_2	377.0 / 85.0	2.24	439.63	473.00	92.95
13C3-HFPO-DA	287.0 / 169.0	1.90	94.63	100.00	94.63
9CI-PF3ONS_1	531.0 / 351.0	3.20	453.68	465.00	97.57
9CI-PF3ONS_2	531.0 / 83.0	3.20	487.29	465.00	104.79
11CI-PF3OUdS_1	631.0 / 451.0	3.81	430.70	470.00	91.64
11CI-PF3OUdS_2	631.0 / 83.0	3.81	548.10	470.00	116.62

Sample Name	KL69 CCV	Injection Vial	44
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:30:02 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.45	785.78	885.00	88.79
PFBS_2	298.9 / 99.0	1.45	786.44	885.00	88.86
PFHxA_1	313.0 / 269.0	1.78	936.89	1000.00	93.69
PFHxA_2	313.0 / 119.0	1.77	983.82	1000.00	98.38
PFHpA_1	363.0 / 319.0	2.19	905.64	1000.00	90.56
PFHpA_2	363.0 / 169.0	2.19	951.10	1000.00	95.11
PFHxS_1	399.0 / 80.0	2.21	845.33	912.00	92.69
PFHxS_2	399.0 / 99.0	2.20	829.69	912.00	90.97
PFOA_1	413.0 / 369.0	2.60	1049.97	1000.00	105.00
PFOA_2	413.0 / 169.0	2.60	1036.17	1000.00	103.62
PFNA_1	463.0 / 419.0	2.99	979.15	1000.00	97.91
PFNA_2	463.0 / 219.0	2.99	980.52	1000.00	98.05
PFOS_1	499.0 / 80.0	2.99	866.37	925.60	93.60
PFOS_2	499.0 / 99.0	2.99	912.78	925.60	98.61
PFDA_1	513.0 / 469.0	3.36	930.23	1000.00	93.02
PFDA_2	513.0 / 219.0	3.36	904.19	1000.00	90.42
PFUnA_1	563.0 / 519.0	3.67	942.45	1000.00	94.25
PFUnA_2	563.0 / 269.0	3.67	938.41	1000.00	93.84
PFDoA_1	613.0 / 569.0	3.96	958.85	1000.00	95.89
PFDoA_2	613.0 / 319.0	3.96	955.49	1000.00	95.55
PFTrDA_1	663.0 / 619.0	4.20	884.02	1000.00	88.40
PFTrDA_2	663.0 / 169.0	4.20	920.55	1000.00	92.05
PFTeDA_1	713.0 / 669.0	4.42	878.26	1000.00	87.83
PFTeDA_2	713.0 / 169.0	4.42	912.07	1000.00	91.21
NMeFOSAA_1	570.0 / 419.0	3.51	934.30	1000.00	93.43
NMeFOSAA_2	570.0 / 512.0	3.51	823.05	1000.00	82.30
NEtFOSAA_1	584.0 / 419.0	3.67	856.89	1000.00	85.69
NEtFOSAA_2	584.0 / 483.0	3.67	952.21	1000.00	95.22
13C2-PFHxA	315.0 / 270.0	1.77	93.82	100.00	93.82
13C2-PFDA	515.0 / 470.0	3.34	100.31	100.00	100.31
d5-EtFOSAA	589.0 / 419.0	3.66	373.62	400.00	93.41
HFPO-DA_1	285.0 / 169.0	1.90	941.88	1000.00	94.19
HFPO-DA_2	285.0 / 118.8	1.90	930.96	1000.00	93.10
ADONA_1	377.0 / 251.0	2.23	861.43	945.00	91.16
ADONA_2	377.0 / 85.0	2.23	808.73	945.00	85.58
13C3-HFPO-DA	287.0 / 169.0	1.90	93.35	100.00	93.35
9CI-PF3ONS_1	531.0 / 351.0	3.20	869.64	930.00	93.51
9CI-PF3ONS_2	531.0 / 83.0	3.19	964.46	930.00	103.71
11CI-PF3OUdS_1	631.0 / 451.0	3.81	840.68	940.00	89.43
11CI-PF3OUdS_2	631.0 / 83.0	3.81	716.95	940.00	76.27

Sample Name	KL67 ISC	Injection Vial	2
Sample ID	ISC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:36:45 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.45	196.44	221.50	88.69
PFBS_2	298.9 / 99.0	1.44	197.97	221.50	89.38
PFHxA_1	313.0 / 269.0	1.77	245.48	250.00	98.19
PFHxA_2	313.0 / 119.0	1.76	236.89	250.00	94.76
PFHpA_1	363.0 / 319.0	2.18	215.97	250.00	86.39
PFHpA_2	363.0 / 169.0	2.18	307.46	250.00	122.98
PFHxS_1	399.0 / 80.0	2.20	230.75	228.00	101.21
PFHxS_2	399.0 / 99.0	2.20	241.17	228.00	105.78
PFOA_1	413.0 / 369.0	2.59	265.31	250.00	106.12
PFOA_2	413.0 / 169.0	2.58	320.35	250.00	128.14
PFNA_1	463.0 / 419.0	2.98	253.29	250.00	101.32
PFNA_2	463.0 / 219.0	2.97	245.74	250.00	98.30
PFOS_1	499.0 / 80.0	2.97	236.09	231.50	101.98
PFOS_2	499.0 / 99.0	2.97	260.31	231.50	112.44
PFDA_1	513.0 / 469.0	3.34	206.24	250.00	82.50
PFDA_2	513.0 / 219.0	3.33	212.20	250.00	84.88
PFUnA_1	563.0 / 519.0	3.65	206.93	250.00	82.77
PFUnA_2	563.0 / 269.0	3.65	246.78	250.00	98.71
PFDoA_1	613.0 / 569.0	3.93	216.85	250.00	86.74
PFDoA_2	613.0 / 319.0	3.93	229.89	250.00	91.96
PFTrDA_1	663.0 / 619.0	4.18	197.11	250.00	78.84
PFTrDA_2	663.0 / 169.0	4.17	243.91	250.00	97.57
PFTeDA_1	713.0 / 669.0	4.39	183.02	250.00	73.21
PFTeDA_2	713.0 / 169.0	4.39	219.64	250.00	87.85
NMeFOSAA_1	570.0 / 419.0	3.49	320.95	250.00	128.38
NMeFOSAA_2	570.0 / 512.0	3.49	323.14	250.00	129.26
NEtFOSAA_1	584.0 / 419.0	3.65	322.03	250.00	128.81
NEtFOSAA_2	584.0 / 483.0	3.65	258.63	250.00	103.45
13C2-PFHxA	315.0 / 270.0	1.76	77.81	100.00	77.81
13C2-PFDA	515.0 / 470.0	3.33	83.82	100.00	83.82
d5-EtFOSAA	589.0 / 419.0	3.64	464.96	400.00	116.24
HFPO-DA_1	285.0 / 169.0	1.89	214.32	250.00	85.73
HFPO-DA_2	285.0 / 118.8	1.89	284.16	250.00	113.66
ADONA_1	377.0 / 251.0	2.22	202.23	236.50	85.51
ADONA_2	377.0 / 85.0	2.23	305.43	236.50	129.15
13C3-HFPO-DA	287.0 / 169.0	1.89	79.75	100.00	79.75
9CI-PF3ONS_1	531.0 / 351.0	3.18	233.53	232.50	100.44
9CI-PF3ONS_2	531.0 / 83.0	3.18	221.86	232.50	95.42
11CI-PF3OUdS_1	631.0 / 451.0	3.79	229.63	235.00	97.72
11CI-PF3OUdS_2	631.0 / 83.0	3.78	196.56	235.00	83.64

Sample Name	KL68 CCV	Injection Vial	13
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:15:19 PM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.44	407.42	443.00	91.97
PFBS_2	298.9 / 99.0	1.43	406.38	443.00	91.73
PFHxA_1	313.0 / 269.0	1.75	481.84	500.00	96.37
PFHxA_2	313.0 / 119.0	1.75	479.75	500.00	95.95
PFHpA_1	363.0 / 319.0	2.17	480.92	500.00	96.18
PFHpA_2	363.0 / 169.0	2.17	601.69	500.00	120.34
PFHxS_1	399.0 / 80.0	2.19	456.51	456.00	100.11
PFHxS_2	399.0 / 99.0	2.19	465.81	456.00	102.15
PFOA_1	413.0 / 369.0	2.58	559.06	500.00	111.81
PFOA_2	413.0 / 169.0	2.58	606.10	500.00	121.22
PFNA_1	463.0 / 419.0	2.97	548.51	500.00	109.70
PFNA_2	463.0 / 219.0	2.97	511.91	500.00	102.38
PFOS_1	499.0 / 80.0	2.97	466.09	463.00	100.67
PFOS_2	499.0 / 99.0	2.97	466.73	463.00	100.81
PFDA_1	513.0 / 469.0	3.33	465.08	500.00	93.02
PFDA_2	513.0 / 219.0	3.33	468.66	500.00	93.73
PFUnA_1	563.0 / 519.0	3.64	452.14	500.00	90.43
PFUnA_2	563.0 / 269.0	3.64	498.61	500.00	99.72
PFDoA_1	613.0 / 569.0	3.93	457.66	500.00	91.53
PFDoA_2	613.0 / 319.0	3.92	484.01	500.00	96.80
PFTrDA_1	663.0 / 619.0	4.17	412.91	500.00	82.58
PFTrDA_2	663.0 / 169.0	4.17	456.60	500.00	91.32
PFTeDA_1	713.0 / 669.0	4.38	397.58	500.00	79.52
PFTeDA_2	713.0 / 169.0	4.38	475.02	500.00	95.00
NMeFOSAA_1	570.0 / 419.0	3.48	538.48	500.00	107.70
NMeFOSAA_2	570.0 / 512.0	3.48	534.01	500.00	106.80
NEtFOSAA_1	584.0 / 419.0	3.64	518.72	500.00	103.74
NEtFOSAA_2	584.0 / 483.0	3.64	468.70	500.00	93.74
13C2-PFHxA	315.0 / 270.0	1.75	85.70	100.00	85.70
13C2-PFDA	515.0 / 470.0	3.32	85.61	100.00	85.61
d5-EtFOSAA	589.0 / 419.0	3.63	381.67	400.00	95.42
HFPO-DA_1	285.0 / 169.0	1.88	482.72	500.00	96.54
HFPO-DA_2	285.0 / 118.8	1.88	497.85	500.00	99.57
ADONA_1	377.0 / 251.0	2.21	444.11	473.00	93.89
ADONA_2	377.0 / 85.0	2.21	455.83	473.00	96.37
13C3-HFPO-DA	287.0 / 169.0	1.88	86.94	100.00	86.94
9CI-PF3ONS_1	531.0 / 351.0	3.17	458.88	465.00	98.68
9CI-PF3ONS_2	531.0 / 83.0	3.17	471.45	465.00	101.39
11CI-PF3OUdS_1	631.0 / 451.0	3.78	472.56	470.00	100.54
11CI-PF3OUdS_2	631.0 / 83.0	3.78	426.22	470.00	90.69

Sample Name	KL74 ICC	Injection Vial	12
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:43:42 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	376204.48	768.30	3137.8	False	13C4-PFOS	174896.40	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	110828.40	762.24	1340.3	False	13C4-PFOS	174896.40	287.00	PFBS	0.295	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	270338.63	1028.25	173.3	False	13C2-PFOA	35076.75	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	19573.93	980.02	138.6	False	13C2-PFOA	35076.75	100.00	PFHxA	0.072	0.076	✓
PFHpA_1	363.0 / 319.0	2.21	261201.12	967.11	116.8	False	13C2-PFOA	35076.75	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	4401.13	1034.83	101.0	False	13C2-PFOA	35076.75	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.23	382610.58	816.93	1363.6	False	13C4-PFOS	174896.40	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	109793.86	795.16	586.6	False	13C4-PFOS	174896.40	287.00	PFHxS	0.287	0.297	✓
PFOA_1	413.0 / 369.0	2.63	350042.28	1049.20	357.5	False	13C2-PFOA	35076.75	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.63	18451.17	1076.52	313.6	False	13C2-PFOA	35076.75	100.00	PFOA	0.053	0.052	✓
PFNA_1	463.0 / 419.0	3.03	302136.09	1098.23	509.1	False	13C2-PFOA	35076.75	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	98645.89	1098.65	331.4	False	13C2-PFOA	35076.75	100.00	PFNA	0.326	0.330	✓
PFOS_1	499.0 / 80.0	3.02	558309.89	803.88	1082.9	False	13C4-PFOS	174896.40	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.02	119994.12	925.46	1158.8	False	13C4-PFOS	174896.40	287.00	PFOS	0.215	0.190	✓
PFDA_1	513.0 / 469.0	3.39	298709.75	1045.41	392.7	False	13C2-PFOA	35076.75	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.39	10816.02	1041.94	597.4	False	13C2-PFOA	35076.75	100.00	PFDA	0.036	0.034	✓
PFUnA_1	563.0 / 519.0	3.71	270081.02	1026.36	296.6	False	13C2-PFOA	35076.75	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	11411.03	1022.66	363.5	False	13C2-PFOA	35076.75	100.00	PFUnA	0.042	0.042	✓
PFDoA_1	613.0 / 569.0	4.00	236772.33	1048.86	373.0	False	13C2-PFOA	35076.75	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	38070.32	1003.92	414.0	False	13C2-PFOA	35076.75	100.00	PFDoA	0.161	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.25	203718.14	996.27	270.4	False	13C2-PFOA	35076.75	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.25	14332.22	1076.66	348.8	False	13C2-PFOA	35076.75	100.00	PFTTrDA	0.070	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.47	215627.84	987.75	531.8	False	13C2-PFOA	35076.75	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.47	10555.14	1011.08	474.4	False	13C2-PFOA	35076.75	100.00	PFTTeDA	0.049	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.55	40882.79	1283.70	1442.2	True	d3-MeFOSAA	14352.25	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	17031.85	939.15	23404.3	False	d3-MeFOSAA	14352.25	400.00	NMeFOSAA	0.417	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.71	37049.93	1166.79	2227.6	False	d3-MeFOSAA	14352.25	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	1880.63	812.50	5507.1	False	d3-MeFOSAA	14352.25	400.00	NEtFOSAA	0.051	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.79	28235.30	98.32	725.0	False	13C2-PFOA	35076.75	100.00				
13C2-PFDA	515.0 / 470.0	3.38	29319.43	97.53	2013.4	False	13C2-PFOA	35076.75	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.70	14716.17	406.72	553.4	False	d3-MeFOSAA	14352.25	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.92	221256.32	1019.96	687.8	False	13C2-PFOA	35076.75	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	6119.32	1047.06	265.7	False	13C2-PFOA	35076.75	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.26	466242.84	923.60	1069.0	False	13C2-PFOA	35076.75	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	4627.85	921.56	523.0	False	13C2-PFOA	35076.75	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	21778.44	98.57	292.2	False	13C2-PFOA	35076.75	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.23	843872.18	883.05	1558.7	False	13C4-PFOS	174896.40	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.23	12320.15	911.68	251.1	False	13C4-PFOS	174896.40	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.85	626407.32	833.97	1114.1	False	13C4-PFOS	174896.40	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.85	6417.56	906.30	81.3	False	13C4-PFOS	174896.40	287.00	11CI-PF3OUdS	0.010	0.010	✓

Sample Name	KL69 CCV	Injection Vial	25
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 7:39:58 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.46	343100.21	783.98	3538.3	False	13C4-PFOS	156315.38	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.46	103644.18	797.56	1487.4	False	13C4-PFOS	156315.38	287.00	PFBS	0.302	0.288	✓
PFHxA_1	313.0 / 269.0	1.79	241013.99	944.30	195.9	False	13C2-PFOA	34051.73	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.79	18782.26	968.69	135.6	False	13C2-PFOA	34051.73	100.00	PFHxA	0.078	0.076	✓
PFHpA_1	363.0 / 319.0	2.20	248953.62	949.51	121.1	False	13C2-PFOA	34051.73	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	4112.57	996.08	95.7	False	13C2-PFOA	34051.73	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.22	346477.31	827.71	1031.9	False	13C4-PFOS	156315.38	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	105305.53	853.31	530.7	False	13C4-PFOS	156315.38	287.00	PFHxS	0.304	0.297	✓
PFOA_1	413.0 / 369.0	2.62	334501.32	1032.80	373.0	False	13C2-PFOA	34051.73	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.62	16524.36	993.13	290.7	False	13C2-PFOA	34051.73	100.00	PFOA	0.049	0.052	✓
PFNA_1	463.0 / 419.0	3.01	281642.95	1054.56	411.9	False	13C2-PFOA	34051.73	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.01	89560.41	1027.49	342.7	False	13C2-PFOA	34051.73	100.00	PFNA	0.318	0.330	✓
PFOS_1	499.0 / 80.0	3.01	566169.28	912.10	763.0	True	13C4-PFOS	156315.38	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.01	102594.97	885.32	1020.5	False	13C4-PFOS	156315.38	287.00	PFOS	0.181	0.190	✓
PFDA_1	513.0 / 469.0	3.37	263312.13	949.27	391.0	False	13C2-PFOA	34051.73	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	9713.07	963.85	688.4	False	13C2-PFOA	34051.73	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.69	240740.50	942.40	370.2	False	13C2-PFOA	34051.73	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	11247.10	1038.31	442.1	False	13C2-PFOA	34051.73	100.00	PFUnA	0.047	0.042	✓
PFDoA_1	613.0 / 569.0	3.97	211818.73	966.56	332.5	False	13C2-PFOA	34051.73	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	34832.83	946.20	303.2	False	13C2-PFOA	34051.73	100.00	PFDoA	0.164	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.22	180288.13	908.23	319.7	False	13C2-PFOA	34051.73	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.22	12910.41	999.05	389.4	False	13C2-PFOA	34051.73	100.00	PFTTrDA	0.072	0.069	✓
PFTeDA_1	713.0 / 669.0	4.44	186362.32	879.39	508.5	False	13C2-PFOA	34051.73	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.43	9352.80	922.88	504.7	False	13C2-PFOA	34051.73	100.00	PFTeDA	0.050	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.53	30594.74	1013.50	1722.2	False	d3-MeFOSAA	13603.95	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	17203.91	1000.82	262.8	True	d3-MeFOSAA	13603.95	400.00	NMeFOSAA	0.562	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.69	30863.79	1025.44	733.0	False	d3-MeFOSAA	13603.95	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.68	2322.75	1058.71	780.9	False	d3-MeFOSAA	13603.95	400.00	NEtFOSAA	0.075	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.78	25788.60	92.50	1054.1	False	13C2-PFOA	34051.73	100.00				
13C2-PFDA	515.0 / 470.0	3.36	28559.61	97.86	4311.7	False	13C2-PFOA	34051.73	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	13059.34	380.79	462.8	False	d3-MeFOSAA	13603.95	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.91	193049.12	916.72	746.9	False	13C2-PFOA	34051.73	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.91	5831.56	1027.86	222.2	False	13C2-PFOA	34051.73	100.00	HFPO-DA	0.030	0.027	✓
ADONA_1	377.0 / 251.0	2.25	435013.71	887.68	745.6	False	13C2-PFOA	34051.73	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.25	4734.00	971.08	315.8	False	13C2-PFOA	34051.73	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.91	18971.55	88.45	346.3	False	13C2-PFOA	34051.73	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	776842.42	909.54	1444.1	False	13C4-PFOS	156315.38	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	10483.37	867.97	234.6	False	13C4-PFOS	156315.38	287.00	9CI-PF3ONS	0.013	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.83	568601.33	846.99	999.1	False	13C4-PFOS	156315.38	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.83	5902.82	932.69	79.9	False	13C4-PFOS	156315.38	287.00	11CI-PF3OUdS	0.010	0.010	✓



Sample Name	KL68 CCV	Injection Vial	36
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:18:25 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	184768.81	418.45	2809.2	False	13C4-PFOS	157715.04	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	55207.31	421.06	1082.1	False	13C4-PFOS	157715.04	287.00	PFBS	0.299	0.288	✓
PFHxA_1	313.0 / 269.0	1.78	127346.48	508.92	108.5	False	13C2-PFOA	33384.31	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.78	9170.82	482.44	77.8	False	13C2-PFOA	33384.31	100.00	PFHxA	0.072	0.076	✓
PFHpA_1	363.0 / 319.0	2.19	139669.64	543.35	77.7	False	13C2-PFOA	33384.31	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.18	2263.61	559.22	51.7	False	13C2-PFOA	33384.31	100.00	PFHpA	0.016	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	193389.84	457.90	1047.0	False	13C4-PFOS	157715.04	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	55331.13	444.38	298.8	False	13C4-PFOS	157715.04	287.00	PFHxS	0.286	0.297	✓
PFOA_1	413.0 / 369.0	2.60	174224.19	548.69	301.4	False	13C2-PFOA	33384.31	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.61	8848.06	542.41	248.4	False	13C2-PFOA	33384.31	100.00	PFOA	0.051	0.052	✓
PFNA_1	463.0 / 419.0	2.99	141632.96	540.92	350.7	False	13C2-PFOA	33384.31	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.00	46271.23	541.46	241.9	False	13C2-PFOA	33384.31	100.00	PFNA	0.327	0.330	✓
PFOS_1	499.0 / 80.0	2.99	288746.95	461.04	467.4	True	13C4-PFOS	157715.04	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	52753.24	451.18	476.4	False	13C4-PFOS	157715.04	287.00	PFOS	0.183	0.190	✓
PFDA_1	513.0 / 469.0	3.36	130484.53	479.81	239.6	False	13C2-PFOA	33384.31	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	5609.78	567.80	19313.5	False	13C2-PFOA	33384.31	100.00	PFDA	0.043	0.034	✓
PFUnA_1	563.0 / 519.0	3.68	125257.42	500.13	248.4	False	13C2-PFOA	33384.31	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.68	5287.17	497.86	402.9	False	13C2-PFOA	33384.31	100.00	PFUnA	0.042	0.042	✓
PFDoA_1	613.0 / 569.0	3.96	111327.13	518.16	293.5	False	13C2-PFOA	33384.31	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	18838.86	521.97	278.9	False	13C2-PFOA	33384.31	100.00	PFDoA	0.169	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.21	90162.15	463.29	236.0	False	13C2-PFOA	33384.31	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	6250.61	493.36	255.7	False	13C2-PFOA	33384.31	100.00	PFTTrDA	0.069	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	99164.87	477.28	389.6	False	13C2-PFOA	33384.31	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	5071.47	510.43	389.2	False	13C2-PFOA	33384.31	100.00	PFTeDA	0.051	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.51	15891.67	559.98	1098.7	False	d3-MeFOSAA	12789.07	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.51	7950.98	492.01	2442.8	False	d3-MeFOSAA	12789.07	400.00	NMeFOSAA	0.500	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.67	16295.07	575.90	1317.9	False	d3-MeFOSAA	12789.07	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.68	942.15	456.79	2828.4	False	d3-MeFOSAA	12789.07	400.00	NEtFOSAA	0.058	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	25789.77	94.35	846.9	False	13C2-PFOA	33384.31	100.00				
13C2-PFDA	515.0 / 470.0	3.35	28094.47	98.19	914.0	False	13C2-PFOA	33384.31	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	15416.89	478.17	372.4	False	d3-MeFOSAA	12789.07	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.90	104065.02	504.04	576.5	False	13C2-PFOA	33384.31	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.89	3250.73	584.42	158.2	False	13C2-PFOA	33384.31	100.00	HFPO-DA	0.031	0.027	✓
ADONA_1	377.0 / 251.0	2.24	232757.16	484.45	751.0	False	13C2-PFOA	33384.31	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.24	2101.20	439.63	336.8	False	13C2-PFOA	33384.31	100.00	ADONA	0.009	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	19899.14	94.63	337.3	False	13C2-PFOA	33384.31	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.20	390964.99	453.68	1254.4	False	13C4-PFOS	157715.04	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.20	5938.23	487.29	193.4	False	13C4-PFOS	157715.04	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	291728.75	430.70	989.5	False	13C4-PFOS	157715.04	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	3499.86	548.10	49.1	False	13C4-PFOS	157715.04	287.00	11CI-PF3OUdS	0.012	0.010	✓

Sample Name	KL69 CCV	Injection Vial	44
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:30:02 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	336137.53	785.78	3214.9	False	13C4-PFOS	152791.97	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	99895.44	786.44	1329.1	False	13C4-PFOS	152791.97	287.00	PFBS	0.297	0.288	✓
PFHxA_1	313.0 / 269.0	1.78	236213.14	936.89	149.7	False	13C2-PFOA	33637.45	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.77	18843.55	983.82	124.6	False	13C2-PFOA	33637.45	100.00	PFHxA	0.080	0.076	✓
PFHpA_1	363.0 / 319.0	2.19	234562.26	905.64	99.2	False	13C2-PFOA	33637.45	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	3879.05	951.10	83.6	False	13C2-PFOA	33637.45	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	345875.72	845.33	1284.0	False	13C4-PFOS	152791.97	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	100082.26	829.69	575.7	False	13C4-PFOS	152791.97	287.00	PFHxS	0.289	0.297	✓
PFOA_1	413.0 / 369.0	2.60	335924.43	1049.97	354.9	False	13C2-PFOA	33637.45	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.60	17030.74	1036.17	293.4	False	13C2-PFOA	33637.45	100.00	PFOA	0.051	0.052	✓
PFNA_1	463.0 / 419.0	2.99	258322.49	979.15	433.8	False	13C2-PFOA	33637.45	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.99	84426.45	980.52	323.6	False	13C2-PFOA	33637.45	100.00	PFNA	0.327	0.330	✓
PFOS_1	499.0 / 80.0	2.99	525658.00	866.37	553.6	True	13C4-PFOS	152791.97	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	103392.02	912.78	1048.6	False	13C4-PFOS	152791.97	287.00	PFOS	0.197	0.190	✓
PFDA_1	513.0 / 469.0	3.36	254890.94	930.23	400.7	False	13C2-PFOA	33637.45	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	9000.94	904.19	594.9	False	13C2-PFOA	33637.45	100.00	PFDA	0.035	0.034	✓
PFUnA_1	563.0 / 519.0	3.67	237824.39	942.45	351.7	False	13C2-PFOA	33637.45	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.67	10041.26	938.41	473.5	False	13C2-PFOA	33637.45	100.00	PFUnA	0.042	0.042	✓
PFDoA_1	613.0 / 569.0	3.96	207573.00	958.85	401.0	False	13C2-PFOA	33637.45	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	34746.95	955.49	327.3	False	13C2-PFOA	33637.45	100.00	PFDoA	0.167	0.166	✓
PFTrDA_1	663.0 / 619.0	4.20	173348.49	884.02	315.7	False	13C2-PFOA	33637.45	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.20	11751.22	920.55	352.5	False	13C2-PFOA	33637.45	100.00	PFTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	183858.26	878.26	605.3	False	13C2-PFOA	33637.45	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	9130.85	912.07	449.7	False	13C2-PFOA	33637.45	100.00	PFTeDA	0.050	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.51	30307.04	934.30	36988.0	False	d3-MeFOSAA	14618.41	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.51	15203.14	823.05	19373.6	False	d3-MeFOSAA	14618.41	400.00	NMeFOSAA	0.502	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.67	27714.10	856.89	805.3	False	d3-MeFOSAA	14618.41	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.67	2244.89	952.21	136.7	True	d3-MeFOSAA	14618.41	400.00	NEtFOSAA	0.081	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	25838.12	93.82	772.8	False	13C2-PFOA	33637.45	100.00				
13C2-PFDA	515.0 / 470.0	3.34	28916.61	100.31	8138.1	False	13C2-PFOA	33637.45	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	13769.11	373.62	735.4	False	d3-MeFOSAA	14618.41	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.90	195935.95	941.88	769.9	False	13C2-PFOA	33637.45	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.90	5217.58	930.96	194.8	False	13C2-PFOA	33637.45	100.00	HFPO-DA	0.027	0.027	✓
ADONA_1	377.0 / 251.0	2.23	417015.26	861.43	992.8	False	13C2-PFOA	33637.45	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	3894.59	808.73	209.7	False	13C2-PFOA	33637.45	100.00	ADONA	0.009	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	19779.31	93.35	390.5	False	13C2-PFOA	33637.45	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.20	726023.89	869.64	1806.8	False	13C4-PFOS	152791.97	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.19	11386.18	964.46	249.3	False	13C4-PFOS	152791.97	287.00	9CI-PF3ONS	0.016	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	551640.96	840.68	1215.7	False	13C4-PFOS	152791.97	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	4435.13	716.95	79.1	False	13C4-PFOS	152791.97	287.00	11CI-PF3OUdS	0.008	0.010	✓

Sample Name	KL67 ISC	Injection Vial	2
Sample ID	ISC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:36:45 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	79695.36	196.44	2045.2	False	13C4-PFOS	144908.58	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.44	23849.66	197.97	785.4	False	13C4-PFOS	144908.58	287.00	PFBS	0.299	0.288	✓
PFHxA_1	313.0 / 269.0	1.77	64709.00	245.48	67.9	False	13C2-PFOA	35169.09	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.76	4743.92	236.89	51.1	False	13C2-PFOA	35169.09	100.00	PFHxA	0.073	0.076	✓
PFHpA_1	363.0 / 319.0	2.18	58484.73	215.97	43.7	True	13C2-PFOA	35169.09	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.18	1311.08	307.46	31.4	True	13C2-PFOA	35169.09	100.00	PFHpA	0.022	0.015	✓
PFHxS_1	399.0 / 80.0	2.20	89542.51	230.75	535.1	False	13C4-PFOS	144908.58	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	27590.46	241.17	279.9	False	13C4-PFOS	144908.58	287.00	PFHxS	0.308	0.297	✓
PFOA_1	413.0 / 369.0	2.59	88747.55	265.31	216.6	False	13C2-PFOA	35169.09	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	5505.13	320.35	128.7	False	13C2-PFOA	35169.09	100.00	PFOA	0.062	0.052	✓
PFNA_1	463.0 / 419.0	2.98	69867.04	253.29	251.3	False	13C2-PFOA	35169.09	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	22122.94	245.74	197.0	False	13C2-PFOA	35169.09	100.00	PFNA	0.317	0.330	✓
PFOS_1	499.0 / 80.0	2.97	135856.02	236.09	488.2	True	13C4-PFOS	144908.58	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	27964.40	260.31	770.7	True	13C4-PFOS	144908.58	287.00	PFOS	0.206	0.190	✓
PFDA_1	513.0 / 469.0	3.34	59084.80	206.24	231.9	False	13C2-PFOA	35169.09	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.33	2208.57	212.20	452.2	False	13C2-PFOA	35169.09	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.65	54594.74	206.93	228.8	False	13C2-PFOA	35169.09	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.65	2760.89	246.78	252.1	False	13C2-PFOA	35169.09	100.00	PFUnA	0.051	0.042	✓
PFDoA_1	613.0 / 569.0	3.93	49080.87	216.85	215.0	False	13C2-PFOA	35169.09	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.93	8740.85	229.89	242.2	False	13C2-PFOA	35169.09	100.00	PFDoA	0.178	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.18	40411.39	197.11	179.6	False	13C2-PFOA	35169.09	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.17	3255.44	243.91	149.1	False	13C2-PFOA	35169.09	100.00	PFTTrDA	0.081	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.39	40059.45	183.02	280.6	False	13C2-PFOA	35169.09	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.39	2298.90	219.64	219.5	False	13C2-PFOA	35169.09	100.00	PFTTeDA	0.057	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.49	7409.69	320.95	2011.8	False	d3-MeFOSAA	10404.27	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.49	4248.26	323.14	959840.4	False	d3-MeFOSAA	10404.27	400.00	NMeFOSAA	0.573	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.65	7412.86	322.03	326.1	False	d3-MeFOSAA	10404.27	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.65	433.97	258.63	319.0	False	d3-MeFOSAA	10404.27	400.00	NEtFOSAA	0.059	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	22404.63	77.81	913.0	False	13C2-PFOA	35169.09	100.00				
13C2-PFDA	515.0 / 470.0	3.33	25263.46	83.82	2874.5	False	13C2-PFOA	35169.09	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.64	12195.61	464.96	412.1	False	d3-MeFOSAA	10404.27	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.89	46614.43	214.32	334.4	False	13C2-PFOA	35169.09	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.89	1665.09	284.16	81.2	False	13C2-PFOA	35169.09	100.00	HFPO-DA	0.036	0.027	✓
ADONA_1	377.0 / 251.0	2.22	102357.08	202.23	579.5	False	13C2-PFOA	35169.09	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	1537.85	305.43	162.1	False	13C2-PFOA	35169.09	100.00	ADONA	0.015	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	17667.15	79.75	368.7	False	13C2-PFOA	35169.09	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.18	184901.84	233.53	948.1	False	13C4-PFOS	144908.58	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.18	2484.07	221.86	86.5	False	13C4-PFOS	144908.58	287.00	9CI-PF3ONS	0.013	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.79	142906.42	229.63	875.5	False	13C4-PFOS	144908.58	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	1153.22	196.56	33.6	False	13C4-PFOS	144908.58	287.00	11CI-PF3OUdS	0.008	0.010	✓

Sample Name	KL68 CCV	Injection Vial	13
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:15:19 PM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	169611.08	407.42	3041.5	False	13C4-PFOS	148694.23	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.43	50234.36	406.38	1100.1	False	13C4-PFOS	148694.23	287.00	PFBS	0.296	0.288	✓
PFHxA_1	313.0 / 269.0	1.75	123025.10	481.84	105.7	False	13C2-PFOA	34064.15	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.75	9305.37	479.75	94.1	False	13C2-PFOA	34064.15	100.00	PFHxA	0.076	0.076	✓
PFHpA_1	363.0 / 319.0	2.17	126140.49	480.92	61.8	False	13C2-PFOA	34064.15	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	2485.12	601.69	48.1	False	13C2-PFOA	34064.15	100.00	PFHpA	0.020	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	181776.01	456.51	774.9	False	13C4-PFOS	148694.23	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.19	54682.43	465.81	342.0	False	13C4-PFOS	148694.23	287.00	PFHxS	0.301	0.297	✓
PFOA_1	413.0 / 369.0	2.58	181133.72	559.06	285.7	False	13C2-PFOA	34064.15	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	10088.40	606.10	206.4	False	13C2-PFOA	34064.15	100.00	PFOA	0.056	0.052	✓
PFNA_1	463.0 / 419.0	2.97	146544.53	548.51	383.2	False	13C2-PFOA	34064.15	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	44636.85	511.91	271.3	False	13C2-PFOA	34064.15	100.00	PFNA	0.305	0.330	✓
PFOS_1	499.0 / 80.0	2.97	275211.31	466.09	433.1	True	13C4-PFOS	148694.23	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	51449.74	466.73	676.9	True	13C4-PFOS	148694.23	287.00	PFOS	0.187	0.190	✓
PFDA_1	513.0 / 469.0	3.33	129054.42	465.08	263.1	False	13C2-PFOA	34064.15	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.33	4724.53	468.66	306.5	False	13C2-PFOA	34064.15	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.64	115543.57	452.14	299.0	False	13C2-PFOA	34064.15	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.64	5402.93	498.61	258.0	False	13C2-PFOA	34064.15	100.00	PFUnA	0.047	0.042	✓
PFDoA_1	613.0 / 569.0	3.93	100330.23	457.66	269.2	False	13C2-PFOA	34064.15	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	17824.71	484.01	267.7	False	13C2-PFOA	34064.15	100.00	PFDoA	0.178	0.166	✓
PFTrDA_1	663.0 / 619.0	4.17	81994.97	412.91	244.2	False	13C2-PFOA	34064.15	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	5902.62	456.60	249.3	False	13C2-PFOA	34064.15	100.00	PFTrDA	0.072	0.069	✓
PFTeDA_1	713.0 / 669.0	4.38	84287.27	397.58	438.0	False	13C2-PFOA	34064.15	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.38	4815.82	475.02	329.3	False	13C2-PFOA	34064.15	100.00	PFTeDA	0.057	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.48	14609.20	538.48	3874.3	False	d3-MeFOSAA	12226.35	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.48	8250.01	534.01	108464.0	False	d3-MeFOSAA	12226.35	400.00	NMeFOSAA	0.565	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.64	14031.54	518.72	454.3	False	d3-MeFOSAA	12226.35	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.64	924.17	468.70	394155.9	False	d3-MeFOSAA	12226.35	400.00	NEtFOSAA	0.066	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	23902.78	85.70	1015.7	False	13C2-PFOA	34064.15	100.00				
13C2-PFDA	515.0 / 470.0	3.32	24993.32	85.61	1884.6	False	13C2-PFOA	34064.15	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	11764.09	381.67	394.0	False	d3-MeFOSAA	12226.35	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.88	101691.34	482.72	504.7	False	13C2-PFOA	34064.15	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.88	2825.56	497.85	163.6	False	13C2-PFOA	34064.15	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.21	217720.91	444.11	609.3	False	13C2-PFOA	34064.15	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.21	2222.98	455.83	184.0	False	13C2-PFOA	34064.15	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	18654.46	86.94	322.3	False	13C2-PFOA	34064.15	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.17	372825.69	458.88	1314.0	False	13C4-PFOS	148694.23	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.17	5416.54	471.45	181.4	False	13C4-PFOS	148694.23	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.78	301771.85	472.56	1265.4	False	13C4-PFOS	148694.23	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	2565.96	426.22	50.0	False	13C4-PFOS	148694.23	287.00	11CI-PF3OUdS	0.009	0.010	✓

Raw Analytical Data

Sample Name	KL73 IB	Injection Vial	11
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:34:45 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	2.26	1797.85	4.25	57.9	False	13C4-PFOS	158011.40	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	756.17	6.06	12.4	True	13C4-PFOS	158011.40	287.00	PFHxS	0.421	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	3.03	3436.05	5.48	30.1	True	13C4-PFOS	158011.40	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.04	781.77	6.67	35.4	True	13C4-PFOS	158011.40	287.00	PFOS	0.228	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	4.00	1038.44	4.64	23.6	True	13C2-PFOA	34749.37	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	294.11	7.83	34.8	True	13C2-PFOA	34749.37	100.00	PFDoA	0.283	0.166	✓
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	4.47	1455.32	6.73	51.6	False	13C2-PFOA	34749.37	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	134.70	13.02	17.7	False	13C2-PFOA	34749.37	100.00	PFTeDA	0.093	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13174.88	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13174.88	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13174.88	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	29.58	13.92	341.1	False	d3-MeFOSAA	13174.88	400.00	NEtFOSAA	N/A	0.079	
13C2-PFHxA	315.0 / 270.0	1.80	27068.84	95.14	1109.9	False	13C2-PFOA	34749.37	100.00				
13C2-PFDA	515.0 / 470.0	3.39	27477.48	92.27	1235.3	False	13C2-PFOA	34749.37	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	14257.37	429.26	337.1	False	d3-MeFOSAA	13174.88	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	19814.88	90.53	367.3	False	13C2-PFOA	34749.37	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	CU242PB-FS(0)	Injection Vial	27
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 7:57:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	2.23	1041.60	2.51	21.8	False	13C4-PFOS	155217.24	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	809.30	6.60	16.8	True	13C4-PFOS	155217.24	287.00	PFHxS	0.777	0.297	
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12549.52	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12549.52	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12549.52	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	False	d3-MeFOSAA	12549.52	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	30313.26	113.62	848.8	False	13C2-PFOA	32585.79	100.00				
13C2-PFDA	515.0 / 470.0	3.36	30560.20	109.43	913.2	False	13C2-PFOA	32585.79	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	14423.63	455.90	466.3	False	d3-MeFOSAA	12549.52	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32585.79	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	19141.81	93.26	309.6	False	13C2-PFOA	32585.79	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155217.24	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	CJ243LCS-FS(0)	Injection Vial	28
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:06:49 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.46	1913190.13	4497.18	5077.9	False	13C4-PFOS	151950.99	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.46	566871.05	4487.48	2056.4	False	13C4-PFOS	151950.99	287.00	PFBS	0.296	0.288	✓
PFHxA_1	313.0 / 269.0	1.79	1401549.00	6222.56	386.3	True	13C2-PFOA	30050.19	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.79	109901.86	6422.93	348.3	False	13C2-PFOA	30050.19	100.00	PFHxA	0.078	0.076	✓
PFHpA_1	363.0 / 319.0	2.20	1293981.81	5592.41	217.9	False	13C2-PFOA	30050.19	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	20571.73	5646.07	245.8	False	13C2-PFOA	30050.19	100.00	PFHpA	0.016	0.015	✓
PFHxS_1	399.0 / 80.0	2.22	1981355.32	4869.30	2256.1	False	13C4-PFOS	151950.99	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	571283.18	4762.17	983.6	False	13C4-PFOS	151950.99	287.00	PFHxS	0.288	0.297	✓
PFOA_1	413.0 / 369.0	2.62	1654658.32	5789.20	655.2	False	13C2-PFOA	30050.19	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.62	88162.32	6004.20	564.1	False	13C2-PFOA	30050.19	100.00	PFOA	0.053	0.052	✓
PFNA_1	463.0 / 419.0	3.01	1359513.79	5768.28	984.1	False	13C2-PFOA	30050.19	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.01	443285.38	5762.86	635.5	False	13C2-PFOA	30050.19	100.00	PFNA	0.326	0.330	✓
PFOS_1	499.0 / 80.0	3.00	2630434.48	4359.35	1661.4	False	13C4-PFOS	151950.99	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.00	563188.21	4999.52	1065.8	False	13C4-PFOS	151950.99	287.00	PFOS	0.214	0.190	✓
PFDA_1	513.0 / 469.0	3.37	1418417.34	5794.47	819.6	False	13C2-PFOA	30050.19	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	53289.81	5992.26	900.6	False	13C2-PFOA	30050.19	100.00	PFDA	0.038	0.034	✓
PFUnA_1	563.0 / 519.0	3.69	1286763.52	5707.91	782.6	False	13C2-PFOA	30050.19	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	58651.26	6135.61	667.1	False	13C2-PFOA	30050.19	100.00	PFUnA	0.046	0.042	✓
PFDoA_1	613.0 / 569.0	3.97	1137890.65	5883.80	644.3	False	13C2-PFOA	30050.19	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	201361.24	6198.14	588.0	False	13C2-PFOA	30050.19	100.00	PFDoA	0.177	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.22	963856.02	5502.14	645.4	False	13C2-PFOA	30050.19	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.22	67313.13	5902.53	709.0	False	13C2-PFOA	30050.19	100.00	PFTTrDA	0.070	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.43	1074329.61	5744.49	1065.2	False	13C2-PFOA	30050.19	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.43	56875.67	6359.48	907.6	False	13C2-PFOA	30050.19	100.00	PFTTeDA	0.053	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.53	180523.47	5989.53	3250.8	False	d3-MeFOSAA	13582.64	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	85703.77	4993.54	7684.0	False	d3-MeFOSAA	13582.64	400.00	NMeFOSAA	0.475	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.69	179866.44	5985.40	1314.5	False	d3-MeFOSAA	13582.64	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.69	11185.15	5106.18	3403.5	False	d3-MeFOSAA	13582.64	400.00	NEtFOSAA	0.062	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.78	26826.29	109.04	666.7	False	13C2-PFOA	30050.19	100.00				
13C2-PFDA	515.0 / 470.0	3.36	27889.47	108.29	619.9	False	13C2-PFOA	30050.19	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	12254.00	357.86	455.4	False	d3-MeFOSAA	13582.64	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.91	1128335.67	6071.52	1673.8	False	13C2-PFOA	30050.19	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.91	30428.02	6077.34	480.4	False	13C2-PFOA	30050.19	100.00	HFPO-DA	0.027	0.027	✓
ADONA_1	377.0 / 251.0	2.25	2367795.33	5475.06	1655.8	False	13C2-PFOA	30050.19	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.25	25515.25	5930.85	396.4	False	13C2-PFOA	30050.19	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.91	21044.07	111.18	364.4	False	13C2-PFOA	30050.19	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	4042148.30	4868.53	1919.3	False	13C4-PFOS	151950.99	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	55461.39	4723.82	447.7	False	13C4-PFOS	151950.99	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.83	3064664.80	4696.26	1570.7	False	13C4-PFOS	151950.99	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.83	26702.99	4340.48	177.4	False	13C4-PFOS	151950.99	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	I3451-FS(0)	Injection Vial	29
Sample ID	Q6-0082-DW0001-20190530	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:15:46 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12717.10	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12717.10	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12717.10	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12717.10	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	29349.14	127.82	361.0	True	13C2-PFOA	28045.16	100.00				
13C2-PFDA	515.0 / 470.0	3.35	27829.61	115.79	610.3	False	13C2-PFOA	28045.16	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	11507.50	358.94	454.1	False	d3-MeFOSAA	12717.10	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28045.16	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	20999.62	118.88	280.0	False	13C2-PFOA	28045.16	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	139754.02	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3453-FS(0)	Injection Vial	30
Sample ID	H6-1607-DW0001-20190530	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:24:43 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12227.16	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12227.16	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12227.16	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12227.16	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.78	26644.50	120.87	366.5	False	13C2-PFOA	26924.43	100.00				
13C2-PFDA	515.0 / 470.0	3.36	26478.11	114.75	663.4	False	13C2-PFOA	26924.43	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	12941.85	419.85	524.9	False	d3-MeFOSAA	12227.16	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26924.43	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	18007.63	106.18	311.2	False	13C2-PFOA	26924.43	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	143929.27	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3459-FS(0)	Injection Vial	33
Sample ID	H5-1434-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:51:33 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13645.70	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13645.70	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13645.70	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13645.70	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	26545.37	113.63	324.3	False	13C2-PFOA	28534.23	100.00				
13C2-PFDA	515.0 / 470.0	3.35	23633.46	96.64	682.2	False	13C2-PFOA	28534.23	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	10871.48	316.02	176.5	False	d3-MeFOSAA	13645.70	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28534.23	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	18469.74	102.76	303.4	False	13C2-PFOA	28534.23	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	147460.46	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3461-FS(0)	Injection Vial	34
Sample ID	H4-1598-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:00:32 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	136949.37	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	136949.37	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	101099.35	275.67	65.5	False	13C4-PFOS	136949.37	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	25611.74	236.88	85.1	False	13C4-PFOS	136949.37	287.00	PFHxS	0.253	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	2.86	49884.12	91.73	55.6	True	13C4-PFOS	136949.37	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.94	8110.16	79.88	35.0	True	13C4-PFOS	136949.37	287.00	PFOS	0.163	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12236.40	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12236.40	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12236.40	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12236.40	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	18780.79	87.64	327.6	False	13C2-PFOA	26174.11	100.00				
13C2-PFDA	515.0 / 470.0	3.34	24551.81	109.45	517.1	False	13C2-PFOA	26174.11	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	10259.54	332.58	233.9	False	d3-MeFOSAA	12236.40	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	26174.11	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	14823.16	89.91	302.3	False	13C2-PFOA	26174.11	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	136949.37	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	136949.37	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	136949.37	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	136949.37	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3463-FS(0)	Injection Vial	35
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:09:28 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	20126.02	47.11	562.7	False	13C4-PFOS	152581.28	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.44	6657.01	52.48	415.0	False	13C4-PFOS	152581.28	287.00	PFBS	0.331	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	2.20	9582.99	23.45	54.6	False	13C4-PFOS	152581.28	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	2966.08	24.62	34.8	False	13C4-PFOS	152581.28	287.00	PFHxS	0.310	0.297	✓
PFOA_1	413.0 / 369.0	2.60	16948.88	54.14	60.6	False	13C2-PFOA	32915.75	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.57	1842.96	114.59	41.3	False	13C2-PFOA	32915.75	100.00	PFOA	0.109	0.052	
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	2.93	33643.22	55.53	82.0	True	13C4-PFOS	152581.28	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	3471.59	30.69	40.7	False	13C4-PFOS	152581.28	287.00	PFOS	0.103	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13530.94	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13530.94	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13530.94	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13530.94	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	33200.49	123.20	683.1	False	13C2-PFOA	32915.75	100.00				
13C2-PFDA	515.0 / 470.0	3.35	28337.81	100.45	1155.3	False	13C2-PFOA	32915.75	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	14963.00	438.65	342.2	False	d3-MeFOSAA	13530.94	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32915.75	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	21797.35	105.13	375.1	False	13C2-PFOA	32915.75	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	152581.28	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	152581.28	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	152581.28	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	152581.28	287.00	11CI-PF3OUdS	N/A	0.010	✓



Sample Name	I3463MS-FS(0)	Injection Vial	38
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:36:20 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	1819726.45	4386.94	2928.3	False	13C4-PFOS	148159.83	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	535627.84	4348.65	2396.2	False	13C4-PFOS	148159.83	287.00	PFBS	0.294	0.288	✓
PFHxA_1	313.0 / 269.0	1.78	1438026.17	5618.82	458.0	False	13C2-PFOA	34145.24	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.78	109066.55	5609.66	326.2	False	13C2-PFOA	34145.24	100.00	PFHxA	0.076	0.076	✓
PFHpA_1	363.0 / 319.0	2.19	1312072.02	4990.52	271.4	False	13C2-PFOA	34145.24	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	21239.62	5130.26	224.8	False	13C2-PFOA	34145.24	100.00	PFHpA	0.016	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	1964679.74	4951.87	989.8	False	13C4-PFOS	148159.83	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	563124.33	4814.27	909.6	False	13C4-PFOS	148159.83	287.00	PFHxS	0.287	0.297	✓
PFOA_1	413.0 / 369.0	2.60	1646297.97	5069.16	523.3	False	13C2-PFOA	34145.24	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.60	86500.44	5184.51	702.4	False	13C2-PFOA	34145.24	100.00	PFOA	0.053	0.052	✓
PFNA_1	463.0 / 419.0	2.99	1280009.89	4779.62	675.0	False	13C2-PFOA	34145.24	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.99	411905.61	4712.69	646.9	False	13C2-PFOA	34145.24	100.00	PFNA	0.322	0.330	✓
PFOS_1	499.0 / 80.0	2.99	2438925.64	4145.40	910.5	False	13C4-PFOS	148159.83	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	530703.22	4831.69	748.1	False	13C4-PFOS	148159.83	287.00	PFOS	0.218	0.190	✓
PFDA_1	513.0 / 469.0	3.36	1332995.16	4792.42	779.9	False	13C2-PFOA	34145.24	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	52965.44	5241.51	779.6	False	13C2-PFOA	34145.24	100.00	PFDA	0.040	0.034	✓
PFUnA_1	563.0 / 519.0	3.68	1255819.55	4902.56	775.0	False	13C2-PFOA	34145.24	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.67	55027.93	5066.18	692.9	False	13C2-PFOA	34145.24	100.00	PFUnA	0.044	0.042	✓
PFDoA_1	613.0 / 569.0	3.96	1044469.99	4753.03	709.3	False	13C2-PFOA	34145.24	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	176471.32	4780.54	669.1	False	13C2-PFOA	34145.24	100.00	PFDoA	0.169	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.20	886796.27	4455.13	608.1	False	13C2-PFOA	34145.24	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.20	60130.23	4640.32	658.9	False	13C2-PFOA	34145.24	100.00	PFTTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	1050839.10	4945.01	1042.9	False	13C2-PFOA	34145.24	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	54906.67	5403.03	863.5	False	13C2-PFOA	34145.24	100.00	PFTeDA	0.052	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.51	173544.13	5391.69	2600.0	False	d3-MeFOSAA	14505.34	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.51	82369.12	4493.96	1711.0	False	d3-MeFOSAA	14505.34	400.00	NMeFOSAA	0.475	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.67	155414.74	4842.74	1583.8	False	d3-MeFOSAA	14505.34	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.67	9901.39	4232.59	1716284.8	False	d3-MeFOSAA	14505.34	400.00	NEtFOSAA	0.064	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	29618.18	105.95	793.8	False	13C2-PFOA	34145.24	100.00				
13C2-PFDA	515.0 / 470.0	3.35	28969.21	99.00	3663.8	False	13C2-PFOA	34145.24	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	13199.10	360.95	355.6	False	d3-MeFOSAA	14505.34	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.90	1169555.05	5538.56	1007.3	False	13C2-PFOA	34145.24	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.90	31562.45	5547.89	452.1	False	13C2-PFOA	34145.24	100.00	HFPO-DA	0.027	0.027	✓
ADONA_1	377.0 / 251.0	2.23	2313441.27	4707.82	1588.7	False	13C2-PFOA	34145.24	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	22776.63	4659.33	422.7	False	13C2-PFOA	34145.24	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	23340.74	108.52	326.9	False	13C2-PFOA	34145.24	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.20	3726638.96	4603.37	1787.0	False	13C4-PFOS	148159.83	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.20	48497.31	4236.37	406.8	False	13C4-PFOS	148159.83	287.00	9CI-PF3ONS	0.013	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	2805653.23	4409.37	1290.5	False	13C4-PFOS	148159.83	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	24634.51	4106.72	193.7	False	13C4-PFOS	148159.83	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	I3463MSD-FS(0)	Injection Vial	39
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:45:17 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	1835492.54	4226.67	2695.4	False	13C4-PFOS	155110.16	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	541151.46	4196.62	2126.6	False	13C4-PFOS	155110.16	287.00	PFBS	0.295	0.288	✓
PFHxA_1	313.0 / 269.0	1.78	1493269.29	6030.08	406.3	False	13C2-PFOA	33038.73	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.78	111796.23	5942.63	324.7	False	13C2-PFOA	33038.73	100.00	PFHxA	0.075	0.076	✓
PFHpA_1	363.0 / 319.0	2.19	1330729.71	5231.00	276.0	False	13C2-PFOA	33038.73	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	20299.63	5067.43	219.6	False	13C2-PFOA	33038.73	100.00	PFHpA	0.015	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	1982870.60	4773.77	1164.7	False	13C4-PFOS	155110.16	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	586165.28	4786.70	975.7	False	13C4-PFOS	155110.16	287.00	PFHxS	0.296	0.297	✓
PFOA_1	413.0 / 369.0	2.60	1716923.88	5463.68	562.8	False	13C2-PFOA	33038.73	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.61	91343.50	5658.14	675.1	False	13C2-PFOA	33038.73	100.00	PFOA	0.053	0.052	✓
PFNA_1	463.0 / 419.0	3.00	1308659.19	5050.25	749.5	False	13C2-PFOA	33038.73	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.99	422835.64	4999.77	640.1	False	13C2-PFOA	33038.73	100.00	PFNA	0.323	0.330	✓
PFOS_1	499.0 / 80.0	2.99	2508033.16	4071.84	992.1	False	13C4-PFOS	155110.16	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	533423.11	4638.84	781.7	False	13C4-PFOS	155110.16	287.00	PFOS	0.213	0.190	✓
PFDA_1	513.0 / 469.0	3.36	1412997.32	5250.19	866.6	False	13C2-PFOA	33038.73	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	51445.01	5261.55	904.2	False	13C2-PFOA	33038.73	100.00	PFDA	0.036	0.034	✓
PFUnA_1	563.0 / 519.0	3.68	1226872.41	4949.96	729.8	False	13C2-PFOA	33038.73	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.68	55943.56	5322.97	614.4	False	13C2-PFOA	33038.73	100.00	PFUnA	0.046	0.042	✓
PFDoA_1	613.0 / 569.0	3.96	1070530.14	5034.78	689.0	False	13C2-PFOA	33038.73	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	186529.27	5222.23	791.2	False	13C2-PFOA	33038.73	100.00	PFDoA	0.174	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.21	927144.23	4813.83	575.0	False	13C2-PFOA	33038.73	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	63550.56	5068.52	588.2	False	13C2-PFOA	33038.73	100.00	PFTTrDA	0.069	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.42	1062417.02	5166.94	973.5	False	13C2-PFOA	33038.73	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.42	55944.84	5689.57	1356.0	False	13C2-PFOA	33038.73	100.00	PFTTeDA	0.053	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.51	171140.99	5788.40	1658.2	False	d3-MeFOSAA	13324.12	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.51	84463.18	5016.74	10898.7	False	d3-MeFOSAA	13324.12	400.00	NMeFOSAA	0.494	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.68	157760.87	5351.65	1596.9	False	d3-MeFOSAA	13324.12	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.67	8999.75	4188.23	682.0	False	d3-MeFOSAA	13324.12	400.00	NEtFOSAA	0.057	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	32062.79	118.53	760.6	False	13C2-PFOA	33038.73	100.00				
13C2-PFDA	515.0 / 470.0	3.35	30166.87	106.54	924.7	False	13C2-PFOA	33038.73	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	13812.84	411.22	415.5	False	d3-MeFOSAA	13324.12	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.90	1188038.56	5814.52	1098.3	False	13C2-PFOA	33038.73	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.90	29680.01	5391.72	463.3	False	13C2-PFOA	33038.73	100.00	HFPO-DA	0.025	0.027	✓
ADONA_1	377.0 / 251.0	2.23	2327545.38	4895.16	1655.9	False	13C2-PFOA	33038.73	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	23733.00	5017.57	403.5	False	13C2-PFOA	33038.73	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	22976.05	110.41	304.3	False	13C2-PFOA	33038.73	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.20	3758659.03	4434.88	2187.8	False	13C4-PFOS	155110.16	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.20	55004.73	4589.51	503.3	False	13C4-PFOS	155110.16	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	2924883.43	4390.78	1584.7	False	13C4-PFOS	155110.16	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	26106.22	4157.05	180.7	False	13C4-PFOS	155110.16	287.00	11CI-PF3OUdS	0.009	0.010	✓



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Sample Name	I3465-FS(0)	Injection Vial	40
Sample ID	E3-1120-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:54:14 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.46	207032.80	534.04	842.0	False	13C4-PFOS	138469.54	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.46	60347.71	524.24	764.9	False	13C4-PFOS	138469.54	287.00	PFBS	0.291	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	265461.16	715.90	342.4	False	13C4-PFOS	138469.54	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	75432.42	690.02	285.4	False	13C4-PFOS	138469.54	287.00	PFHxS	0.284	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	2.86	179554.50	326.54	220.2	True	13C4-PFOS	138469.54	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.89	13305.67	129.62	93.0	True	13C4-PFOS	138469.54	287.00	PFOS	0.074	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.21	1035.96	6.08	28.2	True	13C2-PFOA	29226.05	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.19	111.77	10.08	12.0	True	13C2-PFOA	29226.05	100.00	PFTTrDA	0.108	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12831.25	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12831.25	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12831.25	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12831.25	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	29889.18	124.91	615.2	False	13C2-PFOA	29226.05	100.00				
13C2-PFDA	515.0 / 470.0	3.35	25310.02	101.05	618.5	False	13C2-PFOA	29226.05	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	11317.07	349.86	316.9	False	d3-MeFOSAA	12831.25	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	29226.05	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	21207.80	115.20	309.7	False	13C2-PFOA	29226.05	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	138469.54	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	138469.54	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	138469.54	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	138469.54	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3466-FS(0)	Injection Vial	41
Sample ID	E3-1120-FD-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:03:12 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	199330.30	551.07	738.6	False	13C4-PFOS	129196.05	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	59913.95	557.83	589.9	False	13C4-PFOS	129196.05	287.00	PFBS	0.301	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	2.20	265232.94	766.63	304.0	False	13C4-PFOS	129196.05	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	73540.67	721.00	257.7	False	13C4-PFOS	129196.05	287.00	PFHxS	0.277	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	2.86	174019.87	339.19	245.7	True	13C4-PFOS	129196.05	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.87	14529.39	151.70	86.6	True	13C4-PFOS	129196.05	287.00	PFOS	0.083	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFDoA	N/A	0.166	✓
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11782.88	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11782.88	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11782.88	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11782.88	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	28843.78	122.23	539.3	False	13C2-PFOA	28822.42	100.00				
13C2-PFDA	515.0 / 470.0	3.34	23137.84	93.67	759.5	False	13C2-PFOA	28822.42	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	11377.85	383.03	355.9	False	d3-MeFOSAA	11782.88	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	28822.42	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	19976.54	110.03	293.9	False	13C2-PFOA	28822.42	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	129196.05	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	129196.05	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	129196.05	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	129196.05	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3468-FS(0)	Injection Vial	42
Sample ID	H4-1797-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:12:08 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120694.94	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120694.94	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	1.77	124021.57	684.53	67.2	False	13C2-PFOA	24171.99	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.77	11262.43	818.27	79.5	False	13C2-PFOA	24171.99	100.00	PFHxA	0.091	0.076	✓
PFHpA_1	363.0 / 319.0	2.18	70056.84	376.41	34.1	False	13C2-PFOA	24171.99	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	678.93	231.65	17.7	True	13C2-PFOA	24171.99	100.00	PFHpA	0.010	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	221072.68	684.00	162.9	False	13C4-PFOS	120694.94	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	59818.82	627.78	185.0	False	13C4-PFOS	120694.94	287.00	PFHxS	0.271	0.297	✓
PFOA_1	413.0 / 369.0	2.60	49888.58	216.99	104.1	False	13C2-PFOA	24171.99	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.59	2152.96	182.28	81.2	True	13C2-PFOA	24171.99	100.00	PFOA	0.043	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	2.91	196875.48	410.77	87.7	True	13C4-PFOS	120694.94	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	27227.45	304.30	148.1	True	13C4-PFOS	120694.94	287.00	PFOS	0.138	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10945.35	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10945.35	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10945.35	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10945.35	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	23446.98	118.48	246.3	False	13C2-PFOA	24171.99	100.00				
13C2-PFDA	515.0 / 470.0	3.35	22711.78	109.63	576.7	False	13C2-PFOA	24171.99	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	10188.02	369.22	239.7	False	d3-MeFOSAA	10945.35	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24171.99	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	16016.90	105.20	304.4	False	13C2-PFOA	24171.99	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120694.94	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120694.94	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120694.94	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120694.94	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3470-FS(0)	Injection Vial	43
Sample ID	H4-1840A-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:21:04 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	3475834.17	10634.75	1139.4	False	13C4-PFOS	116739.42	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	1013258.72	10440.57	1074.1	False	13C4-PFOS	116739.42	287.00	PFBS	0.292	0.288	✓
PFHxA_1	313.0 / 269.0	1.77	176328.39	977.67	97.4	False	13C2-PFOA	24062.32	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.77	14243.03	1039.54	96.8	False	13C2-PFOA	24062.32	100.00	PFHxA	0.081	0.076	✓
PFHpA_1	363.0 / 319.0	2.18	97455.75	526.00	44.8	False	13C2-PFOA	24062.32	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	2004.09	686.91	46.4	False	13C2-PFOA	24062.32	100.00	PFHpA	0.021	0.015	✓
PFHxS_1	399.0 / 80.0	2.20	1123765.61	3594.73	323.1	False	13C4-PFOS	116739.42	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	320002.34	3472.10	369.1	False	13C4-PFOS	116739.42	287.00	PFHxS	0.285	0.297	✓
PFOA_1	413.0 / 369.0	2.59	211883.87	925.80	183.3	False	13C2-PFOA	24062.32	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	9336.48	794.08	179.7	True	13C2-PFOA	24062.32	100.00	PFOA	0.044	0.052	✓
PFNA_1	463.0 / 419.0	2.99	11986.33	63.51	59.8	False	13C2-PFOA	24062.32	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.99	4311.83	70.00	82.8	False	13C2-PFOA	24062.32	100.00	PFNA	0.360	0.330	✓
PFOS_1	499.0 / 80.0	2.90	1320291.65	2848.07	279.1	True	13C4-PFOS	116739.42	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	181372.90	2095.72	265.2	True	13C4-PFOS	116739.42	287.00	PFOS	0.137	0.190	✓
PFDA_1	513.0 / 469.0	3.35	7270.50	37.09	52.8	False	13C2-PFOA	24062.32	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	391.08	54.92	43.0	False	13C2-PFOA	24062.32	100.00	PFDA	0.054	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10343.27	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10343.27	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10343.27	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10343.27	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	21645.46	109.87	386.2	False	13C2-PFOA	24062.32	100.00				
13C2-PFDA	515.0 / 470.0	3.34	20158.67	97.75	474.1	False	13C2-PFOA	24062.32	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	7944.55	304.67	301.1	False	d3-MeFOSAA	10343.27	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24062.32	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	16567.37	109.31	242.1	False	13C2-PFOA	24062.32	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	116739.42	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	116739.42	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	116739.42	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	116739.42	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	KL73 IB	Injection Vial	4
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:54:41 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	2.98	6980.64	10.98	85.5	True	13C4-PFOS	160081.69	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.98	1628.28	13.72	43.4	True	13C4-PFOS	160081.69	287.00	PFOS	0.233	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDoA	N/A	0.166	✓
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	26134.44	86.02	998.8	False	13C2-PFOA	37108.76	100.00				
13C2-PFDA	515.0 / 470.0	3.32	26769.43	84.17	762.1	False	13C2-PFOA	37108.76	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	12629.50	445.68	409.2	False	d3-MeFOSAA	11240.55	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	19915.50	85.20	323.0	False	13C2-PFOA	37108.76	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	CJ243LCS-FS-D(3)	Injection Vial	5
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:03:37 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	335818.75	831.66	4023.6	False	13C4-PFOS	144225.91	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.44	100571.92	838.79	1444.0	False	13C4-PFOS	144225.91	287.00	PFBS	0.299	0.288	✓
PFHxA_1	313.0 / 269.0	1.76	247952.43	1064.91	141.3	False	13C2-PFOA	31064.56	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.76	18874.88	1067.07	117.5	False	13C2-PFOA	31064.56	100.00	PFHxA	0.076	0.076	✓
PFHpA_1	363.0 / 319.0	2.17	236491.93	988.71	99.0	False	13C2-PFOA	31064.56	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	4638.18	1231.42	69.7	False	13C2-PFOA	31064.56	100.00	PFHpA	0.020	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	353056.16	914.13	992.7	False	13C4-PFOS	144225.91	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.19	100888.00	886.04	413.4	False	13C4-PFOS	144225.91	287.00	PFHxS	0.286	0.297	✓
PFOA_1	413.0 / 369.0	2.58	361826.52	1224.60	369.1	False	13C2-PFOA	31064.56	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	19098.45	1258.21	294.4	False	13C2-PFOA	31064.56	100.00	PFOA	0.053	0.052	✓
PFNA_1	463.0 / 419.0	2.97	280479.81	1151.19	561.1	False	13C2-PFOA	31064.56	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	90184.71	1134.15	408.8	False	13C2-PFOA	31064.56	100.00	PFNA	0.322	0.330	✓
PFOS_1	499.0 / 80.0	2.97	512305.09	894.51	983.3	False	13C4-PFOS	144225.91	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	111765.76	1045.31	592.1	False	13C4-PFOS	144225.91	287.00	PFOS	0.218	0.190	✓
PFDA_1	513.0 / 469.0	3.32	251987.11	995.80	407.7	False	13C2-PFOA	31064.56	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.32	8411.54	914.96	440.0	False	13C2-PFOA	31064.56	100.00	PFDA	0.033	0.034	✓
PFUnA_1	563.0 / 519.0	3.64	217616.95	933.80	430.8	False	13C2-PFOA	31064.56	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.64	9209.95	932.01	339.3	False	13C2-PFOA	31064.56	100.00	PFUnA	0.042	0.042	✓
PFDoA_1	613.0 / 569.0	3.92	185701.20	928.87	382.2	False	13C2-PFOA	31064.56	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	31941.09	951.08	419.2	False	13C2-PFOA	31064.56	100.00	PFDoA	0.172	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.16	161264.24	890.51	350.4	False	13C2-PFOA	31064.56	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.16	11711.08	993.38	404.8	False	13C2-PFOA	31064.56	100.00	PFTTrDA	0.073	0.069	✓
PFTeDA_1	713.0 / 669.0	4.38	180060.59	931.35	475.9	False	13C2-PFOA	31064.56	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.37	9675.58	1046.54	482.5	False	13C2-PFOA	31064.56	100.00	PFTeDA	0.054	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.48	30916.11	1242.20	41980.4	False	d3-MeFOSAA	11216.00	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.48	14485.68	1022.10	3037.2	False	d3-MeFOSAA	11216.00	400.00	NMeFOSAA	0.469	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.64	28094.35	1132.16	1222.7	False	d3-MeFOSAA	11216.00	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.64	1838.00	1016.12	4360.0	False	d3-MeFOSAA	11216.00	400.00	NEtFOSAA	0.065	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	5177.22	20.36	496.1	False	13C2-PFOA	31064.56	100.00				
13C2-PFDA	515.0 / 470.0	3.32	4605.38	17.30	541.6	False	13C2-PFOA	31064.56	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	2416.14	85.45	255.3	False	d3-MeFOSAA	11216.00	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.88	194040.58	1010.03	804.9	False	13C2-PFOA	31064.56	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.89	5591.83	1080.38	193.1	False	13C2-PFOA	31064.56	100.00	HFPO-DA	0.029	0.027	✓
ADONA_1	377.0 / 251.0	2.21	406495.96	909.25	895.9	False	13C2-PFOA	31064.56	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.21	5287.64	1188.94	238.1	False	13C2-PFOA	31064.56	100.00	ADONA	0.013	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	3634.86	18.58	117.7	False	13C2-PFOA	31064.56	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.17	737770.74	936.20	1631.9	False	13C4-PFOS	144225.91	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.17	10176.70	913.21	235.1	False	13C4-PFOS	144225.91	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.78	550636.67	888.99	1226.4	False	13C4-PFOS	144225.91	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	4956.10	848.75	76.9	False	13C4-PFOS	144225.91	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	I3463MS-FS-D(3)	Injection Vial	7
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:21:33 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	339741.55	911.73	2914.9	False	13C4-PFOS	133096.68	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.44	100938.12	912.24	1627.6	False	13C4-PFOS	133096.68	287.00	PFBS	0.297	0.288	✓
PFHxA_1	313.0 / 269.0	1.76	252013.33	1051.79	152.4	False	13C2-PFOA	31966.96	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.76	20084.56	1103.41	102.1	False	13C2-PFOA	31966.96	100.00	PFHxA	0.080	0.076	✓
PFHpA_1	363.0 / 319.0	2.17	250592.16	1018.09	104.0	False	13C2-PFOA	31966.96	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	4839.92	1248.70	82.6	False	13C2-PFOA	31966.96	100.00	PFHpA	0.019	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	364376.92	1022.33	898.8	False	13C4-PFOS	133096.68	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.19	103281.53	982.91	514.1	False	13C4-PFOS	133096.68	287.00	PFHxS	0.283	0.297	✓
PFOA_1	413.0 / 369.0	2.58	382401.66	1257.70	314.1	False	13C2-PFOA	31966.96	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	19581.95	1253.64	274.4	False	13C2-PFOA	31966.96	100.00	PFOA	0.051	0.052	✓
PFNA_1	463.0 / 419.0	2.97	272688.46	1087.61	439.7	False	13C2-PFOA	31966.96	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	89957.72	1099.36	407.1	False	13C2-PFOA	31966.96	100.00	PFNA	0.330	0.330	✓
PFOS_1	499.0 / 80.0	2.97	483921.36	915.60	770.9	False	13C4-PFOS	133096.68	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	106005.67	1074.34	644.4	False	13C4-PFOS	133096.68	287.00	PFOS	0.219	0.190	✓
PFDA_1	513.0 / 469.0	3.33	252966.39	971.45	386.7	False	13C2-PFOA	31966.96	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.32	9108.26	962.78	358.9	False	13C2-PFOA	31966.96	100.00	PFDA	0.036	0.034	✓
PFUnA_1	563.0 / 519.0	3.64	214127.82	892.89	450.5	False	13C2-PFOA	31966.96	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.64	10131.83	996.36	500.6	False	13C2-PFOA	31966.96	100.00	PFUnA	0.047	0.042	✓
PFDoA_1	613.0 / 569.0	3.93	170242.46	827.51	363.4	False	13C2-PFOA	31966.96	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.93	31246.78	904.14	359.4	False	13C2-PFOA	31966.96	100.00	PFDoA	0.184	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.17	144011.77	772.79	308.8	False	13C2-PFOA	31966.96	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.17	10043.72	827.90	282.0	False	13C2-PFOA	31966.96	100.00	PFTTrDA	0.070	0.069	✓
PFTeDA_1	713.0 / 669.0	4.38	178459.17	897.01	417.2	False	13C2-PFOA	31966.96	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.38	9026.45	948.76	412.7	False	13C2-PFOA	31966.96	100.00	PFTeDA	0.051	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.48	29056.19	1243.86	4788.7	False	d3-MeFOSAA	10527.14	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.48	15241.53	1145.80	2545809.5	False	d3-MeFOSAA	10527.14	400.00	NMeFOSAA	0.525	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.64	28579.24	1227.06	657.0	False	d3-MeFOSAA	10527.14	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.64	1430.72	842.72	315376.6	False	d3-MeFOSAA	10527.14	400.00	NEtFOSAA	0.050	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	5506.34	21.04	457.5	False	13C2-PFOA	31966.96	100.00				
13C2-PFDA	515.0 / 470.0	3.32	6013.58	21.95	1242.1	False	13C2-PFOA	31966.96	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	2159.34	81.36	182.8	False	d3-MeFOSAA	10527.14	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.88	201420.57	1018.85	565.4	False	13C2-PFOA	31966.96	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.88	5471.41	1027.27	204.6	False	13C2-PFOA	31966.96	100.00	HFPO-DA	0.027	0.027	✓
ADONA_1	377.0 / 251.0	2.21	419318.78	911.45	977.7	False	13C2-PFOA	31966.96	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.21	4958.75	1083.52	234.3	False	13C2-PFOA	31966.96	100.00	ADONA	0.012	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	3978.22	19.76	151.8	False	13C2-PFOA	31966.96	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.17	701544.87	964.67	1707.7	False	13C4-PFOS	133096.68	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.17	9613.85	934.84	229.6	False	13C4-PFOS	133096.68	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.78	538320.19	941.77	1542.1	False	13C4-PFOS	133096.68	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	5782.08	1073.00	98.0	False	13C4-PFOS	133096.68	287.00	11CI-PF3OUdS	0.011	0.010	✓

Sample Name	I3463MSD-FS-D(3)	Injection Vial	8
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:30:31 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	323278.01	813.61	3502.3	False	13C4-PFOS	141920.49	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.43	97562.73	826.91	1648.6	False	13C4-PFOS	141920.49	287.00	PFBS	0.302	0.288	✓
PFHxA_1	313.0 / 269.0	1.76	237935.66	969.48	167.2	False	13C2-PFOA	32743.87	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.76	18598.04	997.50	113.6	False	13C2-PFOA	32743.87	100.00	PFHxA	0.078	0.076	✓
PFHpA_1	363.0 / 319.0	2.17	236277.91	937.15	98.1	False	13C2-PFOA	32743.87	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	4059.49	1022.50	73.9	False	13C2-PFOA	32743.87	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	350211.17	921.49	779.1	False	13C4-PFOS	141920.49	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.19	97856.54	873.38	517.0	False	13C4-PFOS	141920.49	287.00	PFHxS	0.279	0.297	✓
PFOA_1	413.0 / 369.0	2.58	358153.37	1150.00	391.8	False	13C2-PFOA	32743.87	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.57	19506.35	1219.17	336.5	False	13C2-PFOA	32743.87	100.00	PFOA	0.054	0.052	✓
PFNA_1	463.0 / 419.0	2.97	259048.49	1008.70	529.9	False	13C2-PFOA	32743.87	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	85004.12	1014.17	359.1	False	13C2-PFOA	32743.87	100.00	PFNA	0.328	0.330	✓
PFOS_1	499.0 / 80.0	2.97	472810.68	838.96	872.4	False	13C4-PFOS	141920.49	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	105568.63	1003.39	702.4	False	13C4-PFOS	141920.49	287.00	PFOS	0.223	0.190	✓
PFDA_1	513.0 / 469.0	3.32	244176.01	915.44	422.3	False	13C2-PFOA	32743.87	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.32	8825.49	910.76	525.1	False	13C2-PFOA	32743.87	100.00	PFDA	0.036	0.034	✓
PFUnA_1	563.0 / 519.0	3.64	218373.14	888.99	424.7	False	13C2-PFOA	32743.87	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.64	9853.39	945.98	365.2	False	13C2-PFOA	32743.87	100.00	PFUnA	0.045	0.042	✓
PFDoA_1	613.0 / 569.0	3.92	174497.12	828.06	426.8	False	13C2-PFOA	32743.87	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	30339.88	857.07	337.6	False	13C2-PFOA	32743.87	100.00	PFDoA	0.174	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.16	145639.95	762.99	336.7	False	13C2-PFOA	32743.87	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.16	9990.73	803.99	295.2	False	13C2-PFOA	32743.87	100.00	PFTTrDA	0.069	0.069	✓
PFTeDA_1	713.0 / 669.0	4.38	170420.53	836.28	425.2	False	13C2-PFOA	32743.87	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.37	9193.12	943.36	520.4	False	13C2-PFOA	32743.87	100.00	PFTeDA	0.054	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.48	29795.73	1252.51	6546.6	False	d3-MeFOSAA	10720.53	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.48	13548.81	1000.18	25348.3	False	d3-MeFOSAA	10720.53	400.00	NMeFOSAA	0.455	0.556	✓
NEtFOSAA_1	584.0 / 419.0	3.64	25672.05	1082.36	656.7	False	d3-MeFOSAA	10720.53	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.64	1870.27	1081.75	48841.8	False	d3-MeFOSAA	10720.53	400.00	NEtFOSAA	0.073	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	4335.66	16.17	269.3	False	13C2-PFOA	32743.87	100.00				
13C2-PFDA	515.0 / 470.0	3.32	5661.14	20.17	2943.6	False	13C2-PFOA	32743.87	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	2414.42	89.33	281.5	False	d3-MeFOSAA	10720.53	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.88	190708.32	941.77	678.7	False	13C2-PFOA	32743.87	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.87	5017.55	919.70	171.8	False	13C2-PFOA	32743.87	100.00	HFPO-DA	0.026	0.027	✓
ADONA_1	377.0 / 251.0	2.21	410354.37	870.80	971.8	False	13C2-PFOA	32743.87	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.21	5146.03	1097.76	195.1	False	13C2-PFOA	32743.87	100.00	ADONA	0.013	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	4385.63	21.26	153.8	False	13C2-PFOA	32743.87	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.17	690789.70	890.82	1856.1	False	13C4-PFOS	141920.49	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.17	9624.39	877.68	249.8	False	13C4-PFOS	141920.49	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.78	507744.97	833.05	1340.7	False	13C4-PFOS	141920.49	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	4582.17	797.46	77.8	False	13C4-PFOS	141920.49	287.00	11CI-PF3OUdS	0.009	0.010	✓



Sample Name	I3455-FS(0)	Injection Vial	9
Sample ID	M6-1518-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:39:28 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	9992.02	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	9992.02	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	9992.02	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	9992.02	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	20549.66	100.71	331.6	False	13C2-PFOA	24921.75	100.00				
13C2-PFDA	515.0 / 470.0	3.32	19958.99	93.45	473.2	False	13C2-PFOA	24921.75	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	7899.32	313.59	549.8	False	d3-MeFOSAA	9992.02	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	24921.75	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	12956.78	82.54	265.8	False	13C2-PFOA	24921.75	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	114251.68	287.00	11CI-PF3OUdS	N/A	0.010	✓



Sample Name	I3457-FS(0)	Injection Vial	10
Sample ID	H5-2139-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:48:24 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10754.07	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10754.07	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10754.07	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	10754.07	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	19169.94	91.91	271.4	False	13C2-PFOA	25475.38	100.00				
13C2-PFDA	515.0 / 470.0	3.32	22848.72	104.65	1117.6	False	13C2-PFOA	25475.38	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	10140.43	374.03	307.5	False	d3-MeFOSAA	10754.07	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25475.38	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	14777.88	92.09	261.1	False	13C2-PFOA	25475.38	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:40:53 AM

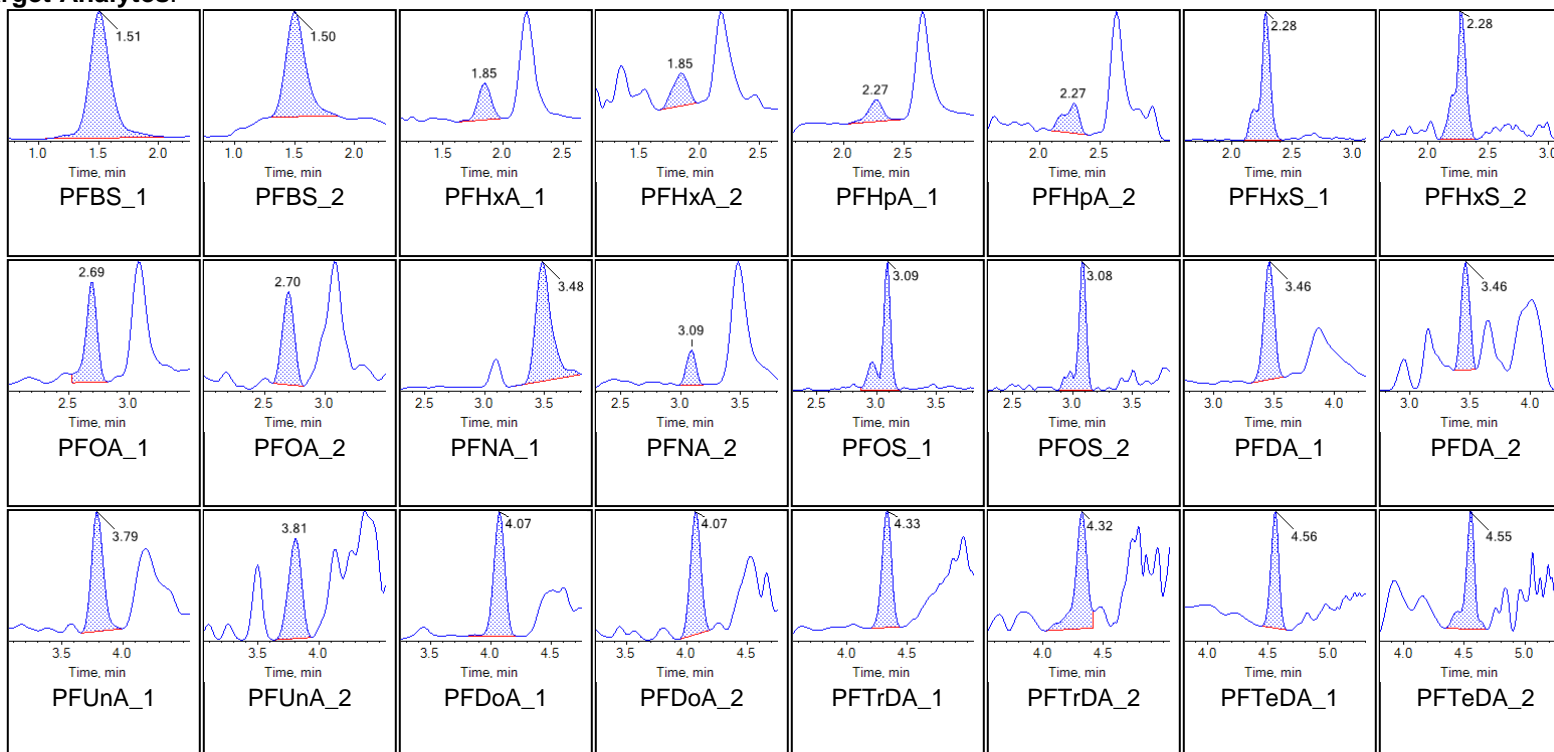
Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	120241.44	287.00	11CI-PF3OUdS	N/A	0.010	✓

Chromatograms

Sample Name	KL64	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

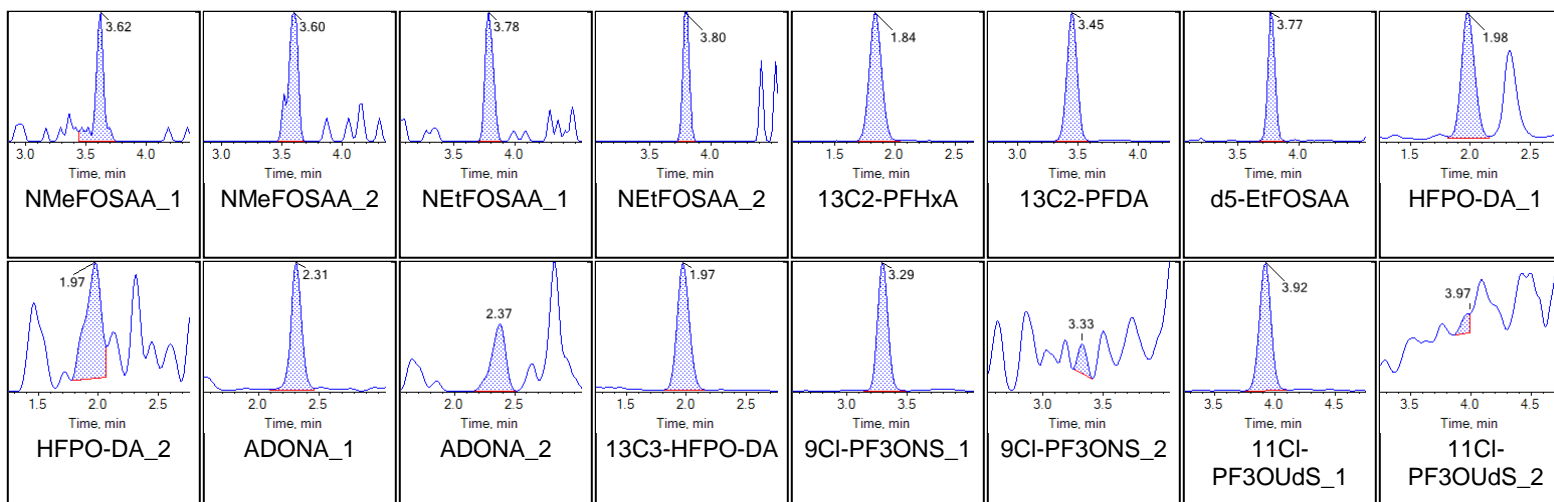
Chromatograms

Target Analytes:

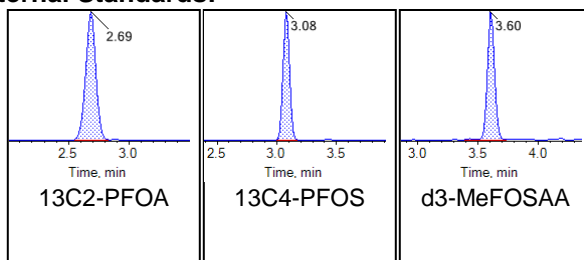




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





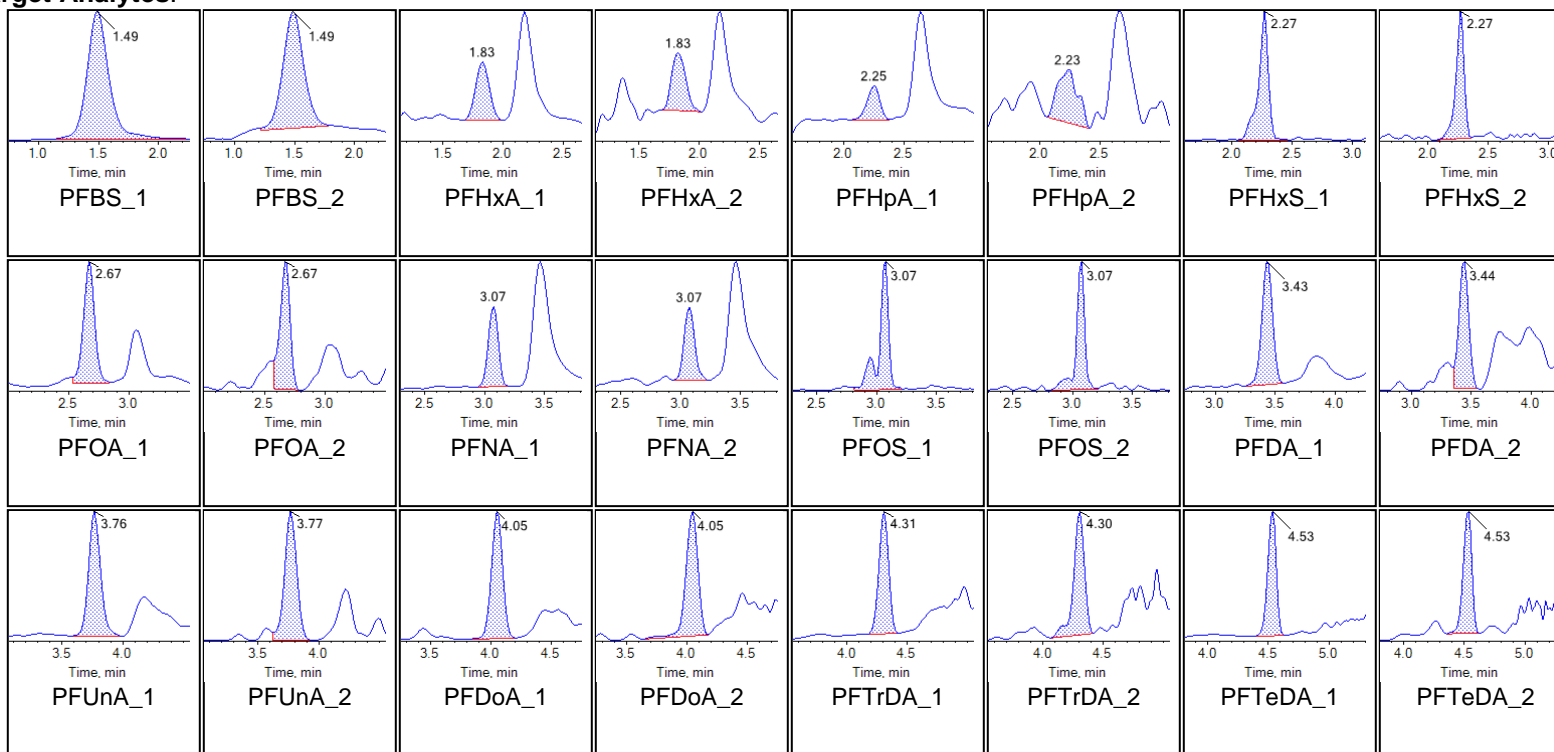
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL65	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:23:13 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

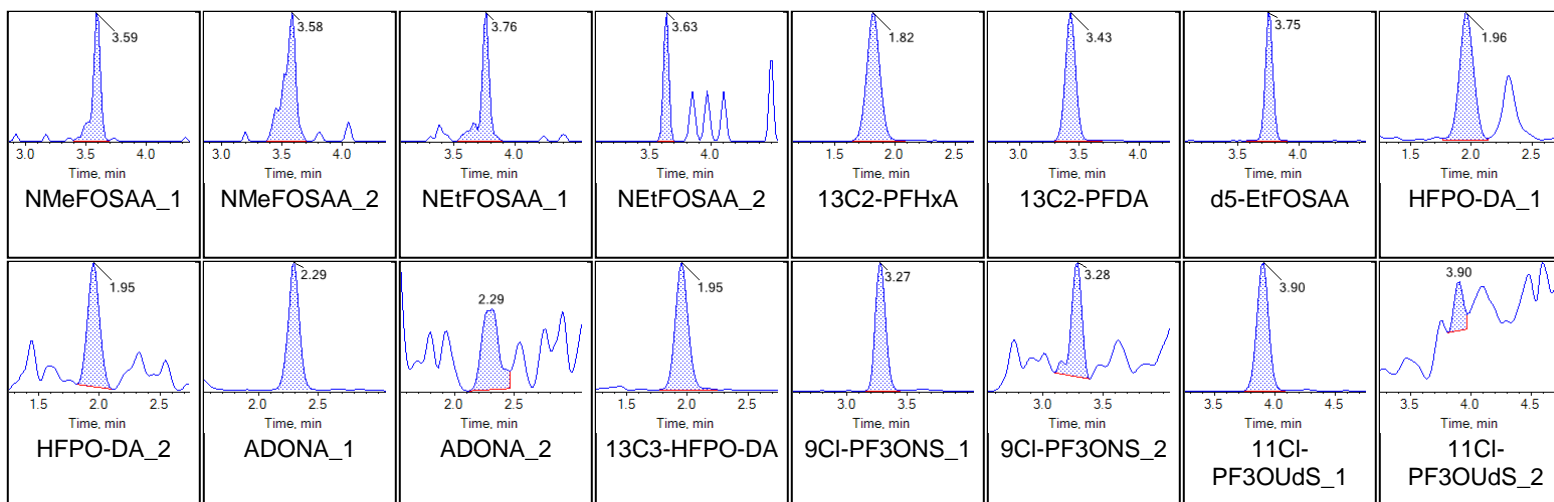
Chromatograms

Target Analytes:

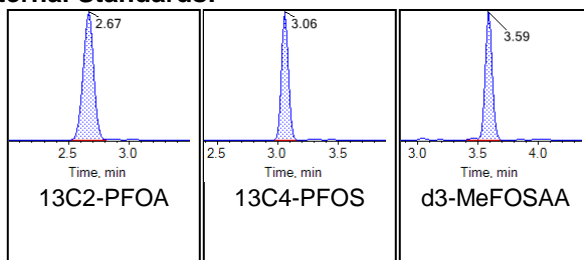




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





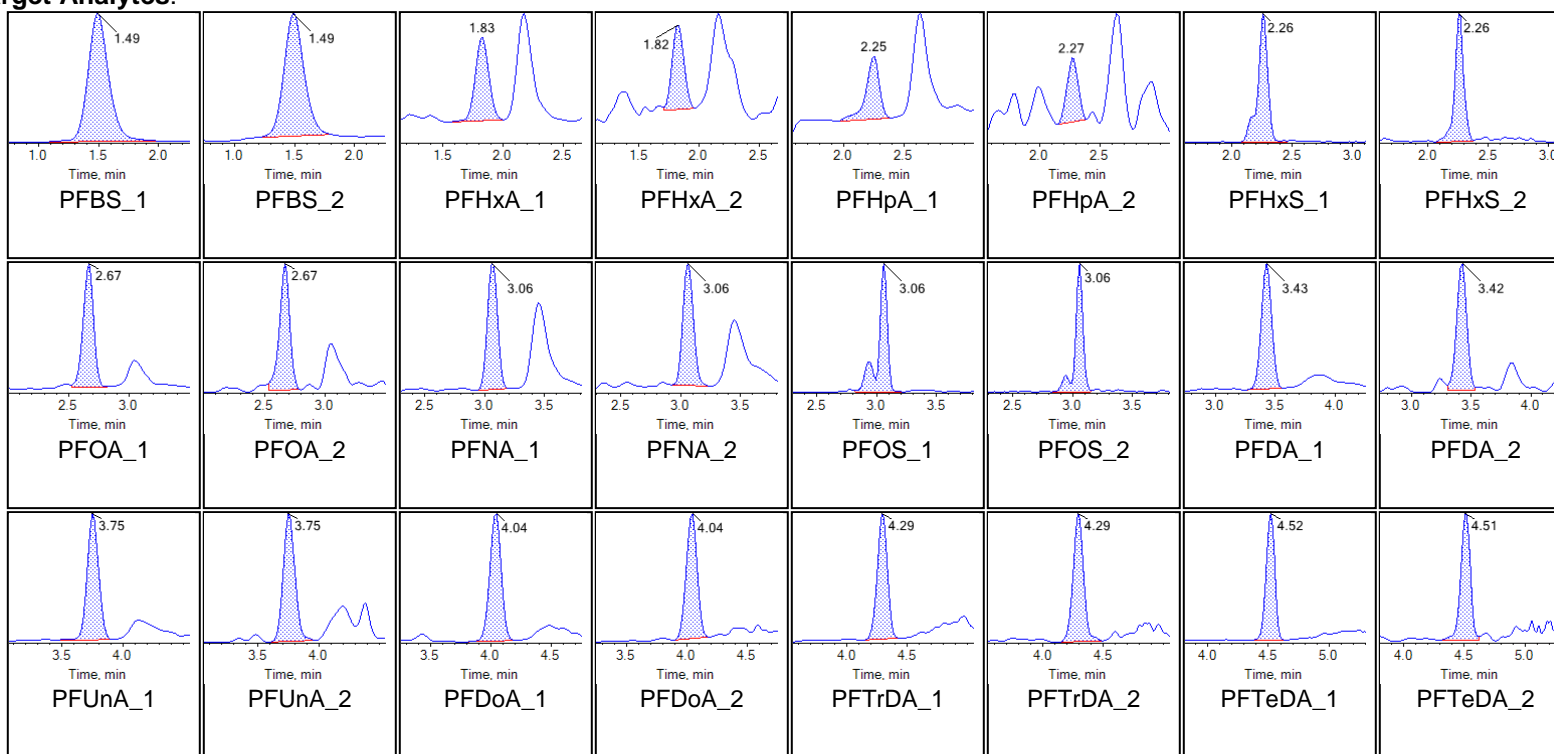
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL66	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:32:11 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

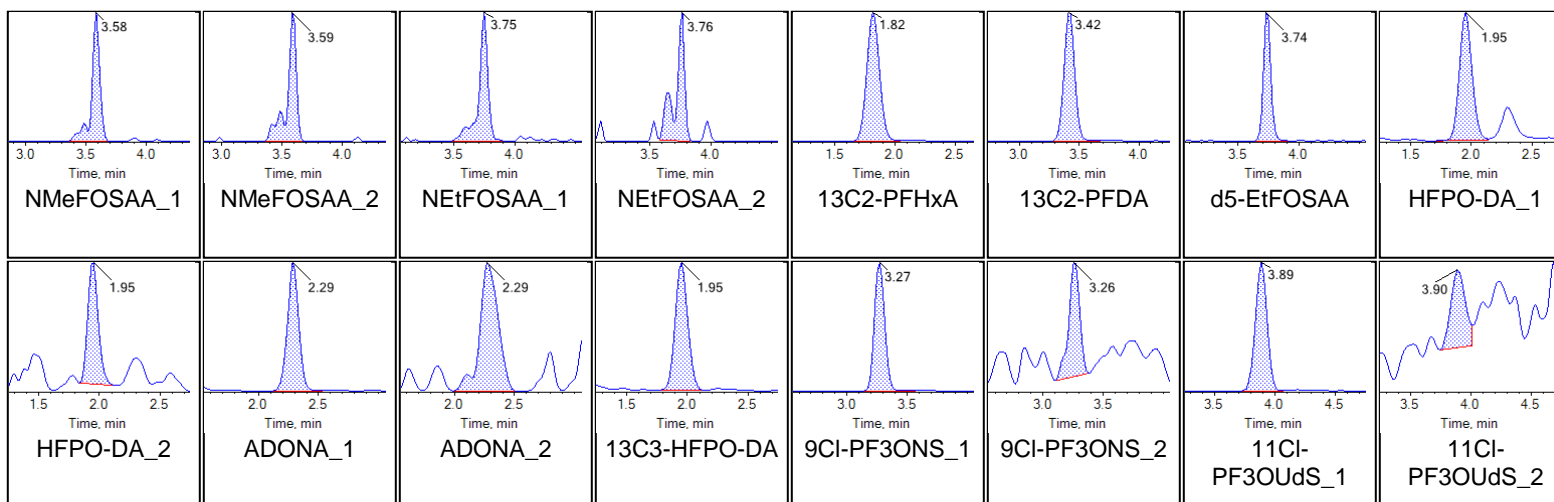
Chromatograms

Target Analytes:

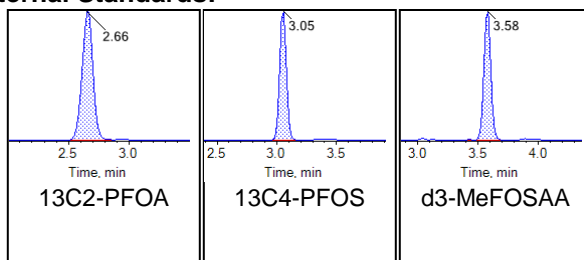




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





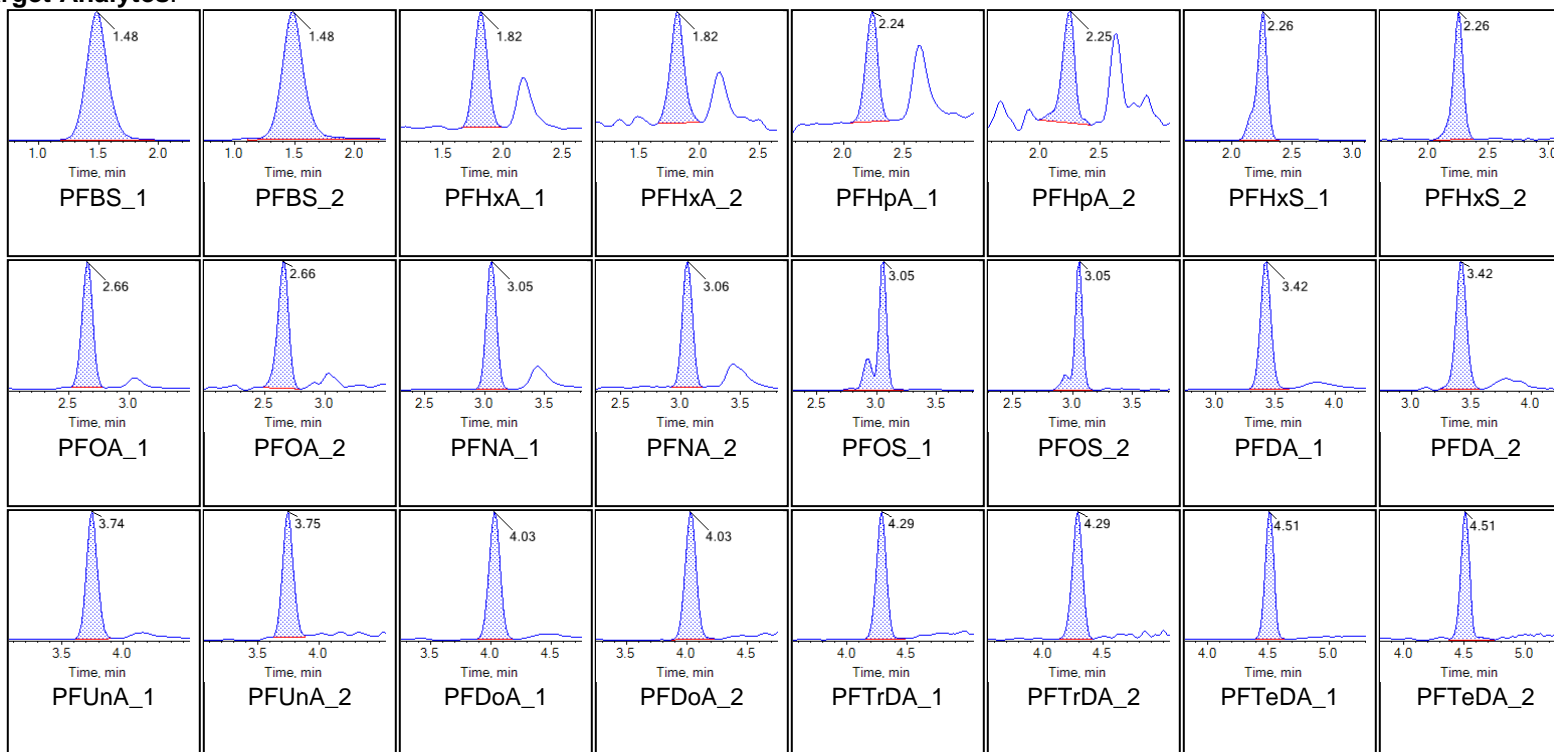
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL67	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:41:08 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

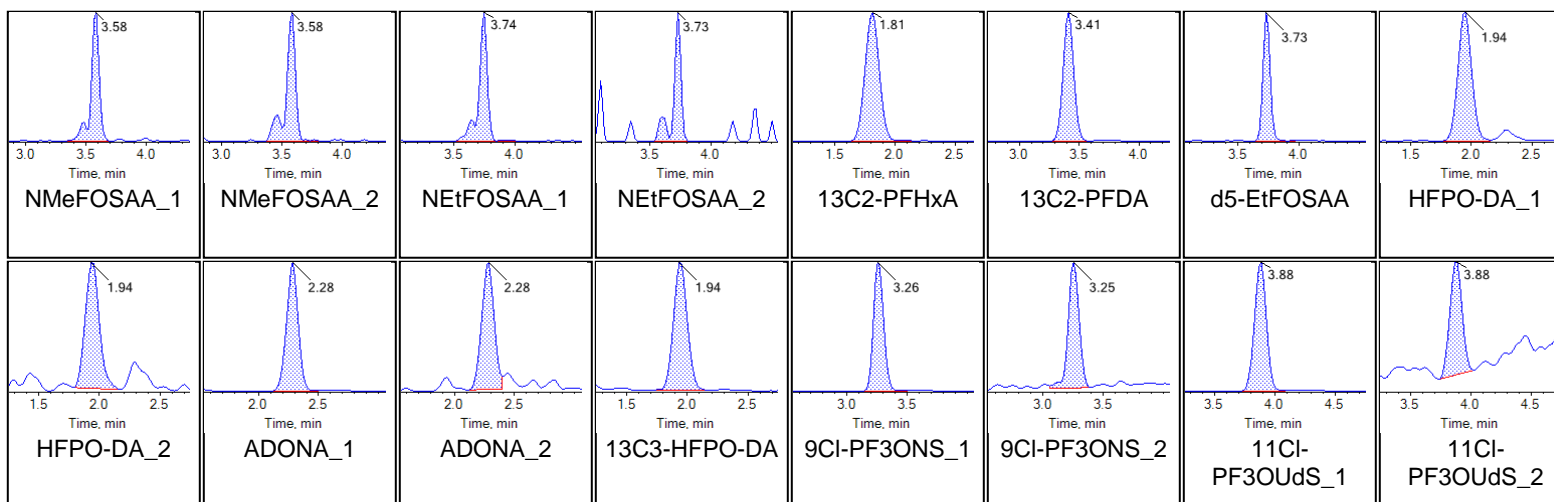
Chromatograms

Target Analytes:

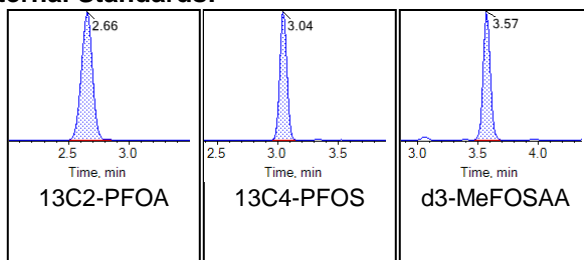




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





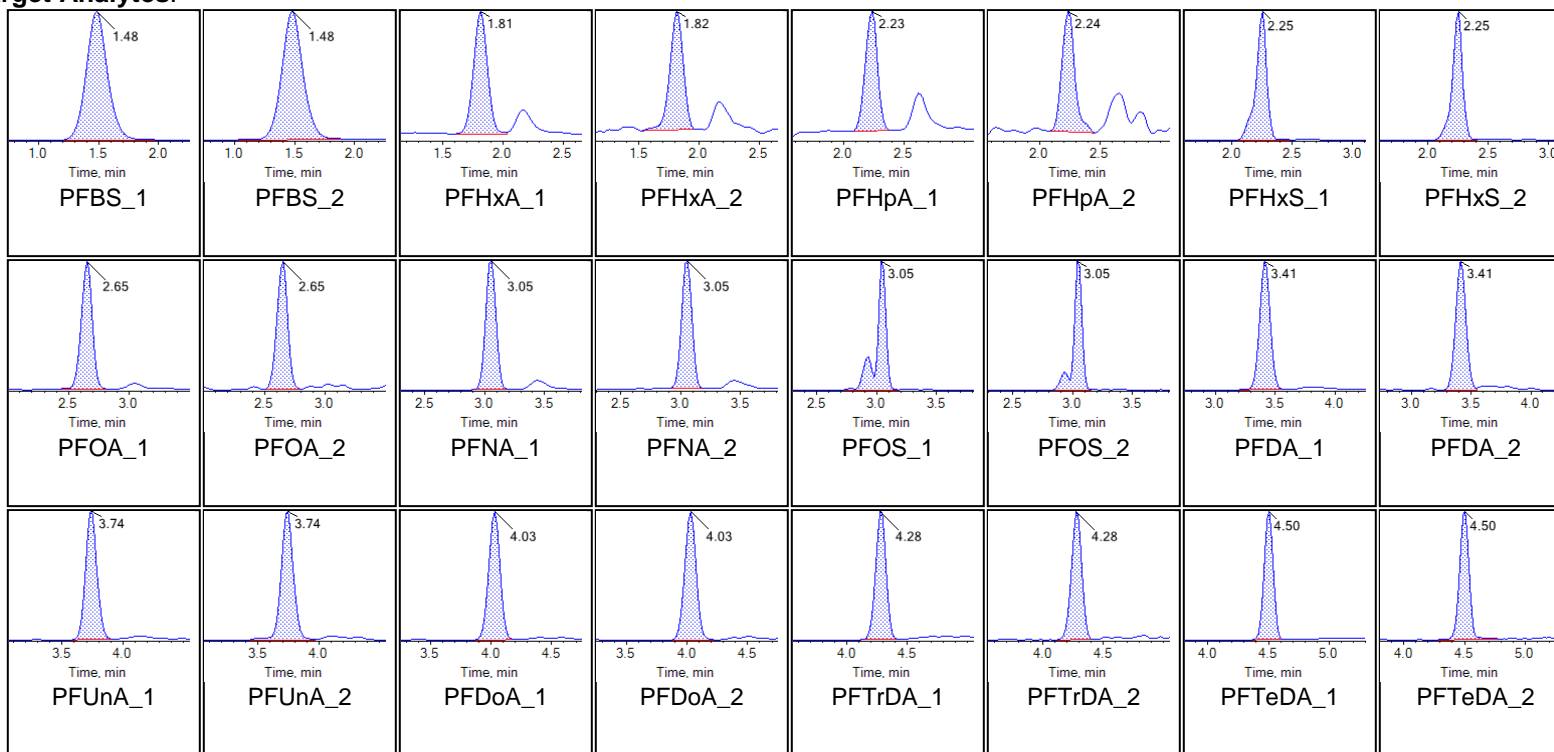
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL68	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:50:04 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

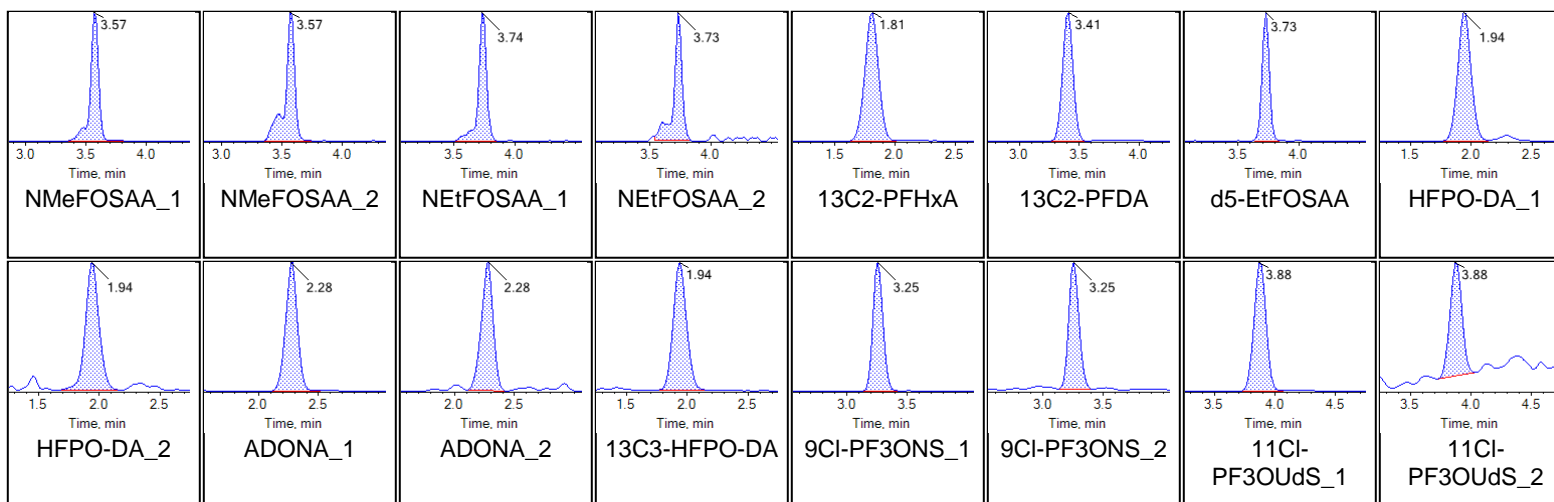
Chromatograms

Target Analytes:

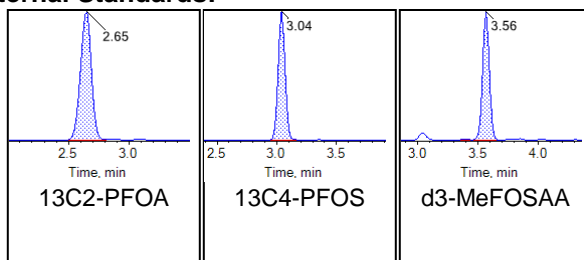




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

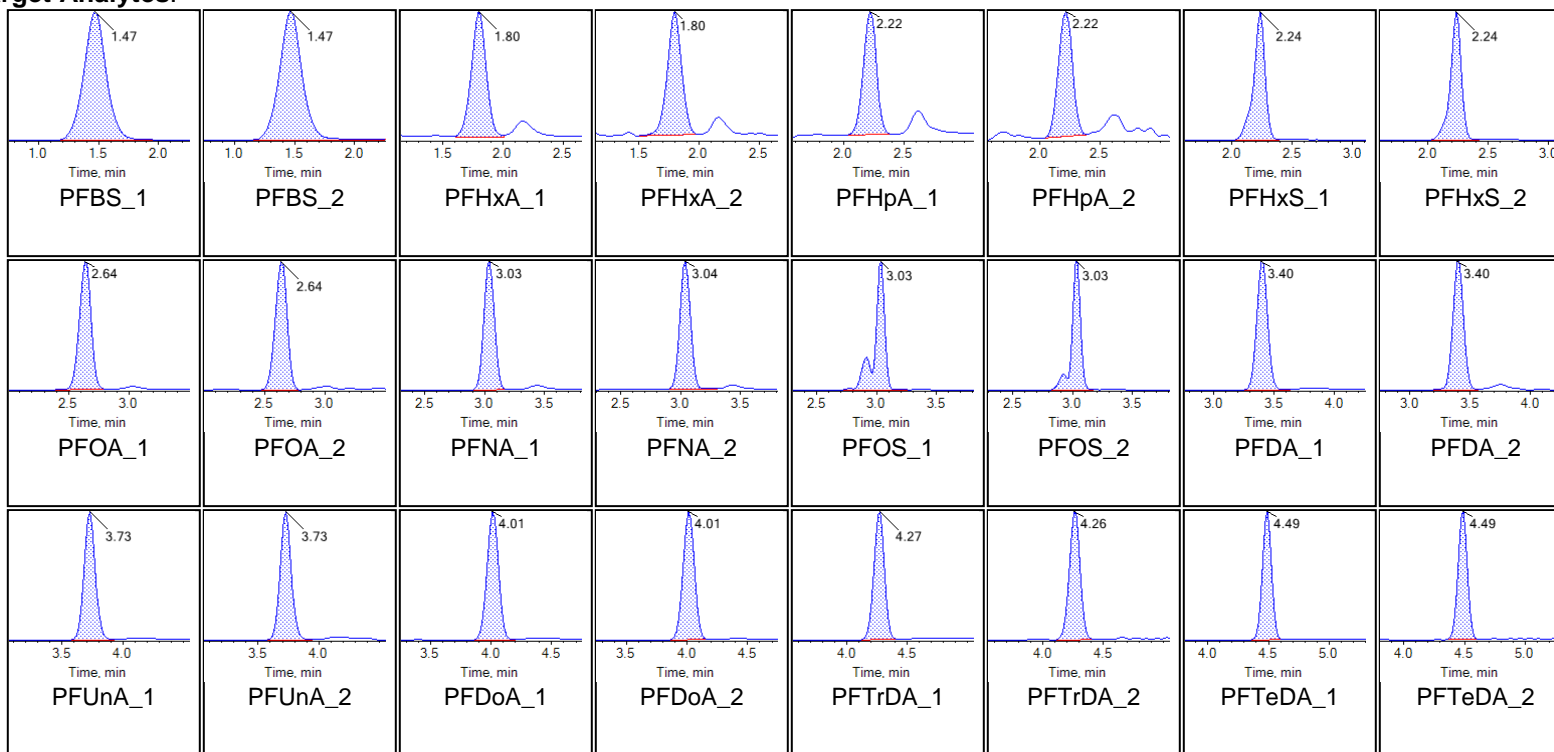
Internal Standards:



Sample Name	KL69	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:59:00 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

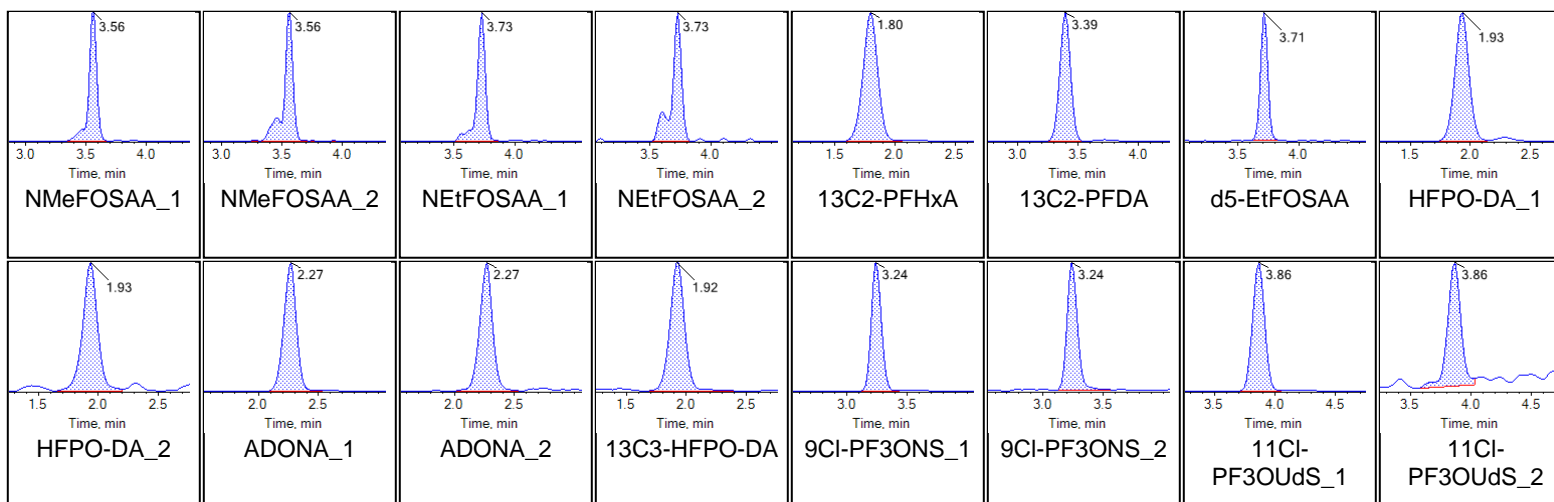
Chromatograms

Target Analytes:

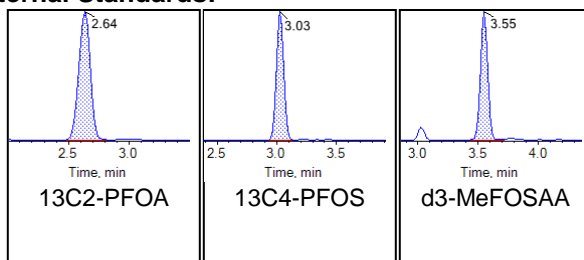




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

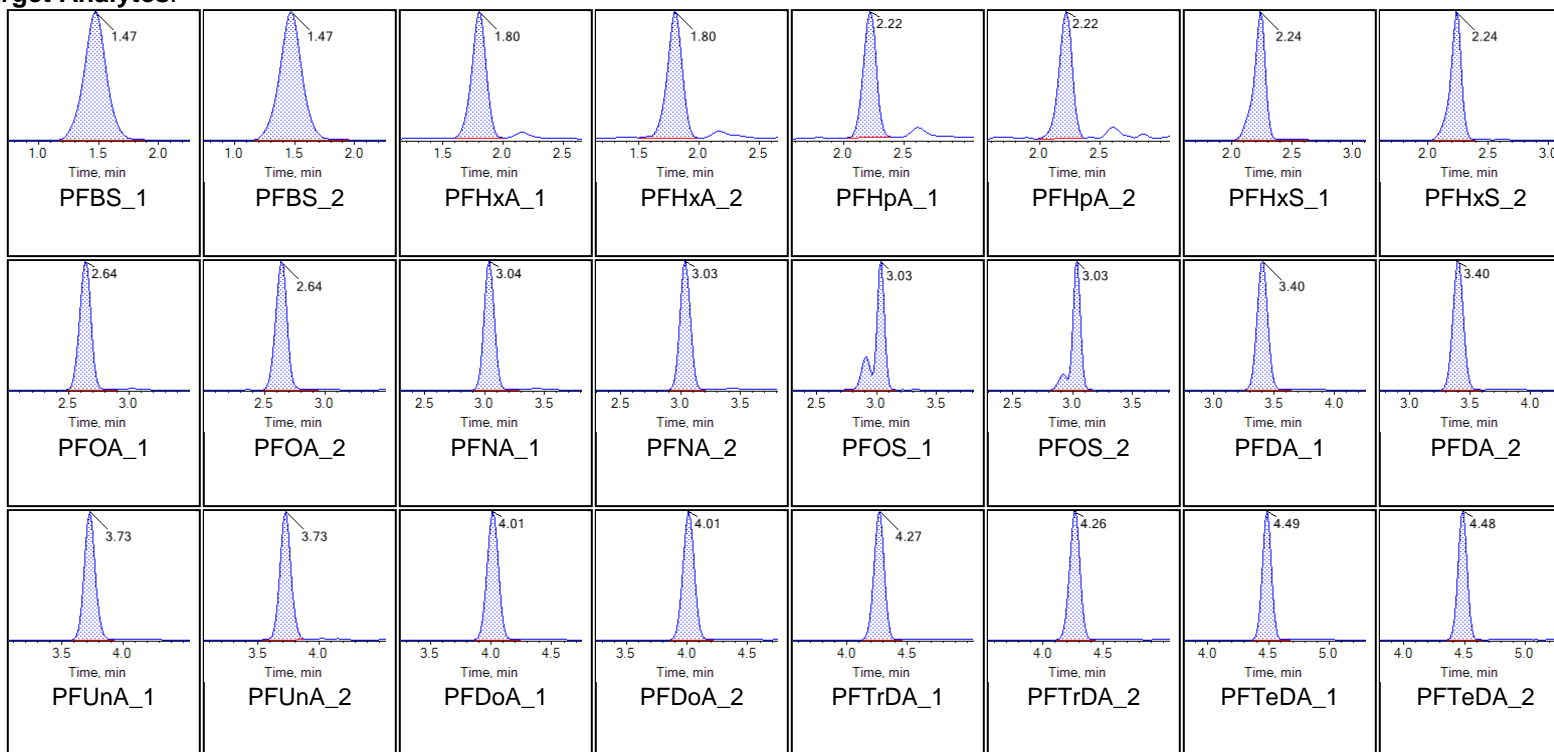
Internal Standards:



Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

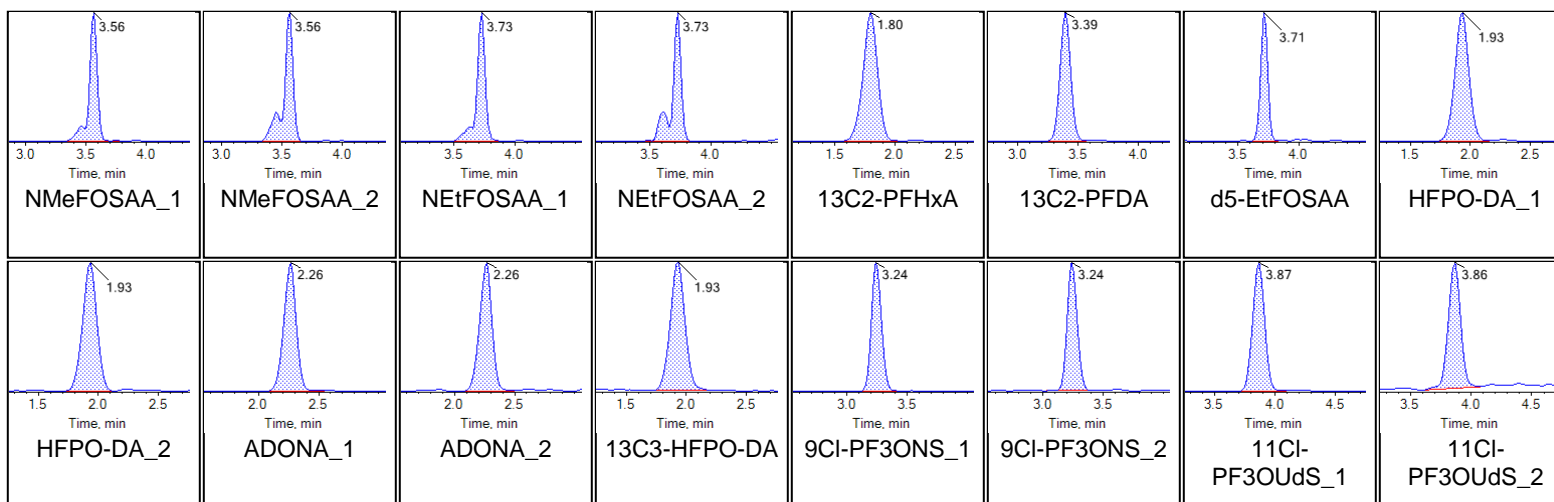
Chromatograms

Target Analytes:

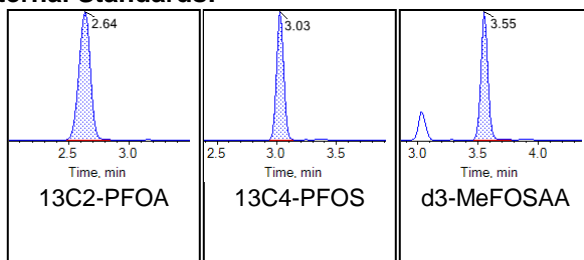




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





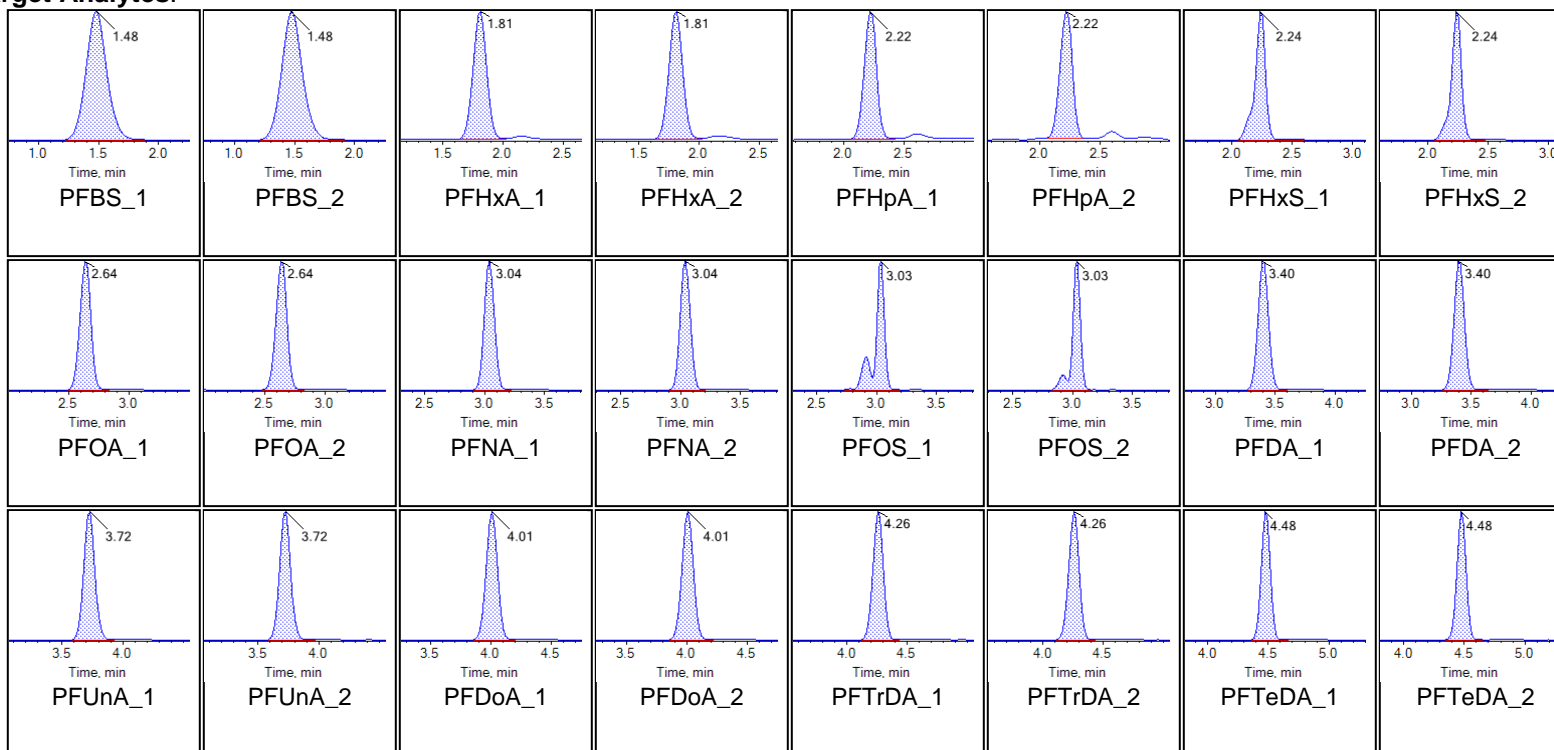
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL71	Injection Vial	9
Sample ID	L8	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:16:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

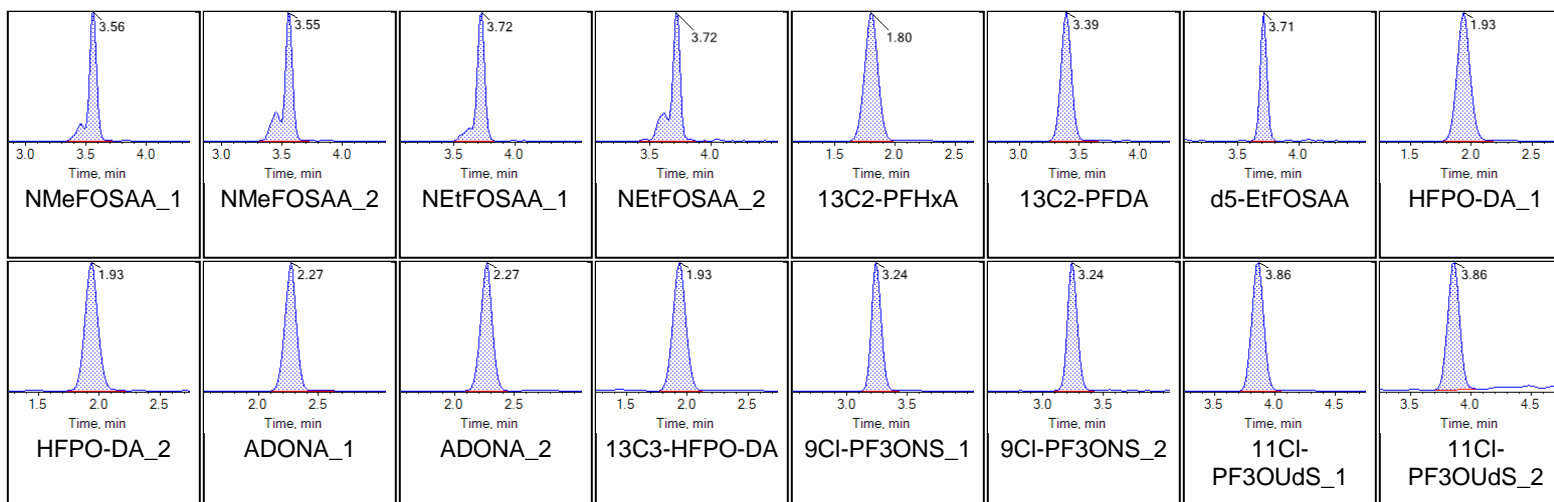
Chromatograms

Target Analytes:

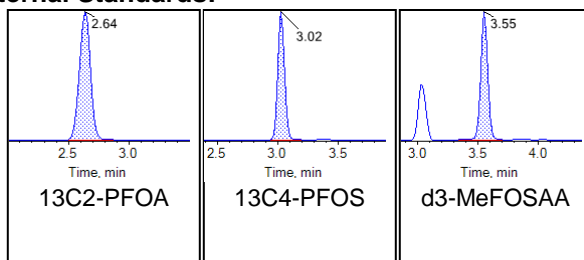




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





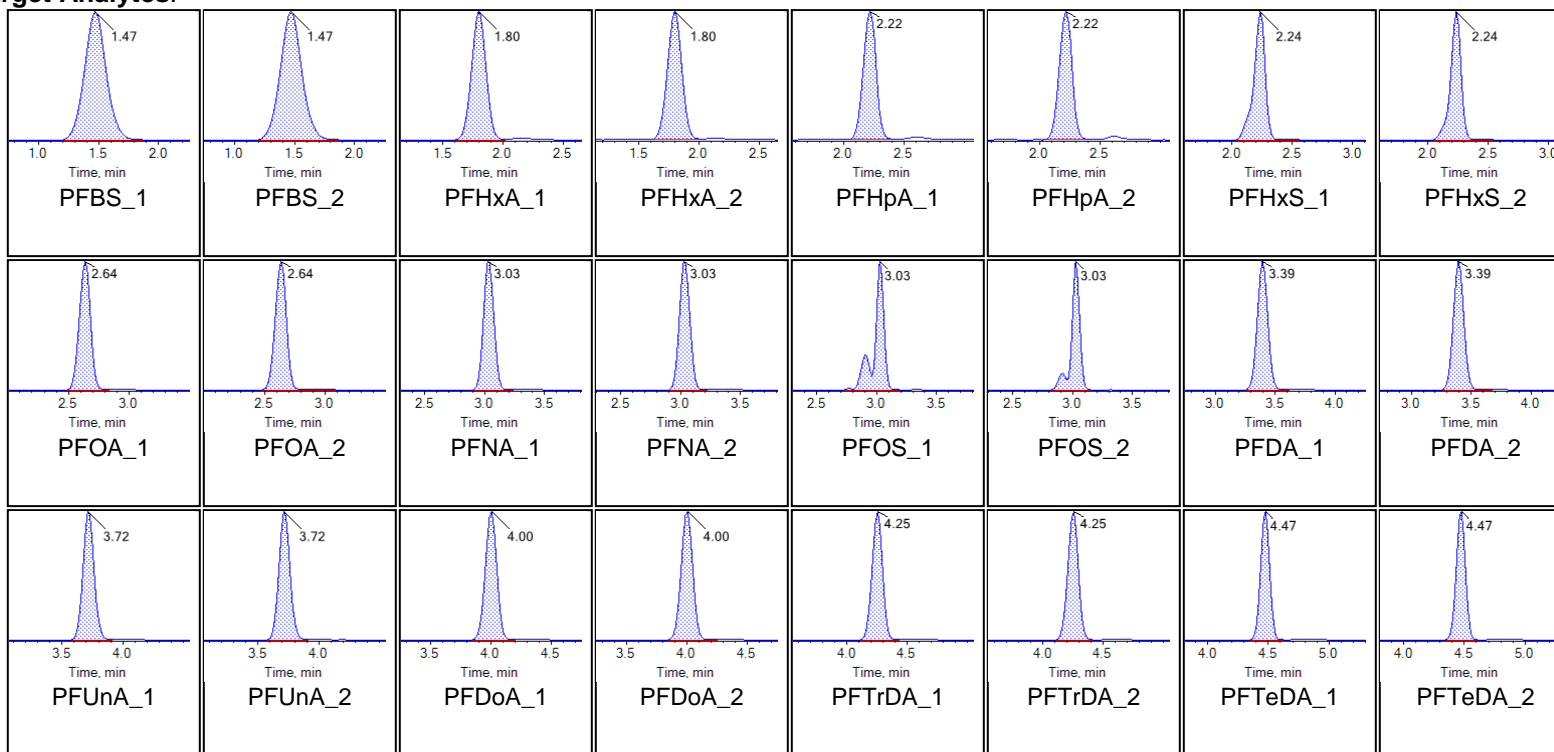
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL72	Injection Vial	10
Sample ID	L9	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:25:48 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

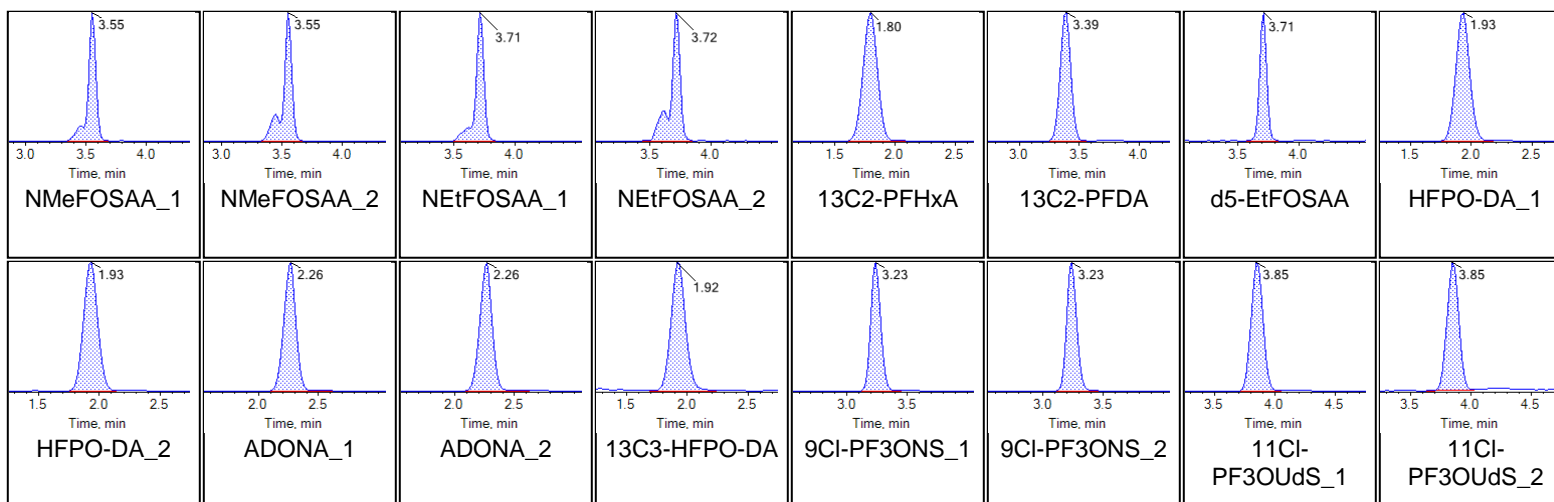
Chromatograms

Target Analytes:

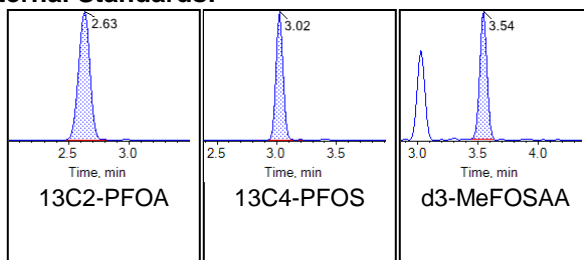




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

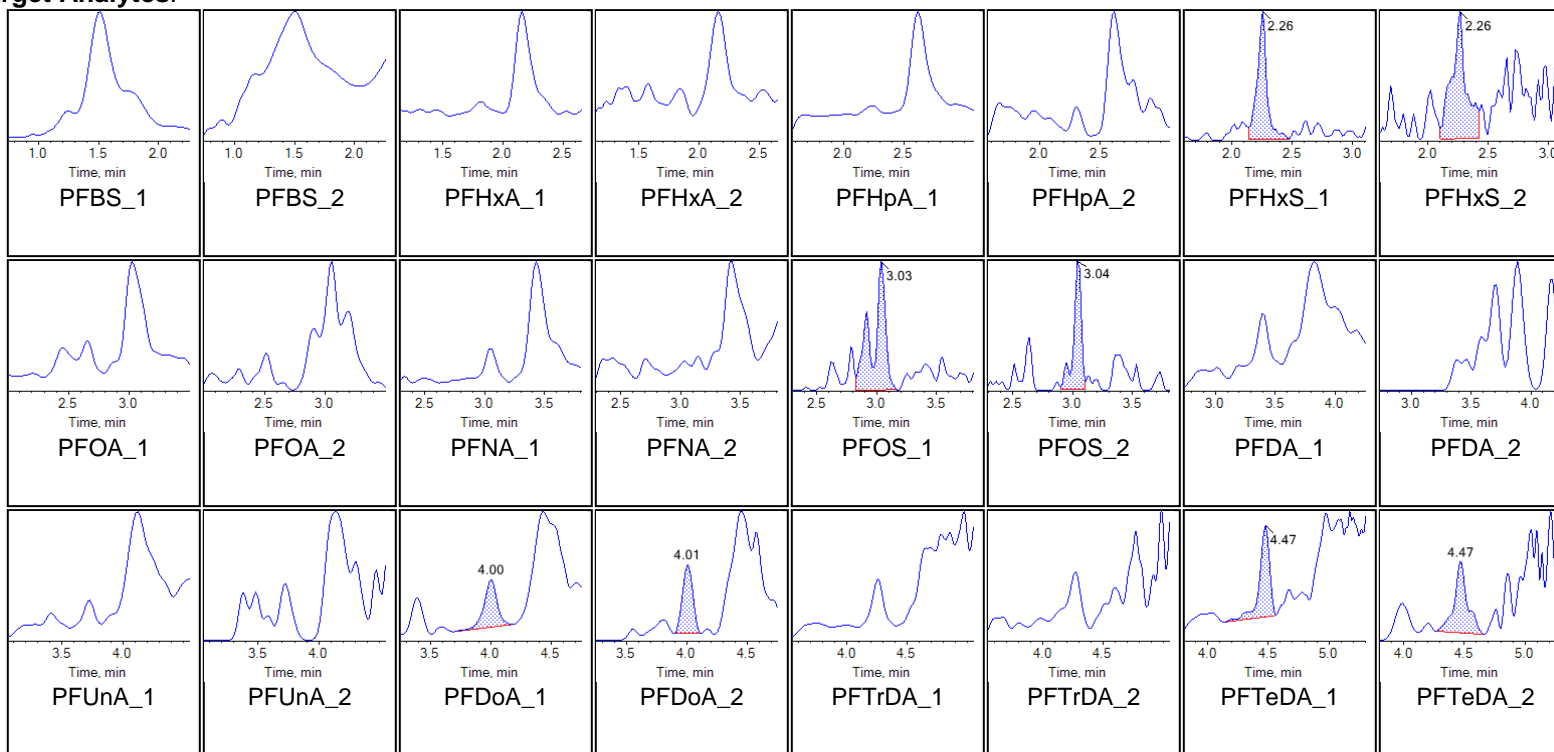
Internal Standards:



Sample Name	KL73 IB	Injection Vial	11
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:34:45 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

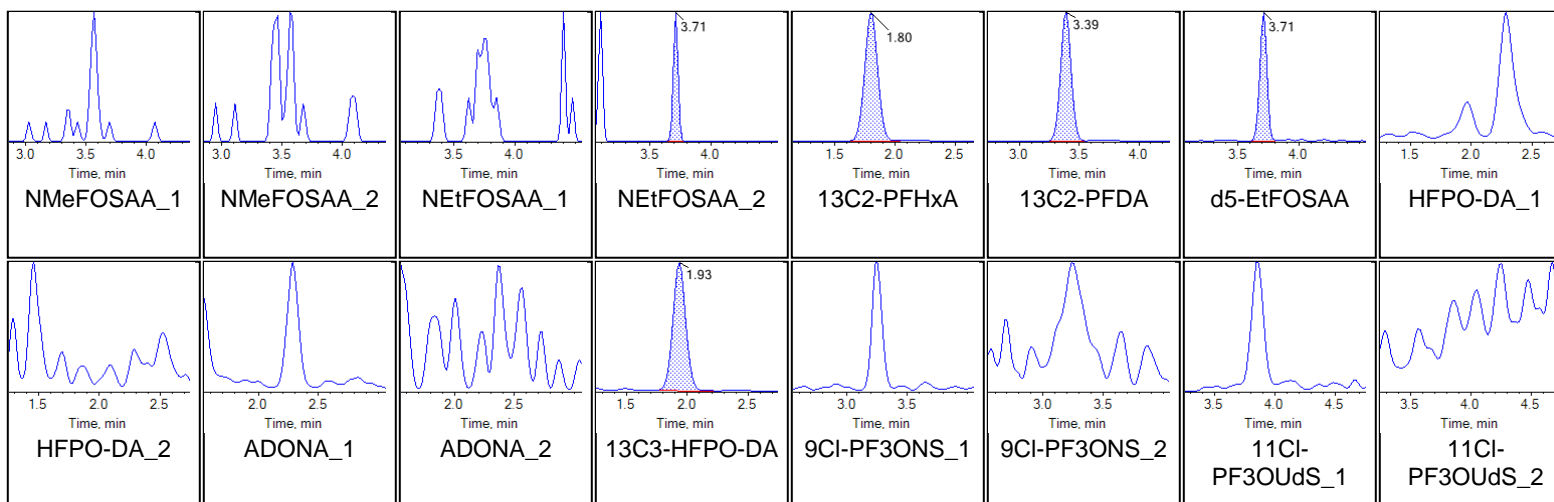
Chromatograms

Target Analytes:

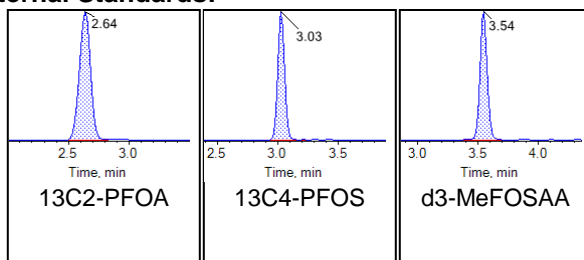




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

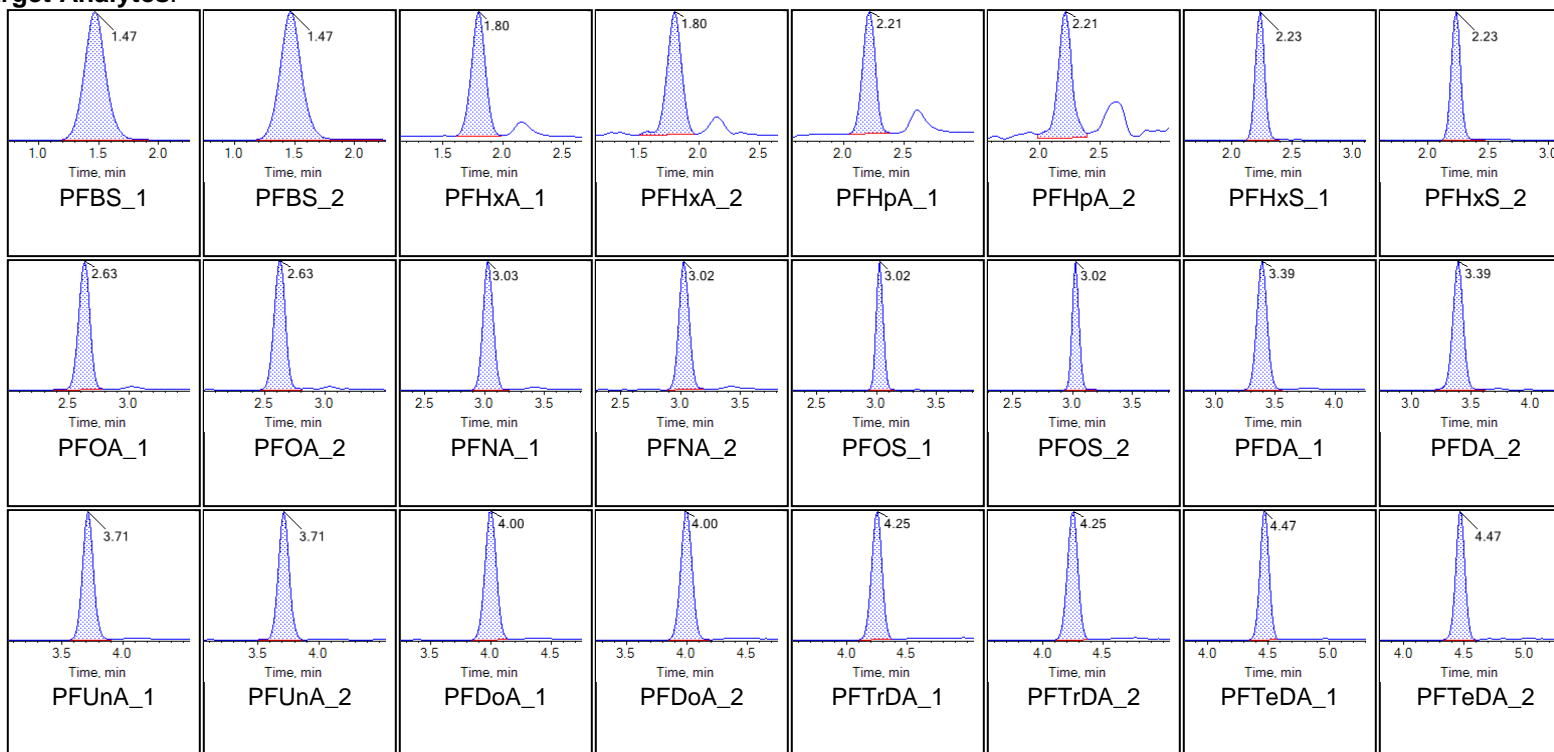
Internal Standards:



Sample Name	KL74 ICC	Injection Vial	12
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:43:42 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

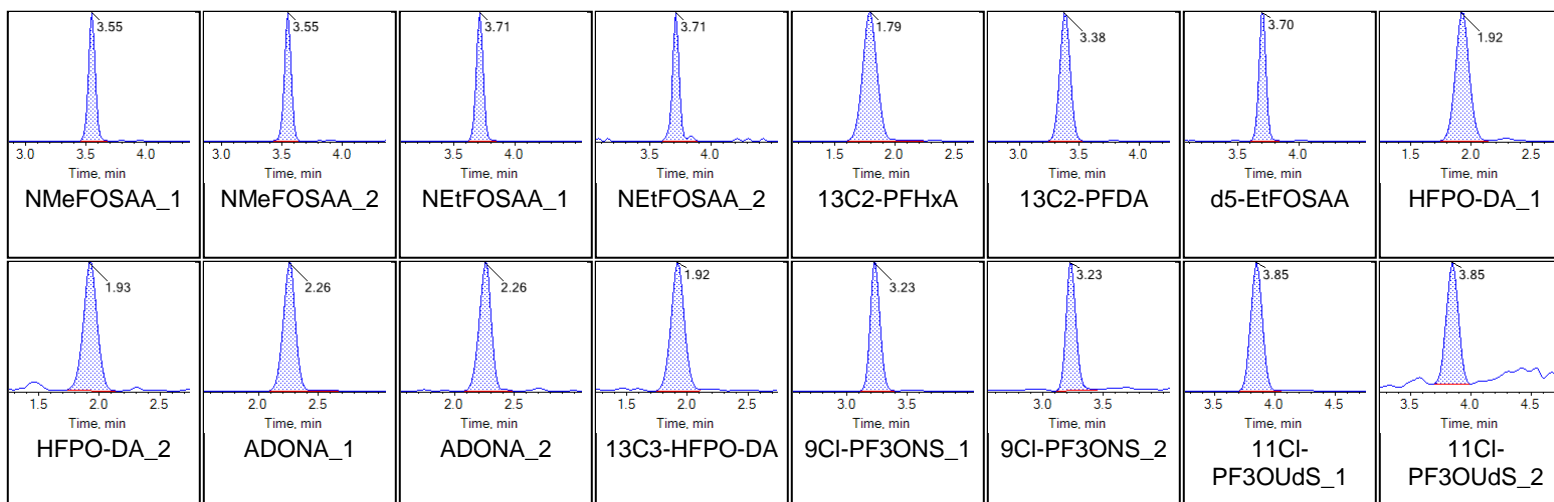
Chromatograms

Target Analytes:

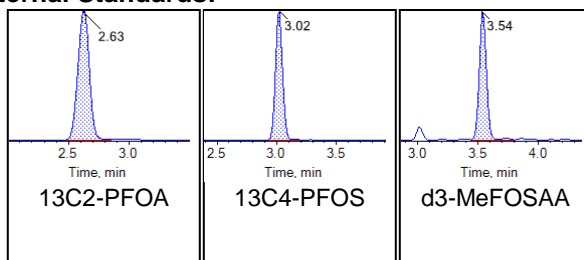




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





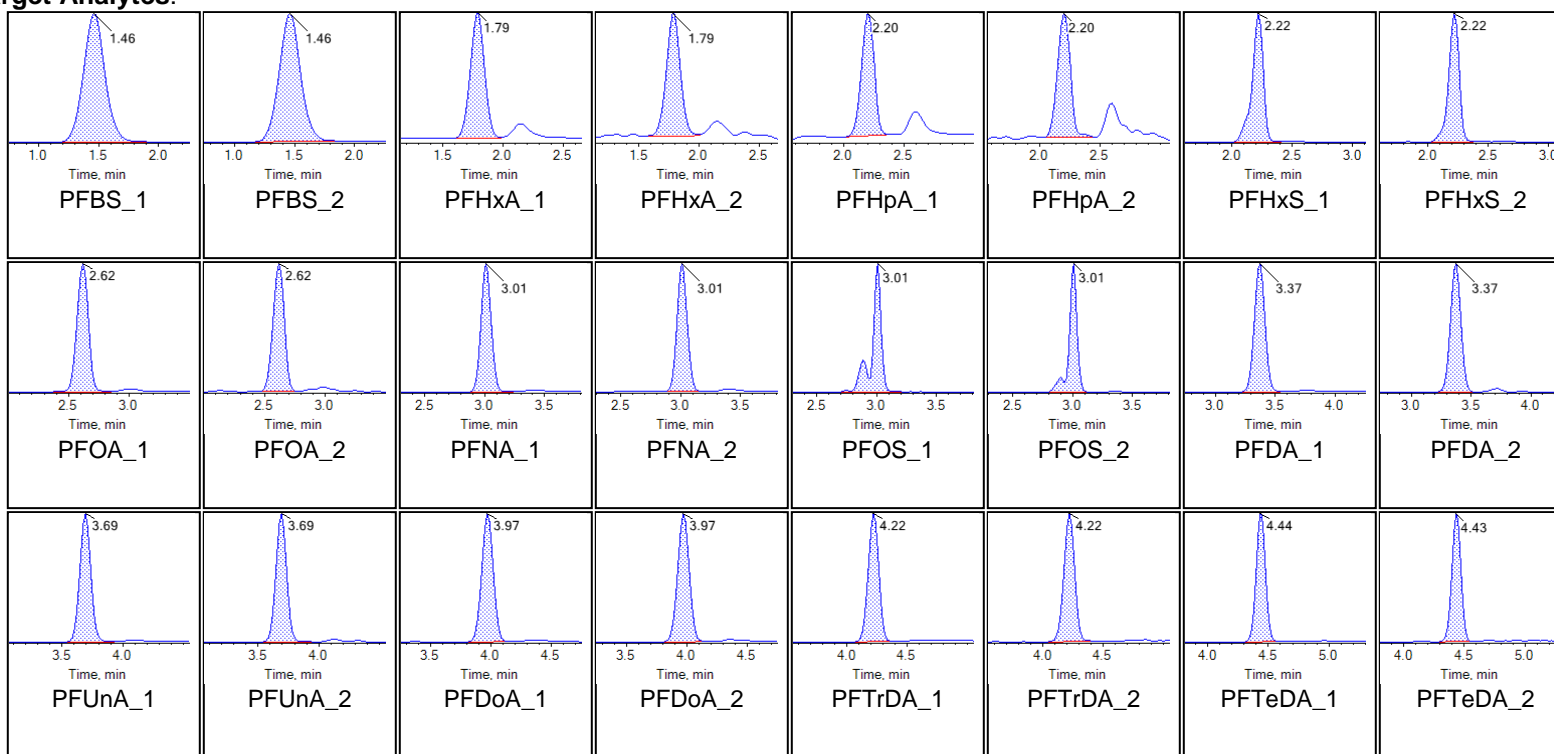
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL69 CCV	Injection Vial	25
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 7:39:58 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

Chromatograms

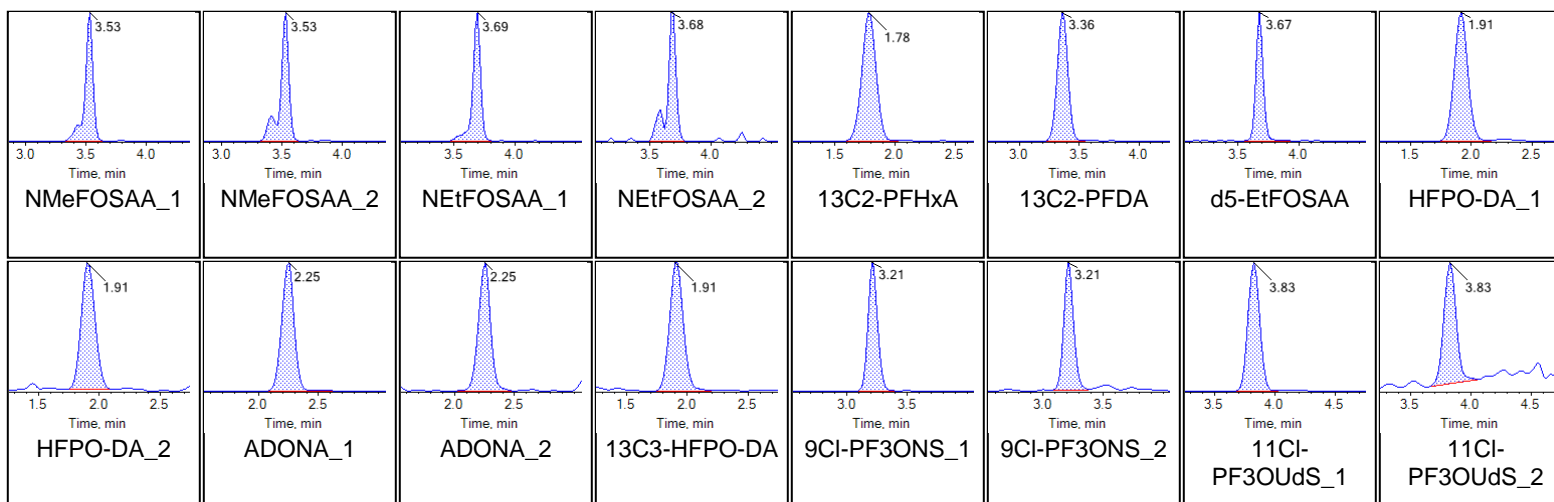
Target Analytes:



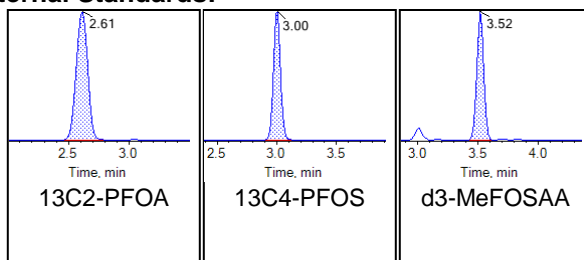


Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM



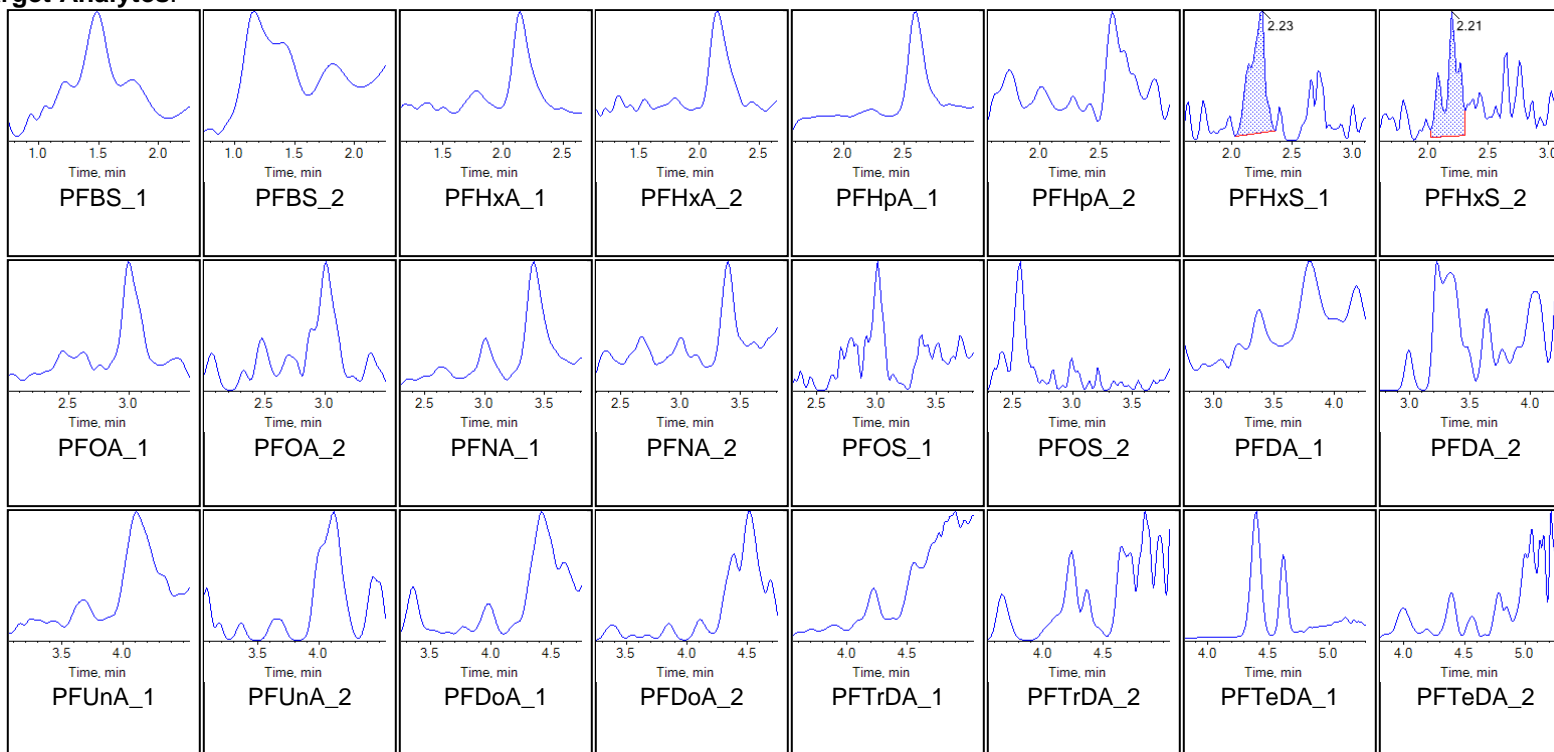
Internal Standards:



Sample Name	CU242PB-FS(0)	Injection Vial	27
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 7:57:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

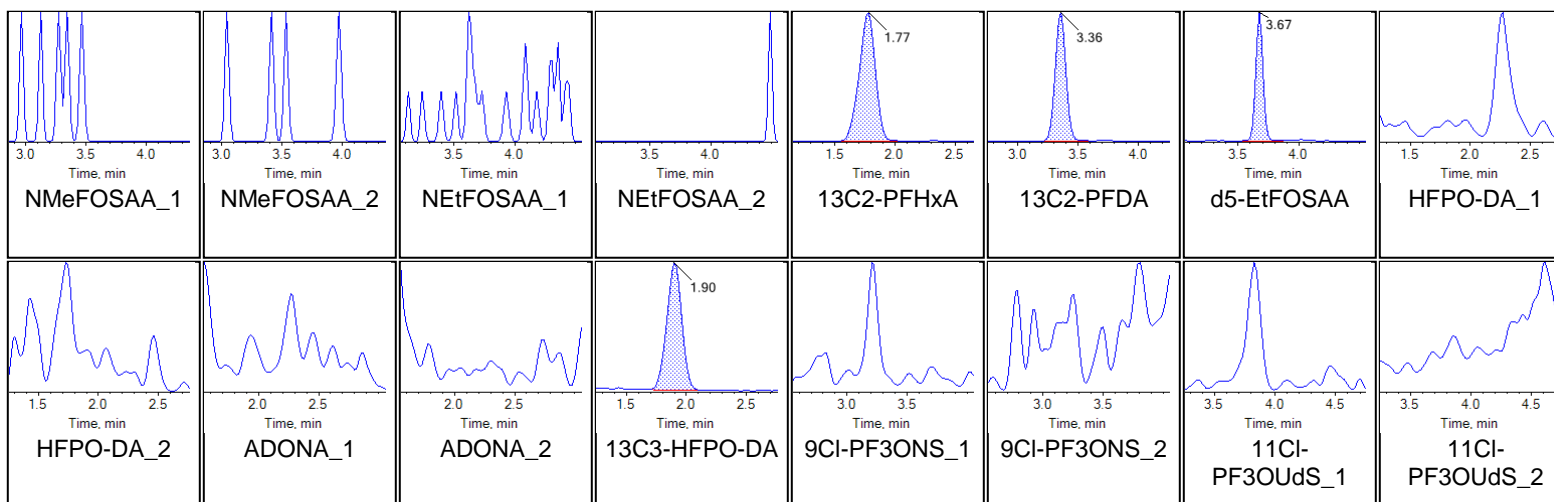
Chromatograms

Target Analytes:

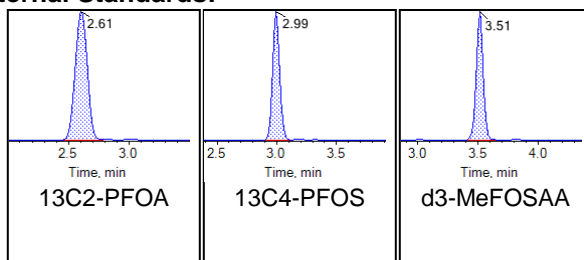




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





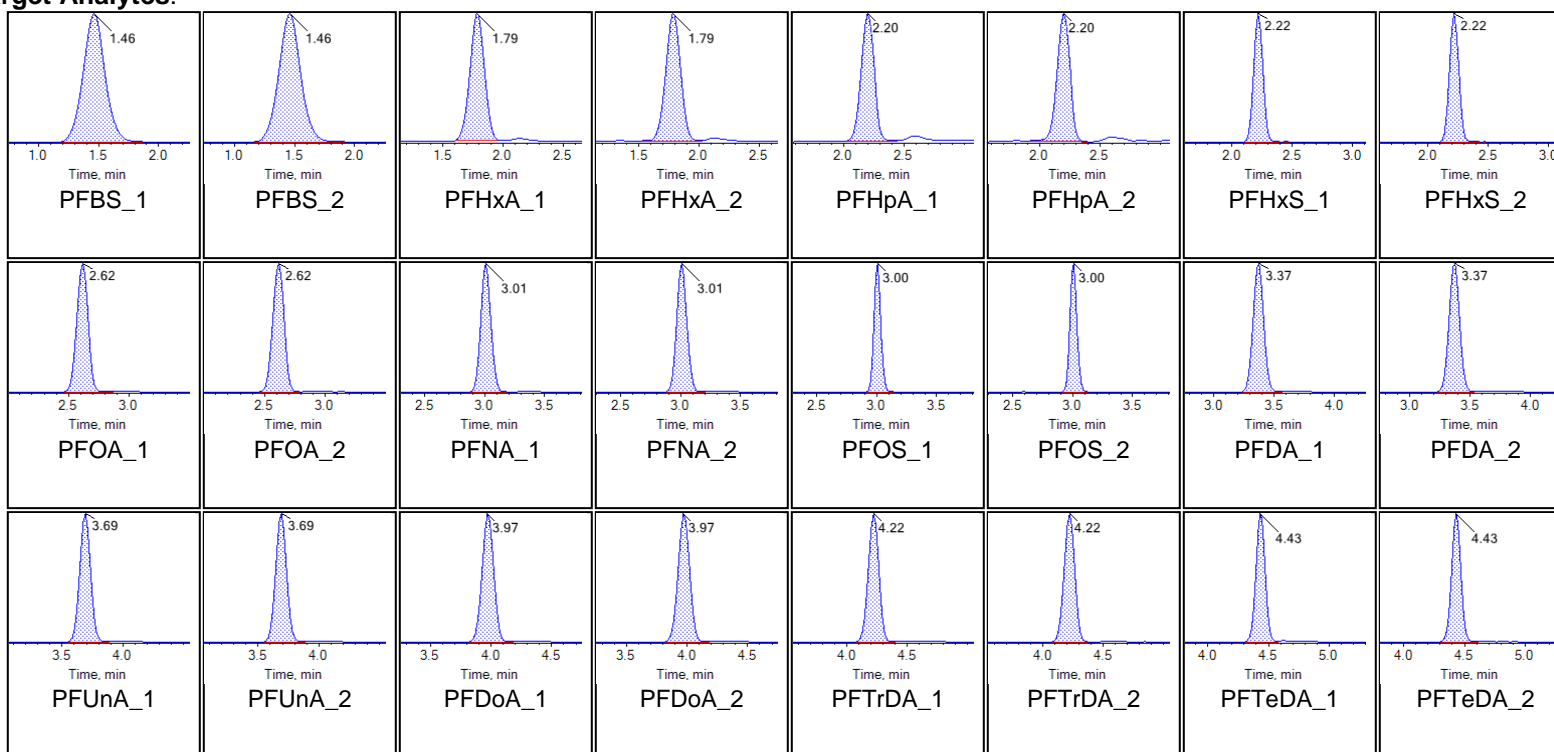
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	CU243LCS-FS(0)	Injection Vial	28
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:06:49 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

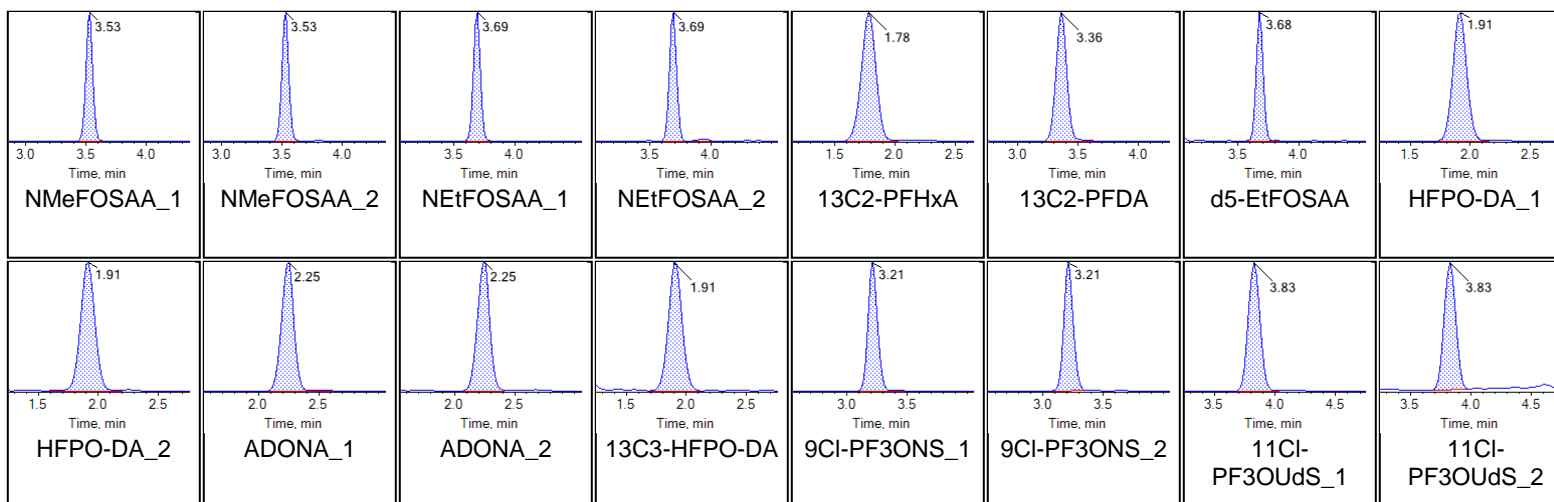
Chromatograms

Target Analytes:

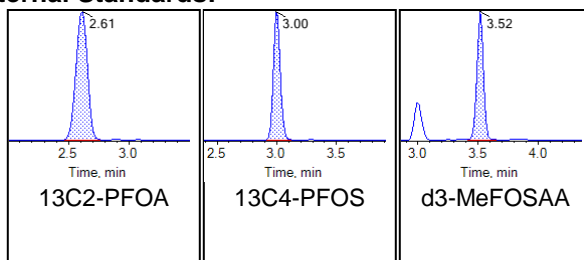




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

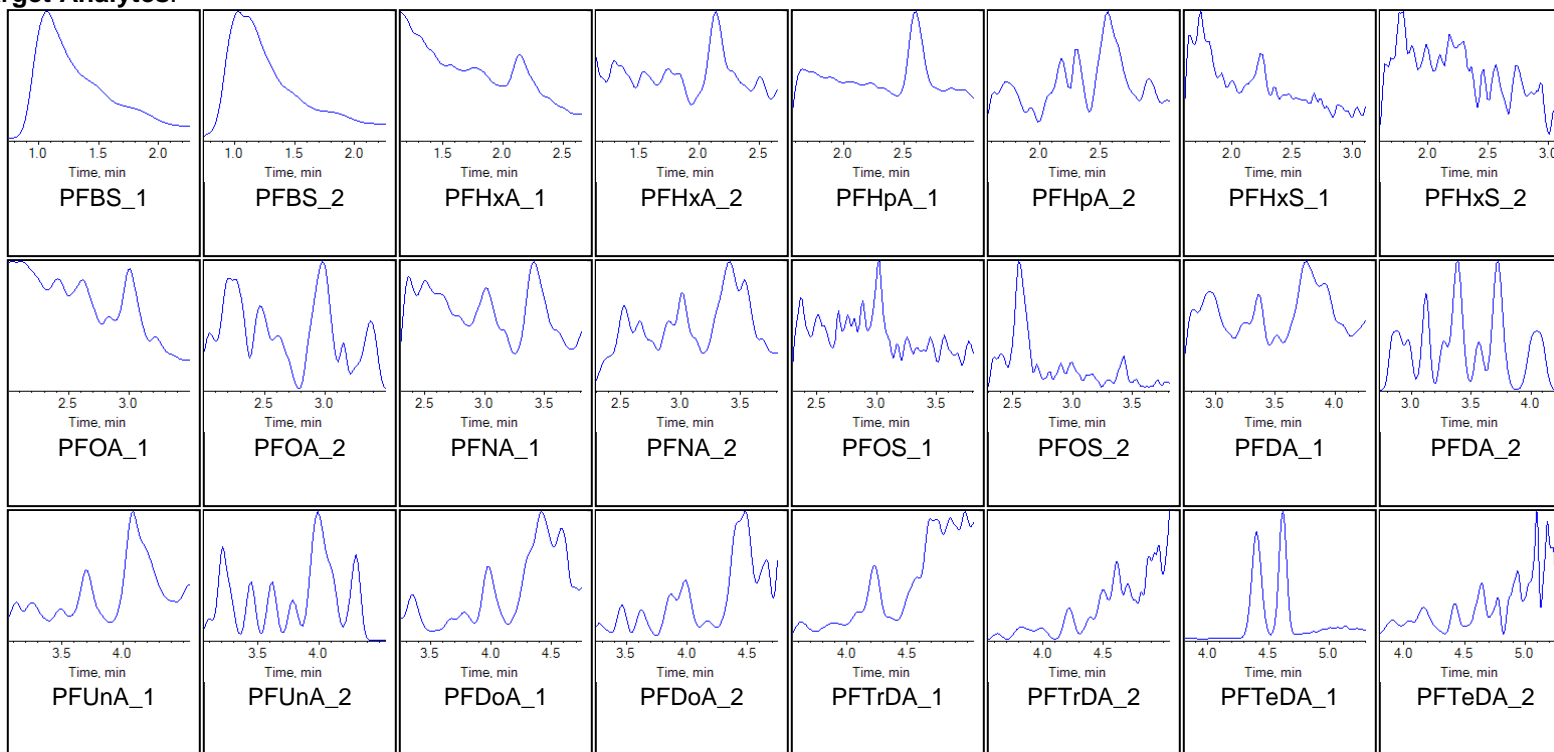
Internal Standards:



Sample Name	I3451-FS(0)	Injection Vial	29
Sample ID	Q6-0082-DW0001-20190530	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:15:46 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

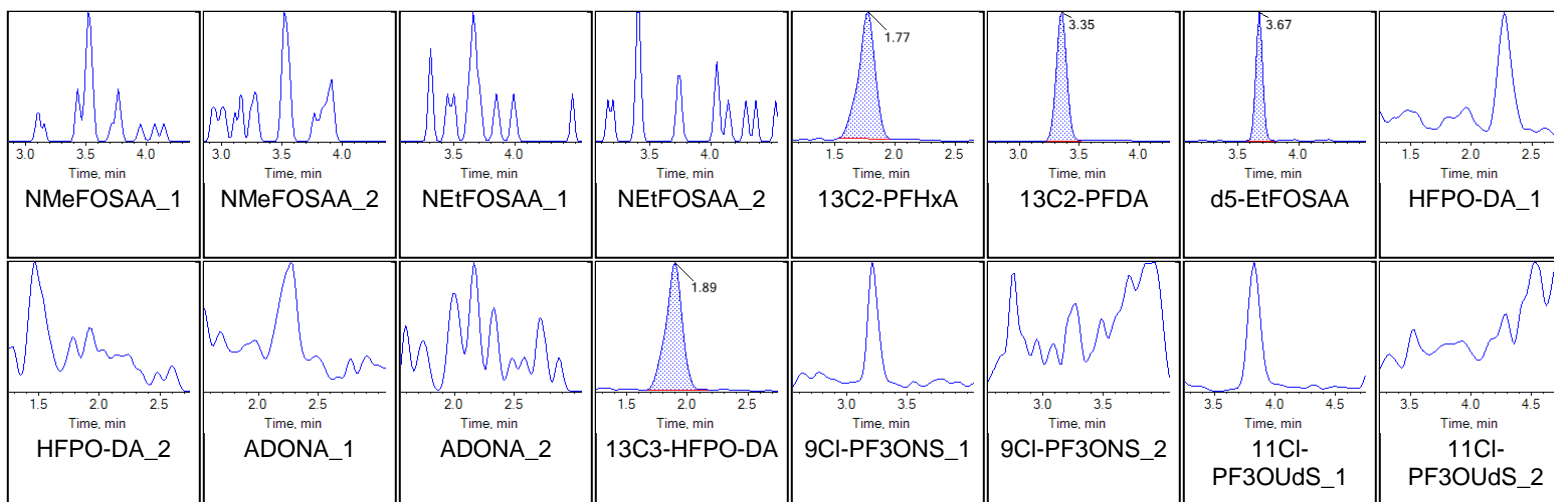
Chromatograms

Target Analytes:

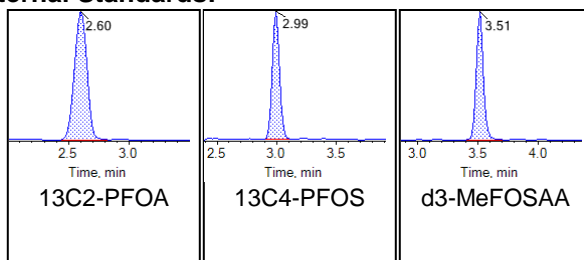




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

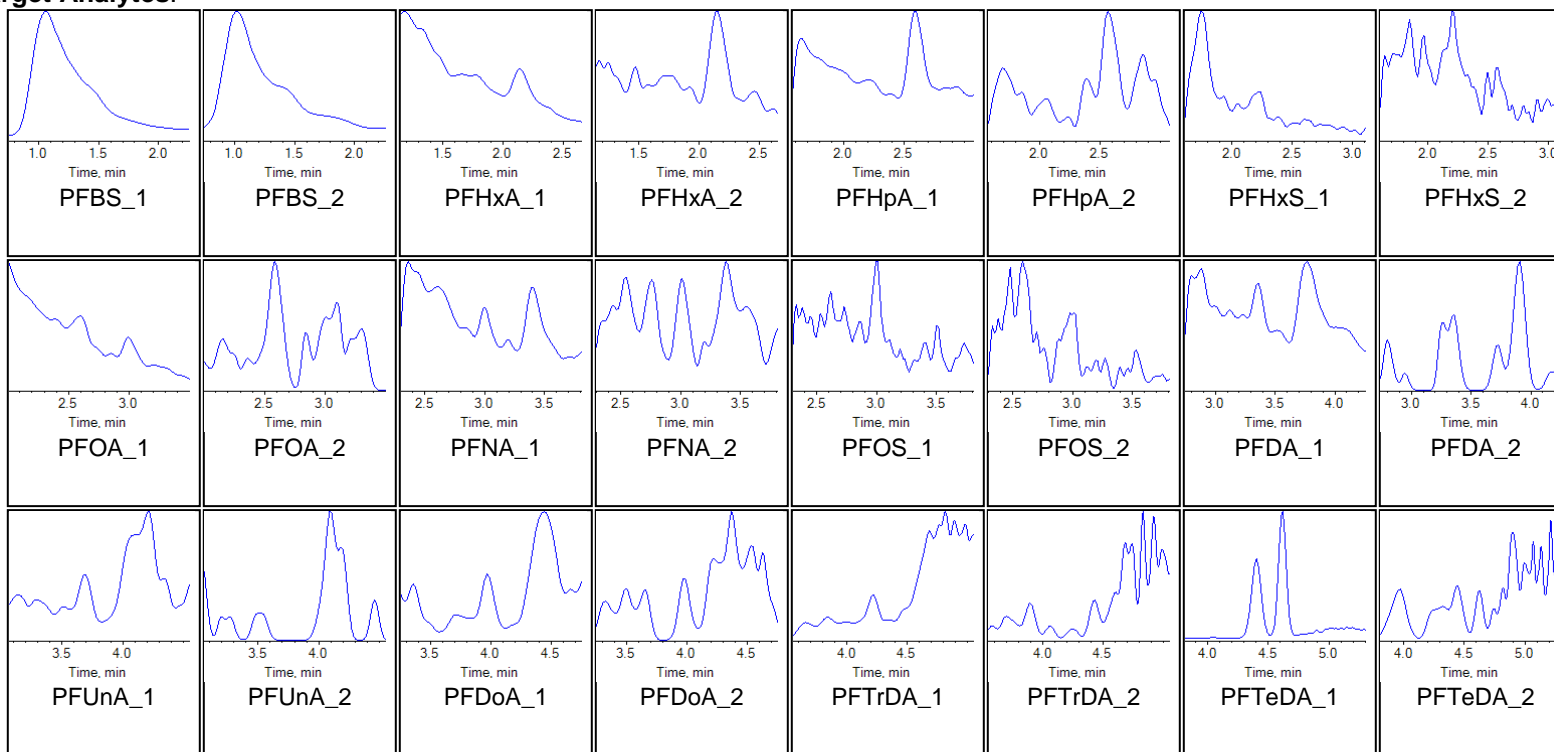
Internal Standards:



Sample Name	I3453-FS(0)	Injection Vial	30
Sample ID	H6-1607-DW0001-20190530	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:24:43 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

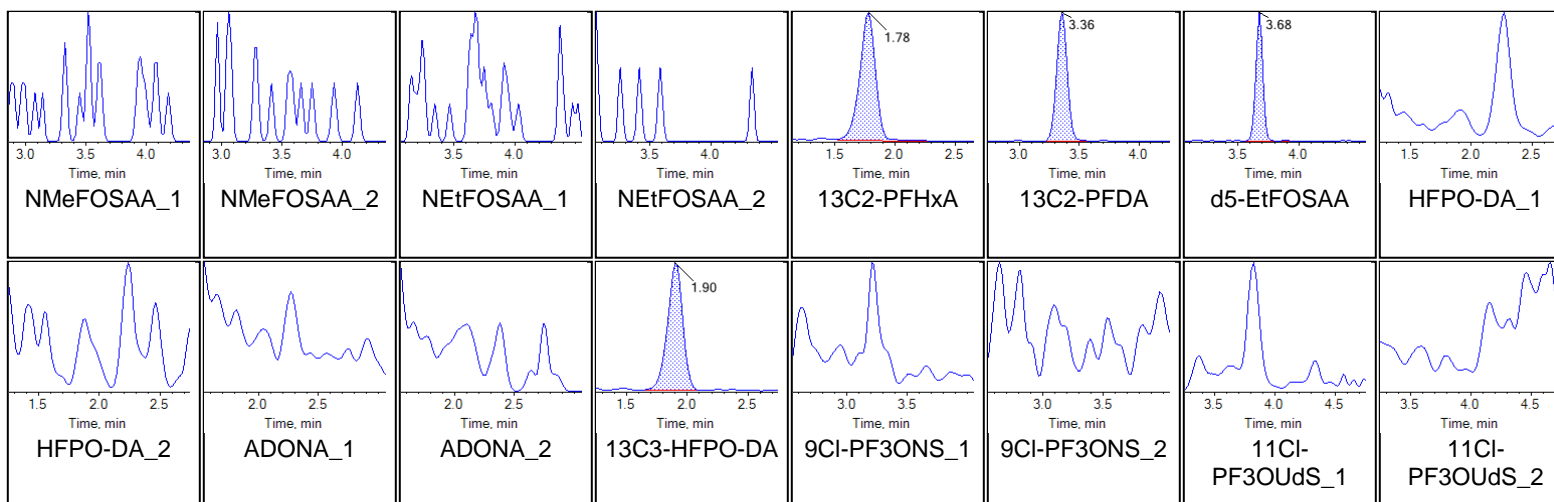
Chromatograms

Target Analytes:

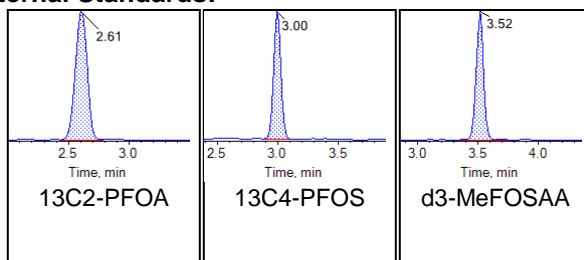




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

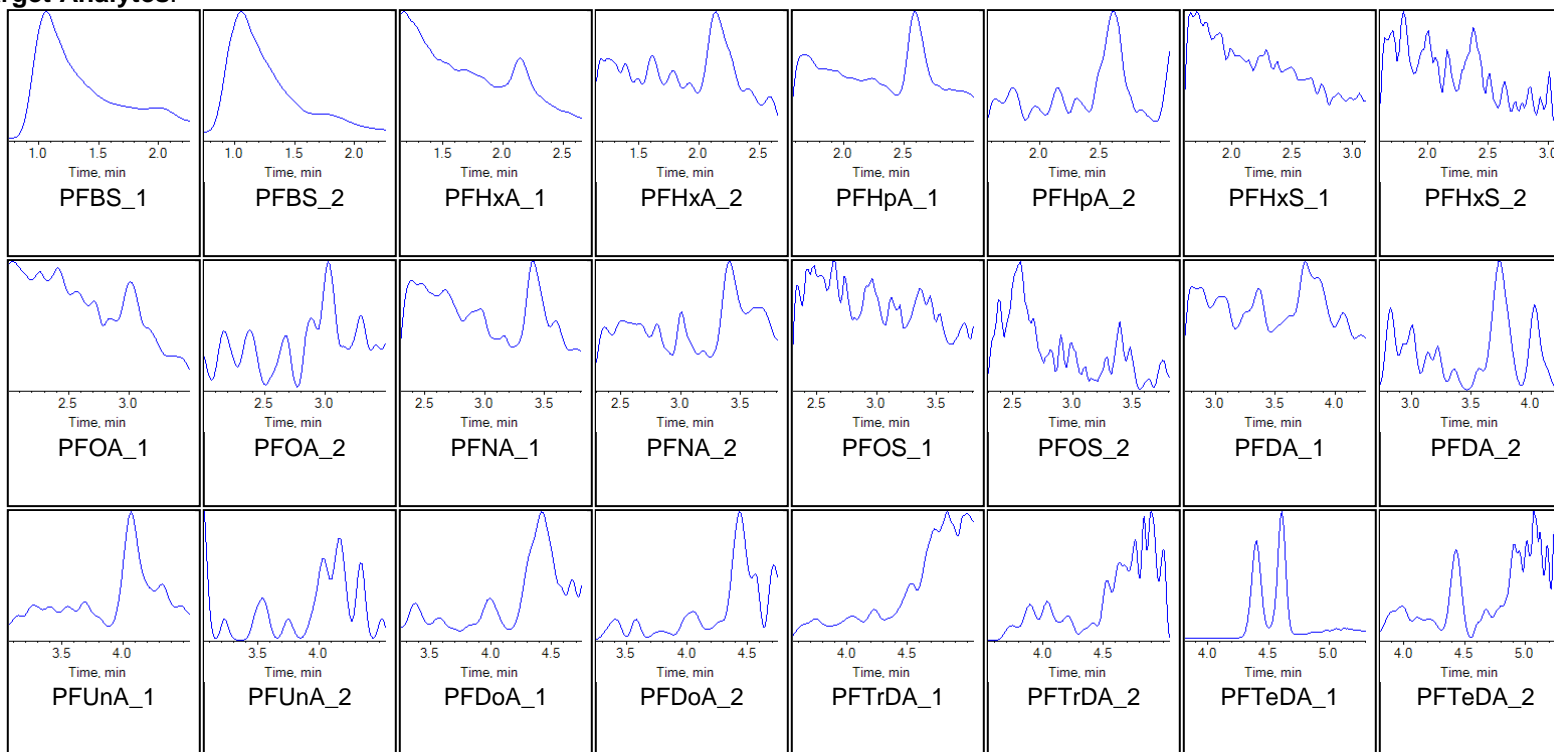
Internal Standards:



Sample Name	I3459-FS(0)	Injection Vial	33
Sample ID	H5-1434-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:51:33 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

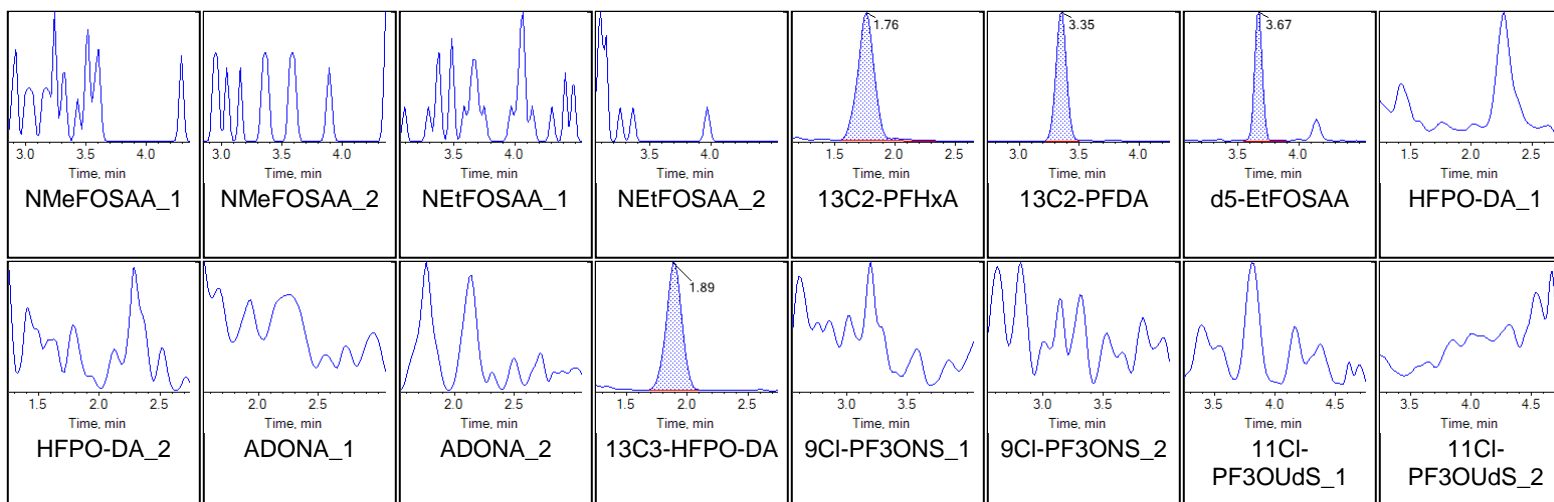
Chromatograms

Target Analytes:

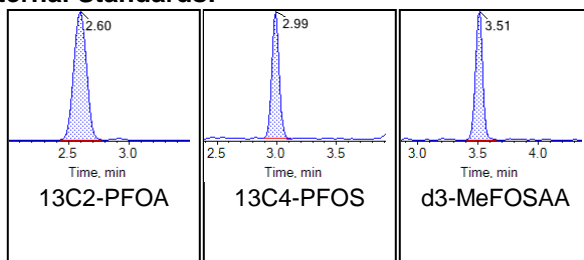




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

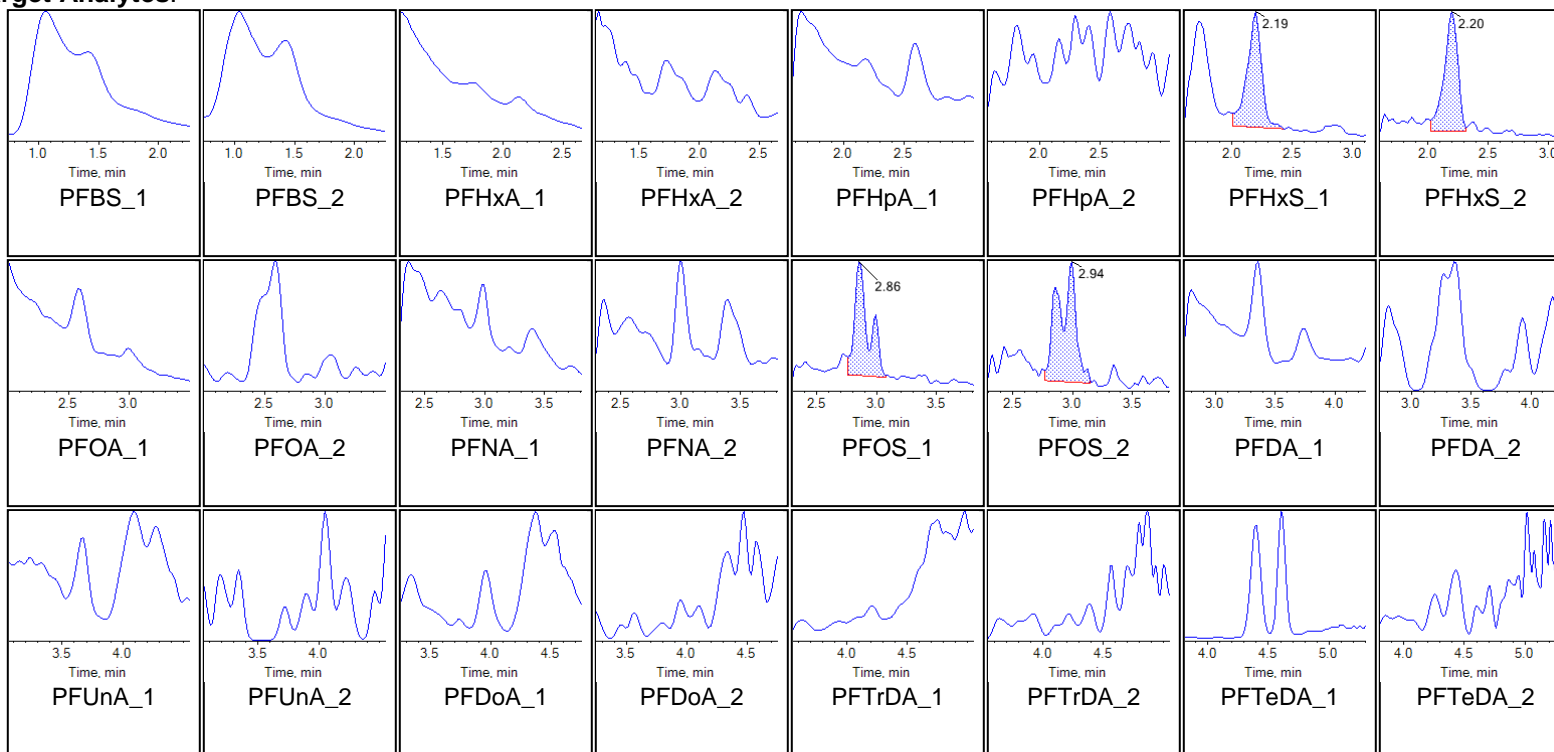
Internal Standards:



Sample Name	I3461-FS(0)	Injection Vial	34
Sample ID	H4-1598-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:00:32 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

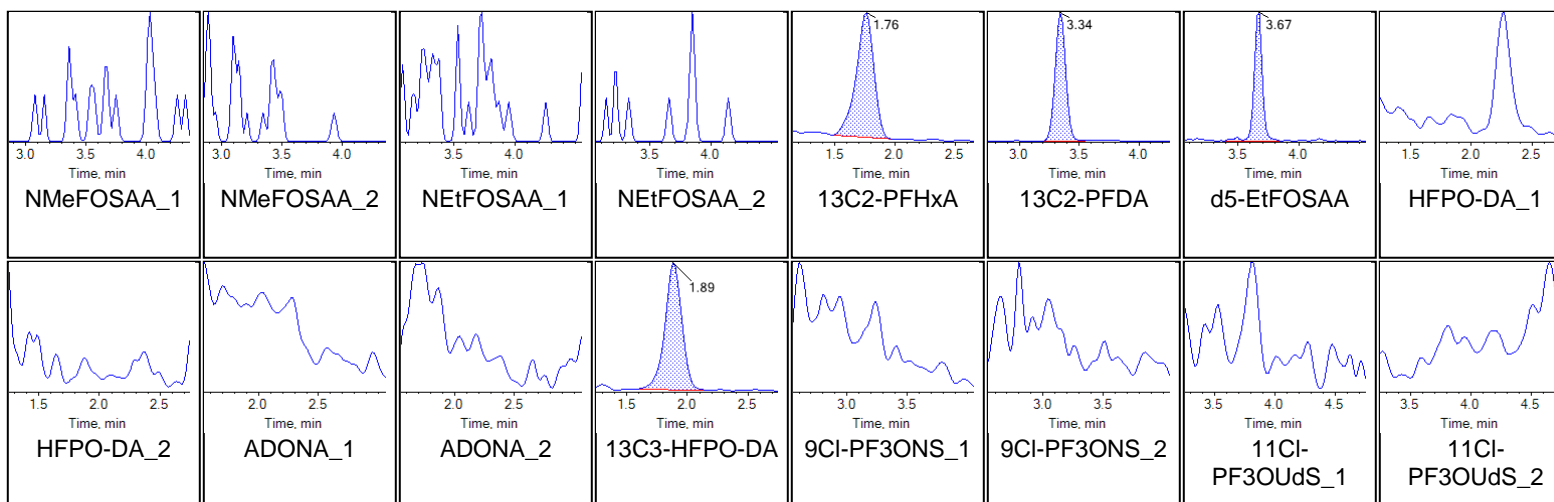
Chromatograms

Target Analytes:

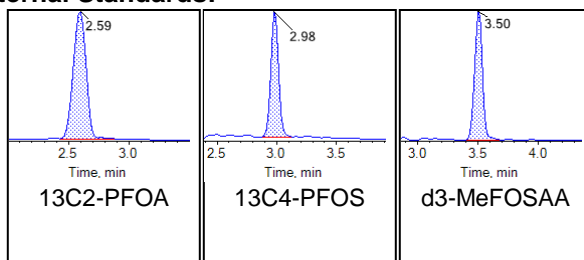




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

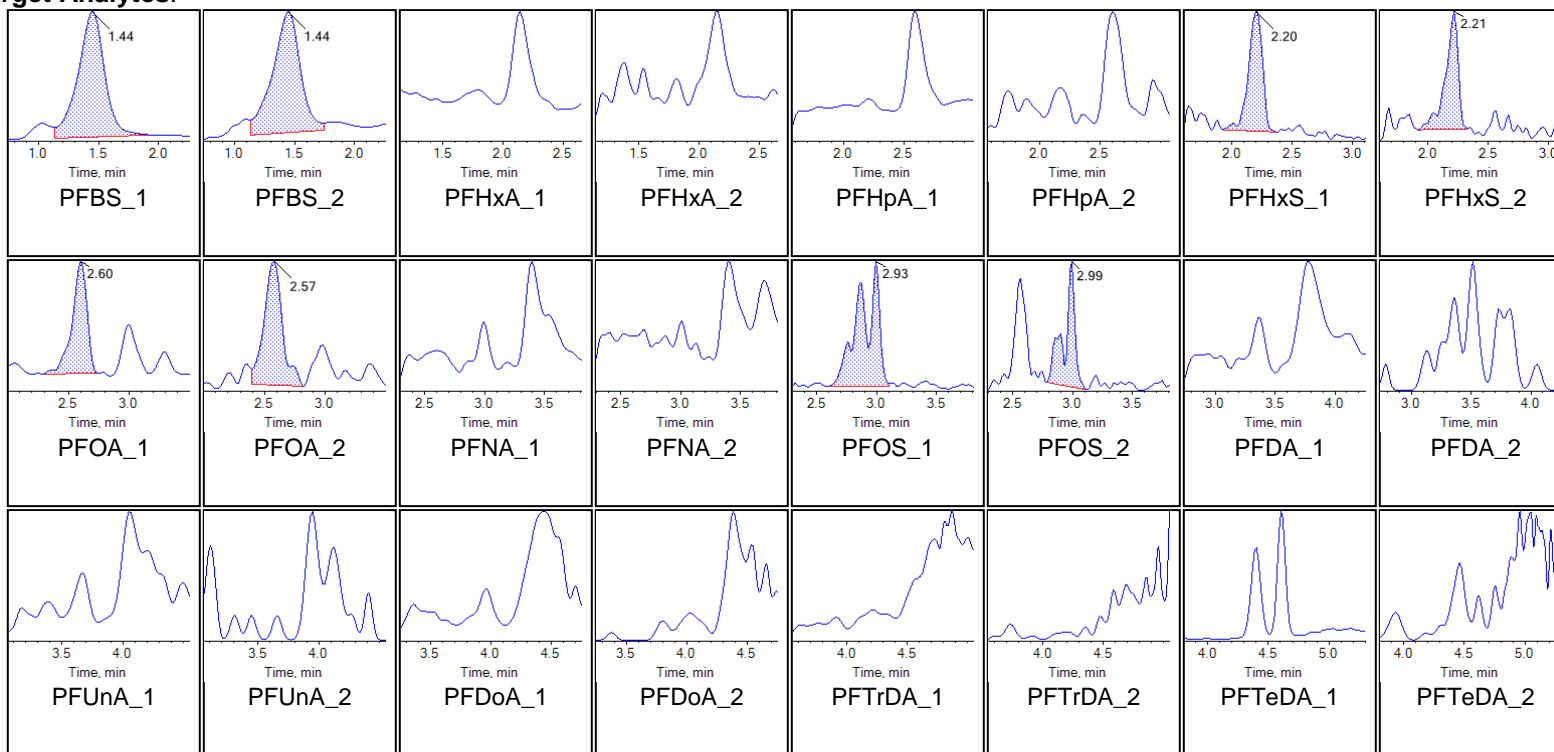
Internal Standards:



Sample Name	I3463-FS(0)	Injection Vial	35
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:09:28 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

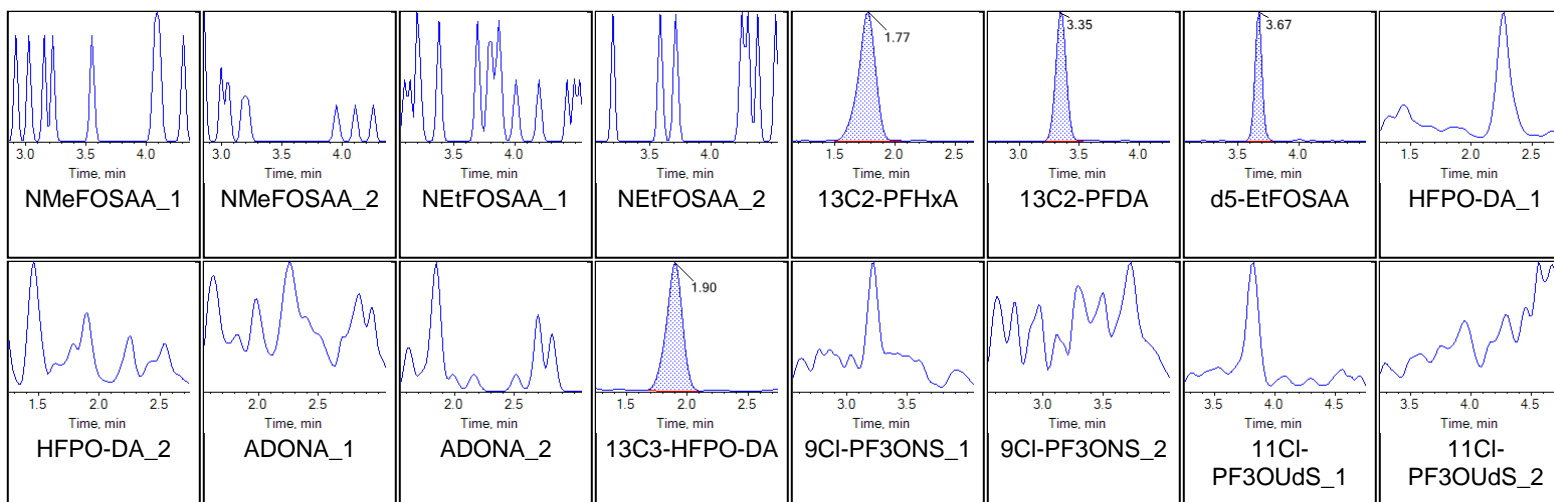
Chromatograms

Target Analytes:

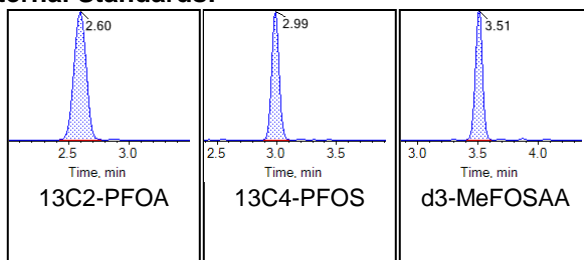




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





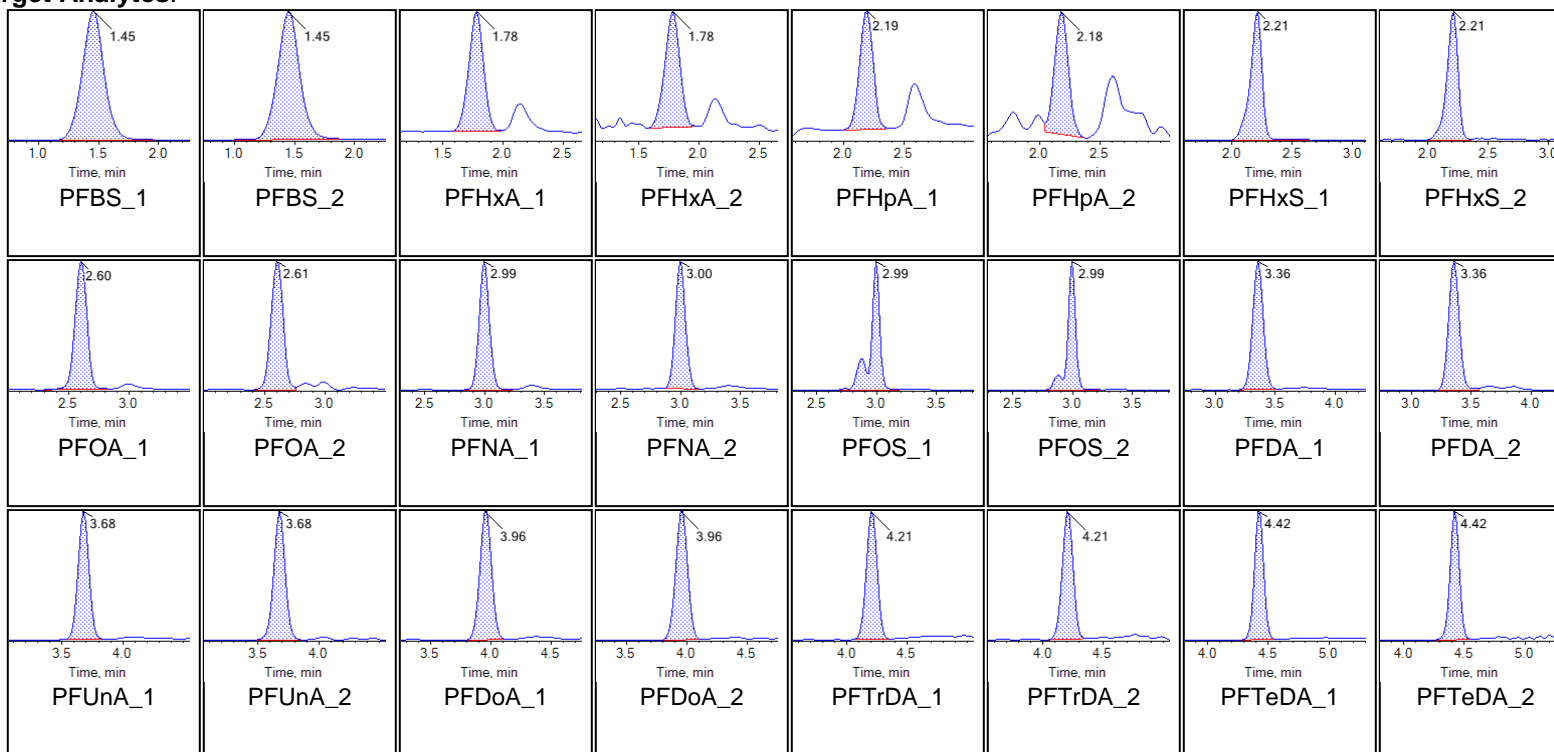
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL68 CCV	Injection Vial	36
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:18:25 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

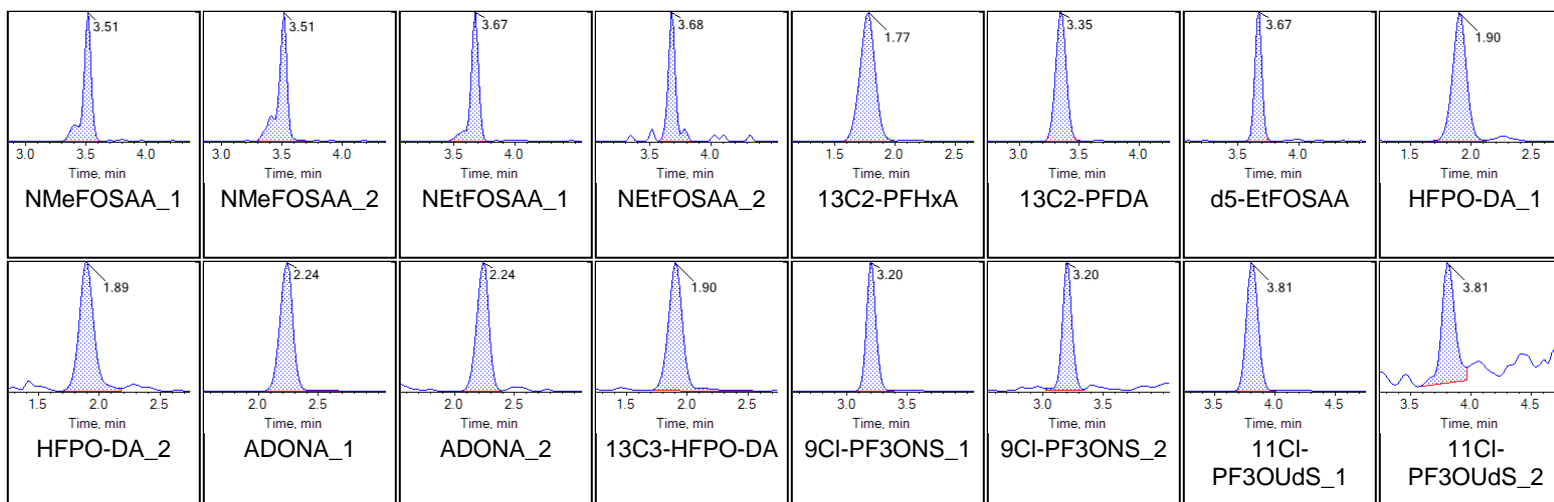
Chromatograms

Target Analytes:

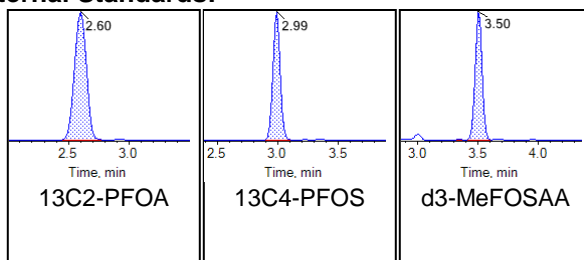




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

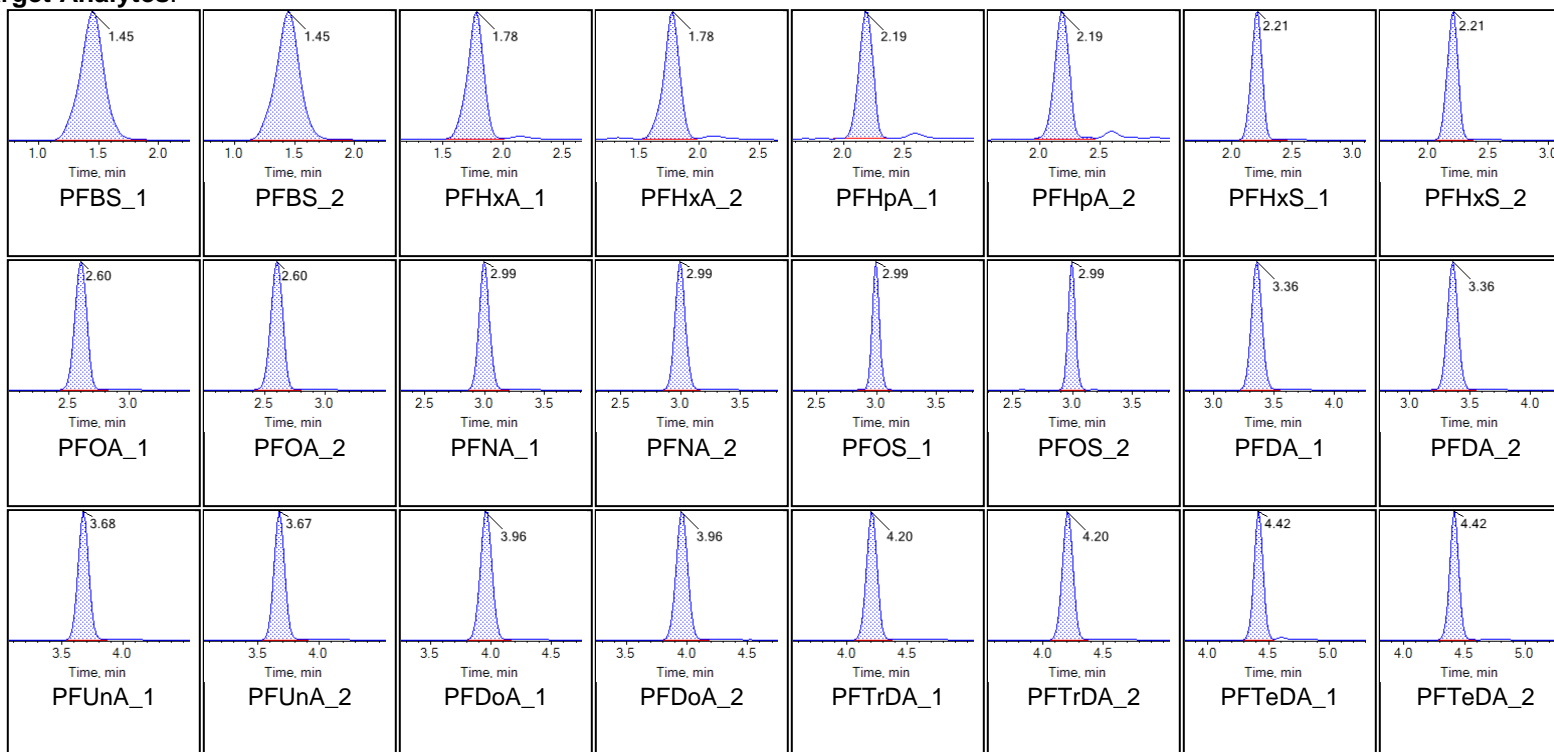
Internal Standards:



Sample Name	I3463MS-FS(0)	Injection Vial	38
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:36:20 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

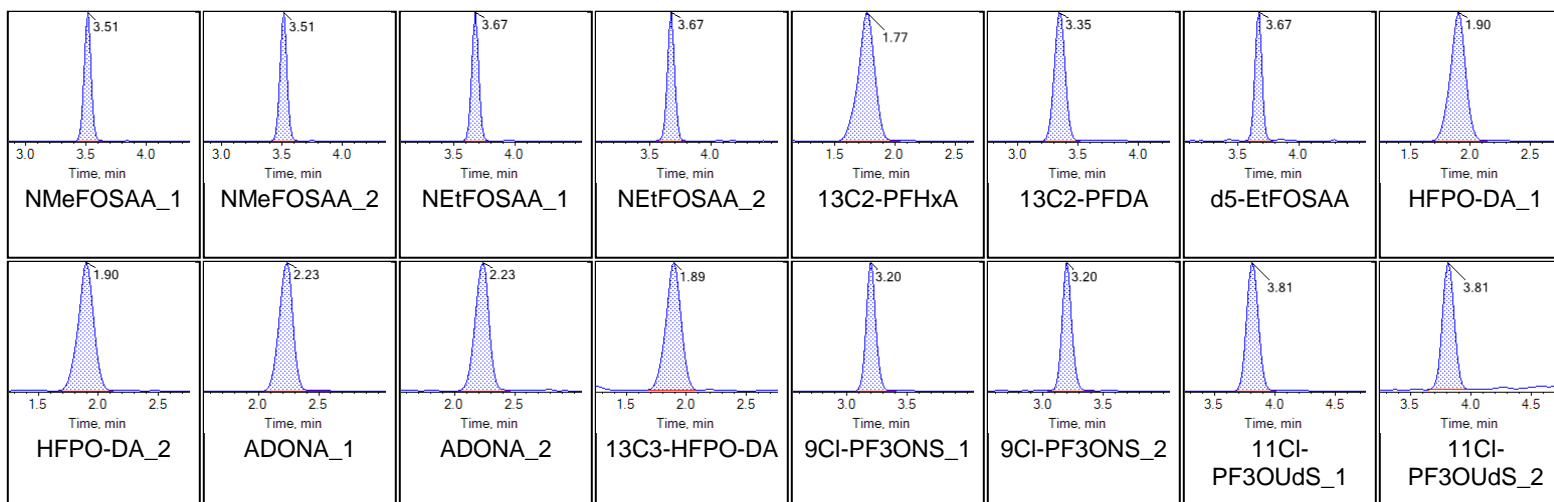
Chromatograms

Target Analytes:

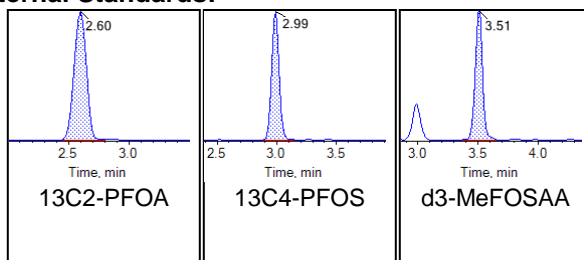




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

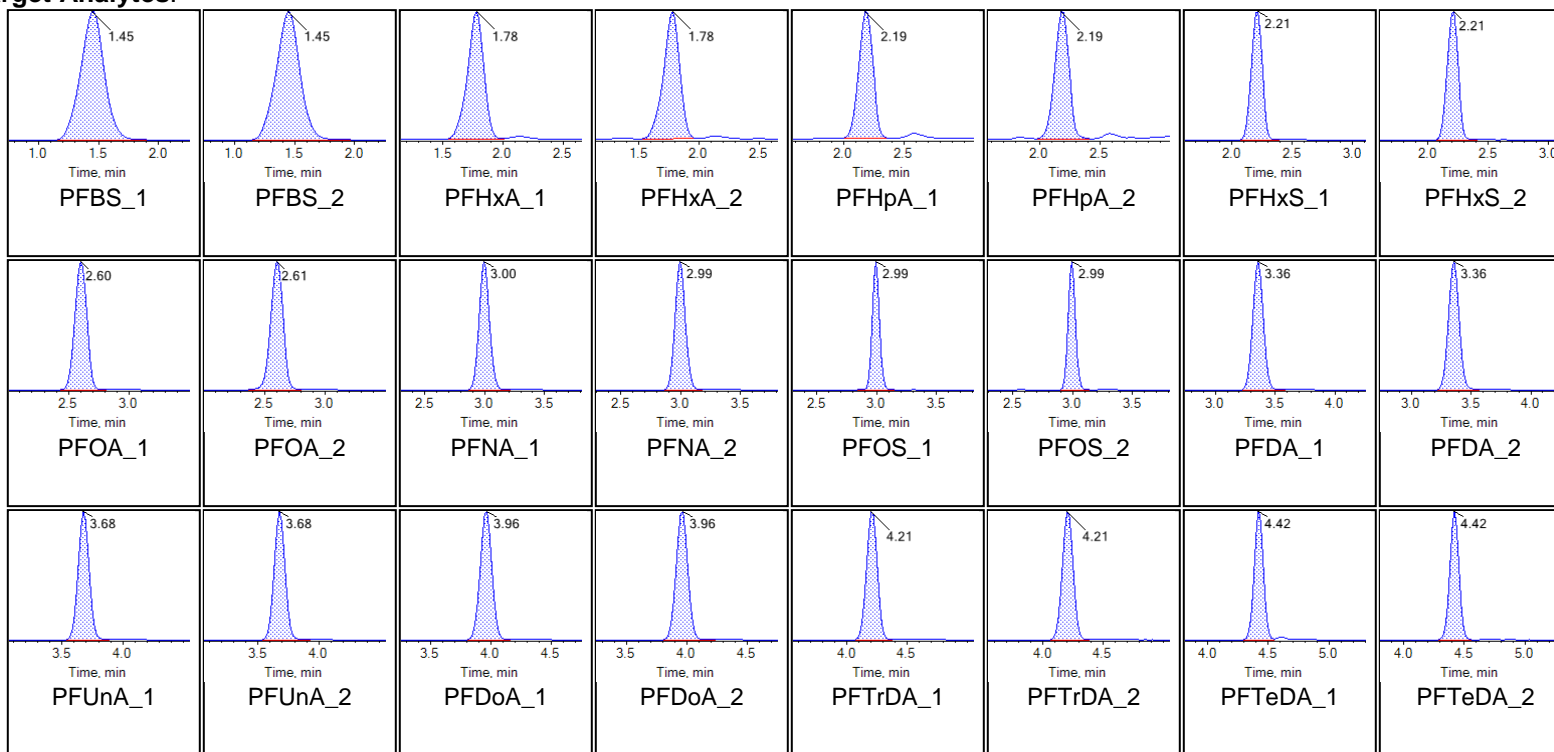
Internal Standards:



Sample Name	I3463MSD-FS(0)	Injection Vial	39
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:45:17 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

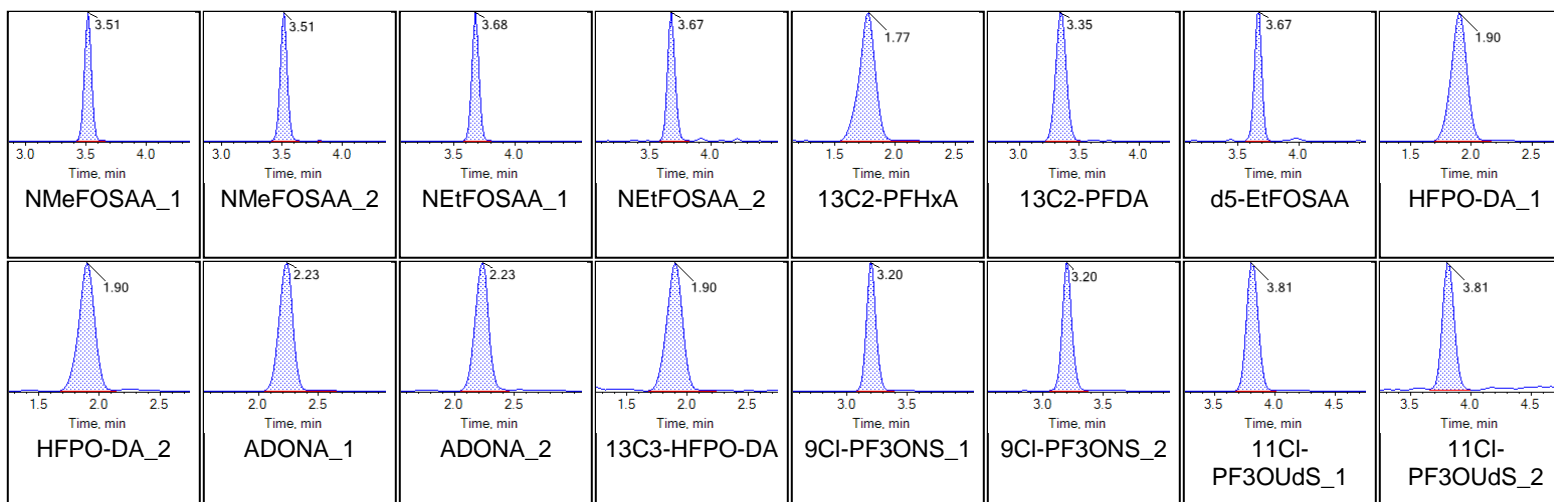
Chromatograms

Target Analytes:

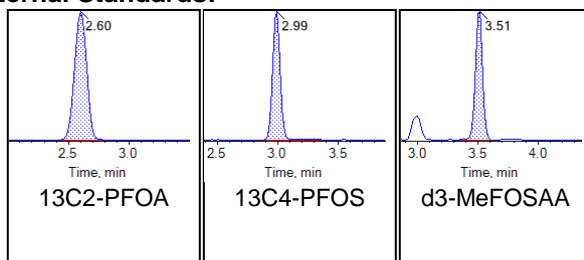




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

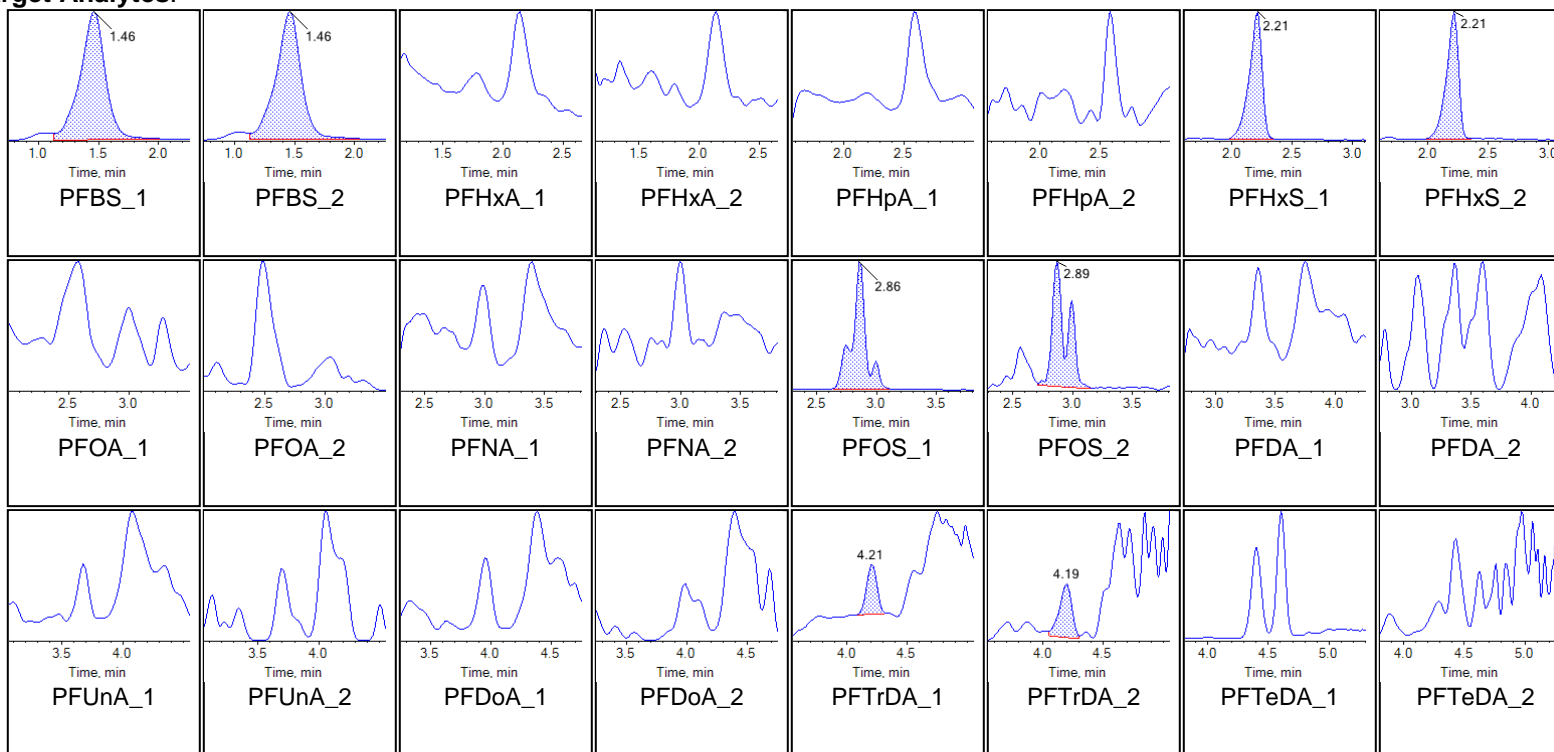
Internal Standards:



Sample Name	I3465-FS(0)	Injection Vial	40
Sample ID	E3-1120-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 9:54:14 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

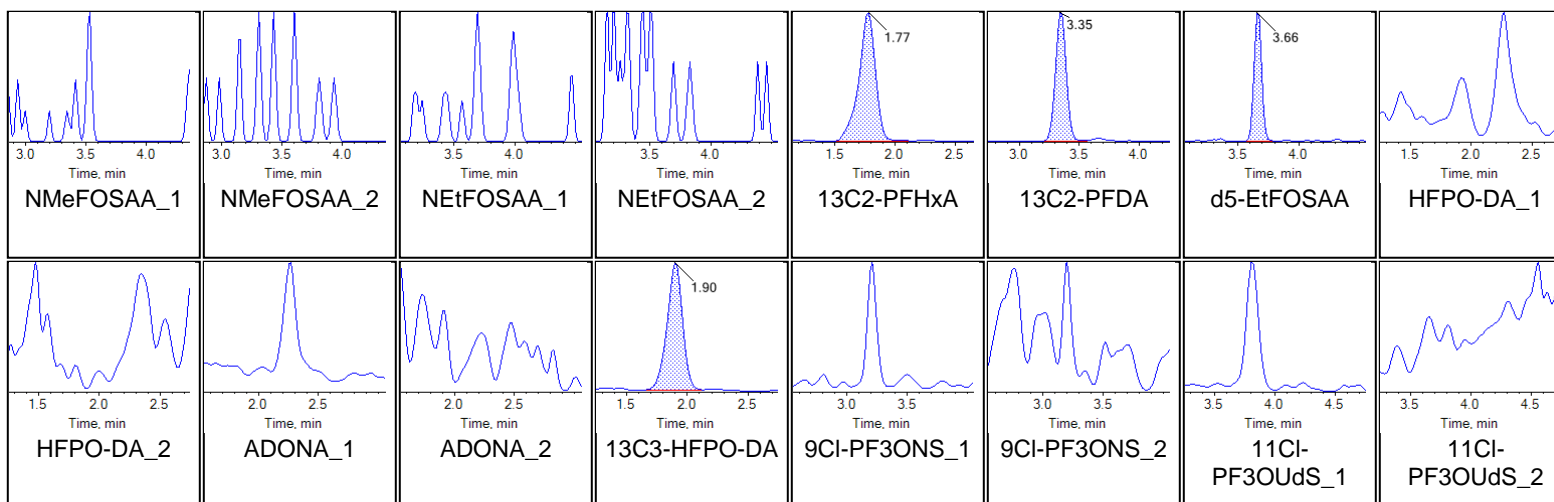
Chromatograms

Target Analytes:

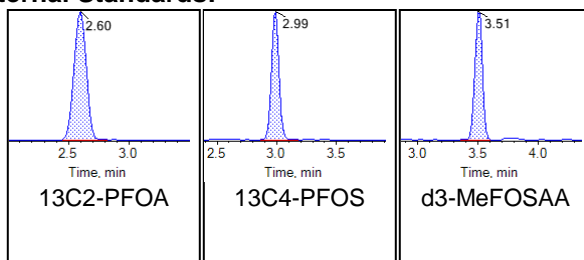




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

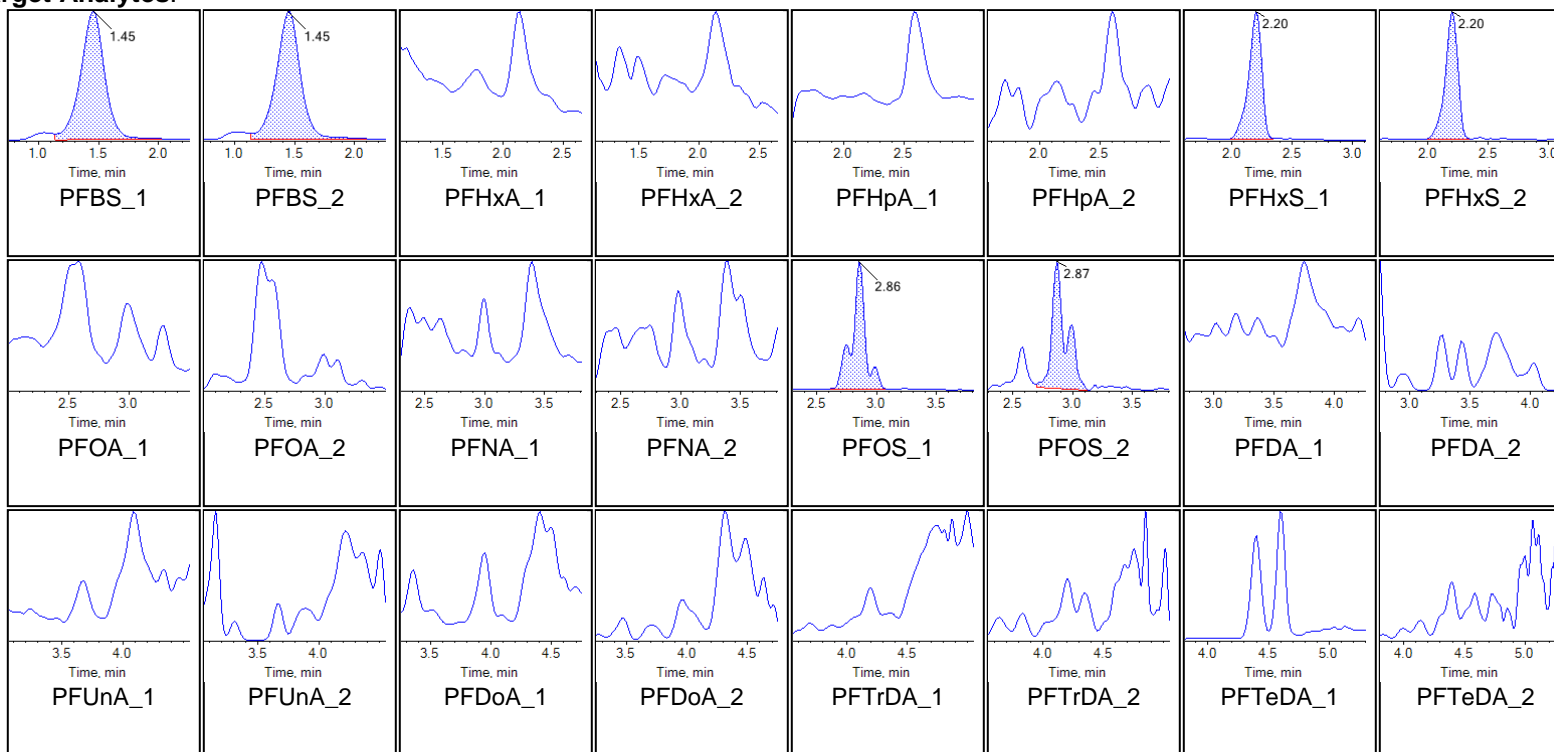
Internal Standards:



Sample Name	I3466-FS(0)	Injection Vial	41
Sample ID	E3-1120-FD-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:03:12 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

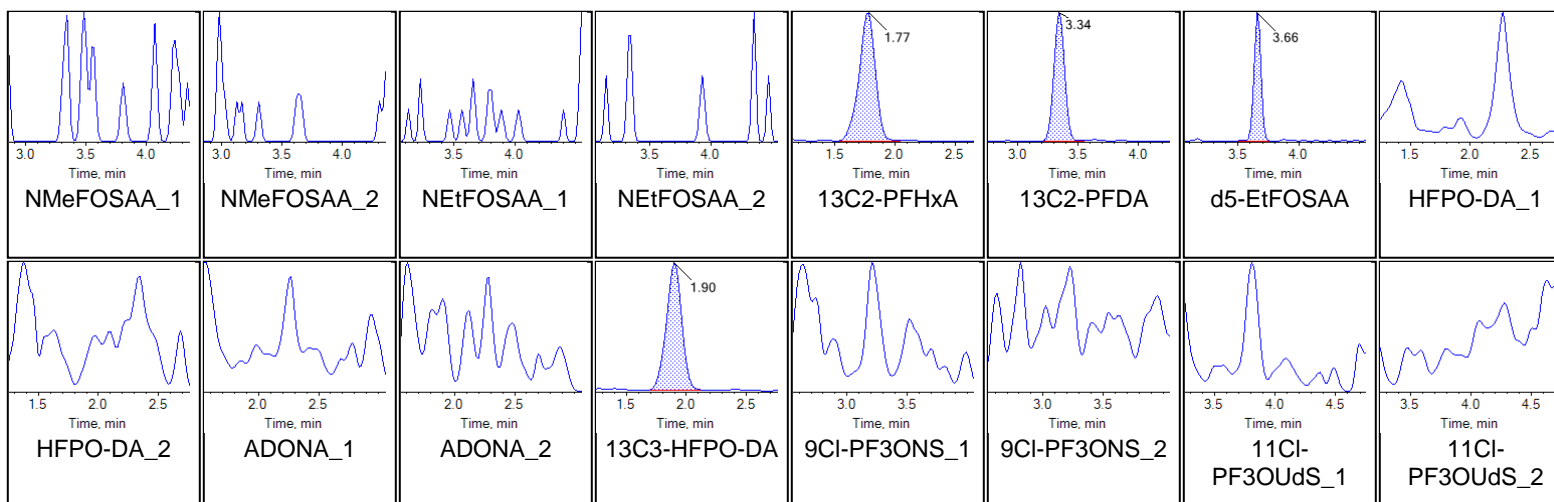
Chromatograms

Target Analytes:

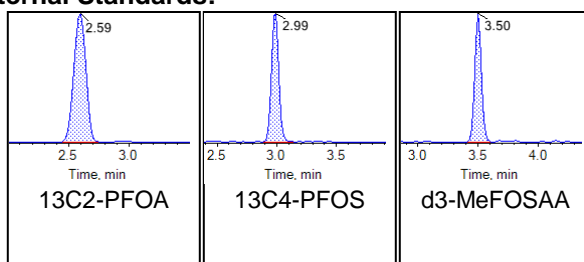




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

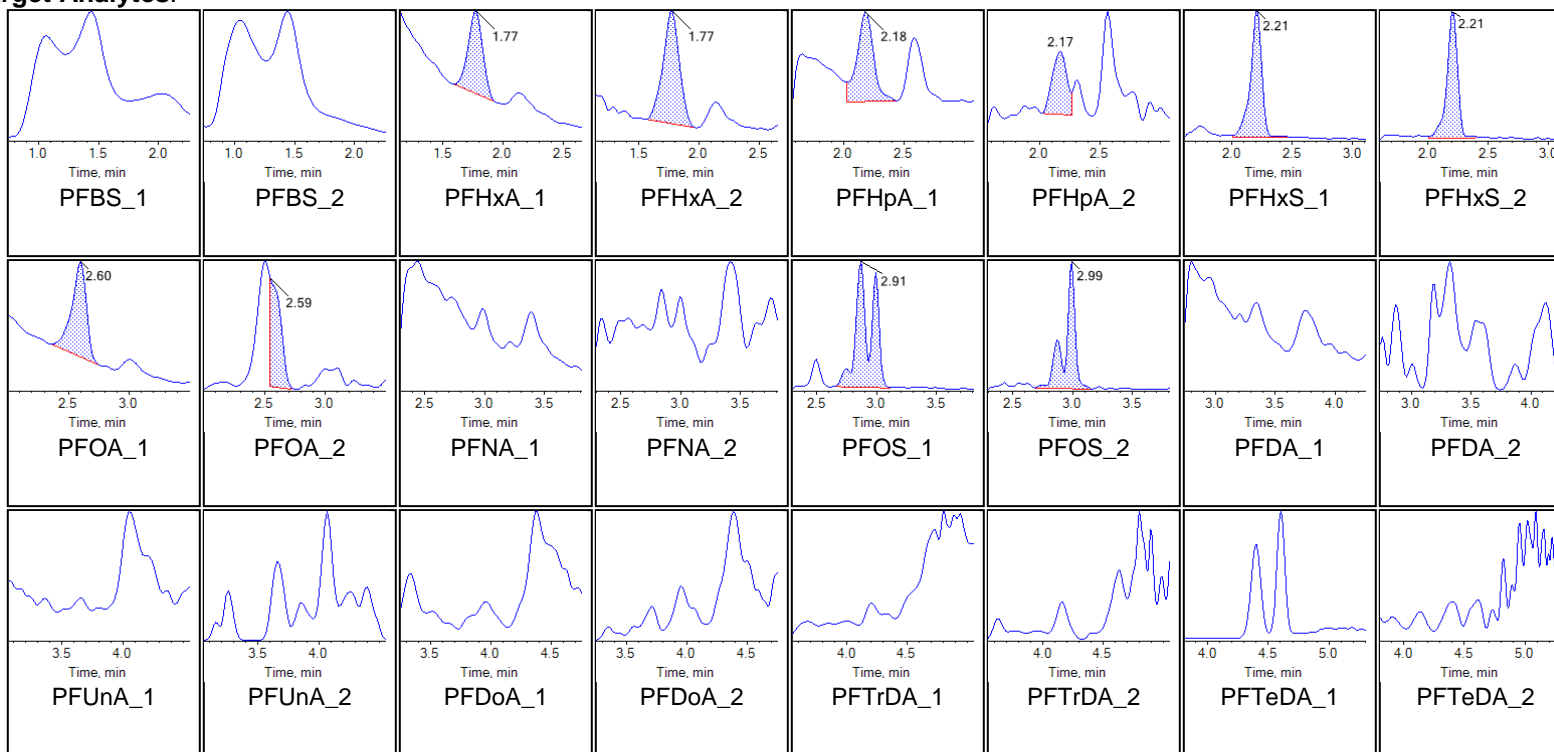
Internal Standards:



Sample Name	I3468-FS(0)	Injection Vial	42
Sample ID	H4-1797-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:12:08 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

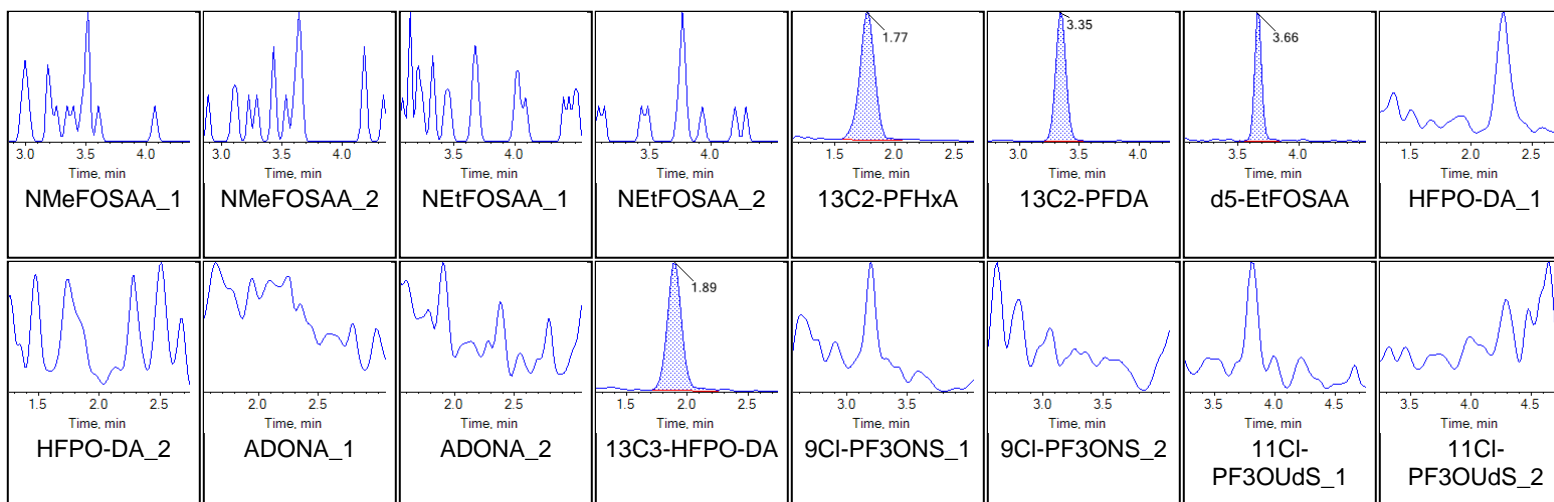
Chromatograms

Target Analytes:

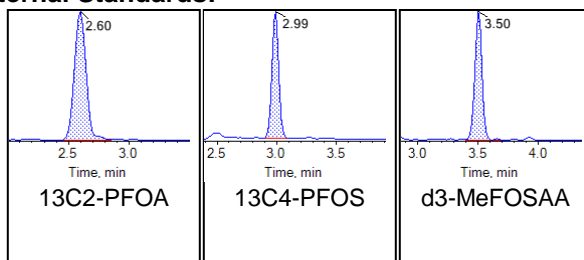




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

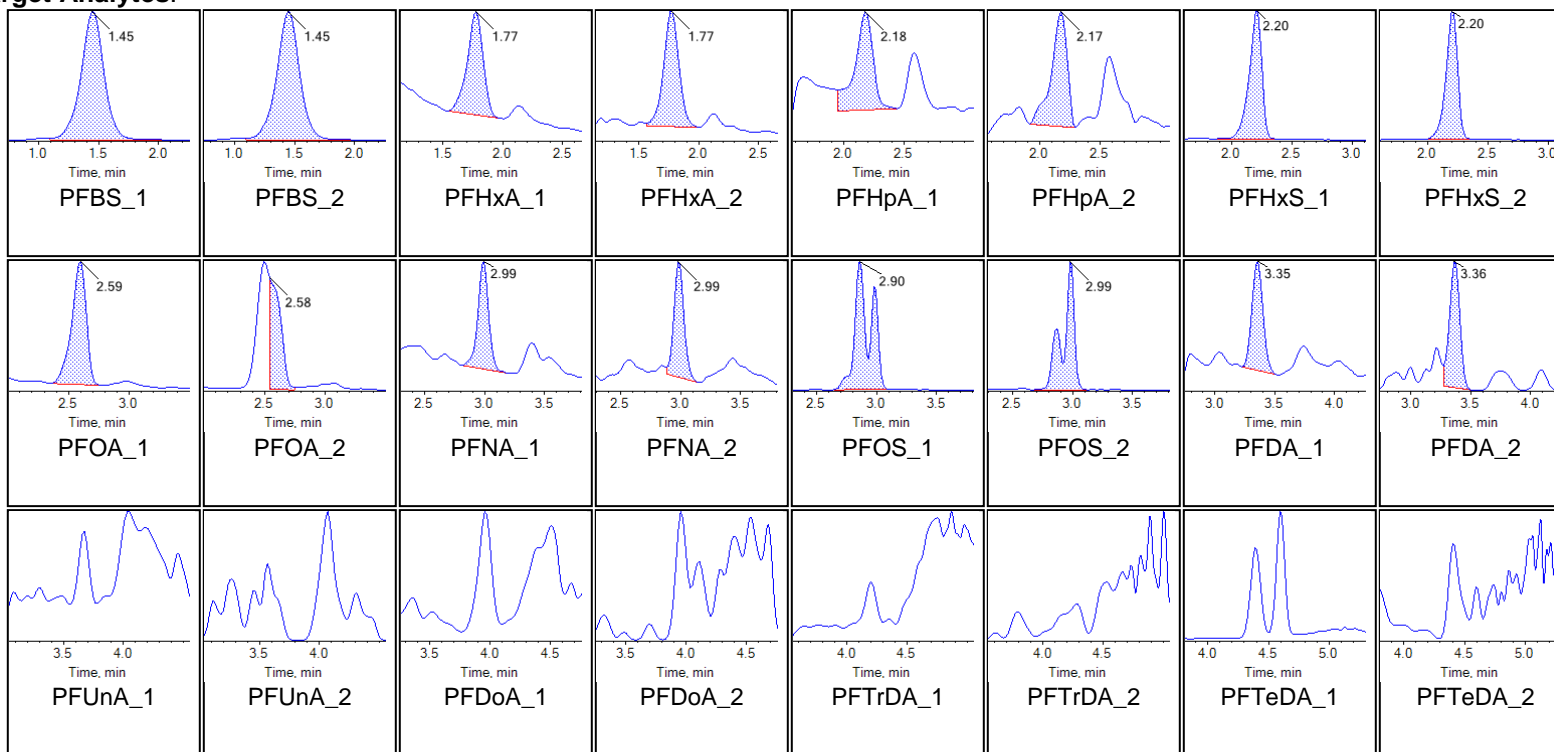
Internal Standards:



Sample Name	I3470-FS(0)	Injection Vial	43
Sample ID	H4-1840A-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:21:04 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

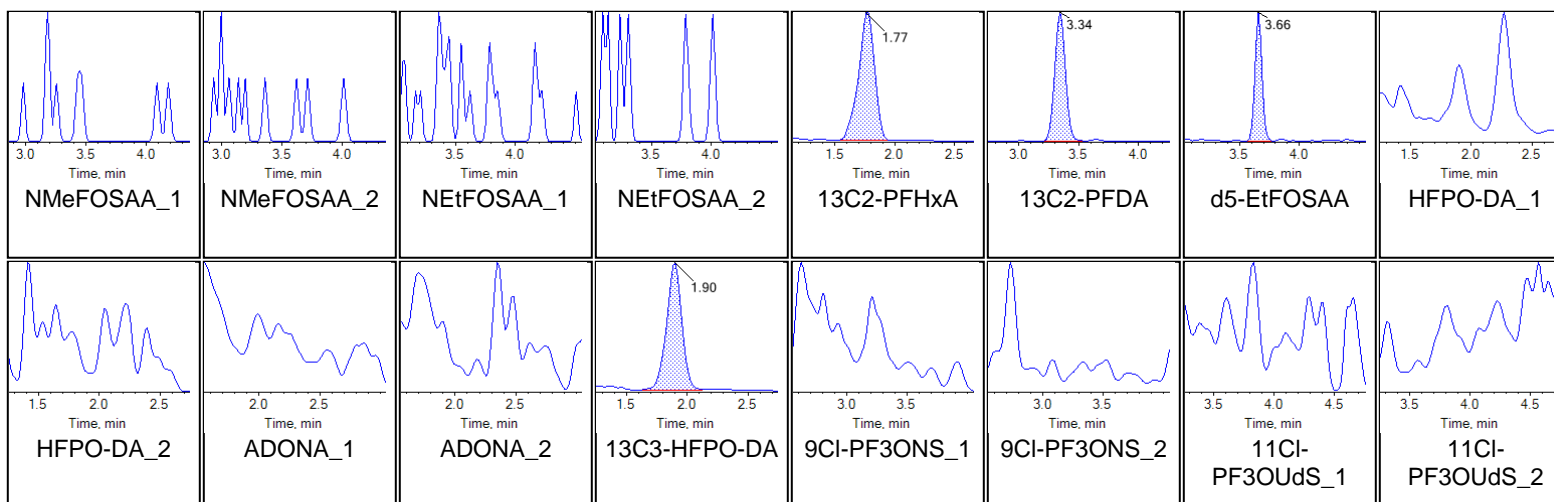
Chromatograms

Target Analytes:

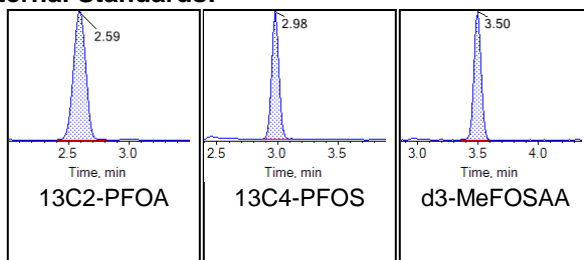




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

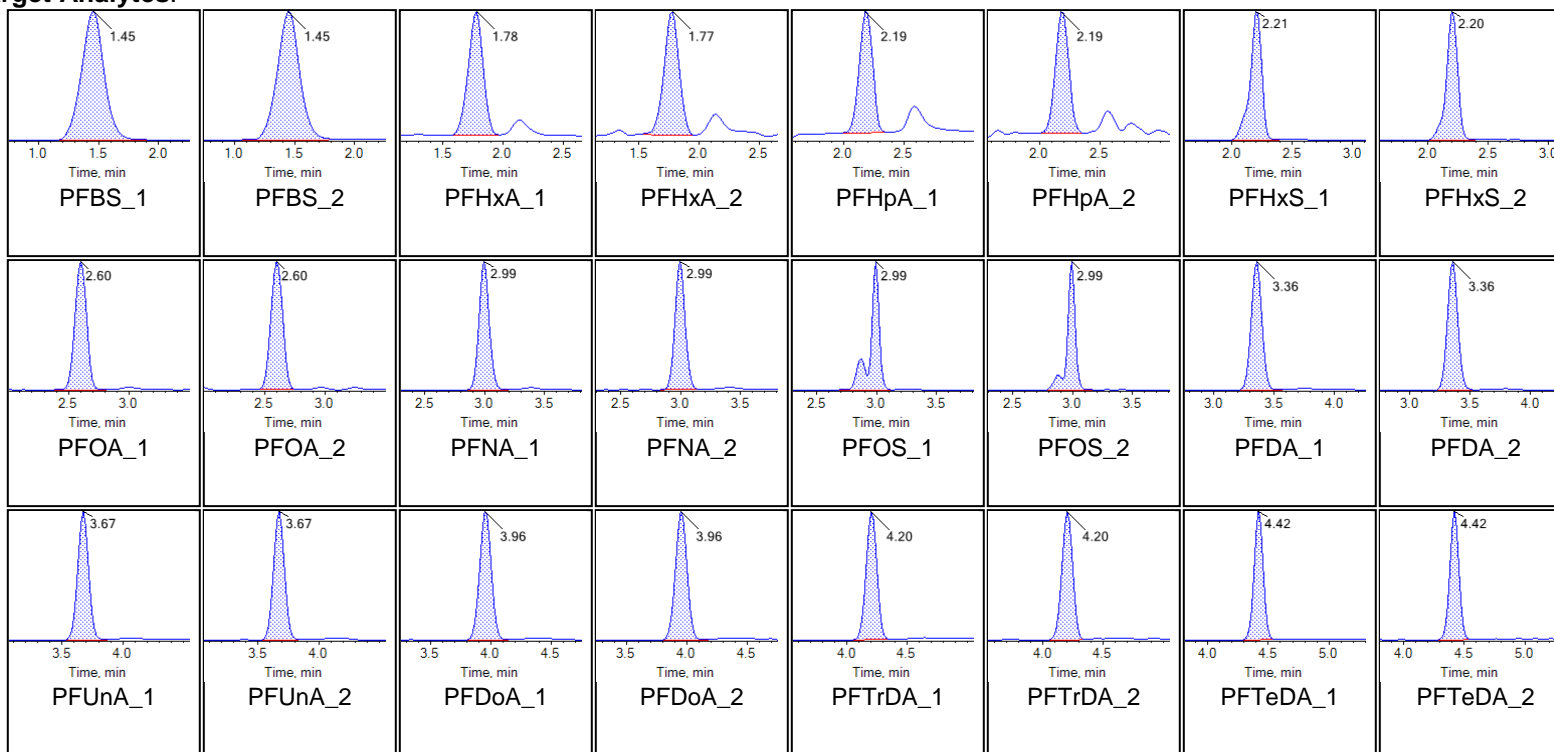
Internal Standards:



Sample Name	KL69 CCV	Injection Vial	44
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:30:02 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

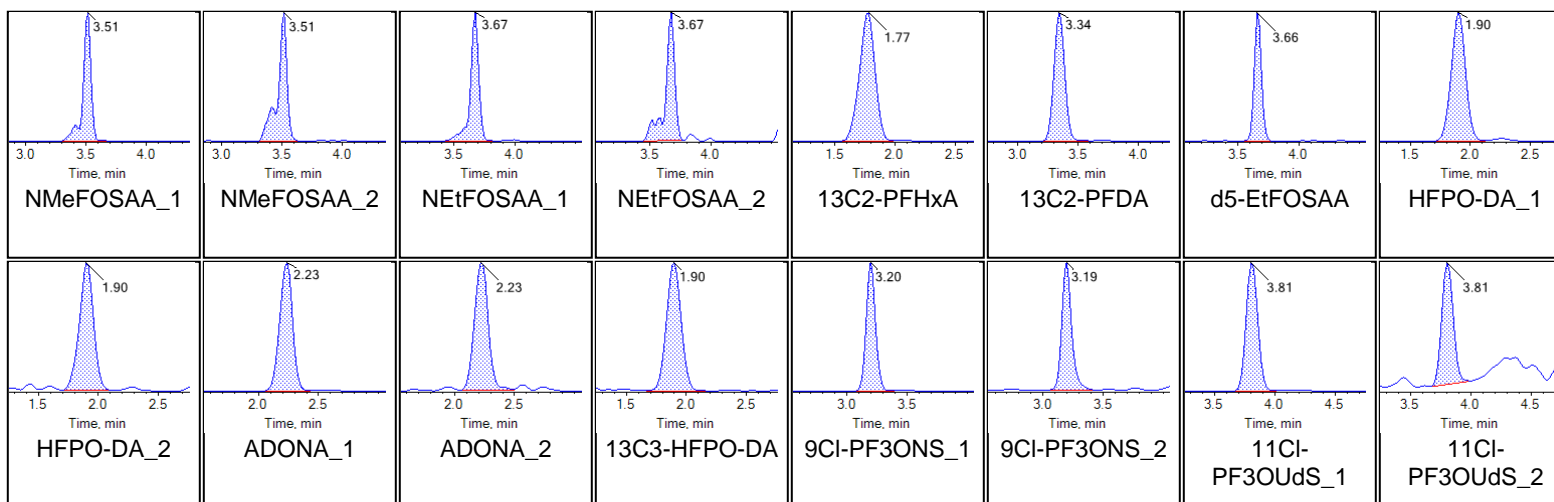
Chromatograms

Target Analytes:

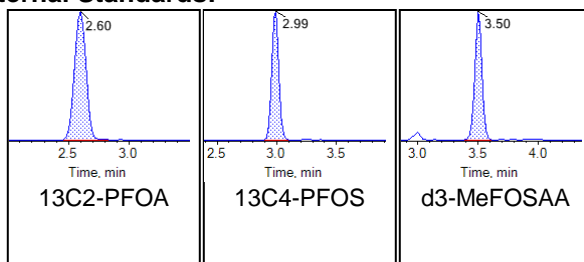




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





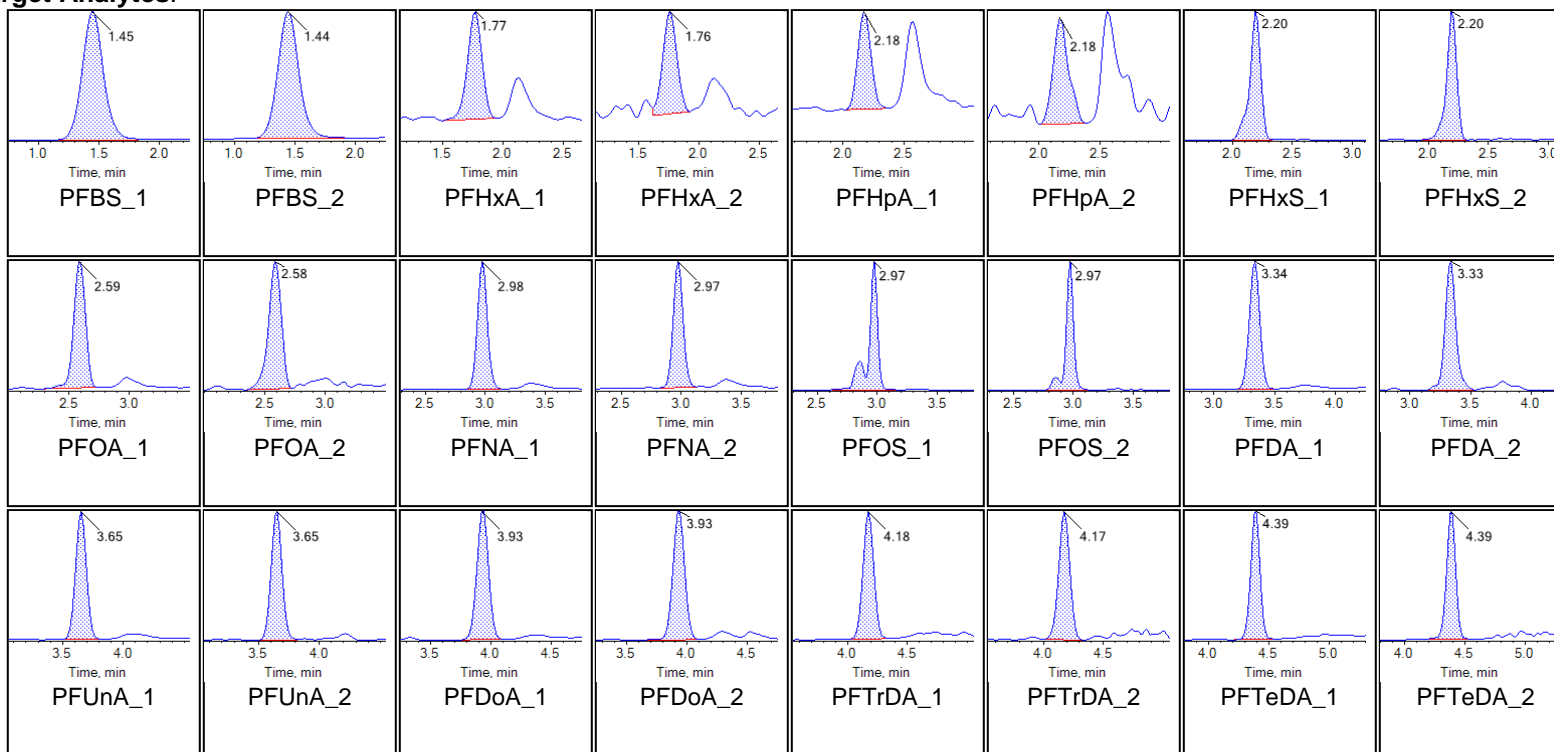
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL67 ISC	Injection Vial	2
Sample ID	ISC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:36:45 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

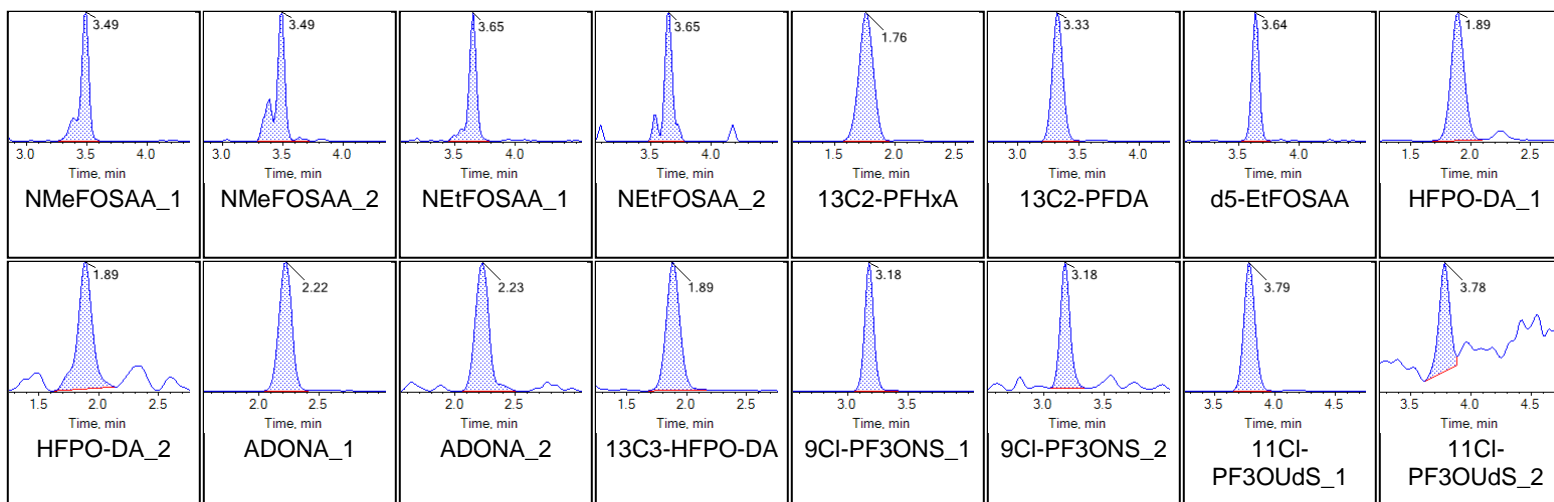
Chromatograms

Target Analytes:

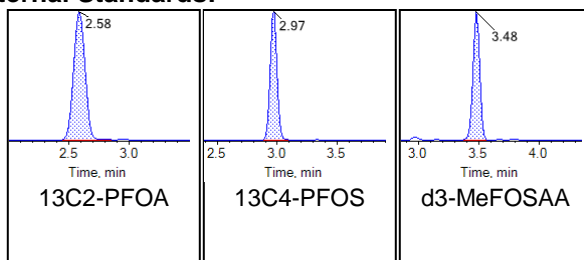




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

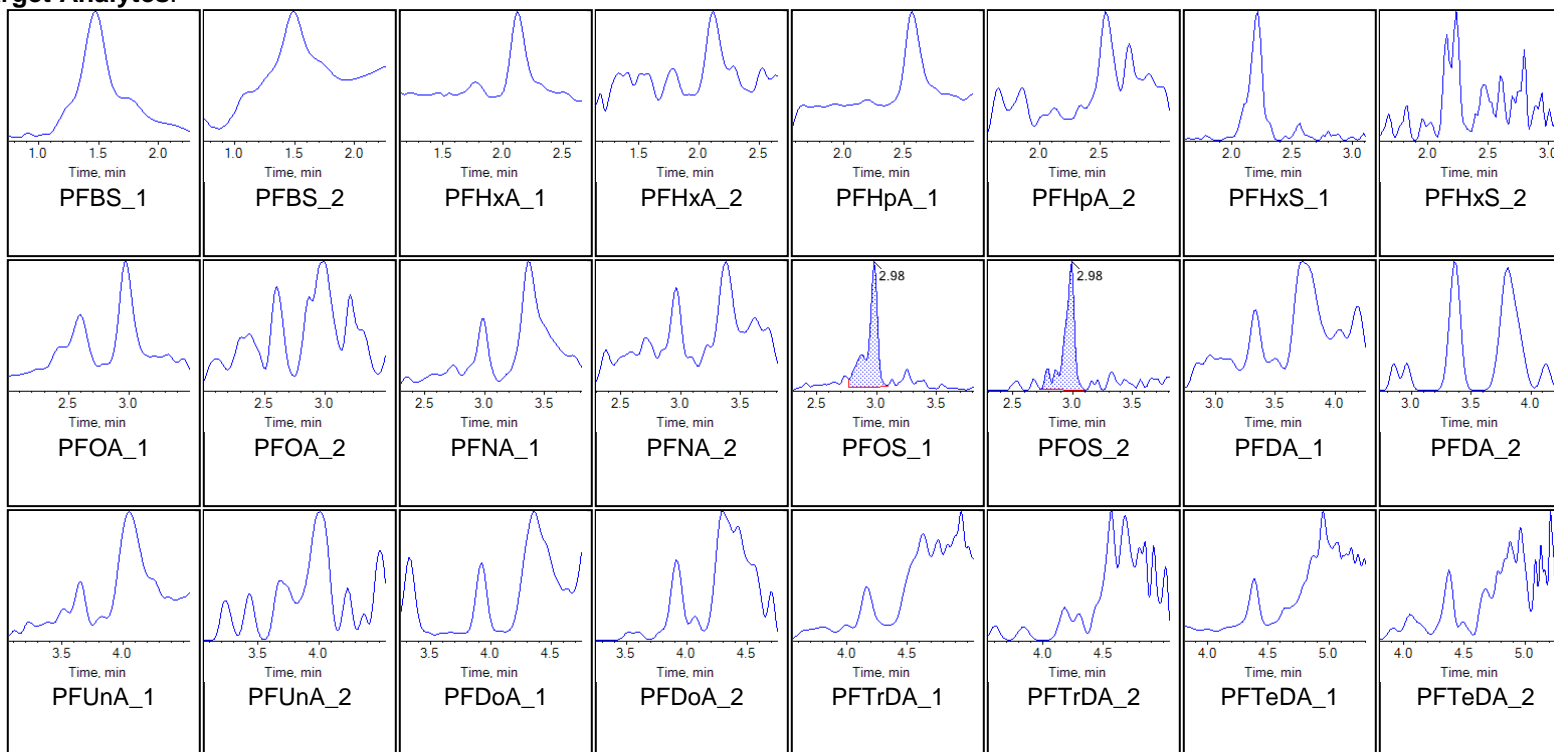
Internal Standards:



Sample Name	KL73 IB	Injection Vial	4
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:54:41 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

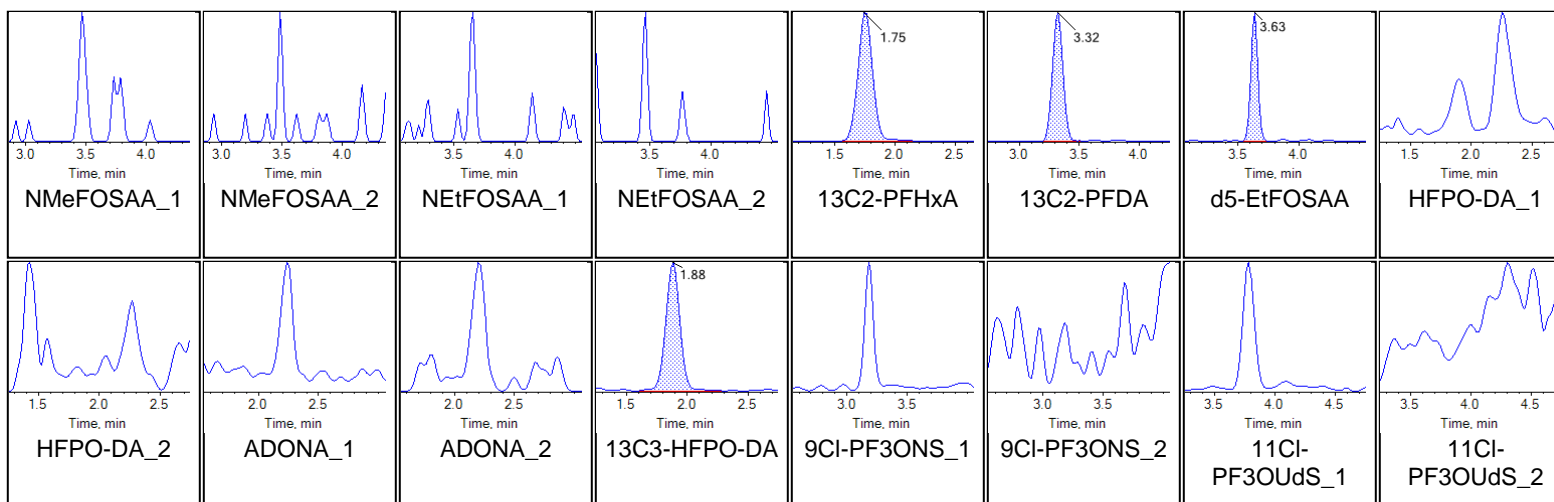
Chromatograms

Target Analytes:

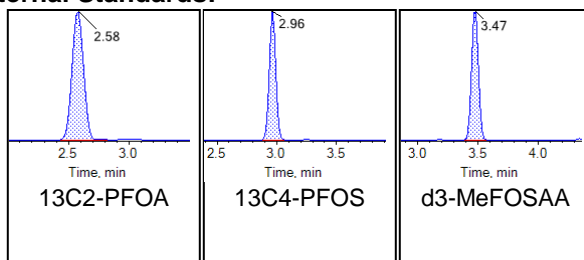




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





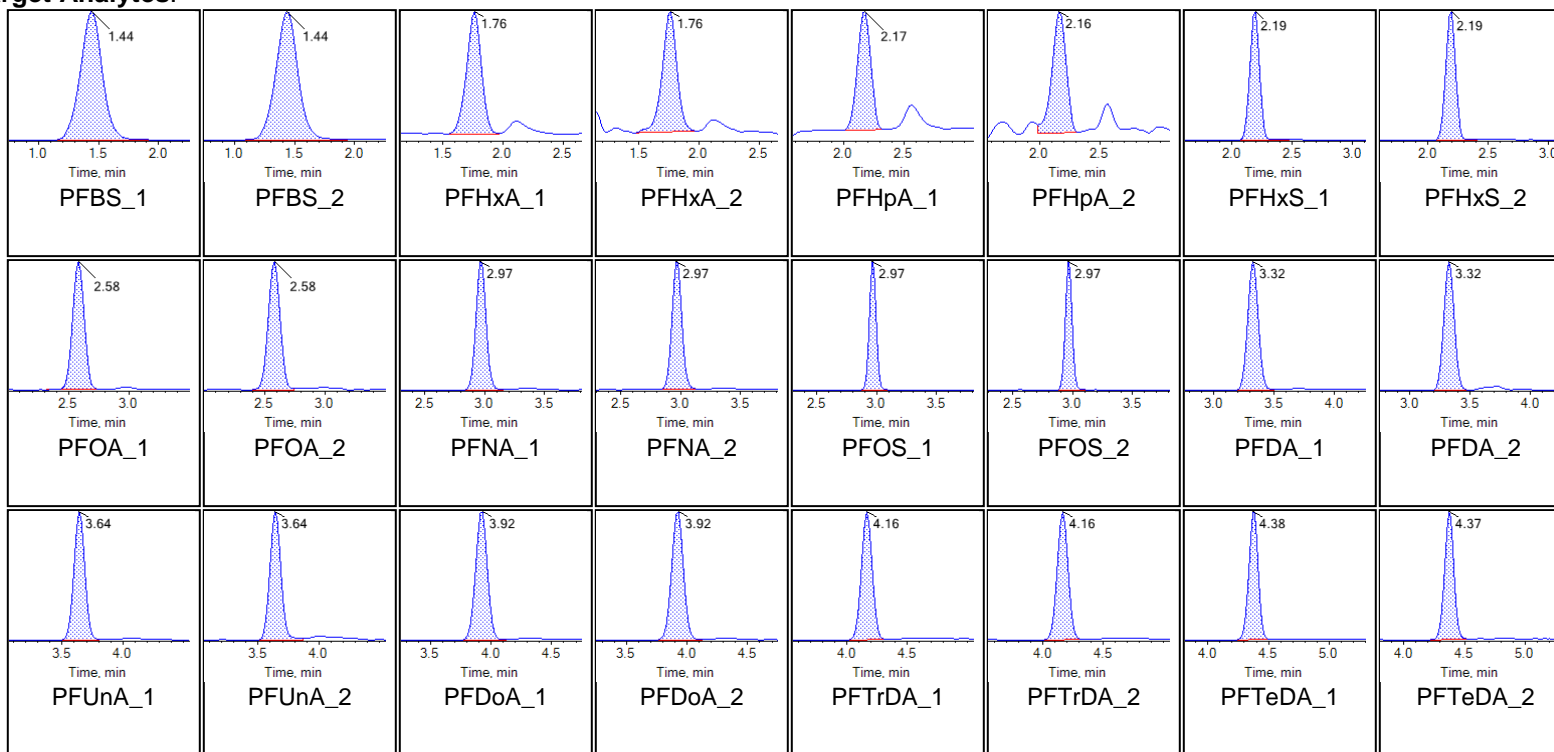
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	CU243LCS-FS-D(3)	Injection Vial	5
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:03:37 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

Chromatograms

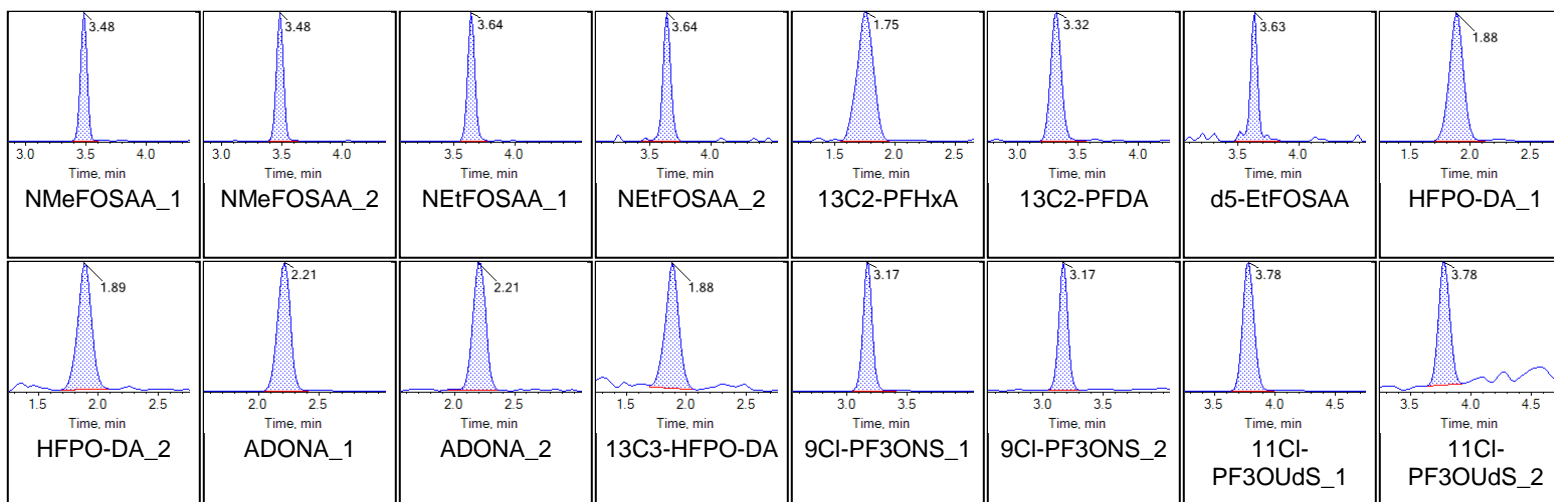
Target Analytes:



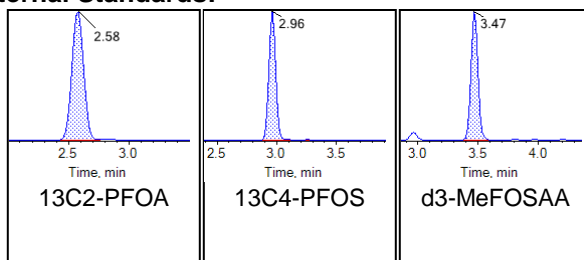


Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM



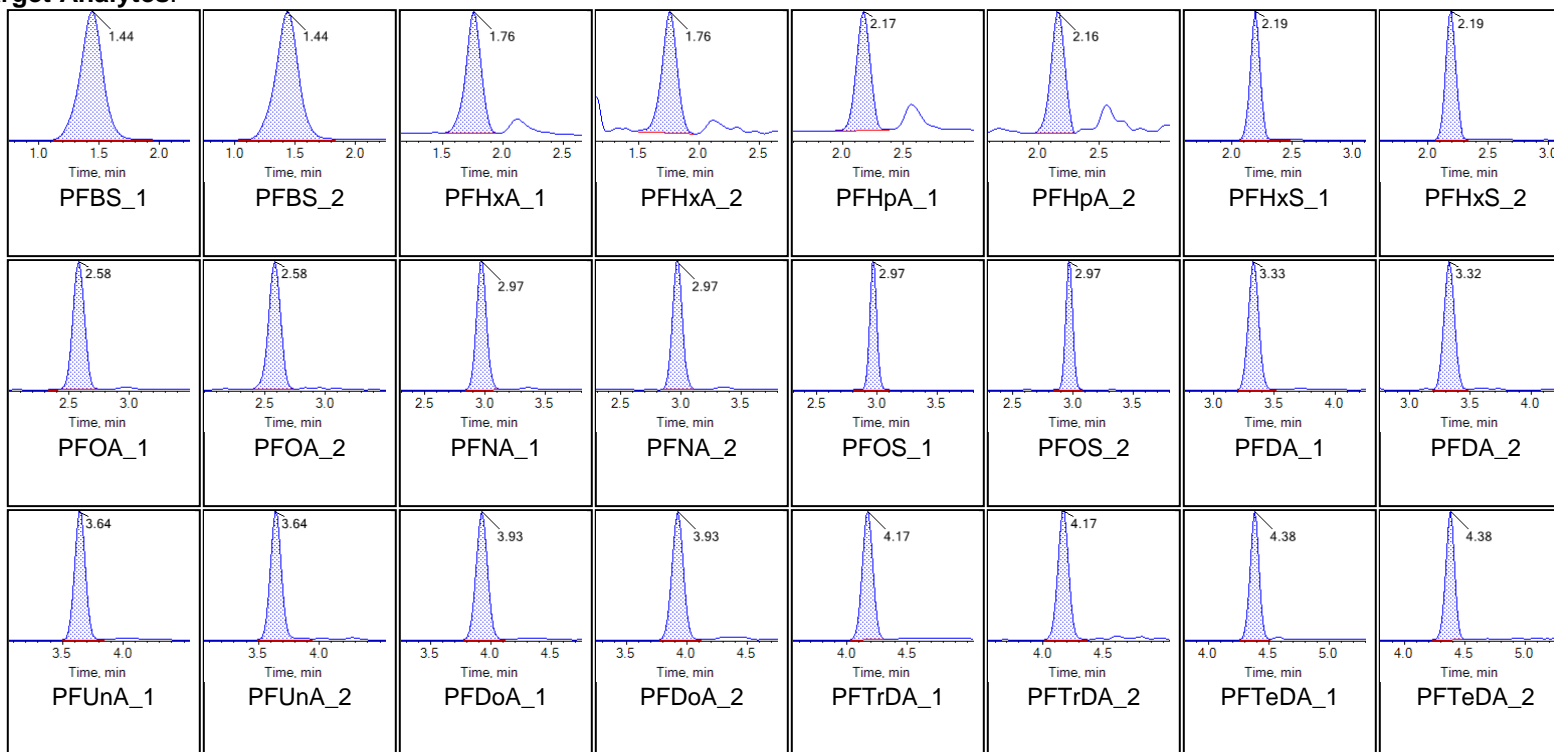
Internal Standards:



Sample Name	I3463MS-FS-D(3)	Injection Vial	7
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:21:33 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

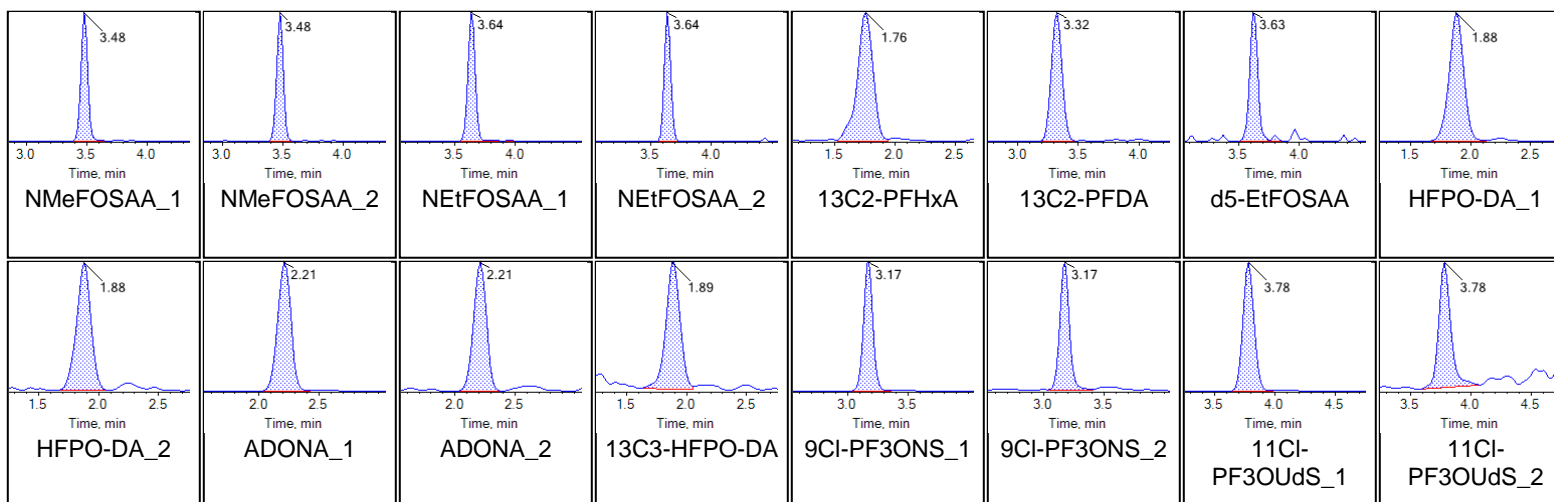
Chromatograms

Target Analytes:

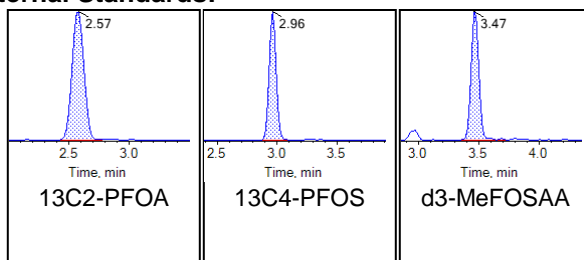




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





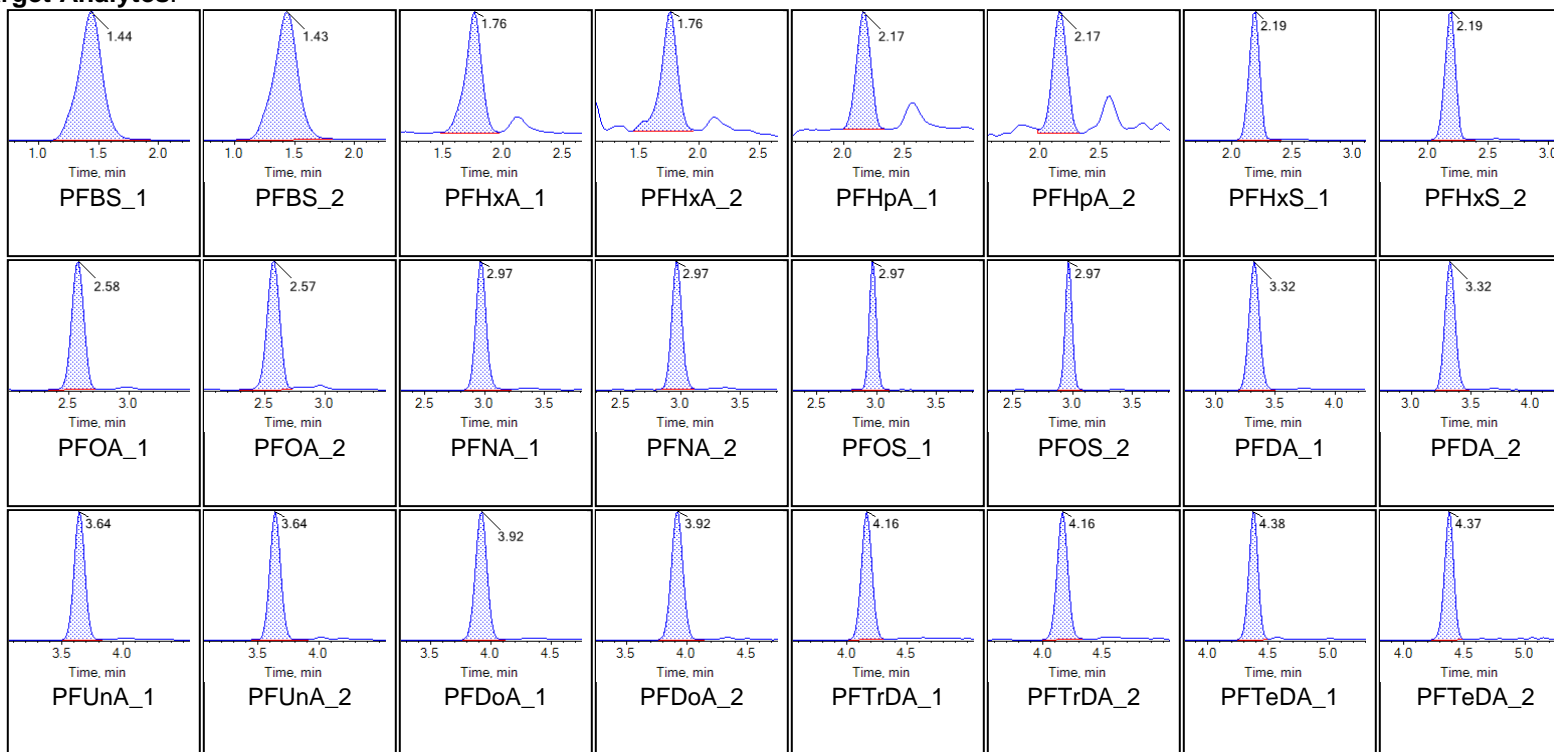
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	I3463MSD-FS-D(3)	Injection Vial	8
Sample ID	F4-1844-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:30:31 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

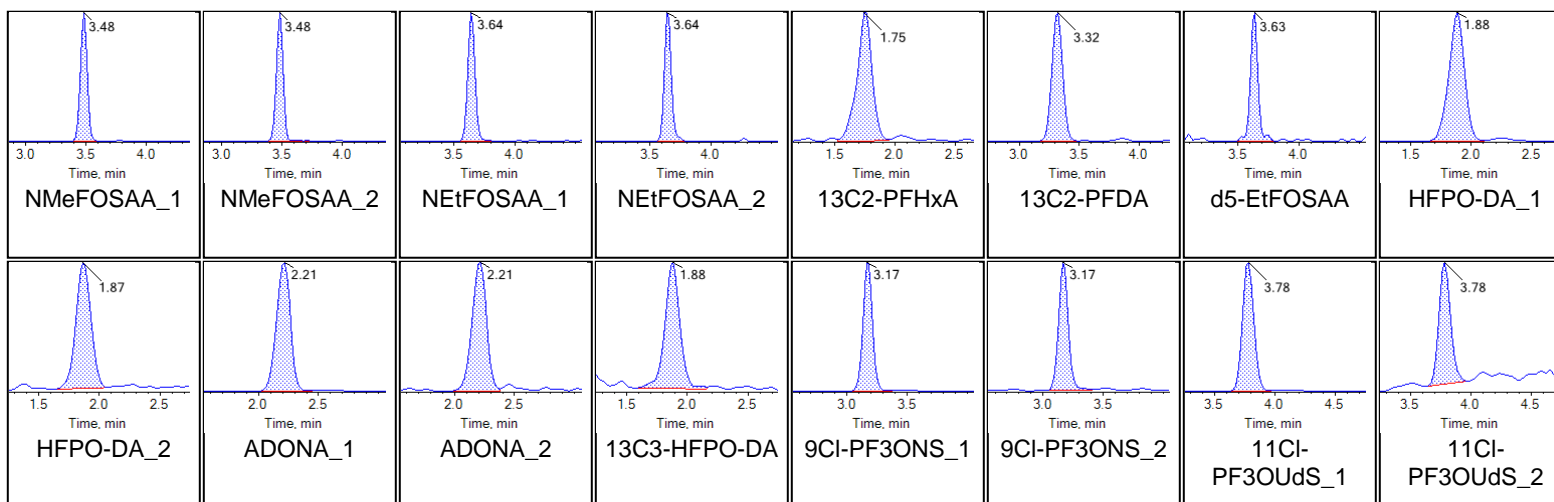
Chromatograms

Target Analytes:

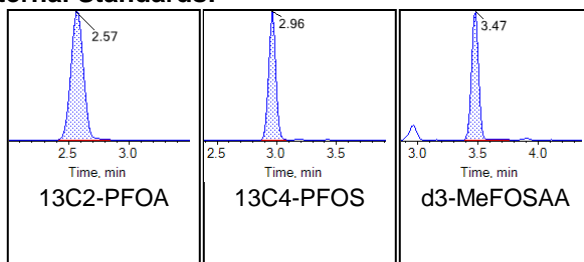




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

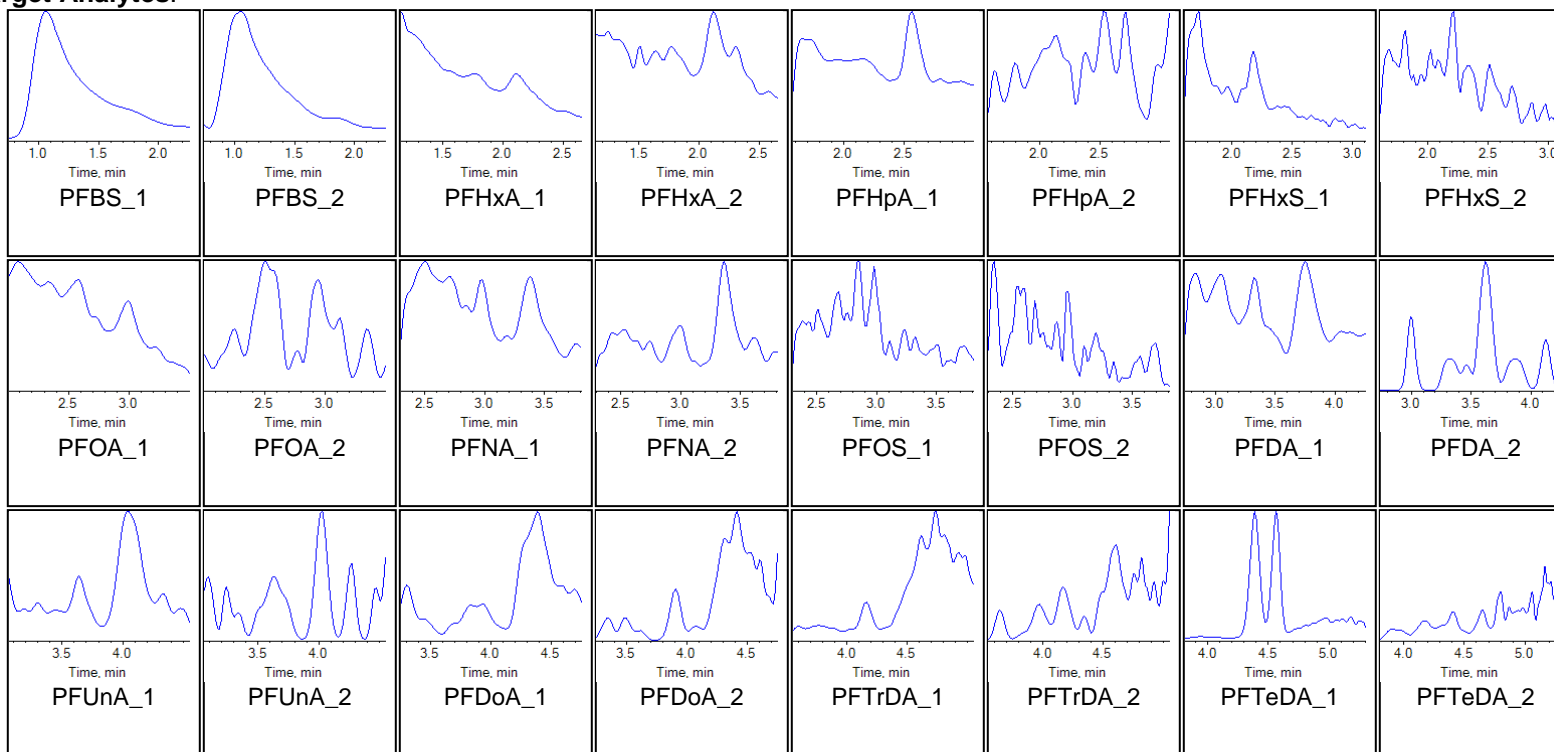
Internal Standards:



Sample Name	I3455-FS(0)	Injection Vial	9
Sample ID	M6-1518-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:39:28 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

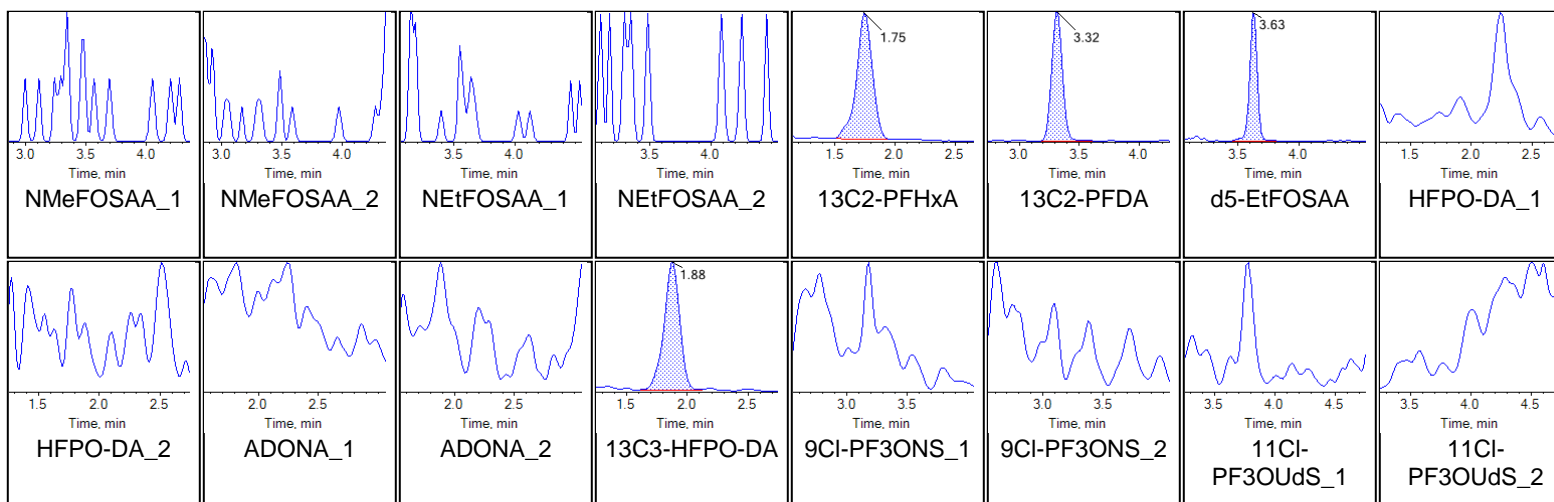
Chromatograms

Target Analytes:

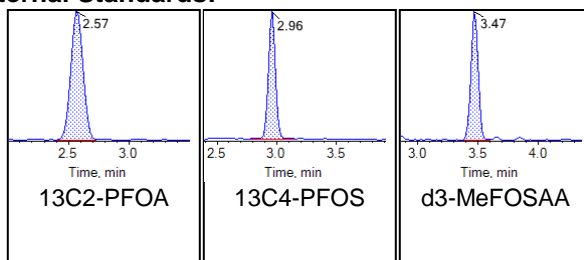




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

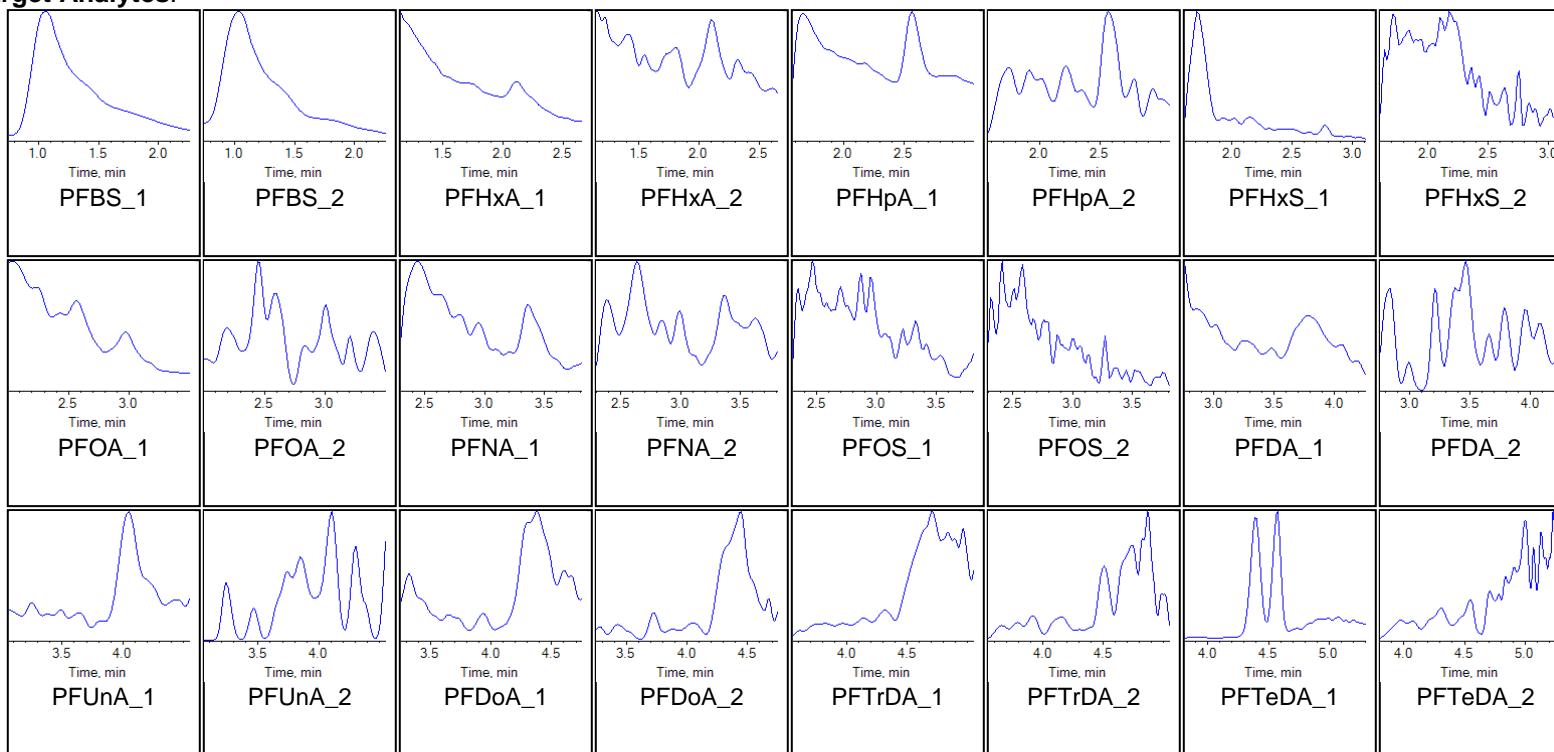
Internal Standards:



Sample Name	I3457-FS(0)	Injection Vial	10
Sample ID	H5-2139-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:48:24 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

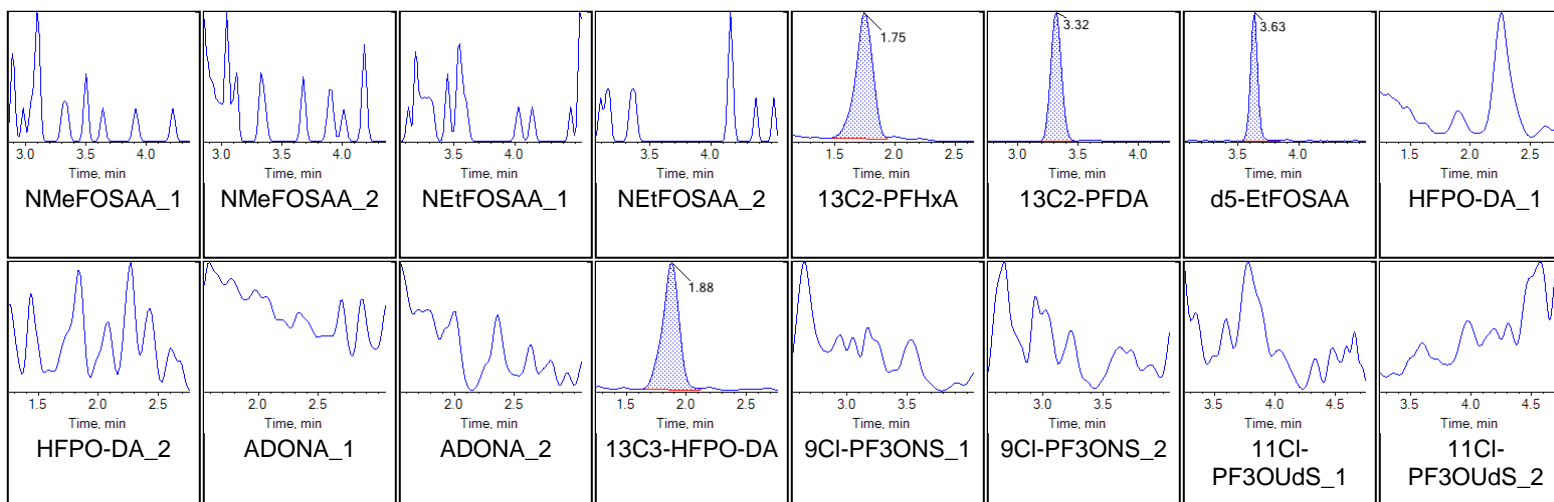
Chromatograms

Target Analytes:

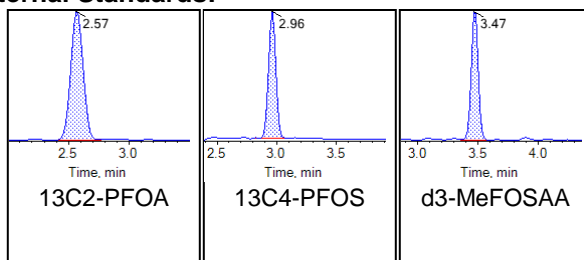




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:





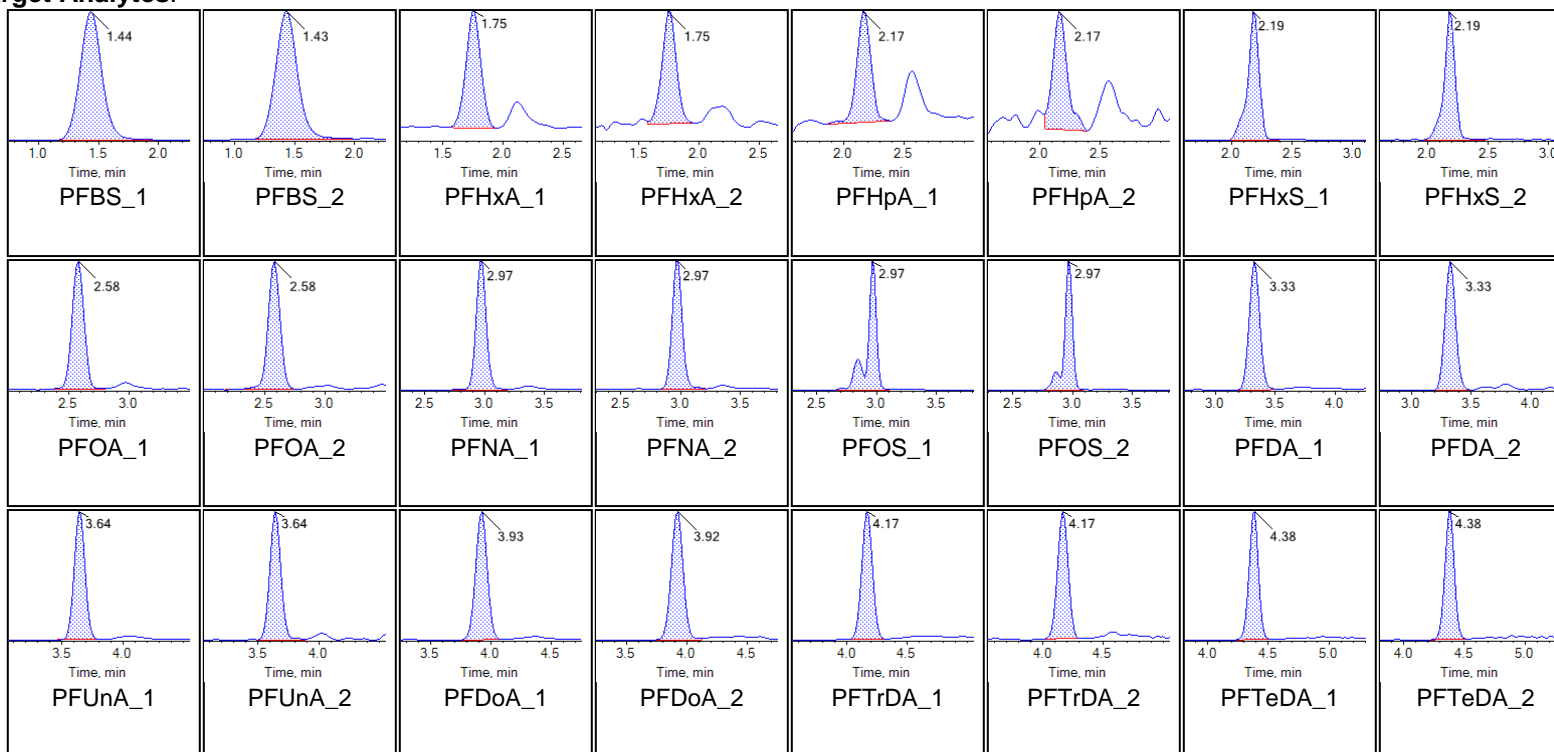
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Sample Name	KL68 CCV	Injection Vial	13
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:15:19 PM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW

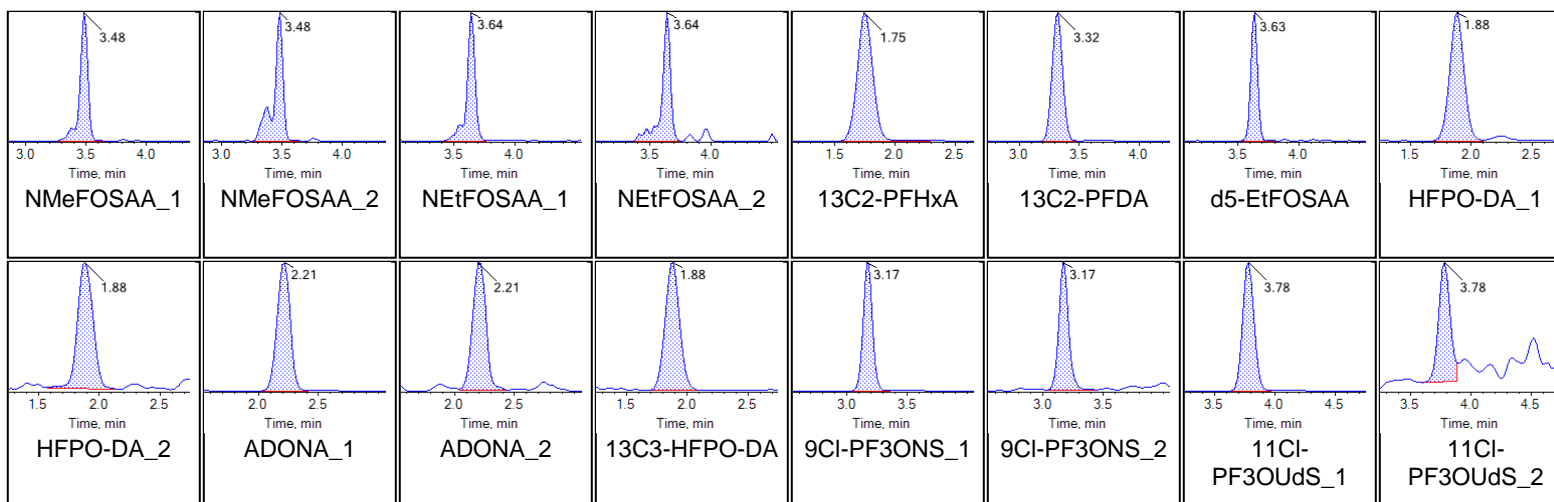
Chromatograms

Target Analytes:

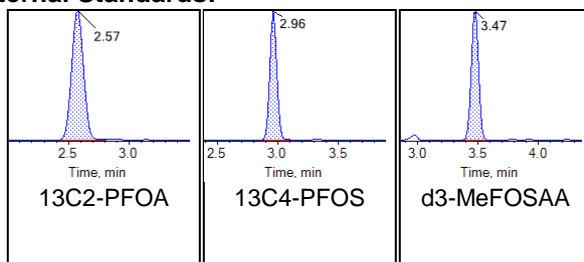




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 7:39:16 AM

Internal Standards:



Unused Data

Sample Name	I3455-FS(0)	Injection Vial	31
Sample ID	M6-1518-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:33:40 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW-UNUSED
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12499.68	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12499.68	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12499.68	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12499.68	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	22371.80	105.32	298.0	False	13C2-PFOA	25943.45	100.00				
13C2-PFDA	515.0 / 470.0	3.36	20898.92	93.99	924.0	False	13C2-PFOA	25943.45	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	8532.76	270.78	385.5	False	d3-MeFOSAA	12499.68	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	25943.45	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	15929.13	97.48	341.5	False	13C2-PFOA	25943.45	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:38:07 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	122486.77	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3457-FS(0)	Injection Vial	32
Sample ID	H5-2139-DW0001-20190531	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 8:42:38 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0465_DW-UNUSED
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11083.05	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11083.05	400.00	NMeFOSAA	N/A	0.556	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11083.05	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11083.05	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	22337.41	115.46	328.9	False	13C2-PFOA	23630.00	100.00				
13C2-PFDA	515.0 / 470.0	3.35	24588.78	121.42	1020.2	False	13C2-PFOA	23630.00	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	11629.26	416.22	266.5	False	d3-MeFOSAA	11083.05	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	23630.00	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	16193.72	108.80	311.7	False	13C2-PFOA	23630.00	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 7:38:07 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	124041.77	287.00	11CI-PF3OUdS	N/A	0.010	✓

PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
QC
Batch 19-0466
Package DP-19-0408

Submitted to:
Tetra Tech
661 Anderson Drive Foster Plaza 7
Pittsburgh, PA 15220 USA

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

BATTELLE

It can be done


PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
QC
Batch 19-0466
Package DP-19-0408

Submitted to:
Tetra Tech
661 Anderson Drive Foster Plaza 7
Pittsburgh, PA 15220 USA

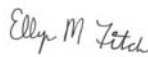
NELAP Accreditation Number: E87856 (Florida Department of Health)
DoD-ELAP Accreditation Number: 91667

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

Analyst Approval:


Digitally signed by
Lauren Griffith
Date: 2019.06.05
13:34:20 -04'00'

QC Chemist Approval:



Digitally signed by Ellyn M. Fitch
Date: 2019.06.06 10:01:22 -04'00'

Project Manager Approval:




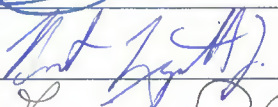
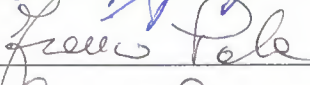





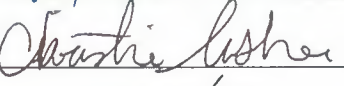

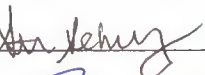

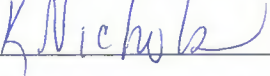

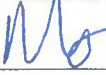

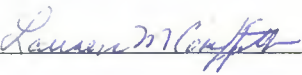
Digitally signed by Jonathan Thorn
Date: 2019.06.07 06:45:46 -04'00'

BATTELLE
It can be done

PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
QC
Batch 19-0466
Package DP-19-0408

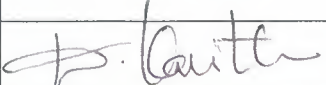

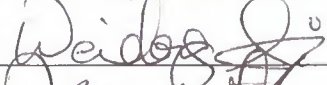
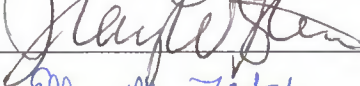
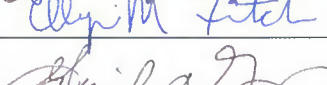
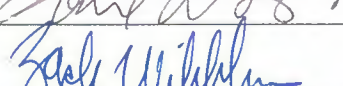
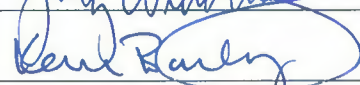
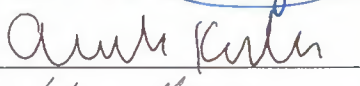


1	<i>Work Plan</i> Laboratory Work Plan, Addendums To Work Plan, Memos From Project Manager, Special Instructions, Chain-of-Custody Reports.	1
2	<i>Tables</i> Analytical Data Tables, Qualifier Definitions.	19
3	<i>Miscellaneous Documentation</i> Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	28
4	<i>Sample Preparation Records</i> Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	98
5	<i>Analytical Calibrations</i> Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	111
6	<i>Analytical Data</i> Raw Data Quantification Reports.	192
7	<i>Chromatograms</i> Sample And Standard Chromatograms.	209
8	<i>Unused Data</i>	NA

Signature Page

Battelle 2018 (1 of 2) Signature Page			
Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4-4-2018
FRANC PALA		FP	4-4-2018
Carla Devine		CRD	4/4/18
Denise Schumitz		DNS	4/4/18
Carol Ann McManey		CM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mena		MM	4/4/2018
Christie Usher		CU	4/4/18
Kevin Matroney		KM	4/4/18
Stephanie Schmitz		SAS	4/4/18
Jordan Tower		JT	4/4/18
KRISTEN NICHOLS		KN	4/4/18
Quimiao H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith		LMG	4.4.18

Signature Page

Battelle 2018 (2 of 2)
Signature Page

Name (Printed)	Signature	Initials	Date
KAVITHA DASU		KD	04/04/18
Kayla Lamarre		KAL	04/04/18
Weidong Li		W.L	04/04/18
Tracy W Stenner		TWS	04/04/18
Ellyn M Fitch		EF	12-April-2018
Gail DeRuzzo		GD	4/18/18
Zachary Willenberg		Z/W	4/20/18
Kevin Bailey		KB	10/25/18
Andrea Kulda		AK	10/25/18
William Mendelsohn		WM	10/25/18

Sample Summary

Client: Tetra Tech, Inc

SDG: 19-0466

Project/Site: Nasa Kennedy Space Center

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CU244PB-FS	Procedural Blank	WATER	6/3/2019	6/3/2019
CU245LCS-FS	Laboratory Control Sample	WATER	6/3/2019	6/3/2019
I3467-FS	E3-1120-FRB-20190531-01	QC	5/31/2019	6/1/2019
I3469-FS	H4-1797-FRB-20190531-01	QC	5/31/2019	6/1/2019
I3471-FS	H4-1840A-FRB-20190531-01	QC	5/31/2019	6/1/2019

Work Plan



WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title: Nasa: PFAS Drinking Water
Project Number: 100123260
Client: Tetra Tech
 661 Anderson Drive Foster Plaza 7
 Pittsburgh, PA 15220
 USA

Client Contact Information: Chris Pike
 Project Manager
 (412) 921-8861(V)
 NA
 chris.pike@tetrattech.com

Effective Date of QAPP: 6/3/2019
Version Number: 100123260(L)-02
Project Manager: Thorn, Jonathan
Laboratory Task Manager: Thorn, Jonathan
Deliverable Due Date: 6/5/2019

2.0 SCOPE OF WORK

Overview: Analysis of drinking water samples at Nasa Kennedy Space Center.
Matrix: Water

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

The list of samples for this project plan are presented in Attachment 1.

Storage Directions: Store refrigerated.
Sub_Sampling: None
Procedures: NA
Contact: NA
Comment: NA
Archiving: Dispose of samples six months after final report has been delivered. Notify client prior to disposal of samples.
Disposal: Dispose of samples in proper waste stream.



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

2.1.2 Sample Preparation

NA

Samples Expected:	Samples Per Batch:	Batches Expected:
30	20	2

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

Type:	Description:	Count:	Rgt:	Reference:	Comment:
PB	Laboratory control reagent blank.	1 per batch	--	NA	
LCS	Laboratory Control Sample	1 per batch	No	NA	
MS	Spiked field sample for determining method accuracy in the presence of matrix.	1 per batch	--	NA	MS/MSD defined on custody records
MSD	Spiked field sample for determining method accuracy and precision in the presence of matrix.	1 per batch	--	NA	MS/MSD defined on custody records

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

SOP No.-Rev:	5-371-04
SOP Title:	<i>ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1</i>
Sample Size:	250 mL
SIS and LCS/MS Compounds:	Defined in Table 2.
Deviations:	None
Comments:	None

Table 2: SIS and LCS/MS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Surrogate Solution	KJ90 SIS	~ 0.100 - 0.40 ng	50 uL	NA



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Second Source LCS/MS Solution	KJ91 LCS/MS	~ 5.0 - 6.3 ng	125 uL	NA

2.1.3.2 Cleanup

None.

RIS spiking levels are presented in Table 3.

Extract PIV (uL): 1000

Table 3: RIS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Internal Standard Solution	KJ92 RIS	~ 0.100 - 0.40 ng	50 uL	NA

2.1.4 Instrumental Analysis

The list of analytes along with data quality criteria are presented in Attachment 2.

- 1) SOP_No-Rev: **5-371-04**
- SOP_Title: *ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1*
- Deviations: None
- Comments: None

2.2. DELIVERABLES

Deliverables Due:	6/5/2019
LIMS Reports:	No
Histograms:	No
Excel Tables:	No
EICs:	No
Chromatograms:	No



WORK/QUALITY ASSURANCE PROJECT PLAN

EDDs: *No*

Comments:

- Excel tables for rush samples to Project Manager within 3-business days (full data package within 10 days).
- L2 validation package not required
- Tetra Tech EDD format
- Full validation packages (see SOW for details)
- Florida reporting template and qualifiers (see SOW for details)

3.0 QUALITY

The Method Quality Objectives are defined in Attachment 3.

4.0 ORGANIZATION AND COMMUNICATION

4.1 ORGANIZATION

The project team is defined in Table 4. Supervisors may make substitutions with Project Manager concurrence.

Table 4: Project Team and Roles

Staff Member	Role	Comment
Jonathan R. Thorn	Project Manager	NA
Stephanie A. Schultz	Sample Preparation	NA
Denise M. Schumitz	LC-MS/MS Analysis	NA
Matt D. Schumitz	Sample Custody	NA
Carla R. Devine	Quality Control Officer	NA
Zachary J. Willenberg	Quality Assurance Officer	NA

4.2 COMMUNICATION

A kick-off meeting will be held to discuss project scope and goals.

5.0 SCHEDULE

The project schedule is presented in Table 5.

Table 5. Schedule of Laboratory Activities

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Receipt	06/01/2019	06/01/2019	0	NA



WORK/QUALITY ASSURANCE PROJECT PLAN

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Preparation	06/03/2019	06/04/2019	1	NA
Instrument Analysis	06/04/2019	06/05/2019	1	NA
Quality Control Review	06/05/2019	06/05/2019	0	NA
Quality Assurance Review	06/05/2019	06/05/2019	0	NA

6.0 BUDGET

The labor budget for the analytical task is presented in Table 6.

Table 6. Labor Budget (Laboratory Analytical Task)

Labor Activity:	Hours/ Batch:	Batches:	Total Hours:	Comment:
Sample Receipt	2	1	2	hours per batch of 20 samples
Sample Preparation	9	1	9	NA
Instrument Analysis	8	1	8	NA
Quality Control Review	3	1	3	NA
Quality Assurance Review	1	1	1	NA

7.0 STAFF DEVELOPMENT

None anticipated.



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: SHP-190603-01
Status: Pending
Description: NASA
Range: I3451-I3471
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	I3451	Q6-0082-DW0001-20190530	05/30/2019 12:50 pm	DW	R0119	(NA)		
2	I3452	Q6-0082-FRB-20190530-01	05/30/2019 1:00 pm	QC	R0119	(NA)		
3	I3453	H6-1607-DW0001-20190530	05/30/2019 4:50 pm	DW	R0119	(NA)		
4	I3454	H6-1607-FRB-20190530-01	05/30/2019 5:00 pm	QC	R0119	(NA)		
5	I3455	M6-1518-DW0001-20190531	05/31/2019 8:35 am	DW	R0119	(NA)		
6	I3456	M6-1518-FRB-20190531-01	05/31/2019 8:45 am	QC	R0119	(NA)		
7	I3457	H5-2139-DW0001-20190531	05/31/2019 10:10 am	DW	R0119	(NA)		
8	I3458	H5-2139-FRB-20190531-01	05/31/2019 10:20 am	QC	R0119	(NA)		
9	I3459	H5-1434-DW0001-20190531	05/31/2019 11:15 am	DW	R0119	(NA)		
10	I3460	H5-1434-FRB-20190531-01	05/31/2019 11:20 am	QC	R0119	(NA)		
11	I3461	H4-1598-DW0001-20190531	05/31/2019 12:10 pm	DW	R0119	(NA)		
12	I3462	H4-1598-FRB-20190531-01	05/31/2019 12:15 pm	QC	R0119	(NA)		
13	I3463	F4-1844-DW0001-20190531	05/31/2019 1:00 pm	DW	R0119	(NA)		
14	I3464	F4-1844-FRB-20190531-01	05/31/2019 1:05 pm	QC	R0119	(NA)		
15	I3465	E3-1120-DW0001-20190531	05/31/2019 2:15 pm	DW	R0119	(NA)		
16	I3466	E3-1120-FD-20190531-01	05/31/2019 2:20 pm	QC	R0119	(NA)		
17	I3467	E3-1120-FRB-20190531-01	05/31/2019 2:25 pm	QC	R0119	(NA)		
18	I3468	H4-1797-DW0001-20190531	05/31/2019 3:45 pm	DW	R0119	(NA)		
19	I3469	H4-1797-FRB-20190531-01	05/31/2019 3:50 pm	QC	R0119	(NA)		
20	I3470	H4-1840A-DW0001-20190531	05/31/2019 4:25 pm	DW	R0119	(NA)		
21	I3471	H4-1840A-FRB-20190531-01	05/31/2019 4:30 pm	QC	R0119	(NA)		



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name:	Master_371.1
SOP Reference:	5-371 - ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1
Description:	PFAS in drinking water
Matrix:	L - Liquid Samples, like water or sea water, prepared and analyzed under the same class of detection limits.
Detection Limit Study:	5-371
Instrument:	LC-MS/MS
MQO Criteria	Universal_LC
Standard Report:	Standard Result Report

Method Specific Reporting		Holding Times (days)		Data Flags
Result Units:	ng/L	Unit Conversion:	(none)	Sample: 14 DL_Flag: U
Weight Basis:	LIQUID	Result Format:	Fixed Digits	Frozen: 14 RL_Flag: J
Standard Basis:	RIS	# of Figures/Digits:	2	Extract: 28 PB_Flag: B
Oil Weight Basis:	No	Oil Weight Source:	Oil Weight	DIL_Flag: D
U-Value Substitution:	U-Flag=MD	Histograms:	No	HT_Flag: T
ECD_Reporting:	No			

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
1	Perfluoro-n-hexanoic acid	PFHxA	T	13C2-PFOA		No	No
2	Perfluoro-n-heptanoic Acid	PFHpA	T	13C2-PFOA		No	No
3	Perfluoro-n-octanoic Acid	PFOA	T	13C2-PFOA		No	No
4	Perfluorononanoic Acid	PFNA	T	13C2-PFOA		No	No
5	Perfluoro-n-decanoic Acid	PFDA	T	13C2-PFOA		No	No
6	Perfluoro-n-undecanoic acid	PFUnA	T	13C2-PFOA		No	No
7	Perfluoro-n-dodecanoic acid	PFDoA	T	13C2-PFOA		No	No
8	Perfluoro-n-tridecanoic acid	PFTTrDA	T	13C2-PFOA		No	No
9	Perfluoro-n-tetradecanoic acid	PFTeDA	T	13C2-PFOA		No	No
10	N-methylperfluoro-1-octanesulfonamidoacetic acid	NMeFOSAA	T	d3-MeFOSAA		No	No
11	N-ethylperfluoro-octanesulfonamidoacetic acid	NEtFOSAA	T	d3-MeFOSAA		No	No
12	Perfluoro-1-butanefulfonate	PFBS	T	13C4-PFOS		No	No
13	Perfluoro-1-octanesulfonate	PFOS	T	13C4-PFOS		No	No
14	Perfluoro-1-hexanesulfonate	PFHxS	T	13C4-PFOS		No	No
15	Hexafluoropropylene oxide dimer acid	HFPO-DA	T	13C2-PFOA		No	No



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_371.1

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
16	Adona	Adona	T	13C2-PFOA		No	No
17	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	T	13C4-PFOS		No	No
18	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	T	13C4-PFOS		No	No
1	13C2-PFHxA	13C2-PFHxA	SIS	13C2-PFOA		No	No
2	13C2-PFDA	13C2-PFDA	SIS	13C2-PFOA		No	No
3	d5-EtFOSAA	d5-EtFOSAA	SIS	d3-MeFOSAA		No	No
4	13C3-HFPO-DA	13C3-HFPO-DA	SIS	13C2-PFOA		No	No
Total Analytes:						22	

Subtract Peaks:

None

Sum Peaks:

None



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_371.1

ICAL Acceptance Criteria:

Curve Fit:	Limit Mean(%):	Mean Qual:	Limit Ind.:	Ind. Qual:	Min Points:	Points Qual:	Comments:
Linear	NA	NA	0.995	N	5	N	NA
Average RF	15	N	25	N	5	N	NA
Linear (0,0)	NA	NA	0.995	N	5	N	NA
Quadratic	NA	NA	0.995	N	6	N	NA
Quadratic (0,0)	NA	NA	0.995	N	6	N	NA

Continuing Calibration Verification Criteria:

CCV Name: Standard

Frequency Hrs:	Mean PD(%):	Individual PD(%):	RIS/SIS RT Window (min):	Area Limit Low(%):	Area Limit High(%):	Comment:
12 (N)	20 (N)	25 (N)	0.07 (N)	-50	100 (N)	Lab Default Continuing Calibration Verification Criteria

Independent Calibration Verification:

ICC Name: Standard

Mean PD Limit(%):	Ind. PD Limit(%):	RIS/SIS Window Limit (Secs):	Area Limit High(%):	Area Limit Low(%):	Comment:
15 (N)	20 (N)	0.07 (N)	-50	100 (N)	Standard laboratory criteria for ICCs

Mass Discrimination Criteria:

None

Degradation Check Criteria:

None



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application: <i>Universal_LC</i>			
MQO:	Acceptance Criteria:	Qual:	Corrective Action:
Procedural Blank	Samples must be greater than five times the blank concentration (>5xPB).	B	Review with Project Manager; re-analyze or justify results in project records.
PB Measurement Quality Objective	Organic results in the Procedural Blank are less than 1/2 times the LOQ (<1/2xLOQ)	N	Review with Project Manager; re-analyze or justify results in project records.
Laboratory Control Sample	Recovery values 70-130%.	N	Review with project manager; re-analyze or justify reporting the results in project records.
Matrix Spike / Matrix Spike Duplicate Recovery	Organics 70-130%. Analyte concentration in MS/MSD must be greater than five times reported background concentration.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the Original	n	
Matrix Spike/Spike Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration in MS/MSD must be greater than five times reported background concentration.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the Original	n	
Standard Reference Material Accuracy	Organics Percent Difference less than 30% from a range of certified values on average. Analyte concentration must be greater than five times the Method Detection Limit (>5xMDL).	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the MDL	n	
Analytical Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration must be > 5x MDL.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Original is less than 5 times the MDL	n	



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application: <i>Universal_LC</i>			
MQO:	Acceptance Criteria:	Qual:	Corrective Action:
Analytical Triplicate Precision	Organics results less than 30% Relative Standard Deviation (RSD). Analyte concentration must be > 5x MDL.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Original is less than 5 times the MDL	n	
Surrogate Compound Recovery	Recovery results between 50% and 150%.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
Control Oil	RPD < 30% for at least 90% of analytes	N	Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Instrument Calibration	5-371-4: R-squared greater than or equal to 0.995 Mean RSD less than or equal to 15%, Individual RSD less than or equal to 25%	N	Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Independent Calibration Check Solution	5-371-4: Individual PD less than or equal to 20%. Mean Percent Difference less than or equal to 15%.	N	Review with Project Manager; re-analyze or justify in project records.
Continuing Calibration Verification	5-371-4: Individual PD less than or equal to 25%. Mean Percent Difference less than or equal to 20%.	N	Review with Project Manager; re-analyze or justify in project records.

ShpNo SHP-190603-01

It can be done

Battelle Project No: _____

Sample Receipt Form

Approved: Authorized:

Project Number: 112G08079 Client: Tetra Tech
 Received by: Schumitz, Matt Date/Time Received: Saturday, June 01, 2019 12:00 PM
 No. of Shipping Containers: 2

SHIPMENT

Method of Delivery: Commercial Carrier Tracking Number: Fed Ex
 COC Forms: Shipped with samples No Forms

Cooler(s)/Box(es)

Cntr	Type	Tracking No.	Seal	Seal	Container	Therm.	Temp C	Smpls
1 of 2	Cooler	7753 6291 3097	Custody Seal	Intact	Intact	Therm_1	1.0	10
2 of 2	Cooler	7753 6291 2860	Custody Seal	Intact	Intact	Therm_1	1.3	11

Samples

Sample Labels: Sample labels agree with COC forms
 Discrepancies (see Sample Custody Corrective Action Form)

Container Seals: Tape Custody Seals Other Seals (See sample Log)
 Seals intact for each shipping container
 Seals broken (See sample log for impacted samples)

Condition of Samples: Sample containers intact
 Sample containers broken/leaking (See Custody Corrective Action Form)

Temperature upon receipt (°C): 1.3 Temperature Blank used Yes No
(Note: If temperature upon receipt differs from required conditions, see sample log comment field)

Samples Acidified: Yes No Unknown

Initial pH 5-9?: Yes No NA
If no, individual sample adjustments on the Auxiliary Sample Receipt Form

Total Residual Chlorine Present?: Yes No NA
If yes, individual sample adjustments on the Auxiliary Sample Receipt Form

Head Space <1% in samples for water VOC analysis: Yes No NA
Individual sample deviations noted on sample log

Samples Containers:
 Samples returned in PC-grade jars: Yes No Unknown /Lot No.: Unknown

Storage Location: Custody: Refrigerator - R0119 (NA) BDO IDs Assigned: I3451 - I3471

Samples logged in by: Schumitz, Matt Date/Time: 06/01/2019 12:00 PM

Approved By: _____ Approved On: _____

Authorized By: _____ Authorized On: _____



It can be done

ShpNo SHP-190603-01

Battelle Project No:

Sample Receipt Form Details

Approved: Authorized

Project Number: 112G08079

Client: Tetra Tech

Received by: Schumitz, Matt

Date/Time Received: Saturday, June 01, 2019 12:00 PM

No. of Shipping Containers: 2

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
I3451	Q6-0082-DW0001-20190530	05/30/19 12:50	06/03/19 9:57	2	DW	1	NA	NA	NA	R0119 (NA)			
I3452	Q6-0082-FRB-20190530-01	05/30/19 13:00	06/03/19 9:57	2	QC	1	NA	NA	NA	R0119 (NA)			
I3453	H6-1607-DW0001-20190530	05/30/19 16:50	06/03/19 9:59	2	DW	1	NA	NA	NA	R0119 (NA)			
I3454	H6-1607-FRB-20190530-01	05/30/19 17:00	06/03/19 10:00	2	QC	1	NA	NA	NA	R0119 (NA)			
I3455	M6-1518-DW0001-20190531	05/31/19 8:35	06/03/19 10:01	2	DW	1	NA	NA	NA	R0119 (NA)			
I3456	M6-1518-FRB-20190531-01	05/31/19 8:45	06/03/19 10:01	2	QC	1	NA	NA	NA	R0119 (NA)			
I3457	H5-2139-DW0001-20190531	05/31/19 10:10	06/03/19 10:02	2	DW	1	NA	NA	NA	R0119 (NA)			
I3458	H5-2139-FRB-20190531-01	05/31/19 10:20	06/03/19 10:02	2	QC	1	NA	NA	NA	R0119 (NA)			
I3459	H5-1434-DW0001-20190531	05/31/19 11:15	06/03/19 10:06	2	DW	1	NA	NA	NA	R0119 (NA)			
I3460	H5-1434-FRB-20190531-01	05/31/19 11:20	06/03/19 10:06	2	QC	1	NA	NA	NA	R0119 (NA)			
I3461	H4-1598-DW0001-20190531	05/31/19 12:10	06/03/19 10:06	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3462	H4-1598-FRB-20190531-01	05/31/19 12:15	06/03/19 10:07	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3463	F4-1844-DW0001-20190531	05/31/19 13:00	06/03/19 10:07	6	DW	1.3	NA	NA	NA	R0119 (NA)			
I3464	F4-1844-FRB-20190531-01	05/31/19 13:05	06/03/19 10:08	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3465	E3-1120-DW0001-20190531	05/31/19 14:15	06/03/19 10:08	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3466	E3-1120-FD-20190531-01	05/31/19 14:20	06/03/19 10:08	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3467	E3-1120-FRB-20190531-01	05/31/19 14:25	06/03/19 10:09	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3468	H4-1797-DW0001-20190531	05/31/19 15:45	06/03/19 10:09	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3469	H4-1797-FRB-20190531-01	05/31/19 15:50	06/03/19 10:10	2	QC	1.3	NA	NA	NA	R0119 (NA)			
I3470	H4-1840A-DW0001-20190531	05/31/19 16:25	06/03/19 10:10	2	DW	1.3	NA	NA	NA	R0119 (NA)			
I3471	H4-1840A-FRB-20190531-01	05/31/19 16:30	06/03/19 10:10	2	QC	1.3	NA	NA	NA	R0119 (NA)			

Total Samples: 21

PROJECT NO: 12G-08079	FACILITY: Multi Site Well Survey	PROJECT MANAGER Chris Pike	PHONE NUMBER (412) 921-7090	LABORATORY NAME AND CONTACT: Batelle - Jon Thorn
SAMPLERS (SIGNATURE) 		FIELD OPERATIONS LEADER Chuck Sorden	PHONE NUMBER (321) 591-7580	ADDRESS 141 Longwater Dr.
		CARRIER/WAYBILL NUMBER		CITY, STATE Norwell, MA 02061

STANDARD TAT
RUSH TAT
 24 hr. 48 hr. 72 hr. 7 day 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G)	P
PRESERVATIVE USED	Fr. 2mm
TYPE OF ANALYSIS	USEPA 537 AAS

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	COMMENTS
05/30	1250	QC-0082-DW0001-2019 0530		-	-	DW	G	2	I 3451
	1300	QC-0082-FRB-2019 0530-01		-	-	QC			52
	1650	H6-1607-DW0001-2019 0530				DW			53
05/30	1700	H6-1607-FRB-2019 0530-01				QC			54
05/31	0835	M6-1518-DW0001-2019 0531				DW			55
	0845	M6-1518-FRB-2019 0531-01				QC			56
	1010	H5-2139-DW0001-2019 0531				DW			57
	1020	H5-2139-FRB-2019 0531-01				QC			58
	1115	H5-1434-DW0001-2019 0531				DW			59
	1120	H5-1434-FRB-2019 0531-01				QC			60
	1210	H4-1548-DW0001-2019 0531				DW			61
	1215	H4-1548-FRB-2019 0531-01				QC		2	I 3462
05/31	1300	F4-1844-DW0001-2019 0531		-	-	DW	G	6	I 3463 MS/MSD Collected

1. RELINQUISHED BY 	DATE 05/31/19	TIME 1750	1. RECEIVED BY 	DATE 6-1-19	TIME 1200
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

PROJECT NO: 112 G-08079	FACILITY: Multi Site Well Survey	PROJECT MANAGER Chris Pike	PHONE NUMBER (412) 921-7090	LABORATORY NAME AND CONTACT: Battelle - San Thom
SAMPLERS (SIGNATURE) 	FIELD OPERATIONS LEADER Chuck Sordun	PHONE NUMBER (321) 591-7580	ADDRESS 141 Longwater Dr.	CITY, STATE Norwell Ma, 02061
CARRIER/WAYBILL NUMBER				

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED	TYPE OF ANALYSIS	COMMENTS
05/31	1305	F4-1844-FRB-20190531-01		-	-	QC	G	2	X			USEPAS37 PEAS Trizma P	I3464
	1415	E3-1120-DW0001-20190531				DW							65
	1420	E3-1120-FD-20190531-01				QC							66
	1425	F3-1120-FRB-20190531-01				QC							67
	1545	H4-1797-DW0001-20190531				DW							68
	1550	H4-1797-FRB-20190531-01				QC							69
	1625	H4-1840A-DW0001-20190531				DW							70
05/31	1630	H4-1840A-FRB-20190531-01		-	-	QC	G	2	X				I3471

1. RELINQUISHED BY 	DATE 05/31/15	TIME 1730	1. RECEIVED BY 	DATE 6-1-19	TIME 1200
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

ORIGIN ID:COIA (321) 591-7580
CHARLES SORDEN
TETRA TECH, INC.
11 RIVERSIDE DRIVE
SUITE 204
COCOA, FL 32922
UNITED STATES US

SHIP DATE: 31MAY19
ACTWGT: 60.00 LB
CAD: 100864341/NET4100

BILL SENDER

TO **MATT SCHUMITZ**

29 NICKERSON ST

PLYMOUTH MA 02360

(781) 810-9964

REF: 112G08079 3063

INV:
PO:

DEPT:

1.0

565.11/D66C/23AD



1 of 2
TRK# 7753 6291 3097
0201
MASTER

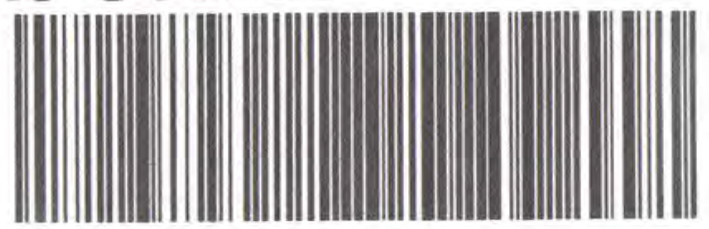
SATURDAY 12:00P
PRIORITY OVERNIGHT

RES

X0 UWAA

02360

MA-US BOS



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ORIGIN ID:COIA (321) 591-7580
CHARLES SORDEN
TETRA TECH, INC.
11 RIVERSIDE DRIVE
SUITE 204
COCOA, FL 32922
UNITED STATES US

SHIP DATE: 31MAY19
ACTWGT: 60.00 LB
CAD: 100864341/NET4100

BILL SENDER

TO **MATT SCHUMITZ**

29 NICKERSON ST

1.3

PLYMOUTH MA 02360

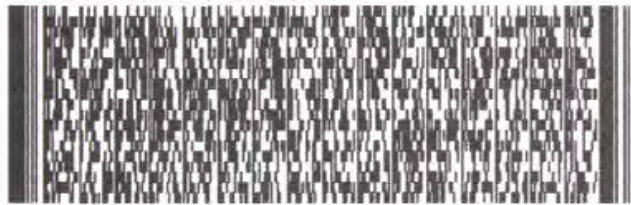
(781) 810-9964

REF: 112G08079.3063

INV.
PO

DEPT

565J1D66CZ3AD



SATURDAY 12:00P

PRIORITY OVERNIGHT

MPS#

0263

7753 6291 2860

Mstr# 7753 6291 3097

0201

RES

02360

X0 UWAA

MA-US

BOS



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Data Tables



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID E3-1120-FRB-20190531-01

Battelle ID I3467-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix QC
 Sample Size 0.265
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.22 U	I3467-FS(0)	1.000	6/5/2019	0.22	0.47	2.36
PFHpA	375-85-9	0.22 U	I3467-FS(0)	1.000	6/5/2019	0.22	0.47	2.36
PFOA	335-67-1	0.19 U	I3467-FS(0)	1.000	6/5/2019	0.19	0.47	2.36
PFNA	375-95-1	0.11 U	I3467-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFDA	335-76-2	0.10 U	I3467-FS(0)	1.000	6/5/2019	0.10	0.38	2.36
PFUnA	2058-94-8	0.09 U	I3467-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
PFDoA	307-55-1	0.13 U	I3467-FS(0)	1.000	6/5/2019	0.13	0.47	2.36
PFTTrDA	72629-94-8	0.09 U	I3467-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
PFTeDA	376-06-7	0.21 U	I3467-FS(0)	1.000	6/5/2019	0.21	0.47	2.36
NMeFOSAA	2355-31-9	0.19 U	I3467-FS(0)	1.000	6/5/2019	0.19	0.47	2.36
NEtFOSAA	2991-50-6	0.16 U	I3467-FS(0)	1.000	6/5/2019	0.16	0.47	2.36
PFBS	375-73-5	0.11 U	I3467-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFHxS	355-46-4	0.11 U	I3467-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFOS	1763-23-1	0.14 U	I3467-FS(0)	1.000	6/5/2019	0.14	0.47	2.36
HFPO-DA	13252-13-6	0.08 U	I3467-FS(0)	1.000	6/5/2019	0.08	0.38	2.36
Adona	919005-14-4	0.11 U	I3467-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
11Cl-PF3OUdS	763051-92-9	0.09 U	I3467-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
9Cl-PF3ONS	756426-58-1	0.11 U	I3467-FS(0)	1.000	6/5/2019	0.11	0.38	2.36

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	116	I3467-FS(0)	6/5/2019
13C2-PFDA	105	I3467-FS(0)	6/5/2019
d5-EtFOSAA	93	I3467-FS(0)	6/5/2019
13C3-HFPO-DA	100	I3467-FS(0)	6/5/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID H4-1797-FRB-20190531-01

Battelle ID I3469-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix QC
 Sample Size 0.265
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.22 U	I3469-FS(0)	1.000	6/5/2019	0.22	0.47	2.36
PFHpA	375-85-9	0.22 U	I3469-FS(0)	1.000	6/5/2019	0.22	0.47	2.36
PFOA	335-67-1	0.19 U	I3469-FS(0)	1.000	6/5/2019	0.19	0.47	2.36
PFNA	375-95-1	0.11 U	I3469-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFDA	335-76-2	0.10 U	I3469-FS(0)	1.000	6/5/2019	0.10	0.38	2.36
PFUnA	2058-94-8	0.09 U	I3469-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
PFDoA	307-55-1	0.13 U	I3469-FS(0)	1.000	6/5/2019	0.13	0.47	2.36
PFTTrDA	72629-94-8	0.09 U	I3469-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
PFTeDA	376-06-7	0.21 U	I3469-FS(0)	1.000	6/5/2019	0.21	0.47	2.36
NMeFOSAA	2355-31-9	0.19 U	I3469-FS(0)	1.000	6/5/2019	0.19	0.47	2.36
NEtFOSAA	2991-50-6	0.16 U	I3469-FS(0)	1.000	6/5/2019	0.16	0.47	2.36
PFBS	375-73-5	0.11 U	I3469-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFHxS	355-46-4	0.11 U	I3469-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFOS	1763-23-1	0.14 U	I3469-FS(0)	1.000	6/5/2019	0.14	0.47	2.36
HFPO-DA	13252-13-6	0.08 U	I3469-FS(0)	1.000	6/5/2019	0.08	0.38	2.36
Adona	919005-14-4	0.11 U	I3469-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
11Cl-PF3OUdS	763051-92-9	0.09 U	I3469-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
9Cl-PF3ONS	756426-58-1	0.11 U	I3469-FS(0)	1.000	6/5/2019	0.11	0.38	2.36

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	116	I3469-FS(0)	6/5/2019
13C2-PFDA	113	I3469-FS(0)	6/5/2019
d5-EtFOSAA	101	I3469-FS(0)	6/5/2019
13C3-HFPO-DA	103	I3469-FS(0)	6/5/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID H4-1840A-FRB-20190531-01

Battelle ID I3471-FS
 Sample Type SA
 Collection Date 05/31/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix QC
 Sample Size 0.265
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.22 U	I3471-FS(0)	1.000	6/5/2019	0.22	0.47	2.36
PFHpA	375-85-9	0.22 U	I3471-FS(0)	1.000	6/5/2019	0.22	0.47	2.36
PFOA	335-67-1	0.19 U	I3471-FS(0)	1.000	6/5/2019	0.19	0.47	2.36
PFNA	375-95-1	0.11 U	I3471-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFDA	335-76-2	0.10 U	I3471-FS(0)	1.000	6/5/2019	0.10	0.38	2.36
PFUnA	2058-94-8	0.09 U	I3471-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
PFDoA	307-55-1	0.13 U	I3471-FS(0)	1.000	6/5/2019	0.13	0.47	2.36
PFTTrDA	72629-94-8	0.09 U	I3471-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
PFTeDA	376-06-7	0.21 U	I3471-FS(0)	1.000	6/5/2019	0.21	0.47	2.36
NMeFOSAA	2355-31-9	0.19 U	I3471-FS(0)	1.000	6/5/2019	0.19	0.47	2.36
NEtFOSAA	2991-50-6	0.16 U	I3471-FS(0)	1.000	6/5/2019	0.16	0.47	2.36
PFBS	375-73-5	0.11 U	I3471-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFHxS	355-46-4	0.11 U	I3471-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
PFOS	1763-23-1	0.14 U	I3471-FS(0)	1.000	6/5/2019	0.14	0.47	2.36
HFPO-DA	13252-13-6	0.08 U	I3471-FS(0)	1.000	6/5/2019	0.08	0.38	2.36
Adona	919005-14-4	0.11 U	I3471-FS(0)	1.000	6/5/2019	0.11	0.38	2.36
11Cl-PF3OUdS	763051-92-9	0.09 U	I3471-FS(0)	1.000	6/5/2019	0.09	0.38	2.36
9Cl-PF3ONS	756426-58-1	0.11 U	I3471-FS(0)	1.000	6/5/2019	0.11	0.38	2.36

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	95	I3471-FS(0)	6/5/2019
13C2-PFDA	89	I3471-FS(0)	6/5/2019
d5-EtFOSAA	88	I3471-FS(0)	6/5/2019
13C3-HFPO-DA	82	I3471-FS(0)	6/5/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID KL73 IB

Battelle ID KL73 IB_06/04/2019
 Sample Type IB
 Collection Date NA
 Extraction Date NA
 Analysis Date 06/04/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix Water
 Sample Size 0.250
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	0.14	0.50	2.50
PFTrDA	72629-94-8	0.10 U	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	0.12	0.40	2.50
11CI-PF3OUdS	763051-92-9	0.10 U	0.10	0.40	2.50
9CI-PF3ONS	756426-58-1	0.12 U	0.12	0.40	2.50

Surrogate Recoveries (%)

13C2-PFHxA	96
13C2-PFDA	92
d5-EtFOSAA	104
13C3-HFPO-DA	91



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID KL73 IB

Battelle ID KL73 IB_06/05/2019
 Sample Type IB
 Collection Date NA
 Extraction Date NA
 Analysis Date 06/05/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix Water
 Sample Size 0.250
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	0.14	0.50	2.50
PFTrDA	72629-94-8	0.10 U	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	0.12	0.40	2.50
11CI-PF3OUdS	763051-92-9	0.10 U	0.10	0.40	2.50
9CI-PF3ONS	756426-58-1	0.12 U	0.12	0.40	2.50

Surrogate Recoveries (%)

13C2-PFHxA	87
13C2-PFDA	84
d5-EtFOSAA	108
13C3-HFPO-DA	85



It can be done

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID Procedural Blank

Battelle ID CU244PB-FS
 Sample Type PB
 Collection Date 06/03/2019
 Extraction Date 06/03/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix WATER
 Sample Size 0.250
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	CU244PB-FS(0)	1.000	6/4/2019	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	CU244PB-FS(0)	1.000	6/4/2019	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	CU244PB-FS(0)	1.000	6/4/2019	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	CU244PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	CU244PB-FS(0)	1.000	6/4/2019	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	CU244PB-FS(0)	1.000	6/4/2019	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	CU244PB-FS(0)	1.000	6/4/2019	0.14	0.50	2.50
PFTrDA	72629-94-8	0.10 U	CU244PB-FS(0)	1.000	6/4/2019	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	CU244PB-FS(0)	1.000	6/4/2019	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	CU244PB-FS(0)	1.000	6/4/2019	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	CU244PB-FS(0)	1.000	6/4/2019	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	CU244PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	CU244PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	CU244PB-FS(0)	1.000	6/4/2019	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	CU244PB-FS(0)	1.000	6/4/2019	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	CU244PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50
11Cl-PF3OUdS	763051-92-9	0.10 U	CU244PB-FS(0)	1.000	6/4/2019	0.10	0.40	2.50
9Cl-PF3ONS	756426-58-1	0.12 U	CU244PB-FS(0)	1.000	6/4/2019	0.12	0.40	2.50

<i>Surrogate Recoveries (%)</i>	Recovery	Extract ID	Analysis Date
13C2-PFHxA	110	CU244PB-FS(0)	6/4/2019
13C2-PFDA	103	CU244PB-FS(0)	6/4/2019
d5-EtFOSAA	88	CU244PB-FS(0)	6/4/2019
13C3-HFPO-DA	105	CU244PB-FS(0)	6/4/2019

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



It can be done

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID		Laboratory Control Sample								
Battelle ID		CU245LCS-FS								
Sample Type		LCS								
Collection Date		06/03/2019								
Extraction Date		06/03/2019								
Analytical Instrument		Sciex 5500 LC/MS/MS								
% Moisture		NA								
Matrix		WATER								
Sample Size		0.250								
Size Unit-Basis		L								
Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	Target	Recovery	Qual	Control Limits Lower	Upper
PFHxA	307-24-4	19.07 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	95		70	130
PFHpA	375-85-9	18.00 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	90		70	130
PFOA	335-67-1	22.55 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	113		70	130
PFNA	375-95-1	20.83 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	104		70	130
PFDA	335-76-2	18.13 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	91		70	130
PFUnA	2058-94-8	17.16 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	86		70	130
PFDoA	307-55-1	16.76 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	84		70	130
PFTTrDA	72629-94-8	20.13	CU245LCS-FS(0)	1.000	6/4/2019	20.00	101		70	130
PFTeDA	376-06-7	17.97 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	90		70	130
NMeFOSAA	2355-31-9	24.25 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	121		70	130
NEtFOSAA	2991-50-6	21.79	CU245LCS-FS(0)	1.000	6/4/2019	20.00	109		70	130
PFBS	375-73-5	18.49	CU245LCS-FS(0)	1.000	6/4/2019	17.70	104		70	130
PFHxS	355-46-4	19.88	CU245LCS-FS(0)	1.000	6/4/2019	18.90	105		70	130
PFOS	1763-23-1	17.77	CU245LCS-FS(0)	1.000	6/4/2019	19.10	93		70	130
HFPO-DA	13252-13-6	18.46 D	CU245LCS-FS-D(3)	5.000	6/5/2019	20.00	92		70	130
Adona	919005-14-4	17.52 D	CU245LCS-FS-D(3)	5.000	6/5/2019	18.90	93		70	130
11Cl-PF3OUdS	763051-92-9	19.36	CU245LCS-FS(0)	1.000	6/4/2019	18.80	103		70	130
9Cl-PF3ONS	756426-58-1	19.64	CU245LCS-FS(0)	1.000	6/4/2019	18.60	106		70	130
				Analysis						
Surrogate Recoveries (%)		Recovery	Extract ID	Date						
13C2-PFHxA		103	CU245LCS-FS(0)	6/4/2019						
13C2-PFDA		98	CU245LCS-FS(0)	6/4/2019						
d5-EtFOSAA		86	CU245LCS-FS(0)	6/4/2019						
13C3-HFPO-DA		113	CU245LCS-FS(0)	6/4/2019						

Analyzed by: Griffith, Lauren
 Printed: 6/5/2019



Glossary of Data Qualifiers

Flag: Application:

V	Analyte found in the sample at a concentration <10x the level found in the procedural blank
D	Dilution Run. Initial run outside the initial calibration range of the instrument
L	Estimate, result is greater than the highest concentration level in the calibration
I	The reported value is greater than or equal to the laboratory Detection Limit (DL) but less than the laboratory Limit of Quantitation (LOQ)
*	Significant Matrix Interference - value could not be determined.
J	Quality Control (QC) value is outside the accuracy or precision Data Quality Objective (DQO)
NA	Not Applicable
Q	Holding Time (HT) exceeded
U	Analyte not detected or detected below the Detection Limit (DL) value, DL reported

Miscellaneous Documentation

QA/QC Summary
Batch 19-0466

Project:	Nasa Kennedy Space Center
Client Project Manager:	Chris Pike
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	QC
Data Set:	DP-19-0408
Analytical SOP:	5-371
Method Reference:	USEPA 537.11 (November 2018), QSM 5.1

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
5/30 and 31/2019	6/1/2019	1.0, 1.3

Corrective Actions	None.
Sample Storage	The water samples were stored refrigerated until extraction.
Related samples	This batch includes FRB samples associated with field samples reported in SDG 19-0465 with hits above the LOQ.

METHOD SUMMARIES	
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a solid phase extraction (SPE) cartridge and eluted from the SPE with methanol. Extracts were concentrated to dryness under nitrogen with a water bath set between 60 °C and 65 °C, reconstituted with 96:4 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	None.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	Samples analyzed on Sciex 5500 LC-MS/MS.

Holding Times	Extraction Date(s)	Analysis Date(s)
	6/3/2019	6/4 – 5/2019

Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.
≤ 1/3 the LOQ	No exceedances noted.
	No comments.

QA/QC Summary
Batch 19-0466

Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
70-130% of true value	No exceedances noted. No comments.
Matrix Spike (MS) / Duplicate (MSD)	A MS/MSD were prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy. The relative percent difference was calculated to measure precision.
70-130% of true value, RPD \leq 30%	No MS/MSD included with this batch. No comments.
Surrogates Standard Analytes	Labelled surrogate compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.
70-130% of true value	No exceedances noted. No comments.
Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
ICAL high and low points RPD \leq 20%, 50-150% of average area of the ICAL and 70-140% of most recent CCV	No exceedances noted. No comments.
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.
R ² >0.99	No exceedances noted.
Target and SIS compounds +/- 30% of true value, Low point 50-150% of true value	No comments.
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.
Target and SIS compounds +/- 30% of true value	No exceedances noted. No comments.

QA/QC Summary
Batch 19-0466

Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
Target and SIS compounds +/- 30% of true value Low point 50-150% of true value	No exceedances noted. NetFOSAA is outside of criteria in secondary transition in CCV KL68 (6/4/2019 23:59:31). As the secondary transition is only being monitored there is no impact on the data.



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project Number: 100123260
 Preparation Batch: 19-0466
 Data Set: DP-19-0408
 Test Code: Master_371.1

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	NA	None
Matrix Spike / Matrix Spike Duplicate Precision	NA	None
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None



It can be done

BATTELLE - NORWELL OPERATIONS MISCELLANEOUS DOCUMENTATION FORM

Project Title:	PFAS: Nasa Kennedy Space Center	Data Set Number:	DP-19-0408
Project Number:	100123260	Prep Batch Number:	19-0466
Entered By:	Lauren Griffith	Entered On:	06/05/2019
Test Code (Matrix Type):	Master_371.1(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 6/05/2019

KL64 is not being used in the calibration curve for PFHxA, PFHpA, PFOA, PFNA, PFDA, PFDoA, NMeFOSAA, NEtFOSAA and HFPO-DA. There is no impact on the data once this point of the calibration is removed.
LMG 6/05/2019

KL65 is not being used in the calibration curve for PFHpA and PFHxA. There is no impact on the data once this point of the calibration is removed.
LMG 6/05/2019

KL71 and KL72 are not being used in the calibration curve for d5-EtFOSAA. There is no impact on the data once these points of the calibration are removed.
LMG 6/05/2019

KL72 is not being used in the calibration curve for PFHxA, PFHpA, PFOA, PFNA, PFDA, PFUnA, PFDoA, PFTrDA, PFTeDA, NMeFOSAA, ADONA, HFPO-DA, 13C2-PFHxA, 13C2-PFDA, and 13C3-HFPO-DA. There is no impact on the data once this point of the calibration is removed.
LMG 6/05/2019

NetFOSAA secondary transition is outside of criteria in CCV KL68 (6/4/2019 23:59:31). As the secondary transition is only being monitored there is no impact on the data.
EMF 6/5/2019

Task Leader Approval:

Supervisor Approval:

PM Approval:

lizzotte@battelle.org

2019.06.05 14:25:36 -04'00'



Example Calculation for PFAS

Calculation of final concentration from area:

$$\text{Concentration} = \left[\frac{PA - b}{m} \right] * C_{IS} * PIV * DF / S$$

Where:

PA = Area of target / area of internal standard
 b = y intercept from calibration curve
 CIS = concentration of internal standard (ng/L)
 m = slope of calibration
 DF = dilution factor
 S = Sample Size
 PIV = Pre-injection volume (L)

Sample ID: CU245LCS-FS(0)
 Client Sample ID: Laboratory Control Sample
 Sample Size: 0.25
 Units: L
 Dilution Factor: 1.000
 PIV (L): 0.001
 Target Analyte: 11CI-PF3OUds
 MRM Transition: 631.0 / 451.0
 Data file: AC_06042019_5-371.wiff
 Result table: 19-0466_DW
 Area: 3,267,031.41
 IS Name: 13C4-PFOS
 IS Area: 157,136.16
 IS Amount (ng/L): 287
 y-intercept: 0
 slope: 1.23256

$$\text{Concentration} = \frac{[(3267031.41/157136.16) - 0]}{1.23256} * 287 * 0.001 * 1 / 0.25$$

$$\text{ng/L} = 19.36$$

*Final concentration may vary based on rounding.



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260
 Preparation Batch: 19-0466
 Data Set: DP-19-0408

		CU244PB-FS (Procedural Blank)	CU245LCS-FS (Laboratory Control Sample)	I3467-FS (E3-1120-FRB-20190531-01)	I3469-FS (H4-1797-FRB-20190531-01)	I3471-FS (H4-1840A-FRB-20190531-01)
PFHxA	307-24-4	-	L	-	-	-
PFHpA	375-85-9	-	L	-	-	-
PFOA	335-67-1	-	L	-	-	-
PFNA	375-95-1	-	L	-	-	-
PFDA	335-76-2	-	L	-	-	-
PFUnA	2058-94-8	-	L	-	-	-
PFDaA	307-55-1	-	L	-	-	-
PFTrDA	72629-94-8	-	L	-	-	-
PFTeDA	376-06-7	-	L	-	-	-
NMeFOSAA	2355-31-9	-	L	-	-	-
NEtFOSAA	2991-50-6	-	L	-	-	-
PFBS	375-73-5	-	L	-	-	-
PFHxS	355-46-4	-	L	-	-	-
PFOS	1763-23-1	-	L	-	-	-
HFPO-DA	13252-13-6	-	L	-	-	-
Adona	919005-14-4	-	L	-	-	-
11Cl-PF3OUdS	763051-92-9	-	L	-	-	-
9Cl-PF3ONS	756426-58-1	-	L	-	-	-

"L": Linear

"Br": branched

"L/Br": Linear/Branched

"-": Not detected



Preparation Batch: 19-0466
 Matrix: Drinking Water

Sample Name	Sample ID	Analysis Date	Passing criteria: 70% - 130%			
			13C3-HFPO-DA	13C2-PFHxA	13C2-PFDA	d5-EtFOSAA
CU244PB-FS(0)	Procedural Blank	6/4/19 22:47	105	110	103	88
CU245LCS-FS(0)	Laboratory Control Sample	6/4/19 22:56	113	103	98	86
I3467-FS(0)	E3-1120-FRB-20190531-01	6/5/19 0:26	100	116	105	93
I3469-FS(0)	H4-1797-FRB-20190531-01	6/5/19 0:35	103	116	113	101
I3471-FS(0)	H4-1840A-FRB-20190531-01	6/5/19 0:44	82	95	89	88
CU245LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:12	90	88	83	94

NQ - Not quantified (dilution run and not needed)

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/4/19 16:14	13C4-PFOS	148,267.69	-
KL65	L2	6/4/19 16:23	13C4-PFOS	148,445.88	-
KL66	L3	6/4/19 16:32	13C4-PFOS	155,176.73	-
KL67	L4	6/4/19 16:41	13C4-PFOS	167,269.91	-
KL68	L5	6/4/19 16:50	13C4-PFOS	187,046.73	-
KL69	L6	6/4/19 16:59	13C4-PFOS	186,285.09	-
KL70	L7	6/4/19 17:07	13C4-PFOS	171,231.97	-
KL71	L8	6/4/19 17:16	13C4-PFOS	160,982.47	-
KL72	L9	6/4/19 17:25	13C4-PFOS	164,123.79	10.2

PASS

Average 165,425.58 Lower 82,712.79 Upper 248,138.37

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/4/19 16:14	13C4-PFOS	148,267.69	82,712.79	248,138.37		130,399.56	260,799.13	
KL65	L2	6/4/19 16:23	13C4-PFOS	148,445.88	82,712.79	248,138.37		130,399.56	260,799.13	
KL66	L3	6/4/19 16:32	13C4-PFOS	155,176.73	82,712.79	248,138.37		130,399.56	260,799.13	
KL67	L4	6/4/19 16:41	13C4-PFOS	167,269.91	82,712.79	248,138.37		130,399.56	260,799.13	
KL68	L5	6/4/19 16:50	13C4-PFOS	187,046.73	82,712.79	248,138.37		130,399.56	260,799.13	
KL69	L6	6/4/19 16:59	13C4-PFOS	186,285.09	82,712.79	248,138.37		130,399.56	260,799.13	
KL70	L7	6/4/19 17:07	13C4-PFOS	171,231.97	82,712.79	248,138.37		130,399.56	260,799.13	
KL71	L8	6/4/19 17:16	13C4-PFOS	160,982.47	82,712.79	248,138.37		130,399.56	260,799.13	
KL72	L9	6/4/19 17:25	13C4-PFOS	164,123.79	82,712.79	248,138.37		130,399.56	260,799.13	
KL73 IB	IB	6/4/19 17:34	13C4-PFOS	158,011.40	82,712.79	248,138.37		130,399.56	260,799.13	
KL74 ICC	ICC	6/4/19 17:43	13C4-PFOS	174,896.40	82,712.79	248,138.37		130,399.56	260,799.13	
KL69 CCV	CCV	6/4/19 22:30	13C4-PFOS	152,791.97	82,712.79	248,138.37		130,399.56	260,799.13	
CU244PB-FS(0)	Procedural Blank	6/4/19 22:47	13C4-PFOS	162,013.19	82,712.79	248,138.37		106,954.38	213,908.76	
CU245LCS-FS(0)	Laboratory Control Sample	6/4/19 22:56	13C4-PFOS	157,136.16	82,712.79	248,138.37		106,954.38	213,908.76	
KL68 CCV	CCV	6/4/19 23:59	13C4-PFOS	163,495.38	82,712.79	248,138.37		106,954.38	213,908.76	
I3467-FS(0)	E3-1120-FRB-20190531-01	6/5/19 0:26	13C4-PFOS	168,835.77	82,712.79	248,138.37		114,446.77	228,893.53	
I3469-FS(0)	H4-1797-FRB-20190531-01	6/5/19 0:35	13C4-PFOS	151,582.80	82,712.79	248,138.37		114,446.77	228,893.53	
I3471-FS(0)	H4-1840A-FRB-20190531-01	6/5/19 0:44	13C4-PFOS	155,258.38	82,712.79	248,138.37		114,446.77	228,893.53	
KL69 CCV	CCV	6/5/19 0:53	13C4-PFOS	168,011.00	82,712.79	248,138.37		114,446.77	228,893.53	
KL67 ISC	ISC	6/5/19 10:36	13C4-PFOS	144,908.58	82,712.79	248,138.37		117,607.70	235,215.40	
KL73 IB	IB	6/5/19 10:54	13C4-PFOS	160,081.69	82,712.79	248,138.37		101,436.01	202,872.01	
CU245LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:12	13C4-PFOS	151,207.06	82,712.79	248,138.37		101,436.01	202,872.01	
KL68 CCV	CCV	6/5/19 12:15	13C4-PFOS	148,694.23	82,712.79	248,138.37		101,436.01	202,872.01	

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/4/19 16:14	13C2-PFOA	30,597.09	-
KL65	L2	6/4/19 16:23	13C2-PFOA	32,851.43	-
KL66	L3	6/4/19 16:32	13C2-PFOA	32,166.13	-
KL67	L4	6/4/19 16:41	13C2-PFOA	34,557.71	-
KL68	L5	6/4/19 16:50	13C2-PFOA	38,290.37	-
KL69	L6	6/4/19 16:59	13C2-PFOA	36,421.90	-
KL70	L7	6/4/19 17:07	13C2-PFOA	39,181.02	-
KL71	L8	6/4/19 17:16	13C2-PFOA	35,879.69	15.9
KL72	L9	6/4/19 17:25	13C2-PFOA	41,606.45	-

PASS

1

Average 34,993.17 Lower 17,496.59 Upper 52,489.76

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/4/19 16:14	13C2-PFOA	30,597.09	17,496.59	52,489.76		25,495.33	50,990.66	
KL65	L2	6/4/19 16:23	13C2-PFOA	32,851.43	17,496.59	52,489.76		25,495.33	50,990.66	
KL66	L3	6/4/19 16:32	13C2-PFOA	32,166.13	17,496.59	52,489.76		25,495.33	50,990.66	
KL67	L4	6/4/19 16:41	13C2-PFOA	34,557.71	17,496.59	52,489.76		25,495.33	50,990.66	
KL68	L5	6/4/19 16:50	13C2-PFOA	38,290.37	17,496.59	52,489.76		25,495.33	50,990.66	
KL69	L6	6/4/19 16:59	13C2-PFOA	36,421.90	17,496.59	52,489.76		25,495.33	50,990.66	
KL70	L7	6/4/19 17:07	13C2-PFOA	39,181.02	17,496.59	52,489.76		25,495.33	50,990.66	
KL71	L8	6/4/19 17:16	13C2-PFOA	35,879.69	17,496.59	52,489.76		25,495.33	50,990.66	
KL72	L9	6/4/19 17:25	13C2-PFOA	41,606.45	17,496.59	52,489.76		25,495.33	50,990.66	
KL73 IB	IB	6/4/19 17:34	13C2-PFOA	34,749.37	17,496.59	52,489.76		25,495.33	50,990.66	
KL74 ICC	ICC	6/4/19 17:43	13C2-PFOA	35,076.75	17,496.59	52,489.76		25,495.33	50,990.66	
KL69 CCV	CCV	6/4/19 22:30	13C2-PFOA	33,637.45	17,496.59	52,489.76		25,495.33	50,990.66	
CU244PB-FS(0)	Procedural Blank	6/4/19 22:47	13C2-PFOA	30,638.80	17,496.59	52,489.76		23,546.22	47,092.43	
CU245LCS-FS(0)	Laboratory Control Sample	6/4/19 22:56	13C2-PFOA	34,564.73	17,496.59	52,489.76		23,546.22	47,092.43	
KL68 CCV	CCV	6/4/19 23:59	13C2-PFOA	37,209.56	17,496.59	52,489.76		23,546.22	47,092.43	
I3467-FS(0)	E3-1120-FRB-20190531-01	6/5/19 0:26	13C2-PFOA	33,555.66	17,496.59	52,489.76		26,046.69	52,093.38	
I3469-FS(0)	H4-1797-FRB-20190531-01	6/5/19 0:35	13C2-PFOA	30,493.08	17,496.59	52,489.76		26,046.69	52,093.38	
I3471-FS(0)	H4-1840A-FRB-20190531-01	6/5/19 0:44	13C2-PFOA	32,430.57	17,496.59	52,489.76		26,046.69	52,093.38	
KL69 CCV	CCV	6/5/19 0:53	13C2-PFOA	36,183.87	17,496.59	52,489.76		26,046.69	52,093.38	
KL67 ISC	ISC	6/5/19 10:36	13C2-PFOA	35,169.09	17,496.59	52,489.76		25,328.71	50,657.42	
KL73 IB	IB	6/5/19 10:54	13C2-PFOA	37,108.76	17,496.59	52,489.76		24,618.36	49,236.73	
CU245LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:12	13C2-PFOA	35,878.80	17,496.59	52,489.76		24,618.36	49,236.73	
KL68 CCV	CCV	6/5/19 12:15	13C2-PFOA	34,064.15	17,496.59	52,489.76		24,618.36	49,236.73	

1 L9 not used in initial calibration. LMG 6/5/19

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/4/19 16:14	d3-MeFOSAA	12,728.23	-
KL65	L2	6/4/19 16:23	d3-MeFOSAA	13,756.33	-
KL66	L3	6/4/19 16:32	d3-MeFOSAA	15,010.56	-
KL67	L4	6/4/19 16:41	d3-MeFOSAA	15,076.19	-
KL68	L5	6/4/19 16:50	d3-MeFOSAA	16,404.06	-
KL69	L6	6/4/19 16:59	d3-MeFOSAA	15,945.51	-
KL70	L7	6/4/19 17:07	d3-MeFOSAA	14,899.66	-
KL71	L8	6/4/19 17:16	d3-MeFOSAA	13,750.57	-
KL72	L9	6/4/19 17:25	d3-MeFOSAA	16,702.83	19.3

PASS

Average Lower Upper
 15,193.21 7,596.61 22,789.82

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/4/19 16:14	d3-MeFOSAA	12,728.23	7,596.61	22,789.82		11,161.86	22,323.71	
KL65	L2	6/4/19 16:23	d3-MeFOSAA	13,756.33	7,596.61	22,789.82		11,161.86	22,323.71	
KL66	L3	6/4/19 16:32	d3-MeFOSAA	15,010.56	7,596.61	22,789.82		11,161.86	22,323.71	
KL67	L4	6/4/19 16:41	d3-MeFOSAA	15,076.19	7,596.61	22,789.82		11,161.86	22,323.71	
KL68	L5	6/4/19 16:50	d3-MeFOSAA	16,404.06	7,596.61	22,789.82		11,161.86	22,323.71	
KL69	L6	6/4/19 16:59	d3-MeFOSAA	15,945.51	7,596.61	22,789.82		11,161.86	22,323.71	
KL70	L7	6/4/19 17:07	d3-MeFOSAA	14,899.66	7,596.61	22,789.82		11,161.86	22,323.71	
KL71	L8	6/4/19 17:16	d3-MeFOSAA	13,750.57	7,596.61	22,789.82		11,161.86	22,323.71	
KL72	L9	6/4/19 17:25	d3-MeFOSAA	16,702.83	7,596.61	22,789.82		11,161.86	22,323.71	
KL73 IB	IB	6/4/19 17:34	d3-MeFOSAA	13,174.88	7,596.61	22,789.82		11,161.86	22,323.71	
KL74 ICC	ICC	6/4/19 17:43	d3-MeFOSAA	13,925.57	7,596.61	22,789.82		11,161.86	22,323.71	
KL69 CCV	CCV	6/4/19 22:30	d3-MeFOSAA	14,618.41	7,596.61	22,789.82		11,161.86	22,323.71	
CU244PB-FS(0)	Procedural Blank	6/4/19 22:47	d3-MeFOSAA	13,349.59	7,596.61	22,789.82		10,232.89	20,465.77	
CU245LCS-FS(0)	Laboratory Control Sample	6/4/19 22:56	d3-MeFOSAA	14,527.64	7,596.61	22,789.82		10,232.89	20,465.77	
KL68 CCV	CCV	6/4/19 23:59	d3-MeFOSAA	11,910.90	7,596.61	22,789.82		10,232.89	20,465.77	
I3467-FS(0)	E3-1120-FRB-20190531-01	6/5/19 0:26	d3-MeFOSAA	13,752.50	7,596.61	22,789.82		8,337.63	16,675.26	
I3469-FS(0)	H4-1797-FRB-20190531-01	6/5/19 0:35	d3-MeFOSAA	12,038.02	7,596.61	22,789.82		8,337.63	16,675.26	
I3471-FS(0)	H4-1840A-FRB-20190531-01	6/5/19 0:44	d3-MeFOSAA	12,424.90	7,596.61	22,789.82		8,337.63	16,675.26	
KL69 CCV	CCV	6/5/19 0:53	d3-MeFOSAA	13,260.27	7,596.61	22,789.82		8,337.63	16,675.26	
KL67 ISC	ISC	6/5/19 10:36	d3-MeFOSAA	10,404.27	7,596.61	22,789.82		9,282.19	18,564.38	
KL73 IB	IB	6/5/19 10:54	d3-MeFOSAA	11,240.55	7,596.61	22,789.82		7,282.99	14,565.98	
CU245LCS-FS-D(3)	Laboratory Control Sample	6/5/19 11:12	d3-MeFOSAA	12,357.78	7,596.61	22,789.82		7,282.99	14,565.98	
KL68 CCV	CCV	6/5/19 12:15	d3-MeFOSAA	12,226.35	7,596.61	22,789.82		7,282.99	14,565.98	

Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Asymmetry Factor	Passing Range
PFBS_1	298.9 / 80.0	1.47	0.97	0.8 – 1.5
PFHxA_1	313.0 / 269.0	1.80	0.95	0.8 – 1.5

Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.47	85	>10
PFBS_2	298.9 / 99.0	1.47	106	>10
PFHxA_1	313.0 / 269.0	1.80	28	>10
PFHxA_2	313.0 / 119.0	1.80	33	>10
PFHpA_1	363.0 / 319.0	2.22	27	>10
PFHpA_2	363.0 / 169.0	2.22	24	>10
PFHxS_1	399.0 / 80.0	2.24	44	>10
PFHxS_2	399.0 / 99.0	2.24	27	>10
PFOA_1	413.0 / 369.0	2.64	39	>10
PFOA_2	413.0 / 169.0	2.64	32	>10
PFNA_1	463.0 / 419.0	3.04	30	>10
PFNA_2	463.0 / 219.0	3.03	27	>10
PFOS_1	499.0 / 80.0	3.03	39	>10
PFOS_2	499.0 / 99.0	3.03	28	>10
PFDA_1	513.0 / 469.0	3.40	27	>10
PFDA_2	513.0 / 219.0	3.40	23	>10
PFUnA_1	563.0 / 519.0	3.73	26	>10
PFUnA_2	563.0 / 269.0	3.73	25	>10
PFDoA_1	613.0 / 569.0	4.01	23	>10
PFDoA_2	613.0 / 319.0	4.01	22	>10
PFTTrDA_1	663.0 / 619.0	4.27	24	>10
PFTTrDA_2	663.0 / 169.0	4.26	22	>10
PFTeDA_1	713.0 / 669.0	4.49	28	>10
PFTeDA_2	713.0 / 169.0	4.48	28	>10
NMeFOSAA_1	570.0 / 419.0	3.56	35	>10
NMeFOSAA_2	570.0 / 512.0	3.56	24	>10
NEtFOSAA_1	584.0 / 419.0	3.73	32	>10
NEtFOSAA_2	584.0 / 483.0	3.73	26	>10
13C2-PFHxA	315.0 / 270.0	1.80	32	>10
13C2-PFDA	515.0 / 470.0	3.39	30	>10
d5-EtFOSAA	589.0 / 419.0	3.71	13	>10
HFPO-DA_1	285.0 / 169.0	1.93	35	>10
HFPO-DA_2	285.0 / 118.8	1.93	30	>10
ADONA_1	377.0 / 251.0	2.26	34	>10
ADONA_2	377.0 / 85.0	2.26	27	>10
13C3-HFPO-DA	287.0 / 169.0	1.93	31	>10
9CI-PF3ONS_1	531.0 / 351.0	3.24	26	>10
9CI-PF3ONS_2	531.0 / 83.0	3.24	25	>10
11CI-PF3OUdS_1	631.0 / 451.0	3.87	23	>10
11CI-PF3OUdS_2	631.0 / 83.0	3.86	26	>10

BATTELLE DETECTION LIMITS FOR PFAS IN DRINKING WATER

EPA Method 537.1

Analyte	CAS No.	MDL (ng/L)	LOD (ng/L)	LOQ (ng/L)	MRL (ng/L)
PFHxA	307-24-4	0.23	0.5	2.5	2.5
PFHpA	375-85-9	0.23	0.5	2.5	2.5
PFOA	335-67-1	0.20	0.5	2.5	2.5
PFNA	375-95-1	0.12	0.4	2.5	2.5
PFDA	335-76-2	0.11	0.4	2.5	2.5
PFUnA	2058-94-8	0.10	0.4	2.5	2.5
PFDoA	307-55-1	0.14	0.5	2.5	2.5
PFTTrDA	72629-94-8	0.10	0.4	2.5	2.5
PFTeDA	376-06-7	0.22	0.5	2.5	2.5
NMeFOSAA	2355-31-9	0.20	0.5	2.5	2.5
NEtFOSAA	2991-50-6	0.17	0.5	2.5	2.5
PFBS	375-73-5	0.12	0.4	2.5	2.5
PFHxS	355-46-4	0.12	0.4	2.5	2.5
PFOS	1763-23-1	0.15	0.5	2.5	2.5
HFPO-DA	13252-13-6	0.09	0.4	2.5	2.5
Adona	919005-14-4	0.12	0.4	2.5	2.5
9CI-PF3ONS	756426-58-1	0.12	0.4	2.5	2.5
11CI-PF3OUdS	763051-92-9	0.10	0.4	2.5	2.5

Analytes on ELAP QSM 5.1 Scope of accreditation

Analytical Transitions for PFAS in drinking water

SOP 5-371 (EPA 537.1 November 2019)

Analyte	CAS No.	Type	Primary Transition	Secondary Transition
PFHxA	307-24-4	Target	313.0 / 269.0	313.0 / 119.0
PFHpA	375-85-9	Target	363.0 / 319.0	363.0 / 169.0
PFOA	335-67-1	Target	413.0 / 369.0	413.0 / 169.0
PFNA	375-95-1	Target	463.0 / 419.0	463.0 / 219.0
PFDA	335-76-2	Target	513.0 / 469.0	513.0 / 219.0
PFUnA	2058-94-8	Target	563.0 / 519.0	563.0 / 269.0
PFDoA	307-55-1	Target	613.0 / 569.0	613.0 / 319.0
PFTTrDA	72629-94-8	Target	663.0 / 619.0	663.0 / 169.0
PFTeDA	376-06-7	Target	713.0 / 669.0	713.0 / 169.0
NMeFOSAA	2355-31-9	Target	570.0 / 419.0	570.0 / 512.0
NEtFOSAA	2991-50-6	Target	584.0 / 419.0	584.0 / 483.0
PFBS	375-73-5	Target	299.0 / 80.0	299.0 / 99.0
PFHxS	355-46-4	Target	399.0 / 80.0	399.0 / 99.0
PFOS	1763-23-1	Target	499.0 / 80.0	499.0 / 99.0
HFPO-DA	13252-13-6	Target	285.0 / 169.0	285.0 / 118.8
Adona	919005-14-4	Target	377.0 / 251.0	377.0 / 85.0
9Cl-PF3ONS	756426-58-1	Target	531.0 / 351.0	531.0 / 83.0
11Cl-PF3OUdS	763051-92-9	Target	631.0 / 451.0	631.0 / 83.0
¹³C₂-PFHxA	NA	SIS	315.0 / 270.0	NA
¹³C₂-PFDA	NA	SIS	515.0 / 470.0	NA
d₅-EtFOSAA	NA	SIS	589.0 / 419.0	NA
¹³C₃-HFPO-DA	NA	SIS	287.0 / 169.0	NA
¹³C₂-PFOA	NA	IS	415.0 / 270.0	NA
¹³C₄-PFOS	NA	IS	503.0 / 80.0	NA
d₃-MeFOSAA	NA	IS	573.0 / 419.0	NA



Drinking Water Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF ¹	Sample Size (L)	Sample Equivalent (ng/L) ²
25	1	1	0.250	0.1
50	1	1	0.250	0.2
100	1	1	0.250	0.4
250	1	1	0.250	1.0
500	1	1	0.250	2.0
1,000	1	1	0.250	4.0
2,500	1	1	0.250	10.0
5,000	1	1	0.250	20.0
10,000	1	1	0.250	40.0

¹ - base level dilution as part of the extraction procedure

² - calculated equivalent of a sample based on the ICAL concentration



Zef Scientific Inc.

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

QTRAP 5500 Preventive Maintenance Checklist

Preventive Maintenance Date:	13-Dec-2018
Request ID:	12358
Company Name:	Battelle Memorial Institute
Instrument ID:	Instrument AC
Instrument Model:	QTrap 5500
Instrument Serial Number:	AU 23051004

PASS **FAIL**

Any failure will lead to an automatic Service Call being open to investigate fault.

Preventive Maintenance is performed twice every year unless specified in the Service Contract. It is designed to help maintain optimum system performance and to help diagnose any system deficiencies.

Engineer is required the assigned Request ID for this PM otherwise making this job invalid.

Comments: _____

Performed By: Kaustubh Dhayagude **Date:** 13-Dec-2018

Approved By : *[Signature]* **Date:** 13-Dec-2018

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

- Consult Customer concerning the unit overall performance.
- Check Logbook for Services recently performed.
- Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.5	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.2	Read Only
<input checked="" type="checkbox"/> CAD Medium	3.3	Read Only
<input checked="" type="checkbox"/> CAD High	4.1	Read Only
<input checked="" type="checkbox"/> CAD 12	4.1	2.4 to 4.5 x10 ⁻⁵ Torr

- Check for Front end contamination symptoms. Run Q1 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop
- Check for Q3 contamination symptoms. Run Q3 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop

Pre PM PPG Test: Perform each of the following tests. Optimize ion source position only. The specifications listed for these Pre PM tests are guidelines only, not required to be met.

- Perform Q1 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 175.133	3.02 e6	Read Only	0.9336	Read Only
Q1 500.380	1.70 e7	Read Only	0.9827	Read Only
Q1 906.673	2.56 e7	Read Only	1.0305	Read Only

- Perform Q3 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 175.133	2.90 e6	Read Only	0.6413	Read Only
Q3 500.380	1.43 e7	Read Only	0.7689	Read Only
Q3 906.673	2.17 e7	Read Only	0.7984	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

Perform MSMS POS in Product Ion scan with 609.3 parent and record daughter 195.1 using Reserpine 0.167 pmol/ul at the scan rate of 10 Da/s for 10 MCA. Calculate transmission efficiency comparing Q1POS 609 intensity. Transmission Efficiency: : 31.42% (Read Only)

Mass	MSMS Intensity		MSMS Width Value	Width Specs
	Value	Spec		
Q1 609.3	2.18 e7	Read Only	0.8899	Read Only
MS/MS 195.1	6.85 e6	Read Only	0.6696	Read Only

Perform Q1 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 933.636	4.27 e6	Read Only	0.7598	Read Only

Perform Q3 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 933.636	5.71 e6	Read Only	0.7457	Read Only

Perform Product Ion scan using NEG PPG 3e-5M. Record 10 mca.

Mass	Scan Rate	MCA	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	8.82 e5	Read Only	0.6745	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

- Check Cooling Fans for Turbo Pumps while MS is ON.
- Check QJet and QPS tuning voltage for reference.
- Record AC input Voltage while MS is OFF: _____(200-240VAC).
If Out-of-Range, notify customer.

- Clean Interface
 - Curtain Plate
 - Orifice Plate
 - QJet
 - Q0 Rods.

- Replace Roughing Pump Oil.
- Inspect Oil Exhaust Filter, if Applicable. N/A
- Clean and inspect built-in divert valve if used. N/A
- Check Multiplier Voltage, optimize if necessary.
- Replace four Air Filters at the bottom of the mass spectrometer.

- Pump down overnight if possible. N/A

- Perform Maintenance on Turbo V source.

- Replace Electrode, if necessary. N/A
- Check Turbo heaters resistances.
- Check if Temperature is reached at 500C with TIS Probe installed.
- Check if Temperature is reached at 500C with APCI Probe installed. N/A

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

- Set-up Sample for Infusion.
- Check spray and adjust sprayer's position of the TIS source.
- Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.6	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.2	Read Only
<input checked="" type="checkbox"/> CAD Medium	3.3	Read Only
<input checked="" type="checkbox"/> CAD High	4.1	Read Only
<input checked="" type="checkbox"/> CAD 12	4.1	2.4 to 4.5 x10 ⁻⁵ Torr

- Perform Q1 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Scan Rate 10 Da/s Record 10 mca				
Q1 175.133	4.47 e6	≥1.2 ^{e6}	0.7356	0.6 to 0.8
Q1 500.380	2.51 e7	≥9.0 ^{e6}	0.7263	0.6 to 0.8
Q1 906.673	3.04 e7	≥1.4 ^{e7}	0.7080	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q1 906.673	1.57 e8	≥6.8 ^{e7}	0.6639	0.6 to 0.8

- Perform Q3 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Scan Rate 10 Da/s Record 10 mca				
Q3 175.133	4.30 e6	≥1.2 ^{e6}	0.6905	0.6 to 0.8
Q3 500.380	2.33 e7	≥9.0 ^{e6}	0.7752	0.6 to 0.8
Q3 906.673	3.51 e7	≥1.4 ^{e7}	0.7682	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q3 906.673	1.58 e8	≥6.8 ^{e7}	0.7088	0.6 to 0.8

- Perform "Product of 609.3" POS and record product ion 195.1 using Reserpine 0.167pmol/uL. Record 10 mca. Calculate Transmission efficiency comparing Q1POS 609 intensity.

Transmission Efficiency: 16.76% (≥ 10.0%)

Mass	MSMS Intensity		Width Value	Width Specs
	Value	Spec		
Q1 609.3	6.74 e7	N/A	0.7430	Read Only
MS/MS 195.1	1.13 e7	N/A	0.7152	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

- Perform Q1 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q1 Intensity		Q1 Width Value	Width Specs
			Value	Spec		
Q1 933.636	10	10	1.25 e7	$\geq 1.0^{e7}$	0.7544	0.6 to 0.8
Q1 933.636	1000	50	7.51 e7	$\geq 4.0^{e7}$	0.7671	0.6 to 0.8

- Perform Q3 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q3 Intensity		Q3 Width Value	Width Specs
			Value	Spec		
Q3 933.636	10	10	2.10 e7	$\geq 8.0^{e6}$	0.7313	0.6 to 0.8
Q3 933.636	1000	50	8.17 e7	$\geq 4.0^{e7}$	0.7088	0.6 to 0.8

- Perform Product Ion scan using NEG PPG 3e-5M.

Mass	Scan Rate	Mca	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	2.97 e6	Read Only	0.6850	Read Only

- Perform ER POS 118.087 and 922.01 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 118.087	0.05	1.03 e7	$\geq 7.2^{e6}$	0.1483	<0.35
ER 922.010	0.05	5.37 e7	$\geq 2.8^{e6}$	0.2138	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 118.087	0.05	2.80 e7	$\geq 2.4^{e7}$	0.4635	<0.65
ER 922.010	0.05	1.33 e8	$\geq 6.8^{e7}$	0.6022	<0.65

- Perform ER NEG 431.982 and 601.978 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 431.982	0.05	3.53 e8	$\geq 4.4^{e7}$	0.1869	<0.35
ER 601.978	0.05	3.46 e8	$\geq 5.6^{e7}$	0.1883	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 431.982	0.05	1.08 e9	$\geq 1.2^{e8}$	0.4373	<0.65
ER 601.978	0.05	1.25 e9	$\geq 1.6^{e8}$	0.4196	<0.65

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

- Perform EPI POS 397.2 using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Q0 Trapping OFF		Q0 Trapping ON	
		Intensity	Spec	Intensity	Spec
EPI 397.2	10000	> 2.8 e6	≥2.0 e6	> 1.0 e7	≥6.4 e6

- Perform MS3 POS full scan Fragmentation ON & OFF using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Fragamentation OFF		Fragmentation ON	
		Intensity	Spec	Intensity	Spec
MS3 397.2	1000	Yes	Contains only 397.2	N/A	N/A
<input type="checkbox"/> 236 OR <input checked="" type="checkbox"/> 365	1000	Yes	Fragment Intensity	> 4.5 e6	≥1.6x 10 ^{e6}

REVIEW:

- Attach all spectrums printouts to this procedure.
- If any parameter setting access modes were changed during the PM, ensure they are returned to their normal access mode and that their offsets are adjusted to match optimized values from the post-PM acquisition files.
- Empty tuning cache folder, if necessary. N/A
- Update Service Work Order status
- Fill and replace PM Label.

END OF PREVENTIVE MAINTENANCE CHECKLIST**Document history:**

06 OCT 2016: Appendix ZEFPM003-2L: Removed requirements to fit Manufacturer's testing criteria.

Battelle Standard ID	Description	Intermediate Solutions			Battelle Reagent ID (purchased solutions)
KJ90	PFAS - 537.1 Surrogate Solution	KJ86	-	-	190410-04
KJ91	PFAS - 537.1 Second Source LCS/MS Solution	-	-	-	190410-03
KJ92	PFAS - 537.1 Internal Standard Solution	KJ89	-	-	180810-02
KL64	PFAS - EPA 537.1 ICAL L1	KJ88	-	-	190410-02
KL64	PFAS - EPA 537.1 ICAL L1	KL62	KJ86	-	190410-04
KL64	PFAS - EPA 537.1 ICAL L1	KL63	KJ89	-	180810-02
KL65	PFAS - EPA 537.1 ICAL L2	KJ88	-	-	190410-02
KL65	PFAS - EPA 537.1 ICAL L2	KL62	KJ86	-	190410-04
KL65	PFAS - EPA 537.1 ICAL L2	KL63	KJ89	-	180810-02
KL66	PFAS - EPA 537.1 ICAL L3	KJ88	-	-	190410-02
KL66	PFAS - EPA 537.1 ICAL L3	KL62	KJ86	-	190410-04
KL66	PFAS - EPA 537.1 ICAL L3	KL63	KJ89	-	180810-02
KL67	PFAS - EPA 537.1 ICAL L4	KJ88	-	-	190410-02
KL67	PFAS - EPA 537.1 ICAL L4	KL62	KJ86	-	190410-04
KL67	PFAS - EPA 537.1 ICAL L4	KL63	KJ89	-	180810-02
KL68	PFAS - EPA 537.1 ICAL L5	KJ88	-	-	190410-02
KL68	PFAS - EPA 537.1 ICAL L5	KL62	KJ86	-	190410-04
KL68	PFAS - EPA 537.1 ICAL L5	KL63	KJ89	-	180810-02
KL69	PFAS - EPA 537.1 ICAL L6	KJ87	-	-	190410-02
KL69	PFAS - EPA 537.1 ICAL L6	KL62	KJ86	-	190410-04
KL69	PFAS - EPA 537.1 ICAL L6	KL63	KJ89	-	180810-02
KL70	PFAS - EPA 537.1 ICAL L7	KJ87	-	-	190410-02
KL70	PFAS - EPA 537.1 ICAL L7	KL62	KJ86	-	190410-04
KL70	PFAS - EPA 537.1 ICAL L7	KL63	KJ89	-	180810-02
KL71	PFAS - EPA 537.1 ICAL L8	KJ87	-	-	190410-02
KL71	PFAS - EPA 537.1 ICAL L8	KL62	KJ86	-	190410-04
KL71	PFAS - EPA 537.1 ICAL L8	KL63	KJ89	-	180810-02
KL72	PFAS - EPA 537.1 ICAL L9	KJ87	-	-	190410-02
KL72	PFAS - EPA 537.1 ICAL L9	KL62	KJ86	-	190410-04
KL72	PFAS - EPA 537.1 ICAL L9	KL63	KJ89	-	180810-02
KL74	PFAS - EPA 537.1 ICC	KJ91	-	-	190410-03
KL74	PFAS - EPA 537.1 ICC	KL62	KJ86	-	190410-04
KL74	PFAS - EPA 537.1 ICC	KL63	KJ89	-	180810-02



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ86**

Description: PFAS - 537.1 Surrogate Standard Stock

Stock Id: **190410-04**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	1000	1.00	1	100.000	1	10	0.10000
13C2-PFHxA	1000	1.00	1	100.000	1	10	0.10000
13C3-HFPO-DA	1000	1.00	1	100.000	1	10	0.10000
d5-EtFOSAA	1000	4.00	1	100.000	1	10	0.40000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.10000
13C2-PFHxA	.10000
13C3-HFPO-DA	.10000
d5-EtFOSAA	.40000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-04	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ87**

Description: PFAS - 537.1 High ICAL Stock

Stock Id: **190410-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	1.88	1	100.000	1	20	0.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	1.86	1	100.000	1	20	0.04650
Adona	500	1.89	1	100.000	1	20	0.04725
Hexafluoropropylene oxide dimer acid	500	2.00	1	100.000	1	20	0.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	500	2.00	1	100.000	1	20	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-1-butanefluorinate	500	1.77	1	100.000	1	20	0.04425
Perfluoro-1-hexanesulfonate	500	1.82	1	100.000	1	20	0.04560
Perfluoro-1-octanesulfonate	500	1.85	1	100.000	1	20	0.04628
Perfluoro-n-decanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-dodecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-heptanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-hexanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-octanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluorononanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-tetradecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-tridecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-undecanoic acid	500	2.00	1	100.000	1	20	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.04650
Adona	.04725
Hexafluoropropylene oxide dimer acid	.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanefluorinate	.04425
Perfluoro-1-hexanesulfonate	.04560
Perfluoro-1-octanesulfonate	.04628
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05000
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KJ87

Description: PFAS - 537.1 High ICAL Stock

Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-02	Pipette	B820865811

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1	Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ88**

Description: PFAS - 537.1 Low ICAL Stock

Stock Id: **190410-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	250	1.88	1	100.000	1	100	0.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	250	1.86	1	100.000	1	100	0.00465
Adona	250	1.89	1	100.000	1	100	0.00473
Hexafluoropropylene oxide dimer acid	250	2.00	1	100.000	1	100	0.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	250	2.00	1	100.000	1	100	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-1-butanefluoride	250	1.77	1	100.000	1	100	0.00443
Perfluoro-1-hexanesulfonate	250	1.82	1	100.000	1	100	0.00456
Perfluoro-1-octanesulfonate	250	1.85	1	100.000	1	100	0.00463
Perfluoro-n-decanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-dodecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-heptanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-hexanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-octanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluorononanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-tetradecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-tridecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-undecanoic acid	250	2.00	1	100.000	1	100	0.00500

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00465
Adona	.00473
Hexafluoropropylene oxide dimer acid	.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-butanefluoride	.00443
Perfluoro-1-hexanesulfonate	.00456
Perfluoro-1-octanesulfonate	.00463
Perfluoro-n-decanoic Acid	.00500
Perfluoro-n-dodecanoic acid	.00500
Perfluoro-n-heptanoic Acid	.00500
Perfluoro-n-hexanoic acid	.00500
Perfluoro-n-octanoic Acid	.00500
Perfluorononanoic Acid	.00500

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 4 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KJ88

Description: PFAS - 537.1 Low ICAL Stock

Perfluoro-n-tetradecanoic acid	.00500
Perfluoro-n-tridecanoic acid	.00500
Perfluoro-n-undecanoic acid	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-02	Pipette	B814657482

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 4 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ89**

Description: PFAS - 537.1 Internal Standard Stock

Stock Id: **180810-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	1000	1.00	1	100.000	1	10	0.10000
13C4-PFOS	1000	2.87	1	100.000	1	10	0.28700
d3-MeFOSAA	1000	4.00	1	100.000	1	10	0.40000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.10000
13C4-PFOS	.28700
d3-MeFOSAA	.40000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180810-02	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ90**

Description: PFAS - 537.1 Surrogate Solution

Stock ID: **KJ86**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	500	0.10	---	---	1	25	0.00200
13C2-PFHxA	500	0.10	---	---	1	25	0.00200
13C3-HFPO-DA	500	0.10	---	---	1	25	0.00200
d5-EtFOSAA	500	0.40	---	---	1	25	0.00800

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.00200
13C2-PFHxA	.00200
13C3-HFPO-DA	.00200
d5-EtFOSAA	.00800

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ86	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ91**

Description: PFAS - 537.1 Second Source LCS/MS Solution

Stock Id: **190410-03**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	1000	1.88	1	100.000	1	40	0.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	1000	1.86	1	100.000	1	40	0.04650
Adona	1000	1.89	1	100.000	1	40	0.04725
Hexafluoropropylene oxide dimer acid	1000	2.00	1	100.000	1	40	0.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	2.00	1	100.000	1	40	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-1-butanefluorinate	1000	1.77	1	100.000	1	40	0.04425
Perfluoro-1-hexanesulfonate	1000	1.89	1	100.000	1	40	0.04725
Perfluoro-1-octanesulfonate	1000	1.91	1	100.000	1	40	0.04775
Perfluoro-n-decanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-dodecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-heptanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-hexanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-octanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluorononanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-tetradecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-tridecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-undecanoic acid	1000	2.00	1	100.000	1	40	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.04650
Adona	.04725
Hexafluoropropylene oxide dimer acid	.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanefluorinate	.04425
Perfluoro-1-hexanesulfonate	.04725
Perfluoro-1-octanesulfonate	.04775
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05000
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KJ91

Description: PFAS - 537.1 Second Source LCS/MS Solution

Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-03	Pipette	B1100330B

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1	Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ92**

Description: PFAS - 537.1 Internal Standard Solution

Stock Id: **KJ89**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	500	0.10	---	---	1	25	0.00200
13C4-PFOS	500	0.29	---	---	1	25	0.00574
d3-MeFOSAA	500	0.40	---	---	1	25	0.00800

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.00200
13C4-PFOS	.00574
d3-MeFOSAA	.00800

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ89	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:32:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL62**

Description: PFAS - 537.1 Surrogate Standard Stock II

Stock ID: **KJ86**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	1000	0.10	---	---	1	5	0.02000
13C2-PFHxA	1000	0.10	---	---	1	5	0.02000
13C3-HFPO-DA	1000	0.10	---	---	1	5	0.02000
d5-EtFOSAA	1000	0.40	---	---	1	5	0.08000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.02000
13C2-PFHxA	.02000
13C3-HFPO-DA	.02000
d5-EtFOSAA	.08000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ86	Pipette	B909301606

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL63**

Description: PFAS - 537.1 Internal Standard Stock II

Stock Id: **KJ89**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	1000	0.10	---	---	1	5	0.02000
13C4-PFOS	1000	0.29	---	---	1	5	0.05740
d3-MeFOSAA	1000	0.40	---	---	1	5	0.08000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.02000
13C4-PFOS	.05740
d3-MeFOSAA	.08000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ89	Pipette	B909301606

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL64**

Description: PFAS - EPA 537.1 ICAL L1

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	50	0.00	---	---	1	10	0.00002
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	50	0.00	---	---	1	10	0.00002
Adona	50	0.00	---	---	1	10	0.00002
Hexafluoropropylene oxide dimer acid	50	0.01	---	---	1	10	0.00003
N-ethylperfluoro-octanesulfonamidoacetic acid	50	0.01	---	---	1	10	0.00003
N-methylperfluoro-1-octanesulfonamidoacetic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-1-butanefluoride	50	0.00	---	---	1	10	0.00002
Perfluoro-1-hexanesulfonate	50	0.00	---	---	1	10	0.00002
Perfluoro-1-octanesulfonate	50	0.00	---	---	1	10	0.00002
Perfluoro-n-decanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-dodecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-heptanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-hexanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-octanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluorononanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-tetradecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-tridecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-undecanoic acid	50	0.01	---	---	1	10	0.00003

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00002

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL64**

Description: PFAS - EPA 537.1 ICAL L1

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00002
Adona	.00002
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00003
N-ethylperfluoro-octanesulfonamidoacetic acid	.00003
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00003
Perfluoro-1-butanefluoride	.00002
Perfluoro-1-hexanesulfonate	.00002
Perfluoro-1-octanesulfonate	.00002
Perfluoro-n-decanoic Acid	.00003
Perfluoro-n-dodecanoic acid	.00003
Perfluoro-n-heptanoic Acid	.00003
Perfluoro-n-hexanoic acid	.00003
Perfluoro-n-octanoic Acid	.00003
Perfluorononanoic Acid	.00003
Perfluoro-n-tetradecanoic acid	.00003
Perfluoro-n-tridecanoic acid	.00003
Perfluoro-n-undecanoic acid	.00003

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	I0793912B
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL65**

Description: PFAS - EPA 537.1 ICAL L2

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	100	0.00	---	---	1	10	0.00005
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	100	0.00	---	---	1	10	0.00005
Adona	100	0.00	---	---	1	10	0.00005
Hexafluoropropylene oxide dimer acid	100	0.01	---	---	1	10	0.00005
N-ethylperfluoro-octanesulfonamidoacetic acid	100	0.01	---	---	1	10	0.00005
N-methylperfluoro-1-octanesulfonamidoacetic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-1-butanefluoride	100	0.00	---	---	1	10	0.00004
Perfluoro-1-hexanesulfonate	100	0.00	---	---	1	10	0.00005
Perfluoro-1-octanesulfonate	100	0.00	---	---	1	10	0.00005
Perfluoro-n-decanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-dodecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-heptanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-hexanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-octanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluorononanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-tetradecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-tridecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-undecanoic acid	100	0.01	---	---	1	10	0.00005

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00005

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL65

Description: PFAS - EPA 537.1 ICAL L2

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00005
Adona	.00005
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00005
N-ethylperfluoro-octanesulfonamidoacetic acid	.00005
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00005
Perfluoro-1-butanedisulfonate	.00004
Perfluoro-1-hexanedisulfonate	.00005
Perfluoro-1-octanedisulfonate	.00005
Perfluoro-n-decanoic Acid	.00005
Perfluoro-n-dodecanoic acid	.00005
Perfluoro-n-heptanoic Acid	.00005
Perfluoro-n-hexanoic acid	.00005
Perfluoro-n-octanoic Acid	.00005
Perfluorononanoic Acid	.00005
Perfluoro-n-tetradecanoic acid	.00005
Perfluoro-n-tridecanoic acid	.00005
Perfluoro-n-undecanoic acid	.00005

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	I0793912B
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL66**

Description: PFAS - EPA 537.1 ICAL L3

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	200	0.00	---	---	1	10	0.00009
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	200	0.00	---	---	1	10	0.00009
Adona	200	0.00	---	---	1	10	0.00009
Hexafluoropropylene oxide dimer acid	200	0.01	---	---	1	10	0.00010
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-1-butanefluoride	200	0.00	---	---	1	10	0.00009
Perfluoro-1-hexanesulfonate	200	0.00	---	---	1	10	0.00009
Perfluoro-1-octanesulfonate	200	0.00	---	---	1	10	0.00009
Perfluoro-n-decanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-dodecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-heptanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-hexanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-octanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluorononanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tetradecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tridecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-undecanoic acid	200	0.01	---	---	1	10	0.00010

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00009

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL66

Description: PFAS - EPA 537.1 ICAL L3

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00009
Adona	.00009
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00010
N-ethylperfluoro-octanesulfonamidoacetic acid	.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00010
Perfluoro-1-butanefluoride	.00009
Perfluoro-1-hexanesulfonate	.00009
Perfluoro-1-octanesulfonate	.00009
Perfluoro-n-decanoic Acid	.00010
Perfluoro-n-dodecanoic acid	.00010
Perfluoro-n-heptanoic Acid	.00010
Perfluoro-n-hexanoic acid	.00010
Perfluoro-n-octanoic Acid	.00010
Perfluorononanoic Acid	.00010
Perfluoro-n-tetradecanoic acid	.00010
Perfluoro-n-tridecanoic acid	.00010
Perfluoro-n-undecanoic acid	.00010

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	B909301860
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie		Date Prepared: 5/28/2019		Expiration Date: 4/11/2020	
Solution Volume	40 mL X 1	Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		
Comment: 96/4 methanol/milli-q water (RP-190528-1)					

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL67**

Description: PFAS - EPA 537.1 ICAL L4

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	0.00	---	---	1	10	0.00024
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	0.00	---	---	1	10	0.00023
Adona	500	0.00	---	---	1	10	0.00024
Hexafluoropropylene oxide dimer acid	500	0.01	---	---	1	10	0.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-1-butanefluoride	500	0.00	---	---	1	10	0.00022
Perfluoro-1-hexanesulfonate	500	0.00	---	---	1	10	0.00023
Perfluoro-1-octanesulfonate	500	0.00	---	---	1	10	0.00023
Perfluoro-n-decanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-dodecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-heptanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-hexanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-octanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluorononanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tetradecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tridecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-undecanoic acid	500	0.01	---	---	1	10	0.00025

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00024

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL67**

Description: PFAS - EPA 537.1 ICAL L4

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00023
Adona	.00024
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00025
Perfluoro-1-butanefluoride	.00022
Perfluoro-1-hexanesulfonate	.00023
Perfluoro-1-octanesulfonate	.00023
Perfluoro-n-decanoic Acid	.00025
Perfluoro-n-dodecanoic acid	.00025
Perfluoro-n-heptanoic Acid	.00025
Perfluoro-n-hexanoic acid	.00025
Perfluoro-n-octanoic Acid	.00025
Perfluorononanoic Acid	.00025
Perfluoro-n-tetradecanoic acid	.00025
Perfluoro-n-tridecanoic acid	.00025
Perfluoro-n-undecanoic acid	.00025

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL68**

Description: PFAS - EPA 537.1 ICAL L5

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	2000	0.00	---	---	1	20	0.00047
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	2000	0.00	---	---	1	20	0.00047
Adona	2000	0.00	---	---	1	20	0.00047
Hexafluoropropylene oxide dimer acid	2000	0.01	---	---	1	20	0.00050
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.01	---	---	1	20	0.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-1-butanefluoride	2000	0.00	---	---	1	20	0.00044
Perfluoro-1-hexanesulfonate	2000	0.00	---	---	1	20	0.00046
Perfluoro-1-octanesulfonate	2000	0.00	---	---	1	20	0.00046
Perfluoro-n-decanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-dodecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-heptanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-hexanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-octanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluorononanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-tetradecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-tridecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-undecanoic acid	2000	0.01	---	---	1	20	0.00050

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	100	0.02	---	---	1	20	0.00010
13C2-PFHxA	100	0.02	---	---	1	20	0.00010
13C3-HFPO-DA	100	0.02	---	---	1	20	0.00010
d5-EtFOSAA	100	0.08	---	---	1	20	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	100	0.02	---	---	1	20	0.00010
13C4-PFOS	100	0.06	---	---	1	20	0.00029
d3-MeFOSAA	100	0.08	---	---	1	20	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00047

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1).

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL68

Description: PFAS - EPA 537.1 ICAL L5

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00047
Adona	.00047
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00050
N-ethylperfluoro-octanesulfonamidoacetic acid	.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00050
Perfluoro-1-butanefluoride	.00044
Perfluoro-1-hexanesulfonate	.00046
Perfluoro-1-octanesulfonate	.00046
Perfluoro-n-decanoic Acid	.00050
Perfluoro-n-dodecanoic acid	.00050
Perfluoro-n-heptanoic Acid	.00050
Perfluoro-n-hexanoic acid	.00050
Perfluoro-n-octanoic Acid	.00050
Perfluorononanoic Acid	.00050
Perfluoro-n-tetradecanoic acid	.00050
Perfluoro-n-tridecanoic acid	.00050
Perfluoro-n-undecanoic acid	.00050

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1).

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL69**

Description: PFAS - EPA 537.1 ICAL L6

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	400	0.05	---	---	1	20	0.00094
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	400	0.05	---	---	1	20	0.00093
Adona	400	0.05	---	---	1	20	0.00095
Hexafluoropropylene oxide dimer acid	400	0.05	---	---	1	20	0.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	400	0.05	---	---	1	20	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-1-butanefluoride	400	0.04	---	---	1	20	0.00089
Perfluoro-1-hexanesulfonate	400	0.05	---	---	1	20	0.00091
Perfluoro-1-octanesulfonate	400	0.05	---	---	1	20	0.00093
Perfluoro-n-decanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-dodecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-heptanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-hexanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-octanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluorononanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-tetradecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-tridecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-undecanoic acid	400	0.05	---	---	1	20	0.00100

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	100	0.02	---	---	1	20	0.00010
13C2-PFHxA	100	0.02	---	---	1	20	0.00010
13C3-HFPO-DA	100	0.02	---	---	1	20	0.00010
d5-EtFOSAA	100	0.08	---	---	1	20	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	100	0.02	---	---	1	20	0.00010
13C4-PFOS	100	0.06	---	---	1	20	0.00029
d3-MeFOSAA	100	0.08	---	---	1	20	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00094

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: **KL69**

Description: PFAS - EPA 537.1 ICAL L6

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00093
Adona	.00095
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanedisulfonate	.00089
Perfluoro-1-hexanesulfonate	.00091
Perfluoro-1-octanesulfonate	.00093
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00100
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		
Comment: 96/4 methanol/milli-q water (RP-190528-1)		

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL70**

Description: PFAS - EPA 537.1 ICAL L7

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	500	0.05	---	---	1	10	0.00235
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	0.05	---	---	1	10	0.00232
Adona	500	0.05	---	---	1	10	0.00236
Hexafluoropropylene oxide dimer acid	500	0.05	---	---	1	10	0.00250
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-1-butanefluoride	500	0.04	---	---	1	10	0.00221
Perfluoro-1-hexanesulfonate	500	0.05	---	---	1	10	0.00228
Perfluoro-1-octanesulfonate	500	0.05	---	---	1	10	0.00231
Perfluoro-n-decanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-dodecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-heptanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-hexanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-octanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluorononanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tetradecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tridecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-undecanoic acid	500	0.05	---	---	1	10	0.00250

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00235

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL70

Description: PFAS - EPA 537.1 ICAL L7

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00232
Adona	.00236
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00250
N-ethylperfluoro-octanesulfonamidoacetic acid	.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00250
Perfluoro-1-butanefluoride	.00221
Perfluoro-1-hexanesulfonate	.00228
Perfluoro-1-octanesulfonate	.00231
Perfluoro-n-decanoic Acid	.00250
Perfluoro-n-dodecanoic acid	.00250
Perfluoro-n-heptanoic Acid	.00250
Perfluoro-n-hexanoic acid	.00250
Perfluoro-n-octanoic Acid	.00250
Perfluorononanoic Acid	.00250
Perfluoro-n-tetradecanoic acid	.00250
Perfluoro-n-tridecanoic acid	.00250
Perfluoro-n-undecanoic acid	.00250

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL71**

Description: PFAS - EPA 537.1 ICAL L8

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	1000	0.05	---	---	1	10	0.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	1000	0.05	---	---	1	10	0.00465
Adona	1000	0.05	---	---	1	10	0.00473
Hexafluoropropylene oxide dimer acid	1000	0.05	---	---	1	10	0.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	0.05	---	---	1	10	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-1-butanefluoride	1000	0.04	---	---	1	10	0.00443
Perfluoro-1-hexanesulfonate	1000	0.05	---	---	1	10	0.00456
Perfluoro-1-octanesulfonate	1000	0.05	---	---	1	10	0.00463
Perfluoro-n-decanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-dodecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-heptanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-hexanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-octanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluorononanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-tetradecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-tridecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-undecanoic acid	1000	0.05	---	---	1	10	0.00500

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00470

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL71

Description: PFAS - EPA 537.1 ICAL L8

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00465
Adona	.00473
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-butanefluoride	.00443
Perfluoro-1-hexanesulfonate	.00456
Perfluoro-1-octanesulfonate	.00463
Perfluoro-n-decanoic Acid	.00500
Perfluoro-n-dodecanoic acid	.00500
Perfluoro-n-heptanoic Acid	.00500
Perfluoro-n-hexanoic acid	.00500
Perfluoro-n-octanoic Acid	.00500
Perfluorononanoic Acid	.00500
Perfluoro-n-tetradecanoic acid	.00500
Perfluoro-n-tridecanoic acid	.00500
Perfluoro-n-undecanoic acid	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		
Comment: 96/4 methanol/milli-q water (RP-190528-1)		

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL72**

Description: PFAS - EPA 537.1 ICAL L9

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	2000	0.05	---	---	1	10	0.00940
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	2000	0.05	---	---	1	10	0.00930
Adona	2000	0.05	---	---	1	10	0.00945
Hexafluoropropylene oxide dimer acid	2000	0.05	---	---	1	10	0.01000
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-1-butanefluoride	2000	0.04	---	---	1	10	0.00885
Perfluoro-1-hexanesulfonate	2000	0.05	---	---	1	10	0.00912
Perfluoro-1-octanesulfonate	2000	0.05	---	---	1	10	0.00925
Perfluoro-n-decanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-dodecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-heptanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-hexanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-octanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluorononanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-tetradecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-tridecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-undecanoic acid	2000	0.05	---	---	1	10	0.01000

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00940

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL72

Description: PFAS - EPA 537.1 ICAL L9

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00930
Adona	.00945
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.01000
N-ethylperfluoro-octanesulfonamidoacetic acid	.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.01000
Perfluoro-1-butanefulfonate	.00885
Perfluoro-1-hexanesulfonate	.00912
Perfluoro-1-octanesulfonate	.00925
Perfluoro-n-decanoic Acid	.01000
Perfluoro-n-dodecanoic acid	.01000
Perfluoro-n-heptanoic Acid	.01000
Perfluoro-n-hexanoic acid	.01000
Perfluoro-n-octanoic Acid	.01000
Perfluorononanoic Acid	.01000
Perfluoro-n-tetradecanoic acid	.01000
Perfluoro-n-tridecanoic acid	.01000
Perfluoro-n-undecanoic acid	.01000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL74**

Description: PFAS - EPA 537.1 ICC

Stock Id: KJ91

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	200	0.05	---	---	1	10	0.00094
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	200	0.05	---	---	1	10	0.00093
Adona	200	0.05	---	---	1	10	0.00095
Hexafluoropropylene oxide dimer acid	200	0.05	---	---	1	10	0.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-1-butanefluoride	200	0.04	---	---	1	10	0.00089
Perfluoro-1-hexanesulfonate	200	0.05	---	---	1	10	0.00095
Perfluoro-1-octanesulfonate	200	0.05	---	---	1	10	0.00095
Perfluoro-n-decanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-dodecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-heptanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-hexanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-octanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluorononanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tetradecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tridecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-undecanoic acid	200	0.05	---	---	1	10	0.00100

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00094

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL74

Description: PFAS - EPA 537.1 ICC

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00093
Adona	.00095
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanefluoride	.00089
Perfluoro-1-hexanesulfonate	.00095
Perfluoro-1-octanesulfonate	.00095
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00100
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ91	Pipette	B814657482
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		
Comment: 96/4 methanol/milli-q water (RP-190528-1)		

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

BDO Id: 180810-02

Reagent Receipt Report

Approved: Authorized

Name: EPA-537IS **Received:** 8/10/2018
Vendor: Wellington Laboratories **Custodian:** Schumitz, Denise
Catalogue No: EPA-537IS **Expires:** 12/13/2022
Type: Solution **Consumed:** _____
Lot No: 537IS1217 **Stored In:** AqChem Laboratory - R0124
Quantity: 2 ea ml **% Moisture:** _____
Description: EPA-537IS

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFOA	BDO-2107	1.0000	100.00	--	--	<input type="checkbox"/>		
13C4-PFOS	BDO-2121	2.8700	100.00	--	--	<input type="checkbox"/>		1
d3-MeFOSAA	BDO-1838	4.0000	100.00	--	--	<input type="checkbox"/>		

Total Analytes: 3

Notes:

Analyte: 1 13C4-PFOS **Comment:** 3.0 as the salt

Approved by: _____ **Approved on:** _____
Authorized by: _____ **Authorized on:** _____

1808 10-2



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537IS

Internal Standard
Primary Dilution Standard

<u>PRODUCT CODE:</u>	EPA-537IS
<u>LOT NUMBER:</u>	537IS1217
<u>SOLVENT(S):</u>	Methanol / Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	12/13/2017
<u>LAST TESTED:</u> (mm/dd/yyyy)	12/13/2017
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	12/13/2022
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

EPA-537IS is a solution/mixture of a mass-labelled (¹³C) perfluoroalkylcarboxylic acid, a mass-labelled (¹³C) perfluoroalkylsulfonate, and a mass-labelled (²H) perfluorooctanesulfonamidoacetic acid. The components and their concentrations are given in Table A.

The mass-labelled perfluoroalkylcarboxylic acid and the mass-labelled perfluoroalkylsulfonate both have chemical purities of >98% and isotopic purities of ≥99%. The mass-labelled perfluorooctanesulfonamidoacetic acid has a chemical purity of >98% and an isotopic purity of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (TIC)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid	M2PFOA	1000		A
N-methyl-d ₃ -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	4000		C
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate	MPFOS	3000	2870	B

Certified By: 
B.G. Chittim, General Manager

Date: 12/22/2017
(mm/dd/yyyy)

It can be done

BDO Id: 190410-02

Reagent Receipt Report

Approved: Authorized

Name:	<u>EPA-537PDS-R1</u>	Received:	<u>4/10/2019</u>
Vendor:	<u>Wellington Laboratories</u>	Custodian:	<u>Schumitz, Matt</u>
Catalogue No:	<u>EPA-537PDS-R1</u>	Expires:	<u>3/19/2022</u>
Type:	<u>Solution</u>	Consumed:	<u></u>
Lot No:	<u>537PDSR10119</u>	Stored In:	<u>VOC Laboratory - R0123</u>
Quantity:	<u>1 ea</u> ml	% Moisture:	<u></u>
Description:	<u>EPA-537PDS-R1</u>		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
11-chloroeicosafuoro-3-oxaundecan	763051-92-9	1.8800	100.00	--	--	<input type="checkbox"/>			
9-chlorohexadecafluoro-3-oxanonane	756426-58-1	1.8600	100.00	--	--	<input type="checkbox"/>			
Adona	919005-14-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Hexafluoropropylene oxide dimer aci	13252-13-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	2.0000	100.00	--	--	<input type="checkbox"/>			1
N-methylperfluoro-1-octanesulfonami	2355-31-9	2.0000	100.00	--	--	<input type="checkbox"/>			2
Perfluoro-1-butanefulfonate	375-73-5	1.7700	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonate	355-46-4	1.8240	100.00	--	--	<input type="checkbox"/>			3
Perfluoro-1-octanesulfonate	1763-23-1	1.8510	100.00	--	--	<input type="checkbox"/>			4
Perfluoro-n-decanoic Acid	335-76-2	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 18

Notes:

Analyte:	Comment:
1 N-ethylperfluoro-octanesulfonamidoacetic acid	Sum of branched and linear isomers
2 N-methylperfluoro-1-octanesulfonamidoacetic acid	Sum of branched and linear isomers
3 Perfluoro-1-hexanesulfonate	Sum of branched and linear isomers
4 Perfluoro-1-octanesulfonate	Sum of branched and linear isomers

Approved by: _____ Approved on: _____
 Authorized by: _____ Authorized on: _____

**WELLINGTON**
LABORATORIESCERTIFICATE OF ANALYSIS
DOCUMENTATION**EPA-537PDS-R1****Native PFAS Primary Dilution
Standard Solution/Mixture**

PRODUCT CODE: EPA-537PDS-R1
LOT NUMBER: 537PDSR10119
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 02/14/2019
LAST TESTED: (mm/dd/yyyy) 03/19/2019
EXPIRY DATE: (mm/dd/yyyy) 03/19/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

EPA-537PDS-R1 is a solution/mixture of native linear perfluoroalkylcarboxylic acids (PFCAs; C₆-C₁₄), native perfluoroalkylsulfonates (PFSAs; C₄ linear; C₆ and C₈ linear and branched), native N-substituted perfluoro-octanesulfonamidoacetic acids (N-MeFOSAA and N-EtFOSAA; linear and branched), GenX (HFPO-DA), the main components of F-53B (9Cl-PF3ONS and 11Cl-PF3OUDS), and the sodium salt of ADONA (NaDONA). The components and their concentrations are given in Table A.

The components of this solution/mixture all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Table B: Isomeric Components and Percent Composition of N-MeFOSAA
Table C: Isomeric Components and Percent Composition of N-EtFOSAA
Table D: Isomeric Components and Percent Composition of PFHxSK
Table E: Isomeric Components and Percent Composition of PFOSK
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537PDS-R1; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-hexanoic acid	PFHxA	2000		B
Perfluoro-n-heptanoic acid	PFHpA	2000		D
Perfluoro-n-octanoic acid	PFOA	2000		H
Perfluoro-n-nonanoic acid	PFNA	2000		I
Perfluoro-n-decanoic acid	PFDA	2000		M
Perfluoro-n-undecanoic acid	PFUdA	2000		R
Perfluoro-n-dodecanoic acid	PFDoA	2000		T
Perfluoro-n-tridecanoic acid	PFTrDA	2000		U
Perfluoro-n-tetradecanoic acid	PFTeDA	2000		V
2,3,3,3-Tetrafluoro-2-(1,1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		C
N-methylperfluorooctanesulfonamidoacetic acid ^a	N-MeFOSAA: linear isomer	1520		O
	N-MeFOSAA: Σ branched isomers	480		N
N-ethylperfluorooctanesulfonamidoacetic acid ^b	N-EtFOSAA: linear isomer	1550		Q
	N-EtFOSAA: Σ branched isomers	450		P
Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000	1770	A
Potassium perfluorohexanesulfonate ^c	PFHxSK: linear isomer	1620	1480	G
	PFHxSK: Σ branched isomers	378	344	F
Potassium perfluorooctanesulfonate ^d	PFOSK: linear isomer	1580	1460	K
	PFOSK: Σ branched isomers	422	391	J
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	2000	1890	E
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1860	L
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1880	S

^a See Table B for percent composition of linear and branched N-MeFOSAA isomers.

^b See Table C for percent composition of linear and branched N-EtFOSAA isomers.

^c See Table D for percent composition of linear and branched PFHxSK isomers.

^d See Table E for percent composition of linear and branched PFOSK isomers.

* Concentrations have been rounded to three significant figures.



It can be done

BDO Id: 190410-03

Reagent Receipt Report

 Approved: Authorized

Name: <u>EPA-537PDSL-R1</u> Vendor: <u>Wellington Laboratories</u> Catalogue No: <u>EPA-537PDSL-R1</u> Type: <u>Solution</u> Lot No: <u>537PDSL10119</u> Quantity: <u>1 ea</u> <u>ml</u> % Moisture: _____ Description: <u>EPA-537PDSL-R1</u>	Received: <u>4/10/2019</u> Custodian: <u>Schumitz, Matt</u> Expires: <u>2/14/2022</u> Consumed: _____ Stored In: <u>VOC Laboratory - R0123</u>
---	---

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
11-chloroeicosafuoro-3-oxaundecan	763051-92-9	1.8800	100.00	--	--	<input type="checkbox"/>			
9-chlorohexadecafluoro-3-oxanonane	756426-58-1	1.8600	100.00	--	--	<input type="checkbox"/>			
Adona	919005-14-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Hexafluoropropylene oxide dimer aci	13252-13-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-methylperfluoro-1-octanesulfonami	2355-31-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-butanefluoride	375-73-5	1.7700	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonate	355-46-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-octanesulfonate	1763-23-1	1.9100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-decanoic Acid	335-76-2	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 18

Notes:

Approved by: _____	Approved on: _____
Authorized by: _____	Authorized on: _____



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537PDSL-R1

Native PFAS Linear Primary Dilution Standard Solution/Mixture

PRODUCT CODE: EPA-537PDSL-R1
LOT NUMBER: 537PDSL10119
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 01/30/2019
LAST TESTED: (mm/dd/yyyy) 02/14/2019
EXPIRY DATE: (mm/dd/yyyy) 02/14/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

EPA-537PDSL-R1 is a solution/mixture of native linear perfluoroalkylcarboxylic acids (PFCAs; C₆-C₁₄), native linear perfluoroalkylsulfonates (PFSAs; C₄, C₆, and C₈), native linear N-substituted perfluorooctanesulfonamidoacetic acids (N-MeFOSAA and N-EtFOSAA), GenX (HFPO-DA), the main components of F-53B (9Cl-PF3ONS and 11Cl-PF3OUdS), and the sodium salt of ADONA (NaDONA). The components and their concentrations are given in Table A.

The components of this solution all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
 Figure 1: LC/MS Data (SIR)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537PDSL-R1; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		(ng/ml)		
Perfluoro-n-hexanoic acid	PFHxA	2000		B
Perfluoro-n-heptanoic acid	PFHpA	2000		D
Perfluoro-n-octanoic acid	PFOA	2000		G
Perfluoro-n-nonanoic acid	PFNA	2000		H
Perfluoro-n-decanoic acid	PFDA	2000		K
Perfluoro-n-undecanoic acid	PFUdA	2000		N
Perfluoro-n-dodecanoic acid	PFDoA	2000		P
Perfluoro-n-tridecanoic acid	PFTrDA	2000		Q
Perfluoro-n-tetradecanoic acid	PFTeDA	2000		R
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		C
N-methylperfluoro-1-octanesulfonamidoacetic acid	N-MeFOSAA	2000		L
N-ethylperfluoro-1-octanesulfonamidoacetic acid	N-EtFOSAA	2000		M
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000	1770	A
Sodium perfluoro-1-hexanesulfonate	L-PFHxS	2000	1890	F
Sodium perfluoro-1-octanesulfonate	L-PFOS	2000	1910	I
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	2000	1890	E
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1860	J
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1880	O

* Concentrations have been rounded to three significant figures.

Certified By: 
B.G. Chittim, General Manager

Date: 03/26/2019
(mm/dd/yyyy)

It can be done

BDO Id: 190410-04

Reagent Receipt Report

Approved: Authorized

Name: EPA-537SS-R1 Received: 4/10/2019
Vendor: Wellington Laboratories Custodian: Schumitz, Matt
Catalogue No: EPA-537SS-R1 Expires: 3/29/2022
Type: Solution Consumed: _____
Lot No: 537SSR10119 Stored In: VOC Laboratory - R0123
Quantity: 1 ea ml % Moisture: _____
Description: EPA-537SS-R1

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFDA	BDO-2110	1.0000	100.00	--	--	<input type="checkbox"/>			
13C2-PFHxA	BDO-2106	1.0000	100.00	--	--	<input type="checkbox"/>			
13C3-HFPO-DA	BDO-2276	1.0000	100.00	--	--	<input type="checkbox"/>			
d5-EtFOSAA	BDO-1839	4.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 4

Notes:

Approved by: _____ Approved on: _____
Authorized by: _____ Authorized on: _____

190410-04



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-537SS-R1

Surrogate Primary Dilution Standard

<u>PRODUCT CODE:</u>	EPA-537SS-R1
<u>LOT NUMBER:</u>	537SSR10119
<u>SOLVENT(S):</u>	Methanol / Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	01/30/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	03/29/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	03/29/2022
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

EPA-537SS-R1 is a solution/mixture of two mass-labelled (¹³C) perfluoroalkylcarboxylic acids (MPFHxA and MPFDA), a mass-labelled (²H) N-ethyl-perfluorooctanesulfonamidoacetic acid (d5-N-EtFOSAA), and mass-labelled (¹³C) 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (M3HFPO-DA). The components and their concentrations are given in Table A.

The mass-labelled (¹³C) perfluoroalkylcarboxylic acids and mass-labelled (¹³C) 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid have chemical purities of >98% and isotopic purities of ≥99%. The mass-labelled (²H) N-ethyl-perfluorooctanesulfonamidoacetic acid has a chemical purity of >98% and an isotopic purity of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.
- Contains ~ 1.9% of the linear M3HFPO-DA isomer (determined by ¹⁹F NMR) relative to the M3HFPO-DA analyte and ~ 0.1% of perfluoro-n-hexanoic acid (PFHxA) relative to the MPFHxA analyte.

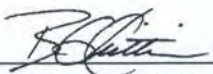
FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537SS-R1; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)	Peak Assignment in Figure 1
Perfluoro-n-[1,2- ¹³ C ₂]hexanoic acid	MPFHxA	1000	A
Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid	MPFDA	1000	C
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)- ¹³ C ₃ -propanoic acid	M3HFPO-DA	1000	B
N-ethyl-d ₅ -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	4000	D

Certified By:


 B.G. Chittim, General Manager
Date: 04/01/2019
(mm/dd/yyyy)

ACCREDITATIONS

Accrediting Authority	Laboratory ID
U.S. Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP)	91667
State of Florida Department of Health	E87856
State of New York Department of Health	12105
Commonwealth of Pennsylvania Department of Environmental Protection	68-05687
State of Washington Department of Ecology	C1050
State of California	3045
Commonwealth of Massachusetts	E87856

Current certificates and lists of accredited parameters are available upon request.



Sample Preparation



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS**

<u>Project Title(s)</u>	<u>Project No.(s)</u>
PFAS: Nasa Kennedy Space Center	100123260
19-0466	
Nasa: PFAS Drinking Water	
QC	
SOP Numbers (see workplan for modifications)	
VOASOP No.	5-371

This Batch Contains The Following Samples:	
CU244PB-FS	I3460-FS
CU245LCS-FS	I3462-FS
I3452-FS	I3464-FS
I3454-FS	I3467-FS
I3456-FS	I3469-FS
I3458-FS	I3471-FS

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	06/05/2019	DMS



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466**Nasa: PFAS Drinking Water****QC**

Sample ID	Description
CU244PB-FS	Procedural Blank
CU245LCS-FS	Laboratory Control Sample
I3452-FS	Q6-0082-FRB-20190530-01
I3454-FS	H6-1607-FRB-20190530-01
I3456-FS	M6-1518-FRB-20190531-01
I3458-FS	H5-2139-FRB-20190531-01
I3460-FS	H5-1434-FRB-20190531-01
I3462-FS	H4-1598-FRB-20190531-01
I3464-FS	F4-1844-FRB-20190531-01
I3467-FS	E3-1120-FRB-20190531-01
I3469-FS	H4-1797-FRB-20190531-01
I3471-FS	H4-1840A-FRB-20190531-01

Samples Assigned By:

Jonathan Thorn

Date :

June 3, 2019

Comments:



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE CUSTODY LOG

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466**Nasa: PFAS Drinking Water****QC**

Requested On/By: 06/03/2019 SAS	Purpose: Sample Preparation
Relinquished On/By: 06/03/2019 MDS	Last Activity: Transfer
Accepted On/By: 06/03/2019 SAS Stored In Facility: Sample Preparation Stored Until: 06/03/2019 Stored Comment: NA	Returned On/To: Returned To Facility: Returned Comment: NA

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:	
1	I3452	1	C	Consumed	NA	
2	I3454	1	C	Consumed	NA	
3	I3456	1	C	Consumed	NA	
4	I3458	1	C	Consumed	NA	
5	I3460	1	C	Consumed	NA	
6	I3462	1	C	Consumed	NA	
7	I3464	1	C	Consumed	NA	
8	I3467	1	C	Consumed	NA	
9	I3469	1	C	Consumed	NA	
10	I3471	1	C	Consumed	NA	
Total Samples		10		* "C" = Consumed Container		



It can be done

**BATTELLE - NORWELL OPERATIONS
LIQUID SAMPLE ID FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466

Nasa: PFAS Drinking Water

QC

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CU244PB-FS	Procedural Blank	250.0	NA	--	06/03/19 SAS
CU245LCS-FS	Laboratory Control Sample	250.0	NA	--	06/03/19 SAS
I3452-FS	Q6-0082-FRB-20190530-01	265.0	1	C	06/04/19 SAS
I3454-FS	H6-1607-FRB-20190530-01	270.0	1	C	06/04/19 SAS
I3456-FS	M6-1518-FRB-20190531-01	265.0	1	C	06/04/19 SAS
I3458-FS	H5-2139-FRB-20190531-01	270.0	1	C	06/04/19 SAS
I3460-FS	H5-1434-FRB-20190531-01	265.0	1	C	06/04/19 SAS
I3462-FS	H4-1598-FRB-20190531-01	260.0	1	C	06/04/19 SAS
I3464-FS	F4-1844-FRB-20190531-01	270.0	1	C	06/04/19 SAS
I3467-FS	E3-1120-FRB-20190531-01	265.0	1	C	06/04/19 SAS
I3469-FS	H4-1797-FRB-20190531-01	265.0	1	C	06/04/19 SAS
I3471-FS	H4-1840A-FRB-20190531-01	265.0	1	C	06/04/19 SAS

Comments:

Sample ID:	Comments:
CU244PB-FS	1.23g of Trizma 190131-01 weighed on BAL-009.
CU245LCS-FS	1.27g of Trizma 190131-01 weighed on BAL-009.

Samples Assigned By:

Jonathan Thorn

Date :

June 3, 2019

* - "C" = Sample is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466

Nasa: PFAS Drinking Water

QC

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CU244PB-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
CU245LCS-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
CU245LCS-FS	KJ91	LCS/MS	1	100	06/03/19 SAS	CV	NA
I3452-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3454-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3456-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3458-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3460-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3462-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3464-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3467-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3469-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA
I3471-FS	KJ90	SIS	1	50	06/03/19 SAS	CV	NA

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KJ90	Pipette	B814659662
KJ91	Pipette	B814659662



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE EXTRACTION FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466**Nasa: PFAS Drinking Water****QC**

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CU244PB-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
CU245LCS-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3452-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3454-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3456-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3458-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3460-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3462-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3464-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3467-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3469-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3471-FS	06/03/19 SAS	NA	NA	NA	NA	NA	NA	NA

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
Pre-packed SPE Column	RP-190603-9	06/04/19	S214- 0085/S19- 001455	Pre-packed SPE Column	

Solvents/Reagents:

Name	Lot No	Comments
Methanol (HPLC) (190521-09)	187803	



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466**Nasa: PFAS Drinking Water****QC****(N/A Fraction)**

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
CU244PB-FS(0)	950	50	KJ92	50	1	1000	1.000	06/05/19 SAS	SG
CU245LCS-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
CU245LCS-FS-D(3)	960	40	KJ92	50	1	1000	5.000	06/05/19 SAS	JRS
I3452-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3454-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3456-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3458-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3460-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3462-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3464-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3467-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3469-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG
I3471-FS(0)	950	50	KJ92	50	1	1000	1.000	06/04/19 SAS	SG

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KJ92	Pipette	B814659662

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466**Nasa: PFAS Drinking Water****QC**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CU244PB-FS	0	--	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
CU245LCS-FS	0	C	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
CU245LCS-FS	2	--	6/5/2019 9:28:00 AM	CU245LCS-FS	0	1000	800	1.250	1.250	06/05/19 SAS
CU245LCS-FS-D	3	--	6/5/2019 9:28:00 AM	CU245LCS-FS	0	1000	200	5.000	5.000	06/05/19 SAS
I3452-FS	0	--	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3454-FS	0	--	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3456-FS	0	--	6/3/2019 2:26:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3458-FS	0	--	6/3/2019 3:50:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3460-FS	0	--	6/3/2019 3:50:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3462-FS	0	--	6/3/2019 3:50:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3464-FS	0	--	6/3/2019 3:50:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3467-FS	0	--	6/3/2019 3:50:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3469-FS	0	--	6/3/2019 3:50:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS
I3471-FS	0	--	6/3/2019 3:50:00 PM	NA		NA	NA	1.000	1.000	06/03/19 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466**Nasa: PFAS Drinking Water****QC**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466**Nasa: PFAS Drinking Water****QC**

Purpose: LC-MS/MS TRANSFER		Last Activity: Prep->Inst			
Relinquished On/By: Jun 4 2019 1:46PM SAS		Received On/By: Jun 4 2019 1:46PM DMS			
Relinquished From: Sample Preparation: NA		Received Location: LC Laboratory: NA			
Relinquish Comment: NA		Received Comment: Samples reconstituted in 96/4 methanol/milli-q water (RP-190604-2).			
No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CU244PB-FS(0)	1000	1	Intact	NA
2	CU245LCS-FS(0)	1000	1	Intact	NA
3	I3452-FS(0)	1000	1	Intact	NA
4	I3454-FS(0)	1000	1	Intact	NA
5	I3456-FS(0)	1000	1	Intact	NA
6	I3458-FS(0)	1000	1	Intact	NA
7	I3460-FS(0)	1000	1	Intact	NA
8	I3462-FS(0)	1000	1	Intact	NA
9	I3464-FS(0)	1000	1	Intact	NA
10	I3467-FS(0)	1000	1	Intact	NA
11	I3469-FS(0)	1000	1	Intact	NA
12	I3471-FS(0)	1000	1	Intact	NA
Total Extracts:		12			

Purpose: LC-MS/MS TRANSFER		Last Activity: Prep->Inst			
Relinquished On/By: Jun 5 2019 9:59AM SAS		Received On/By: Jun 5 2019 10:27AM LMG			
Relinquished From: Sample Preparation: NA		Received Location: LC Laboratory: NA			
Relinquish Comment: NA		Received Comment: Samples diluted in 96/4 methanol/milli-q water (RP-190605-3).			
No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CU245LCS-FS-D(3)	1000	5	Intact	NA
Total Extracts:		1			



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE SPECIFIC COMMENTS

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466

Nasa: PFAS Drinking Water

QC

Sample ID:	Comment:	Date/Initials:
CU244PB-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:52pm.	06/03/19 SAS
CU245LCS-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:54pm.	06/03/19 SAS
I3452-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:56pm.	06/03/19 SAS
I3454-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:57pm.	06/03/19 SAS
I3456-FS	Extraction began at 2:26pm, extraction block 1, ended at 2:57pm.	06/03/19 SAS
I3458-FS	Extraction began at 3:50pm, DW only extraction block, ended at 4:18pm.	06/03/19 SAS
I3460-FS	Extraction began at 3:50pm, DW only extraction block, ended at 4:19pm.	06/03/19 SAS
I3462-FS	Extraction began at 3:50pm, DW only extraction block, ended at 4:21pm.	06/03/19 SAS
I3464-FS	Extraction began at 3:50pm, DW only extraction block, ended at 4:20pm.	06/03/19 SAS
I3467-FS	Extraction began at 3:50pm, DW only extraction block, ended at 4:19pm.	06/03/19 SAS
I3469-FS	Extraction began at 3:50pm, DW only extraction block, ended at 4:18pm.	06/03/19 SAS
I3471-FS	Extraction began at 3:50pm, DW only extraction block, ended at 4:17pm.	06/03/19 SAS



It can be done

**BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0466

Nasa: PFAS Drinking Water

QC

Entered By:

On:

Task Leader Approval:

On:

SupervisorApproval:

On:

PM Approval:

On:

Analytical Calibrations



Sequence Report

Created with Analyst Reporter
Printed: 05/06/2019 2:02:10 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MeOH		6/4/2019 4:05:20 PM	5-0371.dam	AC_06042019_5-371.wiff
2	KL64	L1	6/4/2019 4:14:18 PM	5-0371.dam	AC_06042019_5-371.wiff
3	KL65	L2	6/4/2019 4:23:13 PM	5-0371.dam	AC_06042019_5-371.wiff
4	KL66	L3	6/4/2019 4:32:11 PM	5-0371.dam	AC_06042019_5-371.wiff
5	KL67	L4	6/4/2019 4:41:08 PM	5-0371.dam	AC_06042019_5-371.wiff
6	KL68	L5	6/4/2019 4:50:04 PM	5-0371.dam	AC_06042019_5-371.wiff
7	KL69	L6	6/4/2019 4:59:00 PM	5-0371.dam	AC_06042019_5-371.wiff
8	KL70	L7	6/4/2019 5:07:56 PM	5-0371.dam	AC_06042019_5-371.wiff
9	KL71	L8	6/4/2019 5:16:53 PM	5-0371.dam	AC_06042019_5-371.wiff
10	KL72	L9	6/4/2019 5:25:48 PM	5-0371.dam	AC_06042019_5-371.wiff
11	KL73 IB	IB	6/4/2019 5:34:45 PM	5-0371.dam	AC_06042019_5-371.wiff
12	KL74 ICC	ICC	6/4/2019 5:43:42 PM	5-0371.dam	AC_06042019_5-371.wiff
13	MeOH		6/4/2019 5:52:40 PM	5-0371.dam	AC_06042019_5-371.wiff
14	CU246PB-FS(0)		6/4/2019 6:01:36 PM	5-0371.dam	AC_06042019_5-371.wiff
15	CU247LCS-FS(0)		6/4/2019 6:10:32 PM	5-0371.dam	AC_06042019_5-371.wiff
16	I3472-FS(0)		6/4/2019 6:19:30 PM	5-0371.dam	AC_06042019_5-371.wiff
17	I3473-FS(0)		6/4/2019 6:28:25 PM	5-0371.dam	AC_06042019_5-371.wiff
18	KL38-CCV		6/4/2019 6:37:21 PM	5-0371.dam	AC_06042019_5-371.wiff
19	MeOH		6/4/2019 6:46:19 PM	5-0371.dam	AC_06042019_5-371.wiff
20	CU163PB-FS(0)		6/4/2019 6:55:16 PM	5-0371.dam	AC_06042019_5-371.wiff
21	CU164LCS-FS(0)		6/4/2019 7:04:12 PM	5-0371.dam	AC_06042019_5-371.wiff
22	I3146-FS1(0)		6/4/2019 7:13:09 PM	5-0371.dam	AC_06042019_5-371.wiff
23	I3146-FS1-D(3)		6/4/2019 7:22:05 PM	5-0371.dam	AC_06042019_5-371.wiff
24	I3146-FS1-D(5)		6/4/2019 7:31:01 PM	5-0371.dam	AC_06042019_5-371.wiff
25	KL69-CCV		6/4/2019 7:39:58 PM	5-0371.dam	AC_06042019_5-371.wiff
26	MeOH		6/4/2019 7:48:55 PM	5-0371.dam	AC_06042019_5-371.wiff
27	CU242PB-FS(0)		6/4/2019 7:57:53 PM	5-0371.dam	AC_06042019_5-371.wiff
28	CU243LCS-FS(0)		6/4/2019 8:06:49 PM	5-0371.dam	AC_06042019_5-371.wiff
29	I3451-FS(0)		6/4/2019 8:15:46 PM	5-0371.dam	AC_06042019_5-371.wiff
30	I3453-FS(0)		6/4/2019 8:24:43 PM	5-0371.dam	AC_06042019_5-371.wiff
31	I3455-FS(0)		6/4/2019 8:33:40 PM	5-0371.dam	AC_06042019_5-371.wiff
32	I3457-FS(0)		6/4/2019 8:42:38 PM	5-0371.dam	AC_06042019_5-371.wiff
33	I3459-FS(0)		6/4/2019 8:51:33 PM	5-0371.dam	AC_06042019_5-371.wiff
34	I3461-FS(0)		6/4/2019 9:00:32 PM	5-0371.dam	AC_06042019_5-371.wiff
35	I3463-FS(0)		6/4/2019 9:09:28 PM	5-0371.dam	AC_06042019_5-371.wiff
36	KL68-CCV		6/4/2019 9:18:25 PM	5-0371.dam	AC_06042019_5-371.wiff
37	MeOH		6/4/2019 9:27:22 PM	5-0371.dam	AC_06042019_5-371.wiff
38	I3463MS-FS(0)		6/4/2019 9:36:20 PM	5-0371.dam	AC_06042019_5-371.wiff
39	I3463MSD-FS(0)		6/4/2019 9:45:17 PM	5-0371.dam	AC_06042019_5-371.wiff

1





Sequence Report

Created with Analyst Reporter
Printed: 05/06/2019 2:02:10 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	I3465 FS(0)		6/4/2019 9:54:14 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3466 FS(0)		6/4/2019 10:03:12 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3468 FS(0)		6/4/2019 10:12:08 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3470 FS(0)		6/4/2019 10:21:04 PM	5-0371.dam	AC_06042019_5-371.wiff
	KL69 CCV	CCV	6/4/2019 10:30:02 PM	5-0371.dam	AC_06042019_5-371.wiff
	MeOH		6/4/2019 10:38:59 PM	5-0371.dam	AC_06042019_5-371.wiff
	CU244PB-FS(0)	Procedural Blank	6/4/2019 10:47:56 PM	5-0371.dam	AC_06042019_5-371.wiff
	CU245LCS-FS(0)	Laboratory Control Sample	6/4/2019 10:56:53 PM	5-0371.dam	AC_06042019_5-371.wiff
2	I3452 FS(0)	Q6-0082 FRB-20190530-01	6/4/2019 11:05:51 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3454 FS(0)	H6-1607 FRB-20190530-01	6/4/2019 11:14:48 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3456 FS(0)	M6-1518 FRB-20190531-01	6/4/2019 11:23:45 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3458 FS(0)	H5-2139 FRB-20190531-01	6/4/2019 11:32:42 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3460 FS(0)	H5-1434 FRB-20190531-01	6/4/2019 11:41:39 PM	5-0371.dam	AC_06042019_5-371.wiff
	I3462 FS(0)	H4-1598 FRB-20190531-01	6/4/2019 11:50:35 PM	5-0371.dam	AC_06042019_5-371.wiff
	KL68 CCV	CCV	6/4/2019 11:59:31 PM	5-0371.dam	AC_06042019_5-371.wiff
	MeOH		6/5/2019 12:08:27 AM	5-0371.dam	AC_06042019_5-371.wiff
2	I3464 FS(0)	F4-1844 FRB-20190531-01	6/5/2019 12:17:25 AM	5-0371.dam	AC_06042019_5-371.wiff
	I3467-FS(0)	E3-1120-FRB-20190531-01	6/5/2019 12:26:24 AM	5-0371.dam	AC_06042019_5-371.wiff
	I3469-FS(0)	H4-1797-FRB-20190531-01	6/5/2019 12:35:23 AM	5-0371.dam	AC_06042019_5-371.wiff
	I3471-FS(0)	H4-1840A-FRB-20190531-01	6/5/2019 12:44:22 AM	5-0371.dam	AC_06042019_5-371.wiff
	KL69 CCV	CCV	6/5/2019 12:53:21 AM	5-0371.dam	AC_06042019_5-371.wiff

1 Samples do not apply to this batch. LMG 6/5/19

2 These FRBs were not needed not not reported. LMG 6/5/19



Sequence Report

Created with Analyst Reporter
Printed: 05/06/2019 1:58:56 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
2	KL67 ISC	ISC	6/5/2019 10:36:45 AM	5-0371.dam	AC_06052019_5-371.wiff
3	L9	L9	6/5/2019 10:45:42 AM	5-0371.dam	AC_06052019_5-371.wiff
4	KL73 IB	IB	6/5/2019 10:54:41 AM	5-0371.dam	AC_06052019_5-371.wiff
1	CU243LCS FS-D(3)		6/5/2019 11:03:37 AM	5-0371.dam	AC_06052019_5-371.wiff
6	CU245LCS-FS-D(3)	Laboratory Control Sample	6/5/2019 11:12:35 AM	5-0371.dam	AC_06052019_5-371.wiff
1	I3462MS FS-D(3)		6/5/2019 11:21:33 AM	5-0371.dam	AC_06052019_5-371.wiff
8	I3462MSD FS-D(3)		6/5/2019 11:30:31 AM	5-0371.dam	AC_06052019_5-371.wiff
9	I3455 FS(0)		6/5/2019 11:39:28 AM	5-0371.dam	AC_06052019_5-371.wiff
10	I3457 FS(0)		6/5/2019 11:48:24 AM	5-0371.dam	AC_06052019_5-371.wiff
11	CU164LCS FS-D(3)		6/5/2019 11:57:23 AM	5-0371.dam	AC_06052019_5-371.wiff
12	CU247LCS FS-D(3)		6/5/2019 12:06:21 PM	5-0371.dam	AC_06052019_5-371.wiff
13	KL68 CCV	CCV	6/5/2019 12:15:19 PM	5-0371.dam	AC_06052019_5-371.wiff

1 Samples do not apply to this batch. LMG 6/5/19



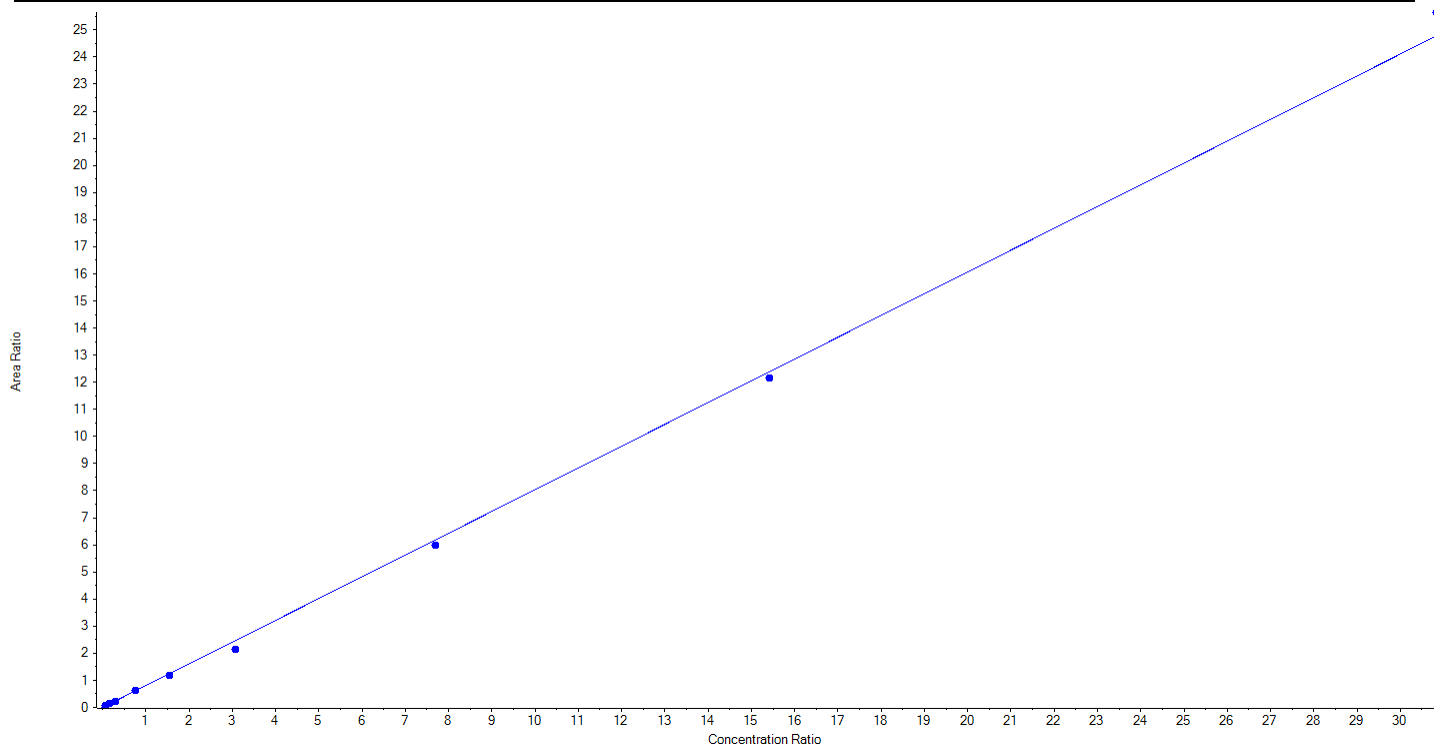
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFBS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	298.9 / 80.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.80352 x$ ($r = 0.99893$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	22.15	25.12	113.4
3	KL65	L2	True	44.30	50.08	113.1
4	KL66	L3	True	88.60	82.05	92.6
5	KL67	L4	True	221.50	219.43	99.1
6	KL68	L5	True	443.00	421.74	95.2
7	KL69	L6	True	885.00	761.32	86.0
8	KL70	L7	True	2212.50	2135.18	96.5
9	KL71	L8	True	4425.00	4339.29	98.1
10	KL72	L9	True	8850.00	9157.83	103.5





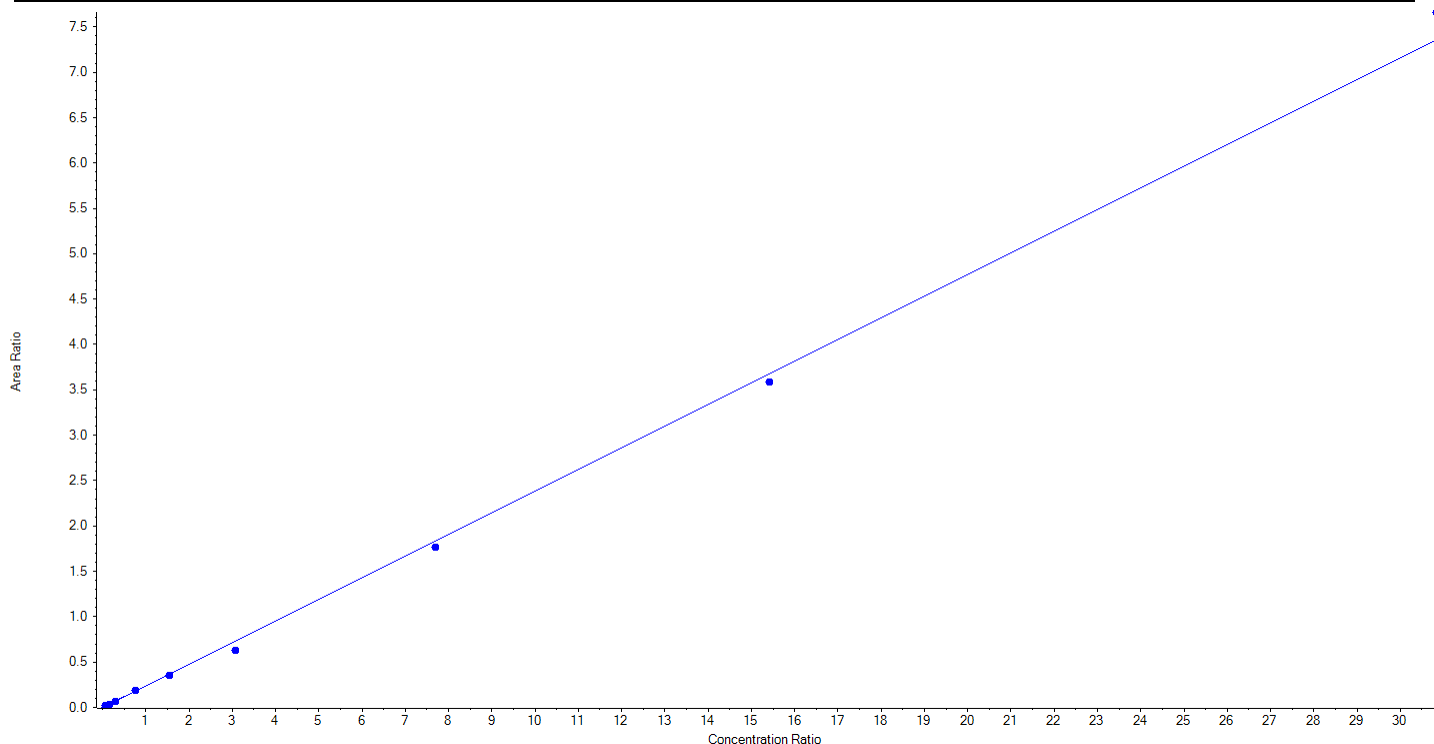
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFBS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	298.9 / 99.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.23859 x$ ($r = 0.99874$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	22.15	22.05	99.6
3	KL65	L2	True	44.30	45.63	103.0
4	KL66	L3	True	88.60	75.49	85.2
5	KL67	L4	True	221.50	228.28	103.1
6	KL68	L5	True	443.00	420.59	94.9
7	KL69	L6	True	885.00	761.99	86.1
8	KL70	L7	True	2212.50	2119.53	95.8
9	KL71	L8	True	4425.00	4307.08	97.3
10	KL72	L9	True	8850.00	9211.40	104.1





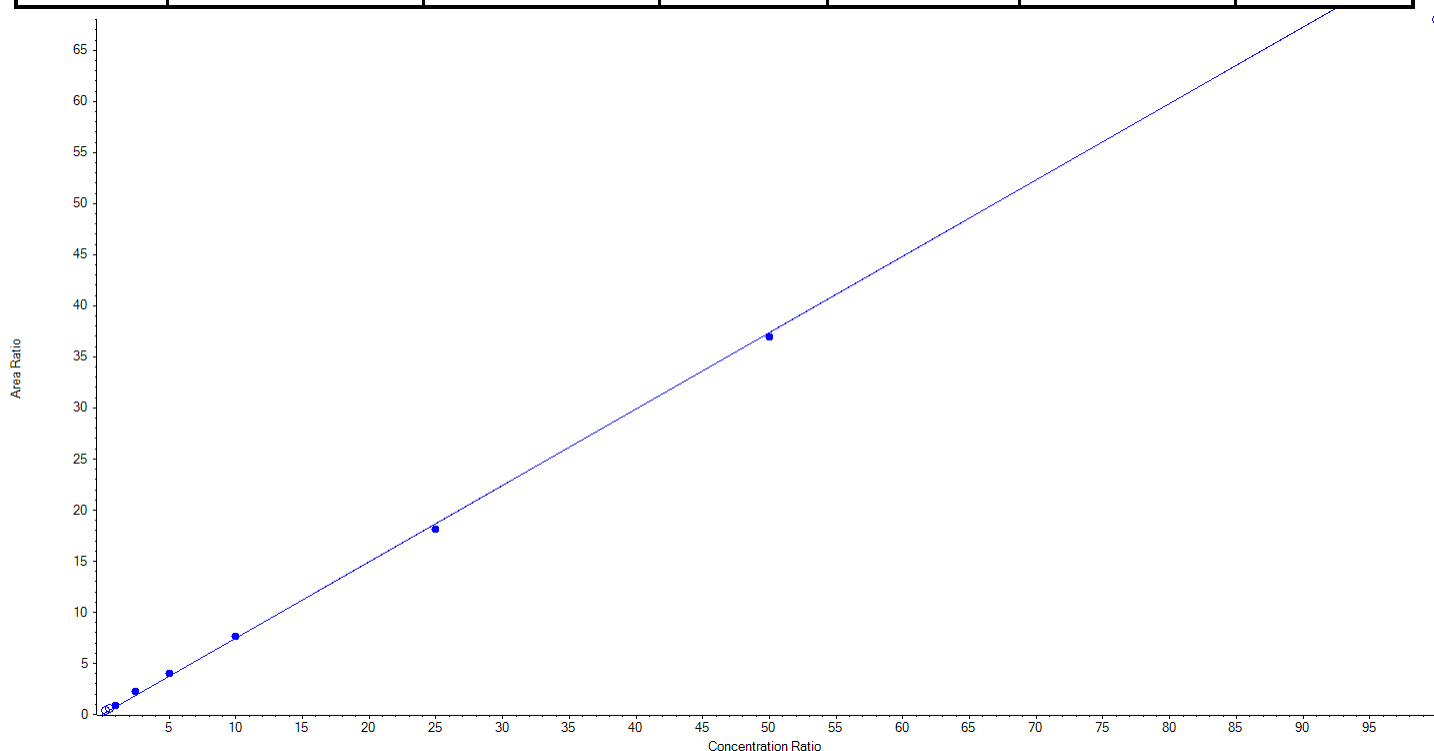
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFHxA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	313.0 / 269.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.74743 x$ ($r = 0.99965$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	51.77	207.1
3	KL65	L2	False	50.00	81.11	162.2
4	KL66	L3	True	100.00	120.59	120.6
5	KL67	L4	True	250.00	302.46	121.0
6	KL68	L5	True	500.00	534.57	106.9
7	KL69	L6	True	1000.00	1019.63	102.0
8	KL70	L7	True	2500.00	2430.53	97.2
9	KL71	L8	True	5000.00	4942.22	98.8
10	KL72	L9	False	10000.00	9099.11	91.0





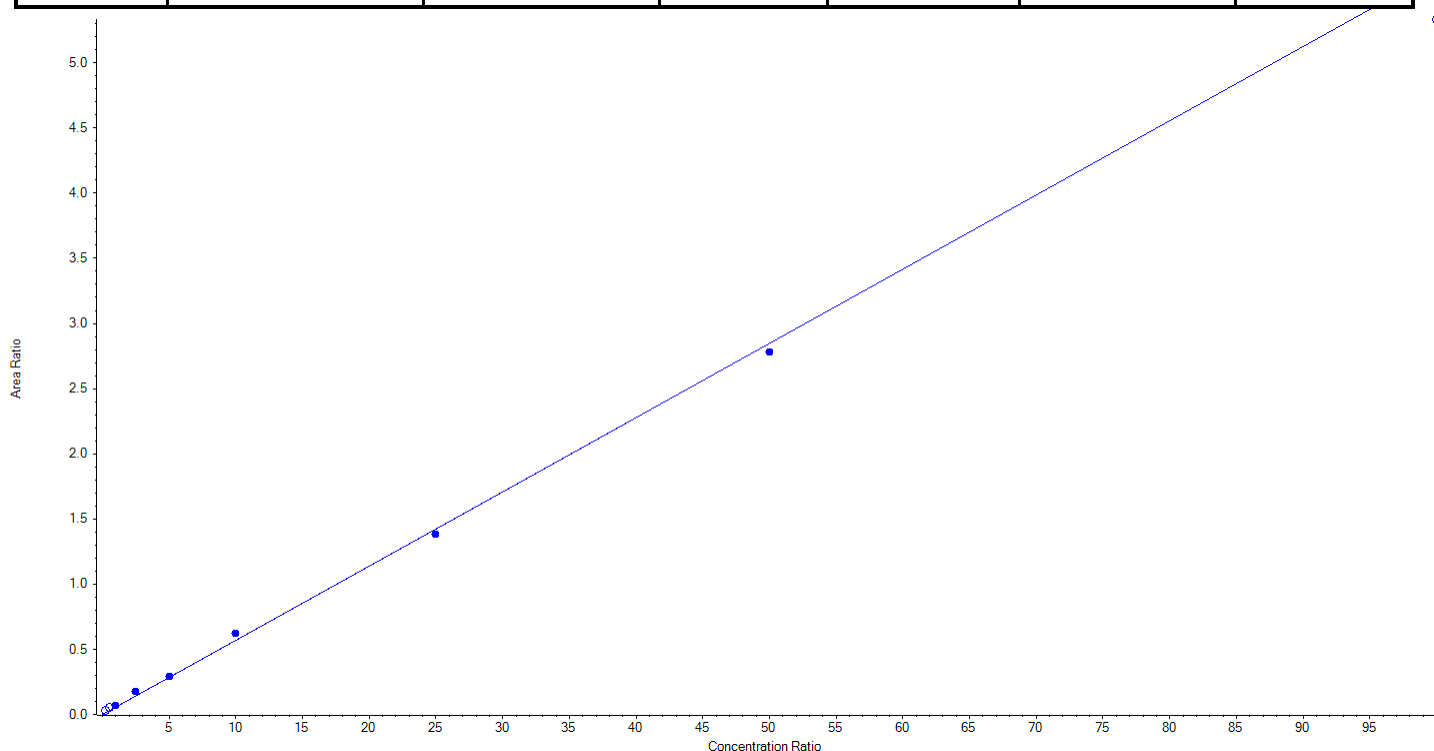
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFHxA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	313.0 / 119.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.05694 x$ ($r = 0.99908$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	49.95	199.8
3	KL65	L2	False	50.00	95.44	190.9
4	KL66	L3	True	100.00	117.56	117.6
5	KL67	L4	True	250.00	310.03	124.0
6	KL68	L5	True	500.00	513.54	102.7
7	KL69	L6	True	1000.00	1086.91	108.7
8	KL70	L7	True	2500.00	2431.63	97.3
9	KL71	L8	True	5000.00	4890.33	97.8
10	KL72	L9	False	10000.00	9364.17	93.6





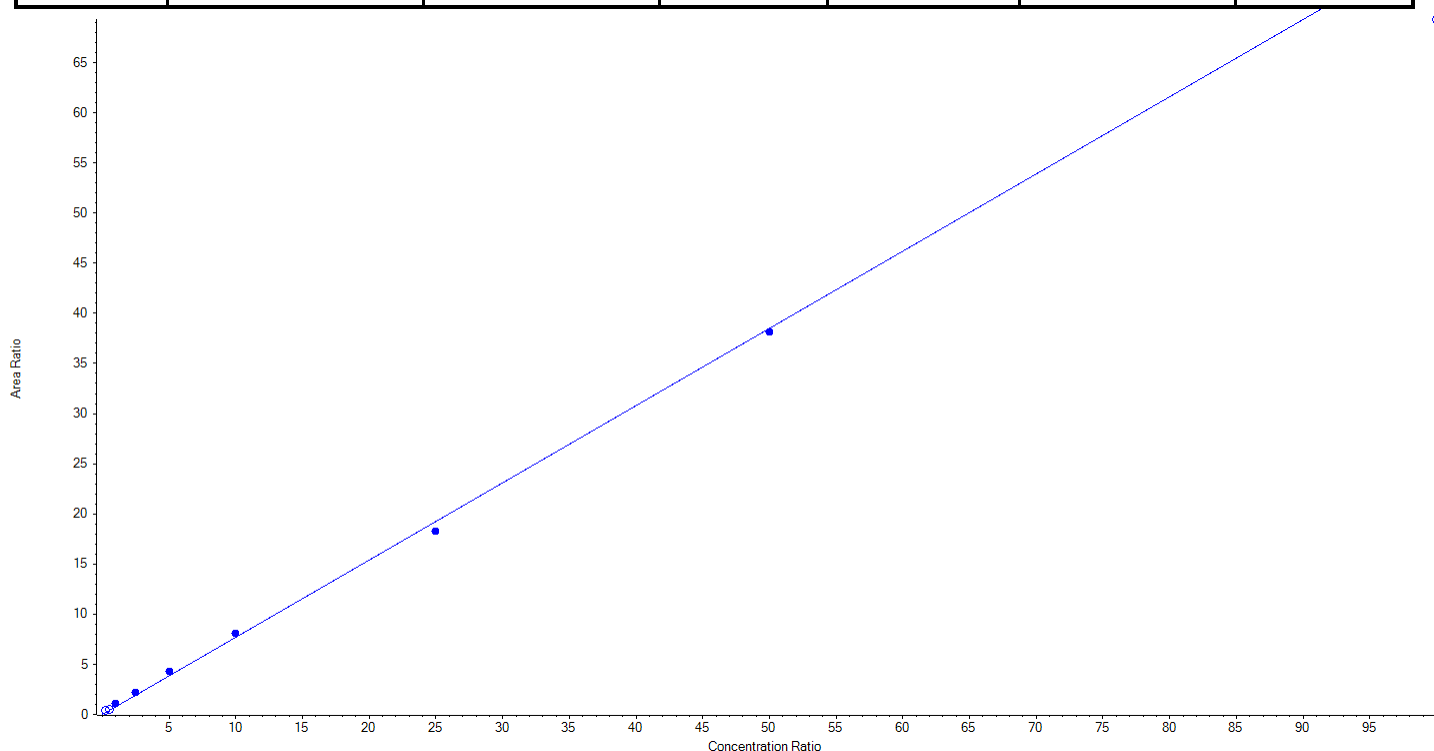
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFHpA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	363.0 / 319.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.76998 x$ ($r = 0.99948$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	57.17	228.7
3	KL65	L2	False	50.00	68.58	137.2
4	KL66	L3	True	100.00	138.33	138.3
5	KL67	L4	True	250.00	279.70	111.9
6	KL68	L5	True	500.00	556.31	111.3
7	KL69	L6	True	1000.00	1051.90	105.2
8	KL70	L7	True	2500.00	2376.02	95.0
9	KL71	L8	True	5000.00	4947.75	99.0
10	KL72	L9	False	10000.00	8999.45	90.0





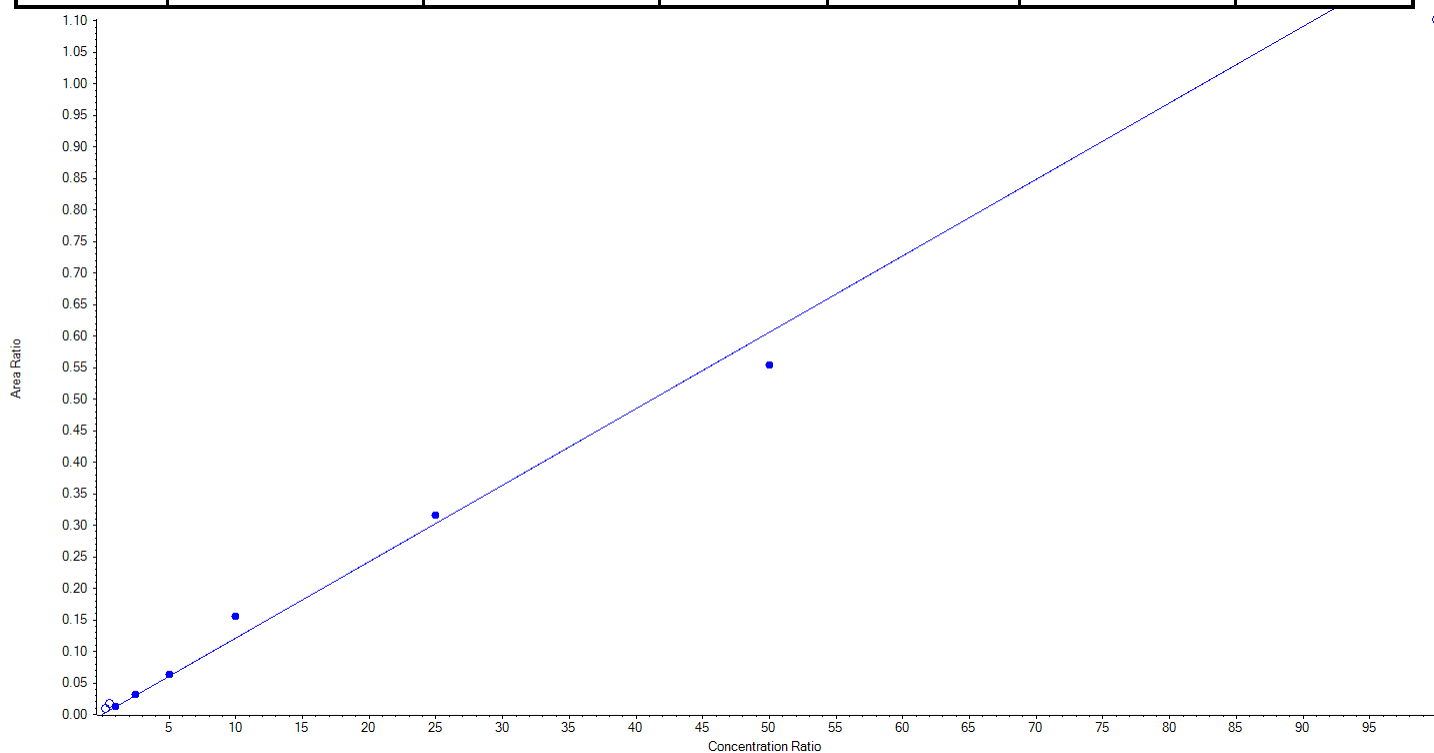
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFHpA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	363.0 / 169.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01212 x$ ($r = 0.99203$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	80.56	322.3
3	KL65	L2	False	50.00	137.58	275.2
4	KL66	L3	True	100.00	99.16	99.2
5	KL67	L4	True	250.00	266.68	106.7
6	KL68	L5	True	500.00	517.46	103.5
7	KL69	L6	True	1000.00	1281.17	128.1
8	KL70	L7	True	2500.00	2612.60	104.5
9	KL71	L8	True	5000.00	4572.93	91.5
10	KL72	L9	False	10000.00	9090.38	90.9





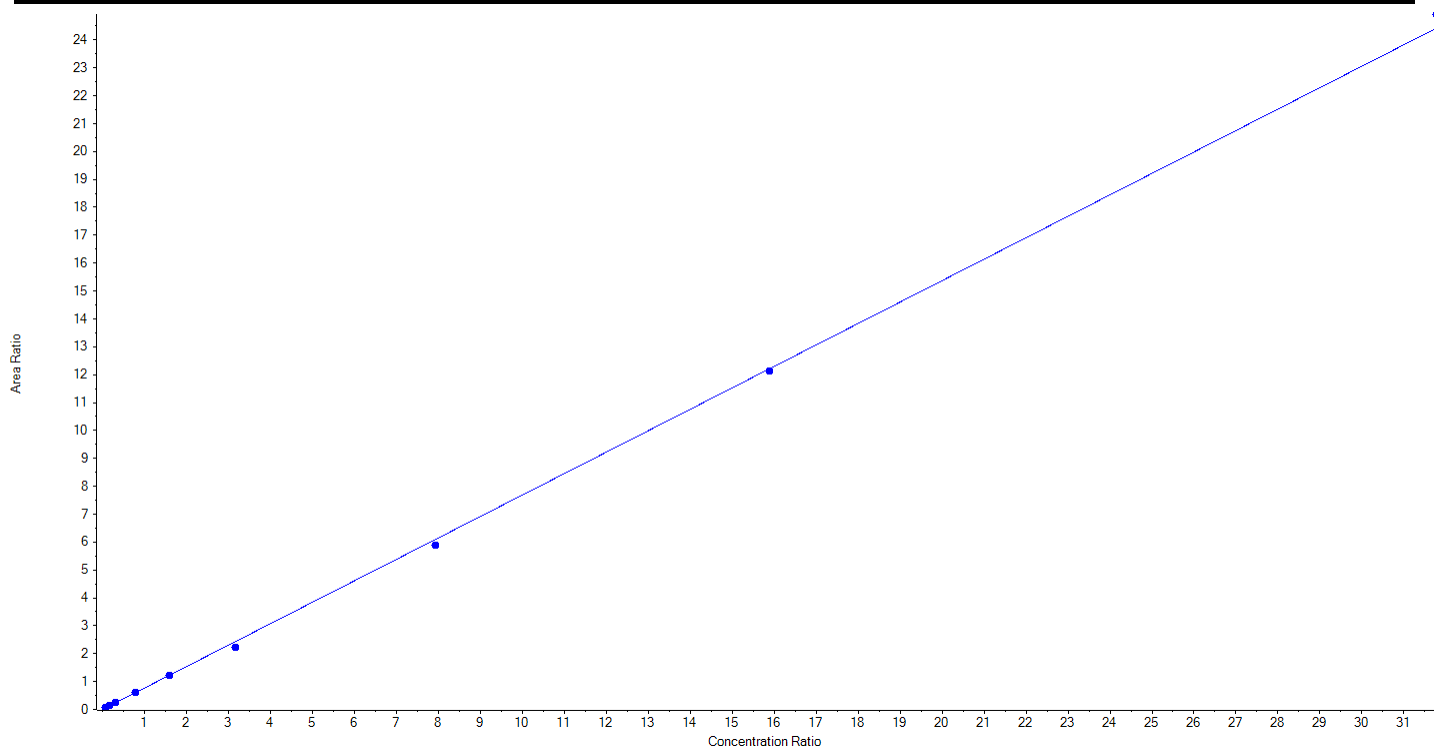
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFHxS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	399.0 / 80.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.76855 x$ ($r = 0.99956$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	22.80	25.89	113.6
3	KL65	L2	True	45.60	50.77	111.3
4	KL66	L3	True	91.20	91.14	99.9
5	KL67	L4	True	228.00	226.38	99.3
6	KL68	L5	True	456.00	458.42	100.5
7	KL69	L6	True	912.00	829.27	90.9
8	KL70	L7	True	2280.00	2202.36	96.6
9	KL71	L8	True	4560.00	4529.70	99.3
10	KL72	L9	True	9120.00	9301.67	102.0





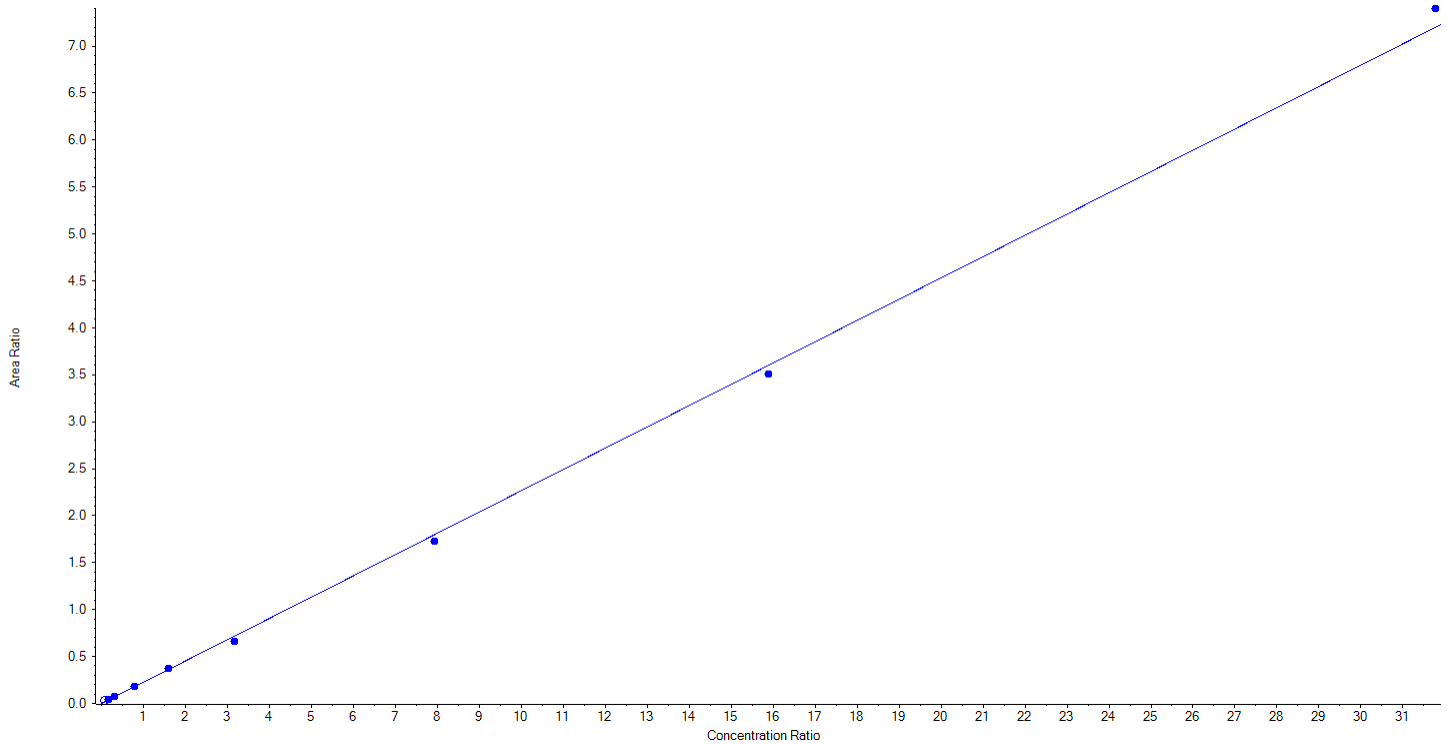
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFHxS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	399.0 / 99.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.22658 x$ ($r = 0.99935$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	22.80	36.67	160.8
3	KL65	L2	True	45.60	50.83	111.5
4	KL66	L3	True	91.20	91.11	99.9
5	KL67	L4	True	228.00	234.42	102.8
6	KL68	L5	True	456.00	470.12	103.1
7	KL69	L6	True	912.00	834.23	91.5
8	KL70	L7	True	2280.00	2191.50	96.1
9	KL71	L8	True	4560.00	4446.84	97.5
10	KL72	L9	True	9120.00	9373.75	102.8





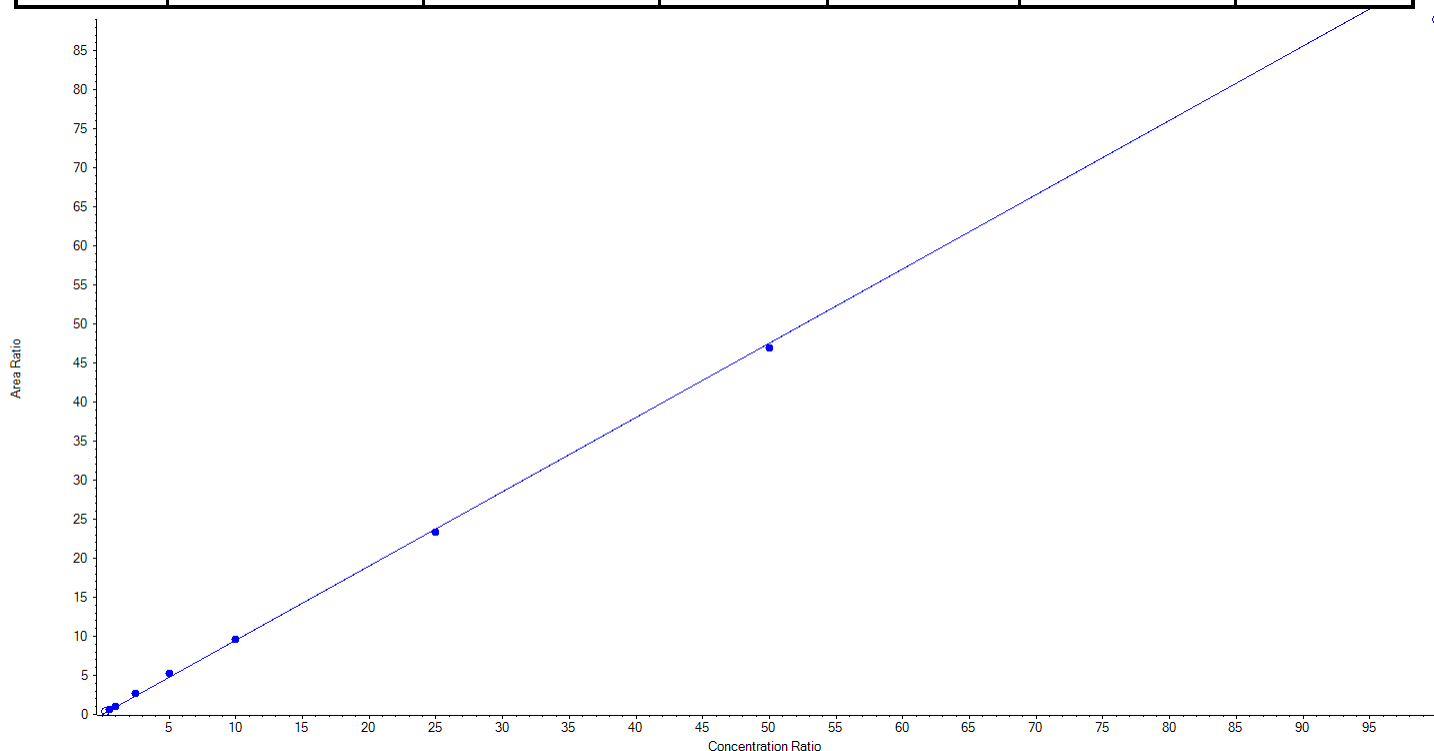
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFOA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	413.0 / 369.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.95114 x$ ($r = 0.99965$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	42.22	168.9
3	KL65	L2	True	50.00	65.51	131.0
4	KL66	L3	True	100.00	106.45	106.5
5	KL67	L4	True	250.00	279.69	111.9
6	KL68	L5	True	500.00	548.34	109.7
7	KL69	L6	True	1000.00	1017.67	101.8
8	KL70	L7	True	2500.00	2450.85	98.0
9	KL71	L8	True	5000.00	4931.49	98.6
10	KL72	L9	False	10000.00	9357.27	93.6





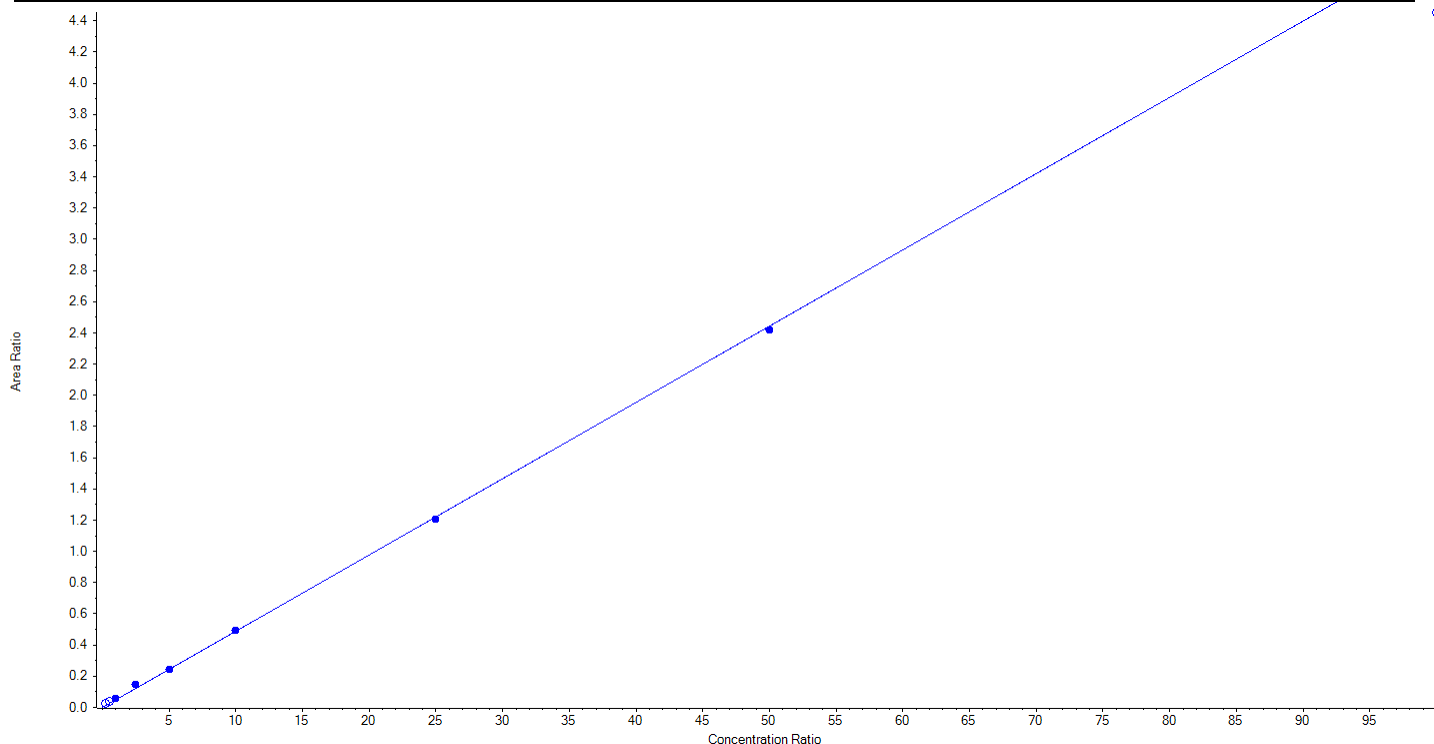
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFOA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	413.0 / 169.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.04886 x$ ($r = 0.99968$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	56.18	224.7
3	KL65	L2	False	50.00	83.38	166.8
4	KL66	L3	True	100.00	120.21	120.2
5	KL67	L4	True	250.00	301.62	120.7
6	KL68	L5	True	500.00	499.18	99.8
7	KL69	L6	True	1000.00	1011.79	101.2
8	KL70	L7	True	2500.00	2465.10	98.6
9	KL71	L8	True	5000.00	4952.10	99.0
10	KL72	L9	False	10000.00	9111.99	91.1





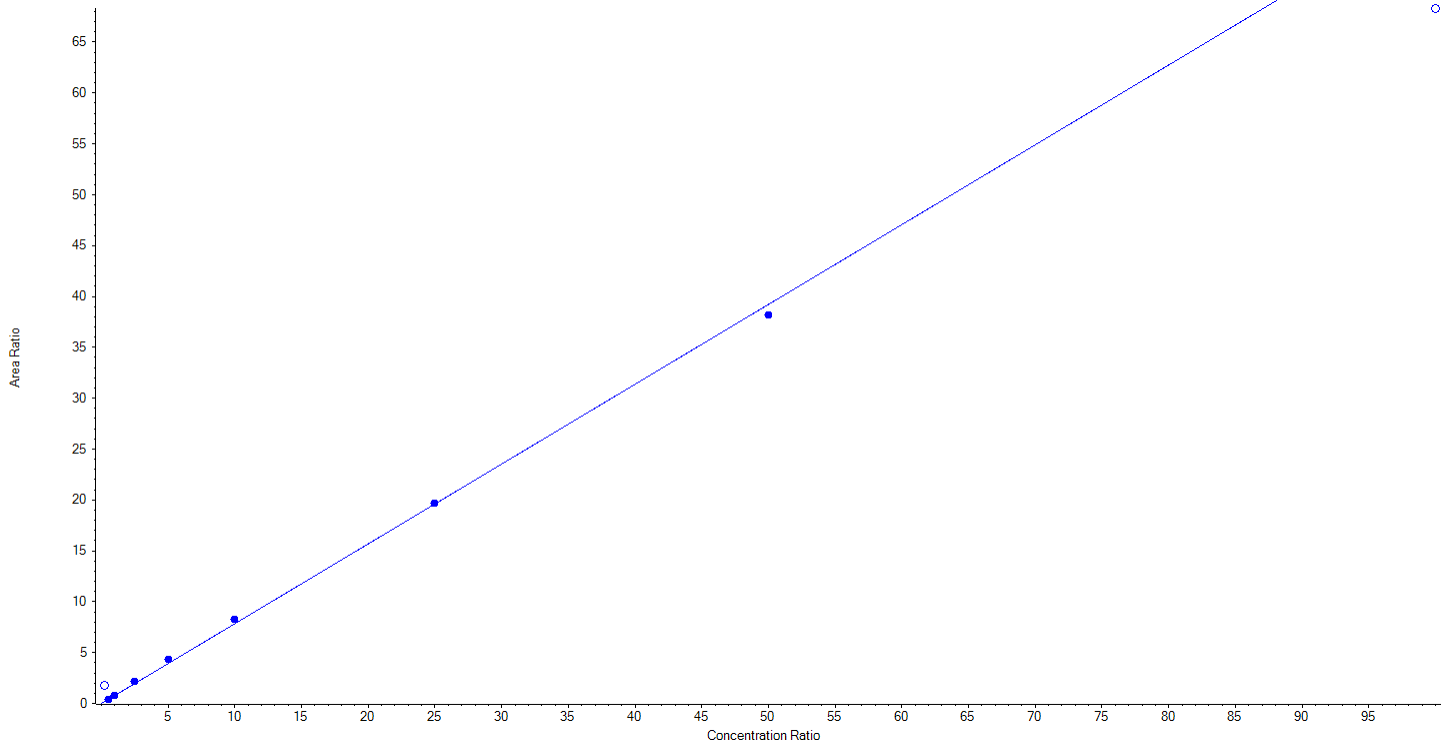
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFNA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	463.0 / 419.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.78431 x$ ($r = 0.99930$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	219.87	879.5
3	KL65	L2	True	50.00	54.51	109.0
4	KL66	L3	True	100.00	98.85	98.9
5	KL67	L4	True	250.00	275.74	110.3
6	KL68	L5	True	500.00	547.49	109.5
7	KL69	L6	True	1000.00	1053.23	105.3
8	KL70	L7	True	2500.00	2505.18	100.2
9	KL71	L8	True	5000.00	4865.00	97.3
10	KL72	L9	False	10000.00	8707.26	87.1





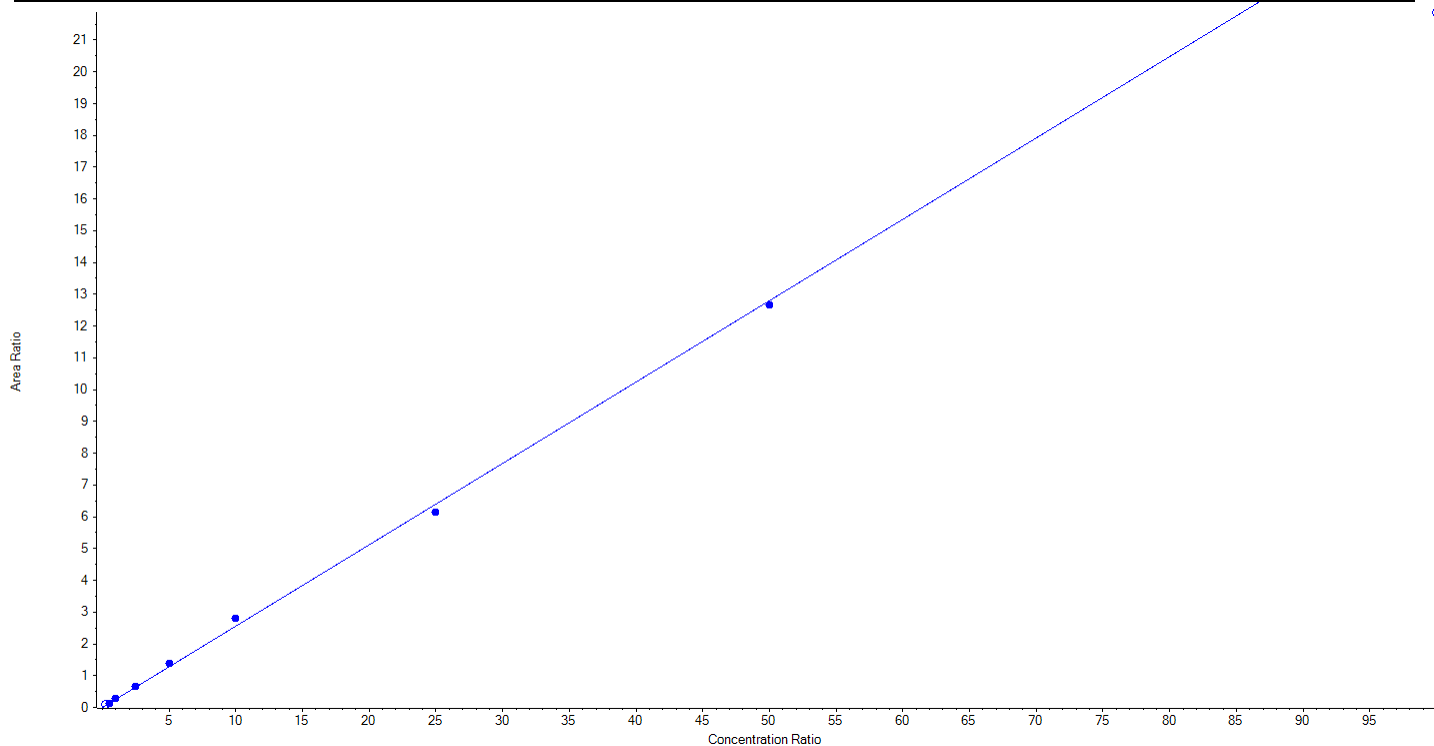
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFNA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	463.0 / 219.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.25598 x$ ($r = 0.99910$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	37.81	151.2
3	KL65	L2	True	50.00	54.40	108.8
4	KL66	L3	True	100.00	111.08	111.1
5	KL67	L4	True	250.00	262.92	105.2
6	KL68	L5	True	500.00	541.10	108.2
7	KL69	L6	True	1000.00	1089.31	108.9
8	KL70	L7	True	2500.00	2395.67	95.8
9	KL71	L8	True	5000.00	4945.53	98.9
10	KL72	L9	False	10000.00	8541.22	85.4





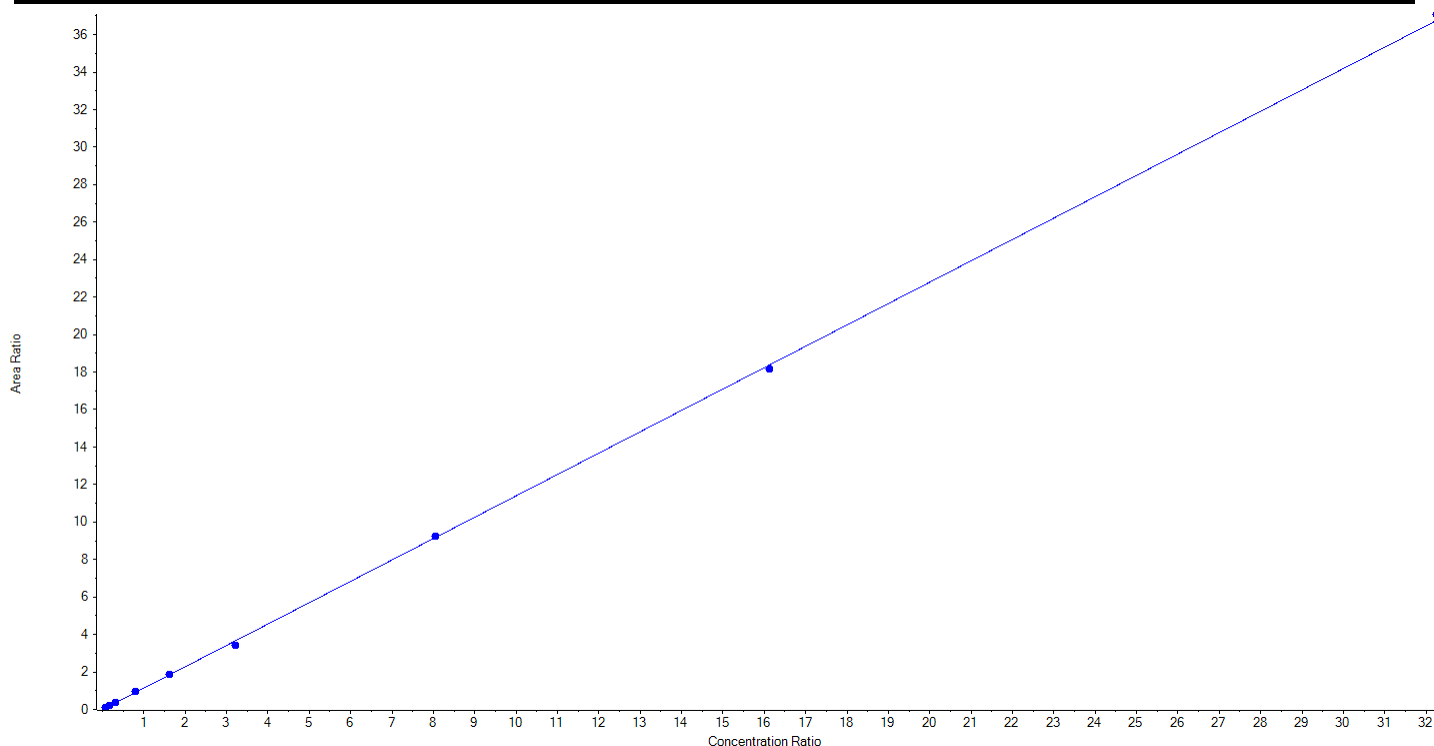
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFOS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	499.0 / 80.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.13968 x$ ($r = 0.99977$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.15	24.90	107.5
3	KL65	L2	True	46.30	49.59	107.1
4	KL66	L3	True	92.60	98.21	106.1
5	KL67	L4	True	231.50	245.83	106.2
6	KL68	L5	True	463.00	470.22	101.6
7	KL69	L6	True	925.60	857.12	92.6
8	KL70	L7	True	2314.00	2328.72	100.6
9	KL71	L8	True	4628.00	4569.76	98.7
10	KL72	L9	True	9256.00	9335.80	100.9





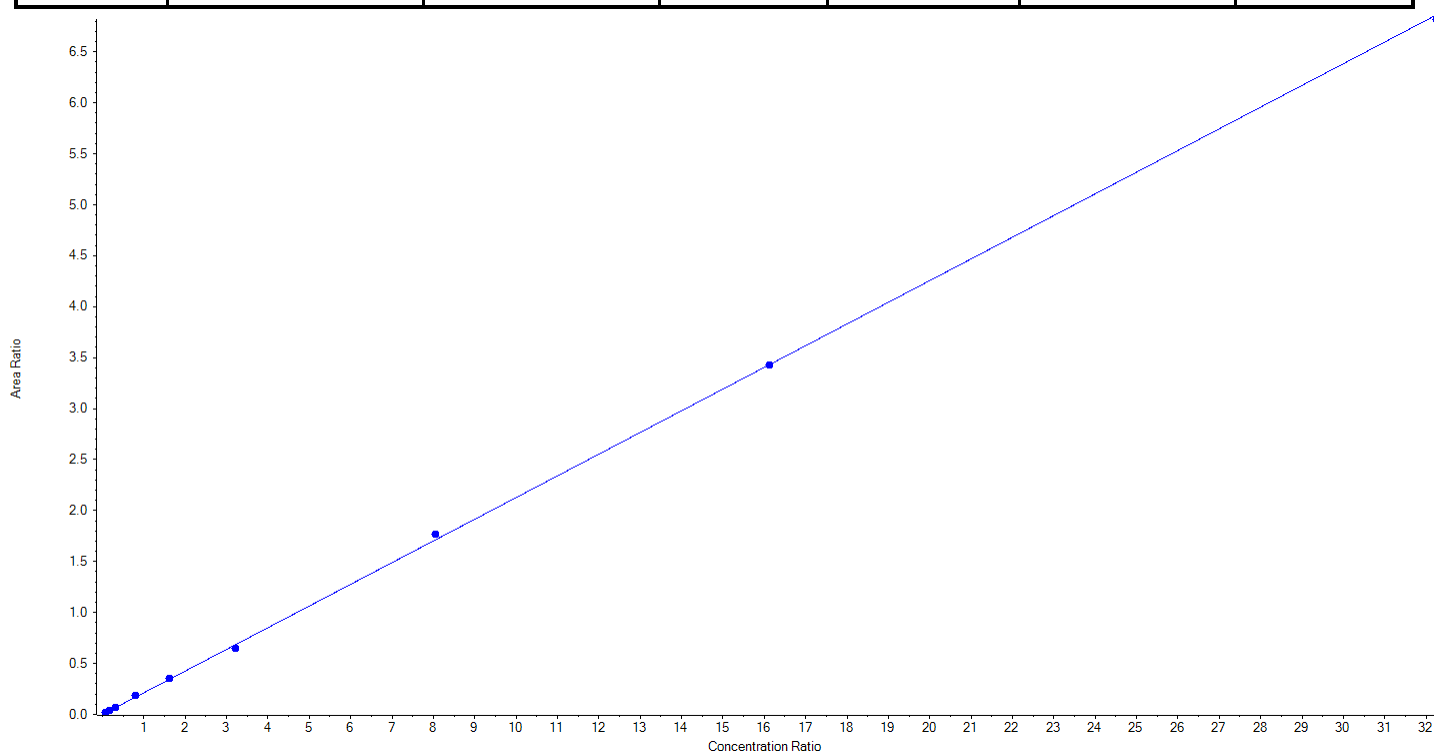
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFOS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	499.0 / 99.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.21277 x$ ($r = 0.99980$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.15	24.34	105.1
3	KL65	L2	True	46.30	55.47	119.8
4	KL66	L3	True	92.60	98.09	105.9
5	KL67	L4	True	231.50	248.05	107.2
6	KL68	L5	True	463.00	478.96	103.5
7	KL69	L6	True	925.60	878.62	94.9
8	KL70	L7	True	2314.00	2382.82	103.0
9	KL71	L8	True	4628.00	4619.65	99.8
10	KL72	L9	True	9256.00	9194.16	99.3





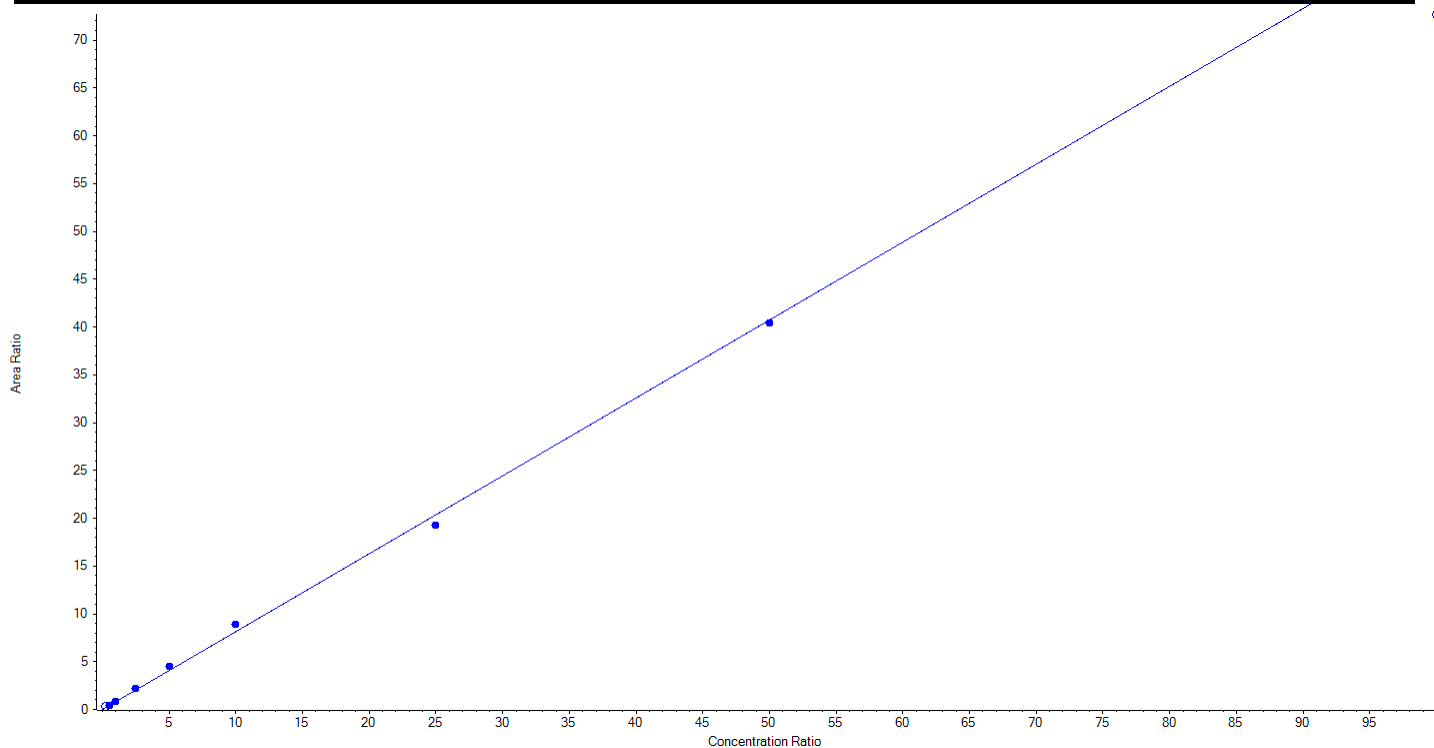
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFDA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	513.0 / 469.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.81460 x$ ($r = 0.99881$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	35.75	143.0
3	KL65	L2	True	50.00	56.17	112.3
4	KL66	L3	True	100.00	107.13	107.1
5	KL67	L4	True	250.00	276.29	110.5
6	KL68	L5	True	500.00	546.81	109.4
7	KL69	L6	True	1000.00	1088.20	108.8
8	KL70	L7	True	2500.00	2359.38	94.4
9	KL71	L8	True	5000.00	4966.03	99.3
10	KL72	L9	False	10000.00	8921.93	89.2





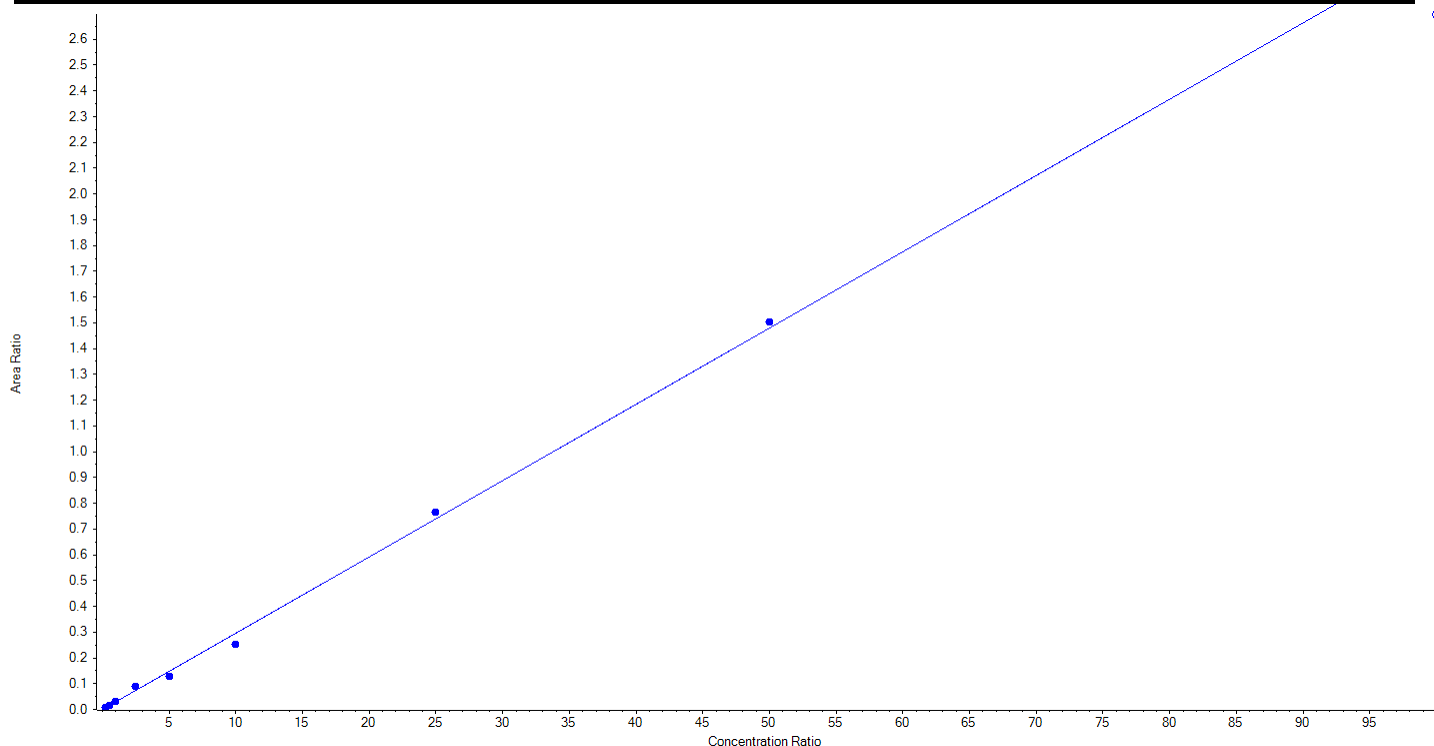
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFDA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	513.0 / 219.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.02959 x$ ($r = 0.99713$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	27.55	110.2
3	KL65	L2	True	50.00	50.48	101.0
4	KL66	L3	True	100.00	101.44	101.4
5	KL67	L4	True	250.00	305.53	122.2
6	KL68	L5	True	500.00	427.70	85.5
7	KL69	L6	True	1000.00	850.04	85.0
8	KL70	L7	True	2500.00	2582.70	103.3
9	KL71	L8	True	5000.00	5079.56	101.6
10	KL72	L9	False	10000.00	9109.66	91.1





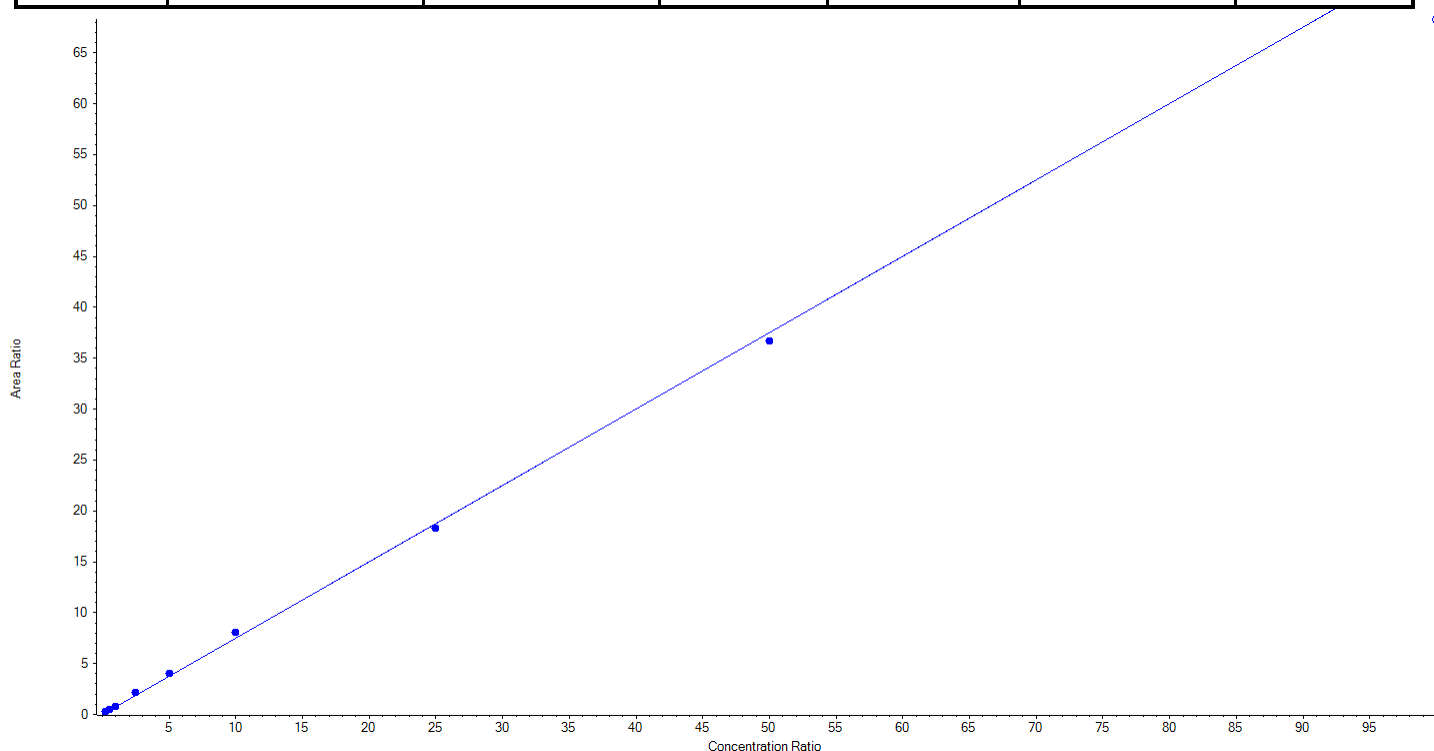
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFUnA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	563.0 / 519.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.75020 x$ ($r = 0.99921$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	35.17	140.7
3	KL65	L2	True	50.00	60.02	120.0
4	KL66	L3	True	100.00	103.34	103.3
5	KL67	L4	True	250.00	293.59	117.4
6	KL68	L5	True	500.00	533.02	106.6
7	KL69	L6	True	1000.00	1071.00	107.1
8	KL70	L7	True	2500.00	2443.33	97.7
9	KL71	L8	True	5000.00	4885.53	97.7
10	KL72	L9	False	10000.00	9099.49	91.0





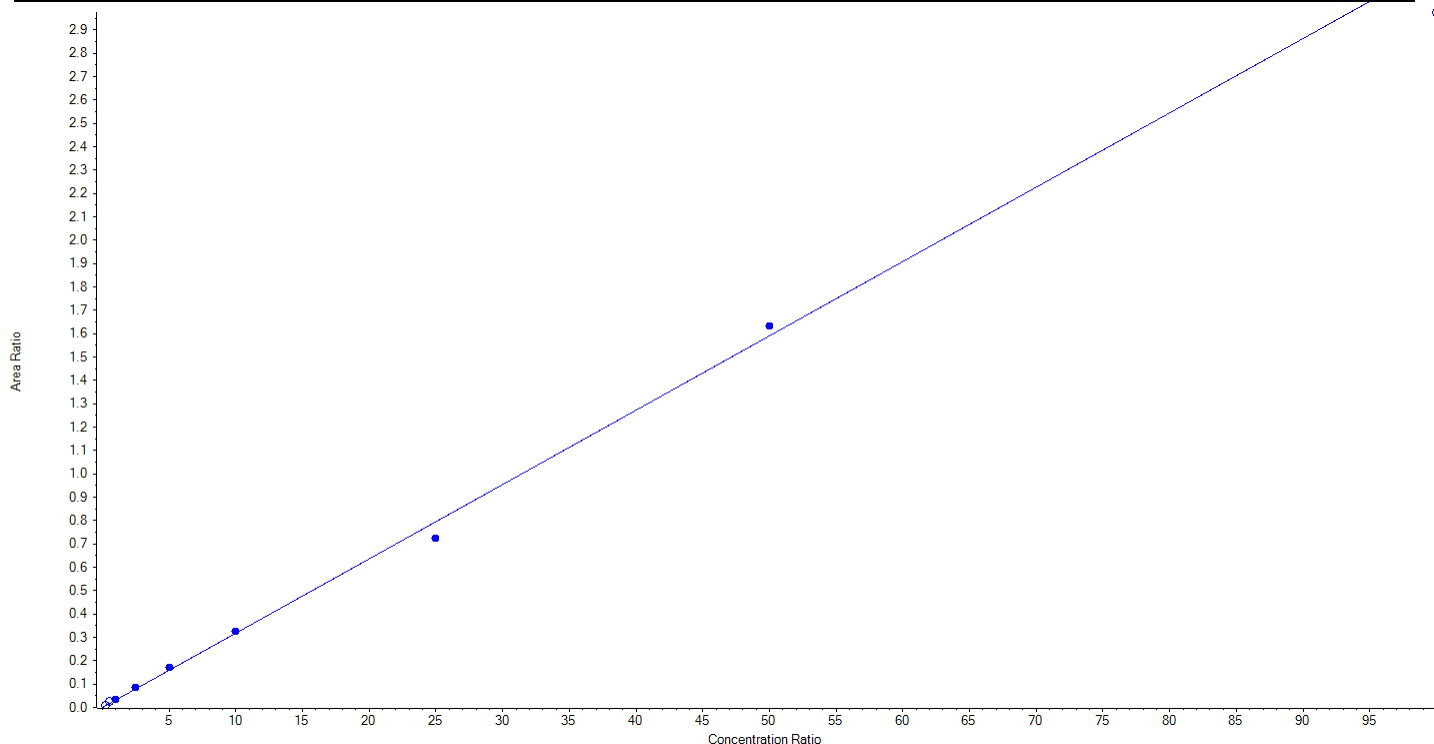
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFUnA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	563.0 / 269.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.03181 x$ ($r = 0.99811$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	25.40	101.6
3	KL65	L2	False	50.00	76.93	153.9
4	KL66	L3	True	100.00	113.39	113.4
5	KL67	L4	True	250.00	275.95	110.4
6	KL68	L5	True	500.00	538.01	107.6
7	KL69	L6	True	1000.00	1022.56	102.3
8	KL70	L7	True	2500.00	2270.45	90.8
9	KL71	L8	True	5000.00	5129.64	102.6
10	KL72	L9	False	10000.00	9349.78	93.5





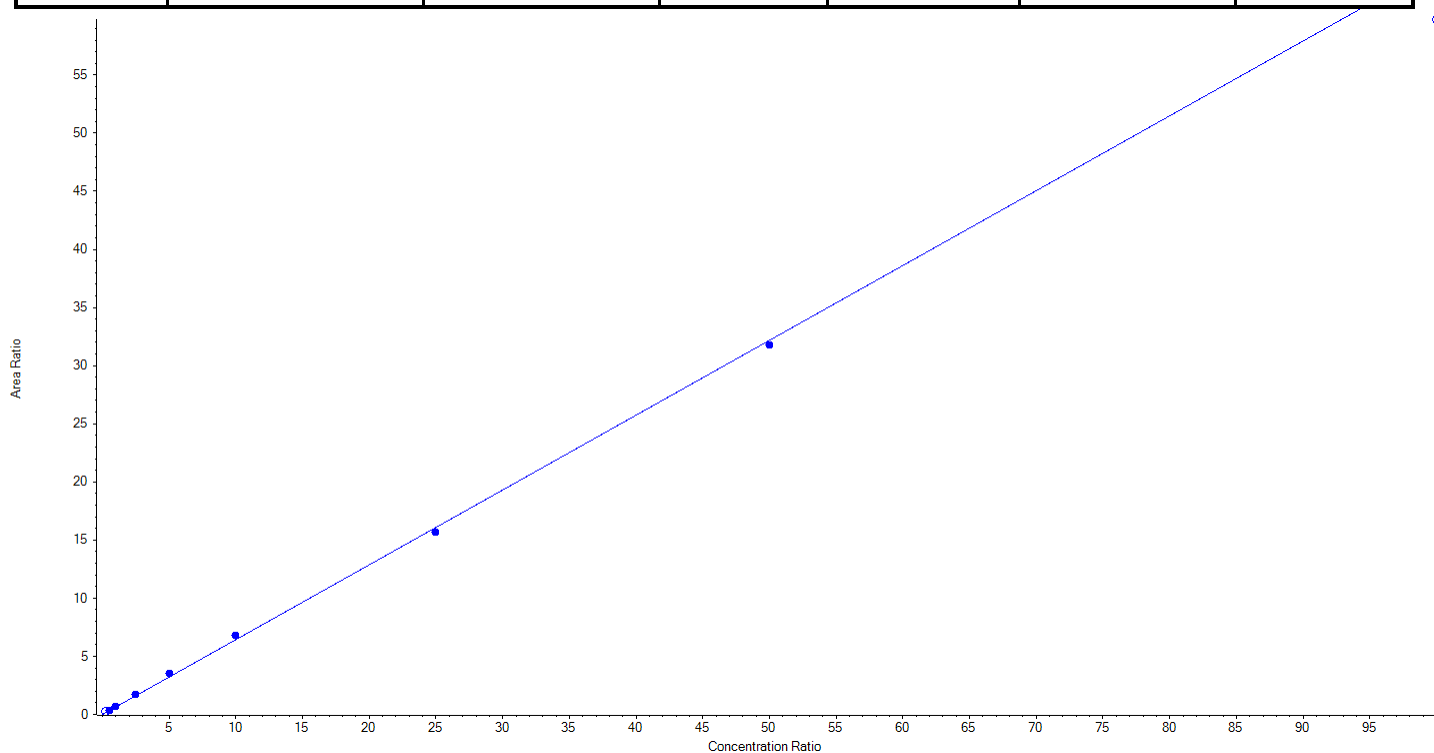
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFD _o A_1	Data File	AC_06042019_5-371.wiff
MRM Transition	613.0 / 569.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.64357 x$ ($r = 0.99939$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	39.25	157.0
3	KL65	L2	True	50.00	51.15	102.3
4	KL66	L3	True	100.00	109.81	109.8
5	KL67	L4	True	250.00	263.70	105.5
6	KL68	L5	True	500.00	552.28	110.5
7	KL69	L6	True	1000.00	1050.51	105.1
8	KL70	L7	True	2500.00	2429.86	97.2
9	KL71	L8	True	5000.00	4942.70	98.9
10	KL72	L9	False	10000.00	9286.79	92.9





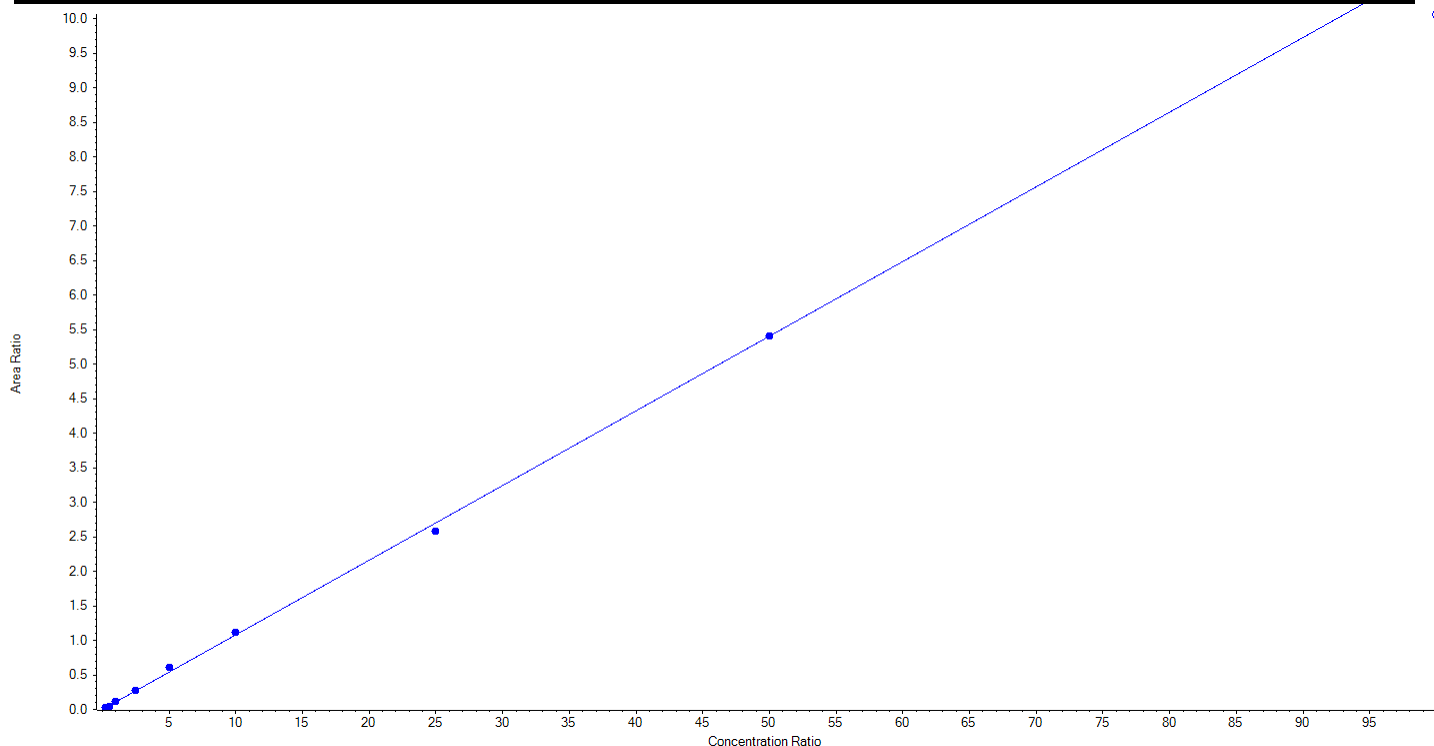
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFD _o A_2	Data File	AC_06042019_5-371.wiff
MRM Transition	613.0 / 319.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.10811 x$ ($r = 0.99908$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	28.32	113.3
3	KL65	L2	True	50.00	45.94	91.9
4	KL66	L3	True	100.00	113.14	113.1
5	KL67	L4	True	250.00	256.80	102.7
6	KL68	L5	True	500.00	560.64	112.1
7	KL69	L6	True	1000.00	1039.06	103.9
8	KL70	L7	True	2500.00	2380.89	95.2
9	KL71	L8	True	5000.00	5000.19	100.0
10	KL72	L9	False	10000.00	9307.34	93.1





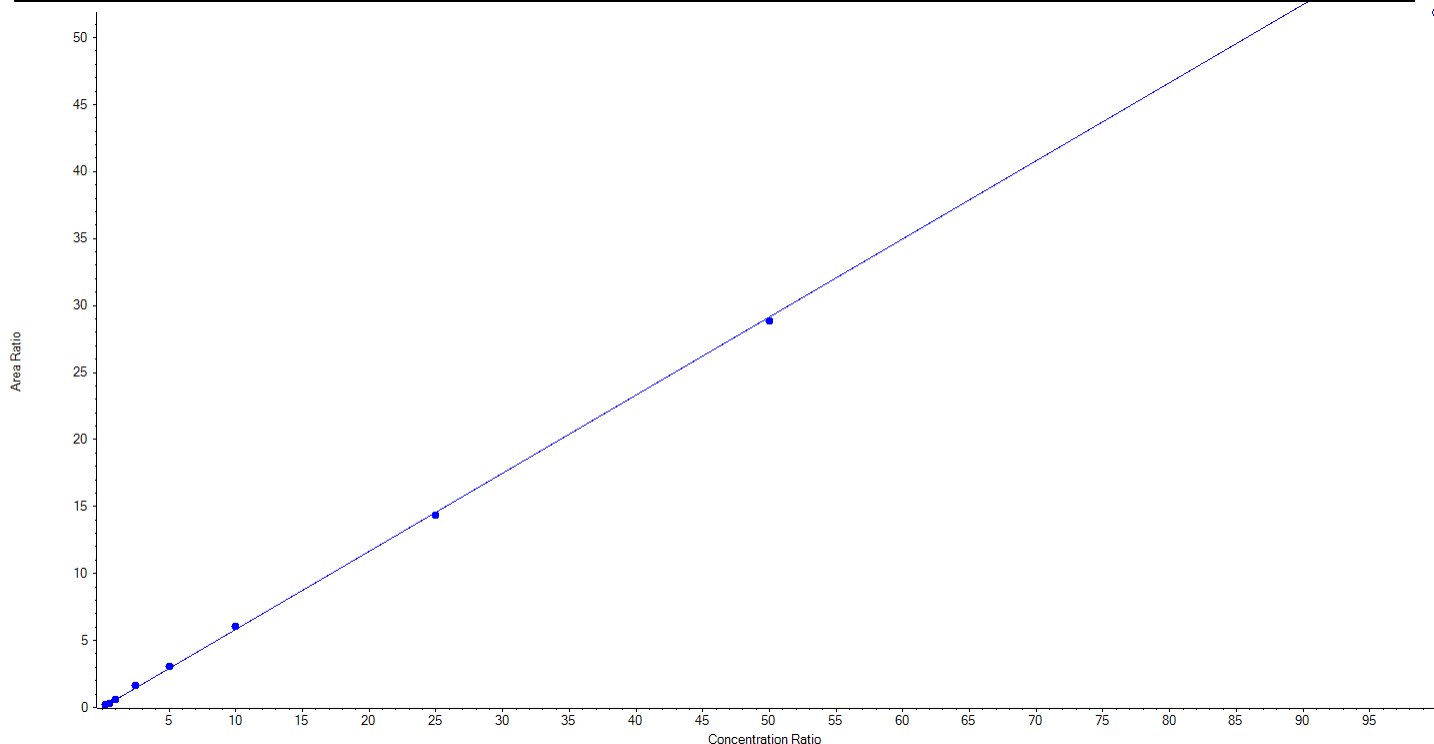
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFTrDA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	663.0 / 619.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.58295 x$ ($r = 0.99960$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	32.31	129.3
3	KL65	L2	True	50.00	50.02	100.0
4	KL66	L3	True	100.00	104.97	105.0
5	KL67	L4	True	250.00	285.16	114.1
6	KL68	L5	True	500.00	521.24	104.3
7	KL69	L6	True	1000.00	1032.55	103.3
8	KL70	L7	True	2500.00	2456.26	98.3
9	KL71	L8	True	5000.00	4942.49	98.9
10	KL72	L9	False	10000.00	8897.71	89.0





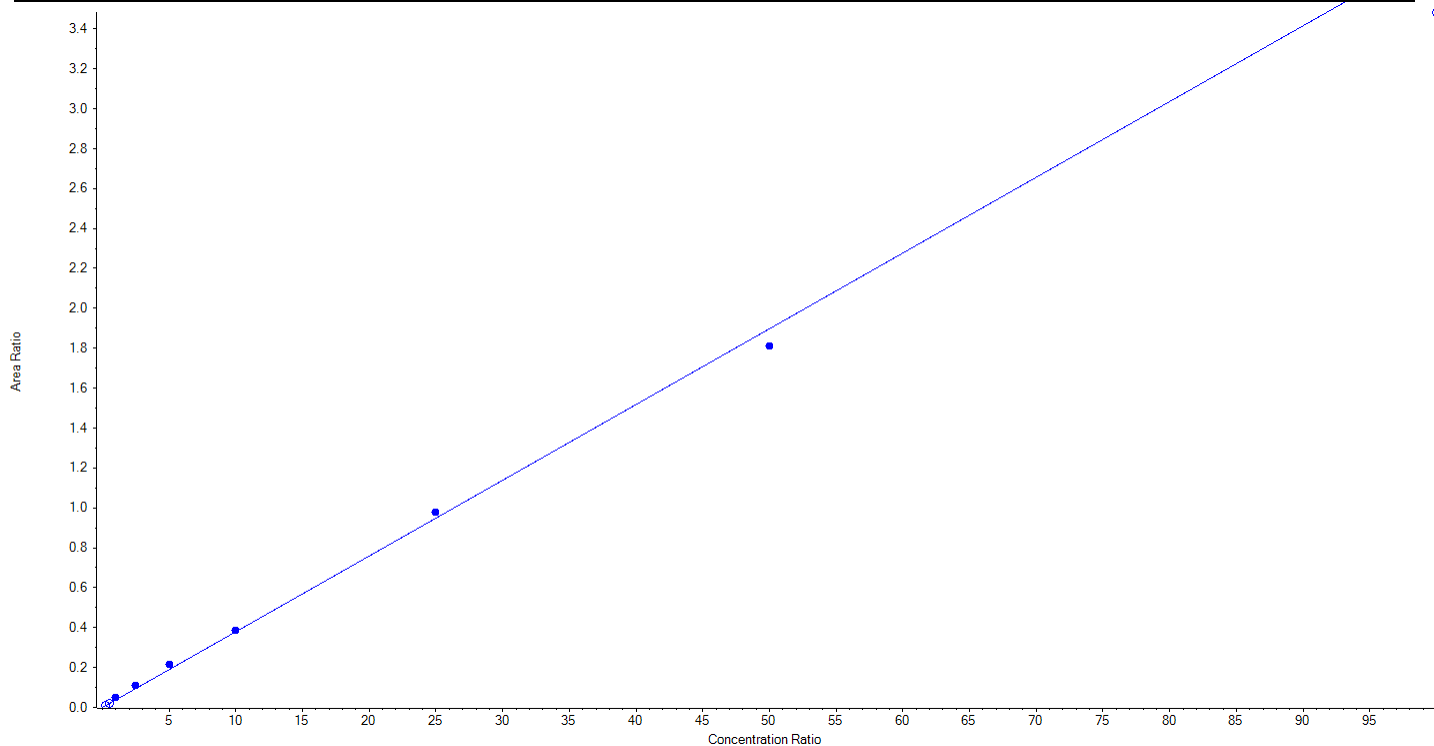
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFTrDA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	663.0 / 169.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.03795 x$ ($r = 0.99904$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	31.04	124.2
3	KL65	L2	False	50.00	47.13	94.3
4	KL66	L3	True	100.00	126.62	126.6
5	KL67	L4	True	250.00	296.70	118.7
6	KL68	L5	True	500.00	571.44	114.3
7	KL69	L6	True	1000.00	1012.08	101.2
8	KL70	L7	True	2500.00	2572.24	102.9
9	KL71	L8	True	5000.00	4770.93	95.4
10	KL72	L9	False	10000.00	9174.77	91.8





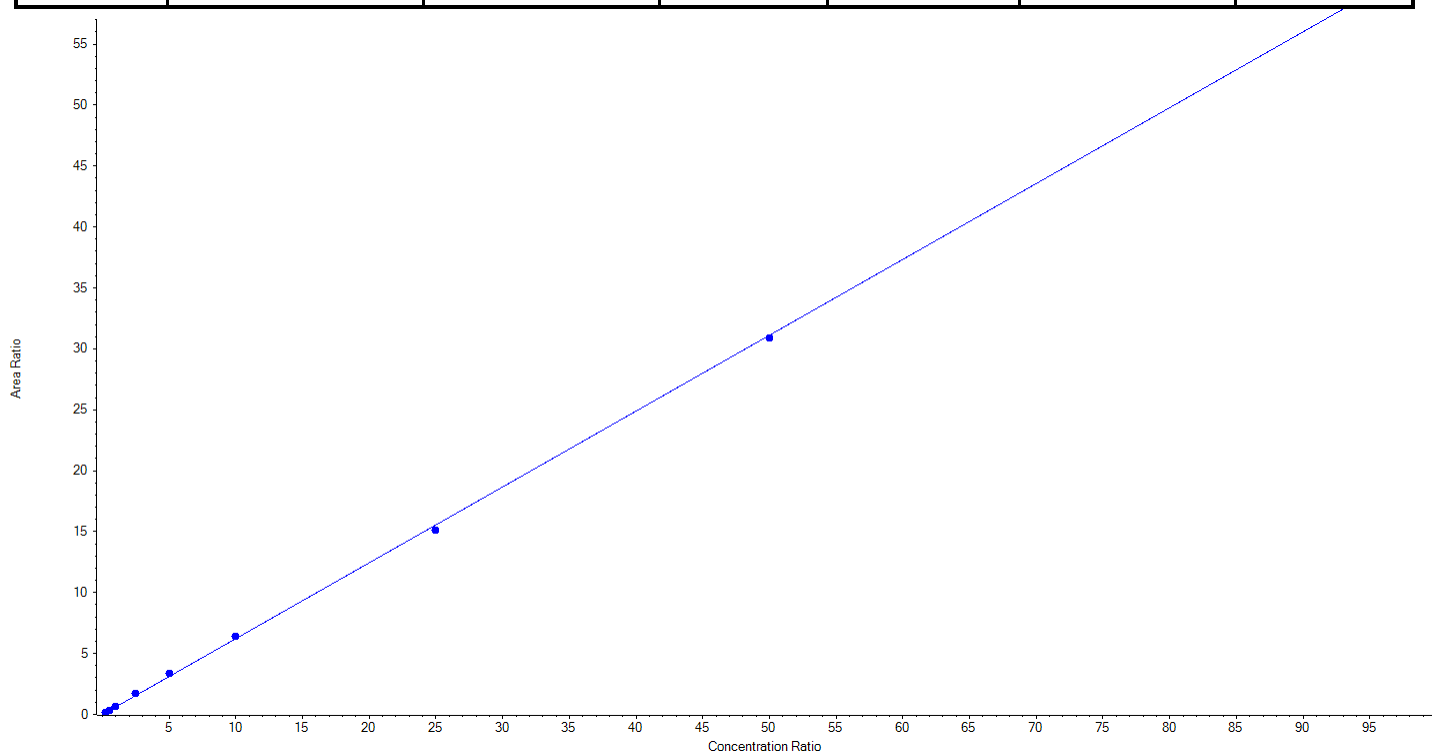
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFTeDA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	713.0 / 669.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.62236 x$ ($r = 0.99942$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	26.24	105.0
3	KL65	L2	True	50.00	48.58	97.2
4	KL66	L3	True	100.00	100.94	100.9
5	KL67	L4	True	250.00	277.07	110.8
6	KL68	L5	True	500.00	547.63	109.5
7	KL69	L6	True	1000.00	1028.17	102.8
8	KL70	L7	True	2500.00	2429.10	97.2
9	KL71	L8	True	5000.00	4967.27	99.4
10	KL72	L9	False	10000.00	9161.94	91.6





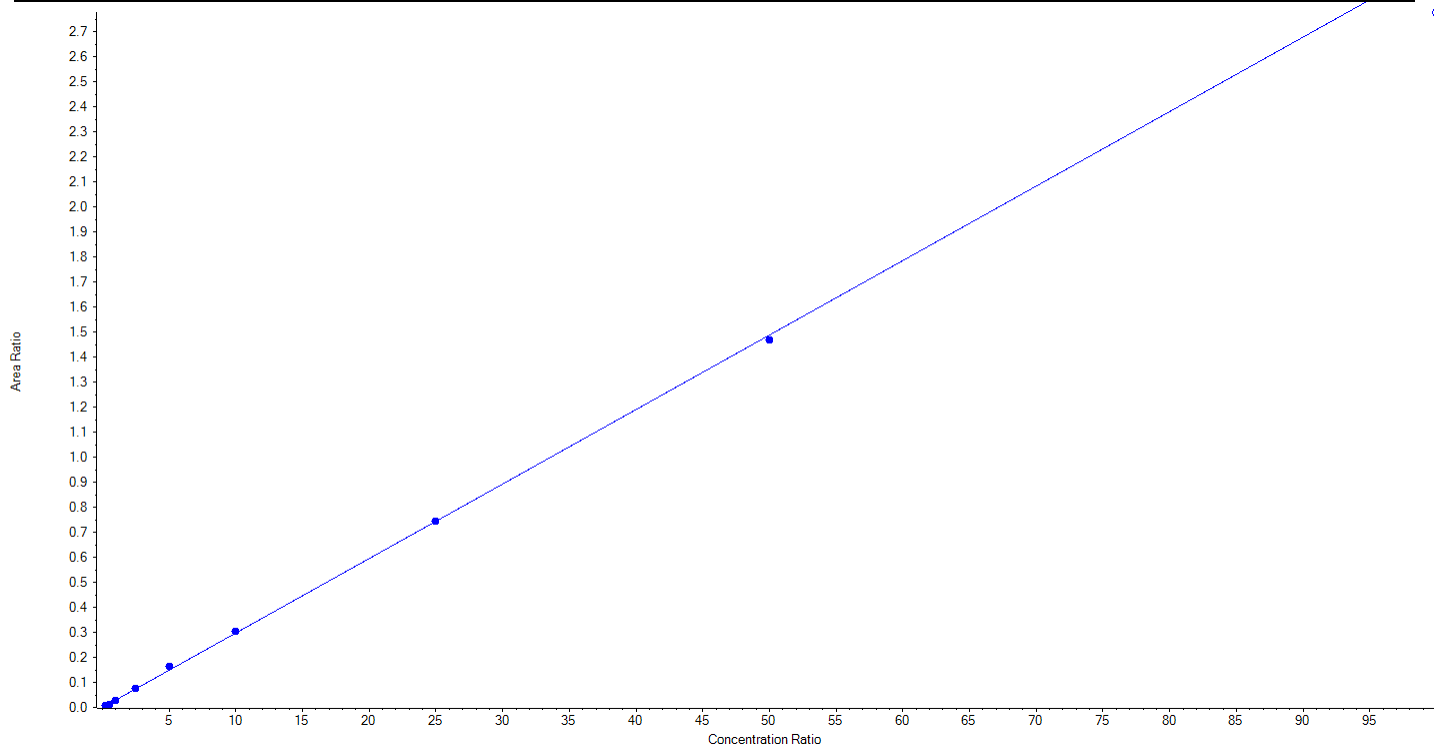
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	PFTeDA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	713.0 / 169.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.02976 x$ ($r = 0.99952$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	30.55	122.2
3	KL65	L2	True	50.00	41.32	82.7
4	KL66	L3	True	100.00	98.75	98.8
5	KL67	L4	True	250.00	261.75	104.7
6	KL68	L5	True	500.00	545.97	109.2
7	KL69	L6	True	1000.00	1015.94	101.6
8	KL70	L7	True	2500.00	2494.45	99.8
9	KL71	L8	True	5000.00	4936.26	98.7
10	KL72	L9	False	10000.00	9329.56	93.3





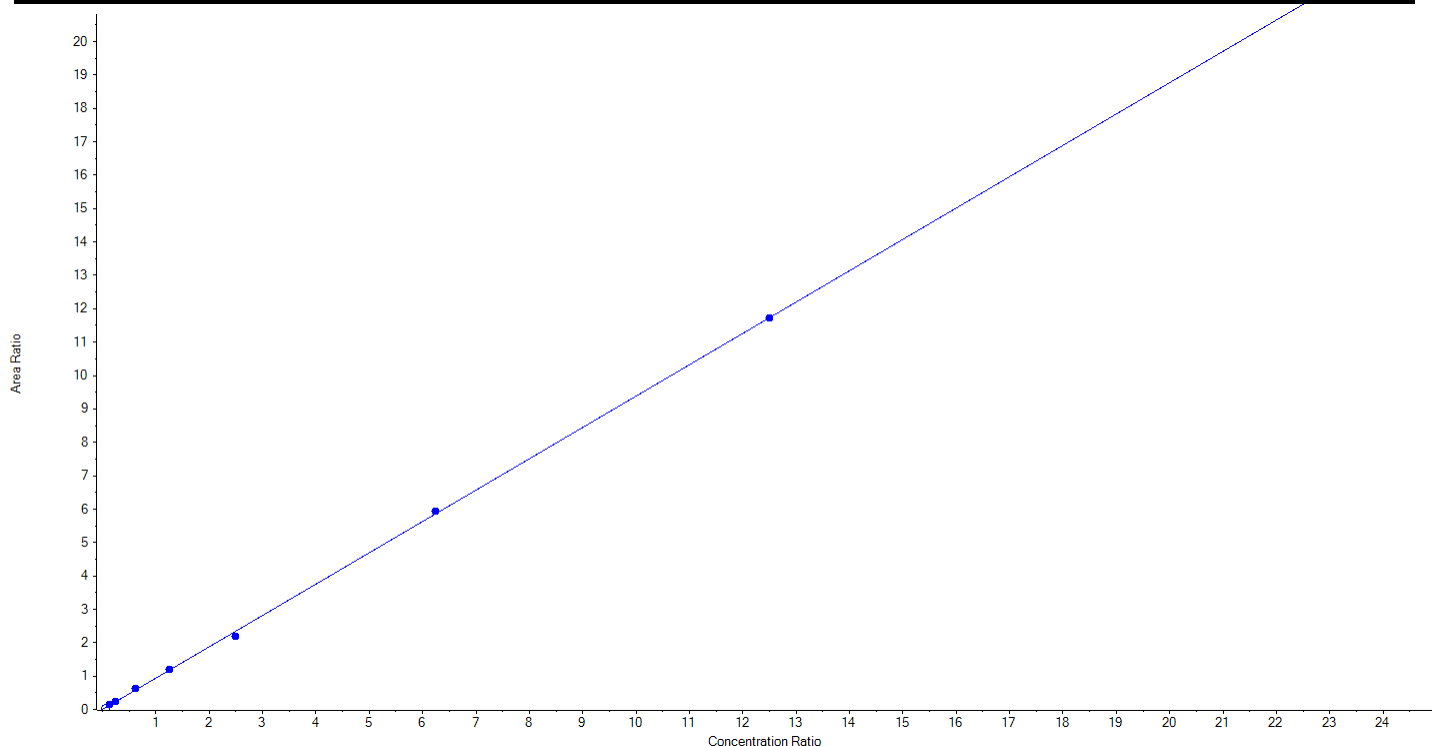
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	NMeFOSAA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	570.0 / 419.0	Result Table	19-0466_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.93846 x$ ($r = 0.99961$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	16.96	67.8
3	KL65	L2	True	50.00	57.55	115.1
4	KL66	L3	True	100.00	107.33	107.3
5	KL67	L4	True	250.00	264.33	105.7
6	KL68	L5	True	500.00	508.20	101.6
7	KL69	L6	True	1000.00	929.88	93.0
8	KL70	L7	True	2500.00	2533.62	101.3
9	KL71	L8	True	5000.00	4999.09	100.0
10	KL72	L9	False	10000.00	8869.80	88.7





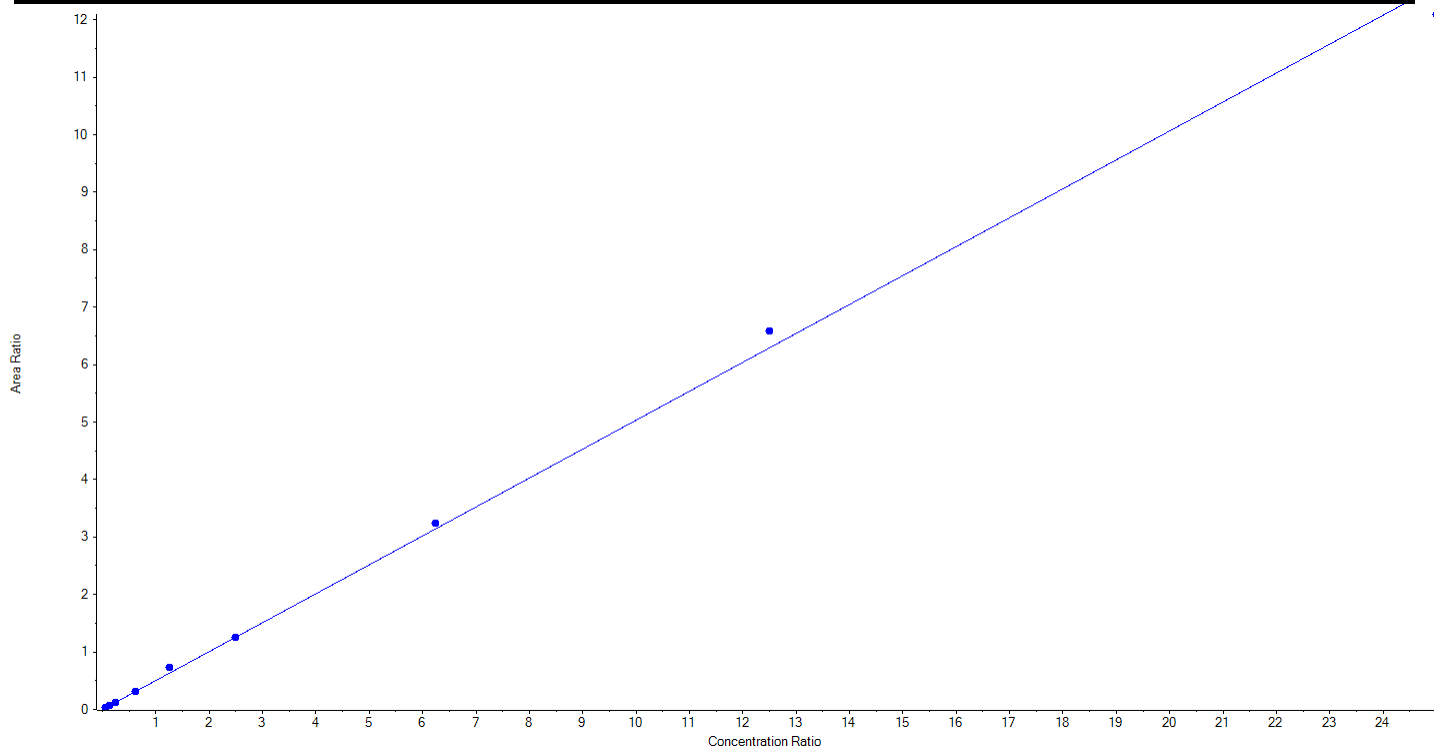
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	NMeFOSAA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	570.0 / 512.0	Result Table	19-0466_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.50322 x$ ($r = 0.99889$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	25.00	23.56	94.3
3	KL65	L2	True	50.00	60.67	121.3
4	KL66	L3	True	100.00	101.47	101.5
5	KL67	L4	True	250.00	249.75	99.9
6	KL68	L5	True	500.00	577.30	115.5
7	KL69	L6	True	1000.00	998.45	99.8
8	KL70	L7	True	2500.00	2576.60	103.1
9	KL71	L8	True	5000.00	5227.74	104.6
10	KL72	L9	True	10000.00	9609.47	96.1





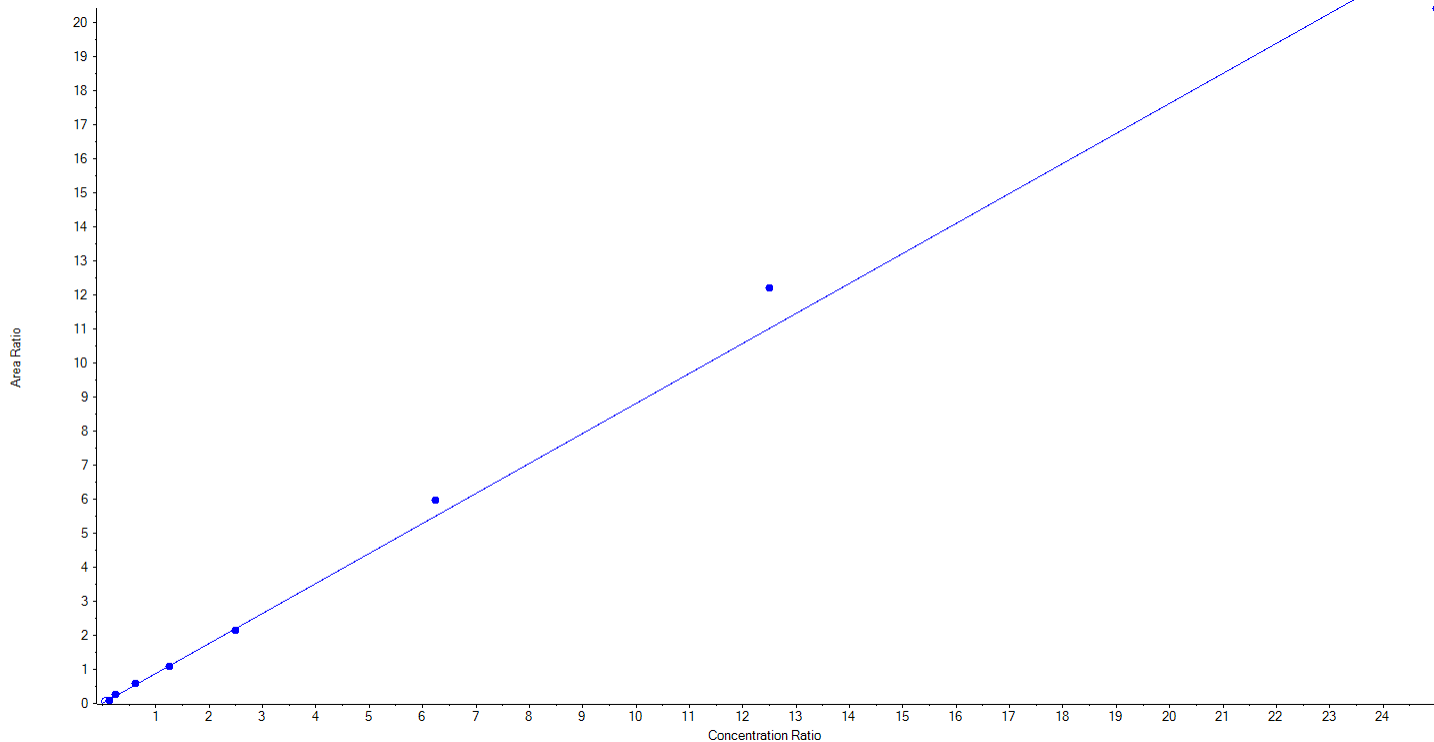
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	NEtFOSAA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	584.0 / 419.0	Result Table	19-0466_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.88124 x$ ($r = 0.99617$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	21.80	87.2
3	KL65	L2	True	50.00	39.86	79.7
4	KL66	L3	True	100.00	119.38	119.4
5	KL67	L4	True	250.00	261.20	104.5
6	KL68	L5	True	500.00	499.21	99.8
7	KL69	L6	True	1000.00	970.14	97.0
8	KL70	L7	True	2500.00	2709.54	108.4
9	KL71	L8	True	5000.00	5536.23	110.7
10	KL72	L9	True	10000.00	9264.43	92.6





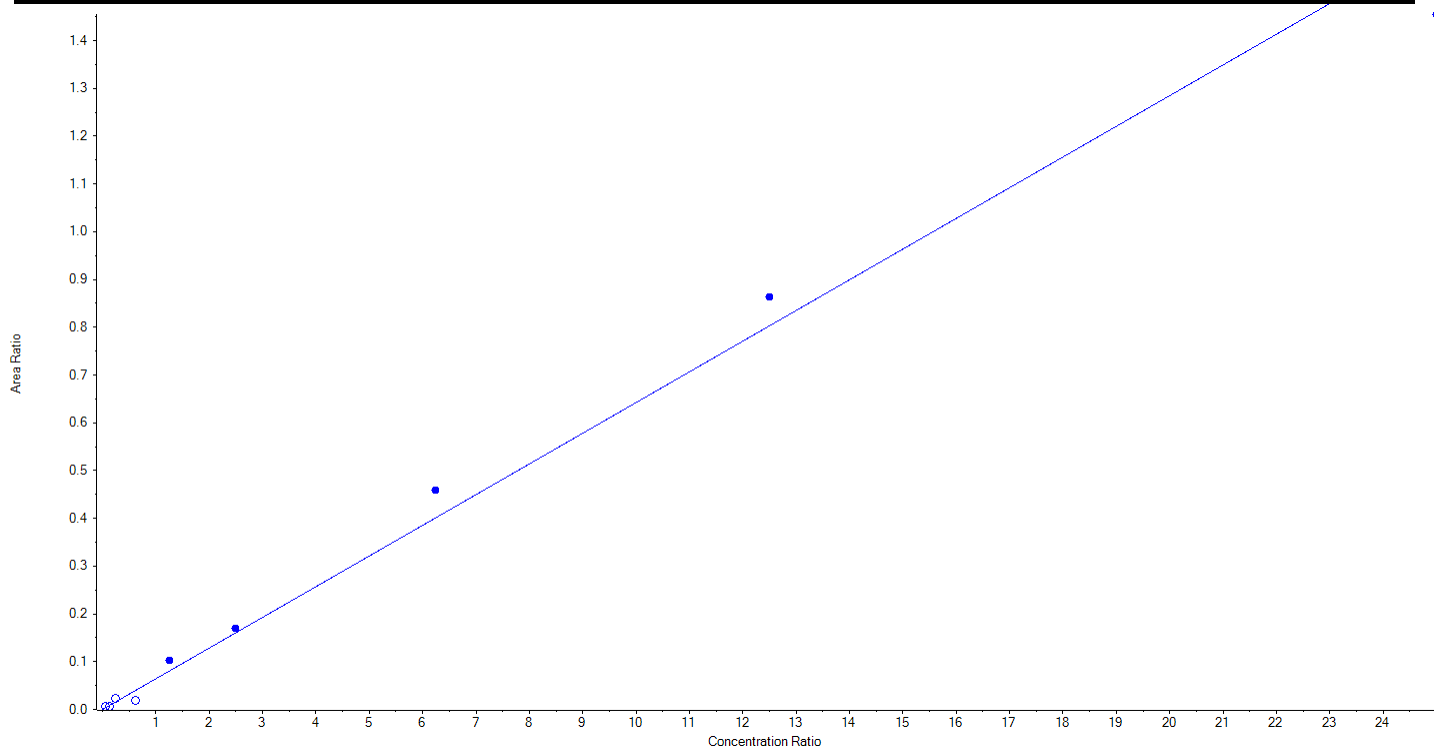
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	NEtFOSAA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	584.0 / 483.0	Result Table	19-0466_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.06424 x$ ($r = 0.99457$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	32.74	131.0
3	KL65	L2	False	50.00	39.67	79.3
4	KL66	L3	False	100.00	146.54	146.5
5	KL67	L4	False	250.00	120.95	48.4
6	KL68	L5	True	500.00	640.69	128.1
7	KL69	L6	True	1000.00	1063.45	106.3
8	KL70	L7	True	2500.00	2861.46	114.5
9	KL71	L8	True	5000.00	5377.56	107.6
10	KL72	L9	True	10000.00	9056.84	90.6





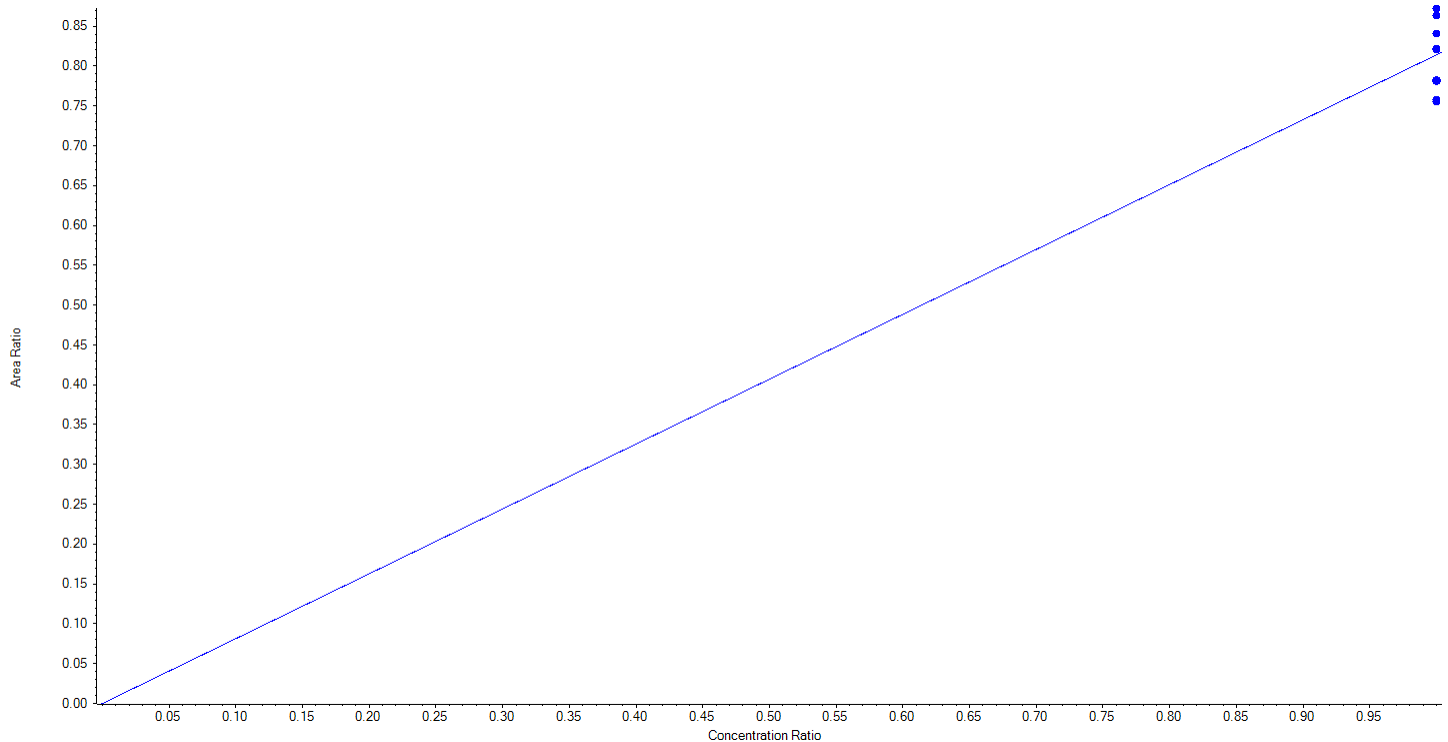
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	13C2-PFHxA	Data File	AC_06042019_5-371.wiff
MRM Transition	315.0 / 270.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.81406 x$ (std. dev. = 0.04506) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	100.00	105.98	106.0
3	KL65	L2	True	100.00	103.25	103.3
4	KL66	L3	True	100.00	92.76	92.8
5	KL67	L4	True	100.00	100.93	100.9
6	KL68	L5	True	100.00	100.82	100.8
7	KL69	L6	True	100.00	107.14	107.1
8	KL70	L7	True	100.00	93.14	93.1
9	KL71	L8	True	100.00	95.97	96.0
10	KL72	L9	False	100.00	96.05	96.1





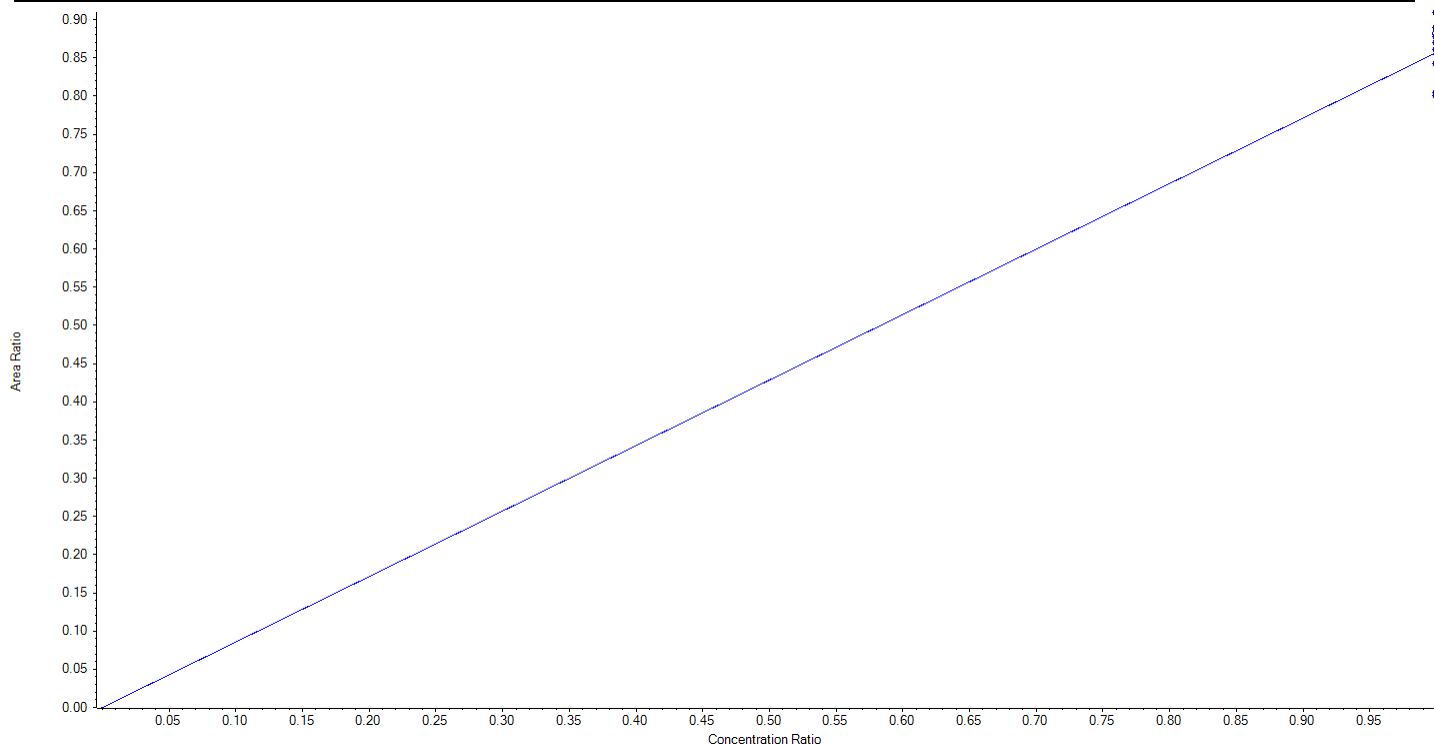
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	13C2-PFDA	Data File	AC_06042019_5-371.wiff
MRM Transition	515.0 / 470.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.85702 x$ (std. dev. = 0.03880) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	100.00	98.32	98.3
3	KL65	L2	True	100.00	100.51	100.5
4	KL66	L3	True	100.00	106.11	106.1
5	KL67	L4	True	100.00	101.54	101.5
6	KL68	L5	True	100.00	103.78	103.8
7	KL69	L6	True	100.00	102.42	102.4
8	KL70	L7	True	100.00	93.83	93.8
9	KL71	L8	True	100.00	93.48	93.5
10	KL72	L9	False	100.00	102.96	103.0





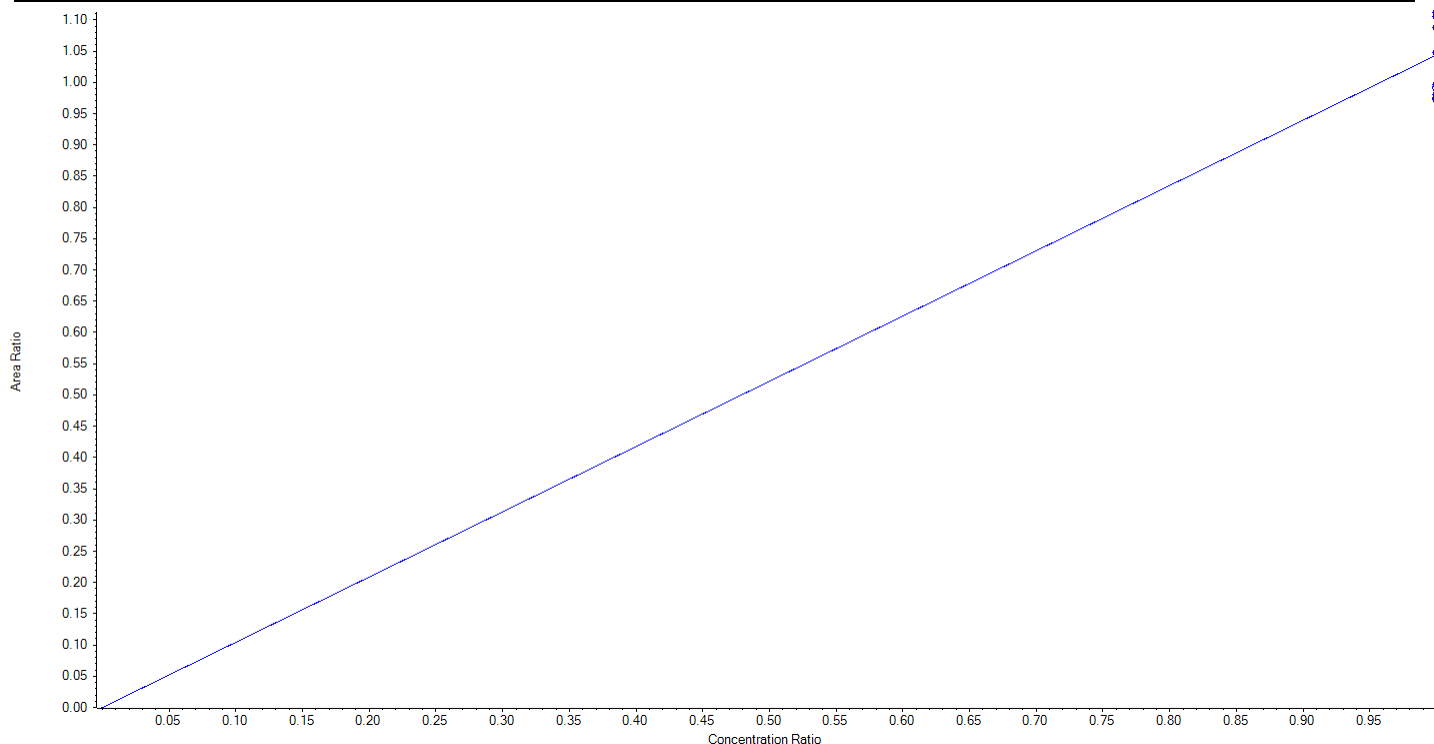
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	d5-EtFOSAA	Data File	AC_06042019_5-371.wiff
MRM Transition	589.0 / 419.0	Result Table	19-0466_DW
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.04371 x$ (std. dev. = 0.05972) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	400.00	401.80	100.5
3	KL65	L2	True	400.00	423.83	106.0
4	KL66	L3	True	400.00	373.61	93.4
5	KL67	L4	True	400.00	375.80	94.0
6	KL68	L5	True	400.00	416.91	104.2
7	KL69	L6	True	400.00	426.06	106.5
8	KL70	L7	True	400.00	381.98	95.5
9	KL71	L8	False	400.00	373.08	93.3
10	KL72	L9	False	400.00	379.71	94.9





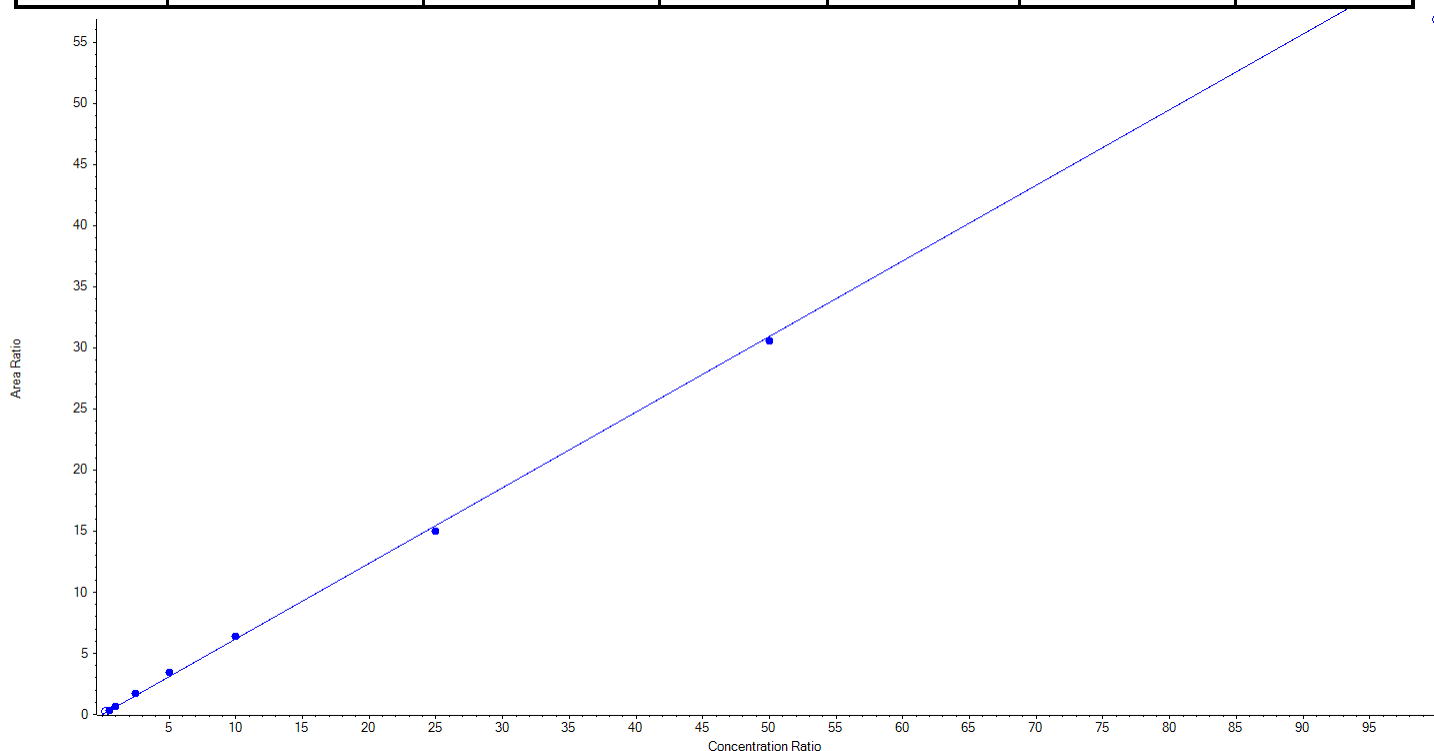
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	HFPO-DA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	285.0 / 169.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.61843 x$ ($r = 0.99935$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	43.47	173.9
3	KL65	L2	True	50.00	56.93	113.9
4	KL66	L3	True	100.00	104.40	104.4
5	KL67	L4	True	250.00	282.63	113.1
6	KL68	L5	True	500.00	555.49	111.1
7	KL69	L6	True	1000.00	1032.90	103.3
8	KL70	L7	True	2500.00	2421.11	96.8
9	KL71	L8	True	5000.00	4946.54	98.9
10	KL72	L9	False	10000.00	9192.01	91.9





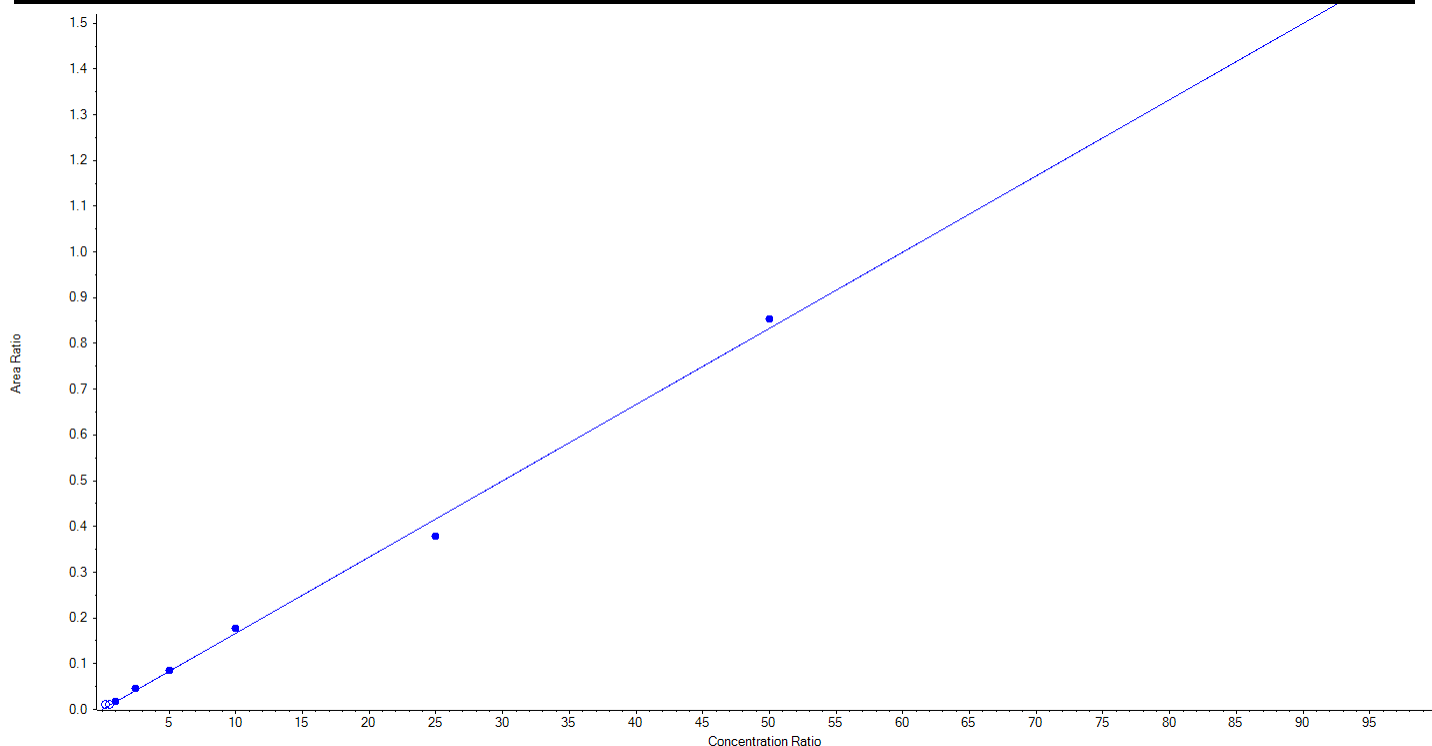
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	HFPO-DA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	285.0 / 118.8	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01666 x$ ($r = 0.99799$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	25.00	67.61	270.4
3	KL65	L2	False	50.00	71.07	142.1
4	KL66	L3	True	100.00	107.66	107.7
5	KL67	L4	True	250.00	271.59	108.6
6	KL68	L5	True	500.00	513.91	102.8
7	KL69	L6	True	1000.00	1068.38	106.8
8	KL70	L7	True	2500.00	2269.28	90.8
9	KL71	L8	True	5000.00	5119.18	102.4
10	KL72	L9	False	10000.00	9116.76	91.2





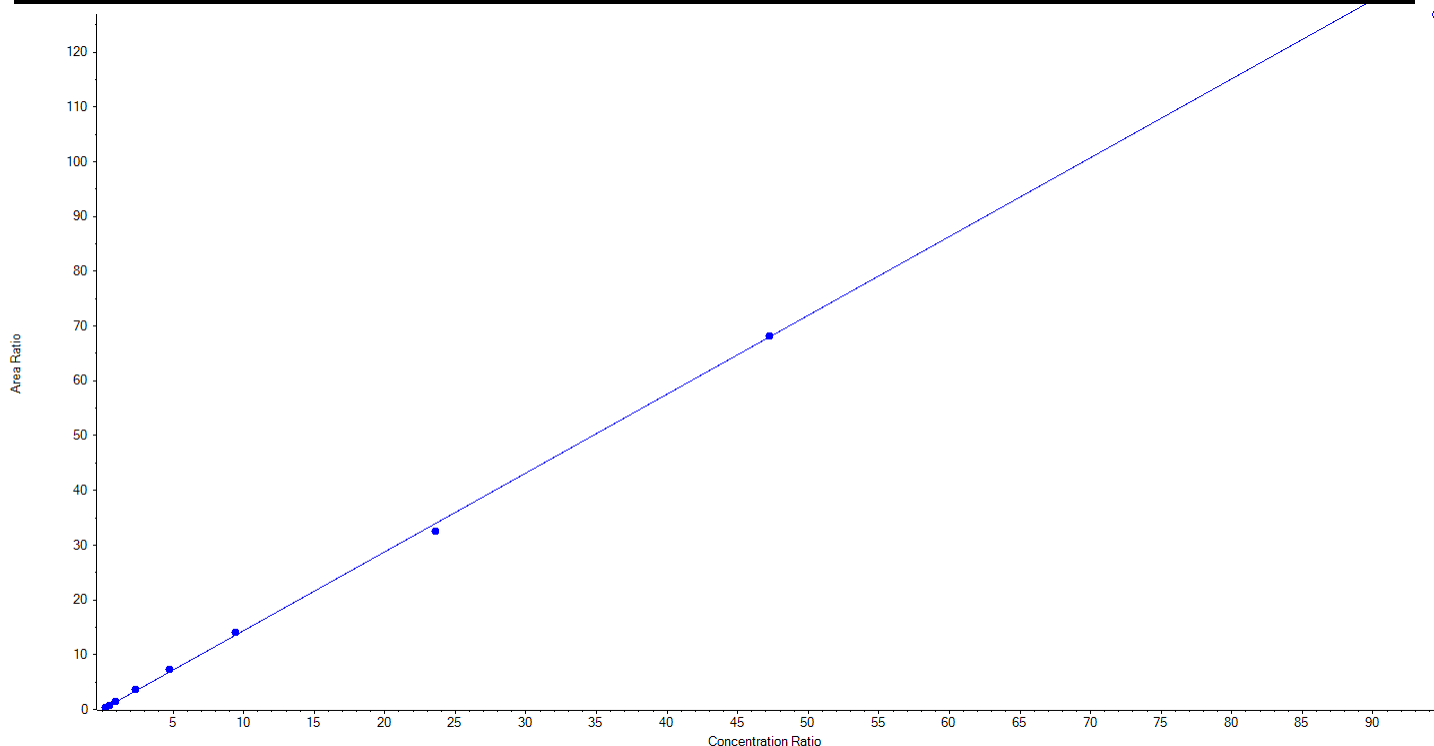
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	ADONA_1	Data File	AC_06042019_5-371.wiff
MRM Transition	377.0 / 251.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.43916 x$ ($r = 0.99955$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.65	24.86	105.1
3	KL65	L2	True	47.30	49.16	103.9
4	KL66	L3	True	94.60	98.47	104.1
5	KL67	L4	True	236.50	249.52	105.5
6	KL68	L5	True	473.00	504.75	106.7
7	KL69	L6	True	945.00	975.56	103.2
8	KL70	L7	True	2362.50	2266.75	96.0
9	KL71	L8	True	4725.00	4738.48	100.3
10	KL72	L9	False	9450.00	8815.41	93.3





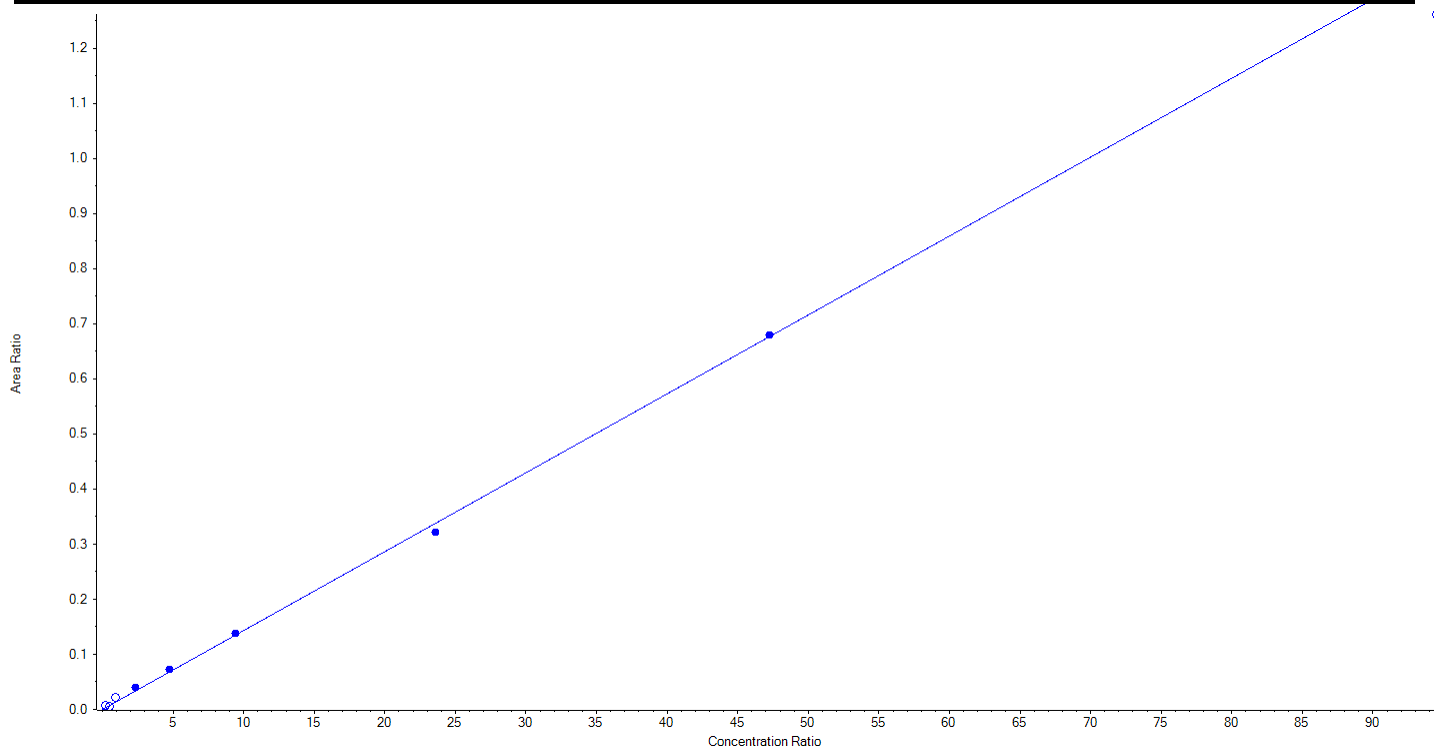
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	ADONA_2	Data File	AC_06042019_5-371.wiff
MRM Transition	377.0 / 85.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01432 x$ ($r = 0.99938$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	23.65	55.01	232.6
3	KL65	L2	False	47.30	40.45	85.5
4	KL66	L3	False	94.60	158.61	167.7
5	KL67	L4	True	236.50	278.39	117.7
6	KL68	L5	True	473.00	505.26	106.8
7	KL69	L6	True	945.00	960.95	101.7
8	KL70	L7	True	2362.50	2245.07	95.0
9	KL71	L8	True	4725.00	4752.33	100.6
10	KL72	L9	False	9450.00	8807.35	93.2





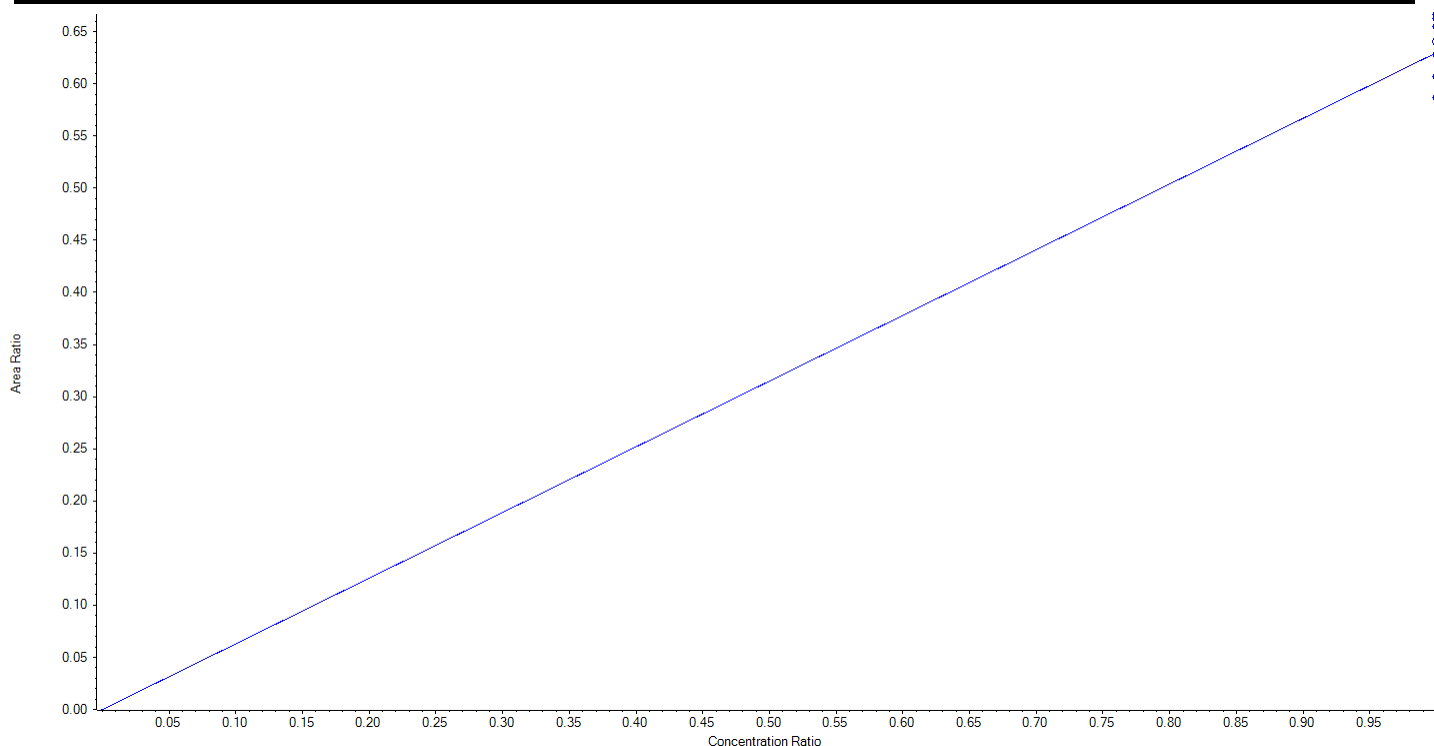
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	13C3-HFPO-DA	Data File	AC_06042019_5-371.wiff
MRM Transition	287.0 / 169.0	Result Table	19-0466_DW
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.62989 x$ (std. dev. = 0.02922) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	100.00	105.17	105.2
3	KL65	L2	True	100.00	99.73	99.7
4	KL66	L3	True	100.00	96.28	96.3
5	KL67	L4	True	100.00	93.12	93.1
6	KL68	L5	True	100.00	99.63	99.6
7	KL69	L6	True	100.00	103.92	103.9
8	KL70	L7	True	100.00	96.33	96.3
9	KL71	L8	True	100.00	105.81	105.8
10	KL72	L9	False	100.00	101.65	101.7





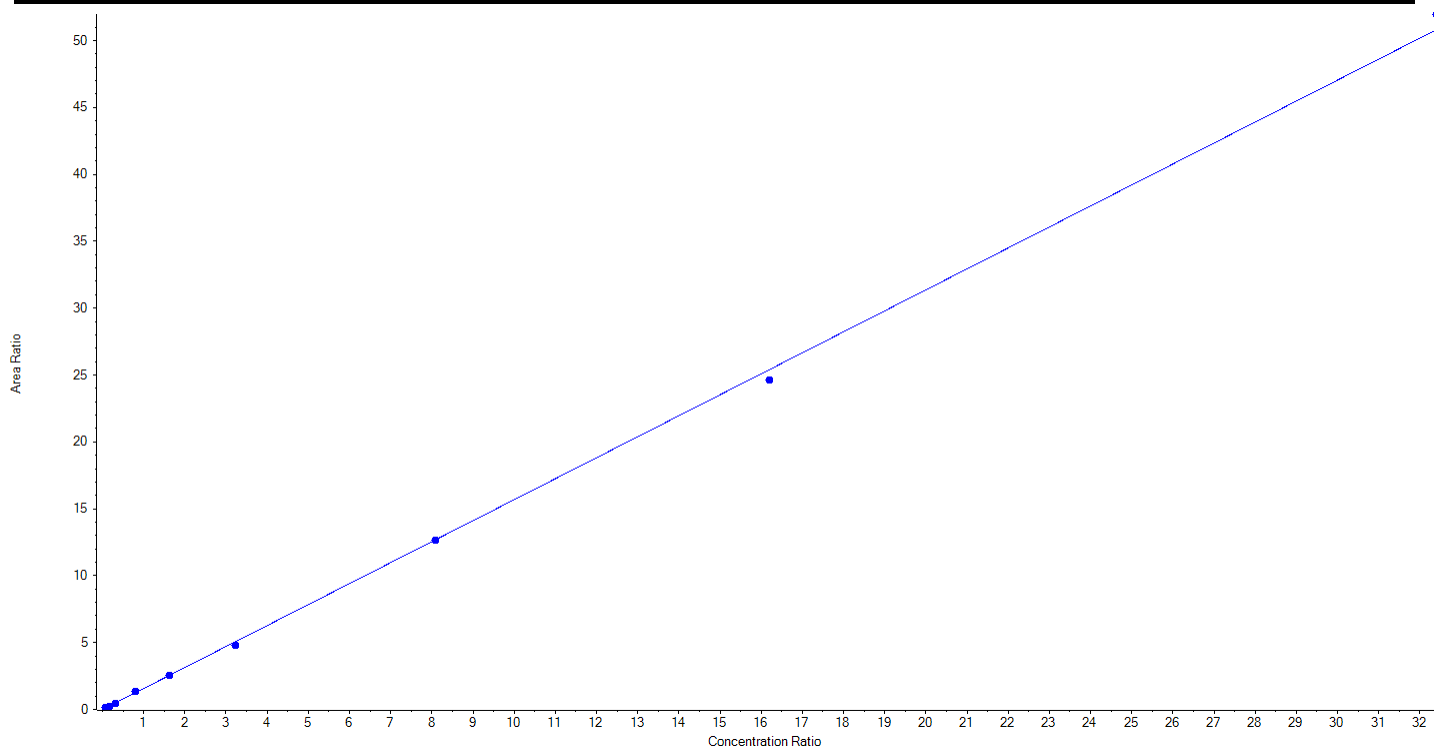
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	9CI-PF3ONS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	531.0 / 351.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.56817 x$ ($r = 0.99959$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.25	25.56	109.9
3	KL65	L2	True	46.50	46.52	100.0
4	KL66	L3	True	93.00	87.65	94.3
5	KL67	L4	True	232.50	245.84	105.7
6	KL68	L5	True	465.00	463.14	99.6
7	KL69	L6	True	930.00	871.83	93.8
8	KL70	L7	True	2325.00	2309.81	99.4
9	KL71	L8	True	4650.00	4507.79	96.9
10	KL72	L9	True	9300.00	9507.11	102.2





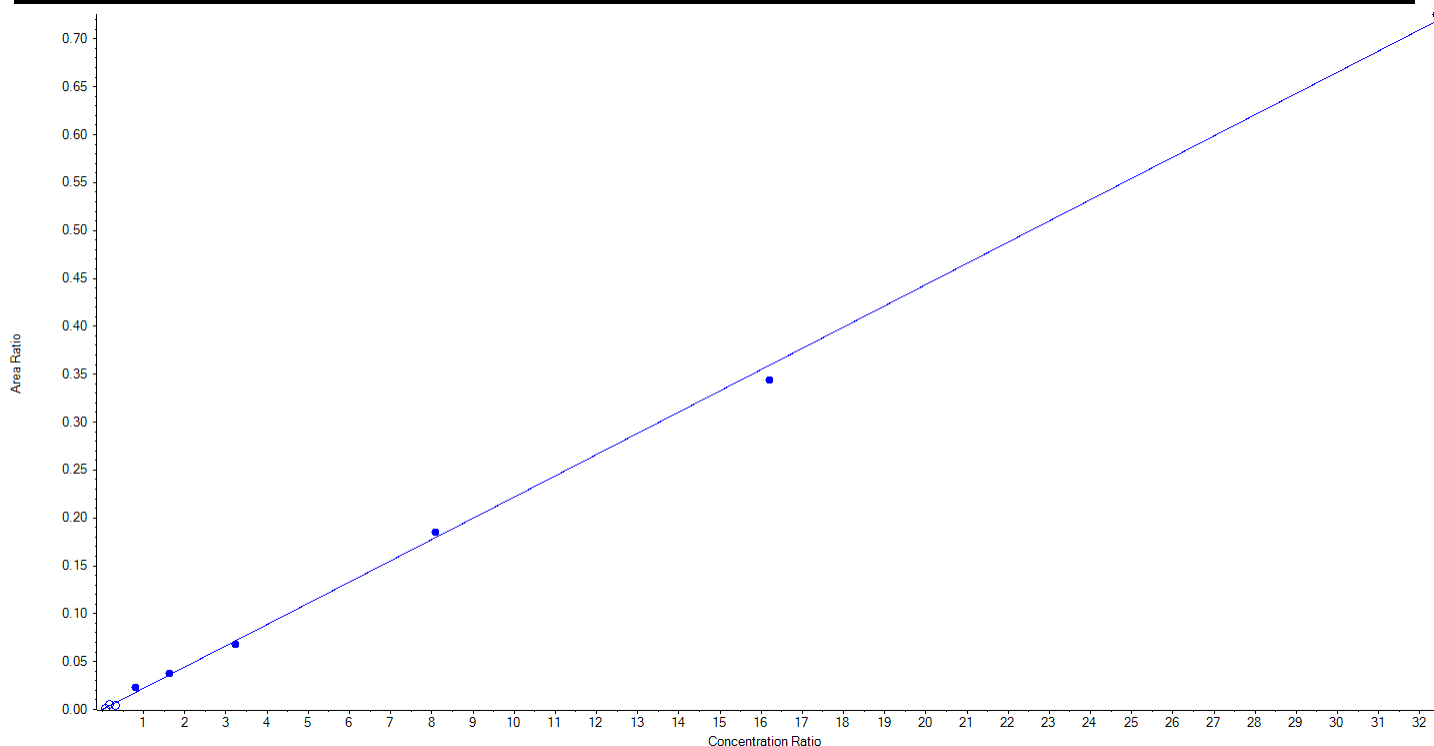
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	9CI-PF3ONS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	531.0 / 83.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.02218 x$ ($r = 0.99917$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	23.25	8.85	38.1
3	KL65	L2	False	46.50	64.80	139.4
4	KL66	L3	False	93.00	56.99	61.3
5	KL67	L4	True	232.50	299.65	128.9
6	KL68	L5	True	465.00	491.22	105.6
7	KL69	L6	True	930.00	882.08	94.9
8	KL70	L7	True	2325.00	2395.20	103.0
9	KL71	L8	True	4650.00	4445.30	95.6
10	KL72	L9	True	9300.00	9389.06	101.0





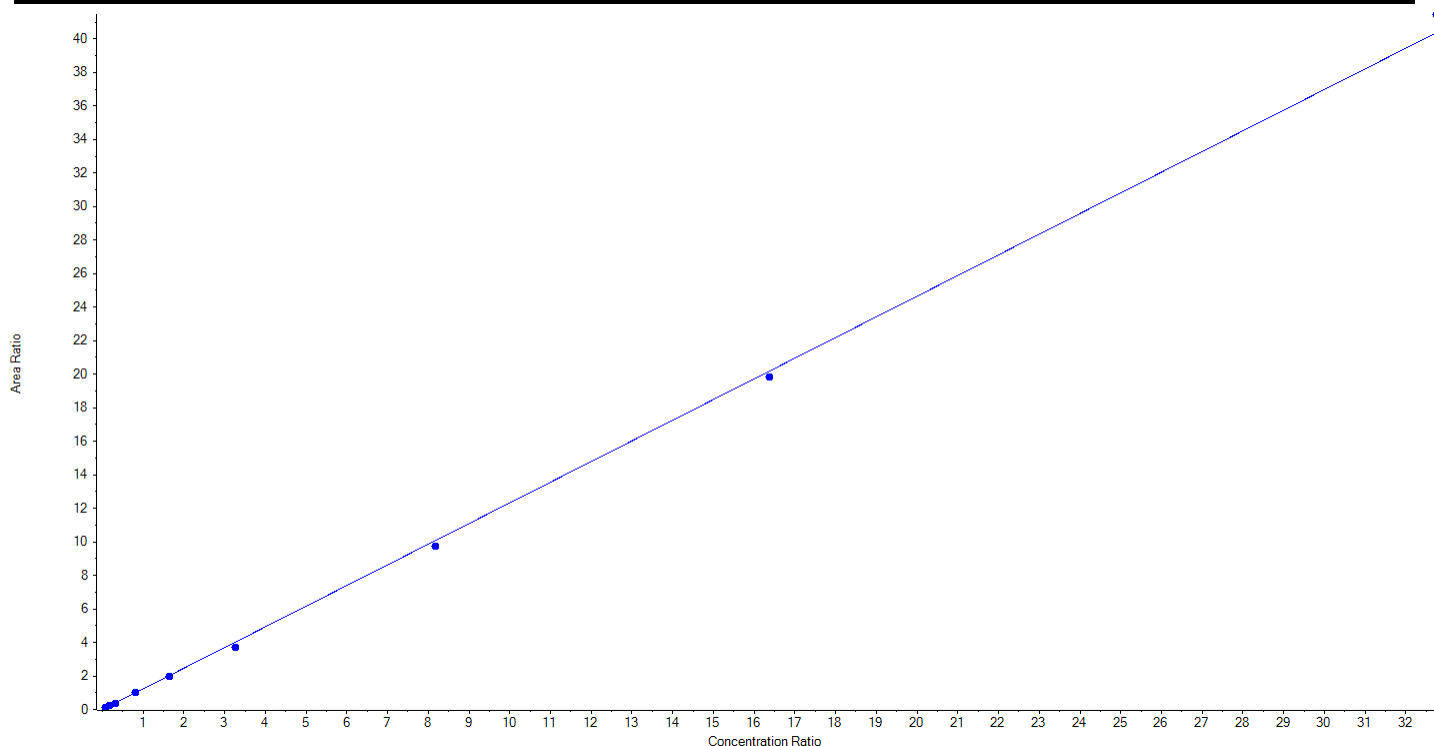
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	11CI-PF3OUdS_1	Data File	AC_06042019_5-371.wiff
MRM Transition	631.0 / 451.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.23256 x$ ($r = 0.99940$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	True	23.50	26.77	113.9
3	KL65	L2	True	47.00	54.78	116.6
4	KL66	L3	True	94.00	86.98	92.5
5	KL67	L4	True	235.00	232.46	98.9
6	KL68	L5	True	470.00	462.18	98.3
7	KL69	L6	True	940.00	856.76	91.1
8	KL70	L7	True	2350.00	2271.67	96.7
9	KL71	L8	True	4700.00	4615.78	98.2
10	KL72	L9	True	9400.00	9652.12	102.7





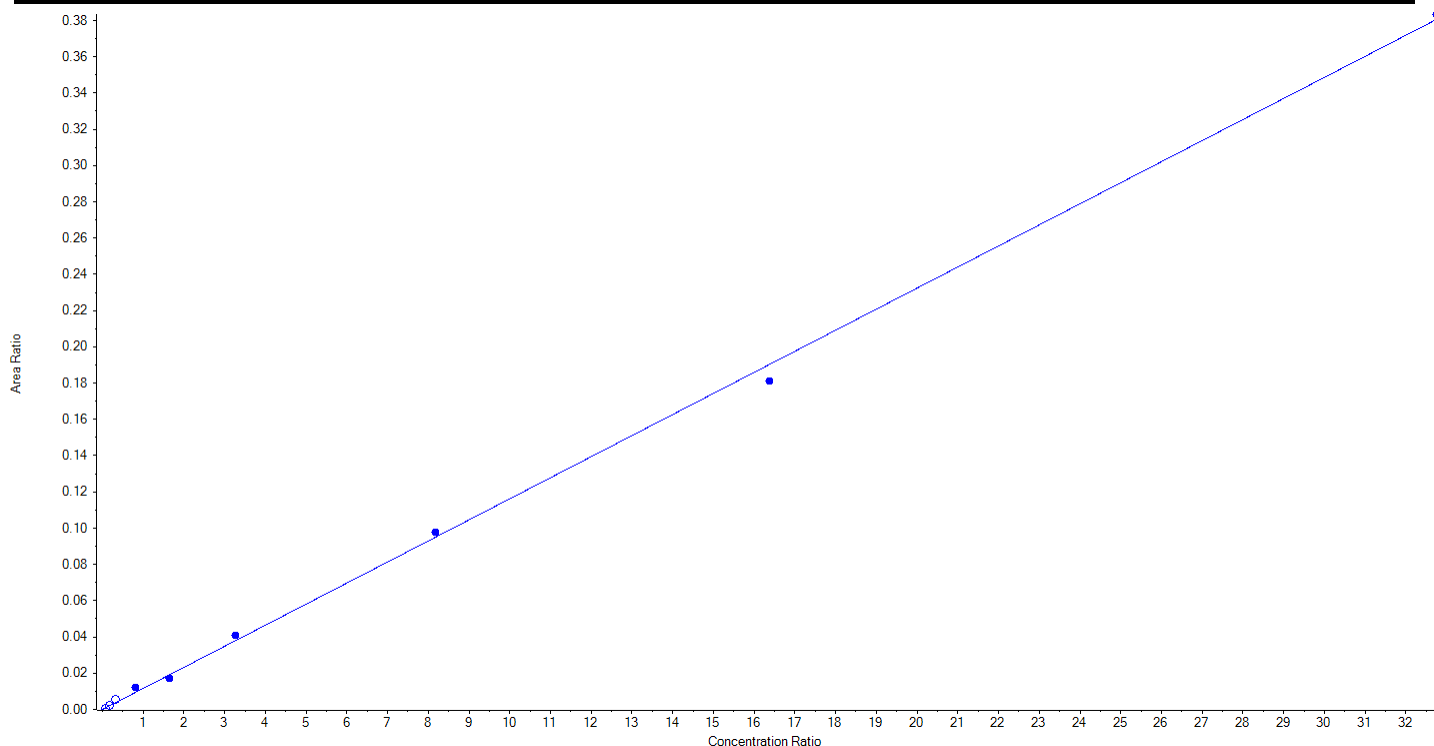
Calibration Summary Report

Created with Analyst Reporter
Printed: 07/06/2019 6:57:02 AM

Analyte Name	11CI-PF3OUdS_2	Data File	AC_06042019_5-371.wiff
MRM Transition	631.0 / 83.0	Result Table	19-0466_DW
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01162 x$ ($r = 0.99885$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KL64	L1	False	23.50	16.27	69.2
3	KL65	L2	False	47.00	53.55	113.9
4	KL66	L3	False	94.00	136.49	145.2
5	KL67	L4	True	235.00	300.03	127.7
6	KL68	L5	True	470.00	427.86	91.0
7	KL69	L6	True	940.00	1015.81	108.1
8	KL70	L7	True	2350.00	2412.48	102.7
9	KL71	L8	True	4700.00	4472.47	95.2
10	KL72	L9	True	9400.00	9466.35	100.7





	Drinking Water Calibration Curve Concentrations (ng/L)									ICC (ng/L)
	KL64	KL65	KL66	KL67	KL68	KL69	KL70	KL71	KL72	KL74
PFHxA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFHpA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFOA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFNA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFUnA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFDoA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFTTrDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFTeDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
NMeFOSAA (branched)	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
NEtFOSAA (branched)	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFBS	22.15	44.30	88.60	221.50	443.00	885.00	2,212.50	4,425.00	8,850.00	885.00
PFHxS (branched)	22.80	45.60	91.20	228.00	456.00	912.00	2,280.00	4,560.00	9,120.00	945.00
PFOS (branched)	23.15	46.30	92.60	231.50	463.00	925.60	2,314.00	4,628.00	9,256.00	955.00
HFPO-DA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
Adona	23.65	47.30	94.60	236.50	473.00	945.00	2,362.50	4,725.00	9,450.00	945.00
9CI-PF3ONS	23.25	46.50	93.00	232.50	465.00	930.00	2,325.00	4,650.00	9,300.00	930.00
11CI-PF3OUdS	23.50	47.00	94.00	235.00	470.00	940.00	2,350.00	4,700.00	9,400.00	940.00
	Surrogates									
13C2-PFHxA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
13C2-PFDA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
d5-EtFOSAA	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00
13C3-HFPO-DA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Internal Standards									
13C2-PFOA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
13C4-PFOS	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00
d3-MeFOSAA	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00

ICC only contains linear isomers.

Sample Name	KL64	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.51	10428.49	25.12	815.4	False	13C4-PFOS	148267.69	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.50	2718.45	22.05	343.0	True	13C4-PFOS	148267.69	287.00	PFBS	0.261	0.288	✓
PFHxA_1	313.0 / 269.0	1.85	11839.55	51.77	26.2	True	13C2-PFOA	30597.09	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	870.28	49.95	14.4	True	13C2-PFOA	30597.09	100.00	PFHxA	0.074	0.076	✓
PFHpA_1	363.0 / 319.0	2.27	13468.76	57.17	19.3	True	13C2-PFOA	30597.09	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	298.87	80.56	12.0	True	13C2-PFOA	30597.09	100.00	PFHpA	0.022	0.015	✓
PFHxS_1	399.0 / 80.0	2.28	10279.67	25.89	201.8	False	13C4-PFOS	148267.69	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	4291.86	36.67	51.5	False	13C4-PFOS	148267.69	287.00	PFHxS	0.418	0.297	✓
PFOA_1	413.0 / 369.0	2.69	12287.42	42.22	48.8	True	13C2-PFOA	30597.09	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.70	839.89	56.18	44.3	True	13C2-PFOA	30597.09	100.00	PFOA	0.068	0.052	✓
PFNA_1	463.0 / 419.0	3.48	52763.25	219.87	173.0	False	13C2-PFOA	30597.09	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.09	2960.96	37.81	27.4	True	13C2-PFOA	30597.09	100.00	PFNA	0.056	0.330	✓
PFOS_1	499.0 / 80.0	3.09	14658.17	24.90	139.8	True	13C4-PFOS	148267.69	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.08	2675.19	24.34	81.1	False	13C4-PFOS	148267.69	287.00	PFOS	0.183	0.190	✓
PFDA_1	513.0 / 469.0	3.46	8910.33	35.75	85.8	True	13C2-PFOA	30597.09	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.46	249.49	27.55	20.5	True	13C2-PFOA	30597.09	100.00	PFDA	0.028	0.034	✓
PFUnA_1	563.0 / 519.0	3.79	8073.06	35.17	55.8	True	13C2-PFOA	30597.09	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.81	247.23	25.40	21.5	False	13C2-PFOA	30597.09	100.00	PFUnA	0.031	0.042	✓
PFDoA_1	613.0 / 569.0	4.07	7729.77	39.25	114.1	False	13C2-PFOA	30597.09	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.07	936.92	28.32	49.1	False	13C2-PFOA	30597.09	100.00	PFDoA	0.121	0.166	✓
PFTrDA_1	663.0 / 619.0	4.33	5763.57	32.31	88.6	False	13C2-PFOA	30597.09	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.32	360.41	31.04	33.6	False	13C2-PFOA	30597.09	100.00	PFTrDA	0.063	0.069	✓
PFTeDA_1	713.0 / 669.0	4.56	4996.44	26.24	90.8	False	13C2-PFOA	30597.09	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.55	278.20	30.55	31.1	False	13C2-PFOA	30597.09	100.00	PFTeDA	0.056	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.62	506.48	16.96	287.7	True	d3-MeFOSAA	12728.23	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.60	377.30	23.56	40.5	False	d3-MeFOSAA	12728.23	400.00	NMeFOSAA	0.745	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.78	611.19	21.80	164.4	False	d3-MeFOSAA	12728.23	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.80	66.92	32.74	4354.4	False	d3-MeFOSAA	12728.23	400.00	NEtFOSAA	0.109	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.84	26397.17	105.98	806.6	False	13C2-PFOA	30597.09	100.00				
13C2-PFDA	515.0 / 470.0	3.45	25782.58	98.32	5907.2	False	13C2-PFOA	30597.09	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.77	13344.51	401.80	319.6	False	d3-MeFOSAA	12728.23	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.98	8225.33	43.47	96.3	False	13C2-PFOA	30597.09	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.97	344.65	67.61	18.6	False	13C2-PFOA	30597.09	100.00	HFPO-DA	0.042	0.027	✓
ADONA_1	377.0 / 251.0	2.31	10948.65	24.86	196.3	False	13C2-PFOA	30597.09	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.37	240.98	55.01	25.0	False	13C2-PFOA	30597.09	100.00	ADONA	0.022	0.010	
13C3-HFPO-DA	287.0 / 169.0	1.97	20269.38	105.17	265.8	False	13C2-PFOA	30597.09	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.29	20704.44	25.56	410.6	False	13C4-PFOS	148267.69	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.33	101.44	8.85	4.6	True	13C4-PFOS	148267.69	287.00	9CI-PF3ONS	0.005	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.92	17048.95	26.77	319.5	False	13C4-PFOS	148267.69	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.97	97.65	16.27	6.1	True	13C4-PFOS	148267.69	287.00	11CI-PF3OUdS	0.006	0.010	✓

Sample Name	KL65	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:23:13 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.49	20814.55	50.08	1204.9	False	13C4-PFOS	148445.88	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.49	5631.39	45.63	422.9	True	13C4-PFOS	148445.88	287.00	PFBS	0.271	0.288	✓
PFHxA_1	313.0 / 269.0	1.83	19915.88	81.11	36.1	True	13C2-PFOA	32851.43	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	1785.26	95.44	23.0	True	13C2-PFOA	32851.43	100.00	PFHxA	0.090	0.076	✓
PFHpA_1	363.0 / 319.0	2.25	17347.76	68.58	23.5	True	13C2-PFOA	32851.43	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	548.00	137.58	14.1	True	13C2-PFOA	32851.43	100.00	PFHpA	0.032	0.015	
PFHxS_1	399.0 / 80.0	2.27	20183.16	50.77	301.2	False	13C4-PFOS	148445.88	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	5957.18	50.83	112.8	False	13C4-PFOS	148445.88	287.00	PFHxS	0.295	0.297	✓
PFOA_1	413.0 / 369.0	2.67	20469.41	65.51	82.7	True	13C2-PFOA	32851.43	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.67	1338.39	83.38	73.0	True	13C2-PFOA	32851.43	100.00	PFOA	0.065	0.052	✓
PFNA_1	463.0 / 419.0	3.07	14045.41	54.51	70.4	True	13C2-PFOA	32851.43	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.07	4574.61	54.40	49.0	True	13C2-PFOA	32851.43	100.00	PFNA	0.326	0.330	✓
PFOS_1	499.0 / 80.0	3.07	29233.43	49.59	158.1	True	13C4-PFOS	148445.88	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.07	6103.93	55.47	135.7	False	13C4-PFOS	148445.88	287.00	PFOS	0.209	0.190	✓
PFDA_1	513.0 / 469.0	3.43	15030.80	56.17	142.4	False	13C2-PFOA	32851.43	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.44	490.81	50.48	62.4	True	13C2-PFOA	32851.43	100.00	PFDA	0.033	0.034	✓
PFUnA_1	563.0 / 519.0	3.76	14791.45	60.02	101.6	False	13C2-PFOA	32851.43	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	803.94	76.93	76.3	False	13C2-PFOA	32851.43	100.00	PFUnA	0.054	0.042	✓
PFDoA_1	613.0 / 569.0	4.05	10814.43	51.15	124.1	False	13C2-PFOA	32851.43	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.05	1631.66	45.94	95.5	False	13C2-PFOA	32851.43	100.00	PFDoA	0.151	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.31	9579.39	50.02	129.5	False	13C2-PFOA	32851.43	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.30	587.60	47.13	67.7	False	13C2-PFOA	32851.43	100.00	PFTTrDA	0.061	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.53	9933.01	48.58	222.6	False	13C2-PFOA	32851.43	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.53	404.03	41.32	74.5	False	13C2-PFOA	32851.43	100.00	PFTTeDA	0.041	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.59	1857.38	57.55	4535.8	True	d3-MeFOSAA	13756.33	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	1049.90	60.67	25597.1	False	d3-MeFOSAA	13756.33	400.00	NMeFOSAA	0.565	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.76	1208.08	39.86	615.9	False	d3-MeFOSAA	13756.33	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	87.64	39.67	27.7	False	d3-MeFOSAA	13756.33	400.00	NEtFOSAA	0.073	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.82	27613.26	103.25	1237.1	False	13C2-PFOA	32851.43	100.00				
13C2-PFDA	515.0 / 470.0	3.43	28296.91	100.51	891.2	False	13C2-PFOA	32851.43	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.75	15213.13	423.83	385.4	False	d3-MeFOSAA	13756.33	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.96	11566.25	56.93	133.7	False	13C2-PFOA	32851.43	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.95	388.98	71.07	37.2	False	13C2-PFOA	32851.43	100.00	HFPO-DA	0.034	0.027	✓
ADONA_1	377.0 / 251.0	2.29	23240.56	49.16	285.7	False	13C2-PFOA	32851.43	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.29	190.22	40.45	12.1	False	13C2-PFOA	32851.43	100.00	ADONA	0.008	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.95	20637.70	99.73	277.9	False	13C2-PFOA	32851.43	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.27	37731.00	46.52	430.5	False	13C4-PFOS	148445.88	287.00	9CI-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.28	743.28	64.80	33.0	False	13C4-PFOS	148445.88	287.00	9CI-PF3ONS	0.020	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.90	34922.76	54.78	613.9	False	13C4-PFOS	148445.88	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.90	321.84	53.55	11.5	True	13C4-PFOS	148445.88	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL66	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:32:11 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.49	35648.49	82.05	1415.9	False	13C4-PFOS	155176.73	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.49	9738.82	75.49	628.3	True	13C4-PFOS	155176.73	287.00	PFBS	0.273	0.288	✓
PFHxA_1	313.0 / 269.0	1.83	28991.28	120.59	48.6	True	13C2-PFOA	32166.13	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	2153.12	117.56	37.6	True	13C2-PFOA	32166.13	100.00	PFHxA	0.074	0.076	✓
PFHpA_1	363.0 / 319.0	2.25	34259.74	138.33	35.4	True	13C2-PFOA	32166.13	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	386.72	99.16	13.9	True	13C2-PFOA	32166.13	100.00	PFHpA	0.011	0.015	✓
PFHxS_1	399.0 / 80.0	2.26	37871.30	91.14	383.5	False	13C4-PFOS	155176.73	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	11162.35	91.11	161.6	False	13C4-PFOS	155176.73	287.00	PFHxS	0.295	0.297	✓
PFOA_1	413.0 / 369.0	2.67	32568.60	106.45	125.2	True	13C2-PFOA	32166.13	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.67	1889.42	120.21	79.2	True	13C2-PFOA	32166.13	100.00	PFOA	0.058	0.052	✓
PFNA_1	463.0 / 419.0	3.06	24938.29	98.85	108.8	True	13C2-PFOA	32166.13	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.06	9146.13	111.08	83.9	True	13C2-PFOA	32166.13	100.00	PFNA	0.367	0.330	✓
PFOS_1	499.0 / 80.0	3.06	60519.17	98.21	305.9	True	13C4-PFOS	155176.73	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.06	11284.43	98.09	250.0	False	13C4-PFOS	155176.73	287.00	PFOS	0.186	0.190	✓
PFDA_1	513.0 / 469.0	3.43	28069.87	107.13	147.6	False	13C2-PFOA	32166.13	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.42	965.61	101.44	83.7	True	13C2-PFOA	32166.13	100.00	PFDA	0.034	0.034	✓
PFUnA_1	563.0 / 519.0	3.75	24936.10	103.34	156.7	False	13C2-PFOA	32166.13	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	1160.27	113.39	89.9	False	13C2-PFOA	32166.13	100.00	PFUnA	0.047	0.042	✓
PFDoA_1	613.0 / 569.0	4.04	22731.56	109.81	176.8	False	13C2-PFOA	32166.13	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.04	3934.53	113.14	142.6	False	13C2-PFOA	32166.13	100.00	PFDoA	0.173	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.29	19683.13	104.97	151.4	False	13C2-PFOA	32166.13	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.29	1545.62	126.62	124.0	False	13C2-PFOA	32166.13	100.00	PFTTrDA	0.079	0.069	✓
PFTeDA_1	713.0 / 669.0	4.52	20207.44	100.94	288.7	False	13C2-PFOA	32166.13	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	945.32	98.75	133.2	False	13C2-PFOA	32166.13	100.00	PFTeDA	0.047	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.58	3779.74	107.33	404.4	False	d3-MeFOSAA	15010.56	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	1916.26	101.47	226.8	False	d3-MeFOSAA	15010.56	400.00	NMeFOSAA	0.507	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.75	3947.97	119.38	391.6	False	d3-MeFOSAA	15010.56	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	353.26	146.54	51.9	True	d3-MeFOSAA	15010.56	400.00	NEtFOSAA	0.089	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.82	24290.06	92.76	1141.3	False	13C2-PFOA	32166.13	100.00				
13C2-PFDA	515.0 / 470.0	3.42	29252.34	106.11	888.7	False	13C2-PFOA	32166.13	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.74	14633.10	373.61	366.5	False	d3-MeFOSAA	15010.56	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.95	20767.32	104.40	177.0	False	13C2-PFOA	32166.13	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.95	577.00	107.66	52.1	False	13C2-PFOA	32166.13	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.29	45583.19	98.47	376.9	False	13C2-PFOA	32166.13	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.29	730.41	158.61	52.4	False	13C2-PFOA	32166.13	100.00	ADONA	0.016	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.95	19507.70	96.28	318.9	False	13C2-PFOA	32166.13	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.27	74320.25	87.65	609.7	False	13C4-PFOS	155176.73	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.26	683.33	56.99	25.6	False	13C4-PFOS	155176.73	287.00	9CI-PF3ONS	0.009	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.89	57967.99	86.98	530.6	False	13C4-PFOS	155176.73	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.90	857.50	136.49	15.4	True	13C4-PFOS	155176.73	287.00	11CI-PF3OUdS	0.015	0.010	✓

Sample Name	KL67	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:41:08 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	102762.97	219.43	2514.0	False	13C4-PFOS	167269.91	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	31744.24	228.28	829.0	False	13C4-PFOS	167269.91	287.00	PFBS	0.309	0.288	✓
PFHxA_1	313.0 / 269.0	1.82	78123.35	302.46	81.2	True	13C2-PFOA	34557.71	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	6100.67	310.03	63.7	True	13C2-PFOA	34557.71	100.00	PFHxA	0.078	0.076	✓
PFHpA_1	363.0 / 319.0	2.24	74423.96	279.70	52.0	False	13C2-PFOA	34557.71	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	1117.41	266.68	32.7	True	13C2-PFOA	34557.71	100.00	PFHpA	0.015	0.015	✓
PFHxS_1	399.0 / 80.0	2.26	101404.23	226.38	612.7	False	13C4-PFOS	167269.91	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	30957.03	234.42	229.4	False	13C4-PFOS	167269.91	287.00	PFHxS	0.305	0.297	✓
PFOA_1	413.0 / 369.0	2.66	91932.62	279.69	215.2	True	13C2-PFOA	34557.71	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.66	5093.12	301.62	134.9	False	13C2-PFOA	34557.71	100.00	PFOA	0.055	0.052	✓
PFNA_1	463.0 / 419.0	3.05	74736.91	275.74	228.1	False	13C2-PFOA	34557.71	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.06	23257.55	262.92	152.2	False	13C2-PFOA	34557.71	100.00	PFNA	0.311	0.330	✓
PFOS_1	499.0 / 80.0	3.05	163287.18	245.83	368.7	True	13C4-PFOS	167269.91	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.05	30758.91	248.05	467.5	True	13C4-PFOS	167269.91	287.00	PFOS	0.188	0.190	✓
PFDA_1	513.0 / 469.0	3.42	77776.69	276.29	317.8	False	13C2-PFOA	34557.71	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.42	3124.65	305.53	251.7	True	13C2-PFOA	34557.71	100.00	PFDA	0.040	0.034	✓
PFUnA_1	563.0 / 519.0	3.74	76112.53	293.59	225.7	False	13C2-PFOA	34557.71	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	3033.50	275.95	149.6	False	13C2-PFOA	34557.71	100.00	PFUnA	0.040	0.042	✓
PFDoA_1	613.0 / 569.0	4.03	58647.21	263.70	221.6	False	13C2-PFOA	34557.71	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	9594.21	256.80	249.8	False	13C2-PFOA	34557.71	100.00	PFDoA	0.164	0.166	✓
PFTrDA_1	663.0 / 619.0	4.29	57446.01	285.16	206.5	False	13C2-PFOA	34557.71	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	3891.12	296.70	175.8	False	13C2-PFOA	34557.71	100.00	PFTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.51	59589.35	277.07	354.2	False	13C2-PFOA	34557.71	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	2692.12	261.75	278.0	False	13C2-PFOA	34557.71	100.00	PFTeDA	0.045	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.58	9349.76	264.33	388.9	False	d3-MeFOSAA	15076.19	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	4736.92	249.75	1335.5	False	d3-MeFOSAA	15076.19	400.00	NMeFOSAA	0.507	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.74	8675.55	261.20	3330.8	False	d3-MeFOSAA	15076.19	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	292.83	120.95	588.7	True	d3-MeFOSAA	15076.19	400.00	NEtFOSAA	0.034	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.81	28392.93	100.93	1066.8	False	13C2-PFOA	34557.71	100.00				
13C2-PFDA	515.0 / 470.0	3.41	30074.30	101.54	787.0	False	13C2-PFOA	34557.71	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.73	14783.24	375.80	426.9	False	d3-MeFOSAA	15076.19	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.94	60402.17	282.63	408.1	False	13C2-PFOA	34557.71	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.94	1563.78	271.59	78.7	False	13C2-PFOA	34557.71	100.00	HFPO-DA	0.026	0.027	✓
ADONA_1	377.0 / 251.0	2.28	124095.65	249.52	570.1	False	13C2-PFOA	34557.71	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.28	1377.32	278.39	119.4	False	13C2-PFOA	34557.71	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.94	20270.02	93.12	310.6	False	13C2-PFOA	34557.71	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.26	224692.33	245.84	996.9	False	13C4-PFOS	167269.91	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.25	3872.77	299.65	108.9	False	13C4-PFOS	167269.91	287.00	9CI-PF3ONS	0.017	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.88	166987.79	232.46	768.8	False	13C4-PFOS	167269.91	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.88	2031.87	300.03	56.8	False	13C4-PFOS	167269.91	287.00	11CI-PF3OUdS	0.012	0.010	✓

Sample Name	KL68	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:50:04 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	220854.07	421.74	3363.4	False	13C4-PFOS	187046.73	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	65401.49	420.59	1077.1	False	13C4-PFOS	187046.73	287.00	PFBS	0.296	0.288	✓
PFHxA_1	313.0 / 269.0	1.81	152990.01	534.57	131.8	False	13C2-PFOA	38290.37	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	11196.72	513.54	93.2	False	13C2-PFOA	38290.37	100.00	PFHxA	0.073	0.076	✓
PFHpA_1	363.0 / 319.0	2.23	164017.88	556.31	87.1	False	13C2-PFOA	38290.37	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	2402.40	517.46	68.3	False	13C2-PFOA	38290.37	100.00	PFHpA	0.015	0.015	✓
PFHxS_1	399.0 / 80.0	2.25	229617.15	458.42	904.4	False	13C4-PFOS	187046.73	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.25	69422.21	470.12	490.2	False	13C4-PFOS	187046.73	287.00	PFHxS	0.302	0.297	✓
PFOA_1	413.0 / 369.0	2.65	199701.07	548.34	272.9	False	13C2-PFOA	38290.37	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.65	9339.58	499.18	190.8	False	13C2-PFOA	38290.37	100.00	PFOA	0.047	0.052	✓
PFNA_1	463.0 / 419.0	3.05	164419.96	547.49	450.0	False	13C2-PFOA	38290.37	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.05	53034.93	541.10	259.2	False	13C2-PFOA	38290.37	100.00	PFNA	0.323	0.330	✓
PFOS_1	499.0 / 80.0	3.05	349264.51	470.22	474.1	True	13C4-PFOS	187046.73	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.05	66416.41	478.96	550.9	True	13C4-PFOS	187046.73	287.00	PFOS	0.190	0.190	✓
PFDA_1	513.0 / 469.0	3.41	170556.30	546.81	310.8	False	13C2-PFOA	38290.37	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.41	4846.61	427.70	329.8	False	13C2-PFOA	38290.37	100.00	PFDA	0.028	0.034	✓
PFUnA_1	563.0 / 519.0	3.74	153112.53	533.02	284.2	False	13C2-PFOA	38290.37	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	6553.24	538.01	364.6	False	13C2-PFOA	38290.37	100.00	PFUnA	0.043	0.042	✓
PFDoA_1	613.0 / 569.0	4.03	136094.75	552.28	319.7	False	13C2-PFOA	38290.37	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	23208.27	560.64	436.8	False	13C2-PFOA	38290.37	100.00	PFDoA	0.171	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.28	116348.12	521.24	282.7	False	13C2-PFOA	38290.37	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.28	8303.83	571.44	260.3	False	13C2-PFOA	38290.37	100.00	PFTTrDA	0.071	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.50	130501.39	547.63	560.2	False	13C2-PFOA	38290.37	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.50	6221.85	545.97	437.1	False	13C2-PFOA	38290.37	100.00	PFTTeDA	0.048	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.57	19558.60	508.20	286.6	False	d3-MeFOSAA	16404.06	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	11913.85	577.30	282.9	False	d3-MeFOSAA	16404.06	400.00	NMeFOSAA	0.609	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.74	18041.48	499.21	2182.4	False	d3-MeFOSAA	16404.06	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	1687.83	640.69	504.2	True	d3-MeFOSAA	16404.06	400.00	NEtFOSAA	0.094	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.81	31427.58	100.82	1139.0	False	13C2-PFOA	38290.37	100.00				
13C2-PFDA	515.0 / 470.0	3.41	34057.11	103.78	1070.6	False	13C2-PFOA	38290.37	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.73	17845.17	416.91	683.7	False	d3-MeFOSAA	16404.06	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.94	131540.32	555.49	584.8	False	13C2-PFOA	38290.37	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.94	3278.61	513.91	143.7	False	13C2-PFOA	38290.37	100.00	HFPO-DA	0.025	0.027	✓
ADONA_1	377.0 / 251.0	2.28	278149.52	504.75	771.0	False	13C2-PFOA	38290.37	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.28	2769.72	505.26	179.7	False	13C2-PFOA	38290.37	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.94	24029.67	99.63	350.7	False	13C2-PFOA	38290.37	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.25	473337.05	463.14	1343.7	False	13C4-PFOS	187046.73	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.25	7099.31	491.22	170.0	False	13C4-PFOS	187046.73	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.88	371269.25	462.18	1144.6	False	13C4-PFOS	187046.73	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.88	3240.19	427.86	60.8	False	13C4-PFOS	187046.73	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL69	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:59:00 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	397063.94	761.32	5314.5	False	13C4-PFOS	186285.09	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	118005.72	761.99	1652.1	False	13C4-PFOS	186285.09	287.00	PFBS	0.297	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	277573.81	1019.63	185.2	False	13C2-PFOA	36421.90	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	22541.43	1086.91	125.0	False	13C2-PFOA	36421.90	100.00	PFHxA	0.081	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	294997.58	1051.90	114.6	False	13C2-PFOA	36421.90	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	5657.80	1281.17	93.6	False	13C2-PFOA	36421.90	100.00	PFHpA	0.019	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	413680.42	829.27	1065.8	False	13C4-PFOS	186285.09	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	122689.99	834.23	528.3	False	13C4-PFOS	186285.09	287.00	PFHxS	0.297	0.297	✓
PFOA_1	413.0 / 369.0	2.64	352542.03	1017.67	321.7	False	13C2-PFOA	36421.90	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	18006.70	1011.79	276.1	False	13C2-PFOA	36421.90	100.00	PFOA	0.051	0.052	✓
PFNA_1	463.0 / 419.0	3.03	300866.72	1053.23	657.1	False	13C2-PFOA	36421.90	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.04	101557.55	1089.31	393.0	False	13C2-PFOA	36421.90	100.00	PFNA	0.338	0.330	✓
PFOS_1	499.0 / 80.0	3.03	634047.81	857.12	497.7	True	13C4-PFOS	186285.09	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	121338.95	878.62	612.6	True	13C4-PFOS	186285.09	287.00	PFOS	0.191	0.190	✓
PFDA_1	513.0 / 469.0	3.40	322860.75	1088.20	407.7	False	13C2-PFOA	36421.90	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.40	9162.36	850.04	471.9	False	13C2-PFOA	36421.90	100.00	PFDA	0.028	0.034	✓
PFUnA_1	563.0 / 519.0	3.73	292634.50	1071.00	326.3	False	13C2-PFOA	36421.90	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	11847.44	1022.56	467.9	False	13C2-PFOA	36421.90	100.00	PFUnA	0.040	0.042	✓
PFDoA_1	613.0 / 569.0	4.01	246239.51	1050.51	319.2	False	13C2-PFOA	36421.90	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	40914.05	1039.06	305.1	False	13C2-PFOA	36421.90	100.00	PFDoA	0.166	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.27	219233.82	1032.55	270.7	False	13C2-PFOA	36421.90	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.26	13989.11	1012.08	342.1	False	13C2-PFOA	36421.90	100.00	PFTTrDA	0.064	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.49	233058.09	1028.17	599.1	False	13C2-PFOA	36421.90	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.49	11012.61	1015.94	448.3	False	13C2-PFOA	36421.90	100.00	PFTTeDA	0.047	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.56	34787.13	929.88	1223.5	False	d3-MeFOSAA	15945.51	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	20029.25	998.45	3160.4	False	d3-MeFOSAA	15945.51	400.00	NMeFOSAA	0.576	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.73	34080.43	970.14	816.0	False	d3-MeFOSAA	15945.51	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	2723.20	1063.45	32754.4	True	d3-MeFOSAA	15945.51	400.00	NEtFOSAA	0.080	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	31765.53	107.14	753.7	False	13C2-PFOA	36421.90	100.00				
13C2-PFDA	515.0 / 470.0	3.39	31968.36	102.42	868.0	False	13C2-PFOA	36421.90	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	17726.80	426.06	492.9	False	d3-MeFOSAA	15945.51	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	232656.65	1032.90	748.1	False	13C2-PFOA	36421.90	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	6483.37	1068.38	224.0	False	13C2-PFOA	36421.90	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.27	511358.04	975.56	828.6	False	13C2-PFOA	36421.90	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.27	5010.73	960.95	334.7	False	13C2-PFOA	36421.90	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	23841.98	103.92	342.0	False	13C2-PFOA	36421.90	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.24	887403.00	871.83	1352.4	False	13C4-PFOS	186285.09	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.24	12696.32	882.08	222.6	False	13C4-PFOS	186285.09	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.86	685428.80	856.76	890.9	False	13C4-PFOS	186285.09	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.86	7661.42	1015.81	85.1	False	13C4-PFOS	186285.09	287.00	11CI-PF3OUdS	0.011	0.010	✓

Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	1023608.59	2135.18	7630.4	False	13C4-PFOS	171231.97	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	301719.85	2119.53	2730.6	False	13C4-PFOS	171231.97	287.00	PFBS	0.295	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	711784.21	2430.53	273.7	False	13C2-PFOA	39181.02	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	54249.69	2431.63	220.5	False	13C2-PFOA	39181.02	100.00	PFHxA	0.076	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	716815.33	2376.02	168.7	False	13C2-PFOA	39181.02	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	12411.54	2612.60	162.3	False	13C2-PFOA	39181.02	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	1009871.07	2202.36	1509.3	False	13C4-PFOS	171231.97	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	296257.45	2191.50	763.7	False	13C4-PFOS	171231.97	287.00	PFHxS	0.293	0.297	✓
PFOA_1	413.0 / 369.0	2.64	913343.37	2450.85	488.0	False	13C2-PFOA	39181.02	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	47194.41	2465.10	444.0	False	13C2-PFOA	39181.02	100.00	PFOA	0.052	0.052	✓
PFNA_1	463.0 / 419.0	3.04	769849.34	2505.18	882.0	False	13C2-PFOA	39181.02	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.03	240270.45	2395.67	652.4	False	13C2-PFOA	39181.02	100.00	PFNA	0.312	0.330	✓
PFOS_1	499.0 / 80.0	3.03	1583448.60	2328.72	704.9	True	13C4-PFOS	171231.97	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	302481.24	2382.82	1069.4	True	13C4-PFOS	171231.97	287.00	PFOS	0.191	0.190	✓
PFDA_1	513.0 / 469.0	3.40	753036.29	2359.38	616.9	False	13C2-PFOA	39181.02	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.40	29947.17	2582.70	761.7	False	13C2-PFOA	39181.02	100.00	PFDA	0.040	0.034	✓
PFUnA_1	563.0 / 519.0	3.73	718178.58	2443.33	505.4	False	13C2-PFOA	39181.02	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	28298.25	2270.45	542.2	False	13C2-PFOA	39181.02	100.00	PFUnA	0.039	0.042	✓
PFDoA_1	613.0 / 569.0	4.01	612705.52	2429.86	497.9	False	13C2-PFOA	39181.02	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	100851.47	2380.89	434.1	False	13C2-PFOA	39181.02	100.00	PFDoA	0.165	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.27	561026.96	2456.26	407.3	False	13C2-PFOA	39181.02	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.26	38247.35	2572.24	436.8	False	13C2-PFOA	39181.02	100.00	PFTTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.49	592324.62	2429.10	910.7	False	13C2-PFOA	39181.02	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	29087.58	2494.45	715.5	False	13C2-PFOA	39181.02	100.00	PFTeDA	0.049	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.56	88567.06	2533.62	1448.9	False	d3-MeFOSAA	14899.66	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	48297.58	2576.60	650.1	True	d3-MeFOSAA	14899.66	400.00	NMeFOSAA	0.545	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.73	88941.71	2709.54	1278.0	False	d3-MeFOSAA	14899.66	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	6846.82	2861.46	1615938.8	True	d3-MeFOSAA	14899.66	400.00	NEtFOSAA	0.077	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	29708.37	93.14	781.4	False	13C2-PFOA	39181.02	100.00				
13C2-PFDA	515.0 / 470.0	3.39	31508.71	93.83	40994.6	False	13C2-PFOA	39181.02	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	14850.50	381.98	449.8	False	d3-MeFOSAA	14899.66	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	586657.14	2421.11	1219.3	False	13C2-PFOA	39181.02	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	14814.13	2269.28	373.7	False	13C2-PFOA	39181.02	100.00	HFPO-DA	0.025	0.027	✓
ADONA_1	377.0 / 251.0	2.26	1278165.91	2266.75	1078.8	False	13C2-PFOA	39181.02	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	12593.34	2245.07	349.9	False	13C2-PFOA	39181.02	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	23774.01	96.33	380.5	False	13C2-PFOA	39181.02	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.24	2161088.27	2309.81	1717.4	False	13C4-PFOS	171231.97	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.24	31689.81	2395.20	315.5	False	13C4-PFOS	171231.97	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.87	1670541.98	2271.67	1237.4	False	13C4-PFOS	171231.97	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.86	16725.06	2412.48	148.7	False	13C4-PFOS	171231.97	287.00	11CI-PF3OUdS	0.010	0.010	✓

Sample Name	KL71	Injection Vial	9
Sample ID	L8	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:16:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	1955740.82	4339.29	8809.7	False	13C4-PFOS	160982.47	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	576421.01	4307.08	3474.5	False	13C4-PFOS	160982.47	287.00	PFBS	0.295	0.288	✓
PFHxA_1	313.0 / 269.0	1.81	1325385.40	4942.22	454.7	False	13C2-PFOA	35879.69	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	99910.66	4890.33	391.3	False	13C2-PFOA	35879.69	100.00	PFHxA	0.075	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	1366904.05	4947.75	259.8	False	13C2-PFOA	35879.69	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	19893.94	4572.93	221.0	False	13C2-PFOA	35879.69	100.00	PFHpA	0.015	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	1952721.06	4529.70	1518.5	False	13C4-PFOS	160982.47	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	565162.23	4446.84	1032.8	False	13C4-PFOS	160982.47	287.00	PFHxS	0.289	0.297	✓
PFOA_1	413.0 / 369.0	2.64	1682943.36	4931.49	809.3	False	13C2-PFOA	35879.69	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	86819.73	4952.10	618.6	False	13C2-PFOA	35879.69	100.00	PFOA	0.052	0.052	✓
PFNA_1	463.0 / 419.0	3.04	1369057.66	4865.00	1012.7	False	13C2-PFOA	35879.69	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.04	454213.38	4945.53	809.7	False	13C2-PFOA	35879.69	100.00	PFNA	0.332	0.330	✓
PFOS_1	499.0 / 80.0	3.03	2921283.61	4569.76	562.5	True	13C4-PFOS	160982.47	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	551327.17	4619.65	790.7	True	13C4-PFOS	160982.47	287.00	PFOS	0.189	0.190	✓
PFDA_1	513.0 / 469.0	3.40	1451447.80	4966.03	873.6	False	13C2-PFOA	35879.69	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.40	53936.30	5079.56	812.2	False	13C2-PFOA	35879.69	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.72	1315028.17	4885.53	707.9	False	13C2-PFOA	35879.69	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	58547.42	5129.64	680.9	False	13C2-PFOA	35879.69	100.00	PFUnA	0.045	0.042	✓
PFDoA_1	613.0 / 569.0	4.01	1141321.79	4942.70	687.6	False	13C2-PFOA	35879.69	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	193955.78	5000.19	549.1	False	13C2-PFOA	35879.69	100.00	PFDoA	0.170	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.26	1033778.32	4942.49	552.5	False	13C2-PFOA	35879.69	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.26	64962.97	4770.93	649.0	False	13C2-PFOA	35879.69	100.00	PFTTrDA	0.063	0.069	✓
PFTeDA_1	713.0 / 669.0	4.48	1109187.91	4967.27	1140.7	False	13C2-PFOA	35879.69	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	52711.34	4936.26	955.7	False	13C2-PFOA	35879.69	100.00	PFTeDA	0.048	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.56	161274.89	4999.09	766.3	False	d3-MeFOSAA	13750.57	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	90435.07	5227.74	748.2	True	d3-MeFOSAA	13750.57	400.00	NMeFOSAA	0.561	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.72	167713.64	5536.23	1249.6	False	d3-MeFOSAA	13750.57	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	11874.94	5377.56	709.1	False	d3-MeFOSAA	13750.57	400.00	NEtFOSAA	0.071	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	28031.56	95.97	1002.4	False	13C2-PFOA	35879.69	100.00				
13C2-PFDA	515.0 / 470.0	3.39	28744.93	93.48	1616.9	False	13C2-PFOA	35879.69	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	13385.89	373.08	406.9	False	d3-MeFOSAA	13750.57	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	1097598.27	4946.54	1181.7	False	13C2-PFOA	35879.69	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	30602.87	5119.18	511.2	False	13C2-PFOA	35879.69	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.27	2446784.87	4738.48	1459.9	False	13C2-PFOA	35879.69	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.27	24411.31	4752.33	599.5	False	13C2-PFOA	35879.69	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	23912.09	105.81	310.9	False	13C2-PFOA	35879.69	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.24	3965086.96	4507.79	2433.1	False	13C4-PFOS	160982.47	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.24	55293.43	4445.30	463.6	False	13C4-PFOS	160982.47	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.86	3191175.66	4615.78	1349.4	False	13C4-PFOS	160982.47	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.86	29150.39	4472.47	205.4	False	13C4-PFOS	160982.47	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL72	Injection Vial	10
Sample ID	L9	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:25:48 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	4208024.43	9157.83	13868.1	False	13C4-PFOS	164123.79	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	1256827.78	9211.40	4775.6	False	13C4-PFOS	164123.79	287.00	PFBS	0.299	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	2829638.05	9099.11	624.5	False	13C2-PFOA	41606.45	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	221847.64	9364.17	509.7	False	13C2-PFOA	41606.45	100.00	PFHxA	0.078	0.076	✓
PFHpA_1	363.0 / 319.0	2.22	2883090.87	8999.45	326.7	False	13C2-PFOA	41606.45	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	45858.55	9090.38	317.8	False	13C2-PFOA	41606.45	100.00	PFHpA	0.016	0.015	✓
PFHxS_1	399.0 / 80.0	2.24	4088131.26	9301.67	1337.7	False	13C4-PFOS	164123.79	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	1214585.44	9373.75	994.5	False	13C4-PFOS	164123.79	287.00	PFHxS	0.297	0.297	✓
PFOA_1	413.0 / 369.0	2.64	3702986.70	9357.27	909.3	False	13C2-PFOA	41606.45	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	185248.28	9111.99	853.3	False	13C2-PFOA	41606.45	100.00	PFOA	0.050	0.052	✓
PFNA_1	463.0 / 419.0	3.03	2841400.96	8707.26	1287.3	False	13C2-PFOA	41606.45	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.03	909660.19	8541.22	1119.3	False	13C2-PFOA	41606.45	100.00	PFNA	0.320	0.330	✓
PFOS_1	499.0 / 80.0	3.03	6084499.62	9335.80	746.4	True	13C4-PFOS	164123.79	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	1118678.39	9194.16	1178.7	False	13C4-PFOS	164123.79	287.00	PFOS	0.184	0.190	✓
PFDA_1	513.0 / 469.0	3.39	3023866.59	8921.93	1159.9	False	13C2-PFOA	41606.45	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.39	112168.01	9109.66	1425.2	False	13C2-PFOA	41606.45	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.72	2840219.98	9099.49	1091.1	False	13C2-PFOA	41606.45	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	123746.93	9349.78	764.5	False	13C2-PFOA	41606.45	100.00	PFUnA	0.044	0.042	✓
PFDoA_1	613.0 / 569.0	4.00	2486689.49	9286.79	794.8	False	13C2-PFOA	41606.45	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	418652.42	9307.34	804.3	False	13C2-PFOA	41606.45	100.00	PFDoA	0.168	0.166	✓
PFTrDA_1	663.0 / 619.0	4.25	2158102.13	8897.71	729.2	False	13C2-PFOA	41606.45	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	144867.27	9174.77	771.9	False	13C2-PFOA	41606.45	100.00	PFTrDA	0.067	0.069	✓
PFTeDA_1	713.0 / 669.0	4.47	2372391.74	9161.94	1506.2	False	13C2-PFOA	41606.45	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	115525.89	9329.56	1256.2	False	13C2-PFOA	41606.45	100.00	PFTeDA	0.049	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.55	347582.87	8869.80	2478.9	False	d3-MeFOSAA	16702.83	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	201925.56	9609.47	1178.3	False	d3-MeFOSAA	16702.83	400.00	NMeFOSAA	0.581	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.71	340911.87	9264.43	1399.5	False	d3-MeFOSAA	16702.83	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	24293.61	9056.84	3462.9	False	d3-MeFOSAA	16702.83	400.00	NEtFOSAA	0.071	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.80	32530.89	96.05	917.3	False	13C2-PFOA	41606.45	100.00				
13C2-PFDA	515.0 / 470.0	3.39	36712.10	102.96	1491.6	False	13C2-PFOA	41606.45	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	16548.84	379.71	476.3	False	d3-MeFOSAA	16702.83	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	2365180.45	9192.01	2342.4	False	13C2-PFOA	41606.45	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	63199.58	9116.76	641.8	False	13C2-PFOA	41606.45	100.00	HFPO-DA	0.027	0.027	✓
ADONA_1	377.0 / 251.0	2.26	5278507.68	8815.41	1785.3	False	13C2-PFOA	41606.45	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	52461.56	8807.35	699.1	False	13C2-PFOA	41606.45	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	26639.61	101.65	356.5	False	13C2-PFOA	41606.45	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.23	8525711.05	9507.11	2289.0	False	13C4-PFOS	164123.79	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.23	119065.97	9389.06	697.7	False	13C4-PFOS	164123.79	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.85	6803322.57	9652.12	1232.4	False	13C4-PFOS	164123.79	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.85	62903.18	9466.35	231.3	False	13C4-PFOS	164123.79	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL74 ICC	Injection Vial	12
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:43:42 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.47	768.30	885.00	86.81
PFBS_2	298.9 / 99.0	1.47	762.24	885.00	86.13
PFHxA_1	313.0 / 269.0	1.80	1031.14	1000.00	103.11
PFHxA_2	313.0 / 119.0	1.80	980.02	1000.00	98.00
PFHpA_1	363.0 / 319.0	2.21	967.11	1000.00	96.71
PFHpA_2	363.0 / 169.0	2.21	1034.83	1000.00	103.48
PFHxS_1	399.0 / 80.0	2.23	816.93	945.00	86.45
PFHxS_2	399.0 / 99.0	2.23	795.16	945.00	84.14
PFOA_1	413.0 / 369.0	2.63	1049.20	1000.00	104.92
PFOA_2	413.0 / 169.0	2.63	1076.52	1000.00	107.65
PFNA_1	463.0 / 419.0	3.03	1098.23	1000.00	109.82
PFNA_2	463.0 / 219.0	3.02	1098.65	1000.00	109.87
PFOS_1	499.0 / 80.0	3.02	803.88	955.00	84.18
PFOS_2	499.0 / 99.0	3.02	925.46	955.00	96.91
PFDA_1	513.0 / 469.0	3.39	1045.41	1000.00	104.54
PFDA_2	513.0 / 219.0	3.39	1041.94	1000.00	104.19
PFUnA_1	563.0 / 519.0	3.71	1026.36	1000.00	102.64
PFUnA_2	563.0 / 269.0	3.71	1022.66	1000.00	102.27
PFDoA_1	613.0 / 569.0	4.00	1048.86	1000.00	104.89
PFDoA_2	613.0 / 319.0	4.00	1003.92	1000.00	100.39
PFTTrDA_1	663.0 / 619.0	4.25	996.27	1000.00	99.63
PFTTrDA_2	663.0 / 169.0	4.25	1076.66	1000.00	107.67
PFTTeDA_1	713.0 / 669.0	4.47	987.75	1000.00	98.77
PFTTeDA_2	713.0 / 169.0	4.47	1011.08	1000.00	101.11
NMeFOSAA_1	570.0 / 419.0	3.55	1257.64	1000.00	125.76
NMeFOSAA_2	570.0 / 512.0	3.55	972.18	1000.00	97.22
NEtFOSAA_1	584.0 / 419.0	3.71	1207.65	1000.00	120.76
NEtFOSAA_2	584.0 / 483.0	3.71	840.94	1000.00	84.09
13C2-PFHxA	315.0 / 270.0	1.79	98.88	100.00	98.88
13C2-PFDA	515.0 / 470.0	3.38	97.53	100.00	97.53
d5-EtFOSAA	589.0 / 419.0	3.70	405.00	400.00	101.25
HFPO-DA_1	285.0 / 169.0	1.92	1019.96	1000.00	102.00
HFPO-DA_2	285.0 / 118.8	1.93	1047.06	1000.00	104.71
ADONA_1	377.0 / 251.0	2.26	923.60	945.00	97.74
ADONA_2	377.0 / 85.0	2.26	921.56	945.00	97.52
13C3-HFPO-DA	287.0 / 169.0	1.92	98.57	100.00	98.57
9Cl-PF3ONS_1	531.0 / 351.0	3.23	883.05	930.00	94.95
9Cl-PF3ONS_2	531.0 / 83.0	3.23	911.68	930.00	98.03
11Cl-PF3OUdS_1	631.0 / 451.0	3.85	833.97	940.00	88.72
11Cl-PF3OUdS_2	631.0 / 83.0	3.85	906.30	940.00	96.41

Sample Name	KL69 CCV	Injection Vial	44
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:30:02 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.45	785.78	885.00	88.79
PFBS_2	298.9 / 99.0	1.45	786.44	885.00	88.86
PFHxA_1	313.0 / 269.0	1.78	939.53	1000.00	93.95
PFHxA_2	313.0 / 119.0	1.77	983.82	1000.00	98.38
PFHpA_1	363.0 / 319.0	2.19	905.64	1000.00	90.56
PFHpA_2	363.0 / 169.0	2.19	951.10	1000.00	95.11
PFHxS_1	399.0 / 80.0	2.21	845.33	912.00	92.69
PFHxS_2	399.0 / 99.0	2.20	829.69	912.00	90.97
PFOA_1	413.0 / 369.0	2.60	1049.97	1000.00	105.00
PFOA_2	413.0 / 169.0	2.60	1036.17	1000.00	103.62
PFNA_1	463.0 / 419.0	2.99	979.15	1000.00	97.91
PFNA_2	463.0 / 219.0	2.99	980.52	1000.00	98.05
PFOS_1	499.0 / 80.0	2.99	866.37	925.60	93.60
PFOS_2	499.0 / 99.0	2.99	912.78	925.60	98.61
PFDA_1	513.0 / 469.0	3.36	930.23	1000.00	93.02
PFDA_2	513.0 / 219.0	3.36	904.19	1000.00	90.42
PFUnA_1	563.0 / 519.0	3.67	942.45	1000.00	94.25
PFUnA_2	563.0 / 269.0	3.67	938.41	1000.00	93.84
PFDoA_1	613.0 / 569.0	3.96	958.85	1000.00	95.89
PFDoA_2	613.0 / 319.0	3.96	955.49	1000.00	95.55
PFTrDA_1	663.0 / 619.0	4.20	884.02	1000.00	88.40
PFTrDA_2	663.0 / 169.0	4.20	920.55	1000.00	92.05
PFTeDA_1	713.0 / 669.0	4.42	878.26	1000.00	87.83
PFTeDA_2	713.0 / 169.0	4.42	912.07	1000.00	91.21
NMeFOSAA_1	570.0 / 419.0	3.51	883.67	1000.00	88.37
NMeFOSAA_2	570.0 / 512.0	3.51	826.67	1000.00	82.67
NEtFOSAA_1	584.0 / 419.0	3.67	860.53	1000.00	86.05
NEtFOSAA_2	584.0 / 483.0	3.67	956.24	1000.00	95.62
13C2-PFHxA	315.0 / 270.0	1.77	94.36	100.00	94.36
13C2-PFDA	515.0 / 470.0	3.34	100.31	100.00	100.31
d5-EtFOSAA	589.0 / 419.0	3.66	360.98	400.00	90.25
HFPO-DA_1	285.0 / 169.0	1.90	941.88	1000.00	94.19
HFPO-DA_2	285.0 / 118.8	1.90	930.96	1000.00	93.10
ADONA_1	377.0 / 251.0	2.23	861.43	945.00	91.16
ADONA_2	377.0 / 85.0	2.23	808.73	945.00	85.58
13C3-HFPO-DA	287.0 / 169.0	1.90	93.35	100.00	93.35
9Cl-PF3ONS_1	531.0 / 351.0	3.20	869.64	930.00	93.51
9Cl-PF3ONS_2	531.0 / 83.0	3.19	964.46	930.00	103.71
11Cl-PF3OUdS_1	631.0 / 451.0	3.81	840.68	940.00	89.43
11Cl-PF3OUdS_2	631.0 / 83.0	3.81	716.95	940.00	76.27

Sample Name	KL68 CCV	Injection Vial	54
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 11:59:31 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.44	393.73	443.00	88.88
PFBS_2	298.9 / 99.0	1.44	402.34	443.00	90.82
PFHxA_1	313.0 / 269.0	1.76	460.77	500.00	92.15
PFHxA_2	313.0 / 119.0	1.76	536.12	500.00	107.22
PFHpA_1	363.0 / 319.0	2.17	478.19	500.00	95.64
PFHpA_2	363.0 / 169.0	2.17	568.85	500.00	113.77
PFHxS_1	399.0 / 80.0	2.19	459.34	456.00	100.73
PFHxS_2	399.0 / 99.0	2.19	434.74	456.00	95.34
PFOA_1	413.0 / 369.0	2.59	521.56	500.00	104.31
PFOA_2	413.0 / 169.0	2.59	518.03	500.00	103.61
PFNA_1	463.0 / 419.0	2.98	524.13	500.00	104.83
PFNA_2	463.0 / 219.0	2.98	511.30	500.00	102.26
PFOS_1	499.0 / 80.0	2.98	474.66	463.00	102.52
PFOS_2	499.0 / 99.0	2.98	498.63	463.00	107.70
PFDA_1	513.0 / 469.0	3.34	465.65	500.00	93.13
PFDA_2	513.0 / 219.0	3.34	374.88	500.00	74.98
PFUnA_1	563.0 / 519.0	3.66	472.18	500.00	94.44
PFUnA_2	563.0 / 269.0	3.66	518.01	500.00	103.60
PFDoA_1	613.0 / 569.0	3.95	500.40	500.00	100.08
PFDoA_2	613.0 / 319.0	3.95	468.48	500.00	93.70
PFTrDA_1	663.0 / 619.0	4.19	425.78	500.00	85.16
PFTrDA_2	663.0 / 169.0	4.19	488.26	500.00	97.65
PFTeDA_1	713.0 / 669.0	4.41	434.70	500.00	86.94
PFTeDA_2	713.0 / 169.0	4.41	468.29	500.00	93.66
NMeFOSAA_1	570.0 / 419.0	3.50	592.74	500.00	118.55
NMeFOSAA_2	570.0 / 512.0	3.50	556.60	500.00	111.32
NEtFOSAA_1	584.0 / 419.0	3.66	597.31	500.00	119.46
NEtFOSAA_2	584.0 / 483.0	3.66	663.36	500.00	132.67
13C2-PFHxA	315.0 / 270.0	1.76	85.70	100.00	85.70
13C2-PFDA	515.0 / 470.0	3.34	87.42	100.00	87.42
d5-EtFOSAA	589.0 / 419.0	3.65	500.05	400.00	125.01
HFPO-DA_1	285.0 / 169.0	1.89	469.99	500.00	94.00
HFPO-DA_2	285.0 / 118.8	1.88	442.25	500.00	88.45
ADONA_1	377.0 / 251.0	2.22	455.04	473.00	96.20
ADONA_2	377.0 / 85.0	2.23	370.90	473.00	78.42
13C3-HFPO-DA	287.0 / 169.0	1.88	84.06	100.00	84.06
9Cl-PF3ONS_1	531.0 / 351.0	3.19	468.75	465.00	100.81
9Cl-PF3ONS_2	531.0 / 83.0	3.18	406.46	465.00	87.41
11Cl-PF3OUdS_1	631.0 / 451.0	3.80	432.91	470.00	92.11
11Cl-PF3OUdS_2	631.0 / 83.0	3.80	431.28	470.00	91.76

Sample Name	KL69 CCV	Injection Vial	6
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:53:21 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.45	738.50	885.00	83.45
PFBS_2	298.9 / 99.0	1.44	736.71	885.00	83.24
PFHxA_1	313.0 / 269.0	1.77	902.99	1000.00	90.30
PFHxA_2	313.0 / 119.0	1.77	857.92	1000.00	85.79
PFHpA_1	363.0 / 319.0	2.18	904.51	1000.00	90.45
PFHpA_2	363.0 / 169.0	2.18	779.00	1000.00	77.90
PFHxS_1	399.0 / 80.0	2.20	826.45	912.00	90.62
PFHxS_2	399.0 / 99.0	2.20	794.44	912.00	87.11
PFOA_1	413.0 / 369.0	2.60	1045.98	1000.00	104.60
PFOA_2	413.0 / 169.0	2.60	1021.27	1000.00	102.13
PFNA_1	463.0 / 419.0	2.99	996.60	1000.00	99.66
PFNA_2	463.0 / 219.0	2.99	977.05	1000.00	97.70
PFOS_1	499.0 / 80.0	2.98	829.98	925.60	89.67
PFOS_2	499.0 / 99.0	2.98	867.78	925.60	93.75
PFDA_1	513.0 / 469.0	3.35	893.24	1000.00	89.32
PFDA_2	513.0 / 219.0	3.34	867.43	1000.00	86.74
PFUnA_1	563.0 / 519.0	3.67	877.11	1000.00	87.71
PFUnA_2	563.0 / 269.0	3.67	911.73	1000.00	91.17
PFDoA_1	613.0 / 569.0	3.95	869.44	1000.00	86.94
PFDoA_2	613.0 / 319.0	3.95	866.19	1000.00	86.62
PFTTrDA_1	663.0 / 619.0	4.20	845.00	1000.00	84.50
PFTTrDA_2	663.0 / 169.0	4.19	915.35	1000.00	91.54
PFTeDA_1	713.0 / 669.0	4.41	825.67	1000.00	82.57
PFTeDA_2	713.0 / 169.0	4.41	882.15	1000.00	88.22
NMeFOSAA_1	570.0 / 419.0	3.51	954.78	1000.00	95.48
NMeFOSAA_2	570.0 / 512.0	3.50	964.38	1000.00	96.44
NEtFOSAA_1	584.0 / 419.0	3.66	1023.25	1000.00	102.32
NEtFOSAA_2	584.0 / 483.0	3.67	995.03	1000.00	99.50
13C2-PFHxA	315.0 / 270.0	1.76	96.50	100.00	96.50
13C2-PFDA	515.0 / 470.0	3.34	98.30	100.00	98.30
d5-EtFOSAA	589.0 / 419.0	3.66	439.82	400.00	109.96
HFPO-DA_1	285.0 / 169.0	1.90	896.34	1000.00	89.63
HFPO-DA_2	285.0 / 118.8	1.88	971.65	1000.00	97.17
ADONA_1	377.0 / 251.0	2.23	846.08	945.00	89.53
ADONA_2	377.0 / 85.0	2.23	893.30	945.00	94.53
13C3-HFPO-DA	287.0 / 169.0	1.89	85.57	100.00	85.57
9Cl-PF3ONS_1	531.0 / 351.0	3.19	854.23	930.00	91.85
9Cl-PF3ONS_2	531.0 / 83.0	3.19	762.82	930.00	82.02
11Cl-PF3OUdS_1	631.0 / 451.0	3.80	788.43	940.00	83.88
11Cl-PF3OUdS_2	631.0 / 83.0	3.81	673.93	940.00	71.69

Sample Name	KL67 ISC	Injection Vial	2
Sample ID	ISC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:36:45 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.45	196.44	221.50	88.69
PFBS_2	298.9 / 99.0	1.44	197.97	221.50	89.38
PFHxA_1	313.0 / 269.0	1.77	246.17	250.00	98.47
PFHxA_2	313.0 / 119.0	1.76	236.89	250.00	94.76
PFHpA_1	363.0 / 319.0	2.18	215.97	250.00	86.39
PFHpA_2	363.0 / 169.0	2.18	307.46	250.00	122.98
PFHxS_1	399.0 / 80.0	2.20	230.75	228.00	101.21
PFHxS_2	399.0 / 99.0	2.20	241.17	228.00	105.78
PFOA_1	413.0 / 369.0	2.59	265.31	250.00	106.12
PFOA_2	413.0 / 169.0	2.58	320.35	250.00	128.14
PFNA_1	463.0 / 419.0	2.98	253.29	250.00	101.32
PFNA_2	463.0 / 219.0	2.97	245.74	250.00	98.30
PFOS_1	499.0 / 80.0	2.97	236.86	231.50	102.31
PFOS_2	499.0 / 99.0	2.97	259.98	231.50	112.30
PFDA_1	513.0 / 469.0	3.34	206.24	250.00	82.50
PFDA_2	513.0 / 219.0	3.33	212.20	250.00	84.88
PFUnA_1	563.0 / 519.0	3.65	206.93	250.00	82.77
PFUnA_2	563.0 / 269.0	3.65	246.78	250.00	98.71
PFDoA_1	613.0 / 569.0	3.93	216.85	250.00	86.74
PFDoA_2	613.0 / 319.0	3.93	229.89	250.00	91.96
PFTrDA_1	663.0 / 619.0	4.18	197.11	250.00	78.84
PFTrDA_2	663.0 / 169.0	4.17	243.91	250.00	97.57
PFTeDA_1	713.0 / 669.0	4.39	183.02	250.00	73.21
PFTeDA_2	713.0 / 169.0	4.39	219.64	250.00	87.85
NMeFOSAA_1	570.0 / 419.0	3.49	303.55	250.00	121.42
NMeFOSAA_2	570.0 / 512.0	3.49	324.56	250.00	129.82
NEtFOSAA_1	584.0 / 419.0	3.65	323.40	250.00	129.36
NEtFOSAA_2	584.0 / 483.0	3.65	259.73	250.00	103.89
13C2-PFHxA	315.0 / 270.0	1.76	78.26	100.00	78.26
13C2-PFDA	515.0 / 470.0	3.33	83.82	100.00	83.82
d5-EtFOSAA	589.0 / 419.0	3.64	449.23	400.00	112.31
HFPO-DA_1	285.0 / 169.0	1.89	214.32	250.00	85.73
HFPO-DA_2	285.0 / 118.8	1.89	284.16	250.00	113.66
ADONA_1	377.0 / 251.0	2.22	202.23	236.50	85.51
ADONA_2	377.0 / 85.0	2.23	305.43	236.50	129.15
13C3-HFPO-DA	287.0 / 169.0	1.89	79.75	100.00	79.75
9CI-PF3ONS_1	531.0 / 351.0	3.18	233.53	232.50	100.44
9CI-PF3ONS_2	531.0 / 83.0	3.18	221.86	232.50	95.42
11CI-PF3OUdS_1	631.0 / 451.0	3.79	229.63	235.00	97.72
11CI-PF3OUdS_2	631.0 / 83.0	3.78	196.56	235.00	83.64

Sample Name	KL68 CCV	Injection Vial	13
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:15:19 PM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.44	407.42	443.00	91.97
PFBS_2	298.9 / 99.0	1.43	406.38	443.00	91.73
PFHxA_1	313.0 / 269.0	1.75	483.20	500.00	96.64
PFHxA_2	313.0 / 119.0	1.75	479.75	500.00	95.95
PFHpA_1	363.0 / 319.0	2.17	480.92	500.00	96.18
PFHpA_2	363.0 / 169.0	2.17	601.69	500.00	120.34
PFHxS_1	399.0 / 80.0	2.19	456.51	456.00	100.11
PFHxS_2	399.0 / 99.0	2.19	465.81	456.00	102.15
PFOA_1	413.0 / 369.0	2.58	559.06	500.00	111.81
PFOA_2	413.0 / 169.0	2.58	606.10	500.00	121.22
PFNA_1	463.0 / 419.0	2.97	548.51	500.00	109.70
PFNA_2	463.0 / 219.0	2.97	511.91	500.00	102.38
PFOS_1	499.0 / 80.0	2.97	466.91	463.00	100.85
PFOS_2	499.0 / 99.0	2.97	468.30	463.00	101.15
PFDA_1	513.0 / 469.0	3.33	465.08	500.00	93.02
PFDA_2	513.0 / 219.0	3.33	468.66	500.00	93.73
PFUnA_1	563.0 / 519.0	3.64	452.14	500.00	90.43
PFUnA_2	563.0 / 269.0	3.64	498.61	500.00	99.72
PFDoA_1	613.0 / 569.0	3.93	457.66	500.00	91.53
PFDoA_2	613.0 / 319.0	3.92	484.01	500.00	96.80
PFTrDA_1	663.0 / 619.0	4.17	412.91	500.00	82.58
PFTrDA_2	663.0 / 169.0	4.17	456.60	500.00	91.32
PFTeDA_1	713.0 / 669.0	4.38	397.58	500.00	79.52
PFTeDA_2	713.0 / 169.0	4.38	475.02	500.00	95.00
NMeFOSAA_1	570.0 / 419.0	3.48	509.30	500.00	101.86
NMeFOSAA_2	570.0 / 512.0	3.48	536.36	500.00	107.27
NEtFOSAA_1	584.0 / 419.0	3.64	520.92	500.00	104.18
NEtFOSAA_2	584.0 / 483.0	3.64	470.68	500.00	94.14
13C2-PFHxA	315.0 / 270.0	1.75	86.20	100.00	86.20
13C2-PFDA	515.0 / 470.0	3.32	85.61	100.00	85.61
d5-EtFOSAA	589.0 / 419.0	3.63	368.76	400.00	92.19
HFPO-DA_1	285.0 / 169.0	1.88	482.72	500.00	96.54
HFPO-DA_2	285.0 / 118.8	1.88	497.85	500.00	99.57
ADONA_1	377.0 / 251.0	2.21	444.11	473.00	93.89
ADONA_2	377.0 / 85.0	2.21	455.83	473.00	96.37
13C3-HFPO-DA	287.0 / 169.0	1.88	86.94	100.00	86.94
9CI-PF3ONS_1	531.0 / 351.0	3.17	458.88	465.00	98.68
9CI-PF3ONS_2	531.0 / 83.0	3.17	471.45	465.00	101.39
11CI-PF3OUdS_1	631.0 / 451.0	3.78	472.56	470.00	100.54
11CI-PF3OUdS_2	631.0 / 83.0	3.78	426.22	470.00	90.69

Sample Name	KL74 ICC	Injection Vial	12
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:43:42 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	376204.48	768.30	3137.8	False	13C4-PFOS	174896.40	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	110828.40	762.24	1340.3	False	13C4-PFOS	174896.40	287.00	PFBS	0.295	0.288	✓
PFHxA_1	313.0 / 269.0	1.80	270338.63	1031.14	173.3	False	13C2-PFOA	35076.75	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	19573.93	980.02	138.6	False	13C2-PFOA	35076.75	100.00	PFHxA	0.072	0.076	✓
PFHpA_1	363.0 / 319.0	2.21	261201.12	967.11	116.8	False	13C2-PFOA	35076.75	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	4401.13	1034.83	101.0	False	13C2-PFOA	35076.75	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.23	382610.58	816.93	1363.6	False	13C4-PFOS	174896.40	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	109793.86	795.16	586.6	False	13C4-PFOS	174896.40	287.00	PFHxS	0.287	0.297	✓
PFOA_1	413.0 / 369.0	2.63	350042.28	1049.20	357.5	False	13C2-PFOA	35076.75	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.63	18451.17	1076.52	313.6	False	13C2-PFOA	35076.75	100.00	PFOA	0.053	0.052	✓
PFNA_1	463.0 / 419.0	3.03	302136.09	1098.23	509.1	False	13C2-PFOA	35076.75	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	98645.89	1098.65	331.4	False	13C2-PFOA	35076.75	100.00	PFNA	0.326	0.330	✓
PFOS_1	499.0 / 80.0	3.02	558309.89	803.88	1082.9	False	13C4-PFOS	174896.40	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.02	119994.12	925.46	1158.8	False	13C4-PFOS	174896.40	287.00	PFOS	0.215	0.190	✓
PFDA_1	513.0 / 469.0	3.39	298709.75	1045.41	392.7	False	13C2-PFOA	35076.75	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.39	10816.02	1041.94	597.4	False	13C2-PFOA	35076.75	100.00	PFDA	0.036	0.034	✓
PFUnA_1	563.0 / 519.0	3.71	270081.02	1026.36	296.6	False	13C2-PFOA	35076.75	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	11411.03	1022.66	363.5	False	13C2-PFOA	35076.75	100.00	PFUnA	0.042	0.042	✓
PFDoA_1	613.0 / 569.0	4.00	236772.33	1048.86	373.0	False	13C2-PFOA	35076.75	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	38070.32	1003.92	414.0	False	13C2-PFOA	35076.75	100.00	PFDoA	0.161	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.25	203718.14	996.27	270.4	False	13C2-PFOA	35076.75	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.25	14332.22	1076.66	348.8	False	13C2-PFOA	35076.75	100.00	PFTTrDA	0.070	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.47	215627.84	987.75	531.8	False	13C2-PFOA	35076.75	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.47	10555.14	1011.08	474.4	False	13C2-PFOA	35076.75	100.00	PFTTeDA	0.049	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.55	41088.89	1257.64	1444.0	False	d3-MeFOSAA	13925.57	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	17031.85	972.18	23404.3	False	d3-MeFOSAA	13925.57	400.00	NMeFOSAA	0.415	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.71	37049.93	1207.65	2227.6	False	d3-MeFOSAA	13925.57	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	1880.63	840.94	5507.1	False	d3-MeFOSAA	13925.57	400.00	NEtFOSAA	0.051	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.79	28235.30	98.88	725.0	False	13C2-PFOA	35076.75	100.00				
13C2-PFDA	515.0 / 470.0	3.38	29319.43	97.53	2013.4	False	13C2-PFOA	35076.75	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.70	14716.17	405.00	553.4	False	d3-MeFOSAA	13925.57	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.92	221256.32	1019.96	687.8	False	13C2-PFOA	35076.75	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	6119.32	1047.06	265.7	False	13C2-PFOA	35076.75	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.26	466242.84	923.60	1069.0	False	13C2-PFOA	35076.75	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	4627.85	921.56	523.0	False	13C2-PFOA	35076.75	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	21778.44	98.57	292.2	False	13C2-PFOA	35076.75	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.23	843872.18	883.05	1558.7	False	13C4-PFOS	174896.40	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.23	12320.15	911.68	251.1	False	13C4-PFOS	174896.40	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.85	626407.32	833.97	1114.1	False	13C4-PFOS	174896.40	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.85	6417.56	906.30	81.3	False	13C4-PFOS	174896.40	287.00	11CI-PF3OUdS	0.010	0.010	✓

Sample Name	KL69 CCV	Injection Vial	44
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:30:02 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	336137.53	785.78	3214.9	False	13C4-PFOS	152791.97	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	99895.44	786.44	1329.1	False	13C4-PFOS	152791.97	287.00	PFBS	0.297	0.288	✓
PFHxA_1	313.0 / 269.0	1.78	236213.14	939.53	149.7	False	13C2-PFOA	33637.45	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.77	18843.55	983.82	124.6	False	13C2-PFOA	33637.45	100.00	PFHxA	0.080	0.076	✓
PFHpA_1	363.0 / 319.0	2.19	234562.26	905.64	99.2	False	13C2-PFOA	33637.45	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	3879.05	951.10	83.6	False	13C2-PFOA	33637.45	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	345875.72	845.33	1284.0	False	13C4-PFOS	152791.97	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	100082.26	829.69	575.7	False	13C4-PFOS	152791.97	287.00	PFHxS	0.289	0.297	✓
PFOA_1	413.0 / 369.0	2.60	335924.43	1049.97	354.9	False	13C2-PFOA	33637.45	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.60	17030.74	1036.17	293.4	False	13C2-PFOA	33637.45	100.00	PFOA	0.051	0.052	✓
PFNA_1	463.0 / 419.0	2.99	258322.49	979.15	433.8	False	13C2-PFOA	33637.45	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.99	84426.45	980.52	323.6	False	13C2-PFOA	33637.45	100.00	PFNA	0.327	0.330	✓
PFOS_1	499.0 / 80.0	2.99	525658.00	866.37	553.6	True	13C4-PFOS	152791.97	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	103392.02	912.78	1048.6	False	13C4-PFOS	152791.97	287.00	PFOS	0.197	0.190	✓
PFDA_1	513.0 / 469.0	3.36	254890.94	930.23	400.7	False	13C2-PFOA	33637.45	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	9000.94	904.19	594.9	False	13C2-PFOA	33637.45	100.00	PFDA	0.035	0.034	✓
PFUnA_1	563.0 / 519.0	3.67	237824.39	942.45	351.7	False	13C2-PFOA	33637.45	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.67	10041.26	938.41	473.5	False	13C2-PFOA	33637.45	100.00	PFUnA	0.042	0.042	✓
PFDoA_1	613.0 / 569.0	3.96	207573.00	958.85	401.0	False	13C2-PFOA	33637.45	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	34746.95	955.49	327.3	False	13C2-PFOA	33637.45	100.00	PFDoA	0.167	0.166	✓
PFTrDA_1	663.0 / 619.0	4.20	173348.49	884.02	315.7	False	13C2-PFOA	33637.45	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.20	11751.22	920.55	352.5	False	13C2-PFOA	33637.45	100.00	PFTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	183858.26	878.26	605.3	False	13C2-PFOA	33637.45	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	9130.85	912.07	449.7	False	13C2-PFOA	33637.45	100.00	PFTeDA	0.050	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.51	30307.04	883.67	36988.0	False	d3-MeFOSAA	14618.41	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.51	15203.14	826.67	19373.6	False	d3-MeFOSAA	14618.41	400.00	NMeFOSAA	0.502	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.67	27714.10	860.53	805.3	False	d3-MeFOSAA	14618.41	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.67	2244.89	956.24	136.7	True	d3-MeFOSAA	14618.41	400.00	NEtFOSAA	0.081	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	25838.12	94.36	772.8	False	13C2-PFOA	33637.45	100.00				
13C2-PFDA	515.0 / 470.0	3.34	28916.61	100.31	8138.1	False	13C2-PFOA	33637.45	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	13769.11	360.98	735.4	False	d3-MeFOSAA	14618.41	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.90	195935.95	941.88	769.9	False	13C2-PFOA	33637.45	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.90	5217.58	930.96	194.8	False	13C2-PFOA	33637.45	100.00	HFPO-DA	0.027	0.027	✓
ADONA_1	377.0 / 251.0	2.23	417015.26	861.43	992.8	False	13C2-PFOA	33637.45	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	3894.59	808.73	209.7	False	13C2-PFOA	33637.45	100.00	ADONA	0.009	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	19779.31	93.35	390.5	False	13C2-PFOA	33637.45	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.20	726023.89	869.64	1806.8	False	13C4-PFOS	152791.97	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.19	11386.18	964.46	249.3	False	13C4-PFOS	152791.97	287.00	9CI-PF3ONS	0.016	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	551640.96	840.68	1215.7	False	13C4-PFOS	152791.97	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	4435.13	716.95	79.1	False	13C4-PFOS	152791.97	287.00	11CI-PF3OUdS	0.008	0.010	✓



Sample Name	KL68 CCV	Injection Vial	54
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 11:59:31 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	180228.24	393.73	4537.4	False	13C4-PFOS	163495.38	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.44	54686.24	402.34	1141.6	False	13C4-PFOS	163495.38	287.00	PFBS	0.303	0.288	✓
PFHxA_1	313.0 / 269.0	1.76	128147.29	460.77	119.2	False	13C2-PFOA	37209.56	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.76	11359.08	536.12	92.6	False	13C2-PFOA	37209.56	100.00	PFHxA	0.089	0.076	✓
PFHpA_1	363.0 / 319.0	2.17	137004.94	478.19	83.2	False	13C2-PFOA	37209.56	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	2566.43	568.85	42.0	False	13C2-PFOA	37209.56	100.00	PFHpA	0.019	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	201109.55	459.34	875.1	False	13C4-PFOS	163495.38	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.19	56114.40	434.74	339.8	False	13C4-PFOS	163495.38	287.00	PFHxS	0.279	0.297	✓
PFOA_1	413.0 / 369.0	2.59	184585.74	521.56	344.8	False	13C2-PFOA	37209.56	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.59	9418.75	518.03	341.6	False	13C2-PFOA	37209.56	100.00	PFOA	0.051	0.052	✓
PFNA_1	463.0 / 419.0	2.98	152961.60	524.13	441.6	False	13C2-PFOA	37209.56	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.98	48700.45	511.30	287.1	False	13C2-PFOA	37209.56	100.00	PFNA	0.318	0.330	✓
PFOS_1	499.0 / 80.0	2.98	308170.32	474.66	588.5	True	13C4-PFOS	163495.38	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.98	60437.83	498.63	886.5	False	13C4-PFOS	163495.38	287.00	PFOS	0.196	0.190	✓
PFDA_1	513.0 / 469.0	3.34	141143.54	465.65	308.4	False	13C2-PFOA	37209.56	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.34	4128.13	374.88	339.3	False	13C2-PFOA	37209.56	100.00	PFDA	0.029	0.034	✓
PFUnA_1	563.0 / 519.0	3.66	131805.96	472.18	320.2	False	13C2-PFOA	37209.56	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.66	6131.51	518.01	320.3	False	13C2-PFOA	37209.56	100.00	PFUnA	0.047	0.042	✓
PFDoA_1	613.0 / 569.0	3.95	119829.44	500.40	362.0	False	13C2-PFOA	37209.56	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.95	18845.85	468.48	408.7	False	13C2-PFOA	37209.56	100.00	PFDoA	0.157	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.19	92357.39	425.78	250.1	False	13C2-PFOA	37209.56	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.19	6894.81	488.26	219.3	False	13C2-PFOA	37209.56	100.00	PFTTrDA	0.075	0.069	✓
PFTeDA_1	713.0 / 669.0	4.41	100666.93	434.70	427.2	False	13C2-PFOA	37209.56	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.41	5185.95	468.29	395.0	False	13C2-PFOA	37209.56	100.00	PFTeDA	0.052	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.50	16563.83	592.74	1254.6	False	d3-MeFOSAA	11910.90	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.50	8340.39	556.60	1797765.3	True	d3-MeFOSAA	11910.90	400.00	NMeFOSAA	0.504	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.66	15673.92	597.31	456.6	False	d3-MeFOSAA	11910.90	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.66	1268.87	663.36	3561.2	True	d3-MeFOSAA	11910.90	400.00	NEtFOSAA	0.081	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	25959.46	85.70	843.1	False	13C2-PFOA	37209.56	100.00				
13C2-PFDA	515.0 / 470.0	3.34	27878.24	87.42	1157.0	False	13C2-PFOA	37209.56	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.65	15540.93	500.05	519.1	False	d3-MeFOSAA	11910.90	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.89	108151.91	469.99	610.8	False	13C2-PFOA	37209.56	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.88	2741.81	442.25	155.5	False	13C2-PFOA	37209.56	100.00	HFPO-DA	0.025	0.027	✓
ADONA_1	377.0 / 251.0	2.22	243676.21	455.04	633.4	False	13C2-PFOA	37209.56	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	1975.84	370.90	200.3	False	13C2-PFOA	37209.56	100.00	ADONA	0.008	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	19702.09	84.06	315.1	False	13C2-PFOA	37209.56	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.19	418750.06	468.75	1534.0	False	13C4-PFOS	163495.38	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.18	5134.70	406.46	160.8	False	13C4-PFOS	163495.38	287.00	9CI-PF3ONS	0.012	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.80	303970.64	432.91	1049.2	False	13C4-PFOS	163495.38	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.80	2854.88	431.28	61.2	False	13C4-PFOS	163495.38	287.00	11CI-PF3OUdS	0.009	0.010	✓

Sample Name	KL69 CCV	Injection Vial	6
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:53:21 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	347376.27	738.50	5403.6	False	13C4-PFOS	168011.00	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.44	102898.88	736.71	1526.0	False	13C4-PFOS	168011.00	287.00	PFBS	0.296	0.288	✓
PFHxA_1	313.0 / 269.0	1.77	244214.18	902.99	181.0	False	13C2-PFOA	36183.87	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.77	17676.09	857.92	123.2	False	13C2-PFOA	36183.87	100.00	PFHxA	0.072	0.076	✓
PFHpA_1	363.0 / 319.0	2.18	252006.67	904.51	113.8	False	13C2-PFOA	36183.87	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.18	3417.67	779.00	65.2	False	13C2-PFOA	36183.87	100.00	PFHpA	0.014	0.015	✓
PFHxS_1	399.0 / 80.0	2.20	371831.76	826.45	970.7	False	13C4-PFOS	168011.00	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	105376.59	794.44	507.5	False	13C4-PFOS	168011.00	287.00	PFHxS	0.283	0.297	✓
PFOA_1	413.0 / 369.0	2.60	359982.36	1045.98	353.8	False	13C2-PFOA	36183.87	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.60	18056.55	1021.27	296.2	False	13C2-PFOA	36183.87	100.00	PFOA	0.050	0.052	✓
PFNA_1	463.0 / 419.0	2.99	282830.75	996.60	484.2	False	13C2-PFOA	36183.87	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.99	90495.86	977.05	349.9	False	13C2-PFOA	36183.87	100.00	PFNA	0.320	0.330	✓
PFOS_1	499.0 / 80.0	2.98	553739.92	829.98	596.2	True	13C4-PFOS	168011.00	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.98	108086.41	867.78	590.6	True	13C4-PFOS	168011.00	287.00	PFOS	0.195	0.190	✓
PFDA_1	513.0 / 469.0	3.35	263284.37	893.24	383.6	False	13C2-PFOA	36183.87	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.34	9288.70	867.43	449.2	False	13C2-PFOA	36183.87	100.00	PFDA	0.035	0.034	✓
PFUnA_1	563.0 / 519.0	3.67	238091.58	877.11	437.2	False	13C2-PFOA	36183.87	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.67	10494.32	911.73	574.0	False	13C2-PFOA	36183.87	100.00	PFUnA	0.044	0.042	✓
PFDoA_1	613.0 / 569.0	3.95	202465.25	869.44	385.7	False	13C2-PFOA	36183.87	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.95	33884.12	866.19	501.8	False	13C2-PFOA	36183.87	100.00	PFDoA	0.167	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.20	178239.32	845.00	289.0	False	13C2-PFOA	36183.87	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.19	12569.50	915.35	351.1	False	13C2-PFOA	36183.87	100.00	PFTTrDA	0.071	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.41	185934.33	825.67	527.4	False	13C2-PFOA	36183.87	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.41	9499.84	882.15	487.0	False	13C2-PFOA	36183.87	100.00	PFTTeDA	0.051	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.51	29703.70	954.78	1078.5	False	d3-MeFOSAA	13260.27	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.50	16087.98	964.38	2771.0	False	d3-MeFOSAA	13260.27	400.00	NMeFOSAA	0.542	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.66	29892.85	1023.25	541.0	False	d3-MeFOSAA	13260.27	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.67	2118.92	995.03	5338.3	True	d3-MeFOSAA	13260.27	400.00	NEtFOSAA	0.071	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	28425.75	96.50	1146.6	False	13C2-PFOA	36183.87	100.00				
13C2-PFDA	515.0 / 470.0	3.34	30482.51	98.30	3084.4	False	13C2-PFOA	36183.87	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	15217.76	439.82	689.2	False	d3-MeFOSAA	13260.27	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.90	200576.19	896.34	862.7	False	13C2-PFOA	36183.87	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.88	5857.87	971.65	236.1	False	13C2-PFOA	36183.87	100.00	HFPO-DA	0.029	0.027	✓
ADONA_1	377.0 / 251.0	2.23	440589.96	846.08	801.6	False	13C2-PFOA	36183.87	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	4627.53	893.30	258.6	False	13C2-PFOA	36183.87	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	19503.53	85.57	397.6	False	13C2-PFOA	36183.87	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.19	784194.21	854.23	2004.5	False	13C4-PFOS	168011.00	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.19	9902.67	762.82	215.1	False	13C4-PFOS	168011.00	287.00	9CI-PF3ONS	0.013	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.80	568892.81	788.43	1285.0	False	13C4-PFOS	168011.00	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	4584.26	673.93	82.6	False	13C4-PFOS	168011.00	287.00	11CI-PF3OUdS	0.008	0.010	✓

Sample Name	KL67 ISC	Injection Vial	2
Sample ID	ISC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:36:45 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	79695.36	196.44	2045.2	False	13C4-PFOS	144908.58	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.44	23849.66	197.97	785.4	False	13C4-PFOS	144908.58	287.00	PFBS	0.299	0.288	✓
PFHxA_1	313.0 / 269.0	1.77	64709.00	246.17	67.9	False	13C2-PFOA	35169.09	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.76	4743.92	236.89	51.1	False	13C2-PFOA	35169.09	100.00	PFHxA	0.073	0.076	✓
PFHpA_1	363.0 / 319.0	2.18	58484.73	215.97	43.7	True	13C2-PFOA	35169.09	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.18	1311.08	307.46	31.4	True	13C2-PFOA	35169.09	100.00	PFHpA	0.022	0.015	✓
PFHxS_1	399.0 / 80.0	2.20	89542.51	230.75	535.1	False	13C4-PFOS	144908.58	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	27590.46	241.17	279.9	False	13C4-PFOS	144908.58	287.00	PFHxS	0.308	0.297	✓
PFOA_1	413.0 / 369.0	2.59	88747.55	265.31	216.6	False	13C2-PFOA	35169.09	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	5505.13	320.35	128.7	False	13C2-PFOA	35169.09	100.00	PFOA	0.062	0.052	✓
PFNA_1	463.0 / 419.0	2.98	69867.04	253.29	251.3	False	13C2-PFOA	35169.09	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	22122.94	245.74	197.0	False	13C2-PFOA	35169.09	100.00	PFNA	0.317	0.330	✓
PFOS_1	499.0 / 80.0	2.97	136296.19	236.86	488.3	True	13C4-PFOS	144908.58	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	27929.03	259.98	770.5	True	13C4-PFOS	144908.58	287.00	PFOS	0.205	0.190	✓
PFDA_1	513.0 / 469.0	3.34	59084.80	206.24	231.9	False	13C2-PFOA	35169.09	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.33	2208.57	212.20	452.2	False	13C2-PFOA	35169.09	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.65	54594.74	206.93	228.8	False	13C2-PFOA	35169.09	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.65	2760.89	246.78	252.1	False	13C2-PFOA	35169.09	100.00	PFUnA	0.051	0.042	✓
PFDoA_1	613.0 / 569.0	3.93	49080.87	216.85	215.0	False	13C2-PFOA	35169.09	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.93	8740.85	229.89	242.2	False	13C2-PFOA	35169.09	100.00	PFDoA	0.178	0.166	✓
PFTrDA_1	663.0 / 619.0	4.18	40411.39	197.11	179.6	False	13C2-PFOA	35169.09	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	3255.44	243.91	149.1	False	13C2-PFOA	35169.09	100.00	PFTrDA	0.081	0.069	✓
PFTeDA_1	713.0 / 669.0	4.39	40059.45	183.02	280.6	False	13C2-PFOA	35169.09	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	2298.90	219.64	219.5	False	13C2-PFOA	35169.09	100.00	PFTeDA	0.057	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.49	7409.69	303.55	2011.8	False	d3-MeFOSAA	10404.27	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.49	4248.26	324.56	959840.4	False	d3-MeFOSAA	10404.27	400.00	NMeFOSAA	0.573	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.65	7412.86	323.40	326.1	False	d3-MeFOSAA	10404.27	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.65	433.97	259.73	319.0	False	d3-MeFOSAA	10404.27	400.00	NEtFOSAA	0.059	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	22404.63	78.26	913.0	False	13C2-PFOA	35169.09	100.00				
13C2-PFDA	515.0 / 470.0	3.33	25263.46	83.82	2874.5	False	13C2-PFOA	35169.09	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.64	12195.61	449.23	412.1	False	d3-MeFOSAA	10404.27	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.89	46614.43	214.32	334.4	False	13C2-PFOA	35169.09	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.89	1665.09	284.16	81.2	False	13C2-PFOA	35169.09	100.00	HFPO-DA	0.036	0.027	✓
ADONA_1	377.0 / 251.0	2.22	102357.08	202.23	579.5	False	13C2-PFOA	35169.09	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.23	1537.85	305.43	162.1	False	13C2-PFOA	35169.09	100.00	ADONA	0.015	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	17667.15	79.75	368.7	False	13C2-PFOA	35169.09	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.18	184901.84	233.53	948.1	False	13C4-PFOS	144908.58	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.18	2484.07	221.86	86.5	False	13C4-PFOS	144908.58	287.00	9CI-PF3ONS	0.013	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.79	142906.42	229.63	875.5	False	13C4-PFOS	144908.58	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	1153.22	196.56	33.6	False	13C4-PFOS	144908.58	287.00	11CI-PF3OUdS	0.008	0.010	✓

Sample Name	KL68 CCV	Injection Vial	13
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:15:19 PM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	169611.08	407.42	3041.5	False	13C4-PFOS	148694.23	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.43	50234.36	406.38	1100.1	False	13C4-PFOS	148694.23	287.00	PFBS	0.296	0.288	✓
PFHxA_1	313.0 / 269.0	1.75	123025.10	483.20	105.7	False	13C2-PFOA	34064.15	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.75	9305.37	479.75	94.1	False	13C2-PFOA	34064.15	100.00	PFHxA	0.076	0.076	✓
PFHpA_1	363.0 / 319.0	2.17	126140.49	480.92	61.8	False	13C2-PFOA	34064.15	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	2485.12	601.69	48.1	False	13C2-PFOA	34064.15	100.00	PFHpA	0.020	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	181776.01	456.51	774.9	False	13C4-PFOS	148694.23	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.19	54682.43	465.81	342.0	False	13C4-PFOS	148694.23	287.00	PFHxS	0.301	0.297	✓
PFOA_1	413.0 / 369.0	2.58	181133.72	559.06	285.7	False	13C2-PFOA	34064.15	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	10088.40	606.10	206.4	False	13C2-PFOA	34064.15	100.00	PFOA	0.056	0.052	✓
PFNA_1	463.0 / 419.0	2.97	146544.53	548.51	383.2	False	13C2-PFOA	34064.15	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	44636.85	511.91	271.3	False	13C2-PFOA	34064.15	100.00	PFNA	0.305	0.330	✓
PFOS_1	499.0 / 80.0	2.97	275696.72	466.91	433.3	True	13C4-PFOS	148694.23	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	51622.85	468.30	676.7	True	13C4-PFOS	148694.23	287.00	PFOS	0.187	0.190	✓
PFDA_1	513.0 / 469.0	3.33	129054.42	465.08	263.1	False	13C2-PFOA	34064.15	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.33	4724.53	468.66	306.5	False	13C2-PFOA	34064.15	100.00	PFDA	0.037	0.034	✓
PFUnA_1	563.0 / 519.0	3.64	115543.57	452.14	299.0	False	13C2-PFOA	34064.15	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.64	5402.93	498.61	258.0	False	13C2-PFOA	34064.15	100.00	PFUnA	0.047	0.042	✓
PFDoA_1	613.0 / 569.0	3.93	100330.23	457.66	269.2	False	13C2-PFOA	34064.15	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	17824.71	484.01	267.7	False	13C2-PFOA	34064.15	100.00	PFDoA	0.178	0.166	✓
PFTrDA_1	663.0 / 619.0	4.17	81994.97	412.91	244.2	False	13C2-PFOA	34064.15	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	5902.62	456.60	249.3	False	13C2-PFOA	34064.15	100.00	PFTrDA	0.072	0.069	✓
PFTeDA_1	713.0 / 669.0	4.38	84287.27	397.58	438.0	False	13C2-PFOA	34064.15	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.38	4815.82	475.02	329.3	False	13C2-PFOA	34064.15	100.00	PFTeDA	0.057	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.48	14609.20	509.30	3874.3	False	d3-MeFOSAA	12226.35	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.48	8250.01	536.36	108464.0	False	d3-MeFOSAA	12226.35	400.00	NMeFOSAA	0.565	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.64	14031.54	520.92	454.3	False	d3-MeFOSAA	12226.35	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.64	924.17	470.68	394155.9	False	d3-MeFOSAA	12226.35	400.00	NEtFOSAA	0.066	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	23902.78	86.20	1015.7	False	13C2-PFOA	34064.15	100.00				
13C2-PFDA	515.0 / 470.0	3.32	24993.32	85.61	1884.6	False	13C2-PFOA	34064.15	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	11764.09	368.76	394.0	False	d3-MeFOSAA	12226.35	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.88	101691.34	482.72	504.7	False	13C2-PFOA	34064.15	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.88	2825.56	497.85	163.6	False	13C2-PFOA	34064.15	100.00	HFPO-DA	0.028	0.027	✓
ADONA_1	377.0 / 251.0	2.21	217720.91	444.11	609.3	False	13C2-PFOA	34064.15	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.21	2222.98	455.83	184.0	False	13C2-PFOA	34064.15	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	18654.46	86.94	322.3	False	13C2-PFOA	34064.15	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.17	372825.69	458.88	1314.0	False	13C4-PFOS	148694.23	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.17	5416.54	471.45	181.4	False	13C4-PFOS	148694.23	287.00	9CI-PF3ONS	0.015	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.78	301771.85	472.56	1265.4	False	13C4-PFOS	148694.23	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	2565.96	426.22	50.0	False	13C4-PFOS	148694.23	287.00	11CI-PF3OUdS	0.009	0.010	✓

Raw Analytical Data

Sample Name	KL73 IB	Injection Vial	11
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:34:45 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	2.26	1797.85	4.25	57.9	False	13C4-PFOS	158011.40	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	756.17	6.06	12.4	True	13C4-PFOS	158011.40	287.00	PFHxS	0.421	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	3.03	3436.05	5.48	30.1	True	13C4-PFOS	158011.40	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.04	781.77	6.67	35.4	True	13C4-PFOS	158011.40	287.00	PFOS	0.228	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	4.00	1038.44	4.64	23.6	True	13C2-PFOA	34749.37	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	294.11	7.83	34.8	True	13C2-PFOA	34749.37	100.00	PFDoA	0.283	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	4.47	1455.32	6.73	51.6	False	13C2-PFOA	34749.37	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	134.70	13.02	17.7	False	13C2-PFOA	34749.37	100.00	PFTeDA	0.093	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13174.88	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13174.88	400.00	NMeFOSAA	N/A	0.553	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13174.88	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	29.58	13.98	341.1	False	d3-MeFOSAA	13174.88	400.00	NEtFOSAA	N/A	0.079	
13C2-PFHxA	315.0 / 270.0	1.80	27068.84	95.69	1109.9	False	13C2-PFOA	34749.37	100.00				
13C2-PFDA	515.0 / 470.0	3.39	27477.48	92.27	1235.3	False	13C2-PFOA	34749.37	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.71	14257.37	414.74	337.1	False	d3-MeFOSAA	13174.88	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	34749.37	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	19814.88	90.53	367.3	False	13C2-PFOA	34749.37	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 6:50:36 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	158011.40	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	CU244PB-FS(0)	Injection Vial	46
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:47:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13349.59	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13349.59	400.00	NMeFOSAA	N/A	0.553	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13349.59	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13349.59	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	27689.87	111.02	762.4	False	13C2-PFOA	30638.80	100.00				
13C2-PFDA	515.0 / 470.0	3.34	27110.98	103.25	641.8	False	13C2-PFOA	30638.80	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	12249.92	351.68	357.6	False	d3-MeFOSAA	13349.59	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30638.80	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	20317.06	105.28	282.4	False	13C2-PFOA	30638.80	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 6:50:36 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	162013.19	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	CJ245LCS-FS(0)	Injection Vial	47
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:56:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.45	2033380.65	4621.98	5132.3	False	13C4-PFOS	157136.16	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.45	612689.35	4690.14	2222.3	False	13C4-PFOS	157136.16	287.00	PFBS	0.301	0.288	✓
PFHxA_1	313.0 / 269.0	1.78	1570321.59	6078.33	399.1	False	13C2-PFOA	34564.73	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.78	121193.94	6157.76	330.9	False	13C2-PFOA	34564.73	100.00	PFHxA	0.077	0.076	✓
PFHpA_1	363.0 / 319.0	2.19	1431684.32	5379.38	263.3	False	13C2-PFOA	34564.73	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	23877.01	5697.30	248.7	False	13C2-PFOA	34564.73	100.00	PFHpA	0.017	0.015	✓
PFHxS_1	399.0 / 80.0	2.21	2090845.89	4968.82	2344.1	False	13C4-PFOS	157136.16	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	612392.75	4936.40	1406.5	False	13C4-PFOS	157136.16	287.00	PFHxS	0.293	0.297	✓
PFOA_1	413.0 / 369.0	2.61	1786968.39	5435.52	750.9	False	13C2-PFOA	34564.73	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.60	93675.10	5546.39	704.4	False	13C2-PFOA	34564.73	100.00	PFOA	0.052	0.052	✓
PFNA_1	463.0 / 419.0	2.99	1508203.23	5563.35	863.1	False	13C2-PFOA	34564.73	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.99	485486.73	5487.14	766.1	False	13C2-PFOA	34564.73	100.00	PFNA	0.322	0.330	✓
PFOS_1	499.0 / 80.0	2.99	2772381.74	4442.99	1654.3	False	13C4-PFOS	157136.16	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.99	606887.93	5209.67	843.6	False	13C4-PFOS	157136.16	287.00	PFOS	0.219	0.190	✓
PFDA_1	513.0 / 469.0	3.36	1538724.32	5464.93	908.7	False	13C2-PFOA	34564.73	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	57781.71	5648.73	694.7	False	13C2-PFOA	34564.73	100.00	PFDA	0.038	0.034	✓
PFUnA_1	563.0 / 519.0	3.67	1384733.36	5340.21	807.9	False	13C2-PFOA	34564.73	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.67	62203.92	5657.34	843.4	False	13C2-PFOA	34564.73	100.00	PFUnA	0.045	0.042	✓
PFDoA_1	613.0 / 569.0	3.96	1180337.03	5306.13	694.9	False	13C2-PFOA	34564.73	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	202052.44	5407.09	859.8	False	13C2-PFOA	34564.73	100.00	PFDoA	0.171	0.166	✓
PFTTrDA_1	663.0 / 619.0	4.20	1014016.75	5032.44	658.4	False	13C2-PFOA	34564.73	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.20	67697.99	5160.93	768.5	False	13C2-PFOA	34564.73	100.00	PFTTrDA	0.067	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	1200055.14	5578.65	1038.3	False	13C2-PFOA	34564.73	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	63595.81	6182.13	935.5	False	13C2-PFOA	34564.73	100.00	PFTeDA	0.053	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.51	190165.39	5579.33	2144.2	False	d3-MeFOSAA	14527.64	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.51	89225.30	4881.92	1805.5	False	d3-MeFOSAA	14527.64	400.00	NMeFOSAA	0.469	0.553	✓
NEiFOSAA_1	584.0 / 419.0	3.67	174362.73	5447.85	1326.5	False	d3-MeFOSAA	14527.64	400.00	NEiFOSAA			
NEiFOSAA_2	584.0 / 483.0	3.67	11881.12	5092.57	2240524.2	False	d3-MeFOSAA	14527.64	400.00	NEiFOSAA	0.068	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	28673.33	101.90	808.3	False	13C2-PFOA	34564.73	100.00				
13C2-PFDA	515.0 / 470.0	3.35	29051.47	98.07	99761.6	False	13C2-PFOA	34564.73	100.00		N/A	N/A	✓
d5-EiFOSAA	589.0 / 419.0	3.66	12936.45	341.27	346.0	False	d3-MeFOSAA	14527.64	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.90	1222225.96	5717.75	1241.0	False	13C2-PFOA	34564.73	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.90	31328.67	5439.96	520.7	False	13C2-PFOA	34564.73	100.00	HFPO-DA	0.026	0.027	✓
ADONA_1	377.0 / 251.0	2.24	2496677.77	5019.04	1429.1	False	13C2-PFOA	34564.73	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.24	26590.83	5373.57	546.8	False	13C2-PFOA	34564.73	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.90	24537.49	112.70	442.3	False	13C2-PFOA	34564.73	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.20	4215038.07	4909.24	1929.8	False	13C4-PFOS	157136.16	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.20	58998.40	4859.26	503.1	False	13C4-PFOS	157136.16	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	3267031.41	4841.17	1323.4	False	13C4-PFOS	157136.16	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	29373.91	4617.08	170.5	False	13C4-PFOS	157136.16	287.00	11CI-PF3OUdS	0.009	0.010	✓



Sample Name	I3467-FS(0)	Injection Vial	3
Sample ID	E3-1120-FRB-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:26:24 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13752.50	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13752.50	400.00	NMeFOSAA	N/A	0.553	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13752.50	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	13752.50	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	32037.09	117.28	897.1	False	13C2-PFOA	33555.66	100.00				
13C2-PFDA	515.0 / 470.0	3.34	30847.34	107.27	1064.2	False	13C2-PFOA	33555.66	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.66	13335.13	371.62	456.9	False	d3-MeFOSAA	13752.50	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	33555.66	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	21557.80	101.99	362.8	False	13C2-PFOA	33555.66	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 6:50:36 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	168835.77	287.00	11CI-PF3OUdS	N/A	0.010	✓



Sample Name	I3469-FS(0)	Injection Vial	4
Sample ID	H4-1797-FRB-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:35:23 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12038.02	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12038.02	400.00	NMeFOSAA	N/A	0.553	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12038.02	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12038.02	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.76	28678.93	115.53	930.0	False	13C2-PFOA	30493.08	100.00				
13C2-PFDA	515.0 / 470.0	3.34	29619.67	113.34	1790.2	False	13C2-PFOA	30493.08	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.65	12685.53	403.86	372.9	False	d3-MeFOSAA	12038.02	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	30493.08	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	19896.52	103.59	289.4	False	13C2-PFOA	30493.08	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 6:50:36 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	151582.80	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	I3471-FS(0)	Injection Vial	5
Sample ID	H4-1840A-FRB-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:44:22 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	PFOS	N/A	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFDoA	N/A	0.166	✓
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12424.90	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12424.90	400.00	NMeFOSAA	N/A	0.553	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12424.90	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	12424.90	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.77	24844.53	94.11	753.2	False	13C2-PFOA	32430.57	100.00				
13C2-PFDA	515.0 / 470.0	3.34	25173.59	90.57	313593.8	False	13C2-PFOA	32430.57	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.65	11408.41	351.89	721.7	False	d3-MeFOSAA	12424.90	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	32430.57	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.89	16572.54	81.13	287.5	False	13C2-PFOA	32430.57	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 6:50:36 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	155258.38	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	KL73 IB	Injection Vial	4
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:54:41 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFBS	N/A	0.288	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHxA	N/A	0.076	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFHpA	N/A	0.015	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	PFHxS	N/A	0.297	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFOA	N/A	0.052	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFNA	N/A	0.330	✓
PFOS_1	499.0 / 80.0	2.98	6975.06	10.97	85.6	True	13C4-PFOS	160081.69	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.98	1487.07	12.53	43.4	True	13C4-PFOS	160081.69	287.00	PFOS	0.213	0.190	✓
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDA	N/A	0.034	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFUnA	N/A	0.042	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFDoA	N/A	0.166	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	PFTeDA	N/A	0.047	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NMeFOSAA	N/A	0.553	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	11240.55	400.00	NEtFOSAA	N/A	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	26134.44	86.51	998.8	False	13C2-PFOA	37108.76	100.00				
13C2-PFDA	515.0 / 470.0	3.32	26769.43	84.17	762.1	False	13C2-PFOA	37108.76	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	12629.50	430.60	409.2	False	d3-MeFOSAA	11240.55	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	HFPO-DA	N/A	0.027	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	37108.76	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.88	19915.50	85.20	323.0	False	13C2-PFOA	37108.76	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 07/06/2019 6:50:36 AM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	9CI-PF3ONS	N/A	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	160081.69	287.00	11CI-PF3OUdS	N/A	0.010	✓

Sample Name	CJ245LCS-FS-D(3)	Injection Vial	6
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:12:35 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.44	350822.07	828.71	4616.1	False	13C4-PFOS	151207.06	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.43	104708.76	832.98	1625.8	False	13C4-PFOS	151207.06	287.00	PFBS	0.298	0.288	✓
PFHxA_1	313.0 / 269.0	1.76	255731.95	953.62	178.6	False	13C2-PFOA	35878.80	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.76	19746.74	966.57	131.4	False	13C2-PFOA	35878.80	100.00	PFHxA	0.077	0.076	✓
PFHpA_1	363.0 / 319.0	2.17	248690.03	900.20	102.6	False	13C2-PFOA	35878.80	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	4452.91	1023.60	91.6	False	13C2-PFOA	35878.80	100.00	PFHpA	0.018	0.015	✓
PFHxS_1	399.0 / 80.0	2.19	375275.43	926.80	1258.1	False	13C4-PFOS	151207.06	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.19	105086.43	880.30	463.3	False	13C4-PFOS	151207.06	287.00	PFHxS	0.280	0.297	✓
PFOA_1	413.0 / 369.0	2.58	384730.03	1127.39	394.3	False	13C2-PFOA	35878.80	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.58	21076.45	1202.21	309.3	False	13C2-PFOA	35878.80	100.00	PFOA	0.055	0.052	✓
PFNA_1	463.0 / 419.0	2.97	293146.71	1041.73	447.5	False	13C2-PFOA	35878.80	100.00	PFNA			
PFNA_2	463.0 / 219.0	2.97	95419.35	1038.96	394.9	False	13C2-PFOA	35878.80	100.00	PFNA	0.326	0.330	✓
PFOS_1	499.0 / 80.0	2.97	543157.38	904.59	976.1	False	13C4-PFOS	151207.06	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.97	115999.02	1034.81	737.2	False	13C4-PFOS	151207.06	287.00	PFOS	0.214	0.190	✓
PFDA_1	513.0 / 469.0	3.33	264954.01	906.55	452.3	False	13C2-PFOA	35878.80	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.32	9955.26	937.58	404.5	False	13C2-PFOA	35878.80	100.00	PFDA	0.038	0.034	✓
PFUnA_1	563.0 / 519.0	3.64	230896.48	857.84	408.5	False	13C2-PFOA	35878.80	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.64	11609.27	1017.17	581.3	False	13C2-PFOA	35878.80	100.00	PFUnA	0.050	0.042	✓
PFDoA_1	613.0 / 569.0	3.93	193515.05	838.07	426.0	False	13C2-PFOA	35878.80	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	36075.63	930.06	366.9	False	13C2-PFOA	35878.80	100.00	PFDoA	0.186	0.166	✓
PFTrDA_1	663.0 / 619.0	4.17	165315.13	790.39	397.4	False	13C2-PFOA	35878.80	100.00	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	11867.78	871.60	347.3	False	13C2-PFOA	35878.80	100.00	PFTrDA	0.072	0.069	✓
PFTeDA_1	713.0 / 669.0	4.38	200628.98	898.50	574.9	False	13C2-PFOA	35878.80	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.38	10098.06	945.68	494.2	False	13C2-PFOA	35878.80	100.00	PFTeDA	0.050	0.047	✓
NMeFOSAA_1	570.0 / 419.0	3.48	35154.45	1212.51	1937.5	False	d3-MeFOSAA	12357.78	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.48	16411.63	1055.62	23023.9	False	d3-MeFOSAA	12357.78	400.00	NMeFOSAA	0.467	0.553	✓
NEtFOSAA_1	584.0 / 419.0	3.64	33473.47	1229.50	1021.0	False	d3-MeFOSAA	12357.78	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.64	1815.69	914.91	4682.7	False	d3-MeFOSAA	12357.78	400.00	NEtFOSAA	0.054	0.079	✓
13C2-PFHxA	315.0 / 270.0	1.75	5082.96	17.40	284.2	False	13C2-PFOA	35878.80	100.00				
13C2-PFDA	515.0 / 470.0	3.32	5034.97	16.37	739.6	False	13C2-PFOA	35878.80	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.63	2414.38	74.88	131.4	False	d3-MeFOSAA	12357.78	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.88	204766.02	922.84	575.7	False	13C2-PFOA	35878.80	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.88	5266.53	881.00	165.3	False	13C2-PFOA	35878.80	100.00	HFPO-DA	0.026	0.027	✓
ADONA_1	377.0 / 251.0	2.21	452358.18	876.06	822.1	False	13C2-PFOA	35878.80	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.21	5454.41	1061.88	250.2	False	13C2-PFOA	35878.80	100.00	ADONA	0.012	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.87	4116.91	18.22	109.3	False	13C2-PFOA	35878.80	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.17	784670.85	949.74	1846.8	False	13C4-PFOS	151207.06	287.00	9Cl-PF3ONS			

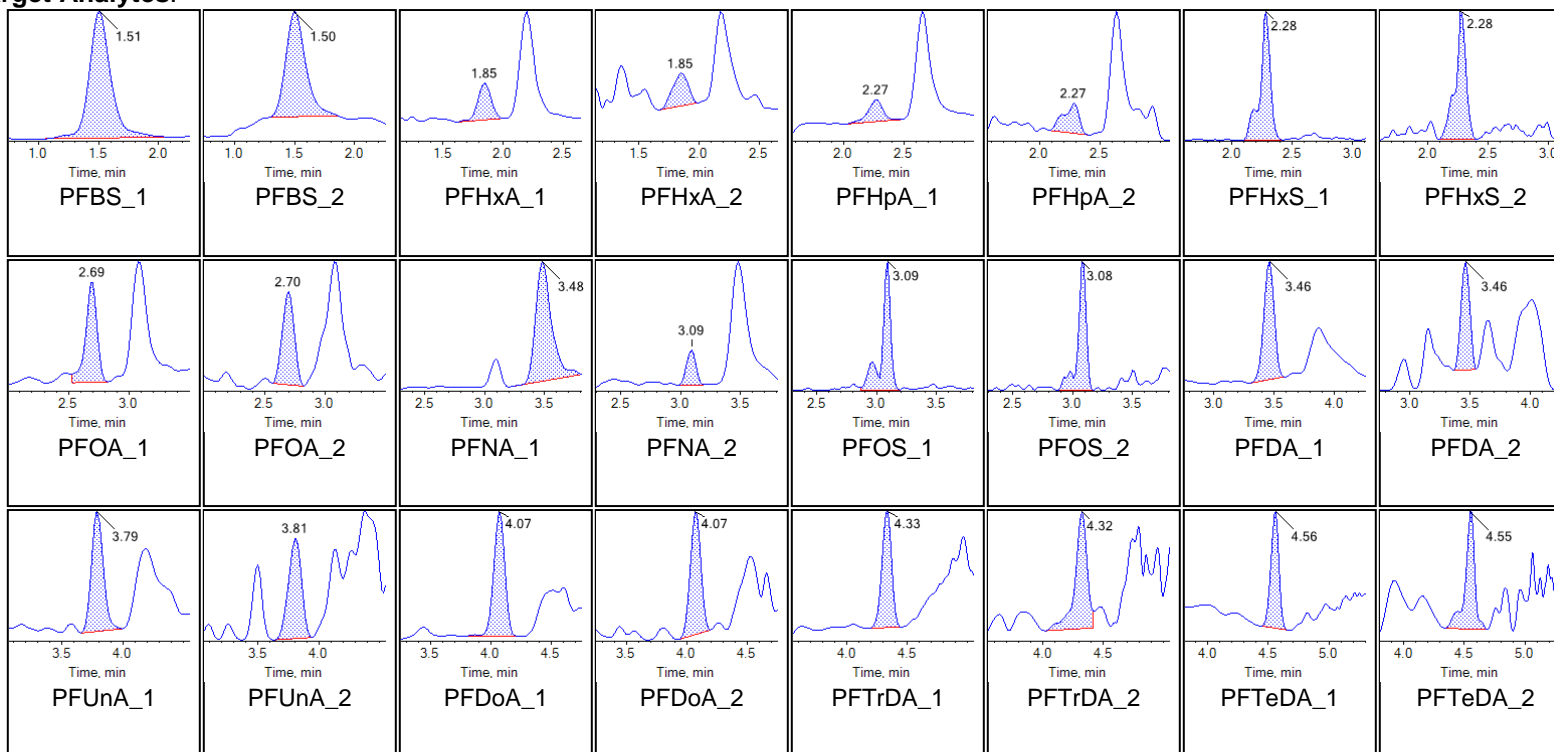
Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.17	10845.99	928.33	246.7	False	13C4-PFOS	151207.06	287.00	9CI-PF3ONS	0.014	0.015	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.78	562866.02	866.77	1175.4	False	13C4-PFOS	151207.06	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.78	4988.73	814.89	99.2	False	13C4-PFOS	151207.06	287.00	11CI-PF3OUdS	0.009	0.010	✓

Chromatograms

Sample Name	KL64	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:14:18 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

Chromatograms

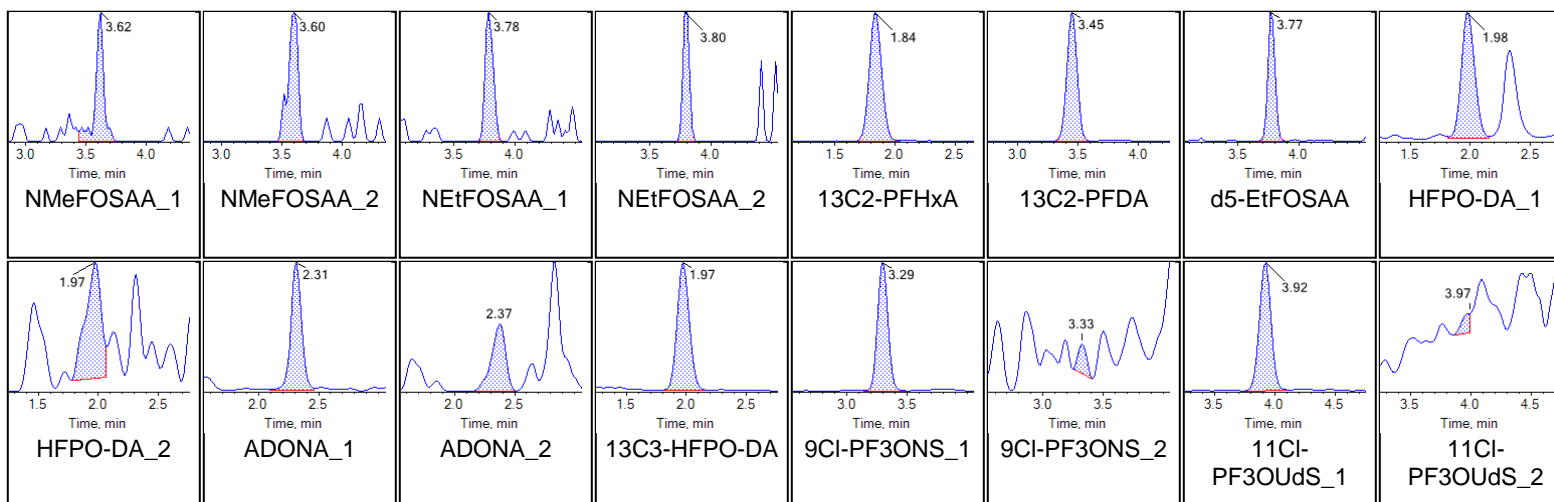
Target Analytes:



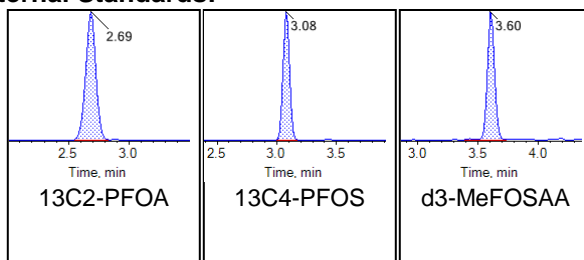


Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM



Internal Standards:





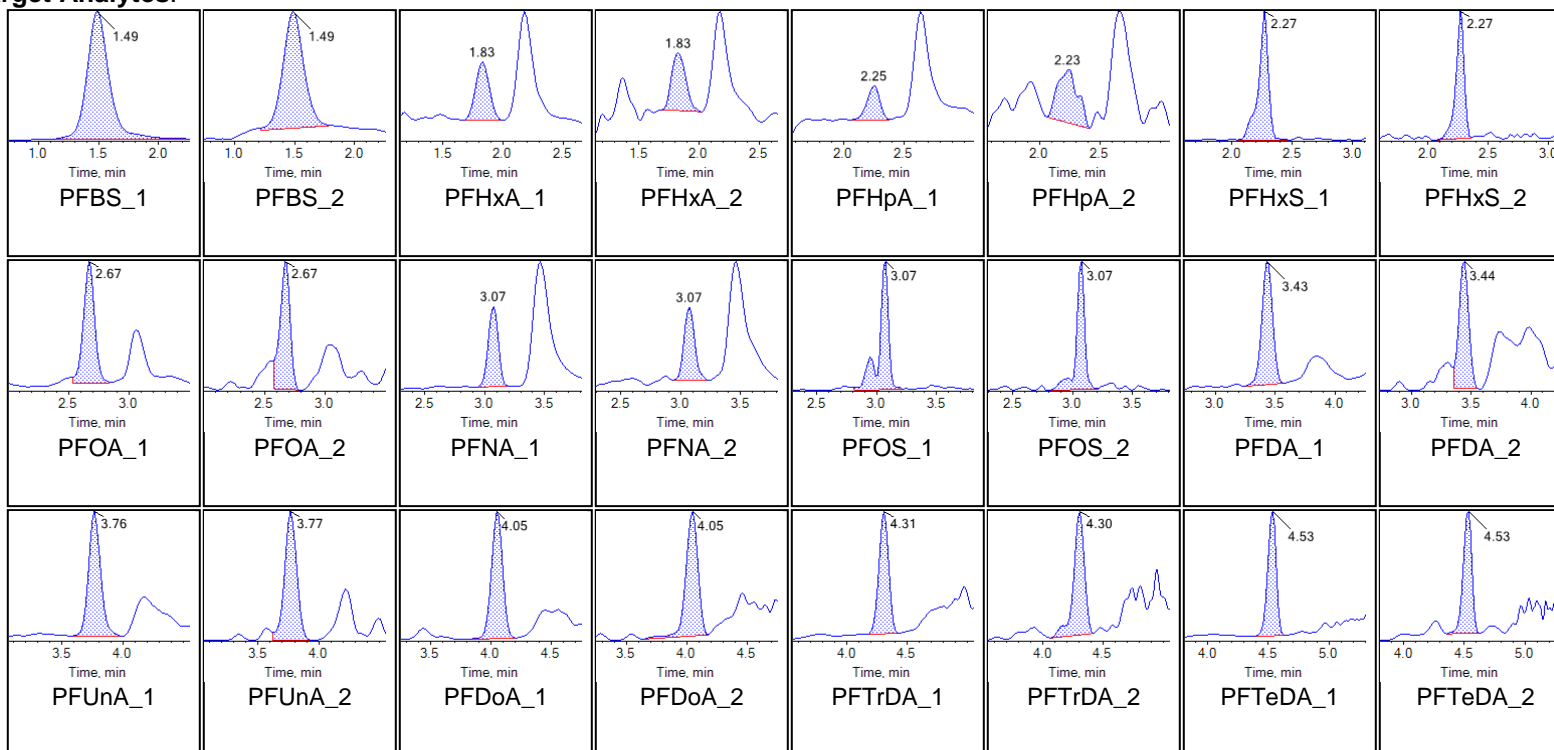
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	KL65	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:23:13 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

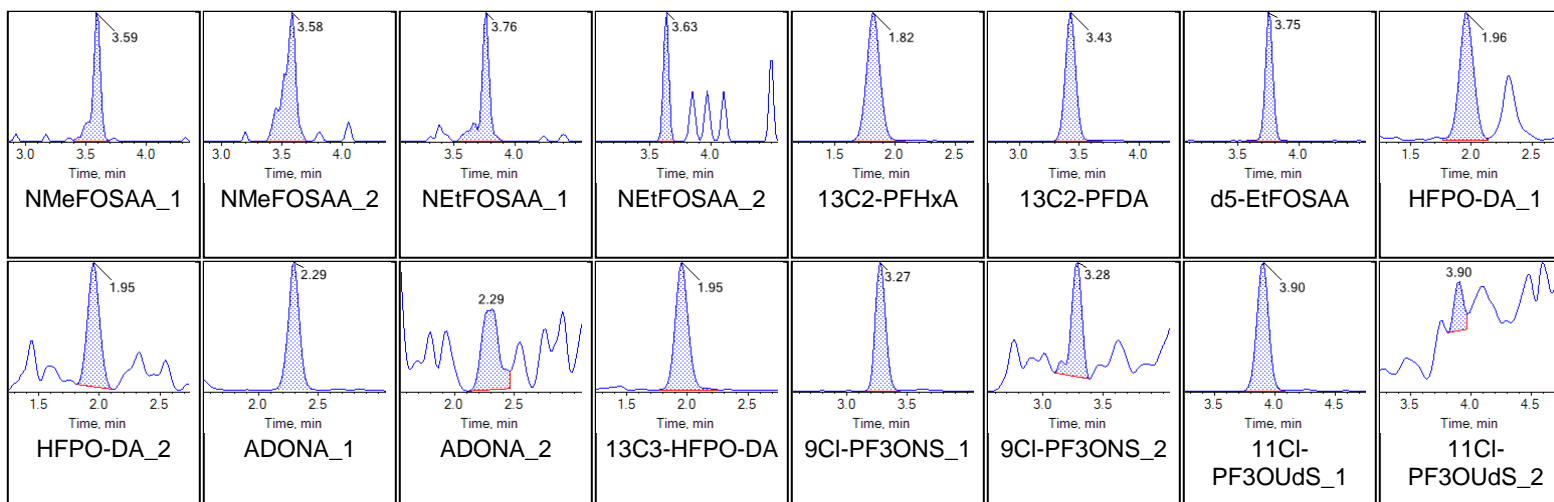
Chromatograms

Target Analytes:

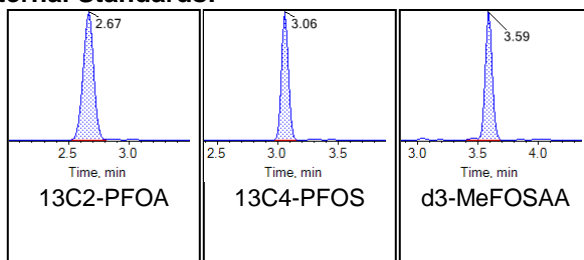




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

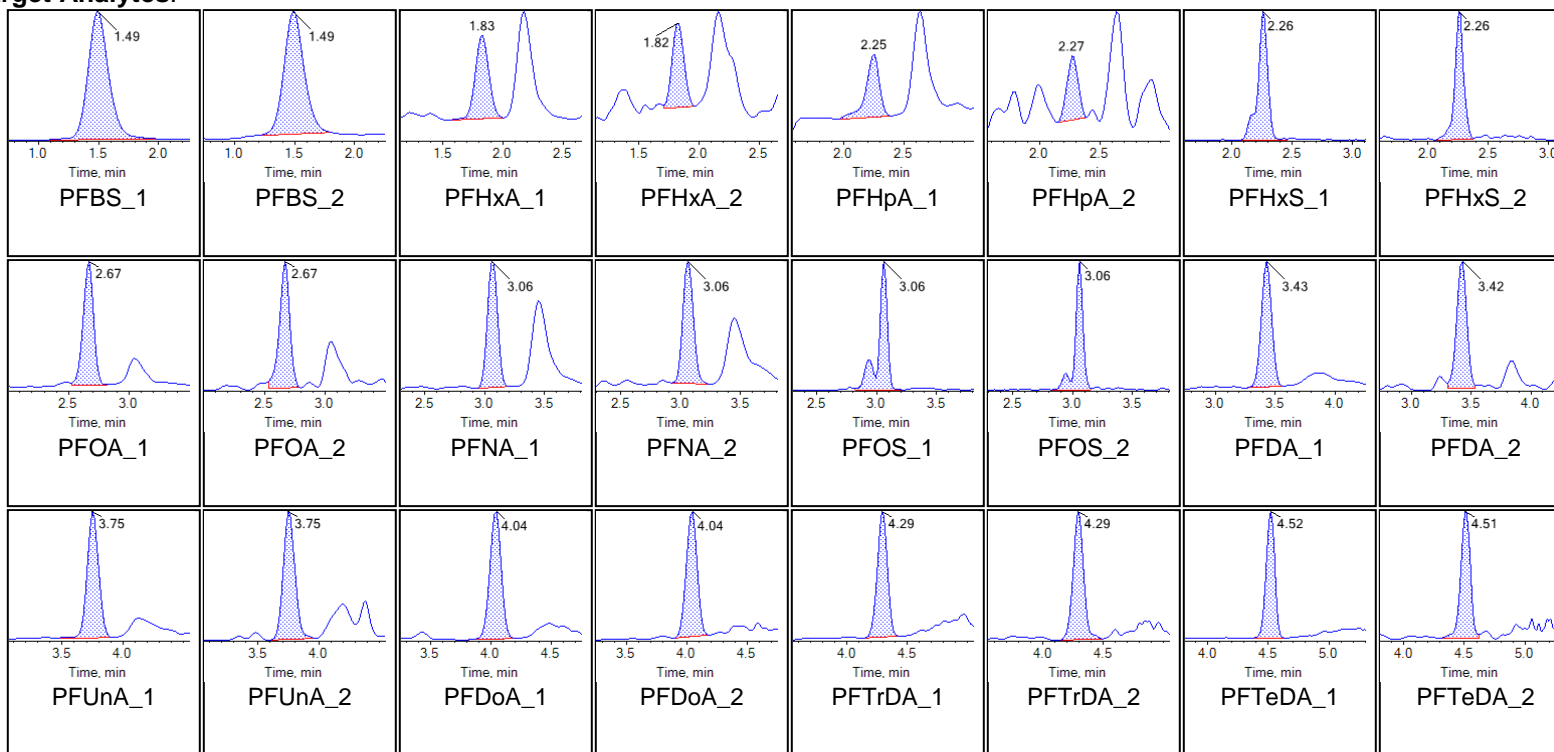
Internal Standards:



Sample Name	KL66	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:32:11 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

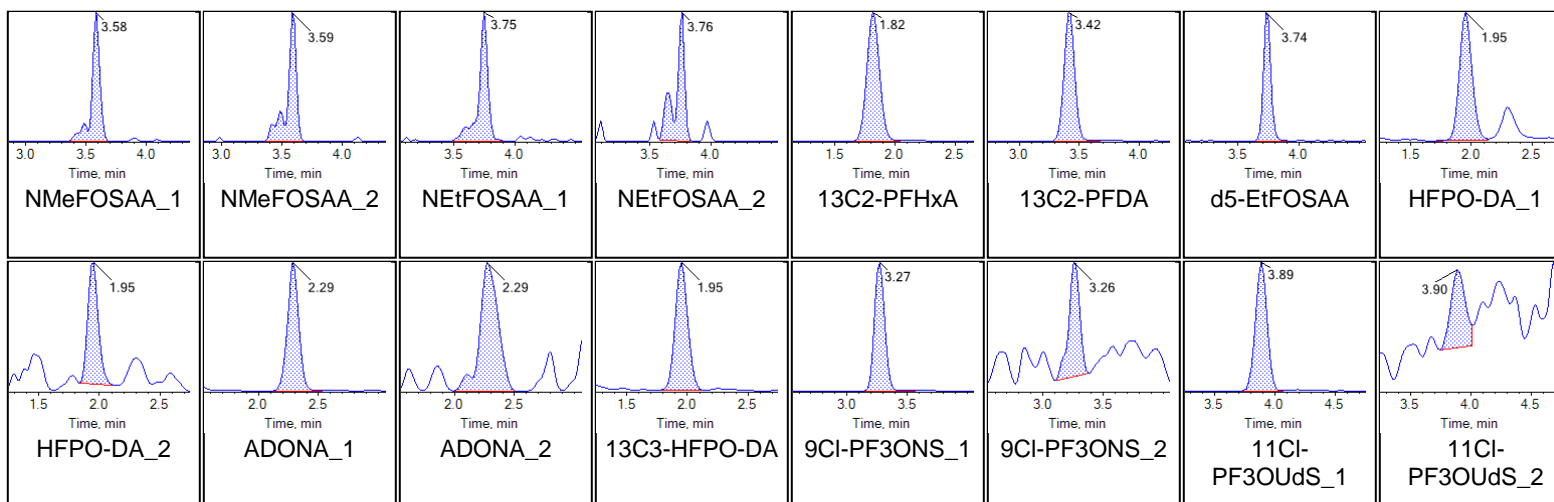
Chromatograms

Target Analytes:

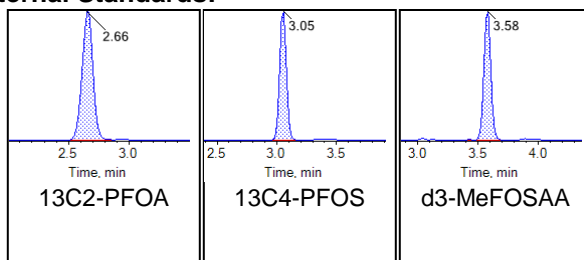




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Internal Standards:





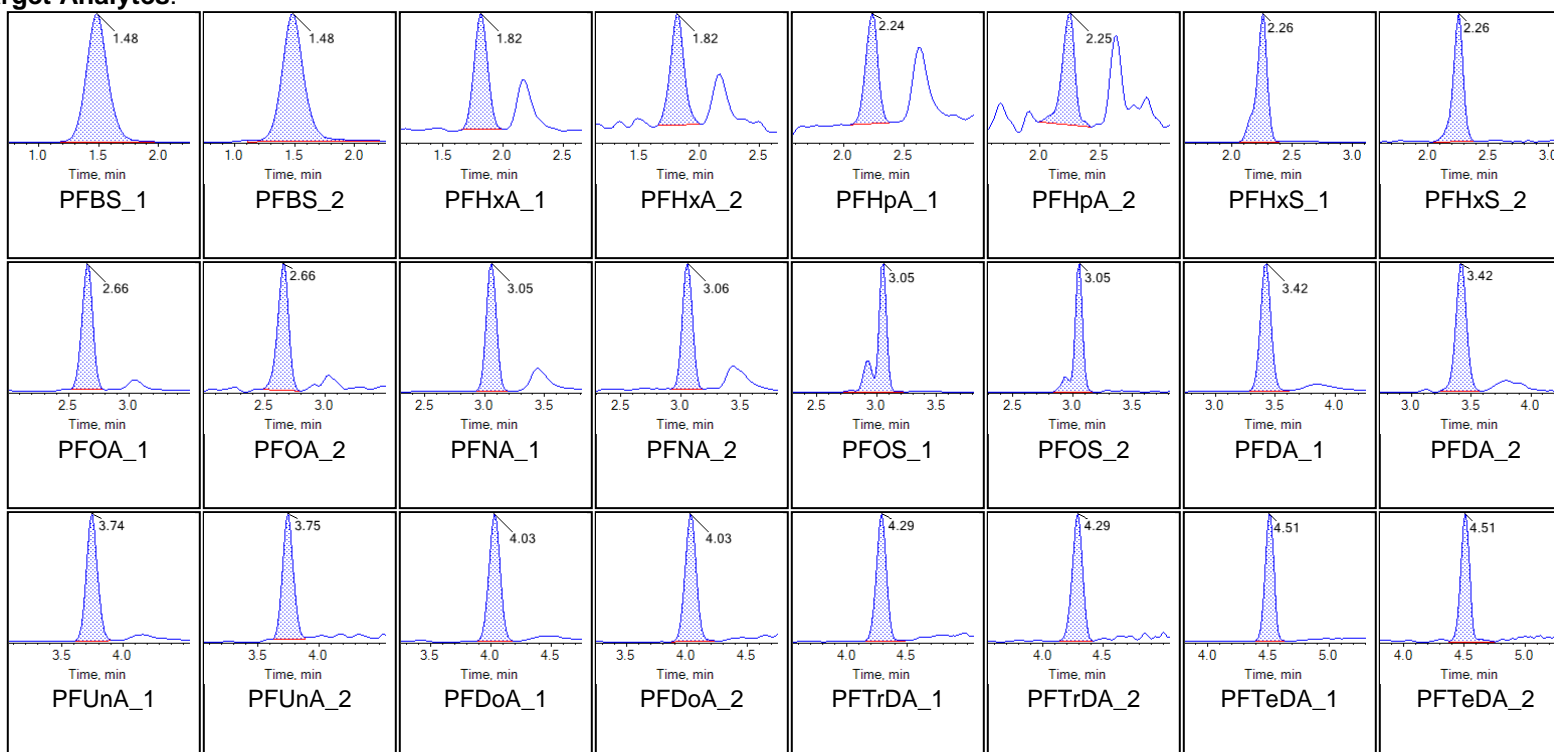
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	KL67	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:41:08 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

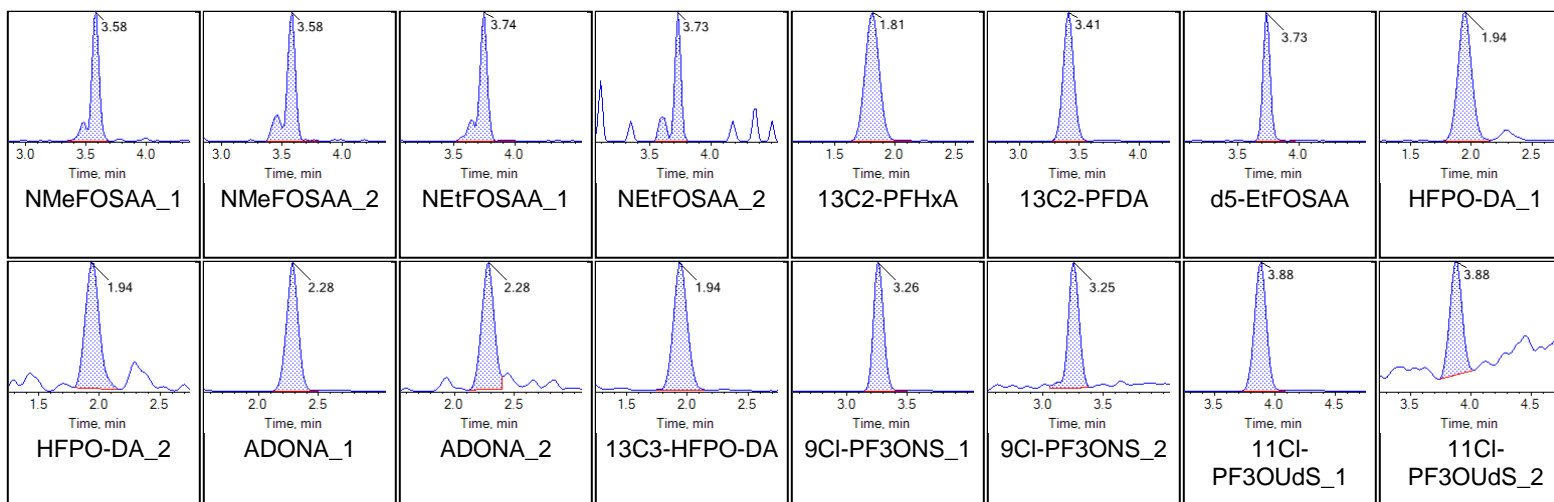
Chromatograms

Target Analytes:

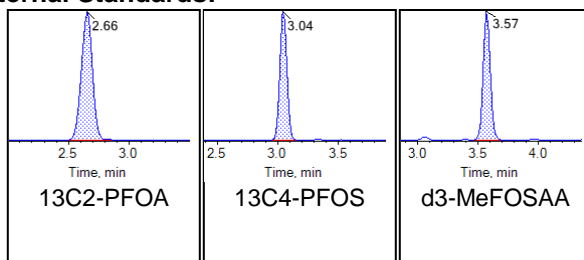




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

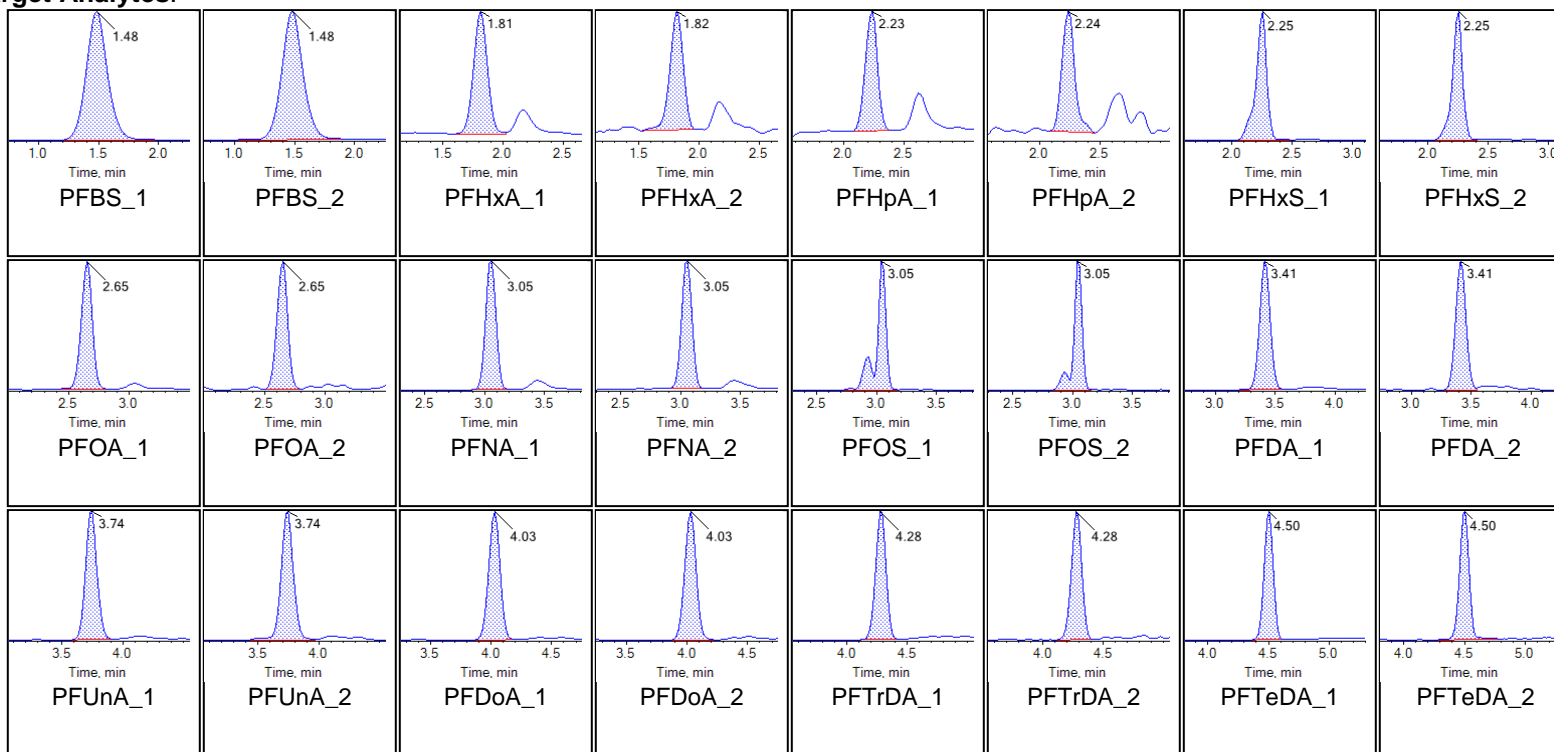
Internal Standards:



Sample Name	KL68	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:50:04 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

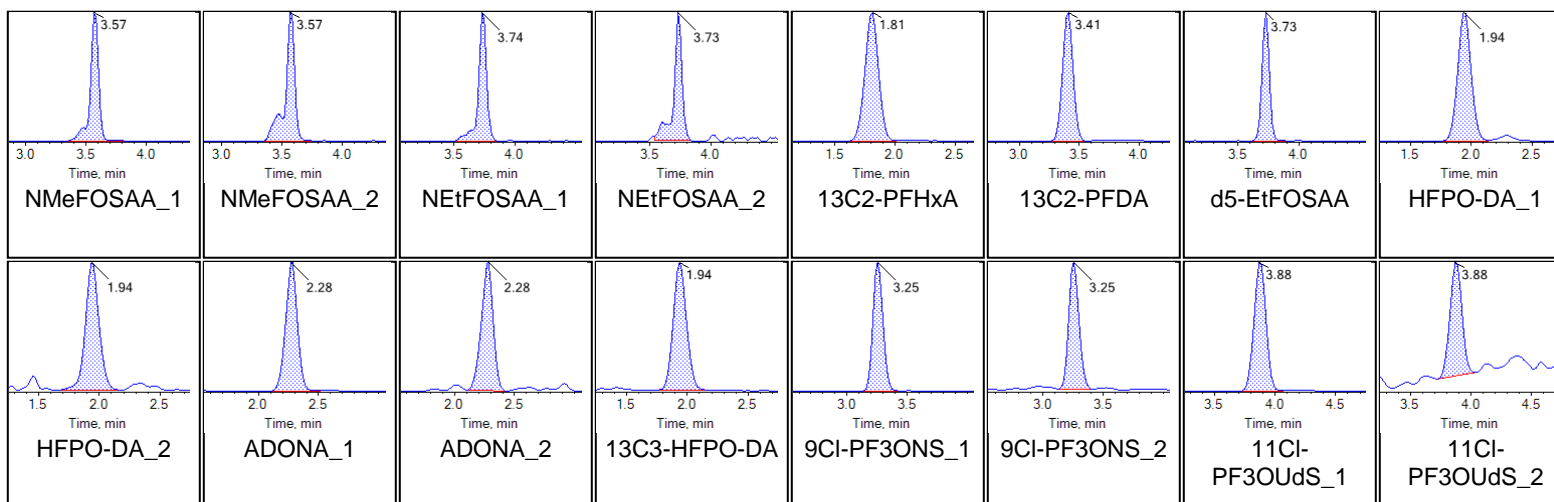
Chromatograms

Target Analytes:

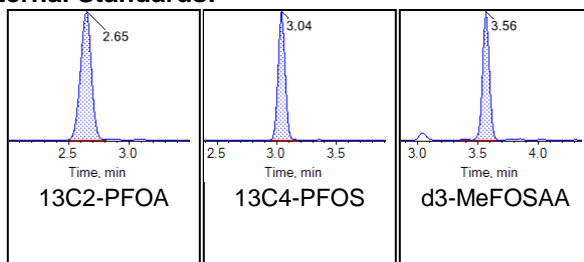




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Internal Standards:





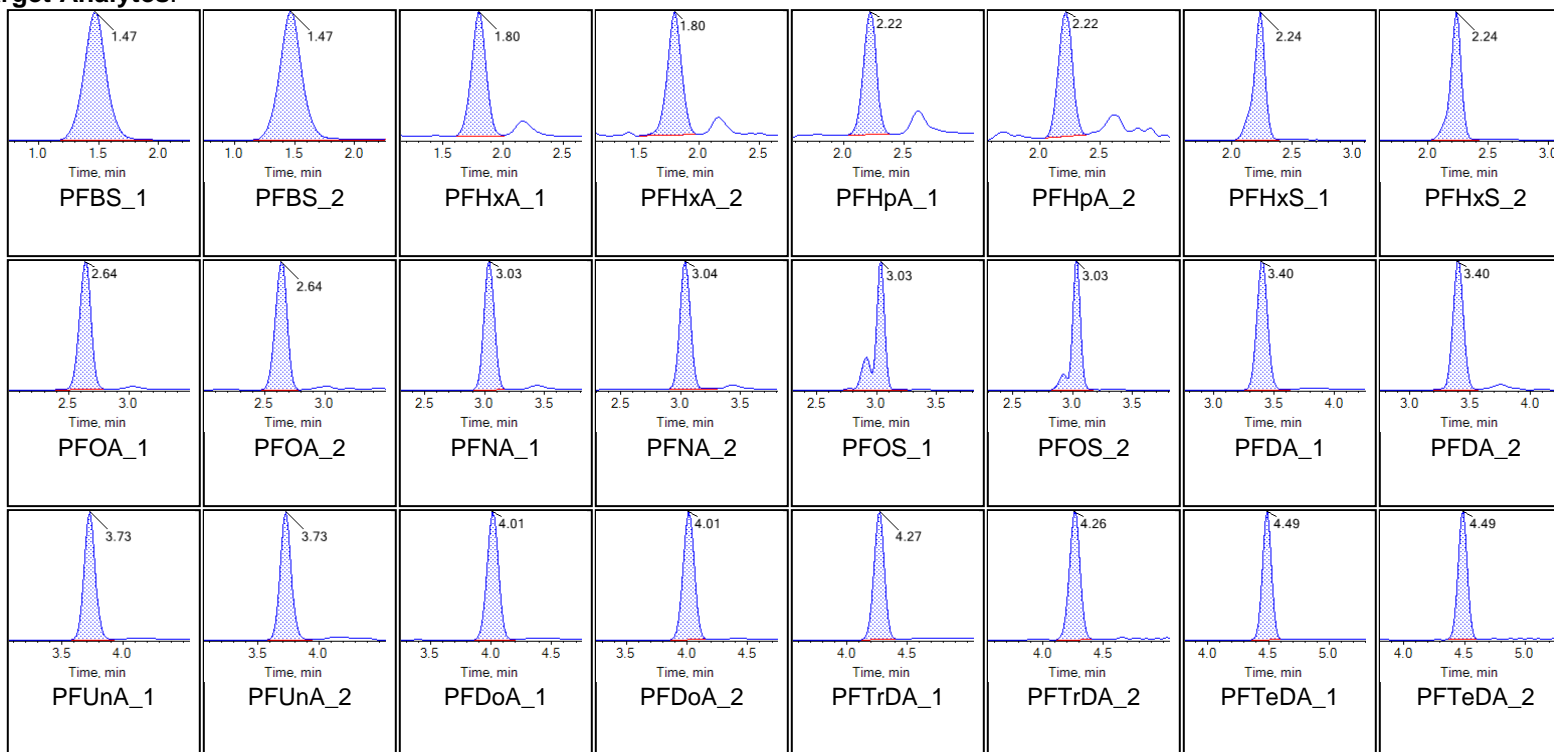
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	KL69	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 4:59:00 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

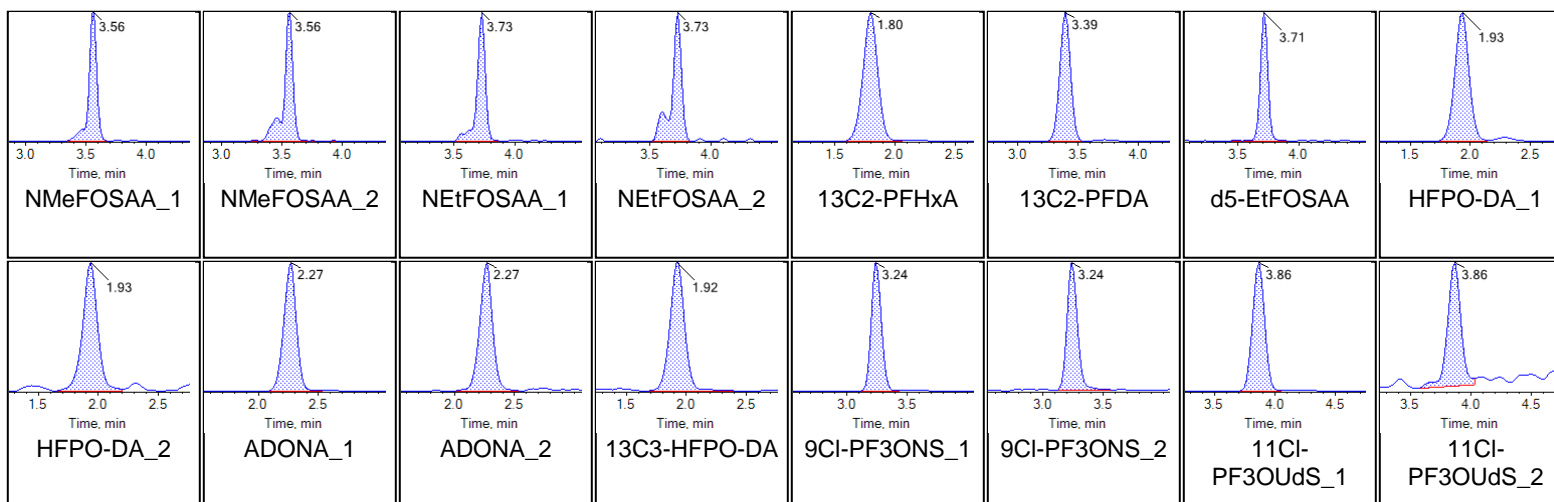
Chromatograms

Target Analytes:

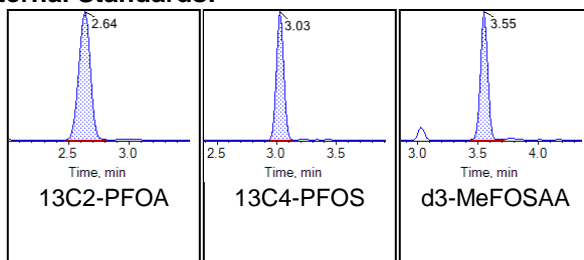




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

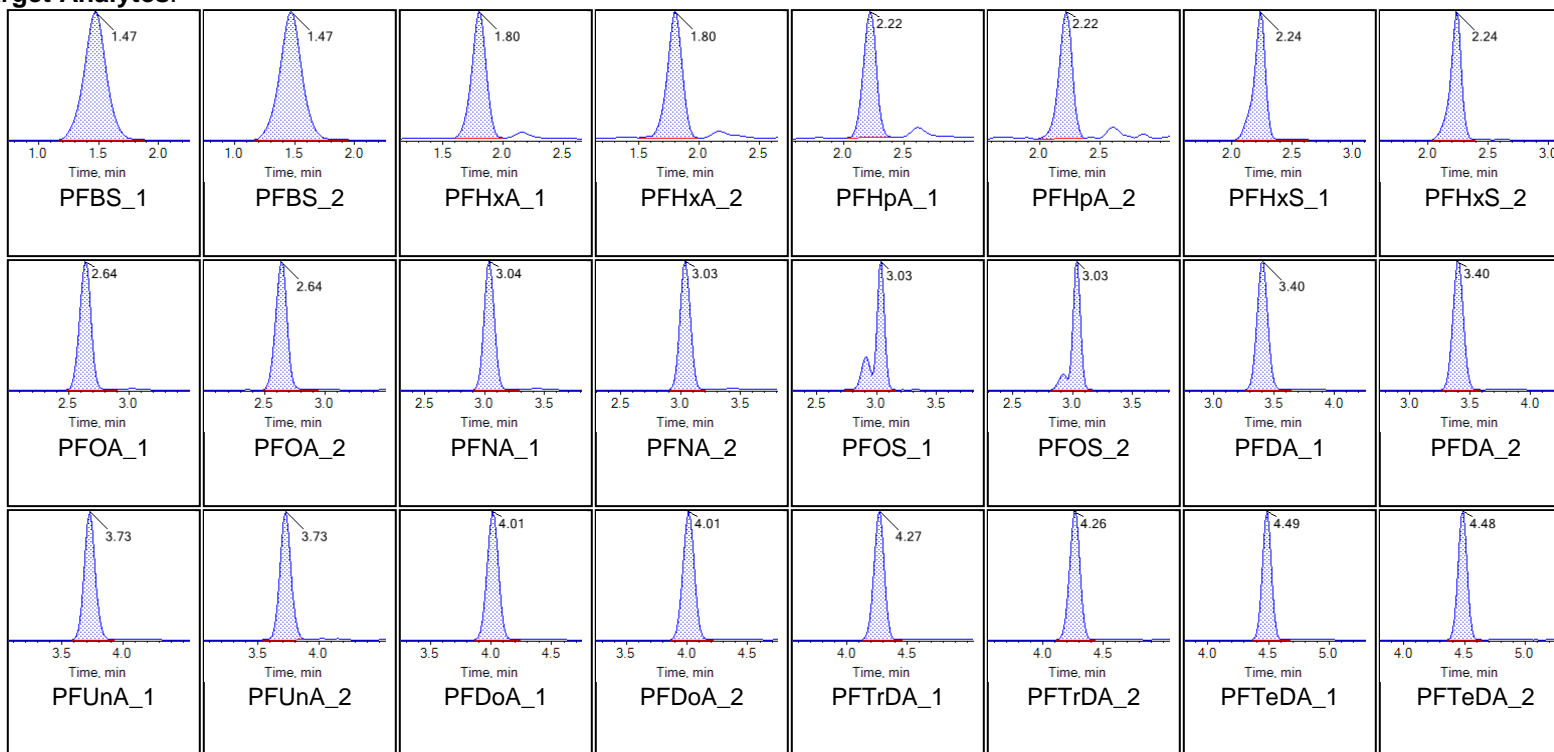
Internal Standards:



Sample Name	KL70	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:07:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

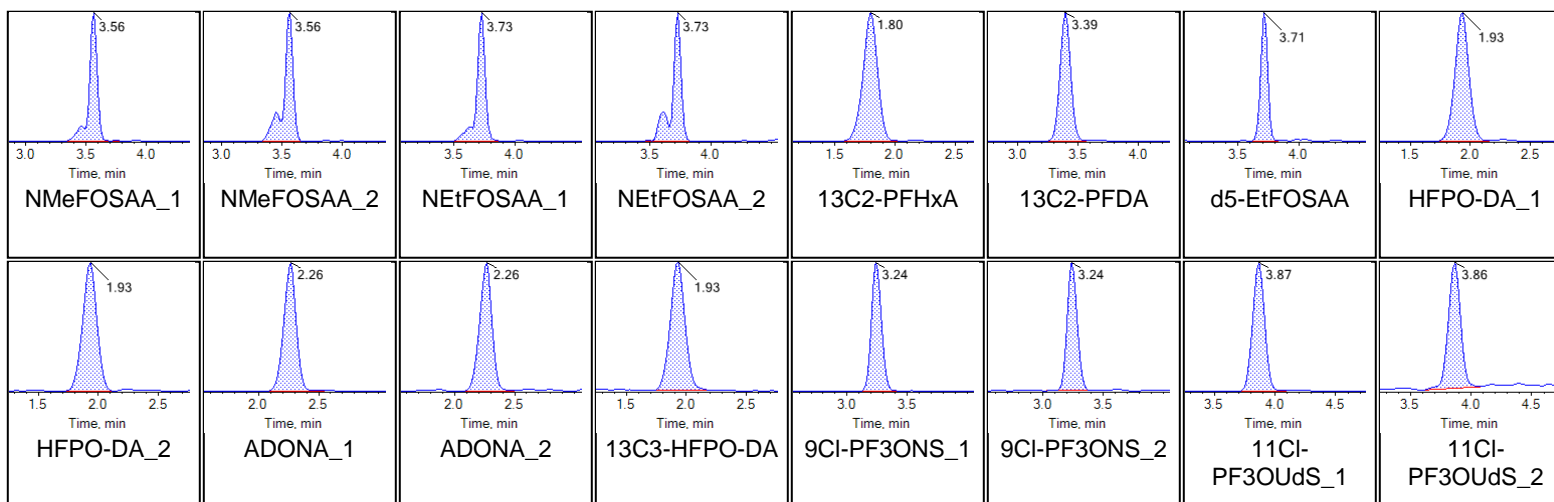
Chromatograms

Target Analytes:

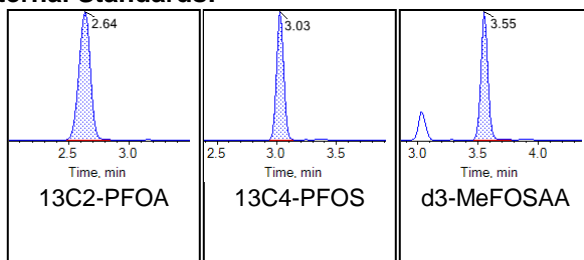




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Internal Standards:





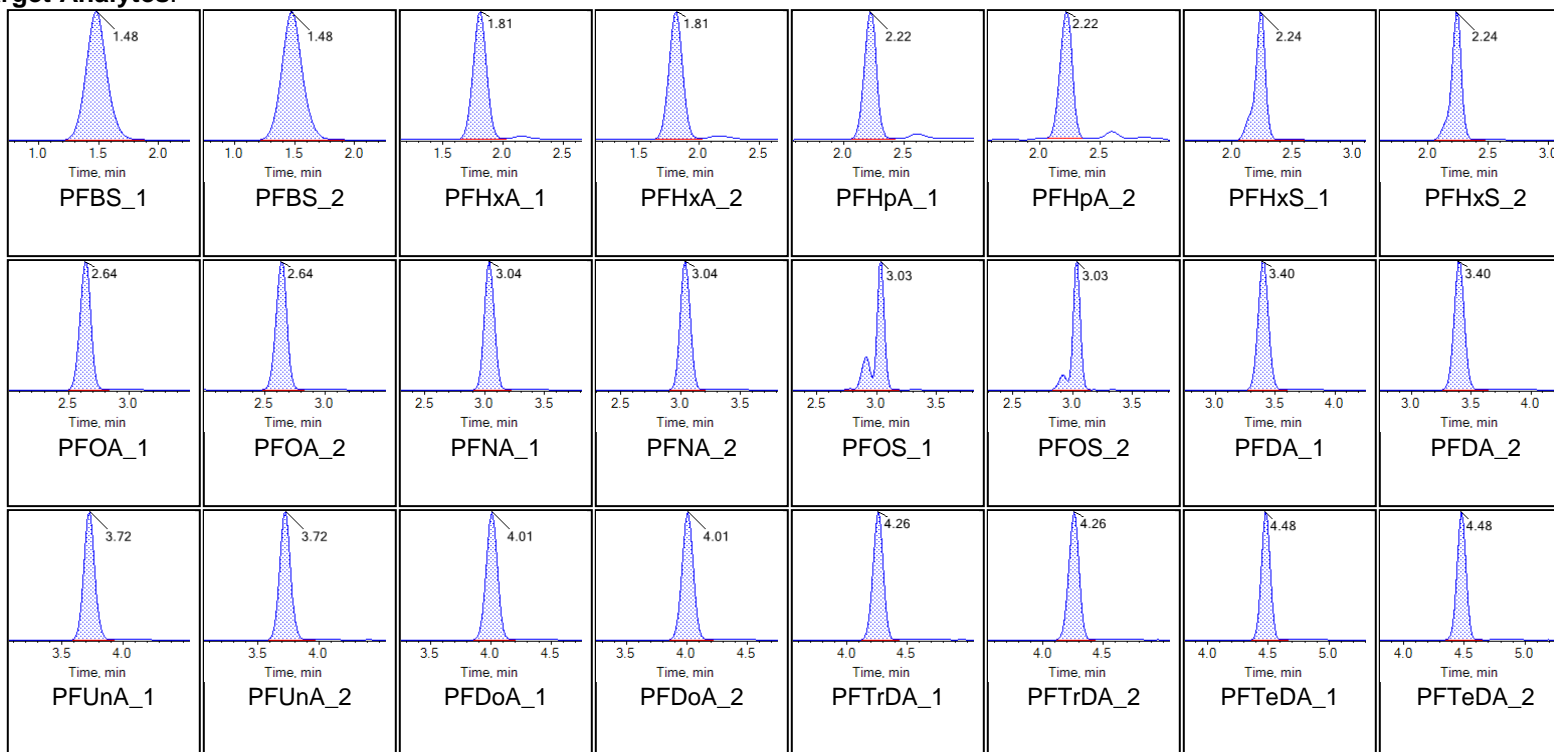
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	KL71	Injection Vial	9
Sample ID	L8	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:16:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

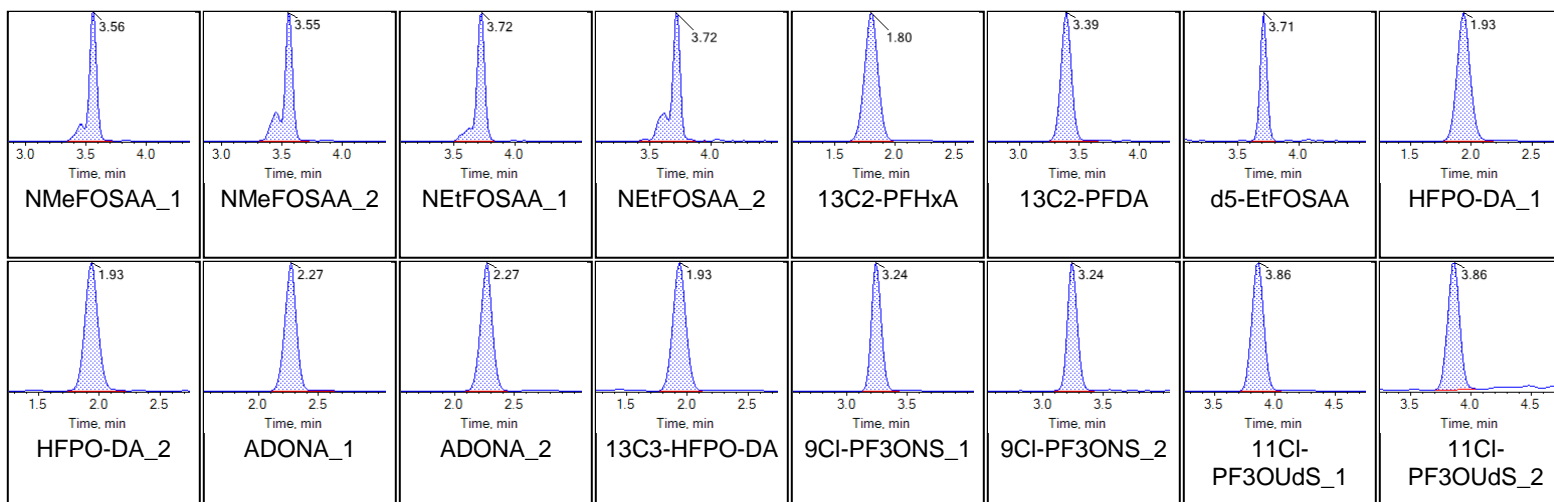
Chromatograms

Target Analytes:

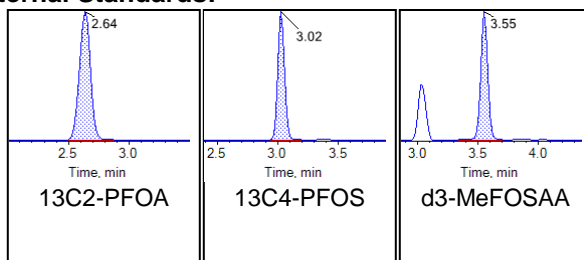




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Internal Standards:





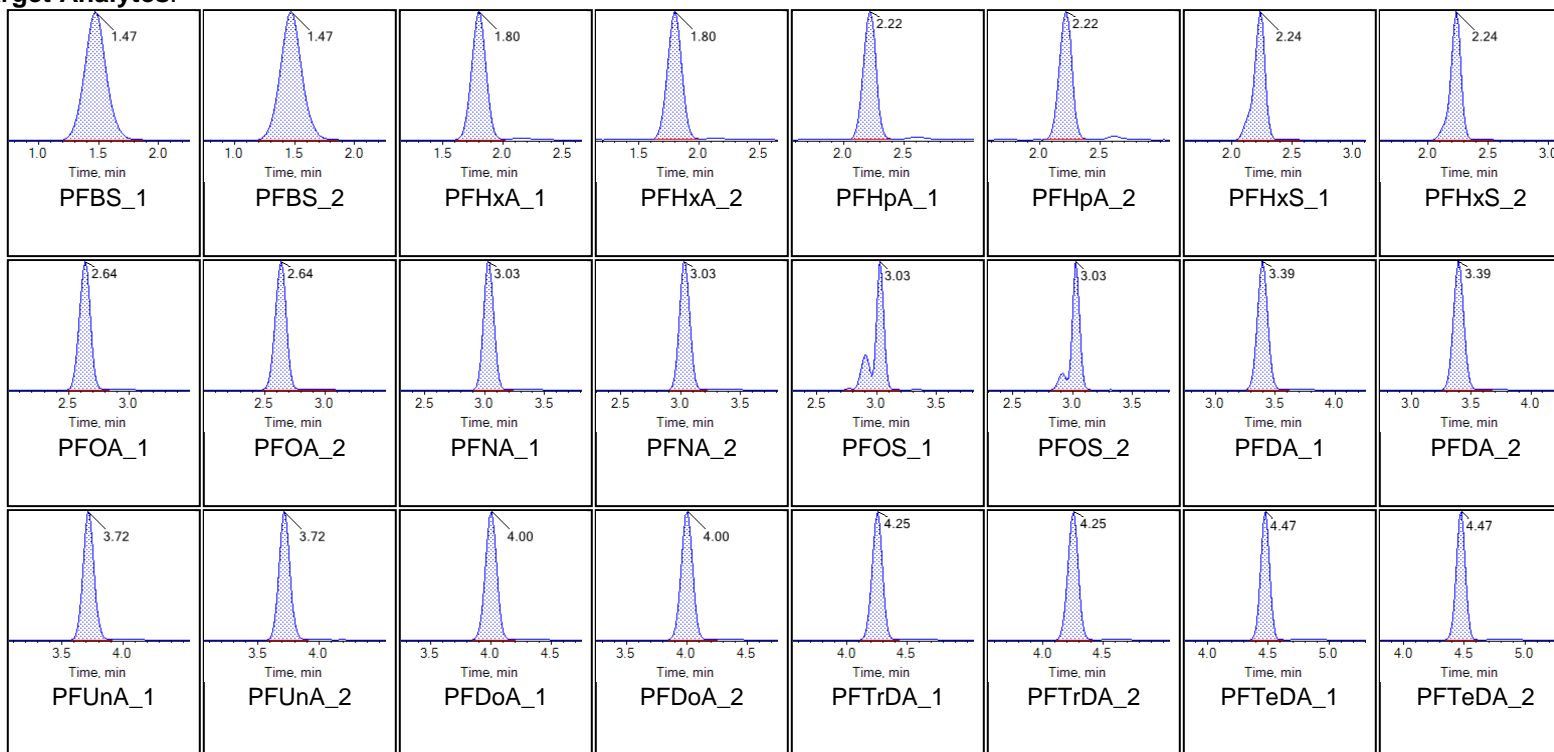
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	KL72	Injection Vial	10
Sample ID	L9	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:25:48 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

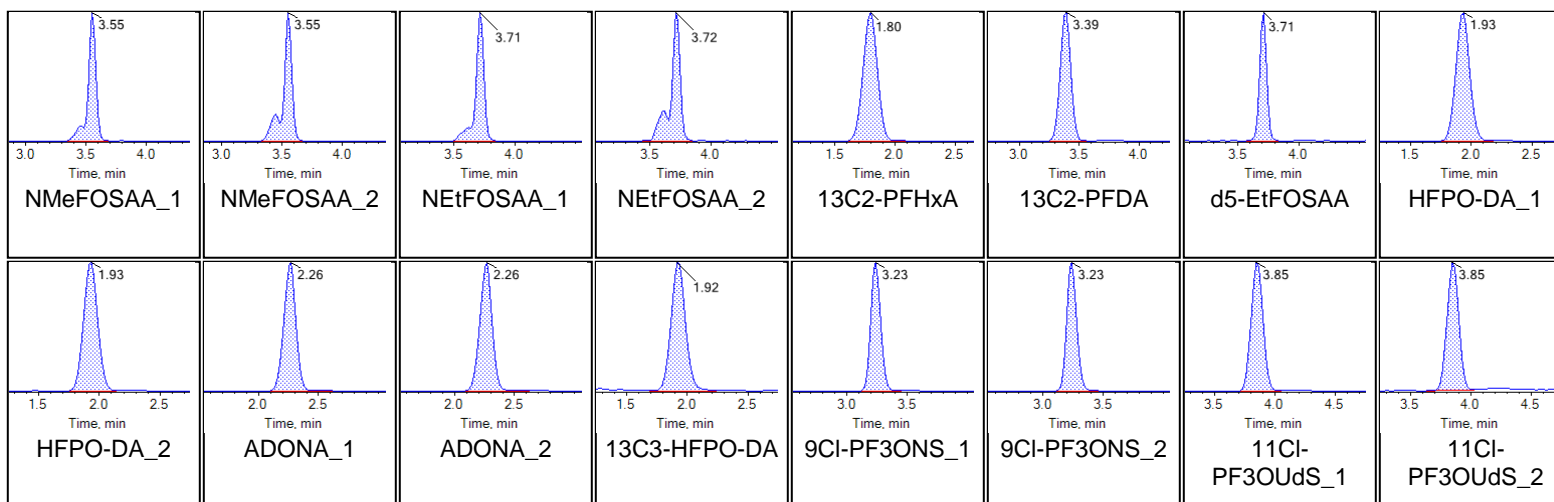
Chromatograms

Target Analytes:

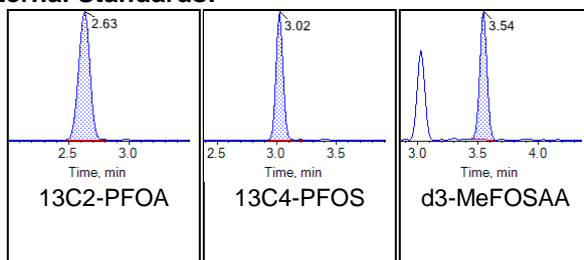




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

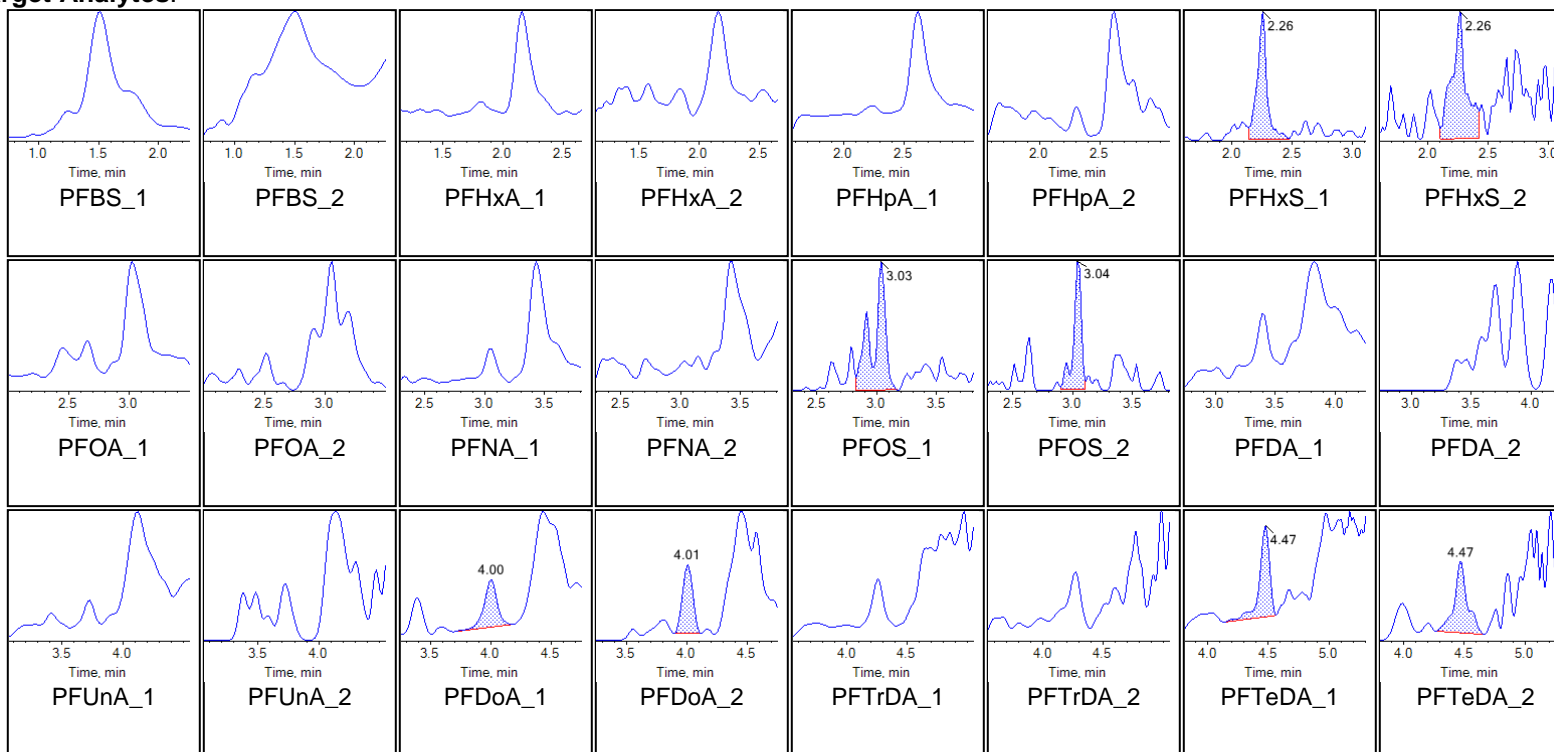
Internal Standards:



Sample Name	KL73 IB	Injection Vial	11
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:34:45 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

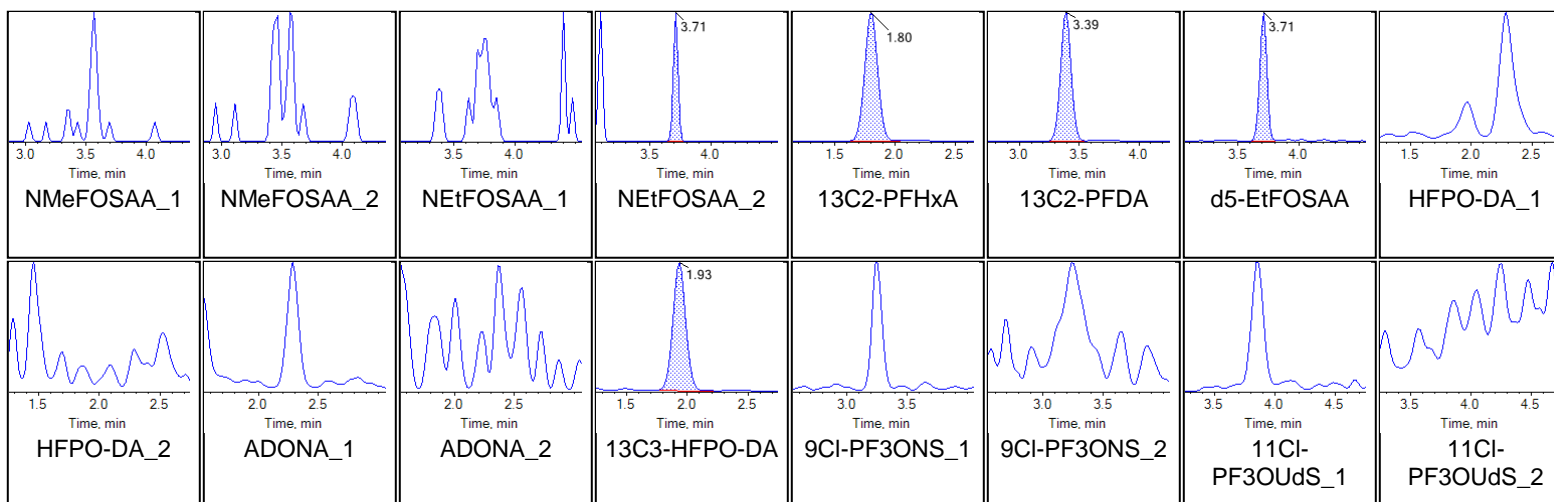
Chromatograms

Target Analytes:

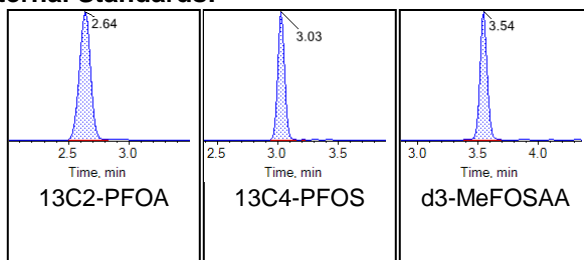




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

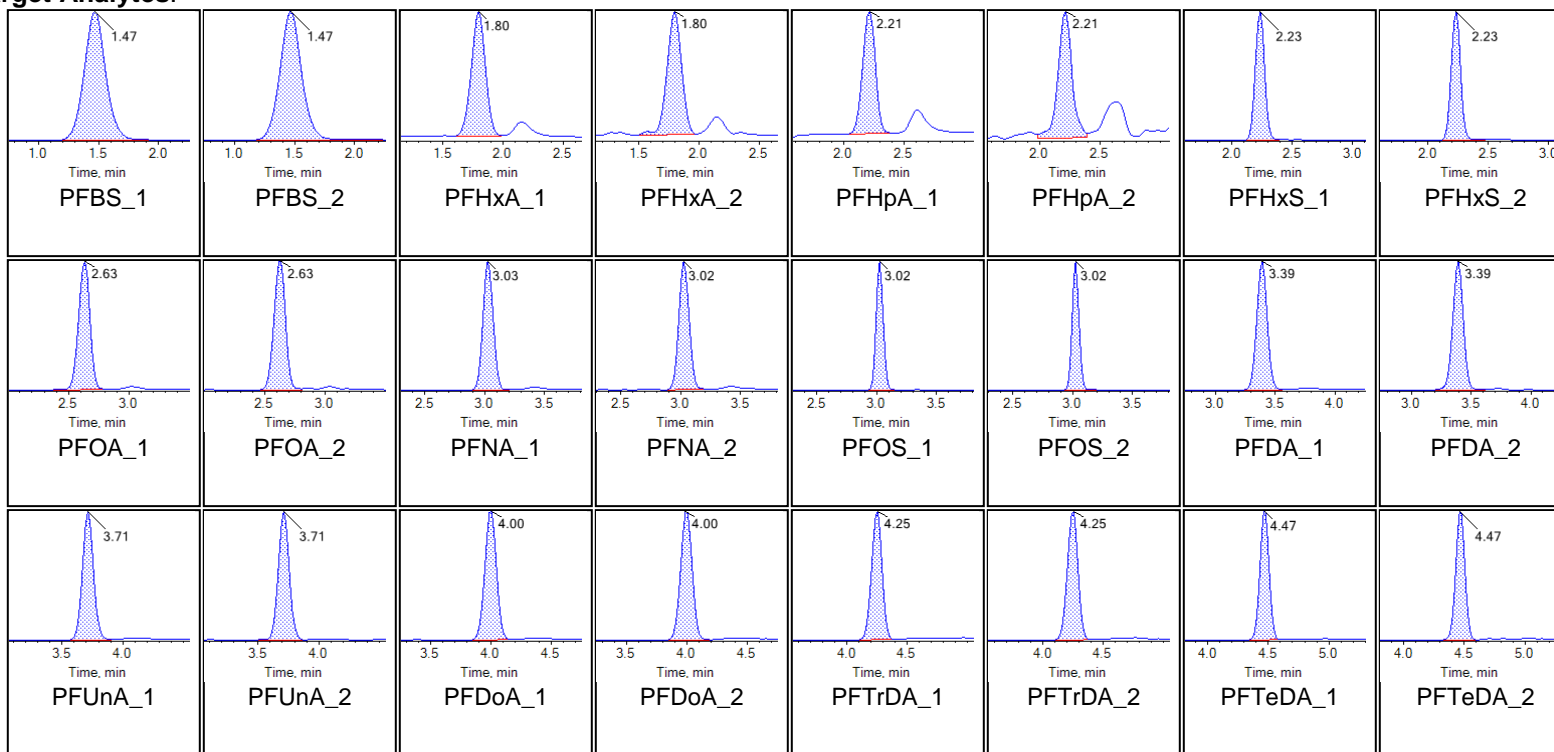
Internal Standards:



Sample Name	KL74 ICC	Injection Vial	12
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 5:43:42 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

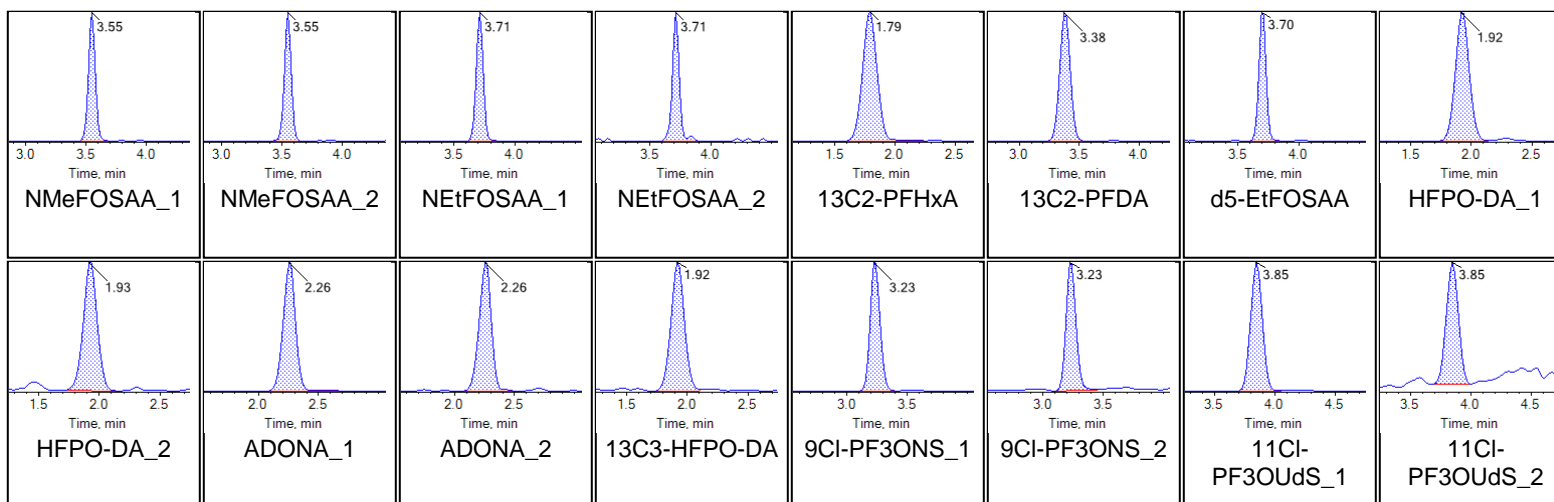
Chromatograms

Target Analytes:

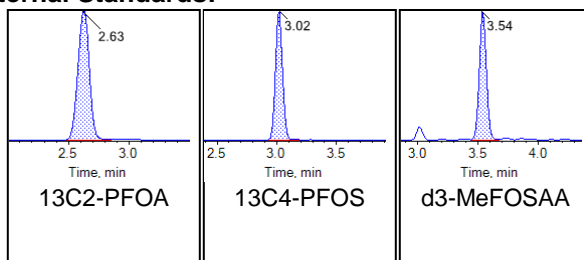




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

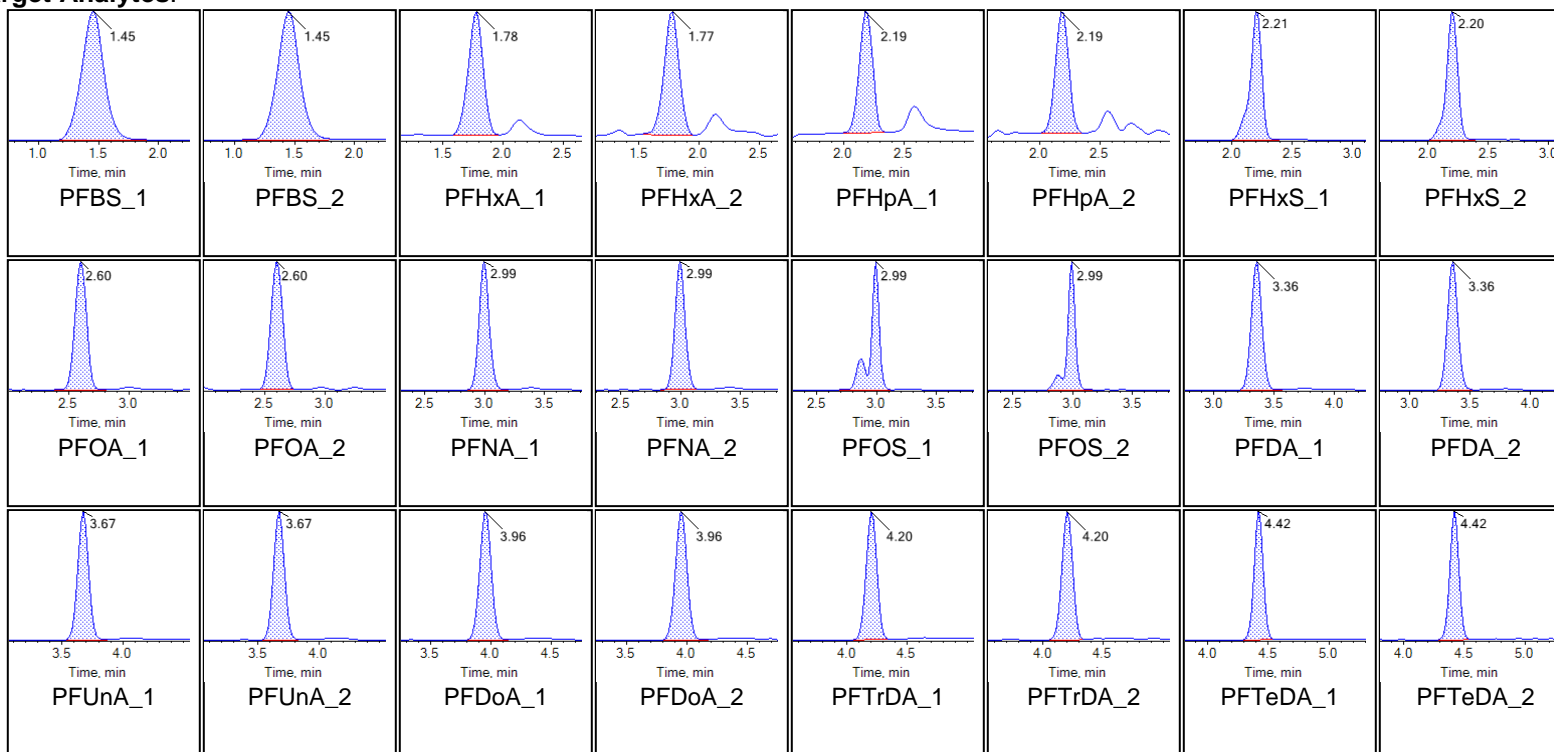
Internal Standards:



Sample Name	KL69 CCV	Injection Vial	44
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:30:02 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

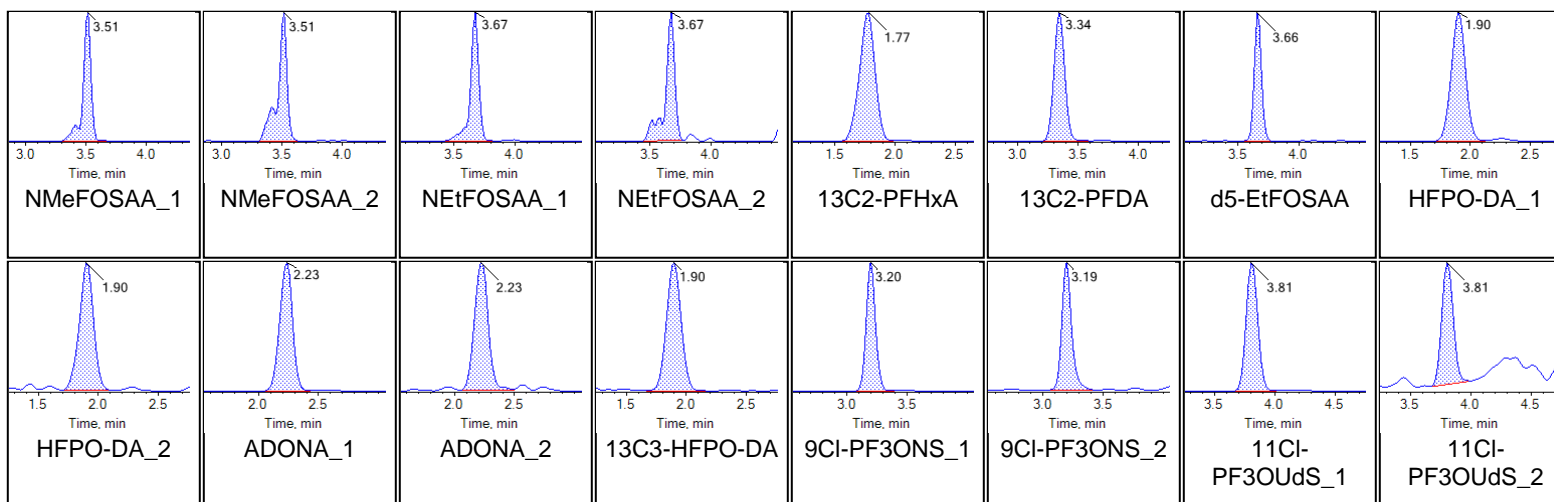
Chromatograms

Target Analytes:

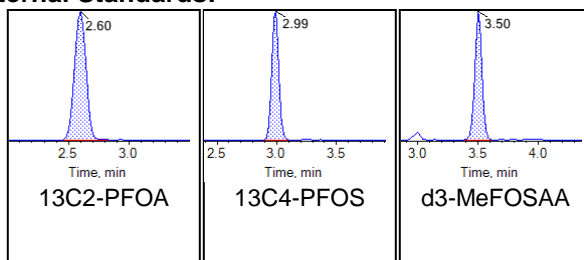




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

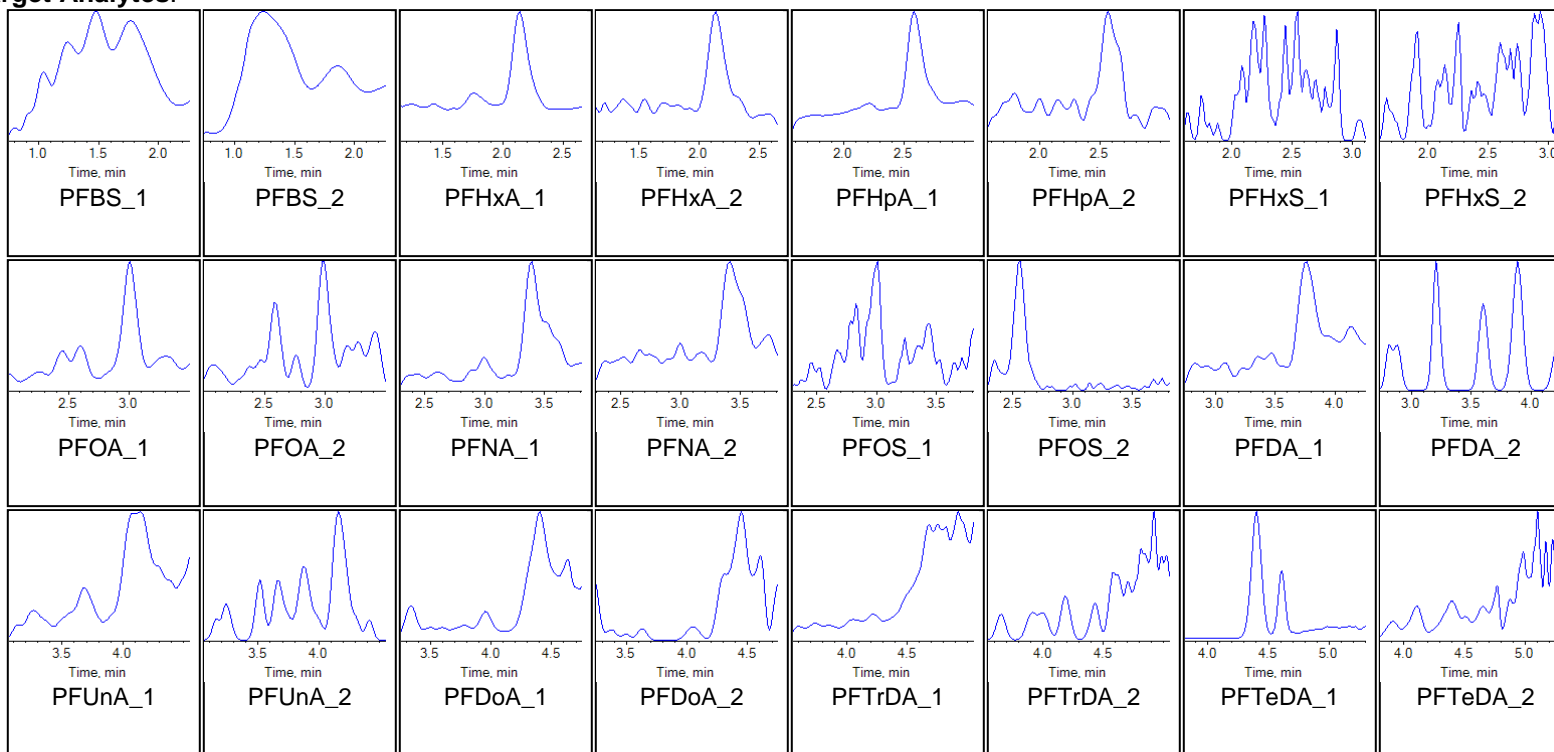
Internal Standards:



Sample Name	CU244PB-FS(0)	Injection Vial	46
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:47:56 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

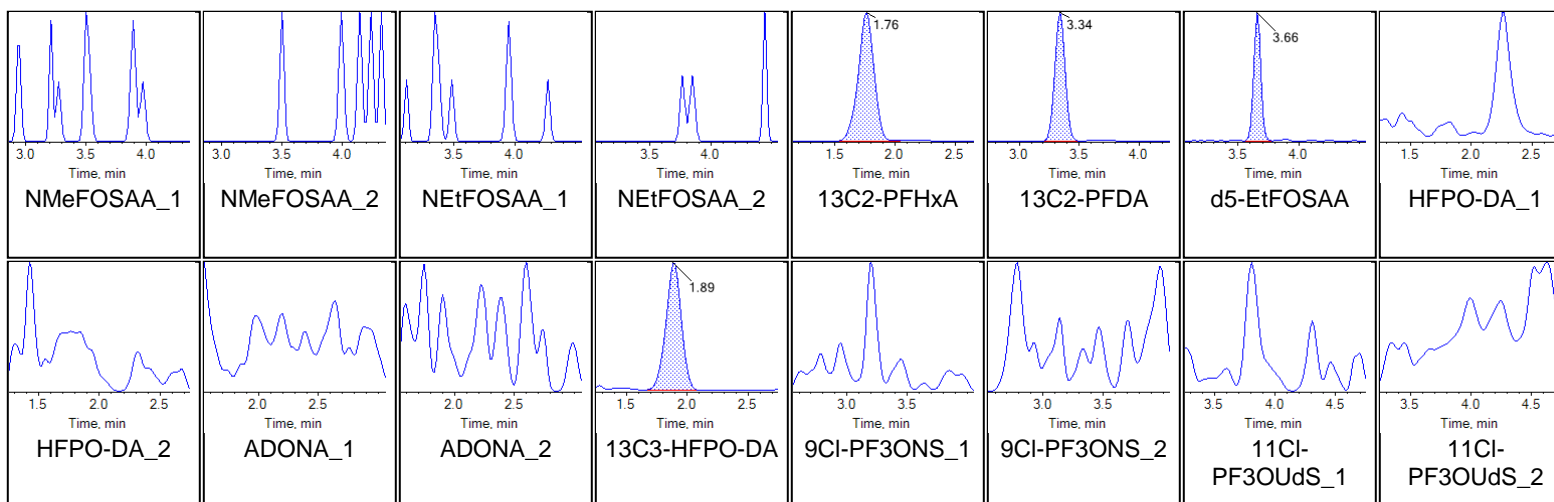
Chromatograms

Target Analytes:

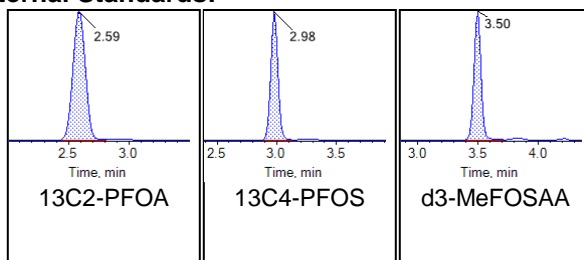




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Internal Standards:





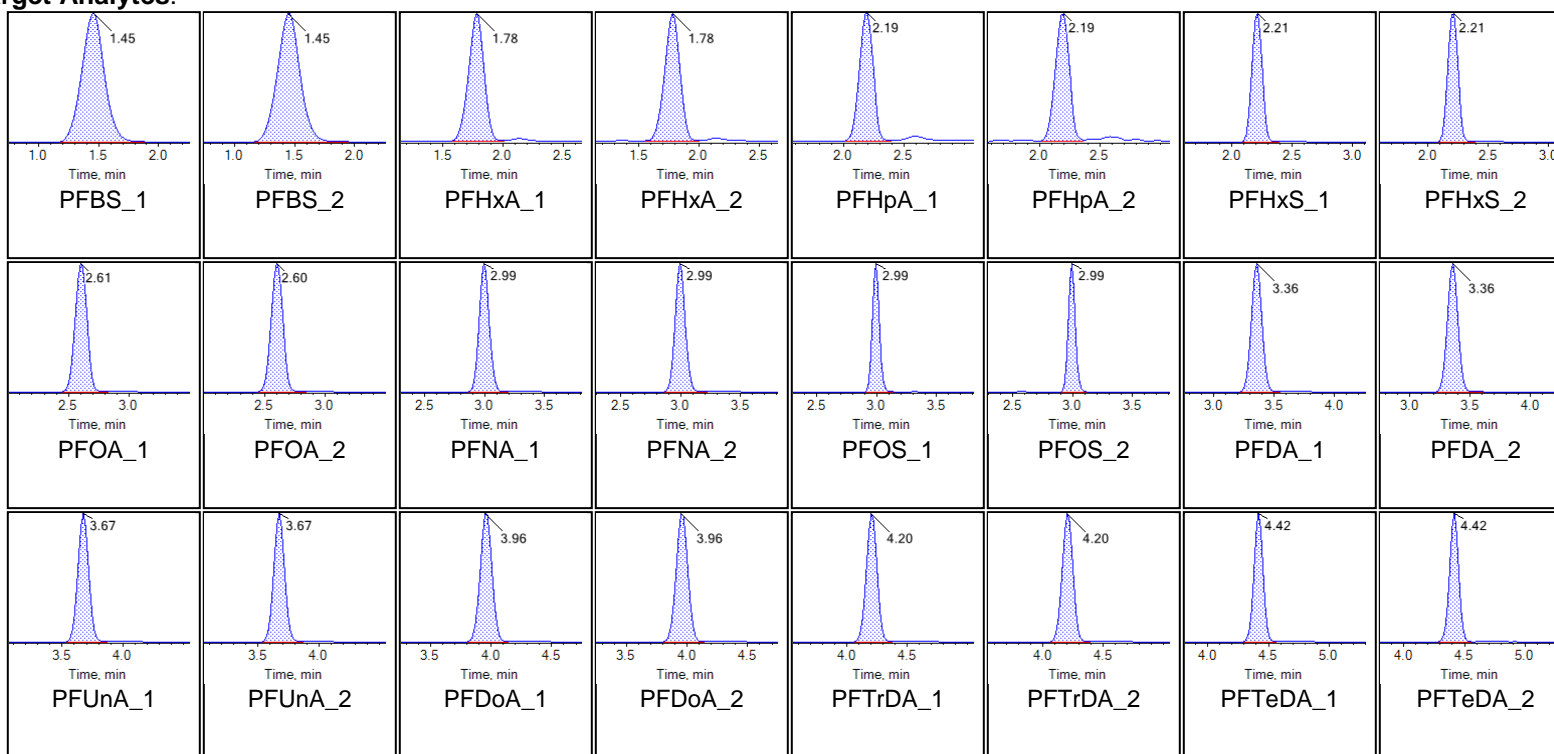
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	CU245LCS-FS(0)	Injection Vial	47
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 10:56:53 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

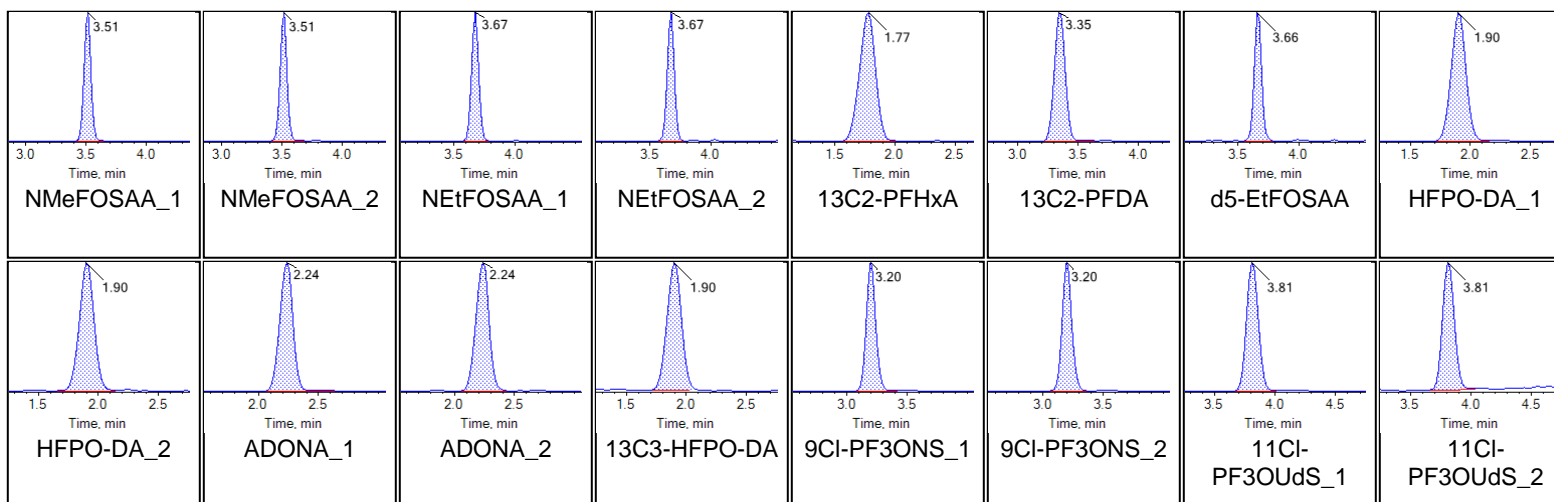
Chromatograms

Target Analytes:

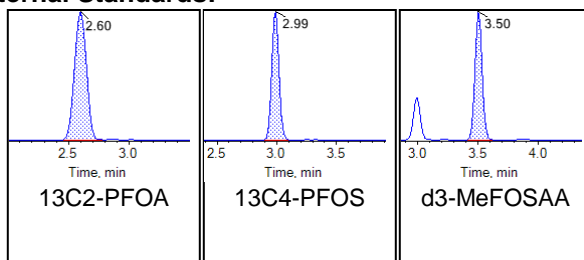




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

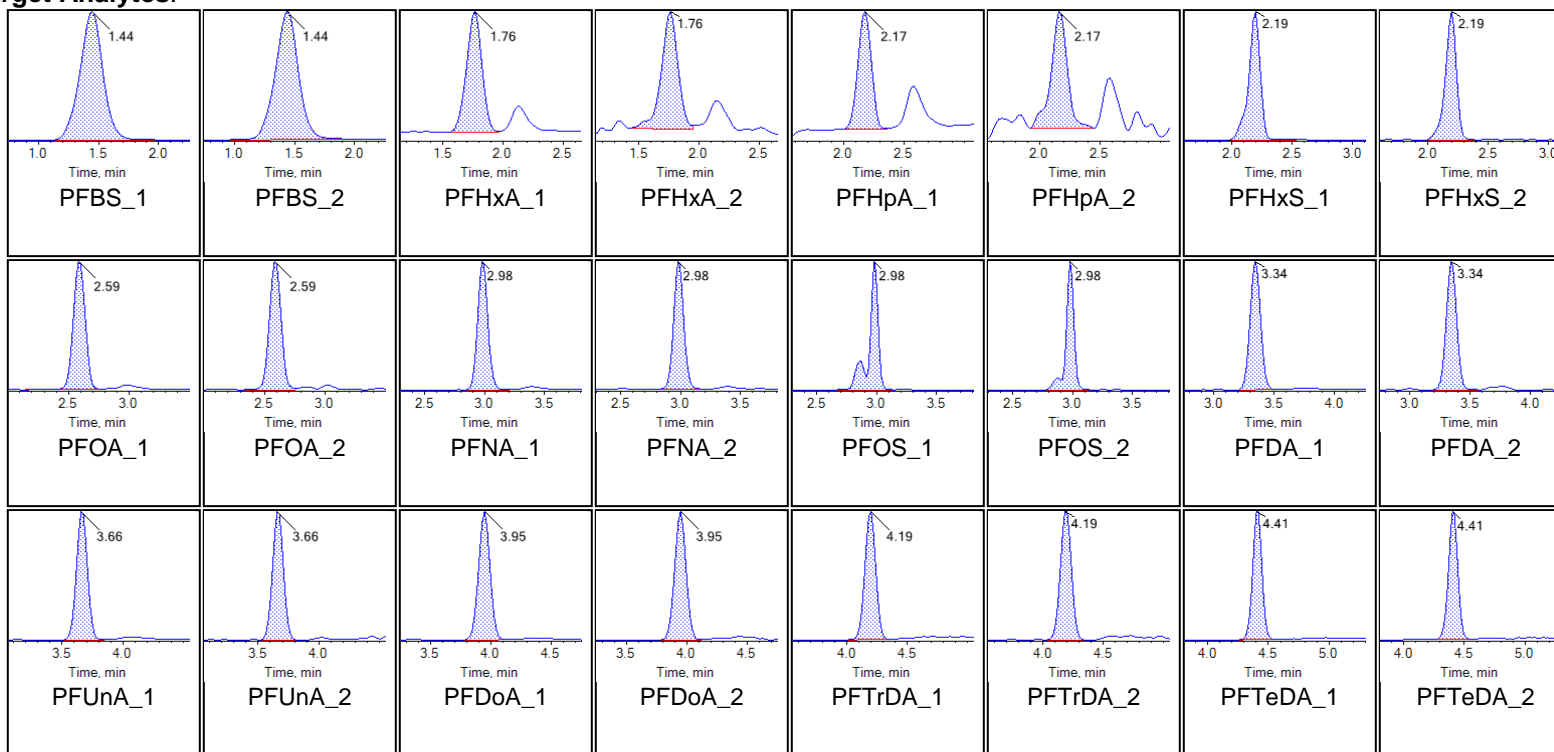
Internal Standards:



Sample Name	KL68 CCV	Injection Vial	54
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/4/2019 11:59:31 PM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

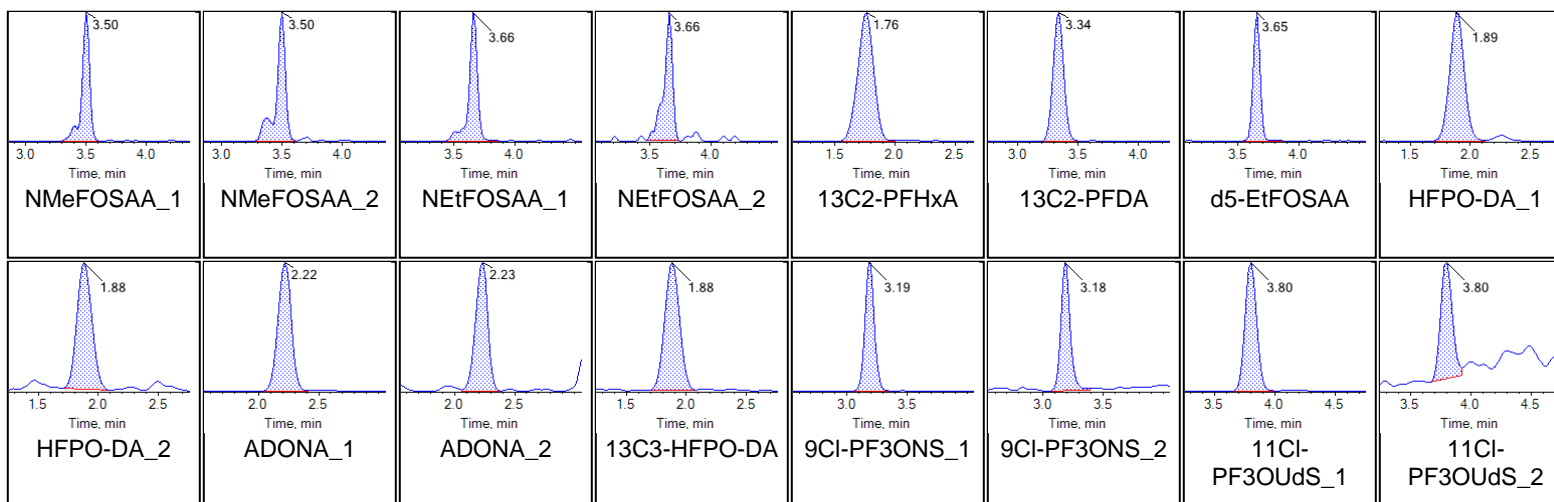
Chromatograms

Target Analytes:

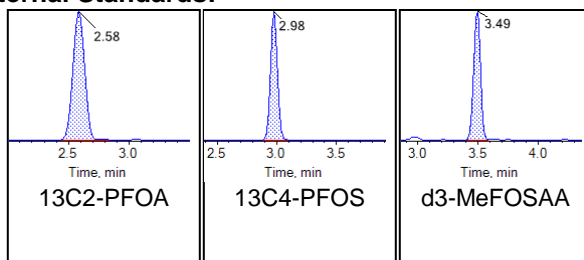




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

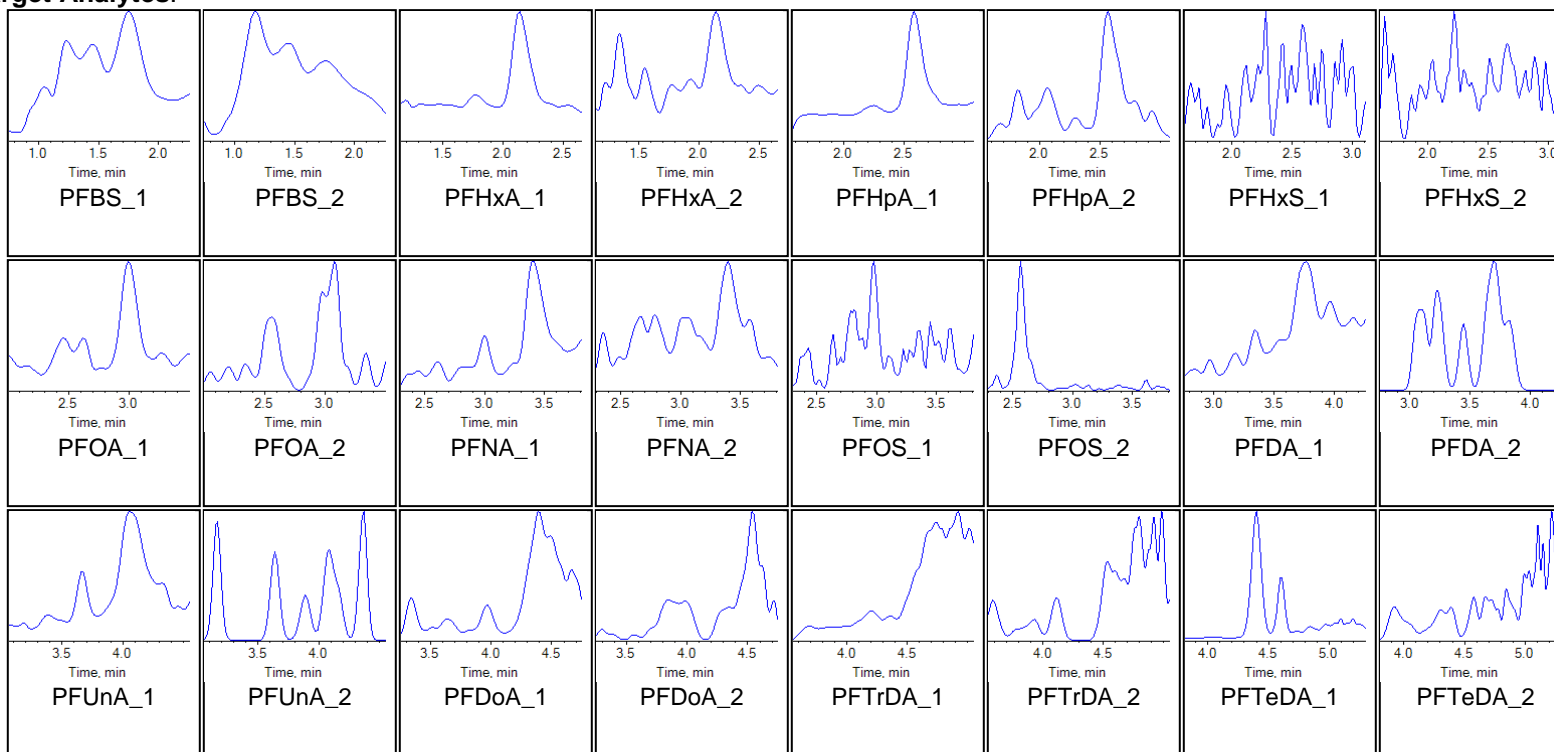
Internal Standards:



Sample Name	I3467-FS(0)	Injection Vial	3
Sample ID	E3-1120-FRB-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:26:24 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

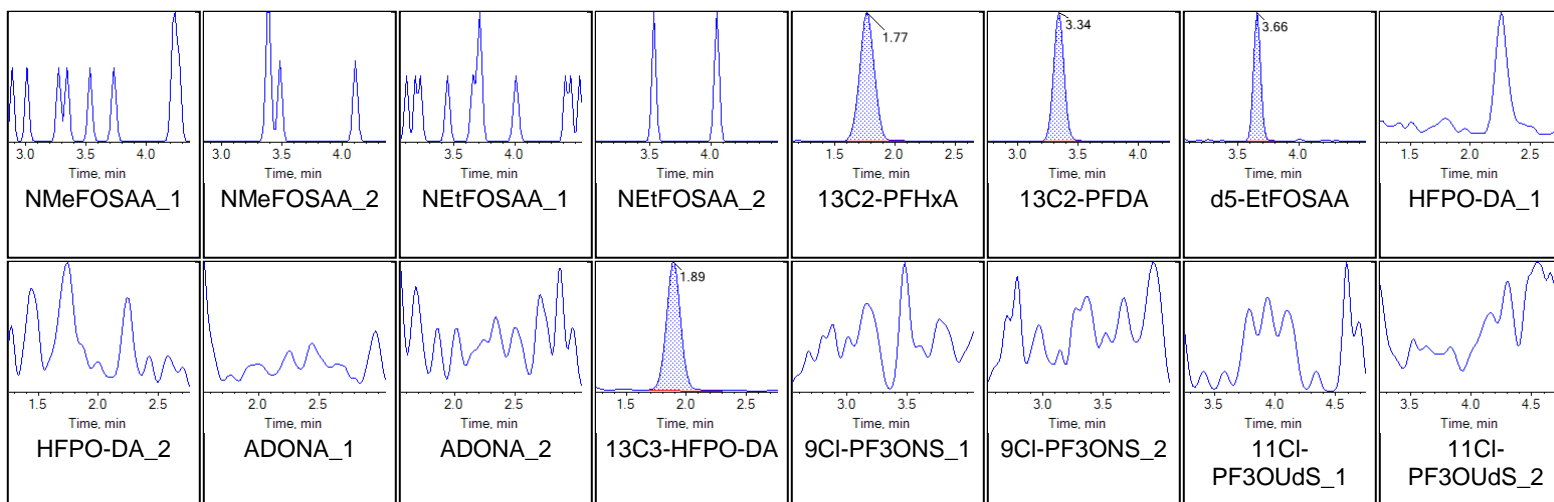
Chromatograms

Target Analytes:

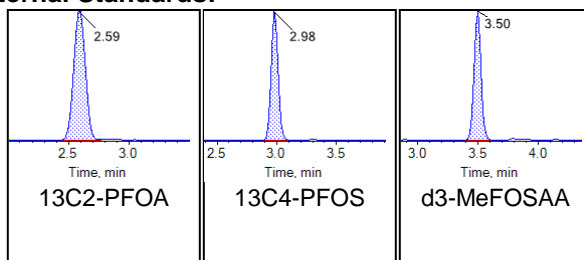




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

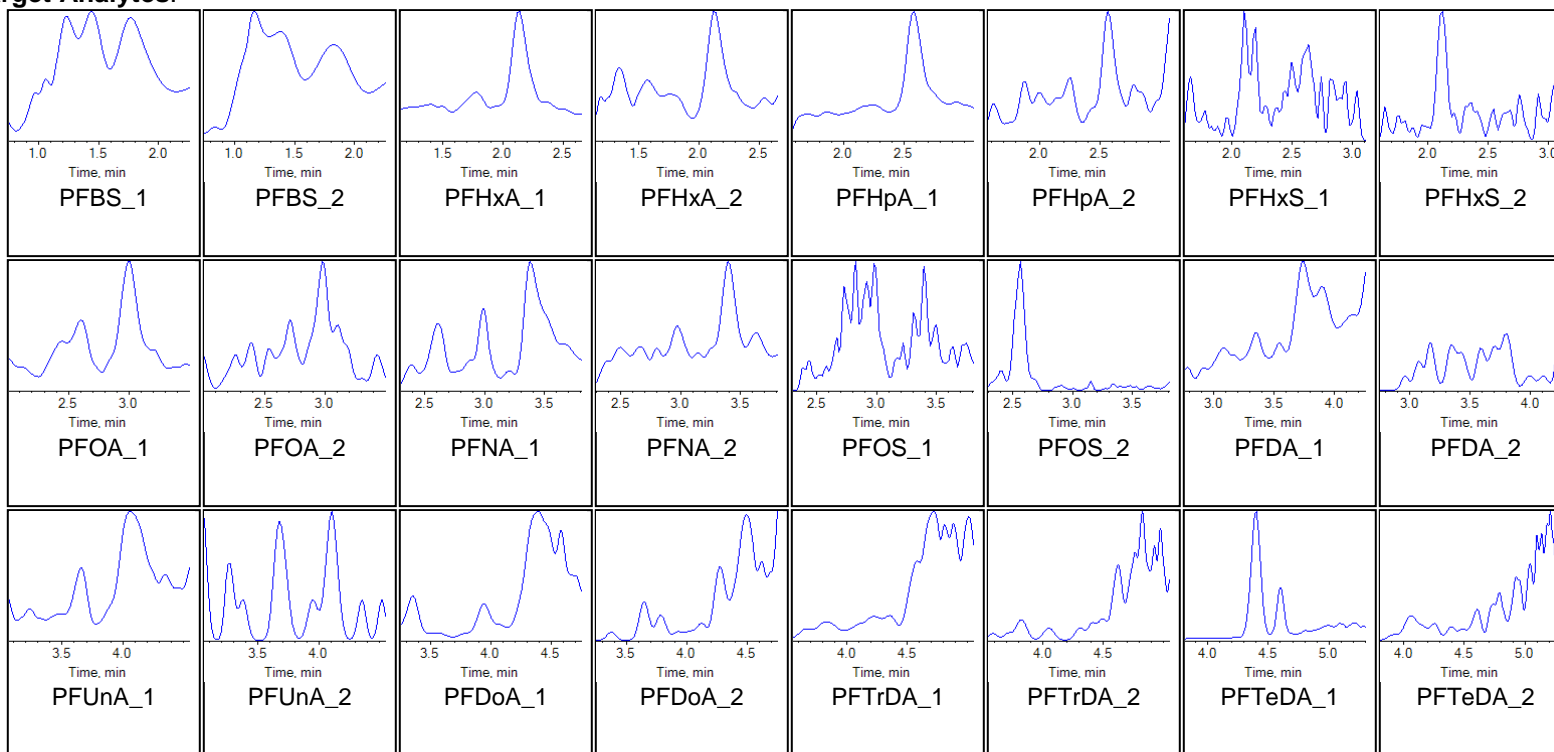
Internal Standards:



Sample Name	I3469-FS(0)	Injection Vial	4
Sample ID	H4-1797-FRB-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:35:23 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

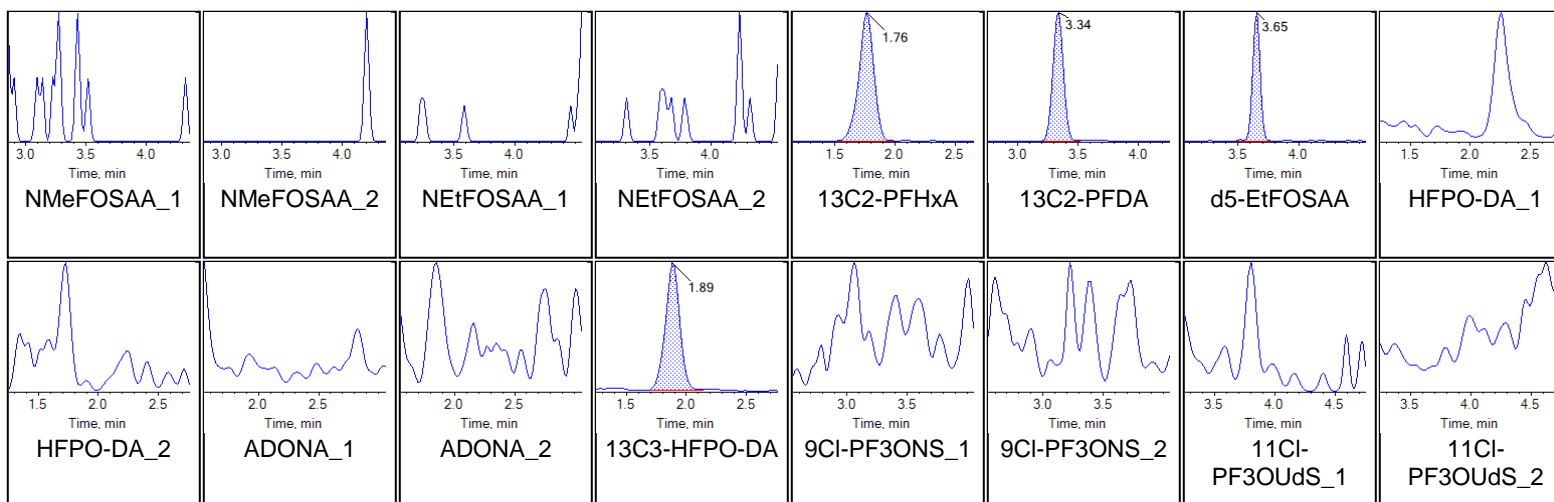
Chromatograms

Target Analytes:

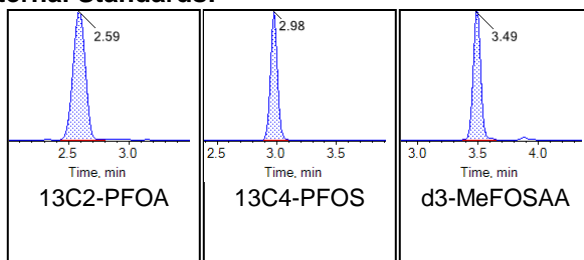




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

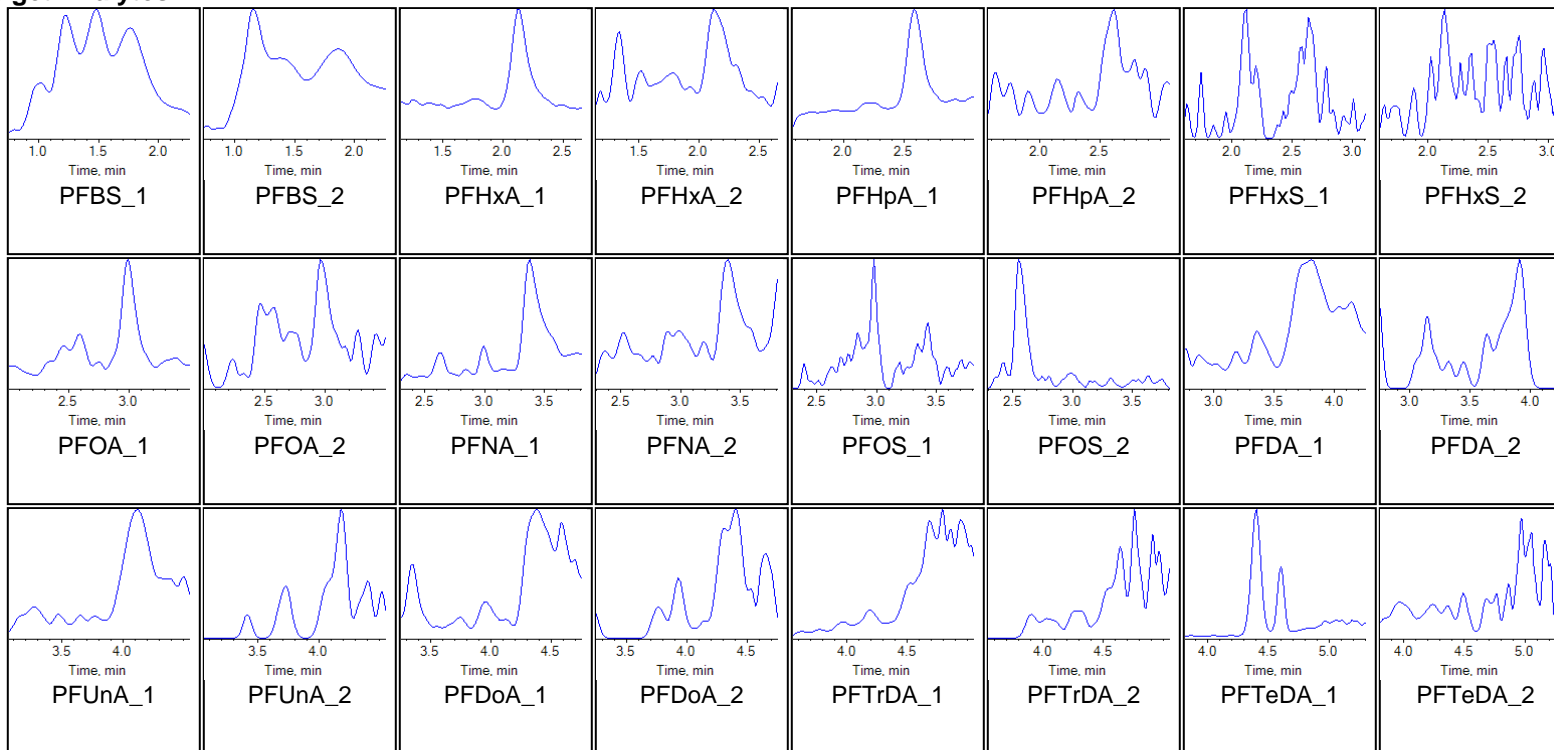
Internal Standards:



Sample Name	I3471-FS(0)	Injection Vial	5
Sample ID	H4-1840A-FRB-20190531-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:44:22 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

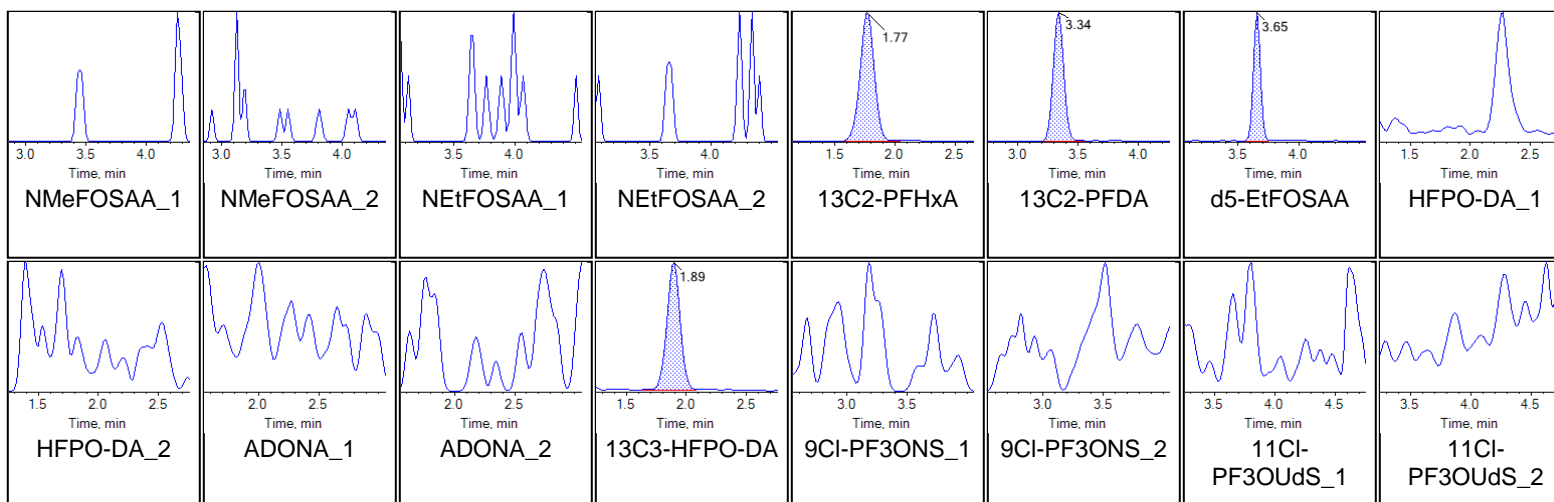
Chromatograms

Target Analytes:

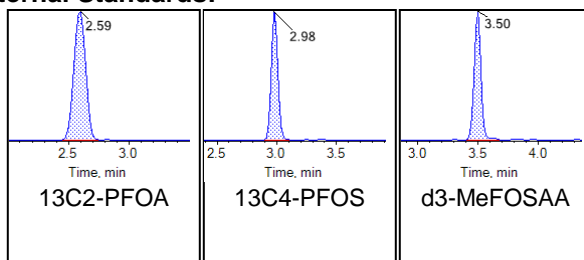




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

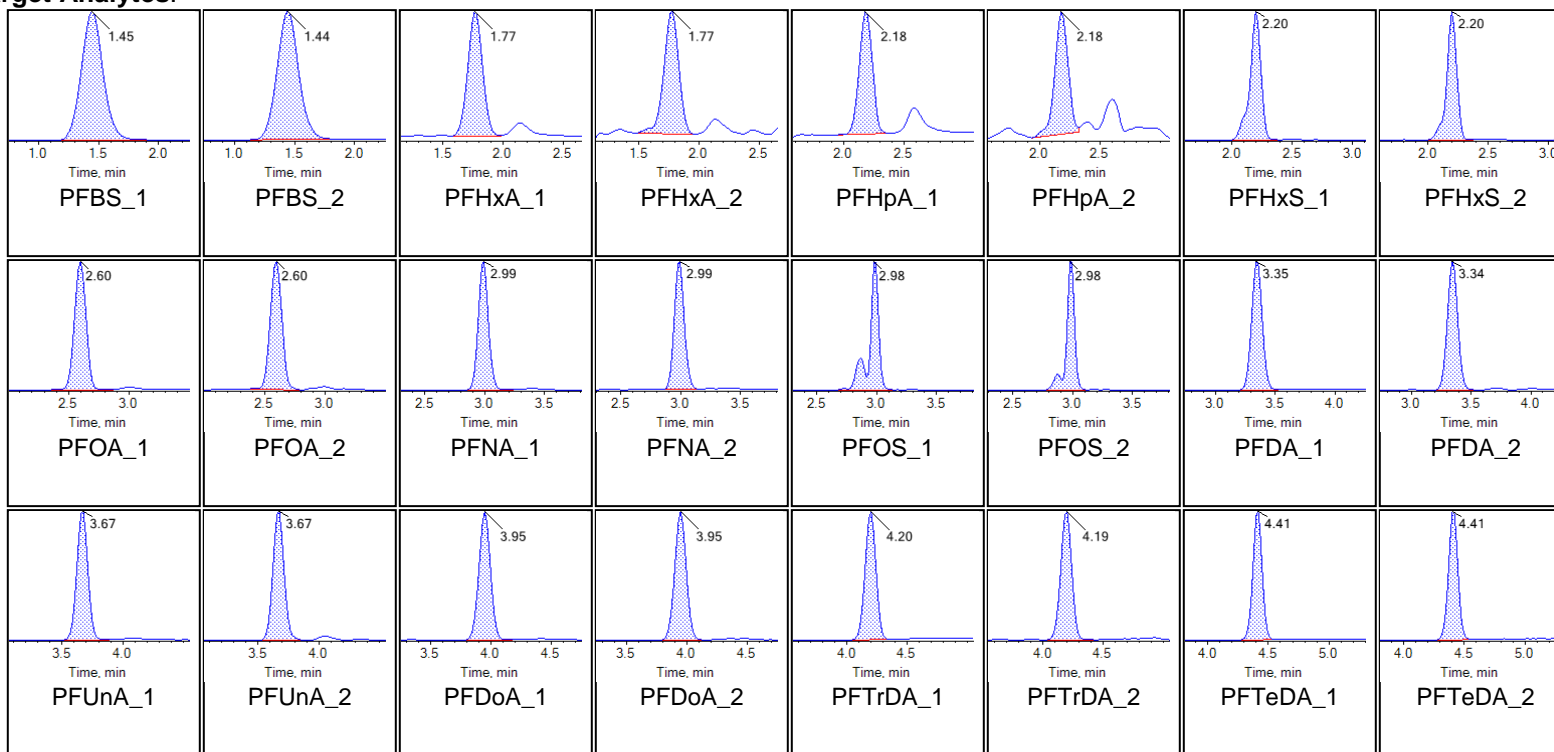
Internal Standards:



Sample Name	KL69 CCV	Injection Vial	6
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:53:21 AM	Data File	AC_06042019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

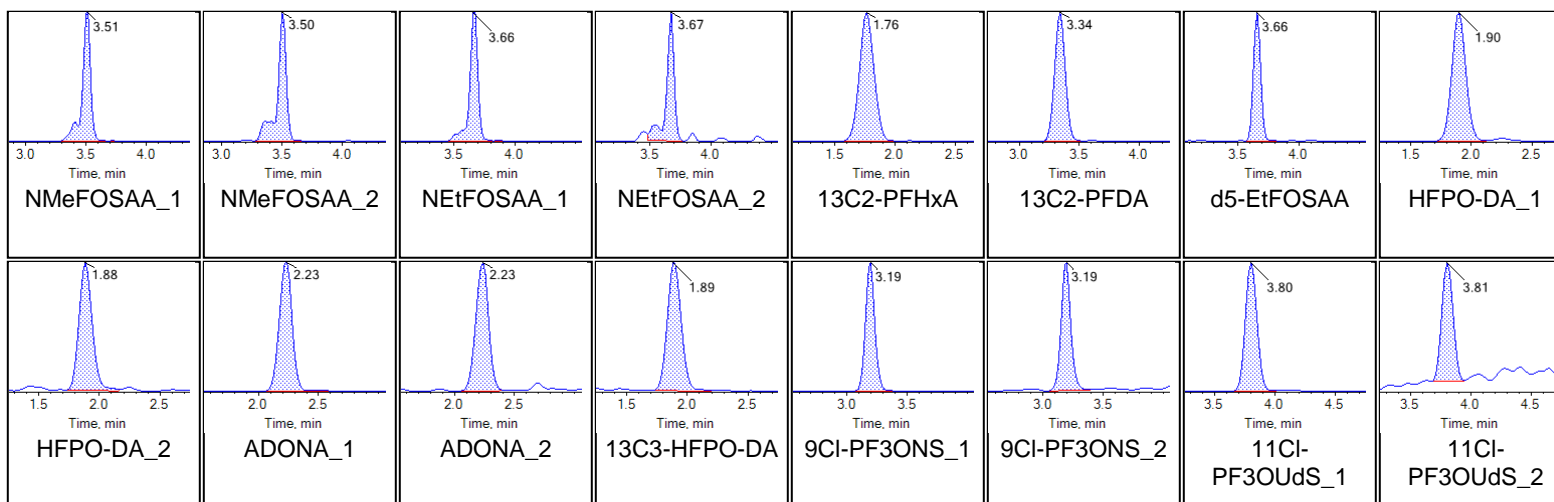
Chromatograms

Target Analytes:

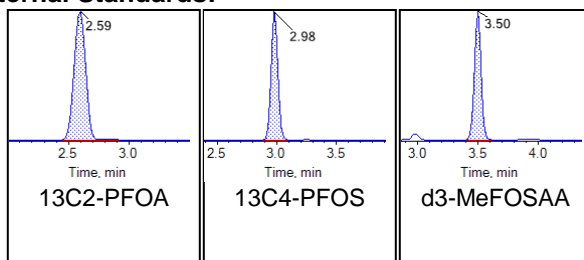




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Internal Standards:





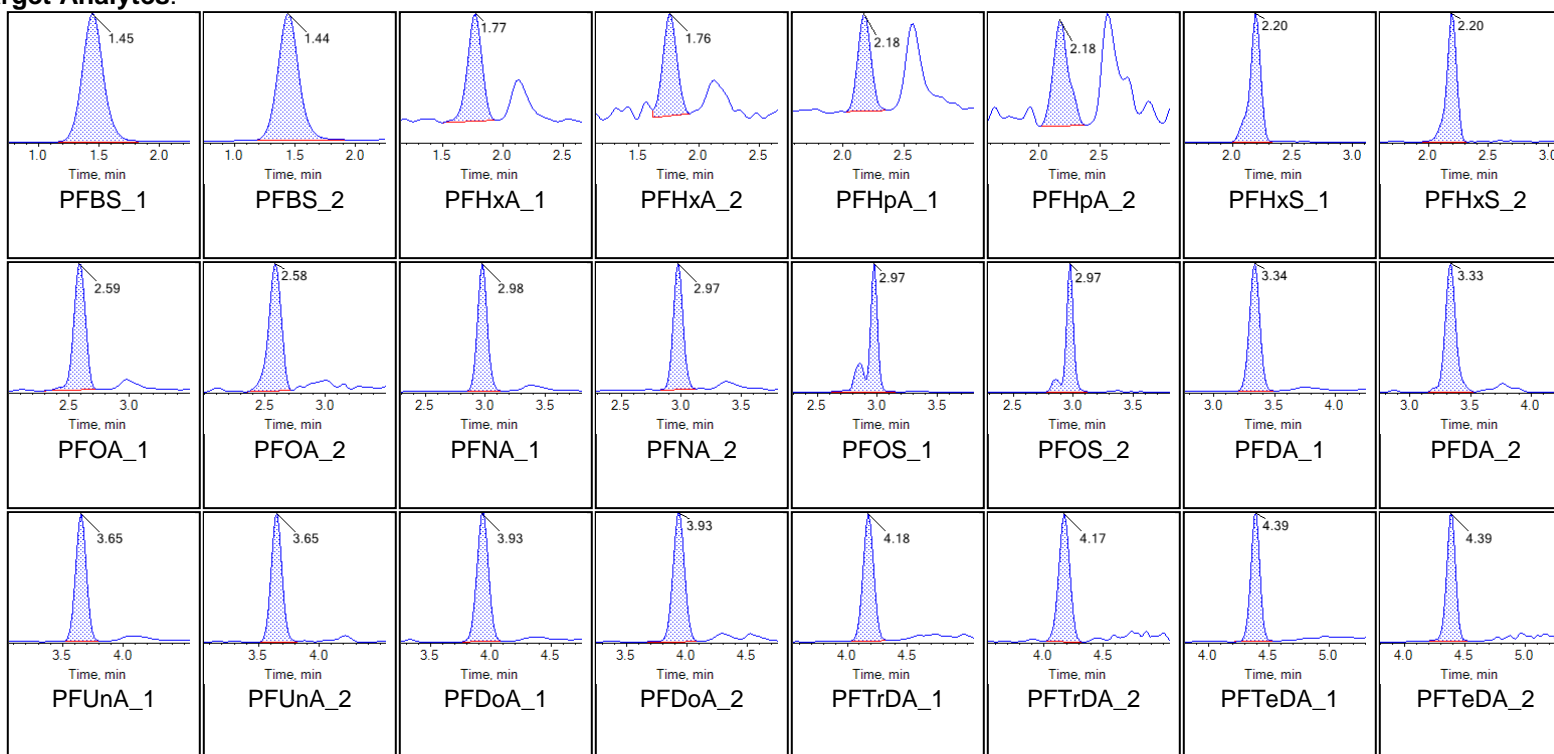
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	KL67 ISC	Injection Vial	2
Sample ID	ISC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:36:45 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

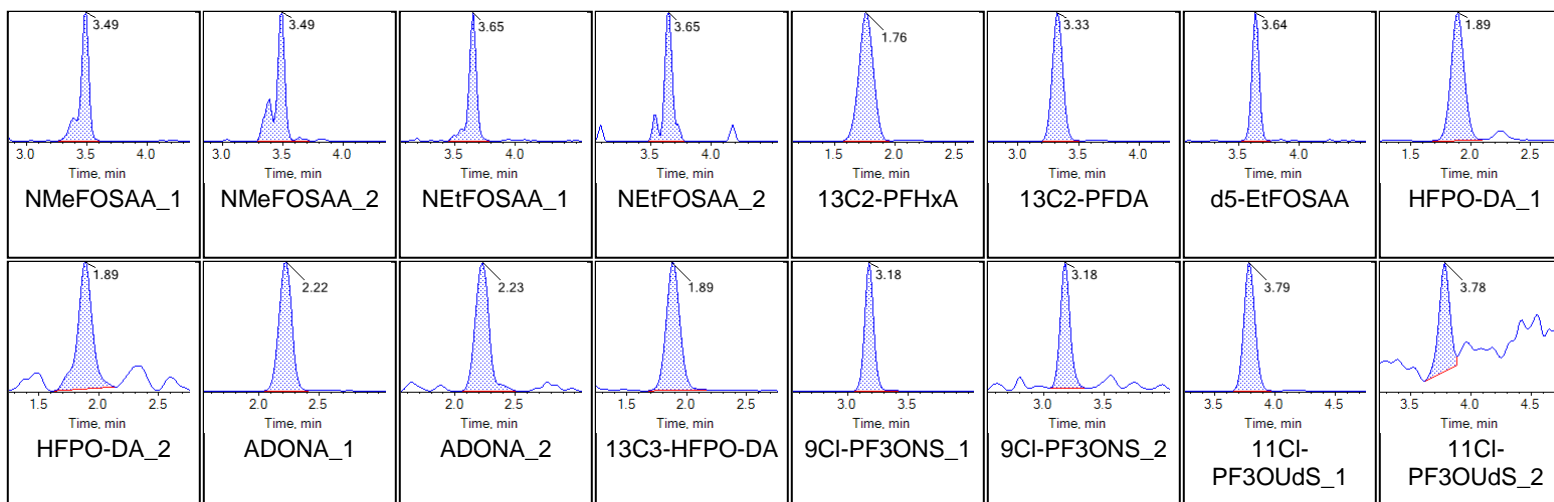
Chromatograms

Target Analytes:

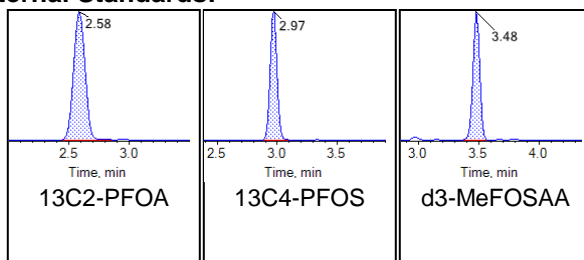




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

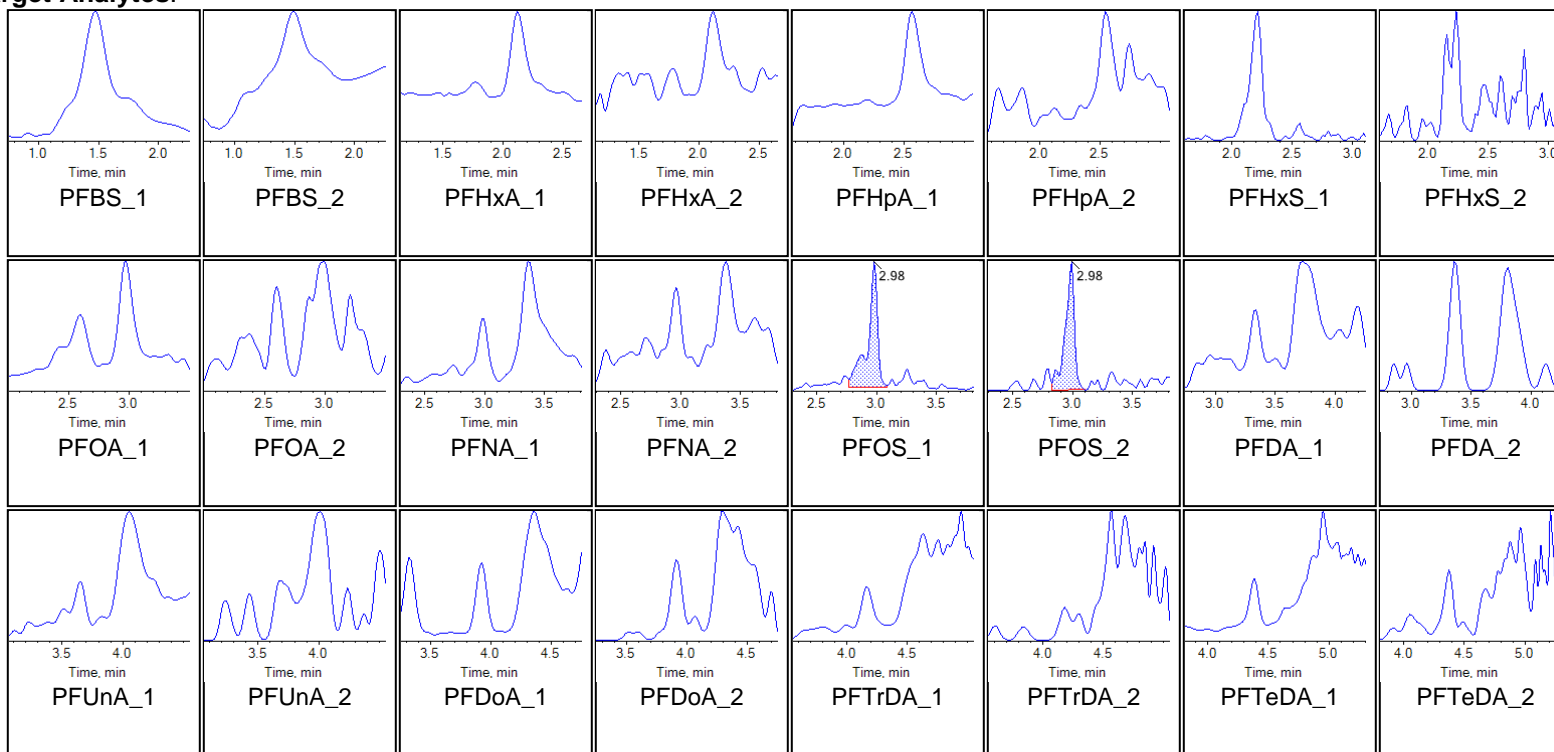
Internal Standards:



Sample Name	KL73 IB	Injection Vial	4
Sample ID	IB	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 10:54:41 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

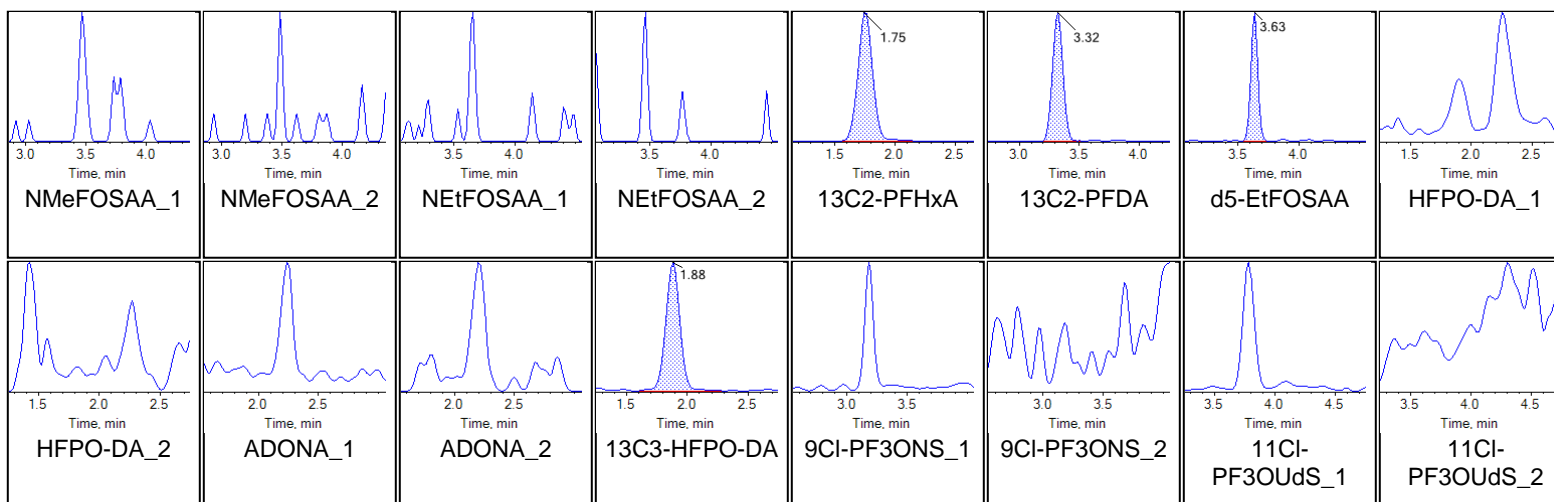
Chromatograms

Target Analytes:

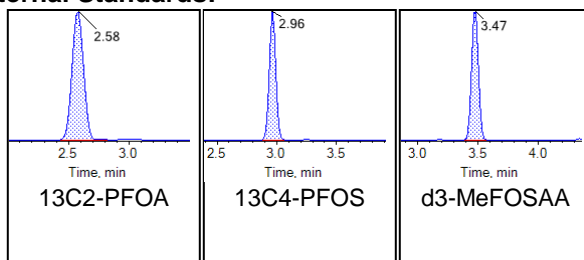




Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Internal Standards:





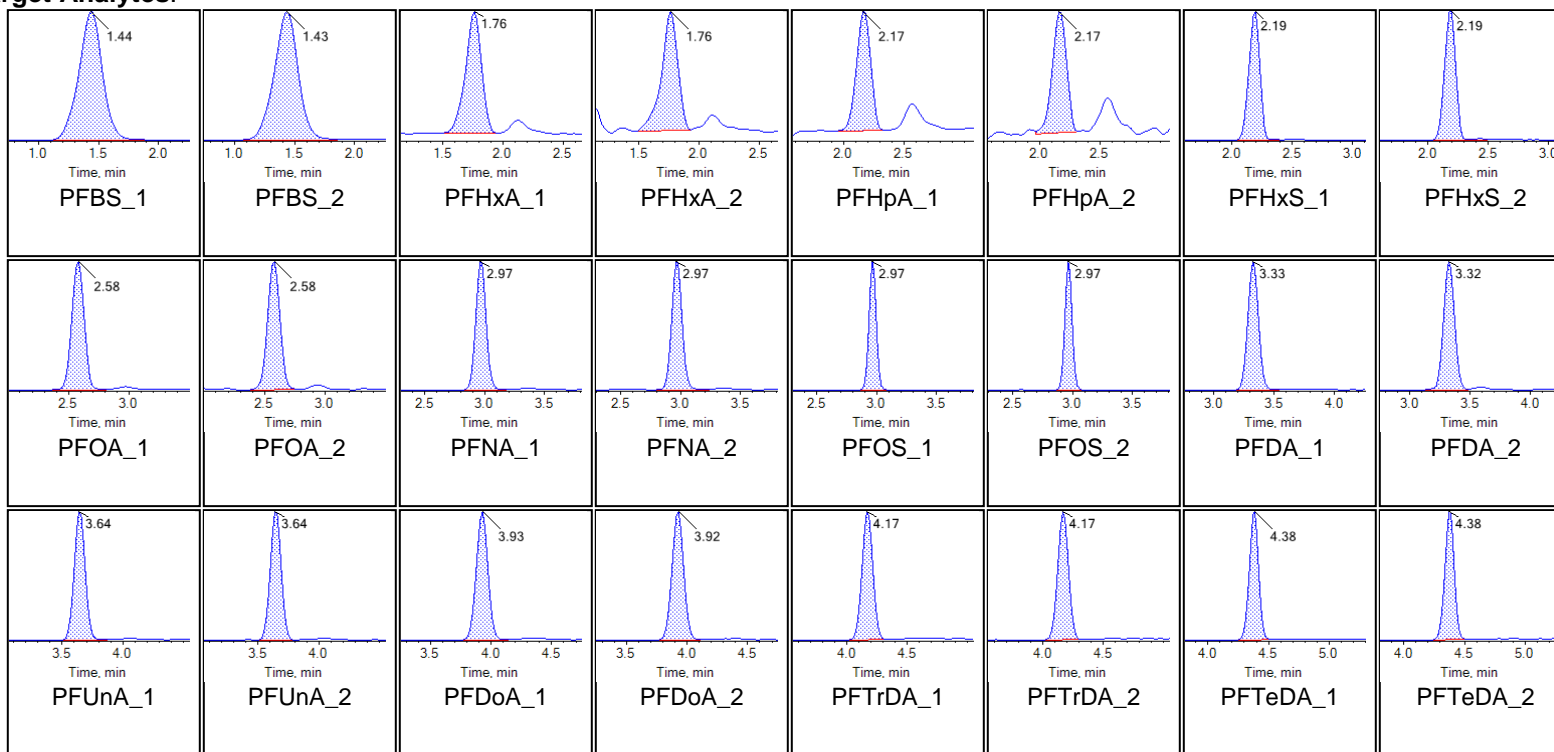
Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM

Sample Name	CU245LCS-FS-D(3)	Injection Vial	6
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 11:12:35 AM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

Chromatograms

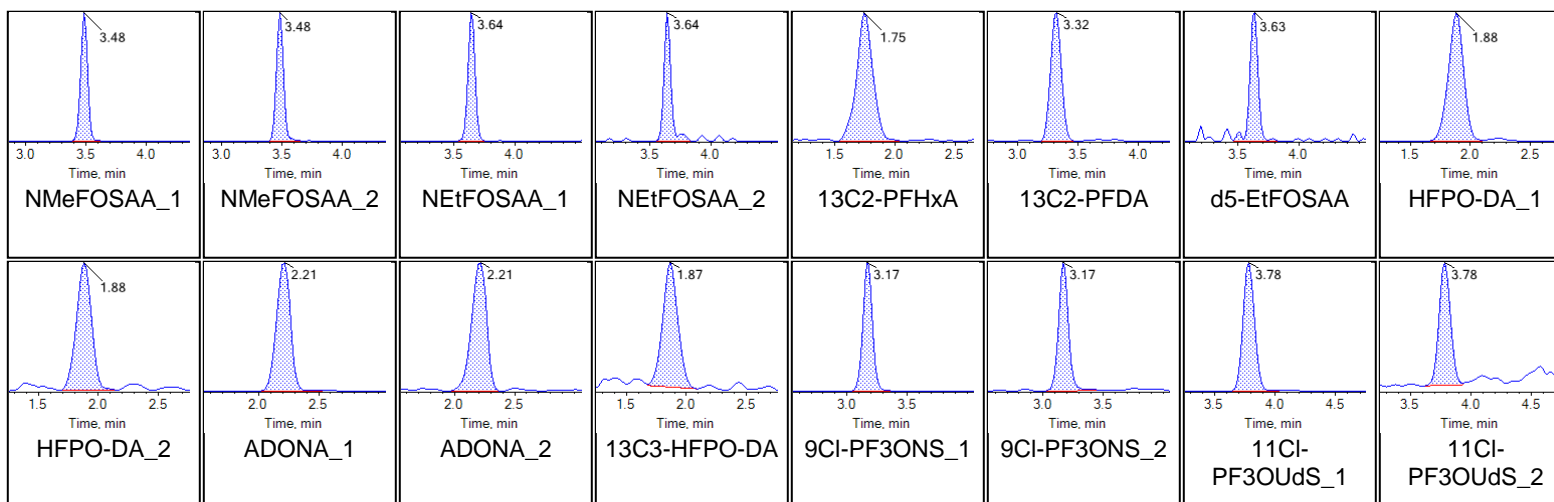
Target Analytes:



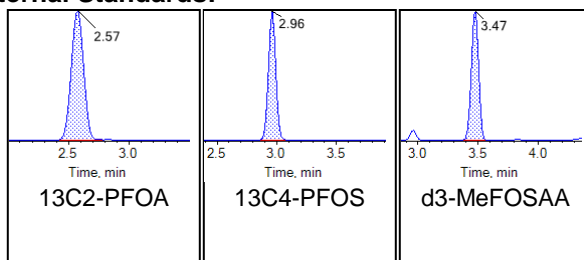


Chromatogram Report

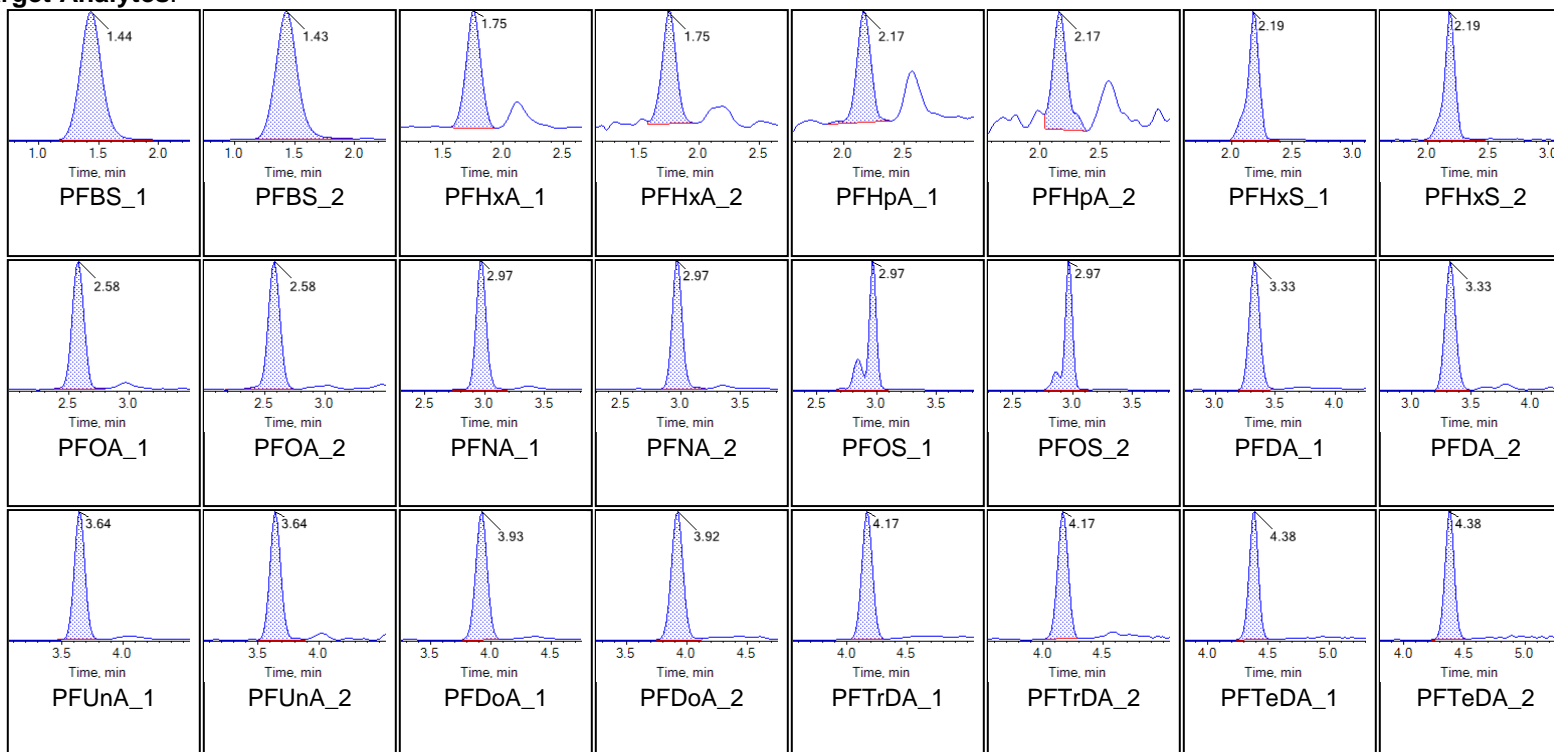
Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM



Internal Standards:



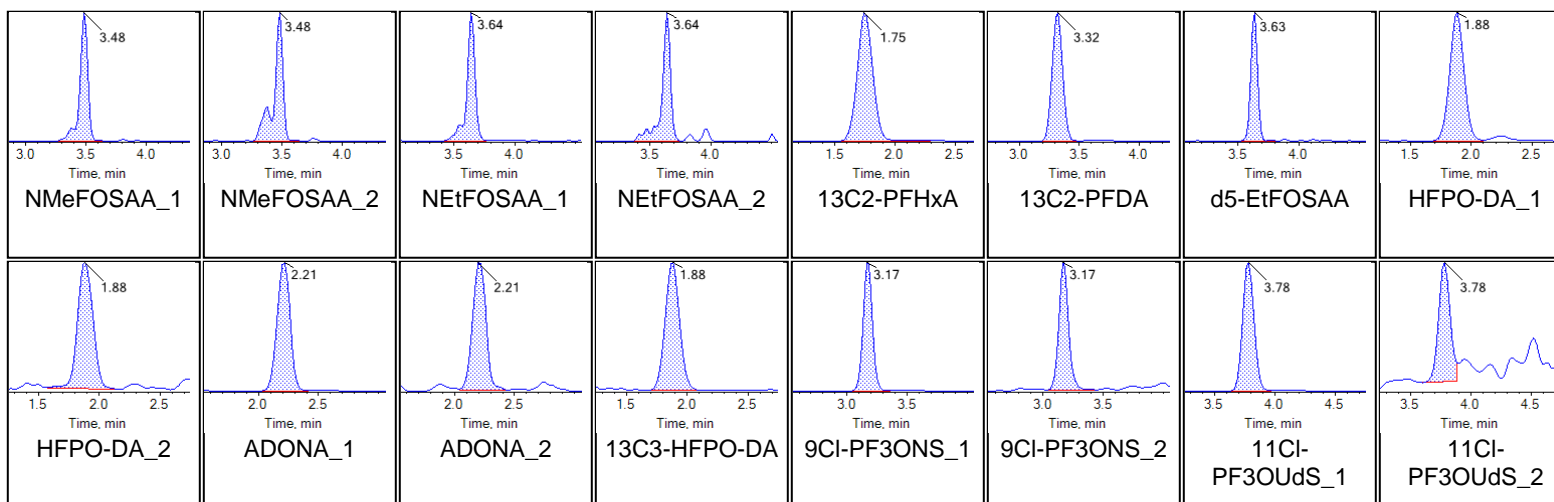
Sample Name	KL68 CCV	Injection Vial	13
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/5/2019 12:15:19 PM	Data File	AC_06052019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0466_DW

Chromatograms**Target Analytes:**

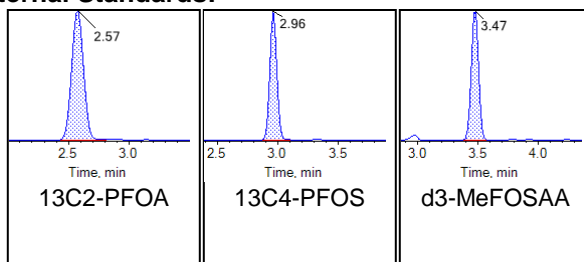


Chromatogram Report

Created with Analyst Reporter
Printed: 07/06/2019 6:48:50 AM



Internal Standards:



PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
DW, QC
Batch 19-0485
Package DP-19-0414

Submitted to:
Tetra Tech
661 Anderson Drive Foster Plaza 7
Pittsburgh, PA 15220 USA

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

BATTELLE


It can be done

PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
DW, QC
Batch 19-0485
Package DP-19-0414

Submitted to:
Tetra Tech
661 Anderson Drive Foster Plaza 7
Pittsburgh, PA 15220 USA

NELAP Accreditation Number: E87856 (Florida Department of Health)
DoD-ELAP Accreditation Number: 91667

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061


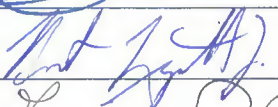
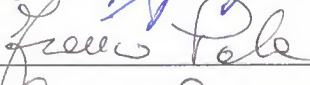





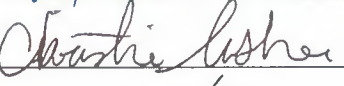

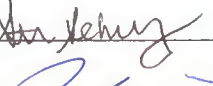

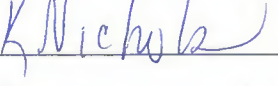

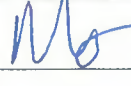

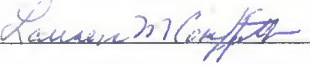
Analyst Approval:	 Digitally signed by Lauren Griffith Date: 2019.06.10 14:45:10 -04'00'	
QC Chemist Approval:		Digitally signed by devinec@battelle.org DN: cn=devinec@battelle.org Date: 2019.06.11 13:38:42 -04'00'
Project Manager Approval:		Digitally signed by Jonathan Thorn Date: 2019.06.11 15:26:06 -04'00'



PFAS: Nasa Kennedy Space Center
Project No 100123260
PFAS in drinking water
DW, QC
Batch 19-0485
Package DP-19-0414

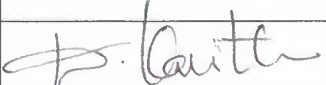

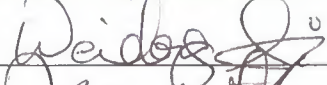
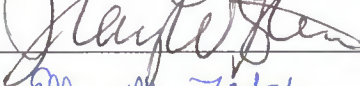
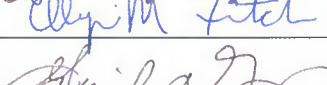
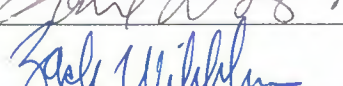
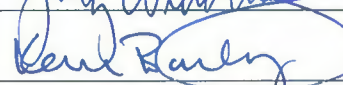
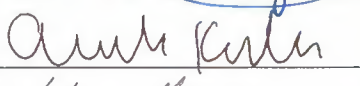


1	<i>Work Plan</i> Laboratory Work Plan, Addendums To Work Plan, Memos From Project Manager, Special Instructions, Chain-of-Custody Reports.	1
2	<i>Tables</i> Analytical Data Tables, Qualifier Definitions.	18
3	<i>Miscellaneous Documentation</i> Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	25
4	<i>Sample Preparation Records</i> Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	95
5	<i>Analytical Calibrations</i> Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	107
6	<i>Analytical Data</i> Raw Data Quantification Reports.	174
7	<i>Chromatograms</i> Sample And Standard Chromatograms.	185
8	<i>Unused Data</i>	218

Signature Page

Battelle 2018 (1 of 2) Signature Page			
Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4-4-2018
FRANC PALA		FP	4-4-2018
Carla Devine		CRD	4/4/18
Denise Schumitz		DNS	4/4/18
Carolus Keum Meay		CKM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mena		MM	4/4/2018
Christie Usher		CU	4/4/18
Kevin Matroney		KM	4/4/18
Stephanie Schmitz		SAS	4/4/18
Jordan Tower		JT	4/4/18
KRISTEN NICHOLS		KN	4/4/18
Quimiao H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith		LMG	4.4.18

Signature Page

Battelle 2018 (2 of 2)
Signature Page

Name (Printed)	Signature	Initials	Date
KAVITHA DASU		KD	04/04/18
Kayla Lamarre		KAL	04/04/18
Weidong Li		W.L	04/04/18
Tracy W Stenner		Tracy	04/04/18
Ellyn M Fitch		EF	12-April-2018
Gail DeRuzzo		GD	4/18/18
Zachary Willenberg		Z/W	4/20/18
Kevin Bailey		KB	10/25/18
Andrea Kulda		AK	10/25/18
William Mendelsohn		WM	10/25/18

Sample Summary

Client: Tetra Tech, Inc.

SDG: 19-0385

Project/Site: Nasa Kennedy Space Center

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CU330PB-FS	Procedural Blank	WATER	6/6/2019	6/6/2019
CU331LCS-FS	Laboratory Control Sample	WATER	6/6/2019	6/6/2019
I3532-FS	C2-1307-DW0001-20190605	DW	6/5/2019	6/6/2019
I3533-FS	C2-1307-FRB-20190605-01	QC	6/5/2019	6/6/2019

Work Plan



WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title: Nasa: PFAS Drinking Water
Project Number: 100123260
Client: Tetra Tech
 661 Anderson Drive Foster Plaza 7
 Pittsburgh, PA 15220
 USA

Client Contact Information: Chris Pike
 Project Manager
 (412) 921-8861(V)
 NA
 chris.pike@tetrattech.com

Effective Date of QAPP: 6/3/2019
Version Number: 100123260(L)-02
Project Manager: Thorn, Jonathan
Laboratory Task Manager: Thorn, Jonathan
Deliverable Due Date: 6/5/2019

2.0 SCOPE OF WORK

Overview: Analysis of drinking water samples at Nasa Kennedy Space Center.
Matrix: Water

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

The list of samples for this project plan are presented in Attachment 1.

Storage Directions: Store refrigerated.
Sub_Sampling: None
Procedures: NA
Contact: NA
Comment: NA
Archiving: Dispose of samples six months after final report has been delivered. Notify client prior to disposal of samples.
Disposal: Dispose of samples in proper waste stream.



WORK/QUALITY ASSURANCE PROJECT PLAN

2.1.2 Sample Preparation

NA

Samples Expected:	Samples Per Batch:	Batches Expected:
30	20	2

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

Type:	Description:	Count:	Rgt:	Reference:	Comment:
PB	Laboratory control reagent blank.	1 per batch	--	NA	
LCS	Laboratory Control Sample	1 per batch	No	NA	
MS	Spiked field sample for determining method accuracy in the presence of matrix.	1 per batch	--	NA	MS/MSD defined on custody records
MSD	Spiked field sample for determining method accuracy and precision in the presence of matrix.	1 per batch	--	NA	MS/MSD defined on custody records

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

SOP No.-Rev:	5-371-04
SOP Title:	<i>ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1</i>
Sample Size:	250 mL
SIS and LCS/MS Compounds:	Defined in Table 2.
Deviations:	None
Comments:	None

Table 2: SIS and LCS/MS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Surrogate Solution	KJ90 SIS	~ 0.100 - 0.40 ng	50 uL	NA



WORK/QUALITY ASSURANCE PROJECT PLAN

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Second Source LCS/MS Solution	KJ91 LCS/MS	~ 5.0 - 6.3 ng	125 uL	NA

2.1.3.2 Cleanup

None.

RIS spiking levels are presented in Table 3.

Extract PIV (uL): 1000

Table 3: RIS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - 537.1 Internal Standard Solution	KJ92 RIS	~ 0.100 - 0.40 ng	50 uL	NA

2.1.4 Instrumental Analysis

The list of analytes along with data quality criteria are presented in Attachment 2.

- 1) SOP_No-Rev: **5-371-04**
- SOP_Title: *ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1*
- Deviations: None
- Comments: None

2.2. DELIVERABLES

Deliverables Due:	6/5/2019
LIMS Reports:	No
Histograms:	No
Excel Tables:	No
EICs:	No
Chromatograms:	No



WORK/QUALITY ASSURANCE PROJECT PLAN

EDDs: *No*

Comments:

- Excel tables for rush samples to Project Manager within 3-business days (full data package within 10 days).
- L2 validation package not required
- Tetra Tech EDD format
- Full validation packages (see SOW for details)
- Florida reporting template and qualifiers (see SOW for details)

3.0 QUALITY

The Method Quality Objectives are defined in Attachment 3.

4.0 ORGANIZATION AND COMMUNICATION

4.1 ORGANIZATION

The project team is defined in Table 4. Supervisors may make substitutions with Project Manager concurrence.

Table 4: Project Team and Roles

Staff Member	Role	Comment
Jonathan R. Thorn	Project Manager	NA
Stephanie A. Schultz	Sample Preparation	NA
Denise M. Schumitz	LC-MS/MS Analysis	NA
Matt D. Schumitz	Sample Custody	NA
Carla R. Devine	Quality Control Officer	NA
Zachary J. Willenberg	Quality Assurance Officer	NA

4.2 COMMUNICATION

A kick-off meeting will be held to discuss project scope and goals.

5.0 SCHEDULE

The project schedule is presented in Table 5.

Table 5. Schedule of Laboratory Activities

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Receipt	06/01/2019	06/01/2019	0	NA



WORK/QUALITY ASSURANCE PROJECT PLAN

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Preparation	06/03/2019	06/04/2019	1	NA
Instrument Analysis	06/04/2019	06/05/2019	1	NA
Quality Control Review	06/05/2019	06/05/2019	0	NA
Quality Assurance Review	06/05/2019	06/05/2019	0	NA

6.0 BUDGET

The labor budget for the analytical task is presented in Table 6.

Table 6. Labor Budget (Laboratory Analytical Task)

Labor Activity:	Hours/ Batch:	Batches:	Total Hours:	Comment:
Sample Receipt	2	1	2	hours per batch of 20 samples
Sample Preparation	9	1	9	NA
Instrument Analysis	8	1	8	NA
Quality Control Review	3	1	3	NA
Quality Assurance Review	1	1	1	NA

7.0 STAFF DEVELOPMENT

None anticipated.



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: SHP-190603-01
Status: Pending
Description: NASA
Range: I3451-I3471
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	I3451	Q6-0082-DW0001-20190530	05/30/2019 12:50 pm	DW	R0119	(NA)		
2	I3452	Q6-0082-FRB-20190530-01	05/30/2019 1:00 pm	QC	R0119	(NA)		
3	I3453	H6-1607-DW0001-20190530	05/30/2019 4:50 pm	DW	R0119	(NA)		
4	I3454	H6-1607-FRB-20190530-01	05/30/2019 5:00 pm	QC	R0119	(NA)		
5	I3455	M6-1518-DW0001-20190531	05/31/2019 8:35 am	DW	R0119	(NA)		
6	I3456	M6-1518-FRB-20190531-01	05/31/2019 8:45 am	QC	R0119	(NA)		
7	I3457	H5-2139-DW0001-20190531	05/31/2019 10:10 am	DW	R0119	(NA)		
8	I3458	H5-2139-FRB-20190531-01	05/31/2019 10:20 am	QC	R0119	(NA)		
9	I3459	H5-1434-DW0001-20190531	05/31/2019 11:15 am	DW	R0119	(NA)		
10	I3460	H5-1434-FRB-20190531-01	05/31/2019 11:20 am	QC	R0119	(NA)		
11	I3461	H4-1598-DW0001-20190531	05/31/2019 12:10 pm	DW	R0119	(NA)		
12	I3462	H4-1598-FRB-20190531-01	05/31/2019 12:15 pm	QC	R0119	(NA)		
13	I3463	F4-1844-DW0001-20190531	05/31/2019 1:00 pm	DW	R0119	(NA)		
14	I3464	F4-1844-FRB-20190531-01	05/31/2019 1:05 pm	QC	R0119	(NA)		
15	I3465	E3-1120-DW0001-20190531	05/31/2019 2:15 pm	DW	R0119	(NA)		
16	I3466	E3-1120-FD-20190531-01	05/31/2019 2:20 pm	QC	R0119	(NA)		
17	I3467	E3-1120-FRB-20190531-01	05/31/2019 2:25 pm	QC	R0119	(NA)		
18	I3468	H4-1797-DW0001-20190531	05/31/2019 3:45 pm	DW	R0119	(NA)		
19	I3469	H4-1797-FRB-20190531-01	05/31/2019 3:50 pm	QC	R0119	(NA)		
20	I3470	H4-1840A-DW0001-20190531	05/31/2019 4:25 pm	DW	R0119	(NA)		
21	I3471	H4-1840A-FRB-20190531-01	05/31/2019 4:30 pm	QC	R0119	(NA)		



WORK/QUALITY ASSURANCE PROJECT PLAN

Shipment: SHP-190606-01
Status: Pending
Description: NASA
Range: I3532-I3533
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	I3532	C2-1307-DW0001-20190605	06/05/2019 10:05 am	DW	R0119 (NA)			
2	I3533	C2-1307-FRB-20190605-01	06/05/2019 10:15 am	QC	R0119 (NA)			



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name:	Master_371.1
SOP Reference:	5-371 - ANALYSIS OF POLY AND PERFLUOROALKYL SUBSTANCES IN DRINKING WATER SAMPLES BY LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS) FOLLOWING EPA METHOD 537.1
Description:	PFAS in drinking water
Matrix:	L - Liquid Samples, like water or sea water, prepared and analyzed under the same class of detection limits.
Detection Limit Study:	5-371
Instrument:	LC-MS/MS
MQO Criteria	Universal_LC
Standard Report:	Standard Result Report

Method Specific Reporting		Holding Times (days)		Data Flags
Result Units:	ng/L	Unit Conversion:	(none)	Sample: 14 DL_Flag: U
Weight Basis:	LIQUID	Result Format:	Fixed Digits	Frozen: 14 RL_Flag: J
Standard Basis:	RIS	# of Figures/Digits:	2	Extract: 28 PB_Flag: B
Oil Weight Basis:	No	Oil Weight Source:	Oil Weight	DIL_Flag: D
U-Value Substitution:	U-Flag=MD	Histograms:	No	HT_Flag: T
ECD_Reporting:	No			

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
1	Perfluoro-n-hexanoic acid	PFHxA	T	13C2-PFOA		No	No
2	Perfluoro-n-heptanoic Acid	PFHpA	T	13C2-PFOA		No	No
3	Perfluoro-n-octanoic Acid	PFOA	T	13C2-PFOA		No	No
4	Perfluorononanoic Acid	PFNA	T	13C2-PFOA		No	No
5	Perfluoro-n-decanoic Acid	PFDA	T	13C2-PFOA		No	No
6	Perfluoro-n-undecanoic acid	PFUnA	T	13C2-PFOA		No	No
7	Perfluoro-n-dodecanoic acid	PFDoA	T	13C2-PFOA		No	No
8	Perfluoro-n-tridecanoic acid	PFTTrDA	T	13C2-PFOA		No	No
9	Perfluoro-n-tetradecanoic acid	PFTeDA	T	13C2-PFOA		No	No
10	N-methylperfluoro-1-octanesulfonamidoacetic acid	NMeFOSAA	T	d3-MeFOSAA		No	No
11	N-ethylperfluoro-octanesulfonamidoacetic acid	NEtFOSAA	T	d3-MeFOSAA		No	No
12	Perfluoro-1-butanefulfonate	PFBS	T	13C4-PFOS		No	No
13	Perfluoro-1-octanesulfonate	PFOS	T	13C4-PFOS		No	No
14	Perfluoro-1-hexanesulfonate	PFHxS	T	13C4-PFOS		No	No
15	Hexafluoropropylene oxide dimer acid	HFPO-DA	T	13C2-PFOA		No	No



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_371.1

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
16	Adona	Adona	T	13C2-PFOA		No	No
17	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	T	13C4-PFOS		No	No
18	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	T	13C4-PFOS		No	No
1	13C2-PFHxA	13C2-PFHxA	SIS	13C2-PFOA		No	No
2	13C2-PFDA	13C2-PFDA	SIS	13C2-PFOA		No	No
3	d5-EtFOSAA	d5-EtFOSAA	SIS	d3-MeFOSAA		No	No
4	13C3-HFPO-DA	13C3-HFPO-DA	SIS	13C2-PFOA		No	No
Total Analytes:						22	

Subtract Peaks:

None

Sum Peaks:

None



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_371.1

ICAL Acceptance Criteria:

Curve Fit:	Limit Mean(%):	Mean Qual:	Limit Ind.:	Ind. Qual:	Min Points:	Points Qual:	Comments:
Linear	NA	NA	0.995	N	5	N	NA
Average RF	15	N	25	N	5	N	NA
Linear (0,0)	NA	NA	0.995	N	5	N	NA
Quadratic	NA	NA	0.995	N	6	N	NA
Quadratic (0,0)	NA	NA	0.995	N	6	N	NA

Continuing Calibration Verification Criteria:

CCV Name: Standard

Frequency Hrs:	Mean PD(%):	Individual PD(%):	RIS/SIS RT Window (min):	Area Limit Low(%):	Area Limit High(%):	Comment:
12 (N)	20 (N)	25 (N)	0.07 (N)	-50	100 (N)	Lab Default Continuing Calibration Verification Criteria

Independent Calibration Verification:

ICC Name: Standard

Mean PD Limit(%):	Ind. PD Limit(%):	RIS/SIS Window Limit (Secs):	Area Limit High(%):	Area Limit Low(%):	Comment:
15 (N)	20 (N)	0.07 (N)	-50	100 (N)	Standard laboratory criteria for ICCs

Mass Discrimination Criteria:

None

Degradation Check Criteria:

None



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application	<i>Universal_LC</i>		
MQO:	Acceptance Criteria	Qual:	Corrective Action:
Procedural Blank	Samples must be greater than five times the blank concentration (>5xPB).	B	Review with Project Manager; re-analyze or justify results in project records.
PB Measurement Quality Objective	Organic results in the Procedural Blank are less than 1/2 times the LOQ (<1/2xLOQ)	N	Review with Project Manager; re-analyze or justify results in project records.
Laboratory Control Sample	Recovery values 70-130%.	N	Review with project manager; re-analyze or justify reporting the results in project records.
Matrix Spike / Matrix Spike Duplicate Recovery	Organics 70-130%. Analyte concentration in MS/MSD must be greater than five times reported background concentration. Organics Results in the Target is less than 5 times the Original	N n	Review with Project Manager; re-analyze or justify reporting results in the project records.
Matrix Spike/Spike Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration in MS/MSD must be greater than five times reported background concentration. Organics Results in the Target is less than 5 times the Original	N n	Review with Project Manager; re-analyze or justify reporting results in the project records.
Standard Reference Material Accuracy	Organics Percent Difference less than 30% from a range of certified values on average. Analyte concentration must be greater than five times the Method Detection Limit (>5xMDL). Organics Results in the Target is less than 5 times the MDL	N n	Review with Project Manager; re-analyze or justify reporting results in the project records.
Analytical Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration must be > 5x MDL. Organics Results in the Original is less than 5 times the MDL	N n	Review with Project Manager; re-analyze or justify reporting results in the project records.



WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application	<i>Universal_LC</i>		
MQO:	Acceptance Criteria	Qual:	Corrective Action:
Analytical Triplicate Precision	Organics results less than 30% Relative Standard Deviation (RSD). Analyte concentration must be > 5x MDL. Organics Results in the Original is less than 5 times the MDL	N n	Review with Project Manager; re-analyze or justify reporting results in the project records.
Surrogate Compound Recovery	Recovery results between 50% and 150%.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
Control Oil	RPD < 30% for at least 90% of analytes	N	Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Instrument Calibration	5-371-4: R-squared greater than or equal to 0.995 Mean RSD less than or equal to 15%, Individual RSD less than or equal to 25%	N	Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Independent Calibration Check Solution	5-371-4: Individual PD less than or equal to 20%. Mean Percent Difference less than or equal to 15%.	N	Review with Project Manager; re-analyze or justify in project records.
Continuing Calibration Verification	5-371-4: Individual PD less than or equal to 25%. Mean Percent Difference less than or equal to 20%.	N	Review with Project Manager; re-analyze or justify in project records.

It can be done

Battelle Project No: _____

Sample Receipt Form

Approved: Authorized:

Project Number: 112G08079 Client: Tetra Tech
Received by: Schumitz, Matt Date/Time Received: Thursday, June 06, 2019 10:00 AM
No. of Shipping Containers: 1

SHIPMENT

Method of Delivery: Commercial Carrier Tracking Number: Fed Ex
COC Forms: Shipped with samples No Forms

Cooler(s)/Box(es)

Cntr	Type	Tracking No.	Seal	Seal	Container	Therm.	Temp C	Smps
1 of 1	Cooler	7877 0007 4274	Custody Seals	Intact	Intact	Therm_1	0.7	2

Samples

Sample Labels: Sample labels agree with COC forms
 Discrepancies (see Sample Custody Corrective Action Form)

Container Seals: Tape Custody Seals Other Seals (See sample Log)
 Seals intact for each shipping container
 Seals broken (See sample log for impacted samples)

Condition of Samples: Sample containers intact
 Sample containers broken/leaking (See Custody Corrective Action Form)

Temperature upon receipt (°C): 0.7 Temperature Blank used Yes No
(Note: If temperature upon receipt differs from required conditions, see sample log comment field)

Samples Acidified: Yes No Unknown

Initial pH 5-9?: Yes No NA
If no, individual sample adjustments on the Auxiliary Sample Receipt Form

Total Residual Chlorine Present?: Yes No NA
If yes, individual sample adjustments on the Auxiliary Sample Receipt Form

Head Space <1% in samples for water VOC analysis: Yes No NA
Individual sample deviations noted on sample log

Samples Containers:
Samples returned in PC-grade jars: Yes No Unknown /Lot No.: Unknown

Storage Location: Custody: Refrigerator - R0119 (NA) BDO IDs Assigned: I3532 - I3533
Samples logged in by: Schumitz, Matt Date/Time: 06/06/2019 10:00 AM
Approved By: _____ Approved On: _____
Authorized By: _____ Authorized On: _____



It can be done

ShpNo SHP-190606-01

Battelle Project No: 100123260

Sample Receipt Form Details

Approved: Authorized

Project Number: 112G08079 Client: Tetra Tech

Received by: Schumitz, Matt Date/Time Received: Thursday, June 06, 2019 10:00 AM

No. of Shipping Containers: 1

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
I3532	C2-1307-DW0001-20190605	06/05/19 10:05	06/06/19 10:46	2	DW	0.7	NA	NA	NA	R0119 (NA)			
I3533	C2-1307-FRB-20190605-01	06/05/19 10:15	06/06/19 10:46	2	QC	0.7	NA	NA	NA	R0119 (NA)			

Total Samples: 2

PROJECT NO: 112G-08079	FACILITY: Meth. Site Well Survey	PROJECT MANAGER Chris Pike	PHONE NUMBER (412) 921-7090	LABORATORY NAME AND CONTACT: Battelle - Jon Thum
SAMPLERS (SIGNATURE) 		FIELD OPERATIONS LEADER Chuck Sorden	PHONE NUMBER (321) 591-7580	ADDRESS 141 Long Water Dr
		CARRIER/WAYBILL NUMBER		CITY, STATE Newell, MA 02001

STANDARD TAT
RUSH TAT
 24 hr. 48 hr. 72 hr. 7 day 14 day

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)	PRESERVATIVE USED	TYPE OF ANALYSIS	COMMENTS
06/03	1005	C2-1307- 1300 -DW0001-20190605		-	-	OW	G	2	X		USEPA 537 PFAS Tri2ma P	I3532
06/05	1015	C2-1307- 1300 -FRB-20190605-01		-	-	AO	G	2	X			I3533

1. RELINQUISHED BY	DATE 06/03/19	TIME 1450	1. RECEIVED BY	DATE 6-6-19	TIME 1000
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

USTC 08/11

ORIGIN ID:COIA (321) 591-7580
CHUCK SORDEN

11 RIVERSIDE DR STE 204

COCOA, FL 32922
UNITED STATES US

SHIP DATE: 05JUN19
ACTWGT: 22.60 LB
CAD: 6990712/SSF02002
DIMS: 16x12x11 IN

BILL THIRD PARTY

TO **MATTHEW SCHUMITZ**
BATTELLE
141 LONGWATER DR STE 202

NORWELL MA 02061

(781) 681-5588

REF:

INU:
PO:

DEPT:

0.7°
10:15
Therm!



FedEx
Express



REL#
3785346

TRK# 7877 0007 4274
0201

THU - 06 JUN 10:30A
PRIORITY OVERNIGHT

XE XPUA

AHS
02061
MA-US BOS



Data Tables



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID C2-1307-DW0001-20190605

Battelle ID I3532-FS
 Sample Type SA
 Collection Date 06/05/2019
 Extraction Date 06/06/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix DW
 Sample Size 0.280
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.21 U	I3532-FS(0)	1.000	6/8/2019	0.21	0.45	2.23
PFHpA	375-85-9	0.21 U	I3532-FS(0)	1.000	6/8/2019	0.21	0.45	2.23
PFOA	335-67-1	0.18 U	I3532-FS(0)	1.000	6/8/2019	0.18	0.45	2.23
PFNA	375-95-1	0.11 U	I3532-FS(0)	1.000	6/8/2019	0.11	0.36	2.23
PFDA	335-76-2	0.10 U	I3532-FS(0)	1.000	6/8/2019	0.10	0.36	2.23
PFUnA	2058-94-8	0.09 U	I3532-FS(0)	1.000	6/8/2019	0.09	0.36	2.23
PFDoA	307-55-1	0.13 U	I3532-FS(0)	1.000	6/8/2019	0.13	0.45	2.23
PFTTrDA	72629-94-8	0.09 U	I3532-FS(0)	1.000	6/8/2019	0.09	0.36	2.23
PFTeDA	376-06-7	0.20 U	I3532-FS(0)	1.000	6/8/2019	0.20	0.45	2.23
NMeFOSAA	2355-31-9	0.18 U	I3532-FS(0)	1.000	6/8/2019	0.18	0.45	2.23
NEtFOSAA	2991-50-6	0.15 U	I3532-FS(0)	1.000	6/8/2019	0.15	0.45	2.23
PFBS	375-73-5	0.22 I	I3532-FS(0)	1.000	6/8/2019	0.11	0.36	2.23
PFHxS	355-46-4	1.38 I	I3532-FS(0)	1.000	6/8/2019	0.11	0.36	2.23
PFOS	1763-23-1	2.49	I3532-FS(0)	1.000	6/8/2019	0.13	0.45	2.23
HFPO-DA	13252-13-6	0.08 U	I3532-FS(0)	1.000	6/8/2019	0.08	0.36	2.23
Adona	919005-14-4	0.11 U	I3532-FS(0)	1.000	6/8/2019	0.11	0.36	2.23
11Cl-PF3OUdS	763051-92-9	0.09 U	I3532-FS(0)	1.000	6/8/2019	0.09	0.36	2.23
9Cl-PF3ONS	756426-58-1	0.11 U	I3532-FS(0)	1.000	6/8/2019	0.11	0.36	2.23

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	128	I3532-FS(0)	6/8/2019
13C2-PFDA	100	I3532-FS(0)	6/8/2019
d5-EtFOSAA	108	I3532-FS(0)	6/8/2019
13C3-HFPO-DA	117	I3532-FS(0)	6/8/2019

Analyzed by: Schumitz, Denise
 Printed: 6/11/2019



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID C2-1307-FRB-20190605-01

Battelle ID I3533-FS
 Sample Type SA
 Collection Date 06/05/2019
 Extraction Date 06/06/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix QC
 Sample Size 0.260
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.22 U	I3533-FS(0)	1.000	6/8/2019	0.22	0.48	2.40
PFHpA	375-85-9	0.22 U	I3533-FS(0)	1.000	6/8/2019	0.22	0.48	2.40
PFOA	335-67-1	0.19 U	I3533-FS(0)	1.000	6/8/2019	0.19	0.48	2.40
PFNA	375-95-1	0.12 U	I3533-FS(0)	1.000	6/8/2019	0.12	0.38	2.40
PFDA	335-76-2	0.11 U	I3533-FS(0)	1.000	6/8/2019	0.11	0.38	2.40
PFUnA	2058-94-8	0.10 U	I3533-FS(0)	1.000	6/8/2019	0.10	0.38	2.40
PFDoA	307-55-1	0.13 U	I3533-FS(0)	1.000	6/8/2019	0.13	0.48	2.40
PFTTrDA	72629-94-8	0.10 U	I3533-FS(0)	1.000	6/8/2019	0.10	0.38	2.40
PFTeDA	376-06-7	0.21 U	I3533-FS(0)	1.000	6/8/2019	0.21	0.48	2.40
NMeFOSAA	2355-31-9	0.19 U	I3533-FS(0)	1.000	6/8/2019	0.19	0.48	2.40
NEtFOSAA	2991-50-6	0.16 U	I3533-FS(0)	1.000	6/8/2019	0.16	0.48	2.40
PFBS	375-73-5	0.12 U	I3533-FS(0)	1.000	6/8/2019	0.12	0.38	2.40
PFHxS	355-46-4	0.12 U	I3533-FS(0)	1.000	6/8/2019	0.12	0.38	2.40
PFOS	1763-23-1	0.14 U	I3533-FS(0)	1.000	6/8/2019	0.14	0.48	2.40
HFPO-DA	13252-13-6	0.09 U	I3533-FS(0)	1.000	6/8/2019	0.09	0.38	2.40
Adona	919005-14-4	0.12 U	I3533-FS(0)	1.000	6/8/2019	0.12	0.38	2.40
11Cl-PF3OUdS	763051-92-9	0.10 U	I3533-FS(0)	1.000	6/8/2019	0.10	0.38	2.40
9Cl-PF3ONS	756426-58-1	0.12 U	I3533-FS(0)	1.000	6/8/2019	0.12	0.38	2.40

Surrogate Recoveries (%)	Recovery	Extract ID	Analysis
			Date
13C2-PFHxA	116	I3533-FS(0)	6/8/2019
13C2-PFDA	103	I3533-FS(0)	6/8/2019
d5-EtFOSAA	103	I3533-FS(0)	6/8/2019
13C3-HFPO-DA	111	I3533-FS(0)	6/8/2019

Analyzed by: Schumitz, Denise
 Printed: 6/11/2019



It can be done

Project Client: Tetra Tech

Project Name: PFAS: Nasa Kennedy Space Center

Project No.: 100123260

Client ID KL73 IB

Battelle ID KL73 IB_06/08/2019

Sample Type IB

Collection Date NA

Extraction Date NA

Analysis Date 06/08/2019

Analytical Instrument Sciex 5500 LC/MS/MS

% Moisture NA

Matrix Water

Sample Size 0.250

Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	0.14	0.50	2.50
PFTTrDA	72629-94-8	0.10 U	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	0.12	0.40	2.50
11Cl-PF3OUdS	763051-92-9	0.10 U	0.10	0.40	2.50
9Cl-PF3ONS	756426-58-1	0.12 U	0.12	0.40	2.50

Surrogate Recoveries (%)

13C2-PFHxA	98
13C2-PFDA	106
d5-EtFOSAA	103
13C3-HFPO-DA	90



It can be done

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID Procedural Blank

Battelle ID CU330PB-FS
 Sample Type PB
 Collection Date 06/06/2019
 Extraction Date 06/06/2019
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture NA
 Matrix WATER
 Sample Size 0.250
 Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	DL	LOD	LOQ
PFHxA	307-24-4	0.23 U	CU330PB-FS(0)	1.000	6/8/2019	0.23	0.50	2.50
PFHpA	375-85-9	0.23 U	CU330PB-FS(0)	1.000	6/8/2019	0.23	0.50	2.50
PFOA	335-67-1	0.20 U	CU330PB-FS(0)	1.000	6/8/2019	0.20	0.50	2.50
PFNA	375-95-1	0.12 U	CU330PB-FS(0)	1.000	6/8/2019	0.12	0.40	2.50
PFDA	335-76-2	0.11 U	CU330PB-FS(0)	1.000	6/8/2019	0.11	0.40	2.50
PFUnA	2058-94-8	0.10 U	CU330PB-FS(0)	1.000	6/8/2019	0.10	0.40	2.50
PFDoA	307-55-1	0.14 U	CU330PB-FS(0)	1.000	6/8/2019	0.14	0.50	2.50
PFTrDA	72629-94-8	0.10 U	CU330PB-FS(0)	1.000	6/8/2019	0.10	0.40	2.50
PFTeDA	376-06-7	0.22 U	CU330PB-FS(0)	1.000	6/8/2019	0.22	0.50	2.50
NMeFOSAA	2355-31-9	0.20 U	CU330PB-FS(0)	1.000	6/8/2019	0.20	0.50	2.50
NEtFOSAA	2991-50-6	0.17 U	CU330PB-FS(0)	1.000	6/8/2019	0.17	0.50	2.50
PFBS	375-73-5	0.12 U	CU330PB-FS(0)	1.000	6/8/2019	0.12	0.40	2.50
PFHxS	355-46-4	0.12 U	CU330PB-FS(0)	1.000	6/8/2019	0.12	0.40	2.50
PFOS	1763-23-1	0.15 U	CU330PB-FS(0)	1.000	6/8/2019	0.15	0.50	2.50
HFPO-DA	13252-13-6	0.09 U	CU330PB-FS(0)	1.000	6/8/2019	0.09	0.40	2.50
Adona	919005-14-4	0.12 U	CU330PB-FS(0)	1.000	6/8/2019	0.12	0.40	2.50
11CI-PF3OUdS	763051-92-9	0.10 U	CU330PB-FS(0)	1.000	6/8/2019	0.10	0.40	2.50
9CI-PF3ONS	756426-58-1	0.12 U	CU330PB-FS(0)	1.000	6/8/2019	0.12	0.40	2.50

<i>Surrogate Recoveries (%)</i>	Recovery	Extract ID	Analysis Date
13C2-PFHxA	115	CU330PB-FS(0)	6/8/2019
13C2-PFDA	103	CU330PB-FS(0)	6/8/2019
d5-EtFOSAA	104	CU330PB-FS(0)	6/8/2019
13C3-HFPO-DA	105	CU330PB-FS(0)	6/8/2019

Analyzed by: Schumitz, Denise
 Printed: 6/11/2019



It can be done

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Client ID		Laboratory Control Sample								
Battelle ID		CU331LCS-FS								
Sample Type		LCS								
Collection Date		06/06/2019								
Extraction Date		06/06/2019								
Analytical Instrument		Sciex 5500 LC/MS/MS								
% Moisture		NA								
Matrix		WATER								
Sample Size		0.250								
Size Unit-Basis		L								
Analyte	CAS No.	Result (ng/L)	Extract ID	DF	Analysis Date	Target	Recovery	Qual	Control Limits Lower	Control Limits Upper
PFHxA	307-24-4	12.83	CU331LCS-FS(0)	1.000	6/8/2019	10.00	128		70	130
PFHpA	375-85-9	12.47	CU331LCS-FS(0)	1.000	6/8/2019	10.00	125		70	130
PFOA	335-67-1	11.85	CU331LCS-FS(0)	1.000	6/8/2019	10.00	119		70	130
PFNA	375-95-1	11.97	CU331LCS-FS(0)	1.000	6/8/2019	10.00	120		70	130
PFDA	335-76-2	11.57	CU331LCS-FS(0)	1.000	6/8/2019	10.00	116		70	130
PFUnA	2058-94-8	11.74	CU331LCS-FS(0)	1.000	6/8/2019	10.00	117		70	130
PFDoA	307-55-1	11.85	CU331LCS-FS(0)	1.000	6/8/2019	10.00	119		70	130
PFTTrDA	72629-94-8	11.76	CU331LCS-FS(0)	1.000	6/8/2019	10.00	118		70	130
PFTeDA	376-06-7	14.15	CU331LCS-FS(0)	1.000	6/8/2019	10.00	142	J	70	130
NMeFOSAA	2355-31-9	12.12	CU331LCS-FS(0)	1.000	6/8/2019	10.00	121		70	130
NEtFOSAA	2991-50-6	11.64	CU331LCS-FS(0)	1.000	6/8/2019	10.00	116		70	130
PFBS	375-73-5	10.61	CU331LCS-FS(0)	1.000	6/8/2019	8.85	120		70	130
PFHxS	355-46-4	10.26	CU331LCS-FS(0)	1.000	6/8/2019	9.45	109		70	130
PFOS	1763-23-1	9.44	CU331LCS-FS(0)	1.000	6/8/2019	9.55	99		70	130
HFPO-DA	13252-13-6	11.64	CU331LCS-FS(0)	1.000	6/8/2019	10.00	116		70	130
Adona	919005-14-4	11.28	CU331LCS-FS(0)	1.000	6/8/2019	9.45	119		70	130
11Cl-PF3OUdS	763051-92-9	9.88	CU331LCS-FS(0)	1.000	6/8/2019	9.40	105		70	130
9Cl-PF3ONS	756426-58-1	9.90	CU331LCS-FS(0)	1.000	6/8/2019	9.30	106		70	130
				Analysis						
Surrogate Recoveries (%)		Recovery	Extract ID	Date						
13C2-PFHxA		115	CU331LCS-FS(0)	6/8/2019						
13C2-PFDA		105	CU331LCS-FS(0)	6/8/2019						
d5-EtFOSAA		94	CU331LCS-FS(0)	6/8/2019						
13C3-HFPO-DA		110	CU331LCS-FS(0)	6/8/2019						



Glossary of Data Qualifiers

Flag: Application:

V	Analyte found in the sample at a concentration <10x the level found in the procedural blank
D	Dilution Run. Initial run outside the initial calibration range of the instrument
L	Estimate, result is greater than the highest concentration level in the calibration
I	The reported value is greater than or equal to the laboratory Detection Limit (DL) but less than the laboratory Limit of Quantitation (LOQ)
*	Significant Matrix Interference - value could not be determined.
J	Quality Control (QC) value is outside the accuracy or precision Data Quality Objective (DQO)
NA	Not Applicable
Q	Holding Time (HT) exceeded
U	Analyte not detected or detected below the Detection Limit (DL) value, DL reported

Miscellaneous Documentation

**QA/QC Summary
Batch 19-0485**

Project:	Nasa Kennedy Space Center
Client Project Manager:	Chris Pike
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	DW, QC
Data Set:	DP-19-0414
Analytical SOP:	5-371
Method Reference:	USEPA 537.1 (November 2018), QSM 5.1

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
6/5/2019	6/6/2019	0.7

Corrective Actions	None.
Sample Storage	The water samples were stored refrigerated until extraction.
Related samples	None.

METHOD SUMMARIES	
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a solid phase extraction (SPE) cartridge and eluted from the SPE with methanol. Extracts were concentrated to dryness under nitrogen with a water bath set between 60 °C and 65 °C, reconstituted with 96:4 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	pH verified at 7 prior to extraction.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	Samples analyzed on Sciex 5500 LC-MS/MS. PFHxS and PFOA in the field samples, when detected, was found and reported as a combination of both linear and branched isomers.

Holding Times	Extraction Date(s)	Analysis Date(s)
	6/6/2019	6/8/2019

Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.
≤ 1/3 the LOQ	No exceedances noted. No comments.

QA/QC Summary
Batch 19-0485

Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
70-130% of true value	One (1) exceedance noted. PFTeDA was recovered high in the LCS. The standard used to fortify the LCS, MS, and MSD was verified and passes criteria (The LCS was re-analyzed with similar results. As the analyte was over-recovered and not detected in the authentic samples, no further corrective action was taken. The quant report from the re-analysis can be found in the unused data section of the full data package.
Matrix Spike (MS) / Duplicate (MSD)	A MS/MSD were prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy. The relative percent difference was calculated to measure precision.
70-130% of true value, RPD \leq 30%	No MS/MSD extracted with this SDG. No comments.
Surrogates Standard Analytes	Labelled surrogate compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.
70-130% of true value	No exceedances noted. No comments.
Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
ICAL high and low points RPD \leq 20%, 50-150% of average area of the ICAL and 70-140% of most recent CCV	No exceedances noted. No comments.
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.
R ² >0.99	No exceedances noted.
Target and SIS compounds +/- 30% of true value, Low point 50-150% of true value	No comments.
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.
Target and SIS compounds +/- 30% of true value	No exceedances noted. No comments.

**QA/QC Summary
Batch 19-0485**

Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
Target and SIS compounds +/- 30% of true value	No exceedances noted.
Low point 50-150% of true value	No comments.



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project Number: 100123260
 Preparation Batch: 19-0485
 Data Set: DP-19-0414
 Test Code: Master_371.1

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	1	PFTeDA was recovered high in the LCS. The LCS was realiquoted and reanalyzed to confirm the results. LMG 6/10/19
Matrix Spike / Matrix Spike Duplicate Recovery	NA	None
Matrix Spike / Matrix Spike Duplicate Precision	NA	None
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None



It can be done

BATTELLE - NORWELL OPERATIONS MISCELLANEOUS DOCUMENTATION FORM

Project Title:	PFAS: Nasa Kennedy Space Center	Data Set Number:	DP-19-0414
Project Number:	100123260	Prep Batch Number:	19-0485
Entered By:	Lauren Griffith	Entered On:	06/10/2019
Test Code (Matrix Type):	Master_371.1(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 6/10/2019

KL64 is not being used in the calibration curve for PFHxA, PFHpA, PFOA, PFNA and PFOS. There is no impact on the data once this point of the calibration is removed.
LMG 6/10/2019

KL65 is not being used in the calibration curve for PFHxA. There is no impact on the data once this point of the calibration is removed.
LMG 6/10/2019

KL71 and KL72 are not being used in the calibration curve for 13C2-PFHxA. There is no impact on the data once these points of the calibration are removed.
LMG 6/10/2019

KL72 is not being used in the calibration curve for PFTeDA. There is no impact on the data once this point of the calibration is removed.
LMG 6/10/2019

Task Leader Approval:

Supervisor Approval:

PM Approval:

Digitally signed by Jonathan Thorn
Date: 2019.06.11 08:06:37 -04'00'



Example Calculation for PFAS

Calculation of final concentration from area:

$$\text{Concentration} = \left[\frac{PA - b}{m} \right] * C_{IS} * PIV * DF / S$$

Where:

PA = Area of target / area of internal standard
 b = y intercept from calibration curve
 CIS = concentration of internal standard (ng/L)
 m = slope of calibration
 DF = dilution factor
 S = Sample Size
 PIV = Pre-injection volume (L)

Sample ID: I3532-FS(0)
 Client Sample ID: C2-1307-DW0001-20190605
 Sample Size: 0.28
 Units: L
 Dilution Factor: 1.000
 PIV (L): 0.001
 Target Analyte: PFOS
 MRM Transition: 499.0 / 80.0
 Data file: AC_06072019_5-371.wiff
 Result table: 19-0485_DW
 Area: 440,431.11
 IS Name: 13C4-PFOS
 IS Area: 161,556.23
 IS Amount (ng/L): 287
 y-intercept: 0
 slope: 1.12011

$$\text{Concentration} = \frac{[(440431.11/161556.23) - 0]}{1.12011} * 287 * 0.001 * 1 / 0.28$$

$$\text{ng/L} = 2.49$$

*Final concentration may vary based on rounding.



Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260

Preparation Batch: 19-0485
 Data Set: DP-19-0414

		CU330PB-FS (Procedural Blank)	CU331LCS-FS (Laboratory Control Sample)	I3532-FS (C2-1307-DW0001-20190605)	I3533-FS (C2-1307-FRB-20190605-01)
PFHxA	307-24-4	-	L	-	-
PFHpA	375-85-9	-	L	-	-
PFOA	335-67-1	-	L	-	-
PFNA	375-95-1	-	L	-	-
PFDA	335-76-2	-	L	-	-
PFUnA	2058-94-8	-	L	-	-
PFDoA	307-55-1	-	L	-	-
PFTTrDA	72629-94-8	-	L	-	-
PFTeDA	376-06-7	-	L	-	-
NMeFOSAA	2355-31-9	-	L	-	-
NEtFOSAA	2991-50-6	-	L	-	-
PFBS	375-73-5	-	L	L	-
PFHxS	355-46-4	-	L	L/Br	-
PFOS	1763-23-1	-	L	L/Br	-
HFPO-DA	13252-13-6	-	L	-	-
Adona	919005-14-4	-	L	-	-
11CI-PF3OUdS	763051-92-9	-	L	-	-
9CI-PF3ONS	756426-58-1	-	L	-	-

"L" :Linear

"Br": branched

"L/Br": Linear/Branched

"-": Not detected

Analyzed by: Schumitz, Denise

Printed: 6/11/2019



Preparation Batch: 19-0485
 Matrix: Drinking Water

Sample Name	Sample ID	Analysis Date	Passing criteria: 70% - 130%			
			13C3-HFPO-DA	13C2-PFHxA	13C2-PFDA	d5-EtFOSAA
CU330PB-FS(0)	Procedural Blank	6/8/19 12:03	105	115	103	104
CU331LCS-FS(0)	Laboratory Control Sample	6/8/19 12:12	110	115	105	94
I3532-FS(0)	C2-1307-DW0001-20190605	6/8/19 12:21	117	128	100	108
I3533-FS(0)	C2-1307-FRB-20190605-01	6/8/19 12:30	111	116	103	103

NQ - Not quantified (dilution run and not needed)

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/8/19 10:15	13C4-PFOS	177,357.13	-
KL65	L2	6/8/19 10:24	13C4-PFOS	179,604.01	-
KL66	L3	6/8/19 10:33	13C4-PFOS	172,292.74	-
KL67	L4	6/8/19 10:42	13C4-PFOS	173,758.37	-
KL68	L5	6/8/19 10:51	13C4-PFOS	190,219.13	-
KL69	L6	6/8/19 11:00	13C4-PFOS	185,000.84	-
KL70	L7	6/8/19 11:09	13C4-PFOS	160,037.80	-
KL71	L8	6/8/19 11:18	13C4-PFOS	200,872.98	-
KL72	L9	6/8/19 11:27	13C4-PFOS	172,081.23	3.0

PASS

Average Lower Upper
 179,024.91 89,512.46 268,537.37

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/8/19 10:15	13C4-PFOS	177,357.13	89,512.46	268,537.37		129,500.59	259,001.18	
KL65	L2	6/8/19 10:24	13C4-PFOS	179,604.01	89,512.46	268,537.37		129,500.59	259,001.18	
KL66	L3	6/8/19 10:33	13C4-PFOS	172,292.74	89,512.46	268,537.37		129,500.59	259,001.18	
KL67	L4	6/8/19 10:42	13C4-PFOS	173,758.37	89,512.46	268,537.37		129,500.59	259,001.18	
KL68	L5	6/8/19 10:51	13C4-PFOS	190,219.13	89,512.46	268,537.37		129,500.59	259,001.18	
KL69	L6	6/8/19 11:00	13C4-PFOS	185,000.84	89,512.46	268,537.37		129,500.59	259,001.18	
KL70	L7	6/8/19 11:09	13C4-PFOS	160,037.80	89,512.46	268,537.37		129,500.59	259,001.18	
KL71	L8	6/8/19 11:18	13C4-PFOS	200,872.98	89,512.46	268,537.37		129,500.59	259,001.18	
KL72	L9	6/8/19 11:27	13C4-PFOS	172,081.23	89,512.46	268,537.37		129,500.59	259,001.18	
KL73 IB	Instrument Blank	6/8/19 11:36	13C4-PFOS	186,343.80	89,512.46	268,537.37		129,500.59	259,001.18	
KL74 ICC	ICC	6/8/19 11:45	13C4-PFOS	191,883.85	89,512.46	268,537.37		129,500.59	259,001.18	
CU330PB-FS(0)	Procedural Blank	6/8/19 12:03	13C4-PFOS	198,873.53	89,512.46	268,537.37		129,500.59	259,001.18	
CU331LCS-FS(0)	Laboratory Control Sample	6/8/19 12:12	13C4-PFOS	168,690.88	89,512.46	268,537.37		129,500.59	259,001.18	
I3532-FS(0)	C2-1307-DW0001-20190605	6/8/19 12:21	13C4-PFOS	161,556.23	89,512.46	268,537.37		129,500.59	259,001.18	
I3533-FS(0)	C2-1307-FRB-20190605-01	6/8/19 12:30	13C4-PFOS	174,620.44	89,512.46	268,537.37		129,500.59	259,001.18	
KL68 CCV	CCV	6/8/19 12:39	13C4-PFOS	186,257.60	89,512.46	268,537.37		129,500.59	259,001.18	

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/8/19 10:15	13C2-PFOA	40,412.86	-
KL65	L2	6/8/19 10:24	13C2-PFOA	38,536.13	-
KL66	L3	6/8/19 10:33	13C2-PFOA	39,779.24	-
KL67	L4	6/8/19 10:42	13C2-PFOA	38,510.54	-
KL68	L5	6/8/19 10:51	13C2-PFOA	42,928.72	-
KL69	L6	6/8/19 11:00	13C2-PFOA	44,294.52	-
KL70	L7	6/8/19 11:09	13C2-PFOA	38,789.12	-
KL71	L8	6/8/19 11:18	13C2-PFOA	50,340.33	-
KL72	L9	6/8/19 11:27	13C2-PFOA	45,105.70	11.0

PASS

Average Lower Upper
 42,077.46 21,038.73 63,116.19

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/8/19 10:15	13C2-PFOA	40,412.86	21,038.73	63,116.19		31,006.16	62,012.33	
KL65	L2	6/8/19 10:24	13C2-PFOA	38,536.13	21,038.73	63,116.19		31,006.16	62,012.33	
KL66	L3	6/8/19 10:33	13C2-PFOA	39,779.24	21,038.73	63,116.19		31,006.16	62,012.33	
KL67	L4	6/8/19 10:42	13C2-PFOA	38,510.54	21,038.73	63,116.19		31,006.16	62,012.33	
KL68	L5	6/8/19 10:51	13C2-PFOA	42,928.72	21,038.73	63,116.19		31,006.16	62,012.33	
KL69	L6	6/8/19 11:00	13C2-PFOA	44,294.52	21,038.73	63,116.19		31,006.16	62,012.33	
KL70	L7	6/8/19 11:09	13C2-PFOA	38,789.12	21,038.73	63,116.19		31,006.16	62,012.33	
KL71	L8	6/8/19 11:18	13C2-PFOA	50,340.33	21,038.73	63,116.19		31,006.16	62,012.33	
KL72	L9	6/8/19 11:27	13C2-PFOA	45,105.70	21,038.73	63,116.19		31,006.16	62,012.33	
KL73 IB	Instrument Blank	6/8/19 11:36	13C2-PFOA	41,151.41	21,038.73	63,116.19		31,006.16	62,012.33	
KL74 ICC	ICC	6/8/19 11:45	13C2-PFOA	44,410.55	21,038.73	63,116.19		31,006.16	62,012.33	
CU330PB-FS(0)	Procedural Blank	6/8/19 12:03	13C2-PFOA	46,914.09	21,038.73	63,116.19		31,006.16	62,012.33	
CU331LCS-FS(0)	Laboratory Control Sample	6/8/19 12:12	13C2-PFOA	40,562.01	21,038.73	63,116.19		31,006.16	62,012.33	
I3532-FS(0)	C2-1307-DW0001-20190605	6/8/19 12:21	13C2-PFOA	38,611.76	21,038.73	63,116.19		31,006.16	62,012.33	
I3533-FS(0)	C2-1307-FRB-20190605-01	6/8/19 12:30	13C2-PFOA	38,642.09	21,038.73	63,116.19		31,006.16	62,012.33	
KL68 CCV	CCV	6/8/19 12:39	13C2-PFOA	42,500.38	21,038.73	63,116.19		31,006.16	62,012.33	

Project Client: Tetra Tech
 Project Name: PFAS: Nasa Kennedy Space Center
 Project No.: 100123260



Sample Name	Sample ID	Analysis Date	Analyte	Area	RPD (L1/L9)
KL64	L1	6/8/19 10:15	d3-MeFOSAA	24,971.05	-
KL65	L2	6/8/19 10:24	d3-MeFOSAA	24,493.12	-
KL66	L3	6/8/19 10:33	d3-MeFOSAA	24,704.73	-
KL67	L4	6/8/19 10:42	d3-MeFOSAA	24,258.94	-
KL68	L5	6/8/19 10:51	d3-MeFOSAA	27,051.71	-
KL69	L6	6/8/19 11:00	d3-MeFOSAA	24,800.90	-
KL70	L7	6/8/19 11:09	d3-MeFOSAA	23,213.41	-
KL71	L8	6/8/19 11:18	d3-MeFOSAA	29,245.49	-
KL72	L9	6/8/19 11:27	d3-MeFOSAA	27,241.64	8.7

PASS

Average Lower Upper
 25,553.44 12,776.72 38,330.16

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier	CCV Lower	CCV Upper	Qualifier
KL64	L1	6/8/19 10:15	d3-MeFOSAA	24,971.05	12,776.72	38,330.16		17,360.63	34,721.26	
KL65	L2	6/8/19 10:24	d3-MeFOSAA	24,493.12	12,776.72	38,330.16		17,360.63	34,721.26	
KL66	L3	6/8/19 10:33	d3-MeFOSAA	24,704.73	12,776.72	38,330.16		17,360.63	34,721.26	
KL67	L4	6/8/19 10:42	d3-MeFOSAA	24,258.94	12,776.72	38,330.16		17,360.63	34,721.26	
KL68	L5	6/8/19 10:51	d3-MeFOSAA	27,051.71	12,776.72	38,330.16		17,360.63	34,721.26	
KL69	L6	6/8/19 11:00	d3-MeFOSAA	24,800.90	12,776.72	38,330.16		17,360.63	34,721.26	
KL70	L7	6/8/19 11:09	d3-MeFOSAA	23,213.41	12,776.72	38,330.16		17,360.63	34,721.26	
KL71	L8	6/8/19 11:18	d3-MeFOSAA	29,245.49	12,776.72	38,330.16		17,360.63	34,721.26	
KL72	L9	6/8/19 11:27	d3-MeFOSAA	27,241.64	12,776.72	38,330.16		17,360.63	34,721.26	
KL73 IB	Instrument Blank	6/8/19 11:36	d3-MeFOSAA	24,906.21	12,776.72	38,330.16		17,360.63	34,721.26	
KL74 ICC	ICC	6/8/19 11:45	d3-MeFOSAA	27,222.00	12,776.72	38,330.16		17,360.63	34,721.26	
CU330PB-FS(0)	Procedural Blank	6/8/19 12:03	d3-MeFOSAA	26,501.45	12,776.72	38,330.16		17,360.63	34,721.26	
CU331LCS-FS(0)	Laboratory Control Sample	6/8/19 12:12	d3-MeFOSAA	25,892.96	12,776.72	38,330.16		17,360.63	34,721.26	
I3532-FS(0)	C2-1307-DW0001-20190605	6/8/19 12:21	d3-MeFOSAA	21,970.41	12,776.72	38,330.16		17,360.63	34,721.26	
I3533-FS(0)	C2-1307-FRB-20190605-01	6/8/19 12:30	d3-MeFOSAA	21,952.20	12,776.72	38,330.16		17,360.63	34,721.26	
KL68 CCV	CCV	6/8/19 12:39	d3-MeFOSAA	25,094.99	12,776.72	38,330.16		17,360.63	34,721.26	

Sample Name	KL70	Injection Vial	27
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:09:41 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Asymmetry Factor	Passing Range
PFBS_1	298.9 / 80.0	1.49	0.92	0.8 – 1.5
PFHxA_1	313.0 / 269.0	1.81	0.90	0.8 – 1.5

Sample Name	KL70	Injection Vial	27
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:09:41 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.49	75	>10
PFBS_2	298.9 / 99.0	1.49	68	>10
PFHxA_1	313.0 / 269.0	1.81	27	>10
PFHxA_2	313.0 / 119.0	1.81	35	>10
PFHpA_1	363.0 / 319.0	2.22	25	>10
PFHpA_2	363.0 / 169.0	2.22	24	>10
PFHxS_1	399.0 / 80.0	2.24	32	>10
PFHxS_2	399.0 / 99.0	2.24	24	>10
PFOA_1	413.0 / 369.0	2.63	32	>10
PFOA_2	413.0 / 169.0	2.63	30	>10
PFNA_1	463.0 / 419.0	3.02	27	>10
PFNA_2	463.0 / 219.0	3.02	32	>10
PFOS_1	499.0 / 80.0	3.01	39	>10
PFOS_2	499.0 / 99.0	3.01	23	>10
PFDA_1	513.0 / 469.0	3.37	29	>10
PFDA_2	513.0 / 219.0	3.37	35	>10
PFUnA_1	563.0 / 519.0	3.69	22	>10
PFUnA_2	563.0 / 269.0	3.69	24	>10
PFDoA_1	613.0 / 569.0	3.97	21	>10
PFDoA_2	613.0 / 319.0	3.97	23	>10
PFTTrDA_1	663.0 / 619.0	4.21	23	>10
PFTTrDA_2	663.0 / 169.0	4.21	24	>10
PFTeDA_1	713.0 / 669.0	4.43	67	>10
PFTeDA_2	713.0 / 169.0	4.42	25	>10
NMeFOSAA_1	570.0 / 419.0	3.53	26	>10
NMeFOSAA_2	570.0 / 512.0	3.53	42	>10
NEtFOSAA_1	584.0 / 419.0	3.69	33	>10
NEtFOSAA_2	584.0 / 483.0	3.69	29	>10
13C2-PFHxA	315.0 / 270.0	1.80	30	>10
13C2-PFDA	515.0 / 470.0	3.36	31	>10
d5-EtFOSAA	589.0 / 419.0	3.68	15	>10
HFPO-DA_1	285.0 / 169.0	1.93	35	>10
HFPO-DA_2	285.0 / 118.8	1.93	27	>10
ADONA_1	377.0 / 251.0	2.26	29	>10
ADONA_2	377.0 / 85.0	2.26	28	>10
13C3-HFPO-DA	287.0 / 169.0	1.93	30	>10
9CI-PF3ONS_1	531.0 / 351.0	3.21	32	>10
9CI-PF3ONS_2	531.0 / 83.0	3.21	23	>10
11CI-PF3OUdS_1	631.0 / 451.0	3.82	24	>10
11CI-PF3OUdS_2	631.0 / 83.0	3.82	18	>10

BATTELLE DETECTION LIMITS FOR PFAS IN DRINKING WATER

EPA Method 537.1

Analyte	CAS No.	MDL (ng/L)	LOD (ng/L)	LOQ (ng/L)	MRL (ng/L)
PFHxA	307-24-4	0.23	0.5	2.5	2.5
PFHpA	375-85-9	0.23	0.5	2.5	2.5
PFOA	335-67-1	0.20	0.5	2.5	2.5
PFNA	375-95-1	0.12	0.4	2.5	2.5
PFDA	335-76-2	0.11	0.4	2.5	2.5
PFUnA	2058-94-8	0.10	0.4	2.5	2.5
PFDoA	307-55-1	0.14	0.5	2.5	2.5
PFTTrDA	72629-94-8	0.10	0.4	2.5	2.5
PFTeDA	376-06-7	0.22	0.5	2.5	2.5
NMeFOSAA	2355-31-9	0.20	0.5	2.5	2.5
NEtFOSAA	2991-50-6	0.17	0.5	2.5	2.5
PFBS	375-73-5	0.12	0.4	2.5	2.5
PFHxS	355-46-4	0.12	0.4	2.5	2.5
PFOS	1763-23-1	0.15	0.5	2.5	2.5
HFPO-DA	13252-13-6	0.09	0.4	2.5	2.5
Adona	919005-14-4	0.12	0.4	2.5	2.5
9CI-PF3ONS	756426-58-1	0.12	0.4	2.5	2.5
11CI-PF3OUdS	763051-92-9	0.10	0.4	2.5	2.5

Analytes on ELAP QSM 5.1 Scope of accreditation

Analytical Transitions for PFAS in drinking water

SOP 5-371 (EPA 537.1 November 2019)

Analyte	CAS No.	Type	Primary Transition	Secondary Transition
PFHxA	307-24-4	Target	313.0 / 269.0	313.0 / 119.0
PFHpA	375-85-9	Target	363.0 / 319.0	363.0 / 169.0
PFOA	335-67-1	Target	413.0 / 369.0	413.0 / 169.0
PFNA	375-95-1	Target	463.0 / 419.0	463.0 / 219.0
PFDA	335-76-2	Target	513.0 / 469.0	513.0 / 219.0
PFUnA	2058-94-8	Target	563.0 / 519.0	563.0 / 269.0
PFDoA	307-55-1	Target	613.0 / 569.0	613.0 / 319.0
PFTTrDA	72629-94-8	Target	663.0 / 619.0	663.0 / 169.0
PFTeDA	376-06-7	Target	713.0 / 669.0	713.0 / 169.0
NMeFOSAA	2355-31-9	Target	570.0 / 419.0	570.0 / 512.0
NEtFOSAA	2991-50-6	Target	584.0 / 419.0	584.0 / 483.0
PFBS	375-73-5	Target	299.0 / 80.0	299.0 / 99.0
PFHxS	355-46-4	Target	399.0 / 80.0	399.0 / 99.0
PFOS	1763-23-1	Target	499.0 / 80.0	499.0 / 99.0
HFPO-DA	13252-13-6	Target	285.0 / 169.0	285.0 / 118.8
Adona	919005-14-4	Target	377.0 / 251.0	377.0 / 85.0
9Cl-PF3ONS	756426-58-1	Target	531.0 / 351.0	531.0 / 83.0
11Cl-PF3OUdS	763051-92-9	Target	631.0 / 451.0	631.0 / 83.0
¹³C₂-PFHxA	NA	SIS	315.0 / 270.0	NA
¹³C₂-PFDA	NA	SIS	515.0 / 470.0	NA
d₅-EtFOSAA	NA	SIS	589.0 / 419.0	NA
¹³C₃-HFPO-DA	NA	SIS	287.0 / 169.0	NA
¹³C₂-PFOA	NA	IS	415.0 / 270.0	NA
¹³C₄-PFOS	NA	IS	503.0 / 80.0	NA
d₃-MeFOSAA	NA	IS	573.0 / 419.0	NA



Drinking Water Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF ¹	Sample Size (L)	Sample Equivalent (ng/L) ²
25	1	1	0.250	0.1
50	1	1	0.250	0.2
100	1	1	0.250	0.4
250	1	1	0.250	1.0
500	1	1	0.250	2.0
1,000	1	1	0.250	4.0
2,500	1	1	0.250	10.0
5,000	1	1	0.250	20.0
10,000	1	1	0.250	40.0

¹ - base level dilution as part of the extraction procedure

² - calculated equivalent of a sample based on the ICAL concentration



Zef Scientific Inc.

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

QTRAP 5500 Preventive Maintenance Checklist

Preventive Maintenance Date:	13-Dec-2018
Request ID:	12358
Company Name:	Battelle Memorial Institute
Instrument ID:	Instrument AC
Instrument Model:	QTrap 5500
Instrument Serial Number:	AU 23051004

PASS **FAIL**

Any failure will lead to an automatic Service Call being open to investigate fault.

Preventive Maintenance is performed twice every year unless specified in the Service Contract. It is designed to help maintain optimum system performance and to help diagnose any system deficiencies.

Engineer is required the assigned Request ID for this PM otherwise making this job invalid.

Comments: _____

Performed By: Kaustubh Dhayagude **Date:** 13-Dec-2018

Approved By : *[Signature]* **Date:** 13-Dec-2018

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

- Consult Customer concerning the unit overall performance.
- Check Logbook for Services recently performed.
- Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.5	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.2	Read Only
<input checked="" type="checkbox"/> CAD Medium	3.3	Read Only
<input checked="" type="checkbox"/> CAD High	4.1	Read Only
<input checked="" type="checkbox"/> CAD 12	4.1	2.4 to 4.5 x10 ⁻⁵ Torr

- Check for Front end contamination symptoms. Run Q1 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop
- Check for Q3 contamination symptoms. Run Q3 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop

Pre PM PPG Test: Perform each of the following tests. Optimize ion source position only. The specifications listed for these Pre PM tests are guidelines only, not required to be met.

- Perform Q1 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 175.133	3.02 e6	Read Only	0.9336	Read Only
Q1 500.380	1.70 e7	Read Only	0.9827	Read Only
Q1 906.673	2.56 e7	Read Only	1.0305	Read Only

- Perform Q3 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 175.133	2.90 e6	Read Only	0.6413	Read Only
Q3 500.380	1.43 e7	Read Only	0.7689	Read Only
Q3 906.673	2.17 e7	Read Only	0.7984	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

Perform MSMS POS in Product Ion scan with 609.3 parent and record daughter 195.1 using Reserpine 0.167 pmol/ul at the scan rate of 10 Da/s for 10 MCA. Calculate transmission efficiency comparing Q1POS 609 intensity. Transmission Efficiency: : 31.42% (Read Only)

Mass	MSMS Intensity		MSMS Width Value	Width Specs
	Value	Spec		
Q1 609.3	2.18 e7	Read Only	0.8899	Read Only
MS/MS 195.1	6.85 e6	Read Only	0.6696	Read Only

Perform Q1 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 933.636	4.27 e6	Read Only	0.7598	Read Only

Perform Q3 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 933.636	5.71 e6	Read Only	0.7457	Read Only

Perform Product Ion scan using NEG PPG 3e-5M. Record 10mca.

Mass	Scan Rate	MCA	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	8.82 e5	Read Only	0.6745	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

- Check Cooling Fans for Turbo Pumps while MS is ON.
- Check QJet and QPS tuning voltage for reference.
- Record AC input Voltage while MS is OFF: _____(200-240VAC).
If Out-of-Range, notify customer.

- Clean Interface
 - Curtain Plate
 - Orifice Plate
 - QJet
 - Q0 Rods.

- Replace Roughing Pump Oil.
- Inspect Oil Exhaust Filter, if Applicable. N/A
- Clean and inspect built-in divert valve if used. N/A
- Check Multiplier Voltage, optimize if necessary.
- Replace four Air Filters at the bottom of the mass spectrometer.

- Pump down overnight if possible. N/A

- Perform Maintenance on Turbo V source.

- Replace Electrode, if necessary. N/A
- Check Turbo heaters resistances.
- Check if Temperature is reached at 500C with TIS Probe installed.
- Check if Temperature is reached at 500C with APCI Probe installed. N/A

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

- Set-up Sample for Infusion.
- Check spray and adjust sprayer's position of the TIS source.
- Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.6	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.2	Read Only
<input checked="" type="checkbox"/> CAD Medium	3.3	Read Only
<input checked="" type="checkbox"/> CAD High	4.1	Read Only
<input checked="" type="checkbox"/> CAD 12	4.1	2.4 to 4.5 x10 ⁻⁵ Torr

- Perform Q1 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Scan Rate 10 Da/s Record 10 mca				
Q1 175.133	4.47 e6	≥1.2 ^{e6}	0.7356	0.6 to 0.8
Q1 500.380	2.51 e7	≥9.0 ^{e6}	0.7263	0.6 to 0.8
Q1 906.673	3.04 e7	≥1.4 ^{e7}	0.7080	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q1 906.673	1.57 e8	≥6.8 ^{e7}	0.6639	0.6 to 0.8

- Perform Q3 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Scan Rate 10 Da/s Record 10 mca				
Q3 175.133	4.30 e6	≥1.2 ^{e6}	0.6905	0.6 to 0.8
Q3 500.380	2.33 e7	≥9.0 ^{e6}	0.7752	0.6 to 0.8
Q3 906.673	3.51 e7	≥1.4 ^{e7}	0.7682	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q3 906.673	1.58 e8	≥6.8 ^{e7}	0.7088	0.6 to 0.8

- Perform "Product of 609.3" POS and record product ion 195.1 using Reserpine 0.167pmol/uL. Record 10 mca. Calculate Transmission efficiency comparing Q1POS 609 intensity.

Transmission Efficiency: 16.76% (≥ 10.0%)

Mass	MSMS Intensity		Width Value	Width Specs
	Value	Spec		
Q1 609.3	6.74 e7	N/A	0.7430	Read Only
MS/MS 195.1	1.13 e7	N/A	0.7152	Read Only

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

- Perform Q1 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q1 Intensity		Q1 Width Value	Width Specs
			Value	Spec		
Q1 933.636	10	10	1.25 e7	$\geq 1.0^{e7}$	0.7544	0.6 to 0.8
Q1 933.636	1000	50	7.51 e7	$\geq 4.0^{e7}$	0.7671	0.6 to 0.8

- Perform Q3 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q3 Intensity		Q3 Width Value	Width Specs
			Value	Spec		
Q3 933.636	10	10	2.10 e7	$\geq 8.0^{e6}$	0.7313	0.6 to 0.8
Q3 933.636	1000	50	8.17 e7	$\geq 4.0^{e7}$	0.7088	0.6 to 0.8

- Perform Product Ion scan using NEG PPG 3e-5M.

Mass	Scan Rate	Mca	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	2.97 e6	Read Only	0.6850	Read Only

- Perform ER POS 118.087 and 922.01 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 118.087	0.05	1.03 e7	$\geq 7.2^{e6}$	0.1483	<0.35
ER 922.010	0.05	5.37 e7	$\geq 2.8^{e6}$	0.2138	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 118.087	0.05	2.80 e7	$\geq 2.4^{e7}$	0.4635	<0.65
ER 922.010	0.05	1.33 e8	$\geq 6.8^{e7}$	0.6022	<0.65

- Perform ER NEG 431.982 and 601.978 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 431.982	0.05	3.53 e8	$\geq 4.4^{e7}$	0.1869	<0.35
ER 601.978	0.05	3.46 e8	$\geq 5.6^{e7}$	0.1883	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 431.982	0.05	1.08 e9	$\geq 1.2^{e8}$	0.4373	<0.65
ER 601.978	0.05	1.25 e9	$\geq 1.6^{e8}$	0.4196	<0.65

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

1975 Hymus Blvd.
Suite 230
Dorval, QC
Canada H9P 1J8

Phone: 1.866.854.7988

QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

- Perform EPI POS 397.2 using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Q0 Trapping OFF		Q0 Trapping ON	
		Intensity	Spec	Intensity	Spec
EPI 397.2	10000	> 2.8 e6	≥2.0 e6	> 1.0 e7	≥6.4 e6

- Perform MS3 POS full scan Fragmentation ON & OFF using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Fragamentation OFF		Fragmentation ON	
		Intensity	Spec	Intensity	Spec
MS3 397.2	1000	Yes	Contains only 397.2	N/A	N/A
<input type="checkbox"/> 236 OR <input checked="" type="checkbox"/> 365	1000	Yes	Fragment Intensity	> 4.5 e6	≥1.6x 10 ^{e6}

REVIEW:

- Attach all spectrums printouts to this procedure.
- If any parameter setting access modes were changed during the PM, ensure they are returned to their normal access mode and that their offsets are adjusted to match optimized values from the post-PM acquisition files.
- Empty tuning cache folder, if necessary. N/A
- Update Service Work Order status
- Fill and replace PM Label.

END OF PREVENTIVE MAINTENANCE CHECKLIST**Document history:**

06 OCT 2016: Appendix ZEFPM003-2L: Removed requirements to fit Manufacturer's testing criteria.

Battelle Standard ID	Description	Intermediate Solutions			Battelle Reagent ID (purchased solutions)
KJ90	PFAS - 537.1 Surrogate Solution	KJ86	-	-	190410-04
KJ91	PFAS - 537.1 Second Source LCS/MS Solution	-	-	-	190410-03
KJ92	PFAS - 537.1 Internal Standard Solution	KJ89	-	-	180810-02
KL64	PFAS - EPA 537.1 ICAL L1	KJ88	-	-	190410-02
KL64	PFAS - EPA 537.1 ICAL L1	KL62	KJ86	-	190410-04
KL64	PFAS - EPA 537.1 ICAL L1	KL63	KJ89	-	180810-02
KL65	PFAS - EPA 537.1 ICAL L2	KJ88	-	-	190410-02
KL65	PFAS - EPA 537.1 ICAL L2	KL62	KJ86	-	190410-04
KL65	PFAS - EPA 537.1 ICAL L2	KL63	KJ89	-	180810-02
KL66	PFAS - EPA 537.1 ICAL L3	KJ88	-	-	190410-02
KL66	PFAS - EPA 537.1 ICAL L3	KL62	KJ86	-	190410-04
KL66	PFAS - EPA 537.1 ICAL L3	KL63	KJ89	-	180810-02
KL67	PFAS - EPA 537.1 ICAL L4	KJ88	-	-	190410-02
KL67	PFAS - EPA 537.1 ICAL L4	KL62	KJ86	-	190410-04
KL67	PFAS - EPA 537.1 ICAL L4	KL63	KJ89	-	180810-02
KL68	PFAS - EPA 537.1 ICAL L5	KJ88	-	-	190410-02
KL68	PFAS - EPA 537.1 ICAL L5	KL62	KJ86	-	190410-04
KL68	PFAS - EPA 537.1 ICAL L5	KL63	KJ89	-	180810-02
KL69	PFAS - EPA 537.1 ICAL L6	KJ87	-	-	190410-02
KL69	PFAS - EPA 537.1 ICAL L6	KL62	KJ86	-	190410-04
KL69	PFAS - EPA 537.1 ICAL L6	KL63	KJ89	-	180810-02
KL70	PFAS - EPA 537.1 ICAL L7	KJ87	-	-	190410-02
KL70	PFAS - EPA 537.1 ICAL L7	KL62	KJ86	-	190410-04
KL70	PFAS - EPA 537.1 ICAL L7	KL63	KJ89	-	180810-02
KL71	PFAS - EPA 537.1 ICAL L8	KJ87	-	-	190410-02
KL71	PFAS - EPA 537.1 ICAL L8	KL62	KJ86	-	190410-04
KL71	PFAS - EPA 537.1 ICAL L8	KL63	KJ89	-	180810-02
KL72	PFAS - EPA 537.1 ICAL L9	KJ87	-	-	190410-02
KL72	PFAS - EPA 537.1 ICAL L9	KL62	KJ86	-	190410-04
KL72	PFAS - EPA 537.1 ICAL L9	KL63	KJ89	-	180810-02
KL74	PFAS - EPA 537.1 ICC	KJ91	-	-	190410-03
KL74	PFAS - EPA 537.1 ICC	KL62	KJ86	-	190410-04
KL74	PFAS - EPA 537.1 ICC	KL63	KJ89	-	180810-02



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KJ86

Description: PFAS - 537.1 Surrogate Standard Stock

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	1000	1.00	1	100.000	1	10	0.10000
13C2-PFHxA	1000	1.00	1	100.000	1	10	0.10000
13C3-HFPO-DA	1000	1.00	1	100.000	1	10	0.10000
d5-EtFOSAA	1000	4.00	1	100.000	1	10	0.40000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.10000
13C2-PFHxA	.10000
13C3-HFPO-DA	.10000
d5-EtFOSAA	.40000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-04	Pipette	B820865811

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ87**

Description: PFAS - 537.1 High ICAL Stock

Stock Id: **190410-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	1.88	1	100.000	1	20	0.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	1.86	1	100.000	1	20	0.04650
Adona	500	1.89	1	100.000	1	20	0.04725
Hexafluoropropylene oxide dimer acid	500	2.00	1	100.000	1	20	0.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	500	2.00	1	100.000	1	20	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-1-butanefluorinate	500	1.77	1	100.000	1	20	0.04425
Perfluoro-1-hexanesulfonate	500	1.82	1	100.000	1	20	0.04560
Perfluoro-1-octanesulfonate	500	1.85	1	100.000	1	20	0.04628
Perfluoro-n-decanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-dodecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-heptanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-hexanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-octanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluorononanoic Acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-tetradecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-tridecanoic acid	500	2.00	1	100.000	1	20	0.05000
Perfluoro-n-undecanoic acid	500	2.00	1	100.000	1	20	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.04650
Adona	.04725
Hexafluoropropylene oxide dimer acid	.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanefluorinate	.04425
Perfluoro-1-hexanesulfonate	.04560
Perfluoro-1-octanesulfonate	.04628
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05000
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KJ87

Description: PFAS - 537.1 High ICAL Stock

Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-02	Pipette	B820865811

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1	Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	
Comment: 96/4 Methanol/Millipore Water (RP-190411-3)		

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ88**

Description: PFAS - 537.1 Low ICAL Stock

Stock Id: **190410-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	250	1.88	1	100.000	1	100	0.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	250	1.86	1	100.000	1	100	0.00465
Adona	250	1.89	1	100.000	1	100	0.00473
Hexafluoropropylene oxide dimer acid	250	2.00	1	100.000	1	100	0.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	250	2.00	1	100.000	1	100	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-1-butanefluoride	250	1.77	1	100.000	1	100	0.00443
Perfluoro-1-hexanesulfonate	250	1.82	1	100.000	1	100	0.00456
Perfluoro-1-octanesulfonate	250	1.85	1	100.000	1	100	0.00463
Perfluoro-n-decanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-dodecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-heptanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-hexanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-octanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluorononanoic Acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-tetradecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-tridecanoic acid	250	2.00	1	100.000	1	100	0.00500
Perfluoro-n-undecanoic acid	250	2.00	1	100.000	1	100	0.00500

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00465
Adona	.00473
Hexafluoropropylene oxide dimer acid	.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-butanefluoride	.00443
Perfluoro-1-hexanesulfonate	.00456
Perfluoro-1-octanesulfonate	.00463
Perfluoro-n-decanoic Acid	.00500
Perfluoro-n-dodecanoic acid	.00500
Perfluoro-n-heptanoic Acid	.00500
Perfluoro-n-hexanoic acid	.00500
Perfluoro-n-octanoic Acid	.00500
Perfluorononanoic Acid	.00500

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 4 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KJ88

Description: PFAS - 537.1 Low ICAL Stock

Perfluoro-n-tetradecanoic acid	.00500
Perfluoro-n-tridecanoic acid	.00500
Perfluoro-n-undecanoic acid	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-02	Pipette	B814657482

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 4 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ89**

Description: PFAS - 537.1 Internal Standard Stock

Stock Id: **180810-02**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	1000	1.00	1	100.000	1	10	0.10000
13C4-PFOS	1000	2.87	1	100.000	1	10	0.28700
d3-MeFOSAA	1000	4.00	1	100.000	1	10	0.40000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.10000
13C4-PFOS	.28700
d3-MeFOSAA	.40000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180810-02	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ90**

Description: PFAS - 537.1 Surrogate Solution

Stock ID: **KJ86**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	500	0.10	---	---	1	25	0.00200
13C2-PFHxA	500	0.10	---	---	1	25	0.00200
13C3-HFPO-DA	500	0.10	---	---	1	25	0.00200
d5-EtFOSAA	500	0.40	---	---	1	25	0.00800

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.00200
13C2-PFHxA	.00200
13C3-HFPO-DA	.00200
d5-EtFOSAA	.00800

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ86	Pipette	B820865811

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ91**

Description: PFAS - 537.1 Second Source LCS/MS Solution

Stock Id: **190410-03**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	1000	1.88	1	100.000	1	40	0.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	1000	1.86	1	100.000	1	40	0.04650
Adona	1000	1.89	1	100.000	1	40	0.04725
Hexafluoropropylene oxide dimer acid	1000	2.00	1	100.000	1	40	0.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	2.00	1	100.000	1	40	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-1-butanefluorinate	1000	1.77	1	100.000	1	40	0.04425
Perfluoro-1-hexanesulfonate	1000	1.89	1	100.000	1	40	0.04725
Perfluoro-1-octanesulfonate	1000	1.91	1	100.000	1	40	0.04775
Perfluoro-n-decanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-dodecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-heptanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-hexanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-octanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluorononanoic Acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-tetradecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-tridecanoic acid	1000	2.00	1	100.000	1	40	0.05000
Perfluoro-n-undecanoic acid	1000	2.00	1	100.000	1	40	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.04700
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.04650
Adona	.04725
Hexafluoropropylene oxide dimer acid	.05000
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanefluorinate	.04425
Perfluoro-1-hexanesulfonate	.04725
Perfluoro-1-octanesulfonate	.04775
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05000
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000

Solution Prepared By: Schumitz, Denise Date Prepared: 4/11/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)

Approved By: Schumitz, Denise Date: 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KJ91

Description: PFAS - 537.1 Second Source LCS/MS Solution

Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
190410-03	Pipette	B1100330B

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1	Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	
Comment: 96/4 Methanol/Millipore Water (RP-190411-3)		

Approved By: Schumitz, Denise **Date:** 4/12/2019 9:31:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KJ92**

Description: PFAS - 537.1 Internal Standard Solution

Stock Id: **KJ89**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	500	0.10	---	---	1	25	0.00200
13C4-PFOS	500	0.29	---	---	1	25	0.00574
d3-MeFOSAA	500	0.40	---	---	1	25	0.00800

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.00200
13C4-PFOS	.00574
d3-MeFOSAA	.00800

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ89	Pipette	B820865811

Solution Prepared By: Schumitz, Denise	Date Prepared: 4/11/2019	Expiration Date: 4/11/2020
--	--------------------------	----------------------------

Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107
---------------------------------	--

Comment: 96/4 Methanol/Millipore Water (RP-190411-3)
--

Approved By: Schumitz, Denise Date: 4/12/2019 9:32:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL62**

Description: PFAS - 537.1 Surrogate Standard Stock II

Stock Id: **KJ86**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	1000	0.10	---	---	1	5	0.02000
13C2-PFHxA	1000	0.10	---	---	1	5	0.02000
13C3-HFPO-DA	1000	0.10	---	---	1	5	0.02000
d5-EtFOSAA	1000	0.40	---	---	1	5	0.08000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.02000
13C2-PFHxA	.02000
13C3-HFPO-DA	.02000
d5-EtFOSAA	.08000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ86	Pipette	B909301606

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL63**

Description: PFAS - 537.1 Internal Standard Stock II

Stock Id: **KJ89**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	1000	0.10	---	---	1	5	0.02000
13C4-PFOS	1000	0.29	---	---	1	5	0.05740
d3-MeFOSAA	1000	0.40	---	---	1	5	0.08000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFOA	.02000
13C4-PFOS	.05740
d3-MeFOSAA	.08000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ89	Pipette	B909301606

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
---	---------------------------------	-----------------------------------

Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121
--	--

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL64**

Description: PFAS - EPA 537.1 ICAL L1

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	50	0.00	---	---	1	10	0.00002
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	50	0.00	---	---	1	10	0.00002
Adona	50	0.00	---	---	1	10	0.00002
Hexafluoropropylene oxide dimer acid	50	0.01	---	---	1	10	0.00003
N-ethylperfluoro-octanesulfonamidoacetic acid	50	0.01	---	---	1	10	0.00003
N-methylperfluoro-1-octanesulfonamidoacetic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-1-butanefluoride	50	0.00	---	---	1	10	0.00002
Perfluoro-1-hexanesulfonate	50	0.00	---	---	1	10	0.00002
Perfluoro-1-octanesulfonate	50	0.00	---	---	1	10	0.00002
Perfluoro-n-decanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-dodecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-heptanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-hexanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-octanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluorononanoic Acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-tetradecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-tridecanoic acid	50	0.01	---	---	1	10	0.00003
Perfluoro-n-undecanoic acid	50	0.01	---	---	1	10	0.00003

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00002

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL64**

Description: PFAS - EPA 537.1 ICAL L1

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00002
Adona	.00002
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00003
N-ethylperfluoro-octanesulfonamidoacetic acid	.00003
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00003
Perfluoro-1-butanefluoride	.00002
Perfluoro-1-hexanesulfonate	.00002
Perfluoro-1-octanesulfonate	.00002
Perfluoro-n-decanoic Acid	.00003
Perfluoro-n-dodecanoic acid	.00003
Perfluoro-n-heptanoic Acid	.00003
Perfluoro-n-hexanoic acid	.00003
Perfluoro-n-octanoic Acid	.00003
Perfluorononanoic Acid	.00003
Perfluoro-n-tetradecanoic acid	.00003
Perfluoro-n-tridecanoic acid	.00003
Perfluoro-n-undecanoic acid	.00003

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	I0793912B
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL65**

Description: PFAS - EPA 537.1 ICAL L2

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	100	0.00	---	---	1	10	0.00005
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	100	0.00	---	---	1	10	0.00005
Adona	100	0.00	---	---	1	10	0.00005
Hexafluoropropylene oxide dimer acid	100	0.01	---	---	1	10	0.00005
N-ethylperfluoro-octanesulfonamidoacetic acid	100	0.01	---	---	1	10	0.00005
N-methylperfluoro-1-octanesulfonamidoacetic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-1-butanefluoride	100	0.00	---	---	1	10	0.00004
Perfluoro-1-hexanesulfonate	100	0.00	---	---	1	10	0.00005
Perfluoro-1-octanesulfonate	100	0.00	---	---	1	10	0.00005
Perfluoro-n-decanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-dodecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-heptanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-hexanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-octanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluorononanoic Acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-tetradecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-tridecanoic acid	100	0.01	---	---	1	10	0.00005
Perfluoro-n-undecanoic acid	100	0.01	---	---	1	10	0.00005

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00005

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL65**

Description: PFAS - EPA 537.1 ICAL L2

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00005
Adona	.00005
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00005
N-ethylperfluoro-octanesulfonamidoacetic acid	.00005
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00005
Perfluoro-1-butanefluoride	.00004
Perfluoro-1-hexanesulfonate	.00005
Perfluoro-1-octanesulfonate	.00005
Perfluoro-n-decanoic Acid	.00005
Perfluoro-n-dodecanoic acid	.00005
Perfluoro-n-heptanoic Acid	.00005
Perfluoro-n-hexanoic acid	.00005
Perfluoro-n-octanoic Acid	.00005
Perfluorononanoic Acid	.00005
Perfluoro-n-tetradecanoic acid	.00005
Perfluoro-n-tridecanoic acid	.00005
Perfluoro-n-undecanoic acid	.00005

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	I0793912B
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL66**

Description: PFAS - EPA 537.1 ICAL L3

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	200	0.00	---	---	1	10	0.00009
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	200	0.00	---	---	1	10	0.00009
Adona	200	0.00	---	---	1	10	0.00009
Hexafluoropropylene oxide dimer acid	200	0.01	---	---	1	10	0.00010
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-1-butanefluoride	200	0.00	---	---	1	10	0.00009
Perfluoro-1-hexanesulfonate	200	0.00	---	---	1	10	0.00009
Perfluoro-1-octanesulfonate	200	0.00	---	---	1	10	0.00009
Perfluoro-n-decanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-dodecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-heptanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-hexanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-octanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluorononanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tetradecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tridecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-undecanoic acid	200	0.01	---	---	1	10	0.00010

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00009

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL66**

Description: PFAS - EPA 537.1 ICAL L3

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00009
Adona	.00009
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00010
N-ethylperfluoro-octanesulfonamidoacetic acid	.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00010
Perfluoro-1-butanedisulfonate	.00009
Perfluoro-1-hexanesulfonate	.00009
Perfluoro-1-octanesulfonate	.00009
Perfluoro-n-decanoic Acid	.00010
Perfluoro-n-dodecanoic acid	.00010
Perfluoro-n-heptanoic Acid	.00010
Perfluoro-n-hexanoic acid	.00010
Perfluoro-n-octanoic Acid	.00010
Perfluorononanoic Acid	.00010
Perfluoro-n-tetradecanoic acid	.00010
Perfluoro-n-tridecanoic acid	.00010
Perfluoro-n-undecanoic acid	.00010

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	B909301860
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL67**

Description: PFAS - EPA 537.1 ICAL L4

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	0.00	---	---	1	10	0.00024
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	0.00	---	---	1	10	0.00023
Adona	500	0.00	---	---	1	10	0.00024
Hexafluoropropylene oxide dimer acid	500	0.01	---	---	1	10	0.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-1-butanefluoride	500	0.00	---	---	1	10	0.00022
Perfluoro-1-hexanesulfonate	500	0.00	---	---	1	10	0.00023
Perfluoro-1-octanesulfonate	500	0.00	---	---	1	10	0.00023
Perfluoro-n-decanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-dodecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-heptanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-hexanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-octanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluorononanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tetradecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tridecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-undecanoic acid	500	0.01	---	---	1	10	0.00025

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00024

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL67**

Description: PFAS - EPA 537.1 ICAL L4

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00023
Adona	.00024
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00025
Perfluoro-1-butanefluoride	.00022
Perfluoro-1-hexanesulfonate	.00023
Perfluoro-1-octanesulfonate	.00023
Perfluoro-n-decanoic Acid	.00025
Perfluoro-n-dodecanoic acid	.00025
Perfluoro-n-heptanoic Acid	.00025
Perfluoro-n-hexanoic acid	.00025
Perfluoro-n-octanoic Acid	.00025
Perfluorononanoic Acid	.00025
Perfluoro-n-tetradecanoic acid	.00025
Perfluoro-n-tridecanoic acid	.00025
Perfluoro-n-undecanoic acid	.00025

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ88	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL68**

Description: PFAS - EPA 537.1 ICAL L5

Stock Id: KJ88

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	2000	0.00	---	---	1	20	0.00047
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	2000	0.00	---	---	1	20	0.00047
Adona	2000	0.00	---	---	1	20	0.00047
Hexafluoropropylene oxide dimer acid	2000	0.01	---	---	1	20	0.00050
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.01	---	---	1	20	0.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-1-butanefluoride	2000	0.00	---	---	1	20	0.00044
Perfluoro-1-hexanesulfonate	2000	0.00	---	---	1	20	0.00046
Perfluoro-1-octanesulfonate	2000	0.00	---	---	1	20	0.00046
Perfluoro-n-decanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-dodecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-heptanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-hexanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-octanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluorononanoic Acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-tetradecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-tridecanoic acid	2000	0.01	---	---	1	20	0.00050
Perfluoro-n-undecanoic acid	2000	0.01	---	---	1	20	0.00050

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	100	0.02	---	---	1	20	0.00010
13C2-PFHxA	100	0.02	---	---	1	20	0.00010
13C3-HFPO-DA	100	0.02	---	---	1	20	0.00010
d5-EtFOSAA	100	0.08	---	---	1	20	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	100	0.02	---	---	1	20	0.00010
13C4-PFOS	100	0.06	---	---	1	20	0.00029
d3-MeFOSAA	100	0.08	---	---	1	20	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00047

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1).

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KL68

Description: PFAS - EPA 537.1 ICAL L5

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00047
Adona	.00047
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00050
N-ethylperfluoro-octanesulfonamidoacetic acid	.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00050
Perfluoro-1-butanefulfonate	.00044
Perfluoro-1-hexanesulfonate	.00046
Perfluoro-1-octanesulfonate	.00046
Perfluoro-n-decanoic Acid	.00050
Perfluoro-n-dodecanoic acid	.00050
Perfluoro-n-heptanoic Acid	.00050
Perfluoro-n-hexanoic acid	.00050
Perfluoro-n-octanoic Acid	.00050
Perfluorononanoic Acid	.00050
Perfluoro-n-tetradecanoic acid	.00050
Perfluoro-n-tridecanoic acid	.00050
Perfluoro-n-undecanoic acid	.00050

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 5/28/2019 **Expiration Date:** 4/11/2020

Solution Volume 40 mL X 1 **Vials Refrigerator/Freezer No:** VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1).

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL69**

Description: PFAS - EPA 537.1 ICAL L6

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic aci	400	0.05	---	---	1	20	0.00094
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	400	0.05	---	---	1	20	0.00093
Adona	400	0.05	---	---	1	20	0.00095
Hexafluoropropylene oxide dimer acid	400	0.05	---	---	1	20	0.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	400	0.05	---	---	1	20	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-1-butanefluoride	400	0.04	---	---	1	20	0.00089
Perfluoro-1-hexanesulfonate	400	0.05	---	---	1	20	0.00091
Perfluoro-1-octanesulfonate	400	0.05	---	---	1	20	0.00093
Perfluoro-n-decanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-dodecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-heptanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-hexanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-octanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluorononanoic Acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-tetradecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-tridecanoic acid	400	0.05	---	---	1	20	0.00100
Perfluoro-n-undecanoic acid	400	0.05	---	---	1	20	0.00100

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	100	0.02	---	---	1	20	0.00010
13C2-PFHxA	100	0.02	---	---	1	20	0.00010
13C3-HFPO-DA	100	0.02	---	---	1	20	0.00010
d5-EtFOSAA	100	0.08	---	---	1	20	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	100	0.02	---	---	1	20	0.00010
13C4-PFOS	100	0.06	---	---	1	20	0.00029
d3-MeFOSAA	100	0.08	---	---	1	20	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	.00094

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL69**

Description: PFAS - EPA 537.1 ICAL L6

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00093
Adona	.00095
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanefluoride	.00089
Perfluoro-1-hexanesulfonate	.00091
Perfluoro-1-octanesulfonate	.00093
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00100
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL70**

Description: PFAS - EPA 537.1 ICAL L7

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	500	0.05	---	---	1	10	0.00235
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	500	0.05	---	---	1	10	0.00232
Adona	500	0.05	---	---	1	10	0.00236
Hexafluoropropylene oxide dimer acid	500	0.05	---	---	1	10	0.00250
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-1-butanefluoride	500	0.04	---	---	1	10	0.00221
Perfluoro-1-hexanesulfonate	500	0.05	---	---	1	10	0.00228
Perfluoro-1-octanesulfonate	500	0.05	---	---	1	10	0.00231
Perfluoro-n-decanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-dodecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-heptanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-hexanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-octanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluorononanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tetradecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tridecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-undecanoic acid	500	0.05	---	---	1	10	0.00250

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00235

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KL70

Description: PFAS - EPA 537.1 ICAL L7

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00232
Adona	.00236
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00250
N-ethylperfluoro-octanesulfonamidoacetic acid	.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00250
Perfluoro-1-butanedisulfonate	.00221
Perfluoro-1-hexanesulfonate	.00228
Perfluoro-1-octanesulfonate	.00231
Perfluoro-n-decanoic Acid	.00250
Perfluoro-n-dodecanoic acid	.00250
Perfluoro-n-heptanoic Acid	.00250
Perfluoro-n-hexanoic acid	.00250
Perfluoro-n-octanoic Acid	.00250
Perfluorononanoic Acid	.00250
Perfluoro-n-tetradecanoic acid	.00250
Perfluoro-n-tridecanoic acid	.00250
Perfluoro-n-undecanoic acid	.00250

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 5/28/2019 **Expiration Date:** 4/11/2020

Solution Volume 40 mL X 1 **Vials Refrigerator/Freezer No:** VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL71**

Description: PFAS - EPA 537.1 ICAL L8

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	1000	0.05	---	---	1	10	0.00470
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	1000	0.05	---	---	1	10	0.00465
Adona	1000	0.05	---	---	1	10	0.00473
Hexafluoropropylene oxide dimer acid	1000	0.05	---	---	1	10	0.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	0.05	---	---	1	10	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-1-butanefluoride	1000	0.04	---	---	1	10	0.00443
Perfluoro-1-hexanesulfonate	1000	0.05	---	---	1	10	0.00456
Perfluoro-1-octanesulfonate	1000	0.05	---	---	1	10	0.00463
Perfluoro-n-decanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-dodecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-heptanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-hexanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-octanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluorononanoic Acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-tetradecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-tridecanoic acid	1000	0.05	---	---	1	10	0.00500
Perfluoro-n-undecanoic acid	1000	0.05	---	---	1	10	0.00500

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00470

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL71**

Description: PFAS - EPA 537.1 ICAL L8

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00465
Adona	.00473
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00500
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-butanedisulfonate	.00443
Perfluoro-1-hexanesulfonate	.00456
Perfluoro-1-octanesulfonate	.00463
Perfluoro-n-decanoic Acid	.00500
Perfluoro-n-dodecanoic acid	.00500
Perfluoro-n-heptanoic Acid	.00500
Perfluoro-n-hexanoic acid	.00500
Perfluoro-n-octanoic Acid	.00500
Perfluorononanoic Acid	.00500
Perfluoro-n-tetradecanoic acid	.00500
Perfluoro-n-tridecanoic acid	.00500
Perfluoro-n-undecanoic acid	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ87	Pipette	B909301606
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie Date Prepared: 5/28/2019 Expiration Date: 4/11/2020

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise Date: 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL72**

Description: PFAS - EPA 537.1 ICAL L9

Stock Id: KJ87

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	2000	0.05	---	---	1	10	0.00940
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	2000	0.05	---	---	1	10	0.00930
Adona	2000	0.05	---	---	1	10	0.00945
Hexafluoropropylene oxide dimer acid	2000	0.05	---	---	1	10	0.01000
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-1-butanefluoride	2000	0.04	---	---	1	10	0.00885
Perfluoro-1-hexanesulfonate	2000	0.05	---	---	1	10	0.00912
Perfluoro-1-octanesulfonate	2000	0.05	---	---	1	10	0.00925
Perfluoro-n-decanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-dodecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-heptanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-hexanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-octanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluorononanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-tetradecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-tridecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-undecanoic acid	2000	0.05	---	---	1	10	0.01000

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00940

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: KL72

Description: PFAS - EPA 537.1 ICAL L9

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00930
Adona	.00945
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.01000
N-ethylperfluoro-octanesulfonamidoacetic acid	.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.01000
Perfluoro-1-butanedisulfonate	.00885
Perfluoro-1-hexanesulfonate	.00912
Perfluoro-1-octanesulfonate	.00925
Perfluoro-n-decanoic Acid	.01000
Perfluoro-n-dodecanoic acid	.01000
Perfluoro-n-heptanoic Acid	.01000
Perfluoro-n-hexanoic acid	.01000
Perfluoro-n-octanoic Acid	.01000
Perfluorononanoic Acid	.01000
Perfluoro-n-tetradecanoic acid	.01000
Perfluoro-n-tridecanoic acid	.01000
Perfluoro-n-undecanoic acid	.01000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KL74**

Description: PFAS - EPA 537.1 ICC

Stock Id: KJ91

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic aci	200	0.05	---	---	1	10	0.00094
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic aci	200	0.05	---	---	1	10	0.00093
Adona	200	0.05	---	---	1	10	0.00095
Hexafluoropropylene oxide dimer acid	200	0.05	---	---	1	10	0.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-1-butanefluoride	200	0.04	---	---	1	10	0.00089
Perfluoro-1-hexanesulfonate	200	0.05	---	---	1	10	0.00095
Perfluoro-1-octanesulfonate	200	0.05	---	---	1	10	0.00095
Perfluoro-n-decanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-dodecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-heptanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-hexanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-octanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluorononanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tetradecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tridecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-undecanoic acid	200	0.05	---	---	1	10	0.00100

Stock Id: KL62

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.02	---	---	1	10	0.00010
13C2-PFHxA	50	0.02	---	---	1	10	0.00010
13C3-HFPO-DA	50	0.02	---	---	1	10	0.00010
d5-EtFOSAA	50	0.08	---	---	1	10	0.00040

Stock Id: KL63

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFOA	50	0.02	---	---	1	10	0.00010
13C4-PFOS	50	0.06	---	---	1	10	0.00029
d3-MeFOSAA	50	0.08	---	---	1	10	0.00040

Final Concentrations:

Analyte:	Conc (ug/mL):
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	.00094

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121	

Comment: 96/4 methanol/milli-q water (RP-190528-1)

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: **KL74**

Description: PFAS - EPA 537.1 ICC

13C2-PFDA	.00010
13C2-PFHxA	.00010
13C2-PFOA	.00010
13C3-HFPO-DA	.00010
13C4-PFOS	.00029
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	.00093
Adona	.00095
d3-MeFOSAA	.00040
d5-EtFOSAA	.00040
Hexafluoropropylene oxide dimer acid	.00100
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanedisulfonate	.00089
Perfluoro-1-hexanedisulfonate	.00095
Perfluoro-1-octanedisulfonate	.00095
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00100
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KJ91	Pipette	B814657482
KL62	Pipette	I0793912B
KL63	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie	Date Prepared: 5/28/2019	Expiration Date: 4/11/2020
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: VOC Laboratory: Refrigerator - R0121		
Comment: 96/4 methanol/milli-q water (RP-190528-1)		

Approved By: Schumitz, Denise **Date:** 5/29/2019 4:48:00 PM



It can be done

BDO Id: 180810-02

Reagent Receipt Report Approved: Authorized

Name: <u>EPA-537IS</u>	Received: <u>8/10/2018</u>
Vendor: <u>Wellington Laboratories</u>	Custodian: <u>Schumitz, Denise</u>
Catalogue No: <u>EPA-537IS</u>	Expires: <u>12/13/2022</u>
Type: <u>Solution</u>	Consumed: _____
Lot No: <u>537IS1217</u>	Stored In: <u>AqChem Laboratory - R0124</u>
Quantity: <u>2 ea</u> ml % Moisture: _____	
Description: <u>EPA-537IS</u>	

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFOA	BDO-2107	1.0000	100.00	--	--	<input type="checkbox"/>			
13C4-PFOS	BDO-2121	2.8700	100.00	--	--	<input type="checkbox"/>			1
d3-MeFOSAA	BDO-1838	4.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 3

Notes:

Analyte:	Comment:
1 13C4-PFOS	3.0 as the salt

Approved by: _____	Approved on: _____
Authorized by: _____	Authorized on: _____

1808 10-2



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537IS

Internal Standard
Primary Dilution Standard

<u>PRODUCT CODE:</u>	EPA-537IS
<u>LOT NUMBER:</u>	537IS1217
<u>SOLVENT(S):</u>	Methanol / Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	12/13/2017
<u>LAST TESTED:</u> (mm/dd/yyyy)	12/13/2017
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	12/13/2022
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

EPA-537IS is a solution/mixture of a mass-labelled (¹³C) perfluoroalkylcarboxylic acid, a mass-labelled (¹³C) perfluoroalkylsulfonate, and a mass-labelled (²H) perfluorooctanesulfonamidoacetic acid. The components and their concentrations are given in Table A.

The mass-labelled perfluoroalkylcarboxylic acid and the mass-labelled perfluoroalkylsulfonate both have chemical purities of >98% and isotopic purities of ≥99%. The mass-labelled perfluorooctanesulfonamidoacetic acid has a chemical purity of >98% and an isotopic purity of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (TIC)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

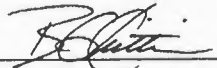
- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-[1,2- ¹³ C ₂]octanoic acid	M2PFOA	1000		A
N-methyl-d ₃ -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	4000		C
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Sodium perfluoro-1-[1,2,3,4- ¹³ C ₄]octanesulfonate	MPFOS	3000	2870	B

Certified By:  Date: 12/22/2017
(mm/dd/yyyy)
 B.G. Chittim, General Manager

It can be done

BDO Id: 190410-02

Reagent Receipt Report

Approved: Authorized

Name: EPA-537PDS-R1 Received: 4/10/2019
Vendor: Wellington Laboratories Custodian: Schumitz, Matt
Catalogue No: EPA-537PDS-R1 Expires: 3/19/2022
Type: Solution Consumed: _____
Lot No: 537PDSR10119 Stored In: VOC Laboratory - R0123
Quantity: 1 ea ml % Moisture: _____
Description: EPA-537PDS-R1

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
11-chloroeicosafuoro-3-oxaundecan	763051-92-9	1.8800	100.00	--	--	<input type="checkbox"/>			
9-chlorohexadecafluoro-3-oxanonane	756426-58-1	1.8600	100.00	--	--	<input type="checkbox"/>			
Adona	919005-14-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Hexafluoropropylene oxide dimer aci	13252-13-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	2.0000	100.00	--	--	<input type="checkbox"/>			1
N-methylperfluoro-1-octanesulfonami	2355-31-9	2.0000	100.00	--	--	<input type="checkbox"/>			2
Perfluoro-1-butanefulfonate	375-73-5	1.7700	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonate	355-46-4	1.8240	100.00	--	--	<input type="checkbox"/>			3
Perfluoro-1-octanesulfonate	1763-23-1	1.8510	100.00	--	--	<input type="checkbox"/>			4
Perfluoro-n-decanoic Acid	335-76-2	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 18

Notes:

Analyte:**Comment:**

- | | |
|--|------------------------------------|
| 1 N-ethylperfluoro-octanesulfonamidoacetic acid | Sum of branched and linear isomers |
| 2 N-methylperfluoro-1-octanesulfonamidoacetic acid | Sum of branched and linear isomers |
| 3 Perfluoro-1-hexanesulfonate | Sum of branched and linear isomers |
| 4 Perfluoro-1-octanesulfonate | Sum of branched and linear isomers |

Approved by: _____ Approved on: _____
Authorized by: _____ Authorized on: _____



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537PDS-R1

Native PFAS Primary Dilution Standard Solution/Mixture

PRODUCT CODE: EPA-537PDS-R1
LOT NUMBER: 537PDSR10119
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 02/14/2019
LAST TESTED: (mm/dd/yyyy) 03/19/2019
EXPIRY DATE: (mm/dd/yyyy) 03/19/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

EPA-537PDS-R1 is a solution/mixture of native linear perfluoroalkylcarboxylic acids (PFCAs; C₆-C₁₄), native perfluoroalkylsulfonates (PFSAs; C₄ linear; C₆ and C₈ linear and branched), native N-substituted perfluoro-octanesulfonamidoacetic acids (N-MeFOSAA and N-EtFOSAA; linear and branched), GenX (HFPO-DA), the main components of F-53B (9CI-PF3ONS and 11CI-PF3OUDS), and the sodium salt of ADONA (NaDONA). The components and their concentrations are given in Table A.

The components of this solution/mixture all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

- Table A: Components and Concentrations of the Solution/Mixture
- Table B: Isomeric Components and Percent Composition of N-MeFOSAA
- Table C: Isomeric Components and Percent Composition of N-EtFOSAA
- Table D: Isomeric Components and Percent Composition of PFHxSK
- Table E: Isomeric Components and Percent Composition of PFOSK
- Figure 1: LC/MS Data (SIR)
- Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537PDS-R1; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-hexanoic acid	PFHxA	2000		B
Perfluoro-n-heptanoic acid	PFHpA	2000		D
Perfluoro-n-octanoic acid	PFOA	2000		H
Perfluoro-n-nonanoic acid	PFNA	2000		I
Perfluoro-n-decanoic acid	PFDA	2000		M
Perfluoro-n-undecanoic acid	PFUdA	2000		R
Perfluoro-n-dodecanoic acid	PFDoA	2000		T
Perfluoro-n-tridecanoic acid	PFTTrDA	2000		U
Perfluoro-n-tetradecanoic acid	PFTeDA	2000		V
2,3,3,3-Tetrafluoro-2-(1,1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		C
N-methylperfluorooctanesulfonamidoacetic acid ^a	N-MeFOSAA: linear isomer	1520		O
	N-MeFOSAA: Σ branched isomers	480		N
N-ethylperfluorooctanesulfonamidoacetic acid ^b	N-EtFOSAA: linear isomer	1550		Q
	N-EtFOSAA: Σ branched isomers	450		P
Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000	1770	A
Potassium perfluorohexanesulfonate ^c	PFHxSK: linear isomer	1620	1480	G
	PFHxSK: Σ branched isomers	378	344	F
Potassium perfluorooctanesulfonate ^d	PFOSK: linear isomer	1580	1460	K
	PFOSK: Σ branched isomers	422	391	J
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	2000	1890	E
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1860	L
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1880	S

^a See Table B for percent composition of linear and branched N-MeFOSAA isomers.

^b See Table C for percent composition of linear and branched N-EtFOSAA isomers.

^c See Table D for percent composition of linear and branched PFHxSK isomers.

^d See Table E for percent composition of linear and branched PFOSK isomers.

* Concentrations have been rounded to three significant figures.



It can be done

BDO Id: 190410-03

Reagent Receipt Report

 Approved: Authorized

Name: <u>EPA-537PDSL-R1</u>	Received: <u>4/10/2019</u>
Vendor: <u>Wellington Laboratories</u>	Custodian: <u>Schumitz, Matt</u>
Catalogue No: <u>EPA-537PDSL-R1</u>	Expires: <u>2/14/2022</u>
Type: <u>Solution</u>	Consumed: _____
Lot No: <u>537PDSL10119</u>	Stored In: <u>VOC Laboratory - R0123</u>
Quantity: <u>1 ea</u> <u>ml</u> % Moisture: _____	
Description: <u>EPA-537PDSL-R1</u>	

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
11-chloroeicosafuoro-3-oxaundecan	763051-92-9	1.8800	100.00	--	--	<input type="checkbox"/>			
9-chlorohexadecafluoro-3-oxanonane	756426-58-1	1.8600	100.00	--	--	<input type="checkbox"/>			
Adona	919005-14-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Hexafluoropropylene oxide dimer aci	13252-13-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	2.0000	100.00	--	--	<input type="checkbox"/>			
N-methylperfluoro-1-octanesulfonami	2355-31-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-butanefulfonate	375-73-5	1.7700	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonate	355-46-4	1.8900	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-octanesulfonate	1763-23-1	1.9100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-decanoic Acid	335-76-2	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	2.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 18

Notes:

Approved by: _____	Approved on: _____
Authorized by: _____	Authorized on: _____



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-537PDSL-R1

Native PFAS Linear Primary Dilution Standard Solution/Mixture

PRODUCT CODE: EPA-537PDSL-R1
LOT NUMBER: 537PDSLRL10119
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 01/30/2019
LAST TESTED: (mm/dd/yyyy) 02/14/2019
EXPIRY DATE: (mm/dd/yyyy) 02/14/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

EPA-537PDSL-R1 is a solution/mixture of native linear perfluoroalkylcarboxylic acids (PFCAs; C₆-C₁₄), native linear perfluoroalkylsulfonates (PFSAs; C₄, C₆, and C₈), native linear N-substituted perfluorooctanesulfonamidoacetic acids (N-MeFOSAA and N-EtFOSAA), GenX (HFPO-DA), the main components of F-53B (9Cl-PF3ONS and 11Cl-PF3OUdS), and the sodium salt of ADONA (NaDONA). The components and their concentrations are given in Table A.

The components of this solution all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
 Figure 1: LC/MS Data (SIR)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537PDSL-R1; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration *		Peak Assignment in Figure 1
		(ng/ml)		
Perfluoro-n-hexanoic acid	PFHxA	2000		B
Perfluoro-n-heptanoic acid	PFHpA	2000		D
Perfluoro-n-octanoic acid	PFOA	2000		G
Perfluoro-n-nonanoic acid	PFNA	2000		H
Perfluoro-n-decanoic acid	PFDA	2000		K
Perfluoro-n-undecanoic acid	PFUdA	2000		N
Perfluoro-n-dodecanoic acid	PFDoA	2000		P
Perfluoro-n-tridecanoic acid	PFTrDA	2000		Q
Perfluoro-n-tetradecanoic acid	PFTeDA	2000		R
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		C
N-methylperfluoro-1-octanesulfonamidoacetic acid	N-MeFOSAA	2000		L
N-ethylperfluoro-1-octanesulfonamidoacetic acid	N-EtFOSAA	2000		M
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanesulfonate	L-PFBS	2000	1770	A
Sodium perfluoro-1-hexanesulfonate	L-PFHxS	2000	1890	F
Sodium perfluoro-1-octanesulfonate	L-PFOS	2000	1910	I
Sodium dodecafluoro-3H-4,8-dioxanonanoate	NaDONA	2000	1890	E
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1860	J
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1880	O

* Concentrations have been rounded to three significant figures.

Certified By: 
B.G. Chittim, General Manager

Date: 03/26/2019
(mm/dd/yyyy)



It can be done

BDO Id: 190410-04

Reagent Receipt Report Approved: Authorized

Name: <u>EPA-537SS-R1</u>	Received: <u>4/10/2019</u>
Vendor: <u>Wellington Laboratories</u>	Custodian: <u>Schumitz, Matt</u>
Catalogue No: <u>EPA-537SS-R1</u>	Expires: <u>3/29/2022</u>
Type: <u>Solution</u>	Consumed: _____
Lot No: <u>537SSR10119</u>	Stored In: <u>VOC Laboratory - R0123</u>
Quantity: <u>1 ea</u> <u>ml</u> % Moisture: _____	
Description: <u>EPA-537SS-R1</u>	

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFDA	BDO-2110	1.0000	100.00	--	--	<input type="checkbox"/>			
13C2-PFHxA	BDO-2106	1.0000	100.00	--	--	<input type="checkbox"/>			
13C3-HFPO-DA	BDO-2276	1.0000	100.00	--	--	<input type="checkbox"/>			
d5-EtFOSAA	BDO-1839	4.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 4

Notes:

Approved by: _____	Approved on: _____
Authorized by: _____	Authorized on: _____

190410-04



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-537SS-R1

Surrogate Primary Dilution Standard

<u>PRODUCT CODE:</u>	EPA-537SS-R1
<u>LOT NUMBER:</u>	537SSR10119
<u>SOLVENT(S):</u>	Methanol / Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	01/30/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	03/29/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	03/29/2022
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

EPA-537SS-R1 is a solution/mixture of two mass-labelled (¹³C) perfluoroalkylcarboxylic acids (MPFHxA and MPFDA), a mass-labelled (²H) N-ethyl-perfluorooctanesulfonamidoacetic acid (d5-N-EtFOSAA), and mass-labelled (¹³C) 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (M3HFPO-DA). The components and their concentrations are given in Table A.

The mass-labelled (¹³C) perfluoroalkylcarboxylic acids and mass-labelled (¹³C) 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid have chemical purities of >98% and isotopic purities of ≥99%. The mass-labelled (²H) N-ethyl-perfluorooctanesulfonamidoacetic acid has a chemical purity of >98% and an isotopic purity of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.
- Contains ~ 1.9% of the linear M3HFPO-DA isomer (determined by ¹⁹F NMR) relative to the M3HFPO-DA analyte and ~ 0.1% of perfluoro-n-hexanoic acid (PFHxA) relative to the MPFHxA analyte.

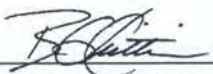
FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: EPA-537SS-R1; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)	Peak Assignment in Figure 1
Perfluoro-n-[1,2- ¹³ C ₂]hexanoic acid	MPFHxA	1000	A
Perfluoro-n-[1,2- ¹³ C ₂]decanoic acid	MPFDA	1000	C
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)- ¹³ C ₃ -propanoic acid	M3HFPO-DA	1000	B
N-ethyl-d ₅ -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	4000	D

Certified By:


 B.G. Chittim, General Manager
Date: 04/01/2019
(mm/dd/yyyy)

ACCREDITATIONS

Accrediting Authority	Laboratory ID
U.S. Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP)	91667
State of Florida Department of Health	E87856
State of New York Department of Health	12105
Commonwealth of Pennsylvania Department of Environmental Protection	68-05687
State of Washington Department of Ecology	C1050
State of California	3045
Commonwealth of Massachusetts	E87856

Current certificates and lists of accredited parameters are available upon request.



Sample Preparation

It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE PREPARATION RECORDS

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485

Nasa: PFAS Drinking Water

DW, QC

SOP Numbers (see workplan for modifications)

VOASOP No.

5-371

This Batch Contains The Following Samples:

CU330PB-FS
CU331LCS-FS
I3532-FS
I3533-FS

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	06/10/2019	DMS



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485

**Nasa: PFAS Drinking Water
DW, QC**

Sample ID	Description
CU330PB-FS	Procedural Blank
CU331LCS-FS	Laboratory Control Sample
I3532-FS	C2-1307-DW0001-20190605
I3533-FS	C2-1307-FRB-20190605-01

Samples Assigned By:

Jonathan Thorn

Date :

June 6, 2019

Comments:



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE CUSTODY LOG**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485

Nasa: PFAS Drinking Water

DW, QC

Requested On/By: 06/06/2019 SAS	Purpose: Sample Preparation
Relinquished On/By: 06/06/2019 MDS	Last Activity: Transfer

Accepted On/By: 06/06/2019 SAS Stored In Facility: Sample Preparation Stored Until: 06/06/2019 Stored Comment: NA	Returned On/To: Returned To Facility: Returned Comment: NA
--	---

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	I3532	1	C	Consumed	NA
2	I3533	1	C	Consumed	NA
Total Samples		2		* "C" = Consumed Container	



It can be done

BATTELLE - NORWELL OPERATIONS LIQUID SAMPLE ID FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485**Nasa: PFAS Drinking Water****DW, QC**

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CU330PB-FS	Procedural Blank	250.0	NA	--	06/06/19 SAS
CU331LCS-FS	Laboratory Control Sample	250.0	NA	--	06/06/19 SAS
I3532-FS	C2-1307-DW0001-20190605	280.0	1	C	06/09/19 SAS
I3533-FS	C2-1307-FRB-20190605-01	260.0	1	C	06/09/19 SAS

Comments:

Sample ID:	Comments:
CU330PB-FS	1.25g of Trizma 190131-01 weighed on BAL-009.
CU331LCS-FS	1.26g of Trizma 190131-01 weighed on BAL-009.

Samples Assigned By

Jonathan Thorn

Date :

June 6, 2019

* - "C" = Sample is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS SURROGATE SPIKE FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485

Nasa: PFAS Drinking Water

DW, QC

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CU330PB-FS	KJ90	SIS	1	50	06/06/19 SAS	KB	NA
CU331LCS-FS	KJ90	SIS	1	50	06/06/19 SAS	KB	NA
CU331LCS-FS	KJ91	LCS/MS	1	50	06/06/19 SAS	KB	NA
I3532-FS	KJ90	SIS	1	50	06/06/19 SAS	KB	NA
I3533-FS	KJ90	SIS	1	50	06/06/19 SAS	KB	NA

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KJ90	Pipette	B814659662
KJ91	Pipette	B814659662



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE EXTRACTION FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485**Nasa: PFAS Drinking Water****DW, QC**

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CU330PB-FS	06/06/19 SAS	NA	NA	NA	NA	NA	NA	NA
CU331LCS-FS	06/06/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3532-FS	06/06/19 SAS	NA	NA	NA	NA	NA	NA	NA
I3533-FS	06/06/19 SAS	NA	NA	NA	NA	NA	NA	NA

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
Pre-packed SPE Column	RP-190606-2	06/06/19	S214- 0085/S19- 001455	Pre-packed SPE Column	

Solvents/Reagents:

Name	Lot No	Comments
Methanol (HPLC) (190521-09)	187803	



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485**Nasa: PFAS Drinking Water****DW, QC****(N/A Fraction)**

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution*	Date Spiked/ Spiked By	Witn'd By
CU330PB-FS(0)	950	50	KJ92	50	1	1000	1.000	06/06/19 SAS	KB
CU331LCS-FS(0)	950	50	KJ92	50	1	1000	1.000	06/06/19 SAS	KB
I3532-FS(0)	950	50	KJ92	50	1	1000	1.000	06/06/19 SAS	KB
I3533-FS(0)	950	50	KJ92	50	1	1000	1.000	06/06/19 SAS	KB

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KJ92	Pipette	B814659662

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485**Nasa: PFAS Drinking Water****DW, QC**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CU330PB-FS	0	--	6/6/2019 11:24:00 AM	NA		NA	NA	1.000	1.000	06/06/19 SAS
CU331LCS-FS	0	--	6/6/2019 11:24:00 AM	NA		NA	NA	1.000	1.000	06/06/19 SAS
I3532-FS	0	--	6/6/2019 11:24:00 AM	NA		NA	NA	1.000	1.000	06/06/19 SAS
I3533-FS	0	--	6/6/2019 11:24:00 AM	NA		NA	NA	1.000	1.000	06/06/19 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485

**Nasa: PFAS Drinking Water
DW, QC**

Purpose: LC-MS/MS TRANSFER		Last Activity: Prep->Inst			
Relinquished On/By: Jun 6 2019 5:08PM SAS		Received On/By: Jun 6 2019 5:08PM DMS			
Relinquished From: Sample Preparation: NA		Received Location: LC Laboratory: NA			
Relinquish Comment: NA		Received Comment: Samples reconstituted in 96/4 methanol/milli-q water (RP-190606-7).			
No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CU330PB-FS(0)	1000	1	Intact	NA
2	CU331LCS-FS(0)	1000	1	Intact	NA
3	I3532-FS(0)	1000	1	Intact	NA
4	I3533-FS(0)	1000	1	Intact	NA
Total Extracts:		4			



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE SPECIFIC COMMENTS

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485

**Nasa: PFAS Drinking Water
DW, QC**

Sample ID:	Comment:	Date/Initials:
CU330PB-FS	Extraction began at 11:24am, DW only extraction block, ended at 11:51am.	06/06/19 SAS
CU331LCS-FS	Extraction began at 11:24am, DW only extraction block, ended at 11:50am.	06/06/19 SAS
I3532-FS	Extraction began at 11:24am, DW only extraction block, ended at 11:58am. Prior to extraction, pH was checked and was 7.	06/06/19 SAS
I3533-FS	Extraction began at 11:24am, DW only extraction block, ended at 11:55am.	06/06/19 SAS



It can be done

**BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM**

Project Title(s)

PFAS: Nasa Kennedy Space Center

Project No.(s)

100123260

19-0485

Nasa: PFAS Drinking Water

DW, QC

Entered By:

On:

Task Leader Approval:

On:

SupervisorApproval:

On:

PM Approval:

On:

Analytical Calibrations



Sequence Report

Created with Analyst Reporter
Printed: 10/06/2019 2:50:49 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
21	KL64	L1	6/8/2019 10:15:59 AM	5-0371.dam	AC_06072019_5-371.wiff
22	KL65	L2	6/8/2019 10:24:55 AM	5-0371.dam	AC_06072019_5-371.wiff
23	KL66	L3	6/8/2019 10:33:52 AM	5-0371.dam	AC_06072019_5-371.wiff
24	KL67	L4	6/8/2019 10:42:49 AM	5-0371.dam	AC_06072019_5-371.wiff
25	KL68	L5	6/8/2019 10:51:45 AM	5-0371.dam	AC_06072019_5-371.wiff
26	KL69	L6	6/8/2019 11:00:43 AM	5-0371.dam	AC_06072019_5-371.wiff
27	KL70	L7	6/8/2019 11:09:41 AM	5-0371.dam	AC_06072019_5-371.wiff
28	KL71	L8	6/8/2019 11:18:37 AM	5-0371.dam	AC_06072019_5-371.wiff
29	KL72	L9	6/8/2019 11:27:34 AM	5-0371.dam	AC_06072019_5-371.wiff
30	KL73 IB	Instrument Blank	6/8/2019 11:36:31 AM	5-0371.dam	AC_06072019_5-371.wiff
31	KL74 ICC	ICC	6/8/2019 11:45:29 AM	5-0371.dam	AC_06072019_5-371.wiff
32	MeOH		6/8/2019 11:54:26 AM	5-0371.dam	AC_06072019_5-371.wiff
33	CU330PB-FS(0)	Procedural Blank	6/8/2019 12:03:23 PM	5-0371.dam	AC_06072019_5-371.wiff
34	CU331LCS-FS(0)	Laboratory Control Sample	6/8/2019 12:12:20 PM	5-0371.dam	AC_06072019_5-371.wiff
35	I3532-FS(0)	C2-1307-DW0001-20190605	6/8/2019 12:21:17 PM	5-0371.dam	AC_06072019_5-371.wiff
36	I3533-FS(0)	C2-1307-FRB-20190605-01	6/8/2019 12:30:13 PM	5-0371.dam	AC_06072019_5-371.wiff
37	KL68 CCV	CCV	6/8/2019 12:39:10 PM	5-0371.dam	AC_06072019_5-371.wiff



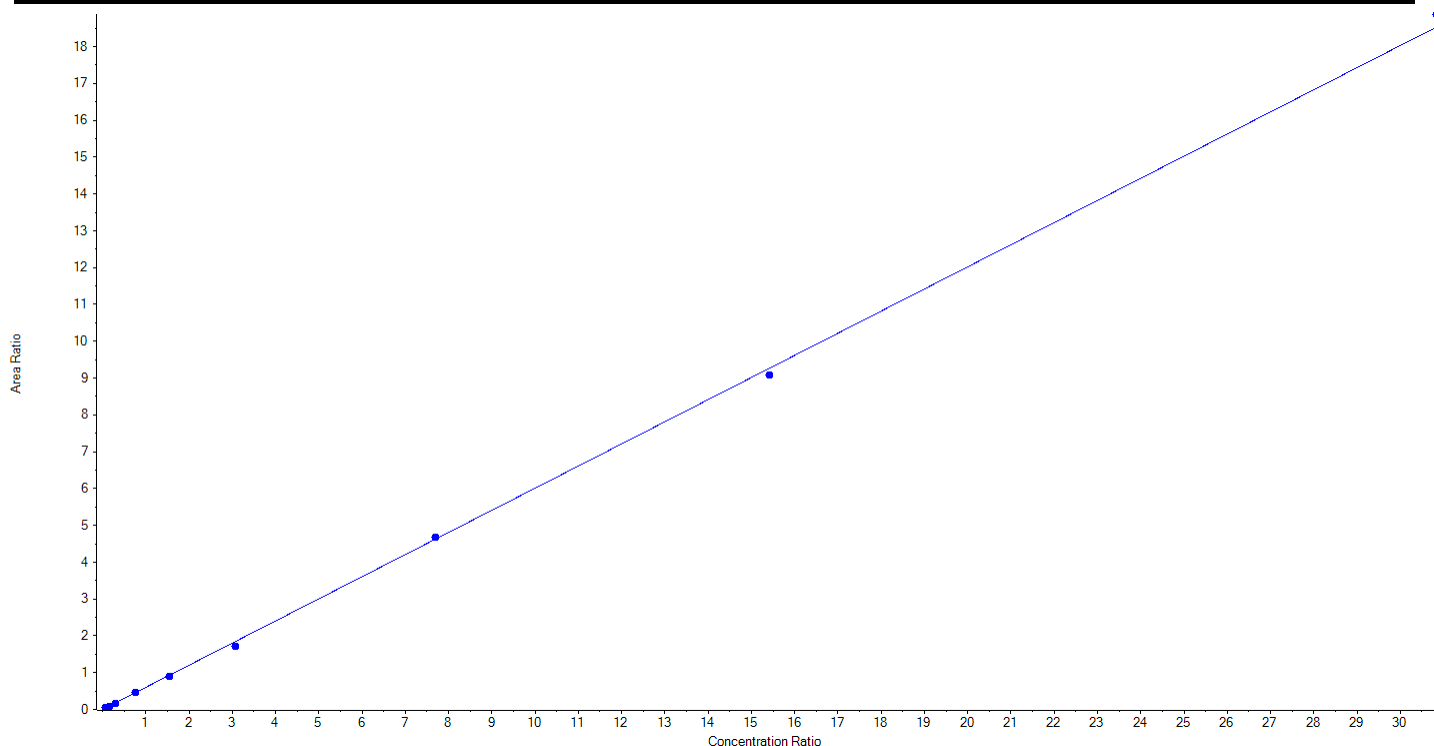
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFBS_1	Data File	AC_06072019_5-371.wiff
MRM Transition	298.9 / 80.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.60104 x$ ($r = 0.99969$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	22.15	22.33	100.8
22	KL65	L2	True	44.30	44.17	99.7
23	KL66	L3	True	88.60	81.76	92.3
24	KL67	L4	True	221.50	215.67	97.4
25	KL68	L5	True	443.00	430.98	97.3
26	KL69	L6	True	885.00	821.33	92.8
27	KL70	L7	True	2212.50	2227.33	100.7
28	KL71	L8	True	4425.00	4336.74	98.0
29	KL72	L9	True	8850.00	9011.75	101.8





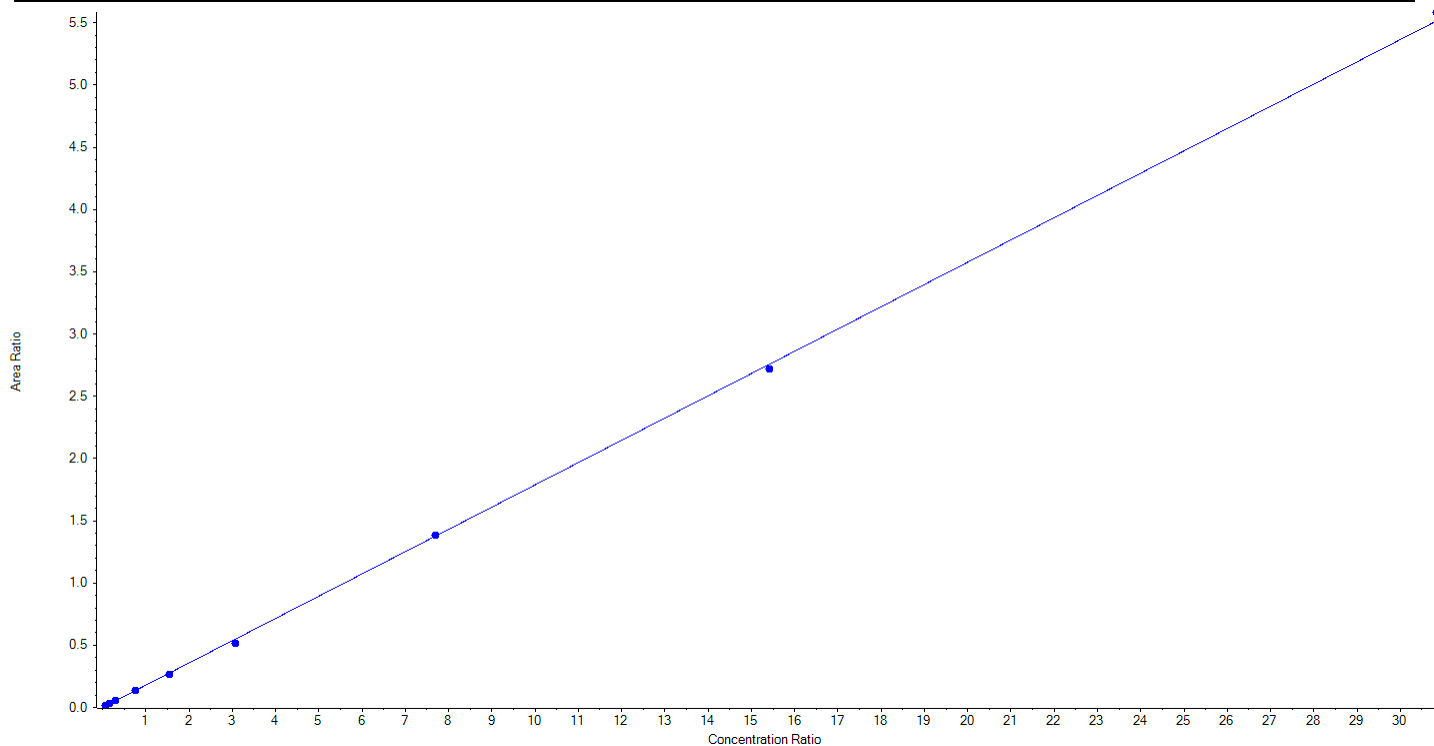
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFBS_2	Data File	AC_06072019_5-371.wiff
MRM Transition	298.9 / 99.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.17882 x$ ($r = 0.99980$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	22.15	24.13	108.9
22	KL65	L2	True	44.30	49.56	111.9
23	KL66	L3	True	88.60	90.08	101.7
24	KL67	L4	True	221.50	218.11	98.5
25	KL68	L5	True	443.00	430.77	97.2
26	KL69	L6	True	885.00	831.74	94.0
27	KL70	L7	True	2212.50	2221.76	100.4
28	KL71	L8	True	4425.00	4367.25	98.7
29	KL72	L9	True	8850.00	8958.64	101.2





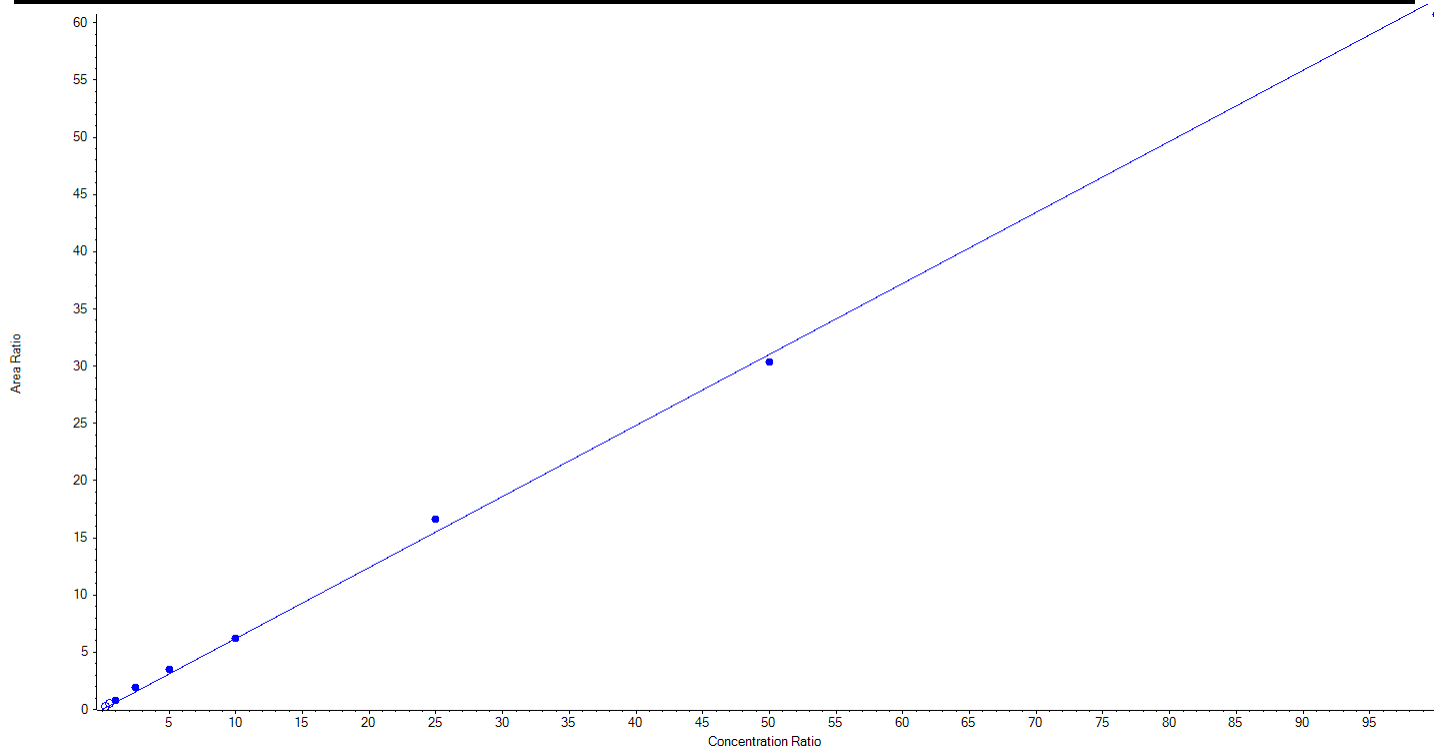
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFHxA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	313.0 / 269.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.62057 x$ ($r = 0.99935$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	38.60	154.4
22	KL65	L2	False	50.00	83.25	166.5
23	KL66	L3	True	100.00	124.59	124.6
24	KL67	L4	True	250.00	308.11	123.2
25	KL68	L5	True	500.00	567.30	113.5
26	KL69	L6	True	1000.00	1002.63	100.3
27	KL70	L7	True	2500.00	2674.21	107.0
28	KL71	L8	True	5000.00	4887.92	97.8
29	KL72	L9	True	10000.00	9785.25	97.9





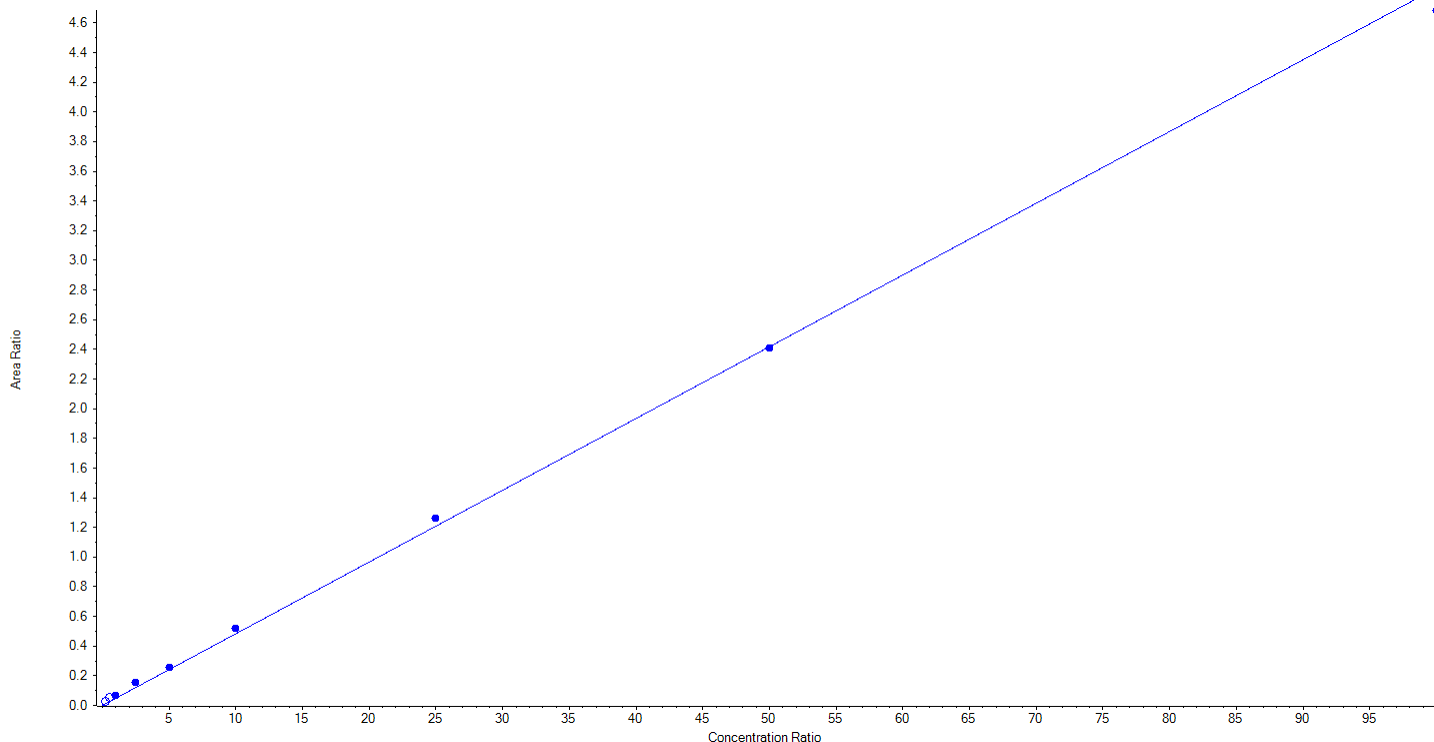
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFHxA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	313.0 / 119.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.04835 x$ ($r = 0.99951$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	49.60	198.4
22	KL65	L2	False	50.00	116.09	232.2
23	KL66	L3	True	100.00	133.55	133.6
24	KL67	L4	True	250.00	324.68	129.9
25	KL68	L5	True	500.00	537.01	107.4
26	KL69	L6	True	1000.00	1072.97	107.3
27	KL70	L7	True	2500.00	2616.60	104.7
28	KL71	L8	True	5000.00	4979.45	99.6
29	KL72	L9	True	10000.00	9685.75	96.9





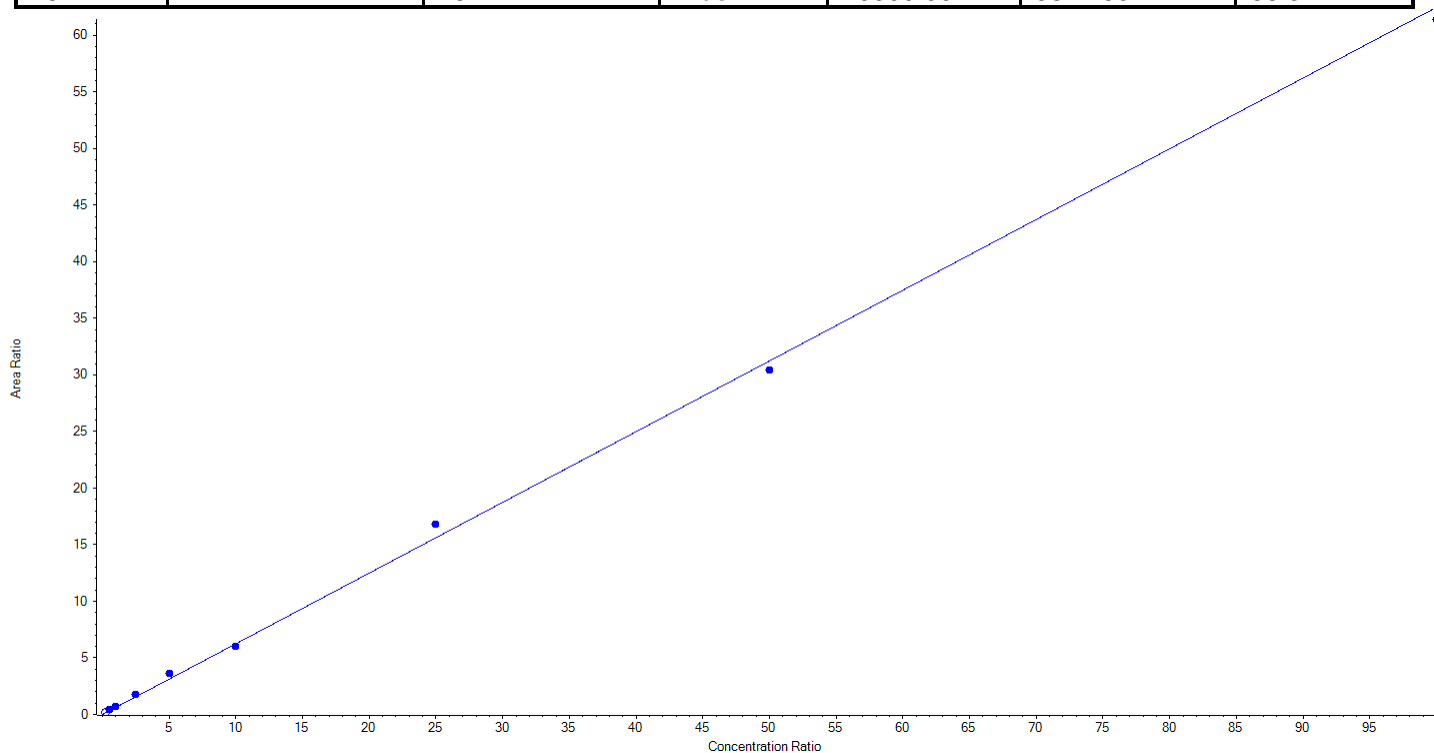
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFHpA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	363.0 / 319.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.62465 x$ ($r = 0.99910$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	25.38	101.5
22	KL65	L2	True	50.00	73.46	146.9
23	KL66	L3	True	100.00	111.34	111.3
24	KL67	L4	True	250.00	285.26	114.1
25	KL68	L5	True	500.00	581.88	116.4
26	KL69	L6	True	1000.00	958.14	95.8
27	KL70	L7	True	2500.00	2693.21	107.7
28	KL71	L8	True	5000.00	4868.79	97.4
29	KL72	L9	True	10000.00	9827.93	98.3





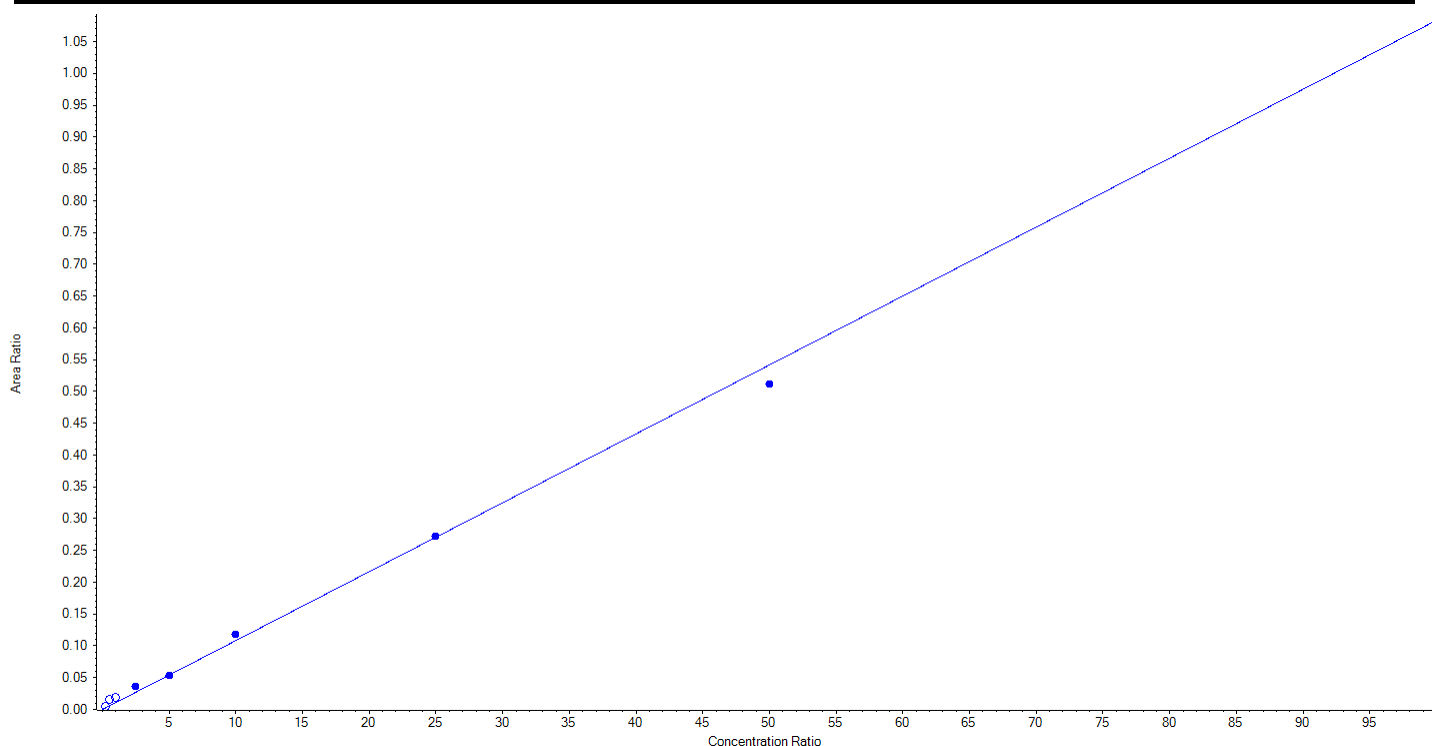
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFHpA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	363.0 / 169.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01084 x$ ($r = 0.99896$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	44.24	177.0
22	KL65	L2	False	50.00	141.36	282.7
23	KL66	L3	False	100.00	170.86	170.9
24	KL67	L4	True	250.00	335.32	134.1
25	KL68	L5	True	500.00	490.01	98.0
26	KL69	L6	True	1000.00	1091.44	109.1
27	KL70	L7	True	2500.00	2519.62	100.8
28	KL71	L8	True	5000.00	4729.01	94.6
29	KL72	L9	True	10000.00	10084.59	100.9





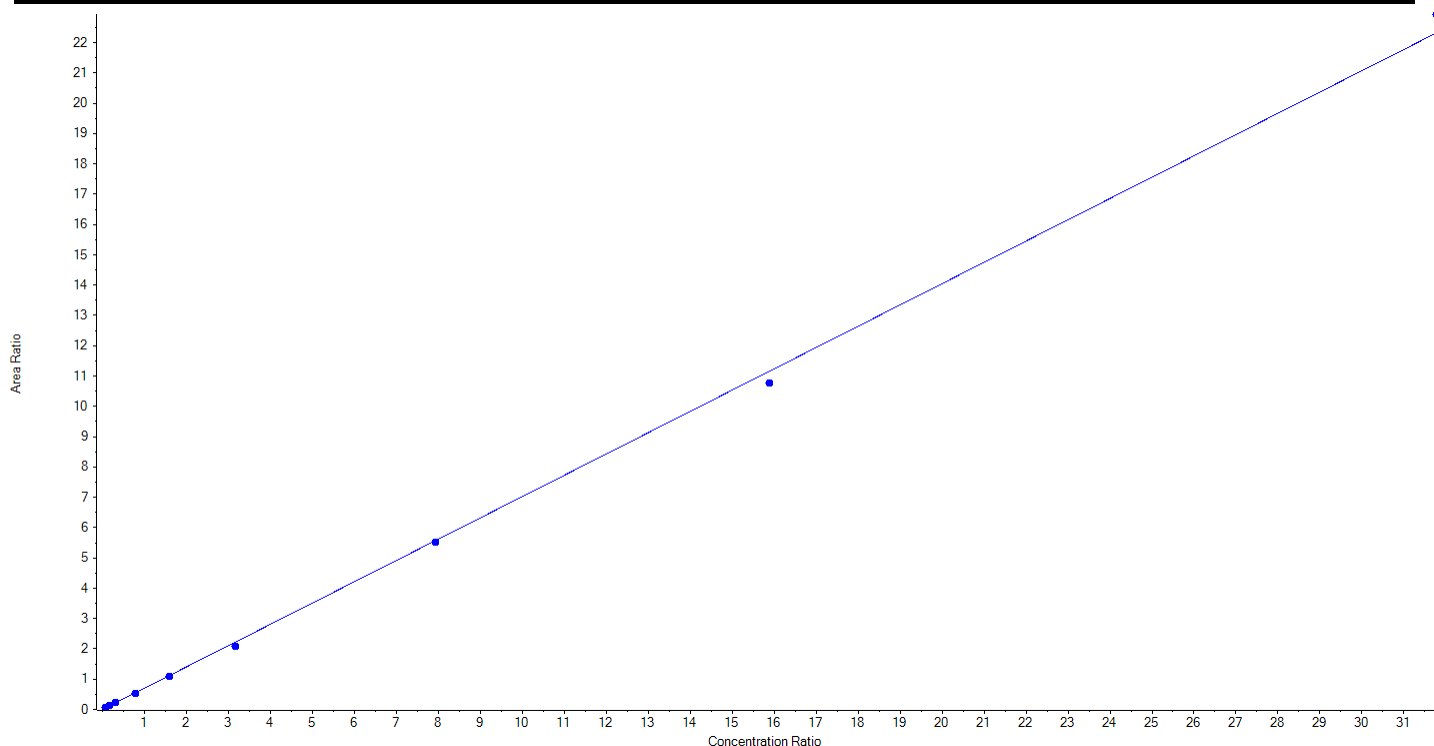
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFHxS_1	Data File	AC_06072019_5-371.wiff
MRM Transition	399.0 / 80.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.70239 x$ ($r = 0.99946$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	22.80	27.62	121.1
22	KL65	L2	True	45.60	51.55	113.1
23	KL66	L3	True	91.20	90.46	99.2
24	KL67	L4	True	228.00	218.86	96.0
25	KL68	L5	True	456.00	441.25	96.8
26	KL69	L6	True	912.00	853.38	93.6
27	KL70	L7	True	2280.00	2260.90	99.2
28	KL71	L8	True	4560.00	4403.98	96.6
29	KL72	L9	True	9120.00	9367.60	102.7





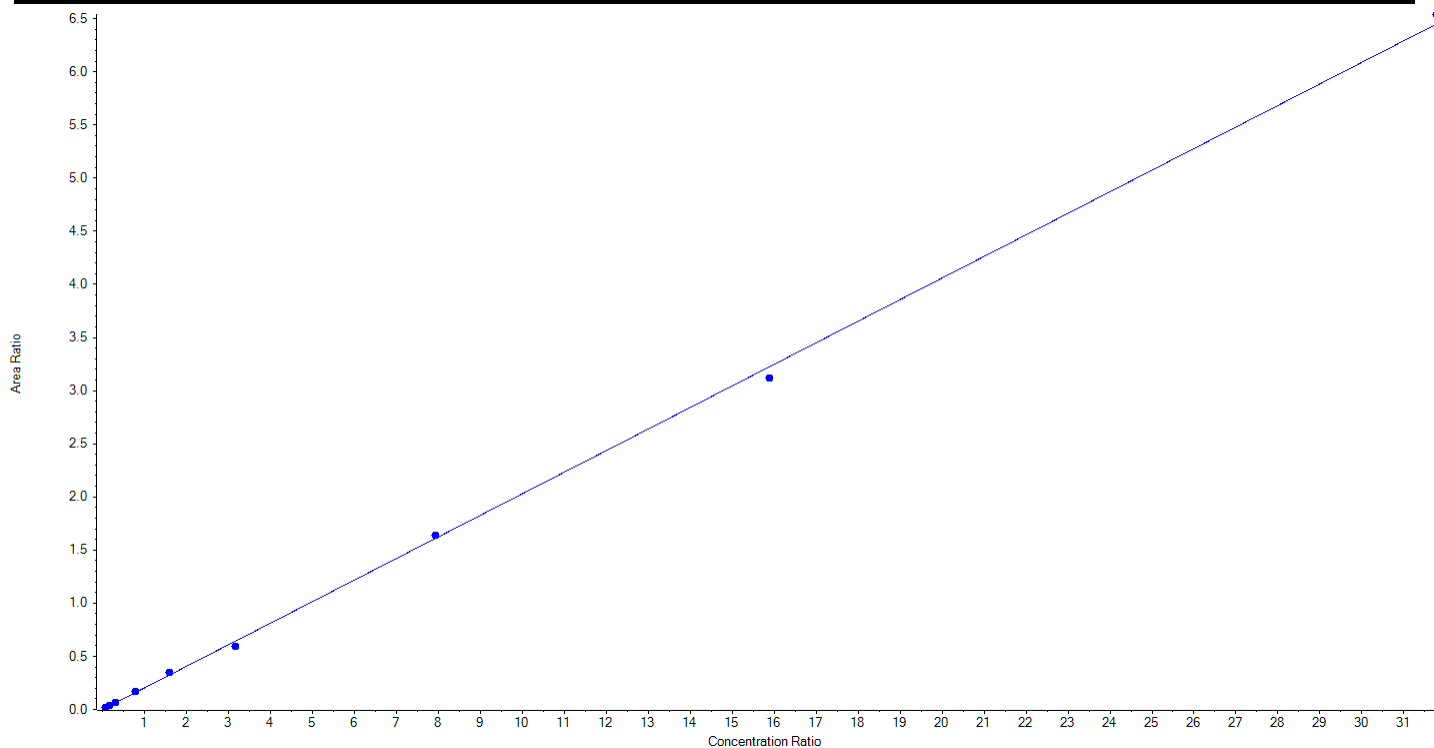
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFHxS_2	Data File	AC_06072019_5-371.wiff
MRM Transition	399.0 / 99.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.20297 x$ ($r = 0.99946$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	22.80	30.30	132.9
22	KL65	L2	True	45.60	48.95	107.3
23	KL66	L3	True	91.20	97.00	106.4
24	KL67	L4	True	228.00	240.33	105.4
25	KL68	L5	True	456.00	491.42	107.8
26	KL69	L6	True	912.00	832.98	91.3
27	KL70	L7	True	2280.00	2323.57	101.9
28	KL71	L8	True	4560.00	4405.18	96.6
29	KL72	L9	True	9120.00	9245.87	101.4





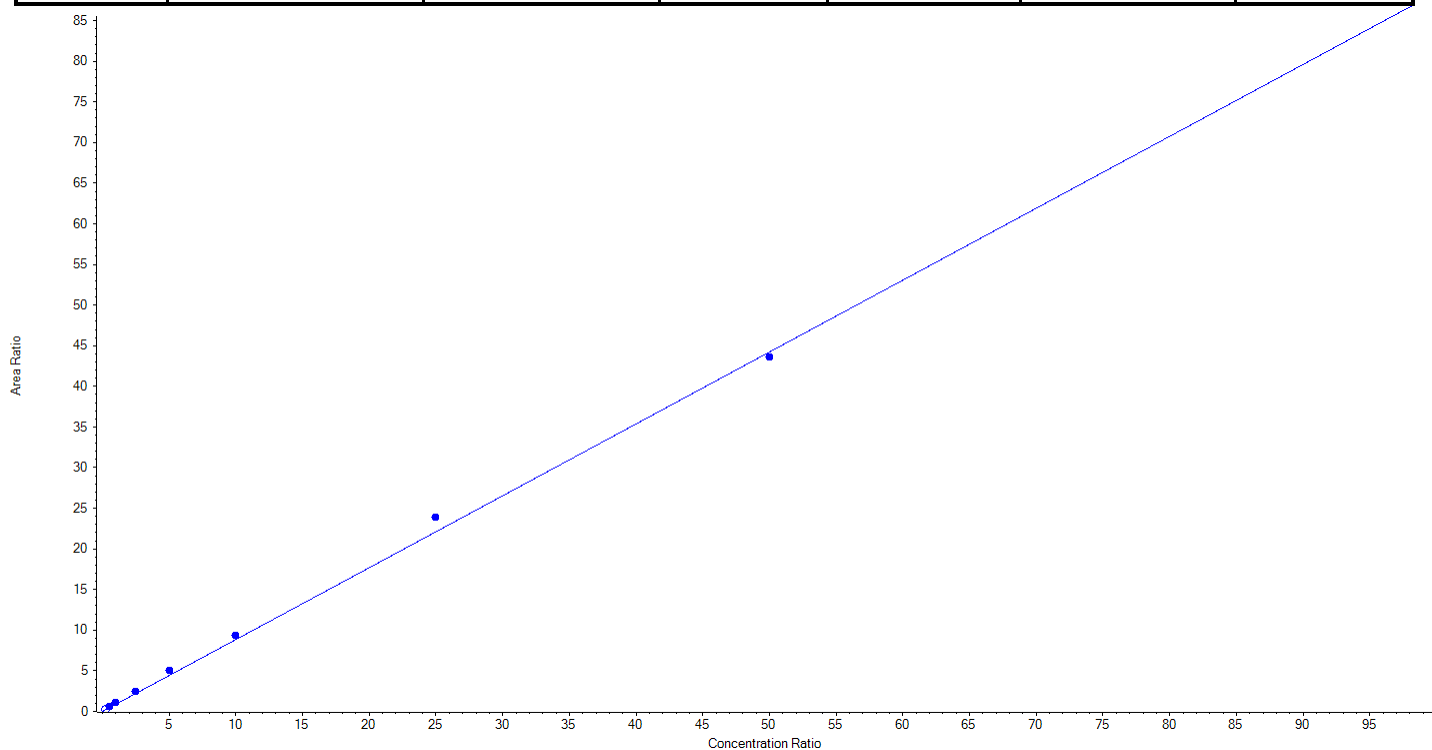
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFOA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	413.0 / 369.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.88452 x$ ($r = 0.99909$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	32.17	128.7
22	KL65	L2	True	50.00	71.16	142.3
23	KL66	L3	True	100.00	118.73	118.7
24	KL67	L4	True	250.00	283.20	113.3
25	KL68	L5	True	500.00	573.27	114.7
26	KL69	L6	True	1000.00	1052.89	105.3
27	KL70	L7	True	2500.00	2704.17	108.2
28	KL71	L8	True	5000.00	4930.24	98.6
29	KL72	L9	True	10000.00	9666.34	96.7





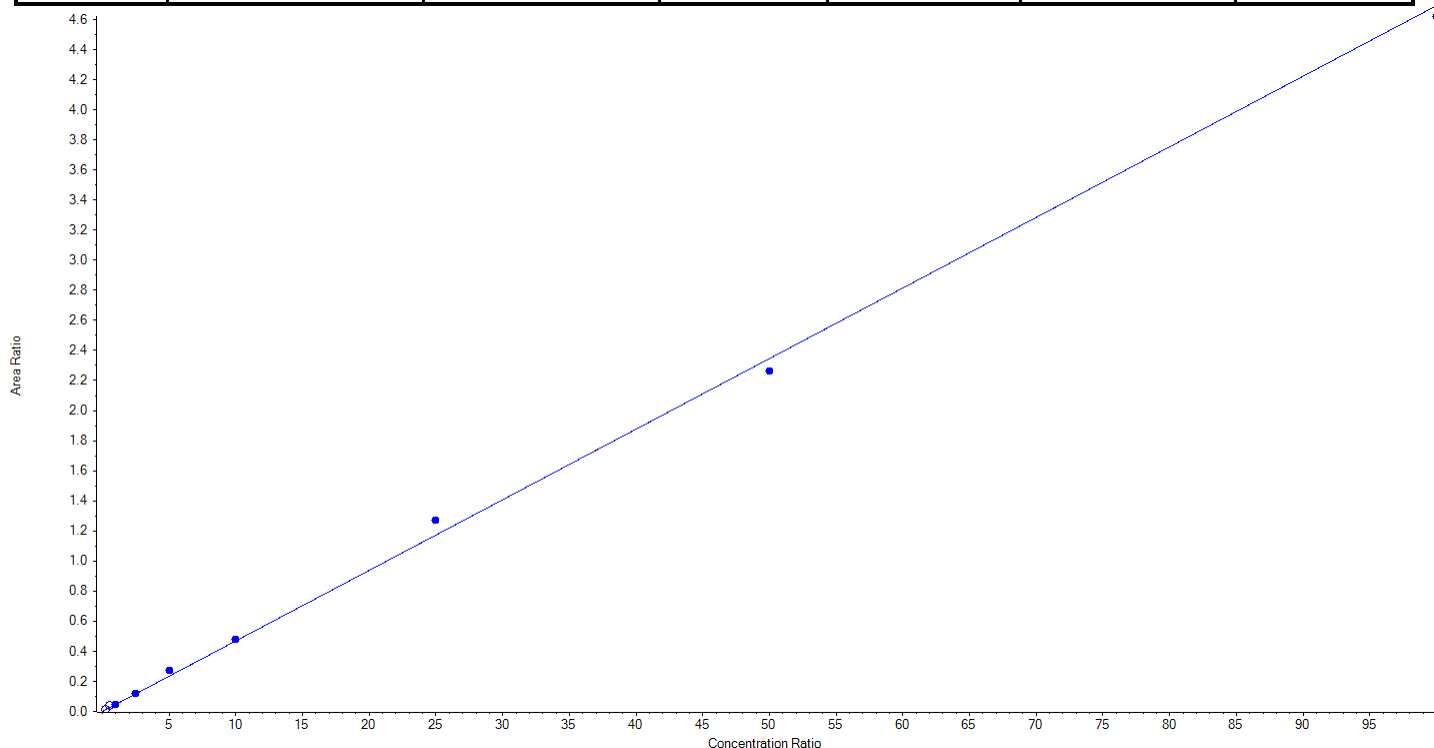
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFOA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	413.0 / 169.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.04692 x$ ($r = 0.99877$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	34.77	139.1
22	KL65	L2	False	50.00	81.41	162.8
23	KL66	L3	True	100.00	95.45	95.5
24	KL67	L4	True	250.00	261.24	104.5
25	KL68	L5	True	500.00	587.33	117.5
26	KL69	L6	True	1000.00	1026.13	102.6
27	KL70	L7	True	2500.00	2715.05	108.6
28	KL71	L8	True	5000.00	4819.08	96.4
29	KL72	L9	True	10000.00	9845.71	98.5





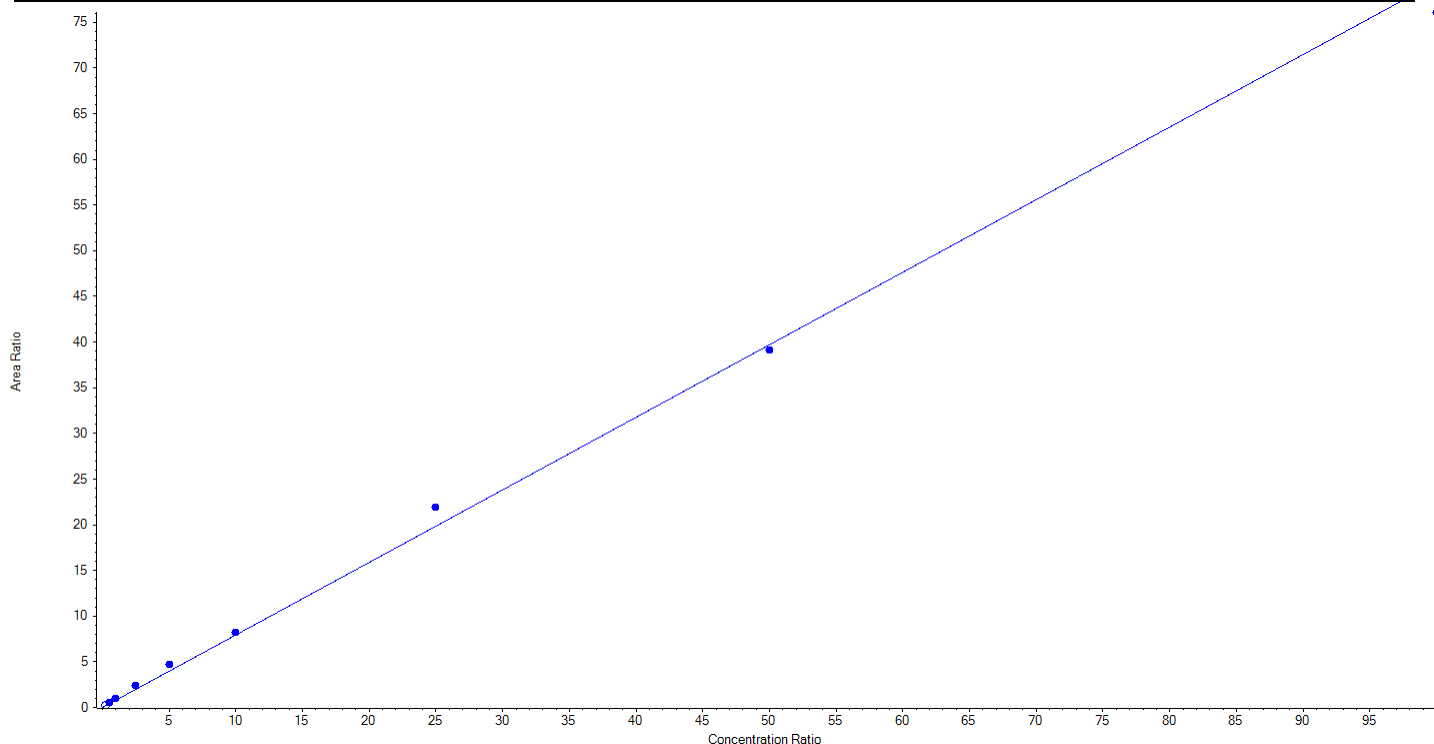
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFNA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	463.0 / 419.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.79415 x$ ($r = 0.99838$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	33.55	134.2
22	KL65	L2	True	50.00	70.04	140.1
23	KL66	L3	True	100.00	118.15	118.2
24	KL67	L4	True	250.00	297.60	119.0
25	KL68	L5	True	500.00	600.10	120.0
26	KL69	L6	True	1000.00	1041.97	104.2
27	KL70	L7	True	2500.00	2764.95	110.6
28	KL71	L8	True	5000.00	4927.63	98.6
29	KL72	L9	True	10000.00	9579.55	95.8





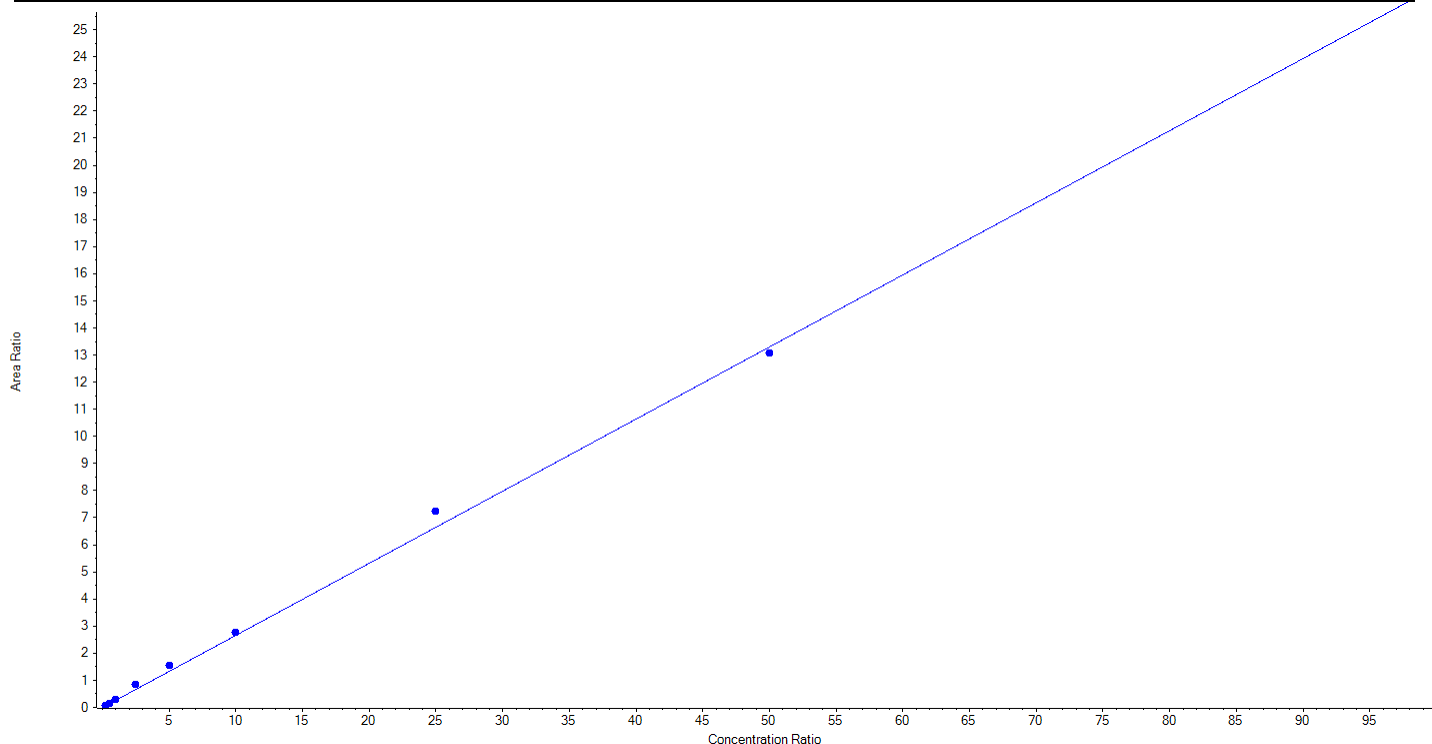
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFNA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	463.0 / 219.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.26598 x$ ($r = 0.99849$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	31.91	127.6
22	KL65	L2	True	50.00	61.44	122.9
23	KL66	L3	True	100.00	114.69	114.7
24	KL67	L4	True	250.00	316.25	126.5
25	KL68	L5	True	500.00	576.47	115.3
26	KL69	L6	True	1000.00	1041.06	104.1
27	KL70	L7	True	2500.00	2727.04	109.1
28	KL71	L8	True	5000.00	4917.94	98.4
29	KL72	L9	True	10000.00	9638.20	96.4





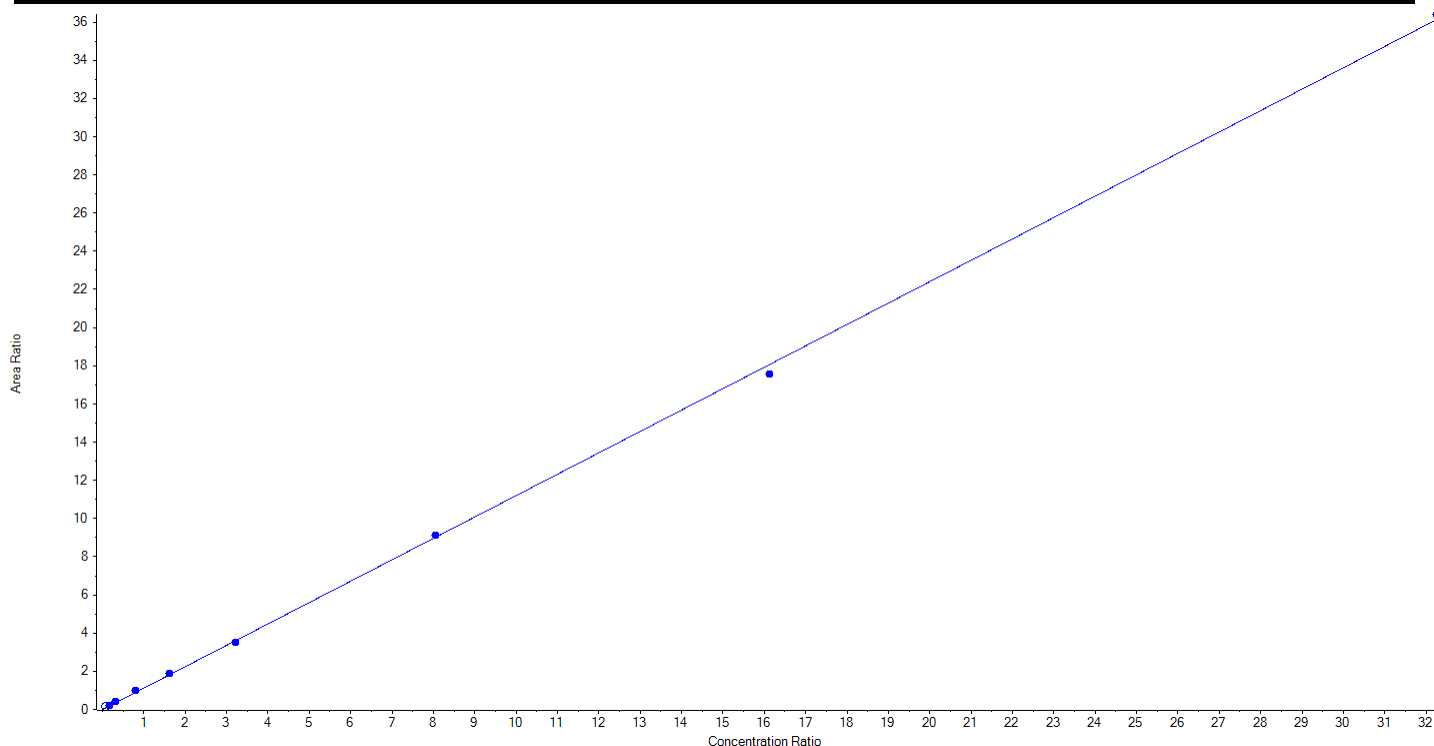
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFOS_1	Data File	AC_06072019_5-371.wiff
MRM Transition	499.0 / 80.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.12011 x$ ($r = 0.99979$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	23.15	39.09	168.9
22	KL65	L2	True	46.30	59.96	129.5
23	KL66	L3	True	92.60	103.56	111.8
24	KL67	L4	True	231.50	260.21	112.4
25	KL68	L5	True	463.00	477.32	103.1
26	KL69	L6	True	925.60	896.82	96.9
27	KL70	L7	True	2314.00	2332.97	100.8
28	KL71	L8	True	4628.00	4501.08	97.3
29	KL72	L9	True	9256.00	9325.08	100.8





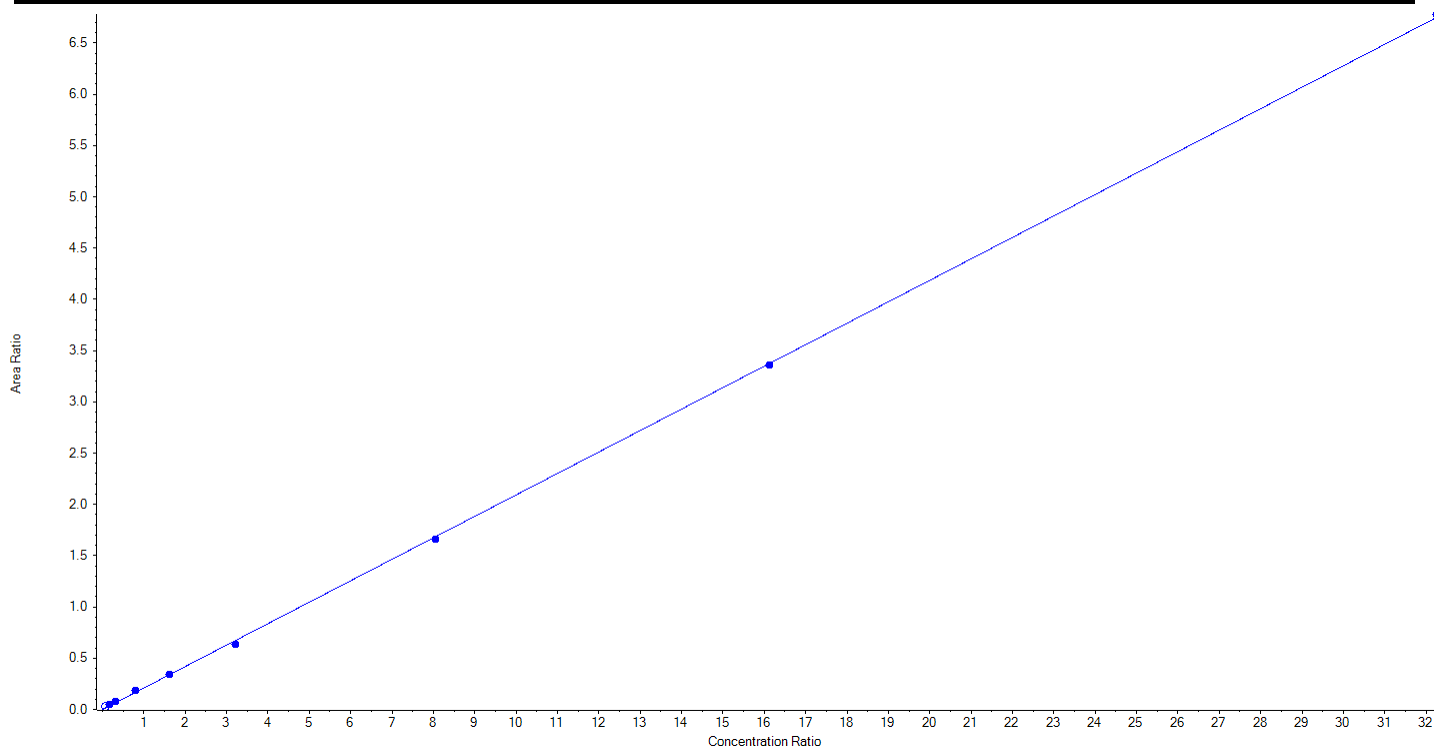
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFOS_2	Data File	AC_06072019_5-371.wiff
MRM Transition	499.0 / 99.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.20922 x$ ($r = 0.99979$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	23.15	45.81	197.9
22	KL65	L2	True	46.30	69.41	149.9
23	KL66	L3	True	92.60	104.32	112.7
24	KL67	L4	True	231.50	252.92	109.3
25	KL68	L5	True	463.00	466.64	100.8
26	KL69	L6	True	925.60	875.31	94.6
27	KL70	L7	True	2314.00	2281.01	98.6
28	KL71	L8	True	4628.00	4611.98	99.7
29	KL72	L9	True	9256.00	9295.42	100.4





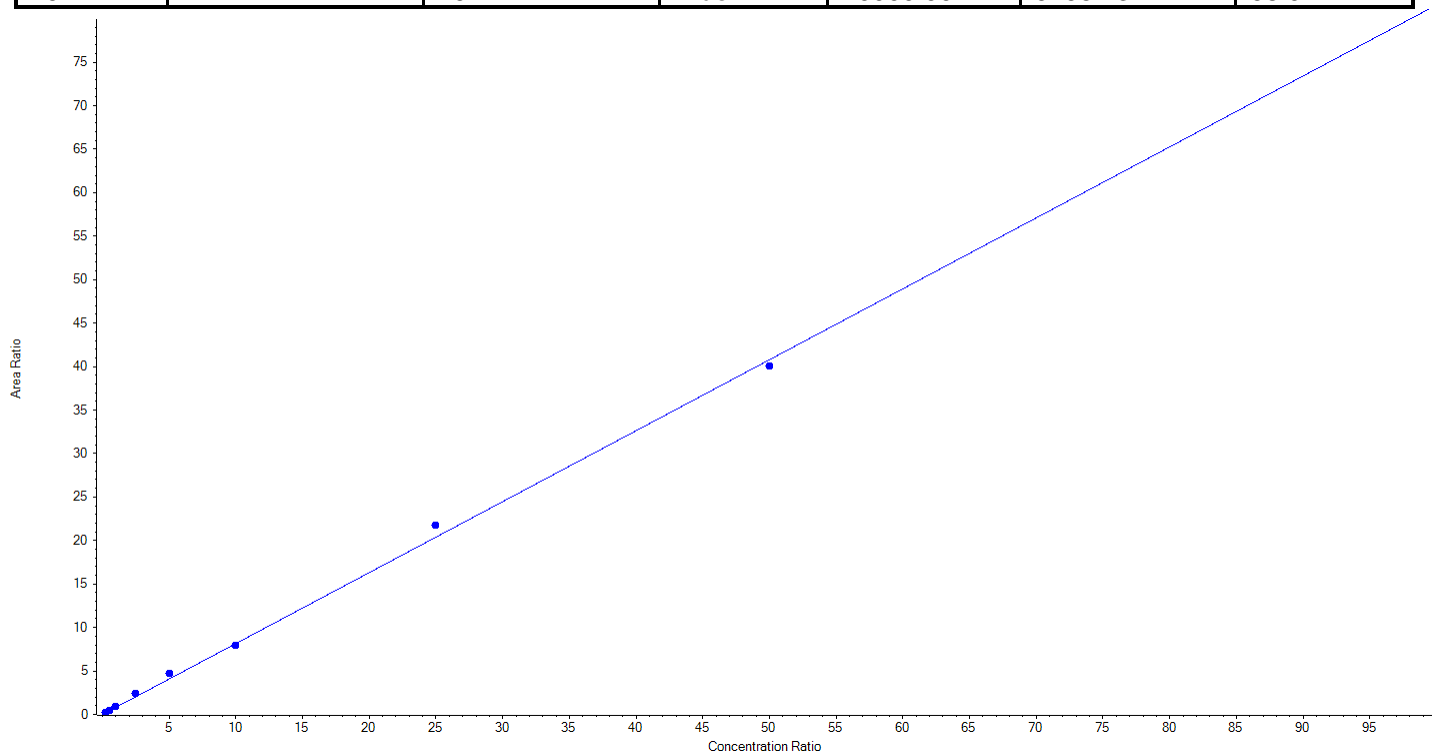
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFDA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	513.0 / 469.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.81575 x$ ($r = 0.99907$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	28.30	113.2
22	KL65	L2	True	50.00	55.06	110.1
23	KL66	L3	True	100.00	115.80	115.8
24	KL67	L4	True	250.00	289.95	116.0
25	KL68	L5	True	500.00	581.31	116.3
26	KL69	L6	True	1000.00	979.55	98.0
27	KL70	L7	True	2500.00	2670.33	106.8
28	KL71	L8	True	5000.00	4909.47	98.2
29	KL72	L9	True	10000.00	9795.23	98.0





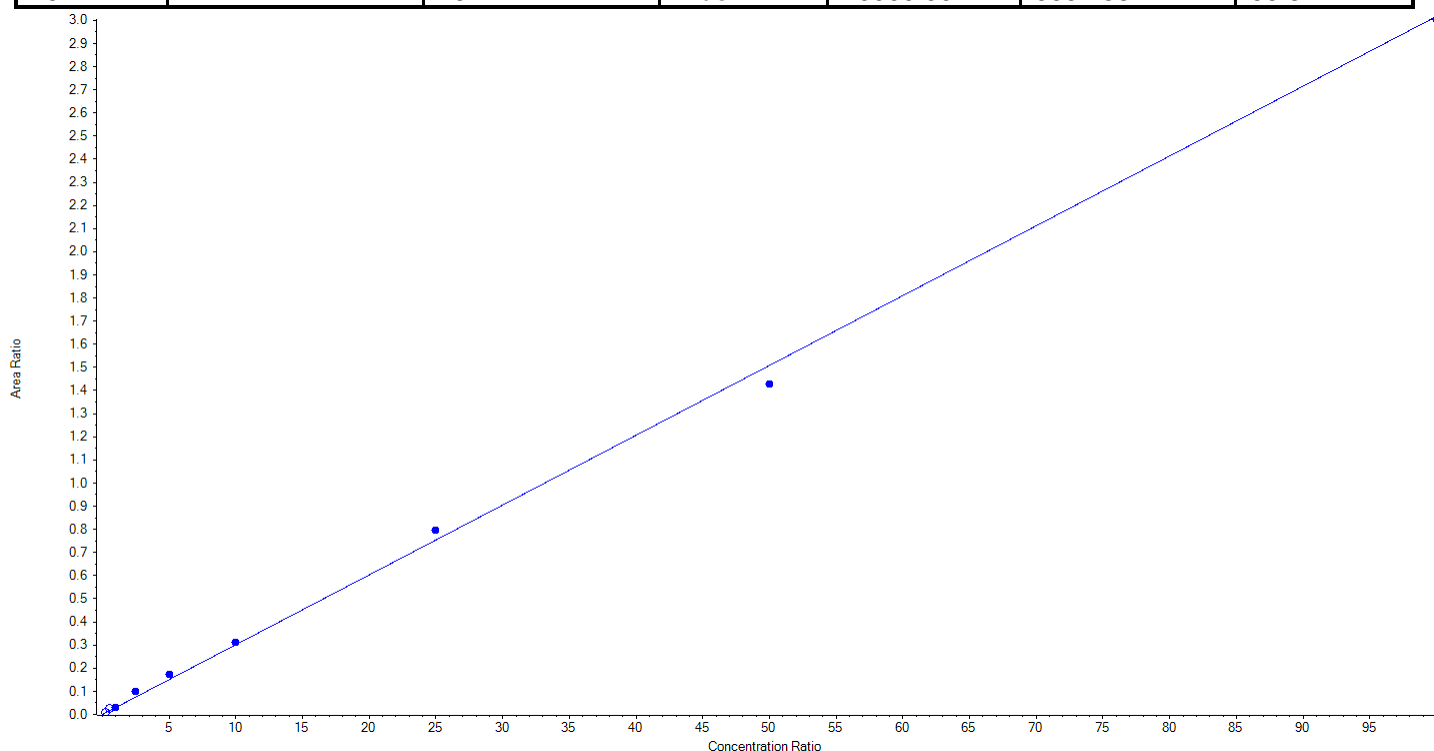
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFDA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	513.0 / 219.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.03017 x$ ($r = 0.99888$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	25.56	102.3
22	KL65	L2	False	50.00	83.05	166.1
23	KL66	L3	True	100.00	106.56	106.6
24	KL67	L4	True	250.00	323.77	129.5
25	KL68	L5	True	500.00	566.79	113.4
26	KL69	L6	True	1000.00	1035.78	103.6
27	KL70	L7	True	2500.00	2634.18	105.4
28	KL71	L8	True	5000.00	4728.37	94.6
29	KL72	L9	True	10000.00	9954.56	99.6





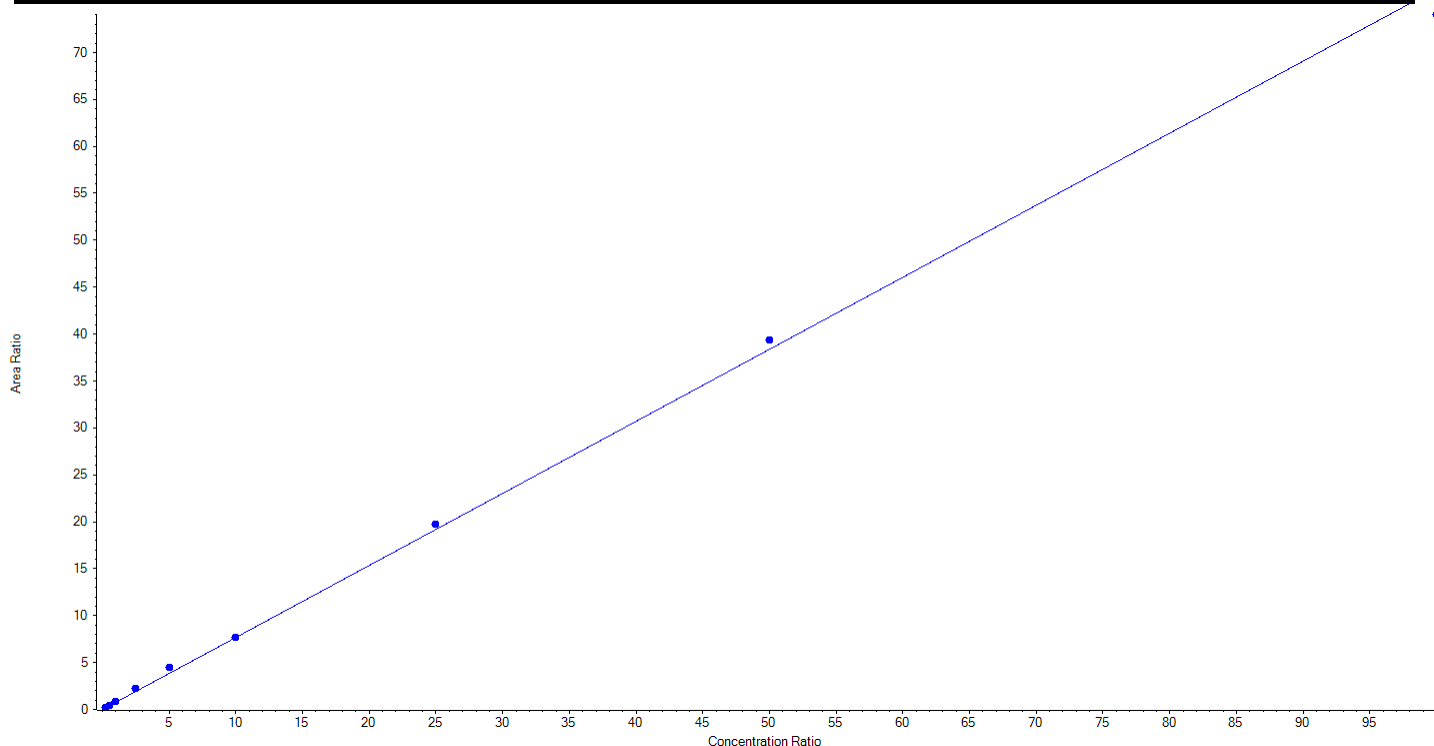
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFUnA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	563.0 / 519.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.76749 x$ ($r = 0.99912$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	33.42	133.7
22	KL65	L2	True	50.00	59.92	119.8
23	KL66	L3	True	100.00	110.22	110.2
24	KL67	L4	True	250.00	289.33	115.7
25	KL68	L5	True	500.00	587.91	117.6
26	KL69	L6	True	1000.00	997.78	99.8
27	KL70	L7	True	2500.00	2575.82	103.0
28	KL71	L8	True	5000.00	5123.16	102.5
29	KL72	L9	True	10000.00	9647.45	96.5





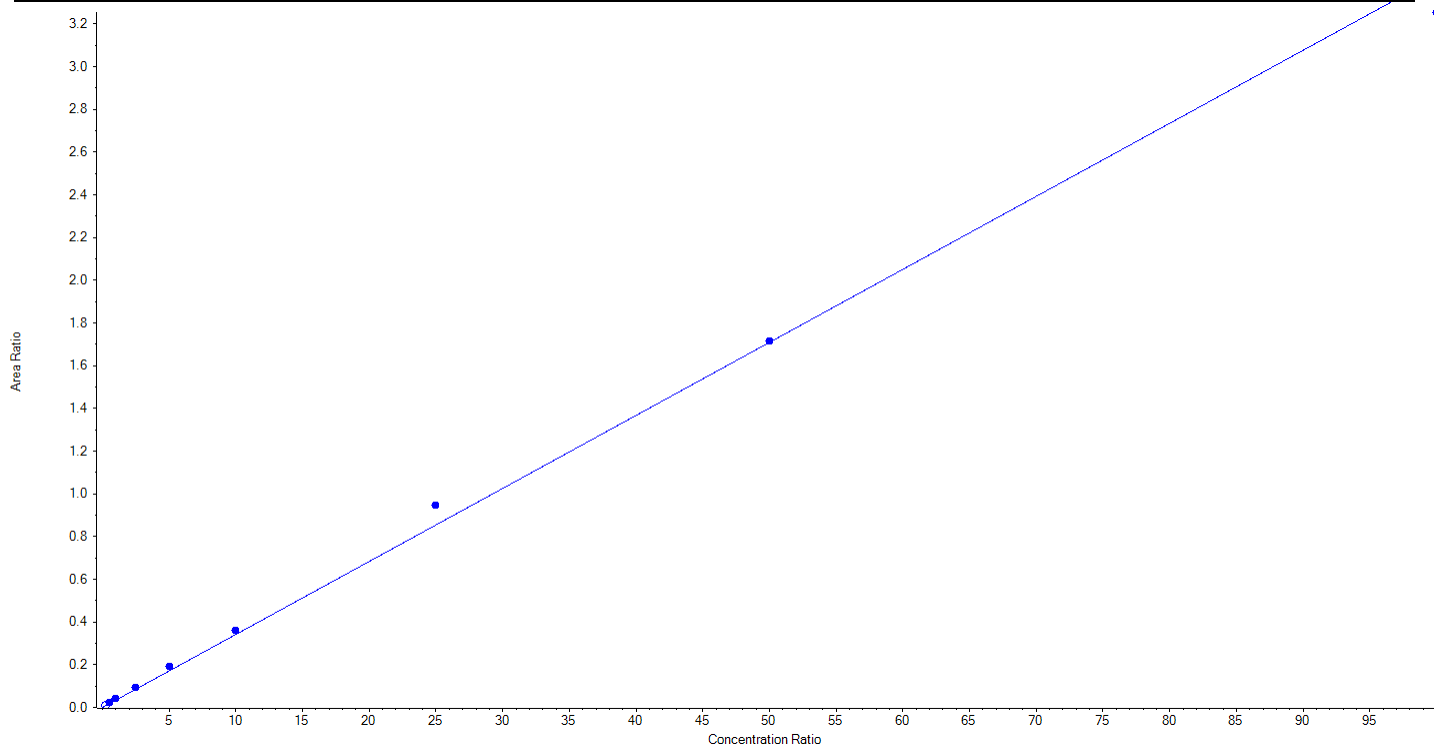
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFUnA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	563.0 / 269.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.03418 x$ ($r = 0.99854$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	23.02	92.1
22	KL65	L2	True	50.00	73.01	146.0
23	KL66	L3	True	100.00	120.58	120.6
24	KL67	L4	True	250.00	279.92	112.0
25	KL68	L5	True	500.00	567.54	113.5
26	KL69	L6	True	1000.00	1053.44	105.3
27	KL70	L7	True	2500.00	2764.46	110.6
28	KL71	L8	True	5000.00	5024.00	100.5
29	KL72	L9	True	10000.00	9517.04	95.2





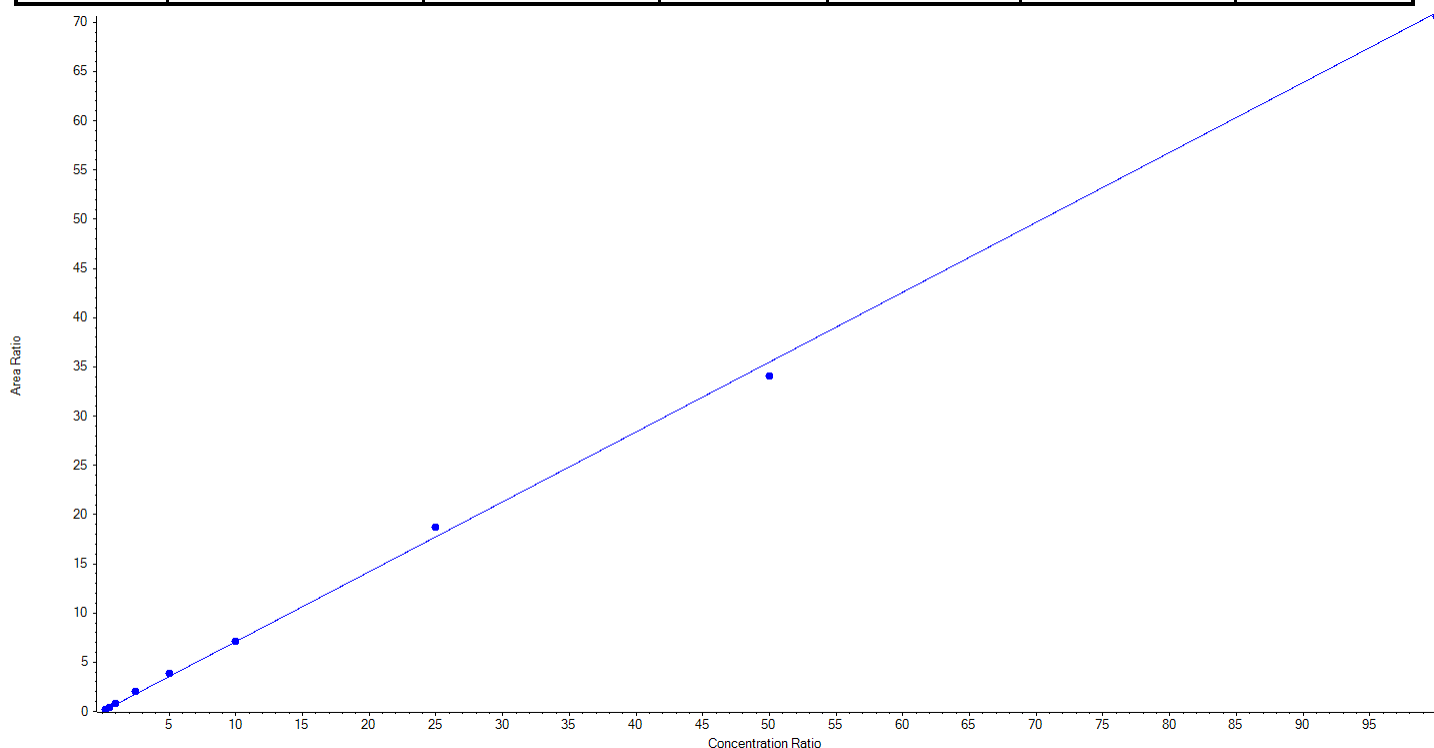
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFD _o A_1	Data File	AC_06072019_5-371.wiff
MRM Transition	613.0 / 569.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.70973 x$ ($r = 0.99939$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	29.69	118.8
22	KL65	L2	True	50.00	59.62	119.2
23	KL66	L3	True	100.00	114.31	114.3
24	KL67	L4	True	250.00	285.39	114.2
25	KL68	L5	True	500.00	548.58	109.7
26	KL69	L6	True	1000.00	1004.72	100.5
27	KL70	L7	True	2500.00	2638.51	105.5
28	KL71	L8	True	5000.00	4799.65	96.0
29	KL72	L9	True	10000.00	9944.52	99.5





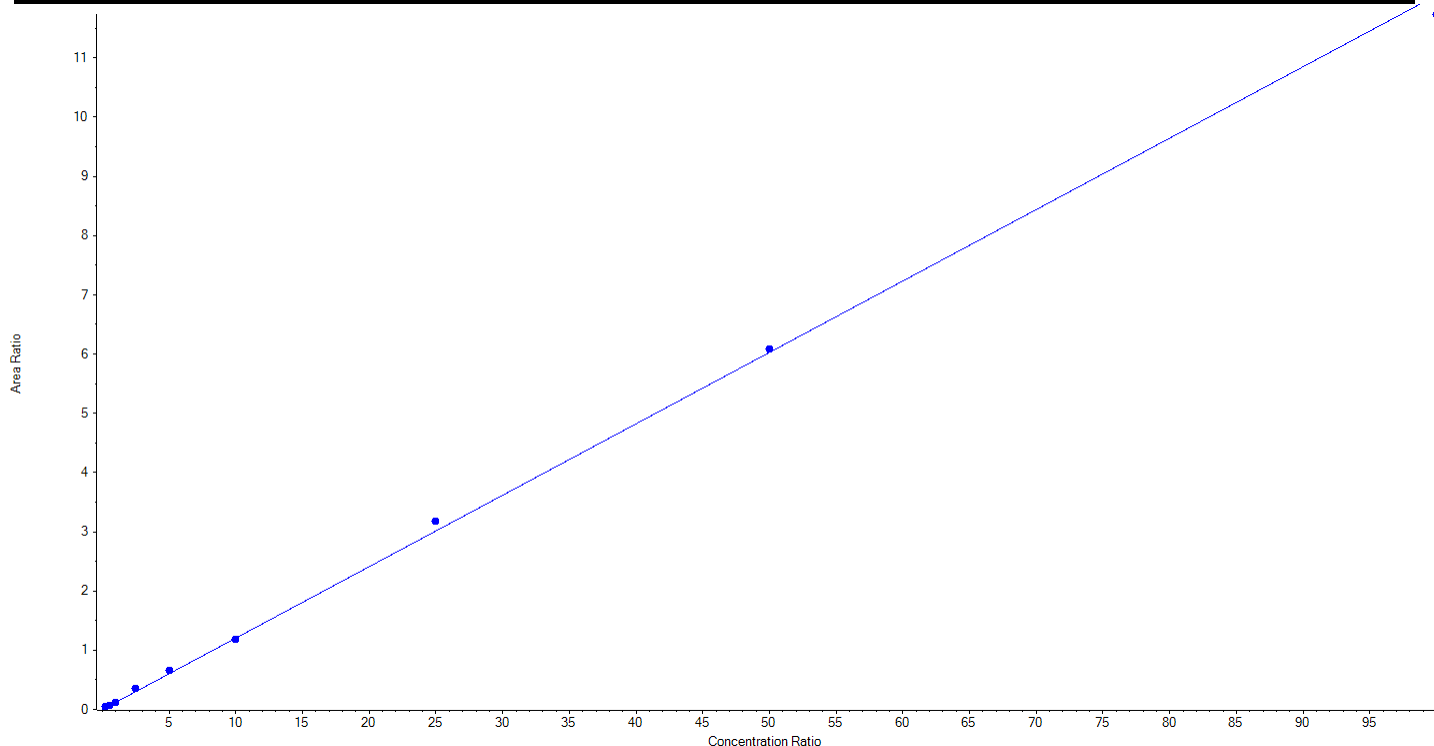
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFD _o A_2	Data File	AC_06072019_5-371.wiff
MRM Transition	613.0 / 319.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.12056 x$ ($r = 0.99934$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	37.40	149.6
22	KL65	L2	True	50.00	54.00	108.0
23	KL66	L3	True	100.00	94.18	94.2
24	KL67	L4	True	250.00	290.61	116.3
25	KL68	L5	True	500.00	548.26	109.7
26	KL69	L6	True	1000.00	988.42	98.8
27	KL70	L7	True	2500.00	2629.57	105.2
28	KL71	L8	True	5000.00	5051.88	101.0
29	KL72	L9	True	10000.00	9730.67	97.3





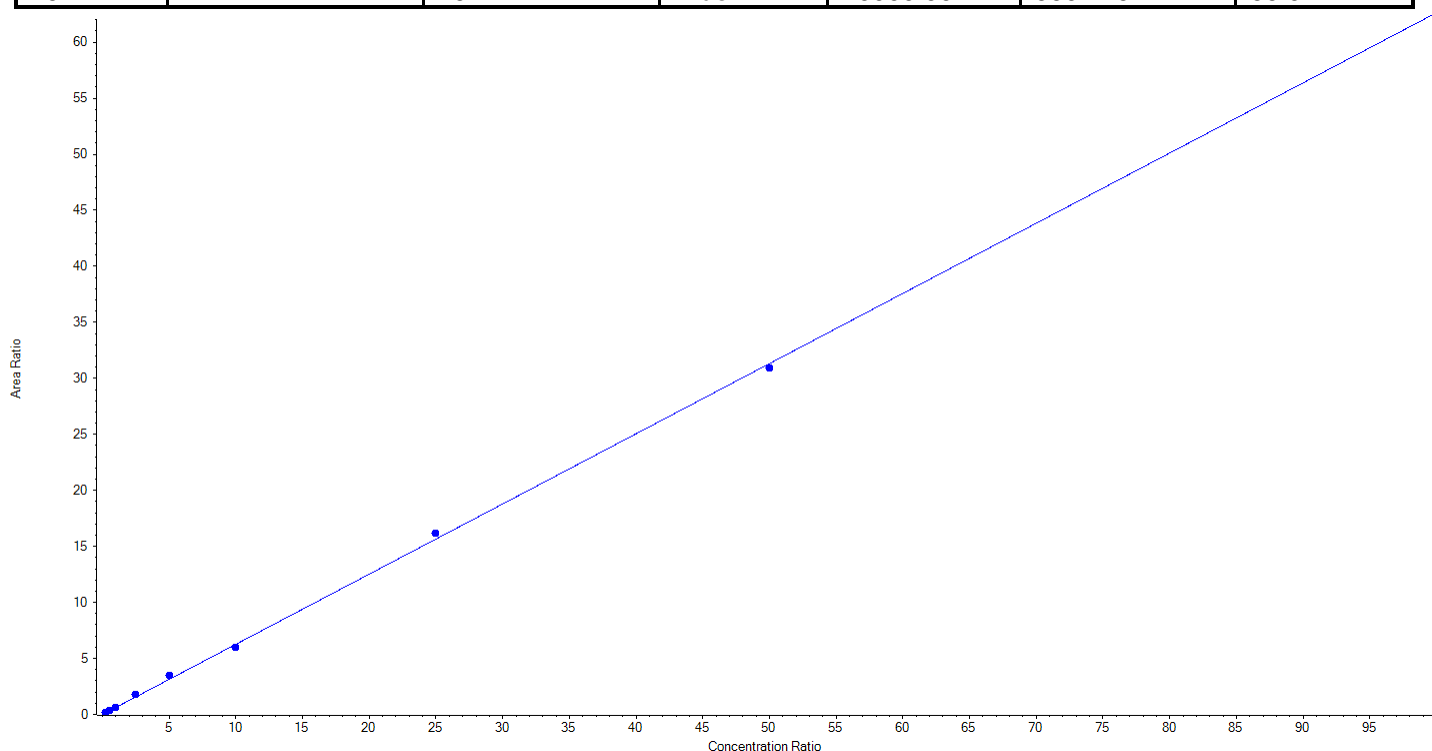
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFTrDA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	663.0 / 619.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.62636 x$ ($r = 0.99957$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	27.97	111.9
22	KL65	L2	True	50.00	61.21	122.4
23	KL66	L3	True	100.00	105.77	105.8
24	KL67	L4	True	250.00	285.80	114.3
25	KL68	L5	True	500.00	556.06	111.2
26	KL69	L6	True	1000.00	959.74	96.0
27	KL70	L7	True	2500.00	2589.07	103.6
28	KL71	L8	True	5000.00	4937.08	98.7
29	KL72	L9	True	10000.00	9902.29	99.0





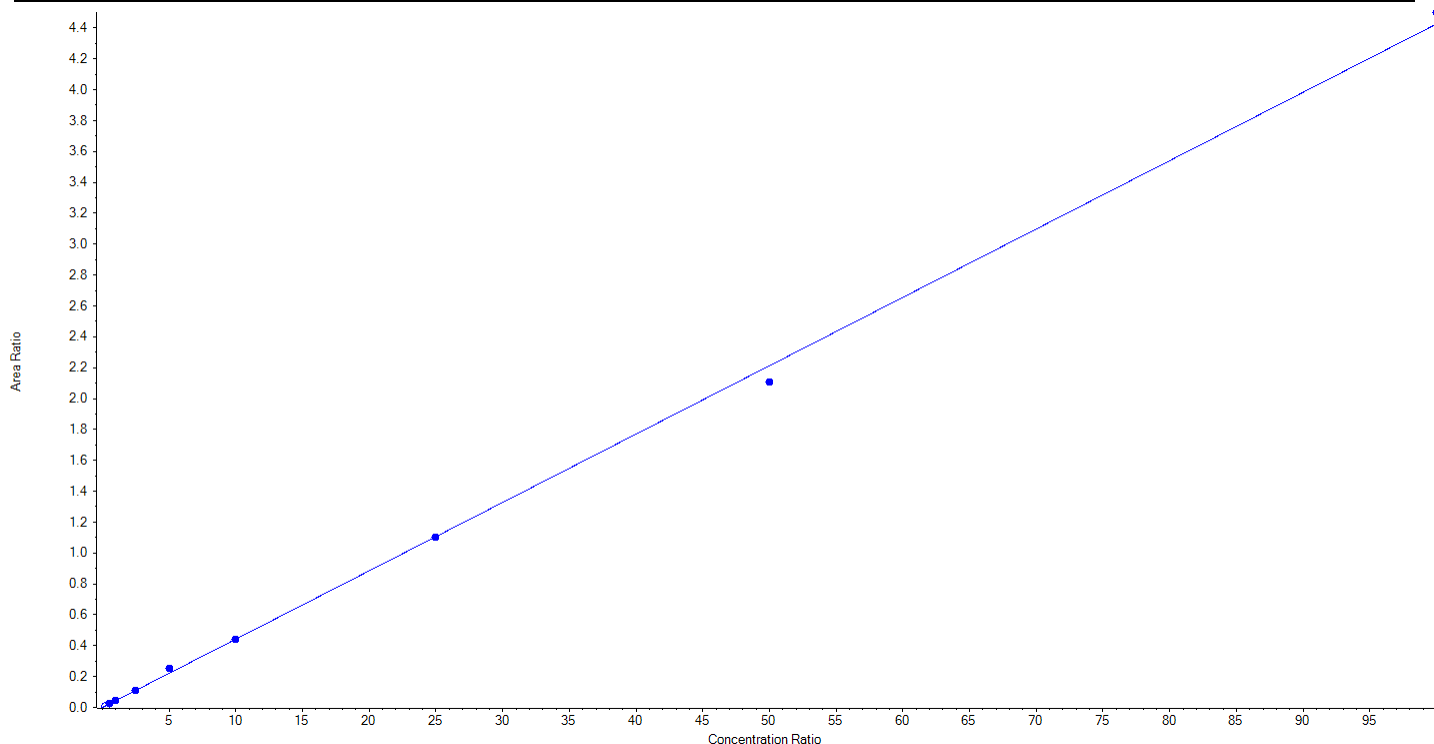
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFTrDA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	663.0 / 169.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.04426 x$ ($r = 0.99939$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	14.51	58.0
22	KL65	L2	True	50.00	61.28	122.6
23	KL66	L3	True	100.00	101.75	101.8
24	KL67	L4	True	250.00	249.15	99.7
25	KL68	L5	True	500.00	564.83	113.0
26	KL69	L6	True	1000.00	991.87	99.2
27	KL70	L7	True	2500.00	2496.11	99.8
28	KL71	L8	True	5000.00	4768.10	95.4
29	KL72	L9	True	10000.00	10166.91	101.7





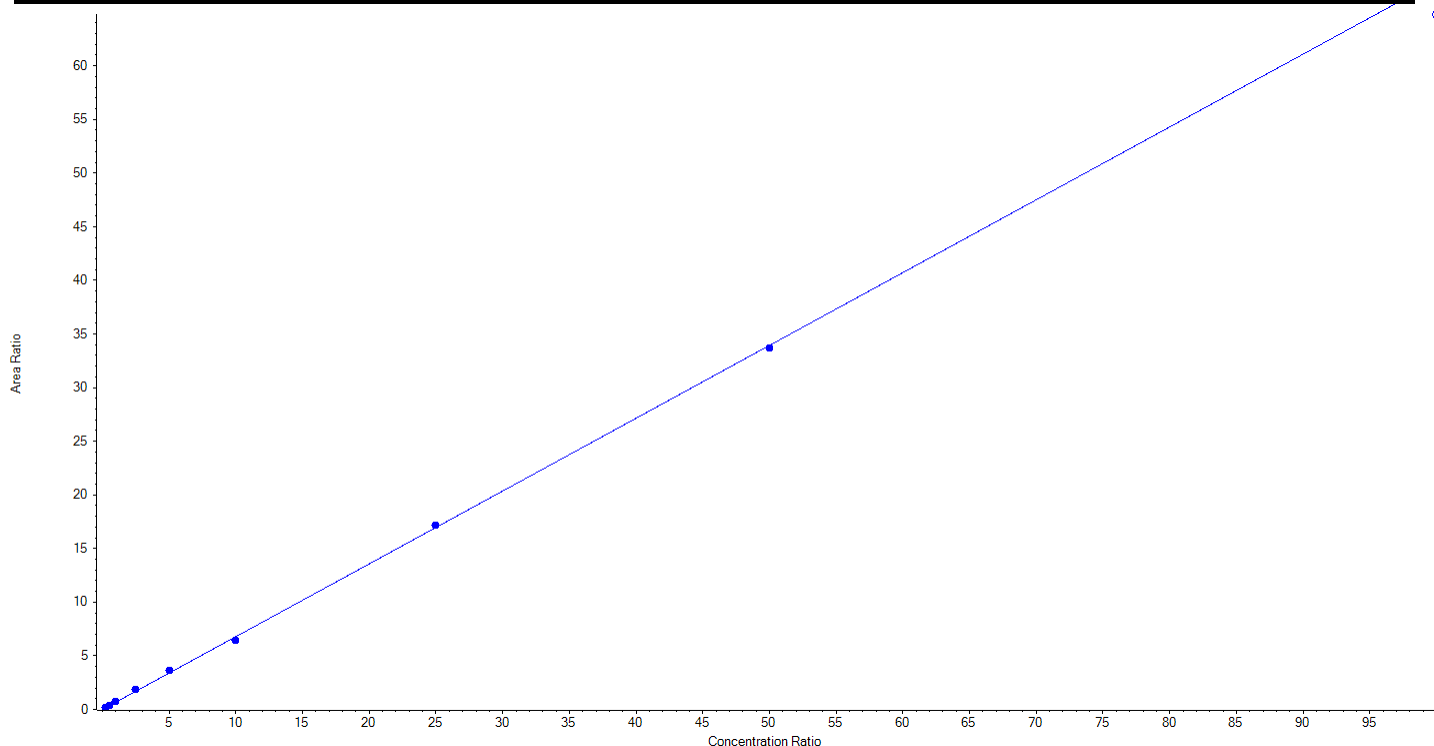
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFTeDA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	713.0 / 669.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.67874 x$ ($r = 0.99954$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	25.13	100.5
22	KL65	L2	True	50.00	56.63	113.3
23	KL66	L3	True	100.00	103.20	103.2
24	KL67	L4	True	250.00	274.24	109.7
25	KL68	L5	True	500.00	529.66	105.9
26	KL69	L6	True	1000.00	942.03	94.2
27	KL70	L7	True	2500.00	2523.83	101.0
28	KL71	L8	True	5000.00	4970.27	99.4
29	KL72	L9	False	10000.00	9543.79	95.4





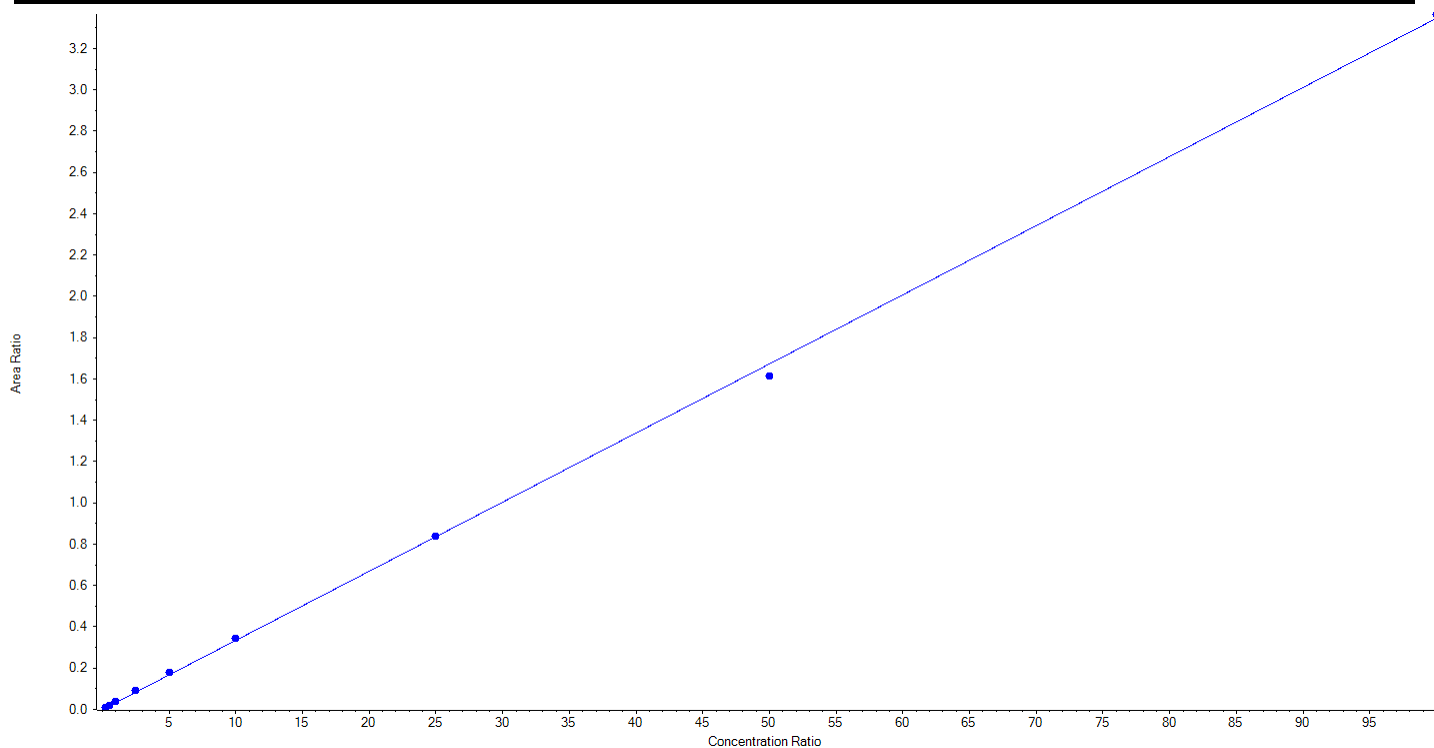
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	PFTeDA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	713.0 / 169.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.03346 x$ ($r = 0.99966$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	30.34	121.4
22	KL65	L2	True	50.00	51.93	103.9
23	KL66	L3	True	100.00	111.21	111.2
24	KL67	L4	True	250.00	278.84	111.5
25	KL68	L5	True	500.00	537.87	107.6
26	KL69	L6	True	1000.00	1031.65	103.2
27	KL70	L7	True	2500.00	2509.14	100.4
28	KL71	L8	True	5000.00	4819.41	96.4
29	KL72	L9	True	10000.00	10054.60	100.6





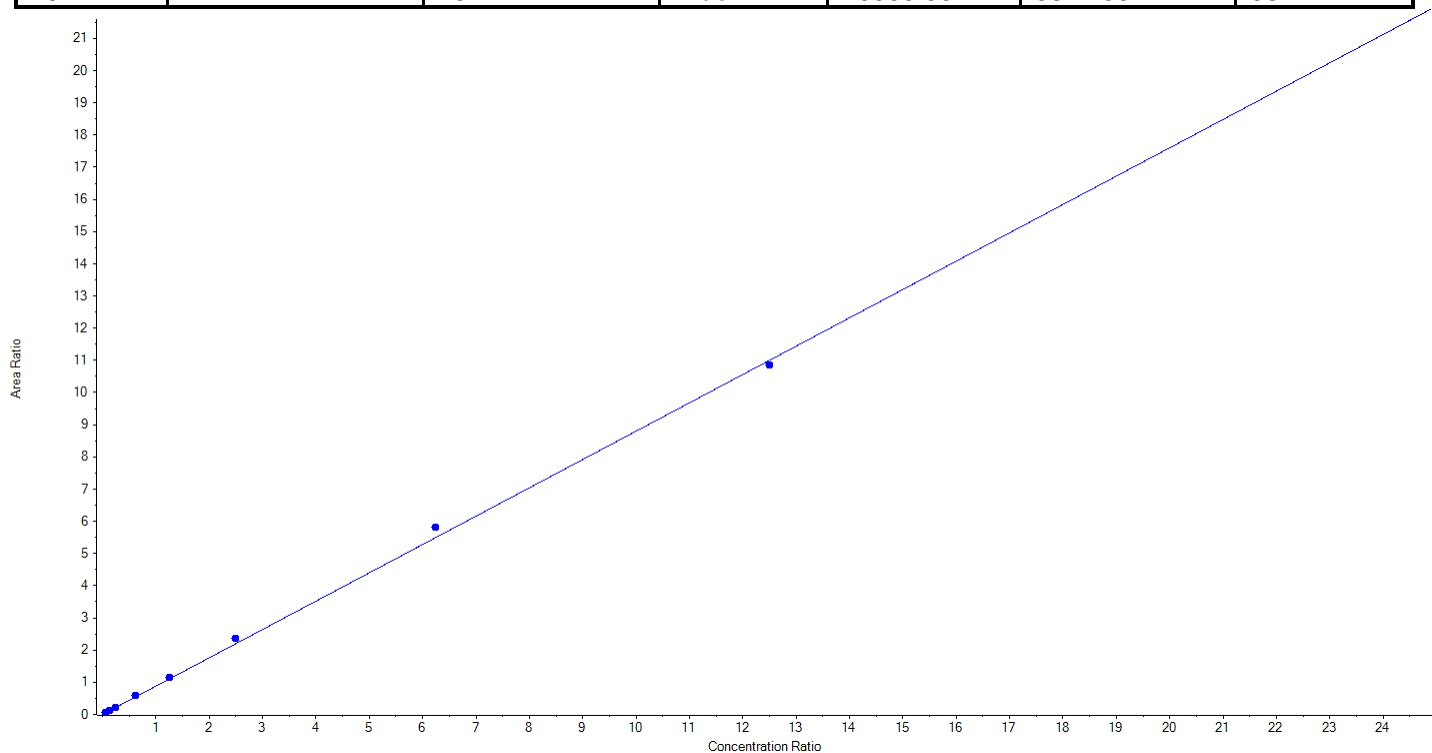
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	NMeFOSAA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	570.0 / 419.0	Result Table	19-0485
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.88003 x$ ($r = 0.99948$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	26.64	106.6
22	KL65	L2	True	50.00	55.29	110.6
23	KL66	L3	True	100.00	94.97	95.0
24	KL67	L4	True	250.00	269.06	107.6
25	KL68	L5	True	500.00	516.26	103.3
26	KL69	L6	True	1000.00	1074.27	107.4
27	KL70	L7	True	2500.00	2638.80	105.6
28	KL71	L8	True	5000.00	4938.41	98.8
29	KL72	L9	True	10000.00	9811.30	98.1





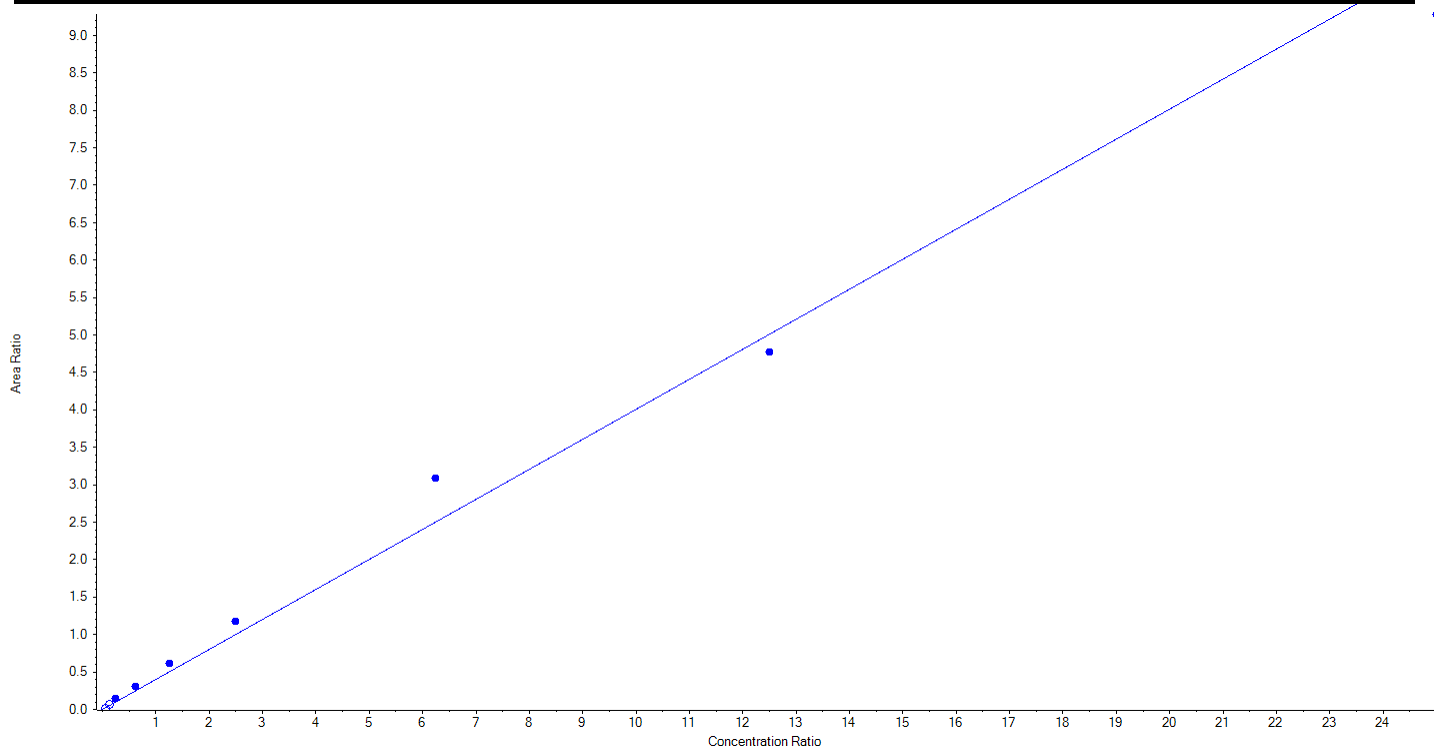
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	NMeFOSAA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	570.0 / 512.0	Result Table	19-0485
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.40082 x$ ($r = 0.99371$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	15.76	63.1
22	KL65	L2	False	50.00	71.97	143.9
23	KL66	L3	True	100.00	143.29	143.3
24	KL67	L4	True	250.00	310.18	124.1
25	KL68	L5	True	500.00	613.75	122.8
26	KL69	L6	True	1000.00	1174.58	117.5
27	KL70	L7	True	2500.00	3083.84	123.4
28	KL71	L8	True	5000.00	4763.82	95.3
29	KL72	L9	True	10000.00	9260.54	92.6





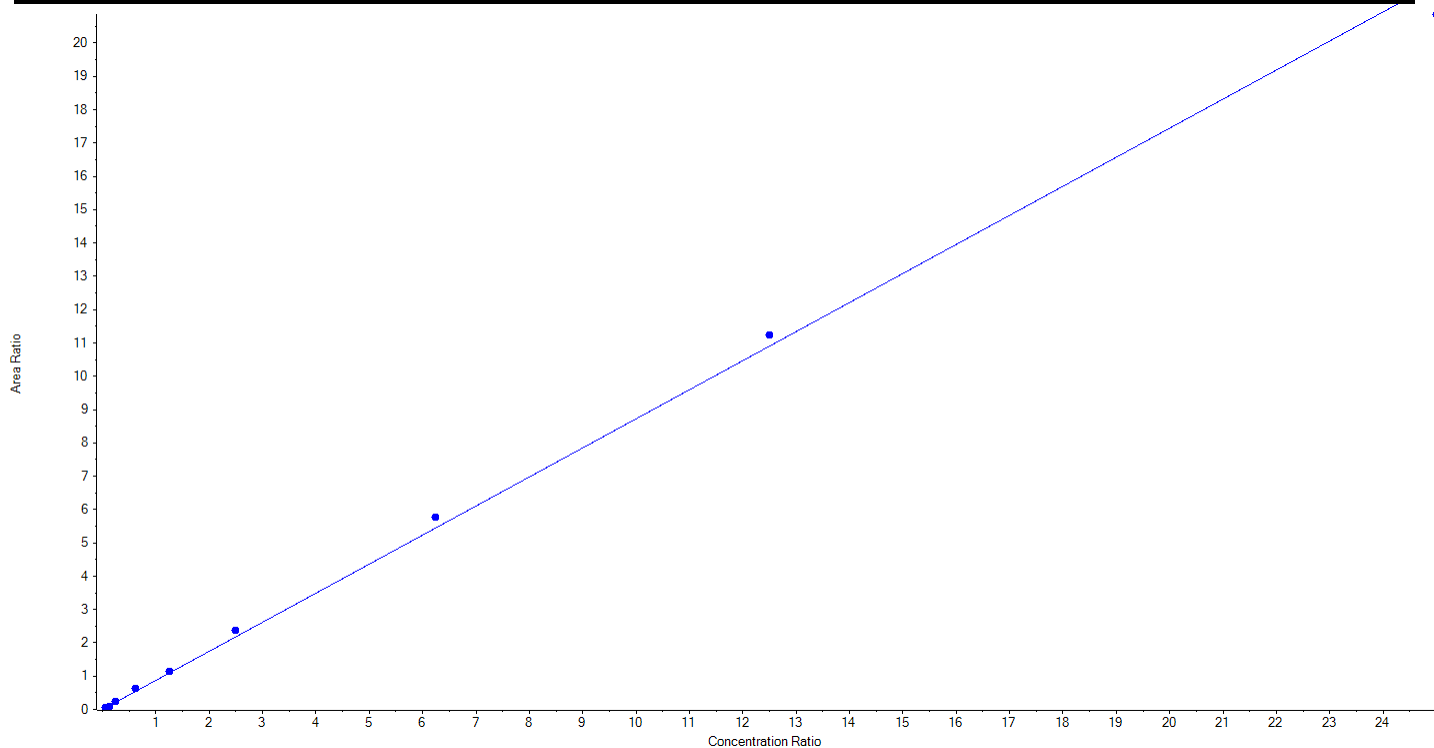
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	NEtFOSAA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	584.0 / 419.0	Result Table	19-0485
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.87230 x$ ($r = 0.99881$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	29.82	119.3
22	KL65	L2	True	50.00	44.69	89.4
23	KL66	L3	True	100.00	103.69	103.7
24	KL67	L4	True	250.00	283.22	113.3
25	KL68	L5	True	500.00	519.65	103.9
26	KL69	L6	True	1000.00	1088.83	108.9
27	KL70	L7	True	2500.00	2640.11	105.6
28	KL71	L8	True	5000.00	5151.44	103.0
29	KL72	L9	True	10000.00	9563.55	95.6





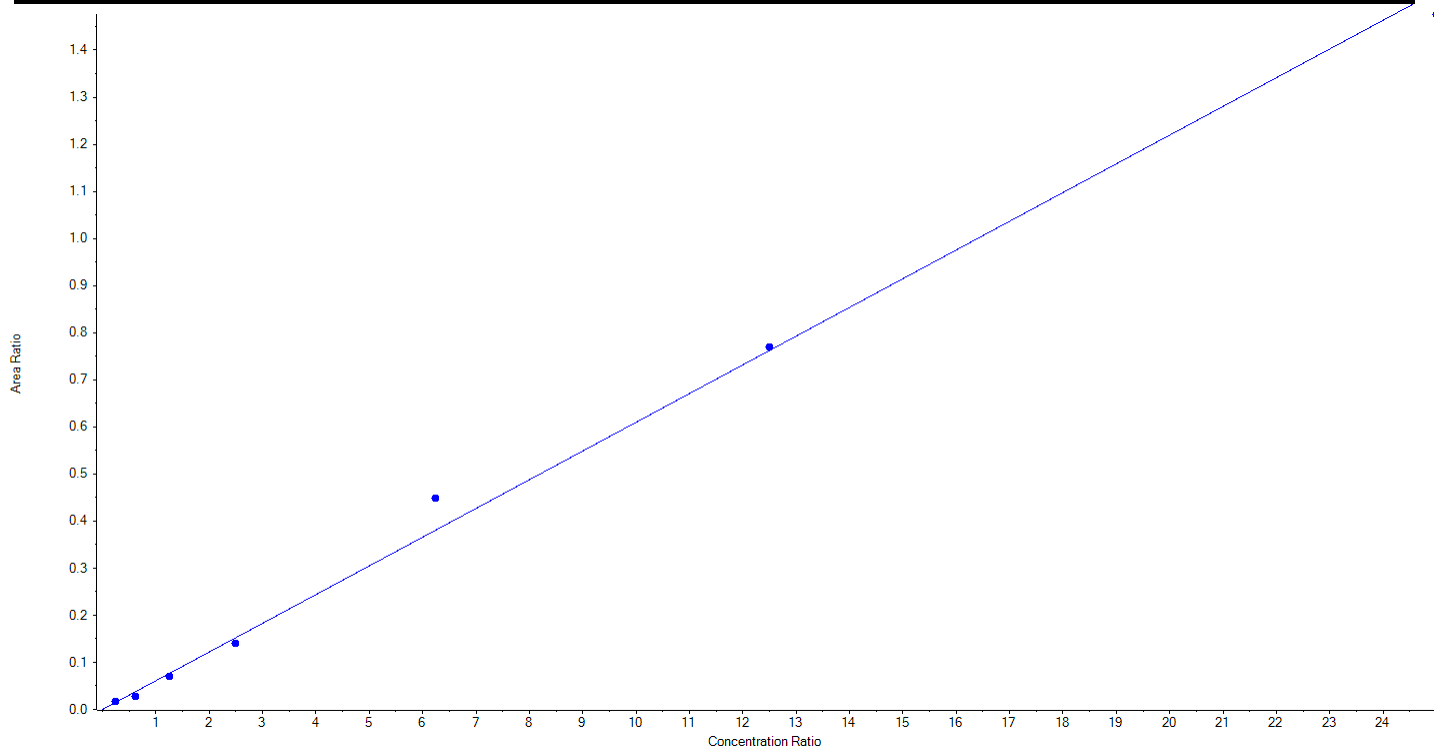
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	NEtFOSAA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	584.0 / 483.0	Result Table	19-0485
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.06097 x$ ($r = 0.99666$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	N/A	N/A
22	KL65	L2	False	50.00	N/A	N/A
23	KL66	L3	True	100.00	106.10	106.1
24	KL67	L4	True	250.00	181.16	72.5
25	KL68	L5	True	500.00	466.36	93.3
26	KL69	L6	True	1000.00	923.29	92.3
27	KL70	L7	True	2500.00	2938.20	117.5
28	KL71	L8	True	5000.00	5055.64	101.1
29	KL72	L9	True	10000.00	9679.24	96.8





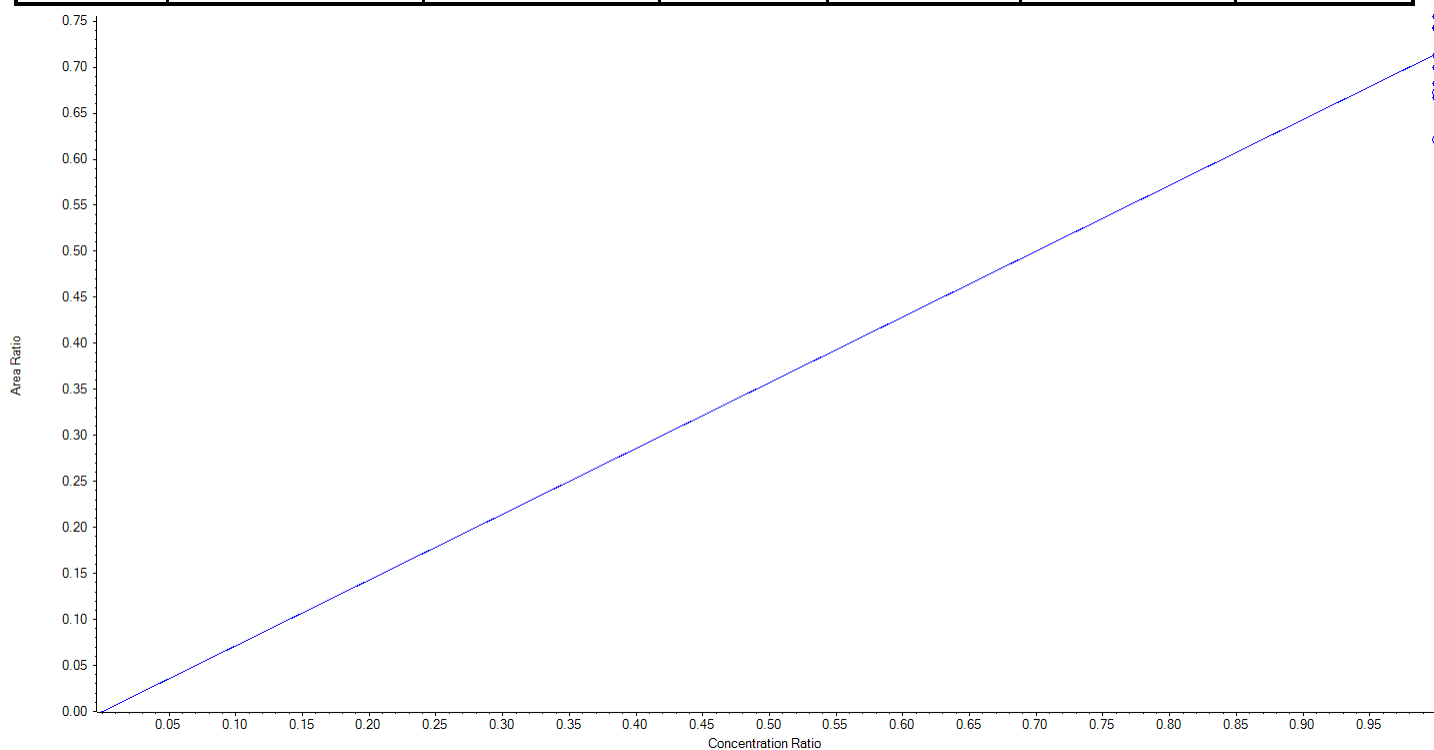
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	13C2-PFHxA	Data File	AC_06072019_5-371.wiff
MRM Transition	315.0 / 270.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.71460 x$ (std. dev. = 0.03338) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	100.00	103.96	104.0
22	KL65	L2	True	100.00	105.66	105.7
23	KL66	L3	True	100.00	97.97	98.0
24	KL67	L4	True	100.00	103.82	103.8
25	KL68	L5	True	100.00	99.73	99.7
26	KL69	L6	True	100.00	93.37	93.4
27	KL70	L7	True	100.00	95.49	95.5
28	KL71	L8	False	100.00	86.86	86.9
29	KL72	L9	False	100.00	94.10	94.1





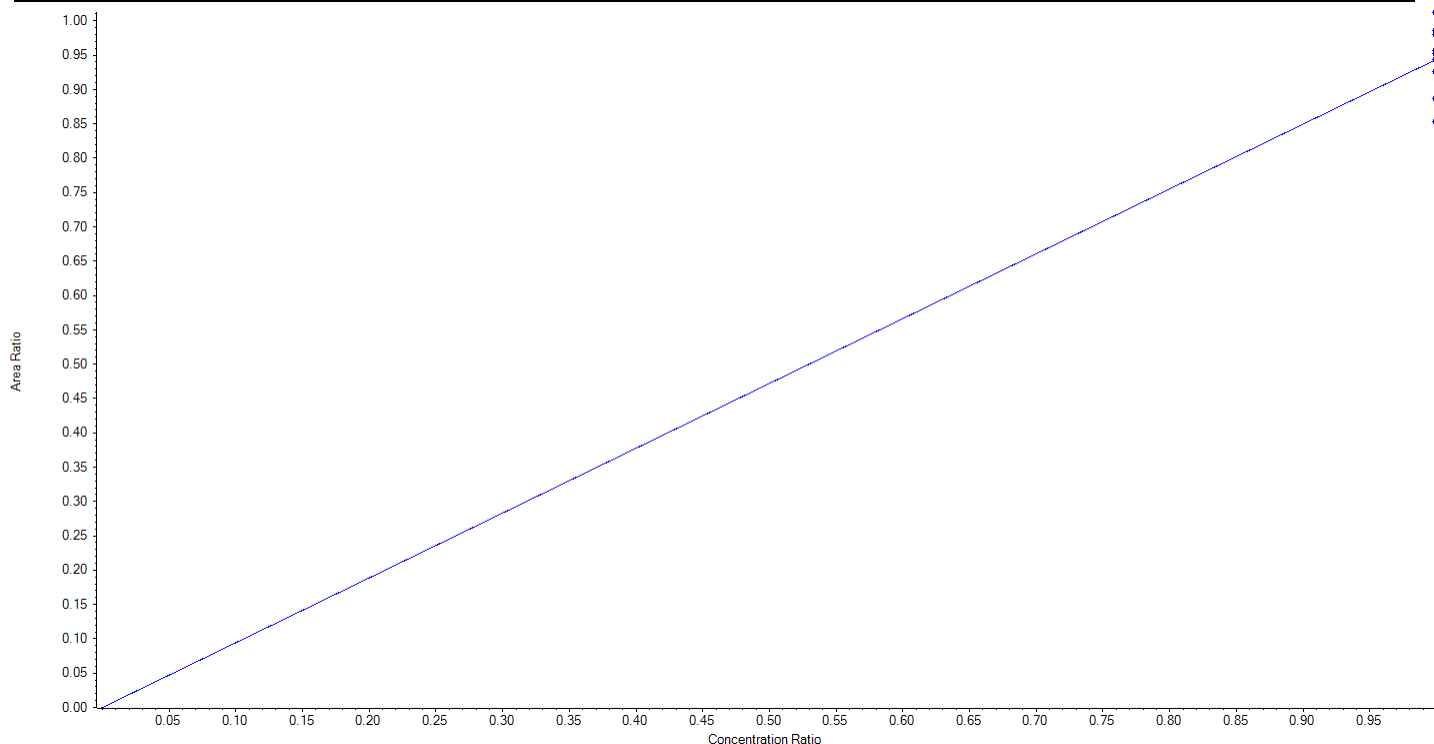
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	13C2-PFDA	Data File	AC_06072019_5-371.wiff
MRM Transition	515.0 / 470.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.94398 x$ (std. dev. = 0.04995) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	100.00	103.88	103.9
22	KL65	L2	True	100.00	104.42	104.4
23	KL66	L3	True	100.00	107.22	107.2
24	KL67	L4	True	100.00	101.29	101.3
25	KL68	L5	True	100.00	100.88	100.9
26	KL69	L6	True	100.00	93.88	93.9
27	KL70	L7	True	100.00	90.30	90.3
28	KL71	L8	True	100.00	98.17	98.2
29	KL72	L9	True	100.00	99.96	100.0





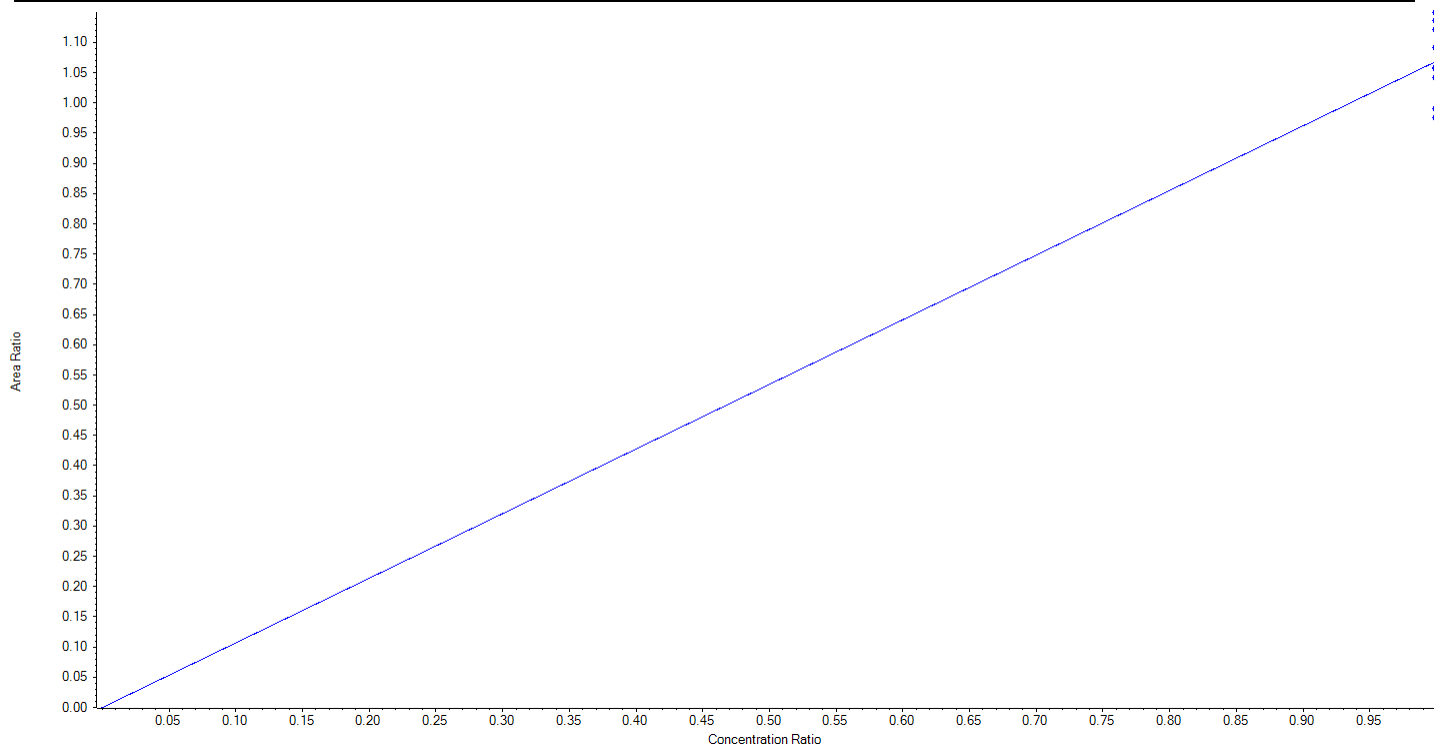
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	d5-EtFOSAA	Data File	AC_06072019_5-371.wiff
MRM Transition	589.0 / 419.0	Result Table	19-0485
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.06881 x$ (std. dev. = 0.06176) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	400.00	408.51	102.1
22	KL65	L2	True	400.00	419.88	105.0
23	KL66	L3	True	400.00	389.79	97.5
24	KL67	L4	True	400.00	430.13	107.5
25	KL68	L5	True	400.00	396.14	99.0
26	KL69	L6	True	400.00	425.26	106.3
27	KL70	L7	True	400.00	395.16	98.8
28	KL71	L8	True	400.00	364.81	91.2
29	KL72	L9	True	400.00	370.33	92.6





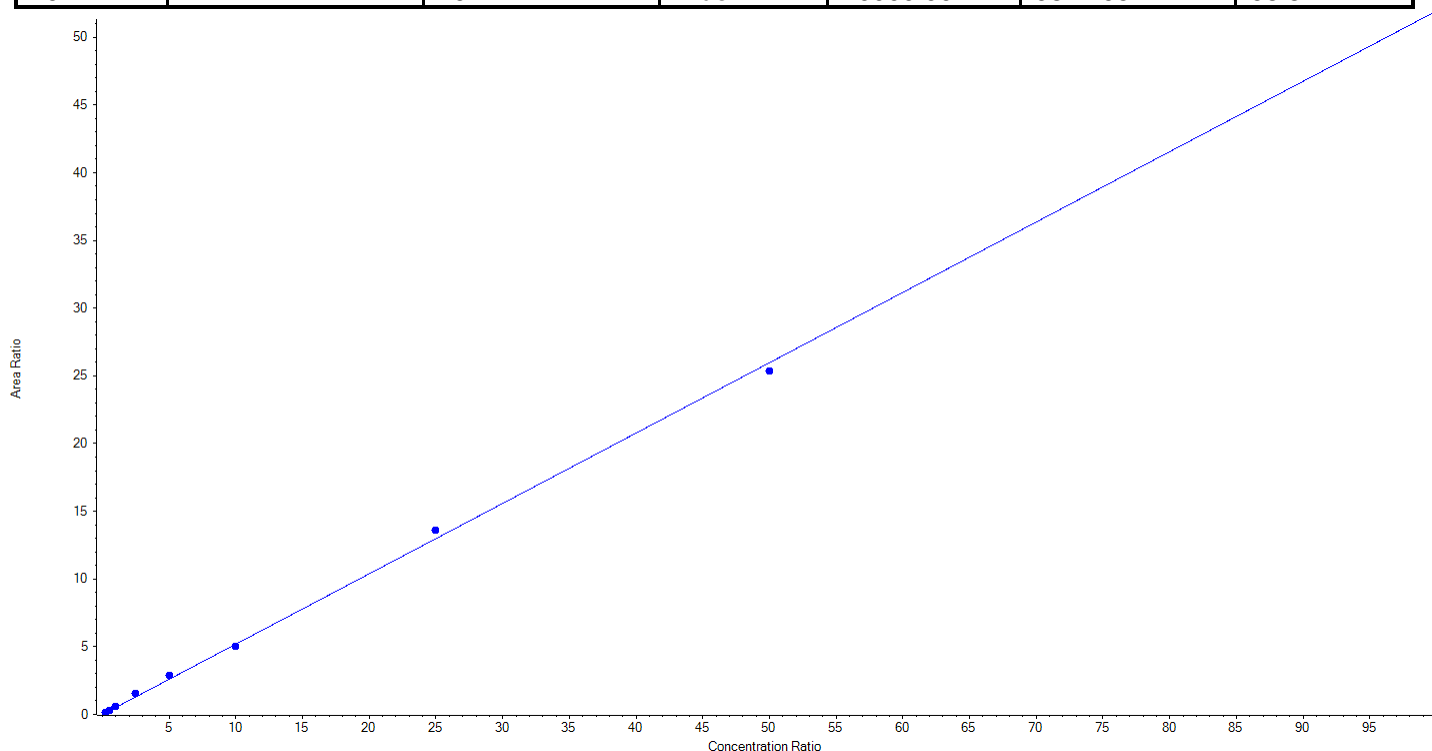
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	HFPO-DA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	285.0 / 169.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.51941 x$ ($r = 0.99931$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	25.00	26.27	105.1
22	KL65	L2	True	50.00	63.30	126.6
23	KL66	L3	True	100.00	113.75	113.8
24	KL67	L4	True	250.00	300.60	120.2
25	KL68	L5	True	500.00	556.77	111.4
26	KL69	L6	True	1000.00	974.23	97.4
27	KL70	L7	True	2500.00	2624.76	105.0
28	KL71	L8	True	5000.00	4887.36	97.8
29	KL72	L9	True	10000.00	9877.95	98.8





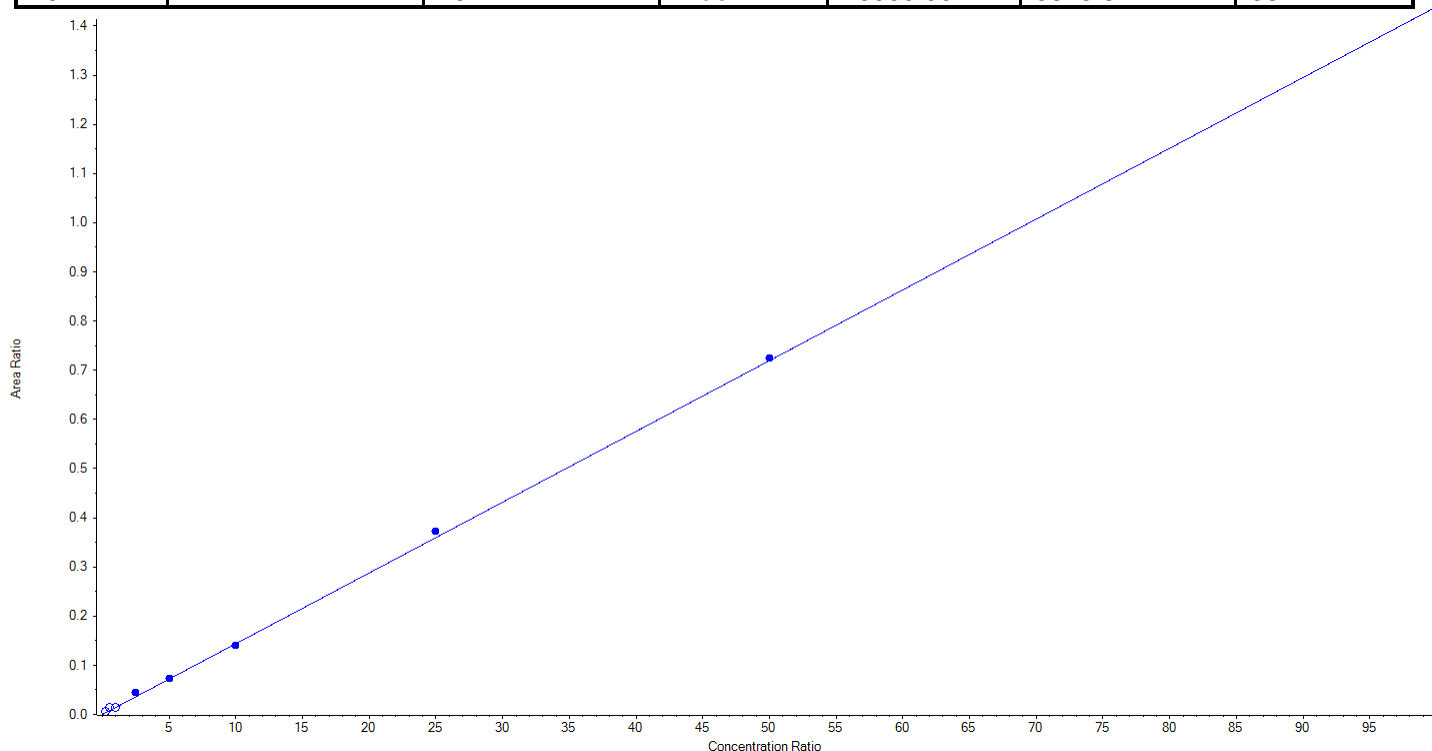
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	HFPO-DA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	285.0 / 118.8	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01439 x$ ($r = 0.99963$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	25.00	37.29	149.2
22	KL65	L2	False	50.00	105.65	211.3
23	KL66	L3	False	100.00	102.37	102.4
24	KL67	L4	True	250.00	312.28	124.9
25	KL68	L5	True	500.00	515.74	103.2
26	KL69	L6	True	1000.00	972.04	97.2
27	KL70	L7	True	2500.00	2593.26	103.7
28	KL71	L8	True	5000.00	5037.04	100.7
29	KL72	L9	True	10000.00	9819.64	98.2





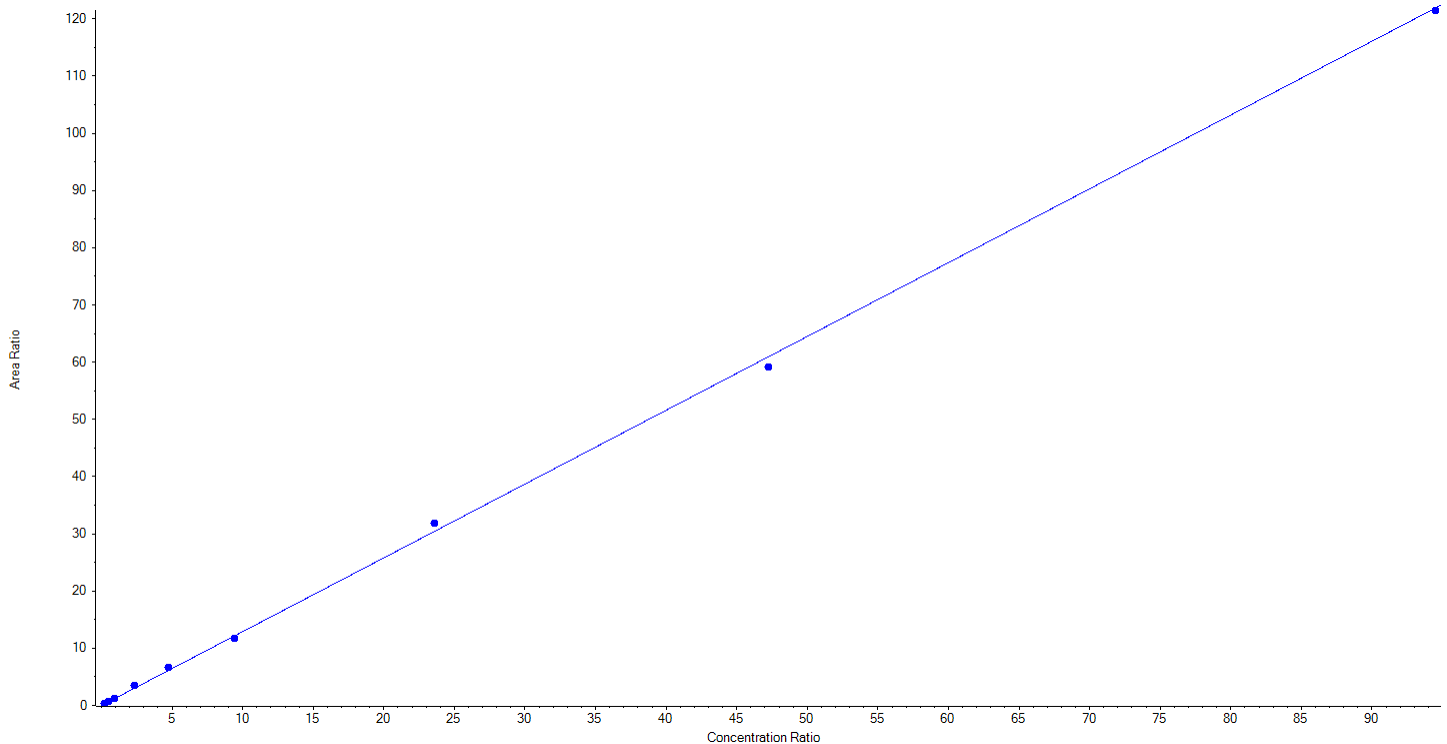
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	ADONA_1	Data File	AC_06072019_5-371.wiff
MRM Transition	377.0 / 251.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.28977 x$ ($r = 0.99950$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	23.65	27.58	116.6
22	KL65	L2	True	47.30	56.90	120.3
23	KL66	L3	True	94.60	97.59	103.2
24	KL67	L4	True	236.50	276.02	116.7
25	KL68	L5	True	473.00	512.61	108.4
26	KL69	L6	True	945.00	915.23	96.9
27	KL70	L7	True	2362.50	2467.69	104.5
28	KL71	L8	True	4725.00	4588.14	97.1
29	KL72	L9	True	9450.00	9415.79	99.6





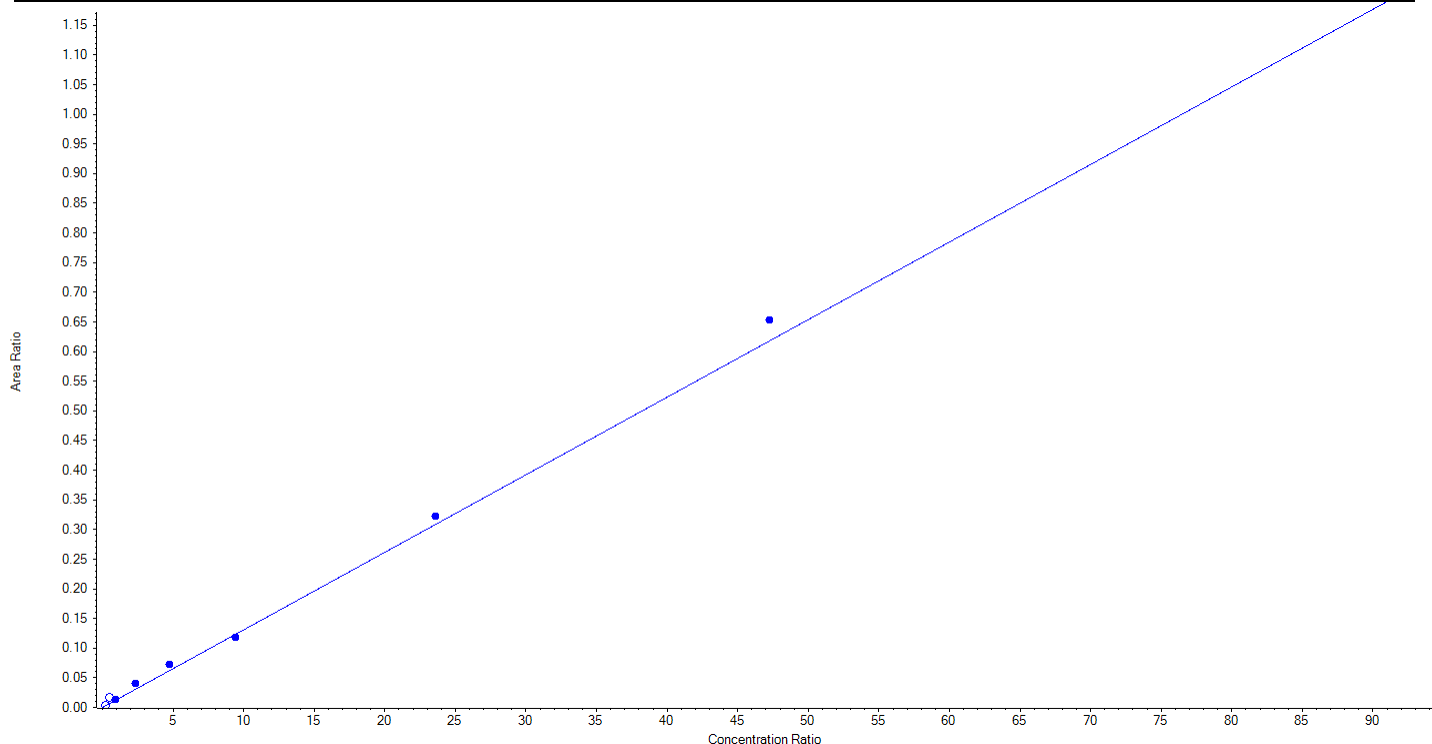
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	ADONA_2	Data File	AC_06072019_5-371.wiff
MRM Transition	377.0 / 85.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01308 x$ ($r = 0.99784$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	23.65	24.06	101.7
22	KL65	L2	False	47.30	127.93	270.5
23	KL66	L3	True	94.60	97.22	102.8
24	KL67	L4	True	236.50	305.03	129.0
25	KL68	L5	True	473.00	556.69	117.7
26	KL69	L6	True	945.00	907.91	96.1
27	KL70	L7	True	2362.50	2460.93	104.2
28	KL71	L8	True	4725.00	5000.42	105.8
29	KL72	L9	True	9450.00	8958.39	94.8





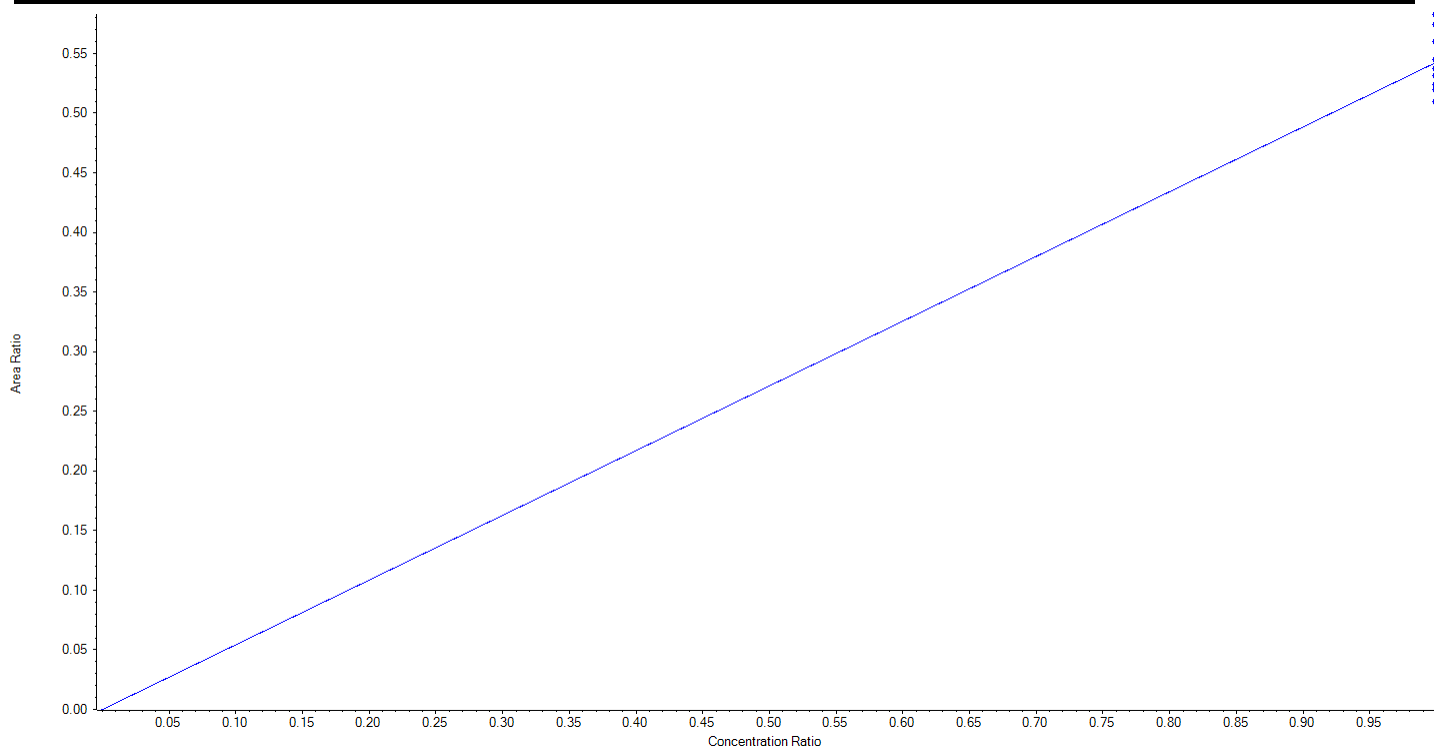
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	13C3-HFPO-DA	Data File	AC_06072019_5-371.wiff
MRM Transition	287.0 / 169.0	Result Table	19-0485
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.54269 x$ (std. dev. = 0.02499) (weighting: None)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	100.00	96.54	96.5
22	KL65	L2	True	100.00	103.17	103.2
23	KL66	L3	True	100.00	105.84	105.8
24	KL67	L4	True	100.00	98.99	99.0
25	KL68	L5	True	100.00	93.97	94.0
26	KL69	L6	True	100.00	95.80	95.8
27	KL70	L7	True	100.00	97.99	98.0
28	KL71	L8	True	100.00	100.34	100.3
29	KL72	L9	True	100.00	107.37	107.4





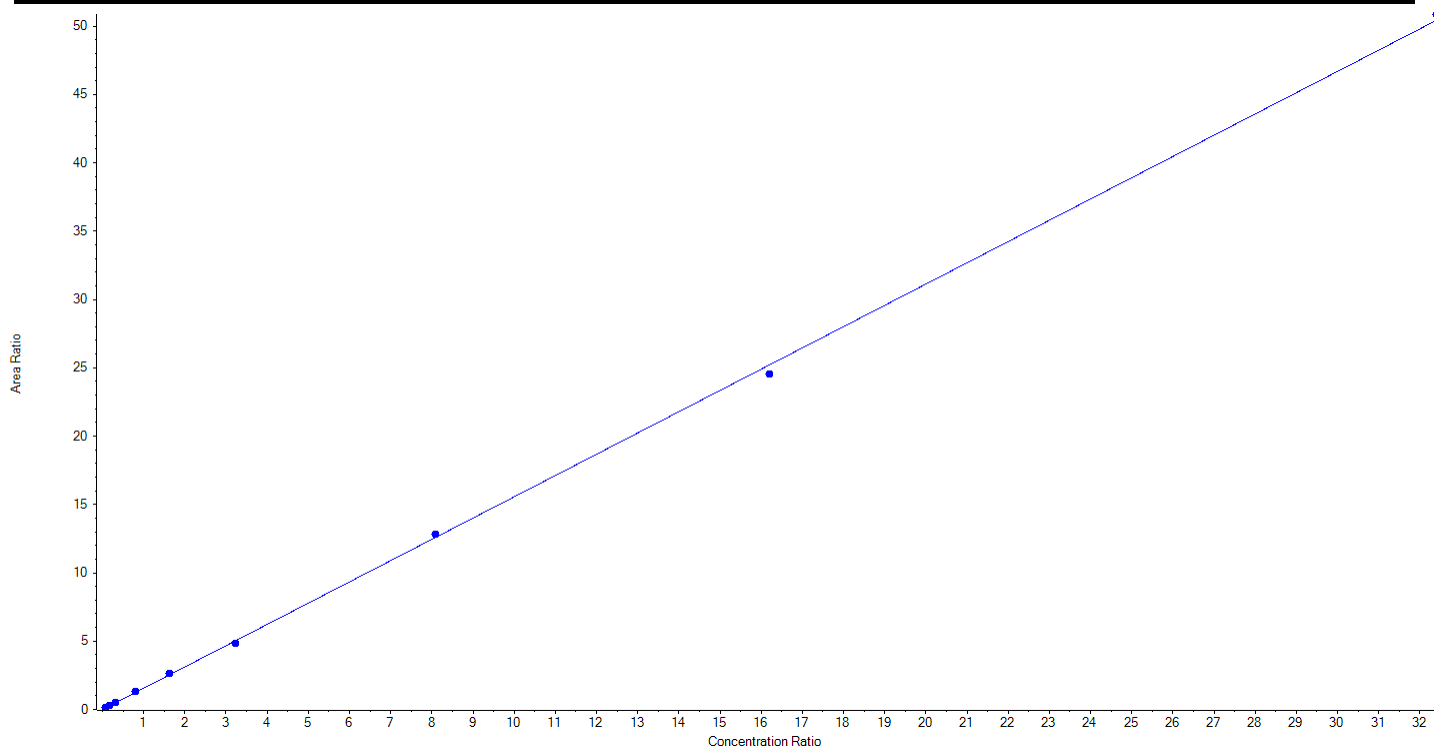
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	9CI-PF3ONS_1	Data File	AC_06072019_5-371.wiff
MRM Transition	531.0 / 351.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.55621 x$ ($r = 0.99979$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	23.25	24.77	106.5
22	KL65	L2	True	46.50	50.00	107.5
23	KL66	L3	True	93.00	96.66	103.9
24	KL67	L4	True	232.50	242.74	104.4
25	KL68	L5	True	465.00	480.39	103.3
26	KL69	L6	True	930.00	891.58	95.9
27	KL70	L7	True	2325.00	2370.93	102.0
28	KL71	L8	True	4650.00	4530.37	97.4
29	KL72	L9	True	9300.00	9377.81	100.8





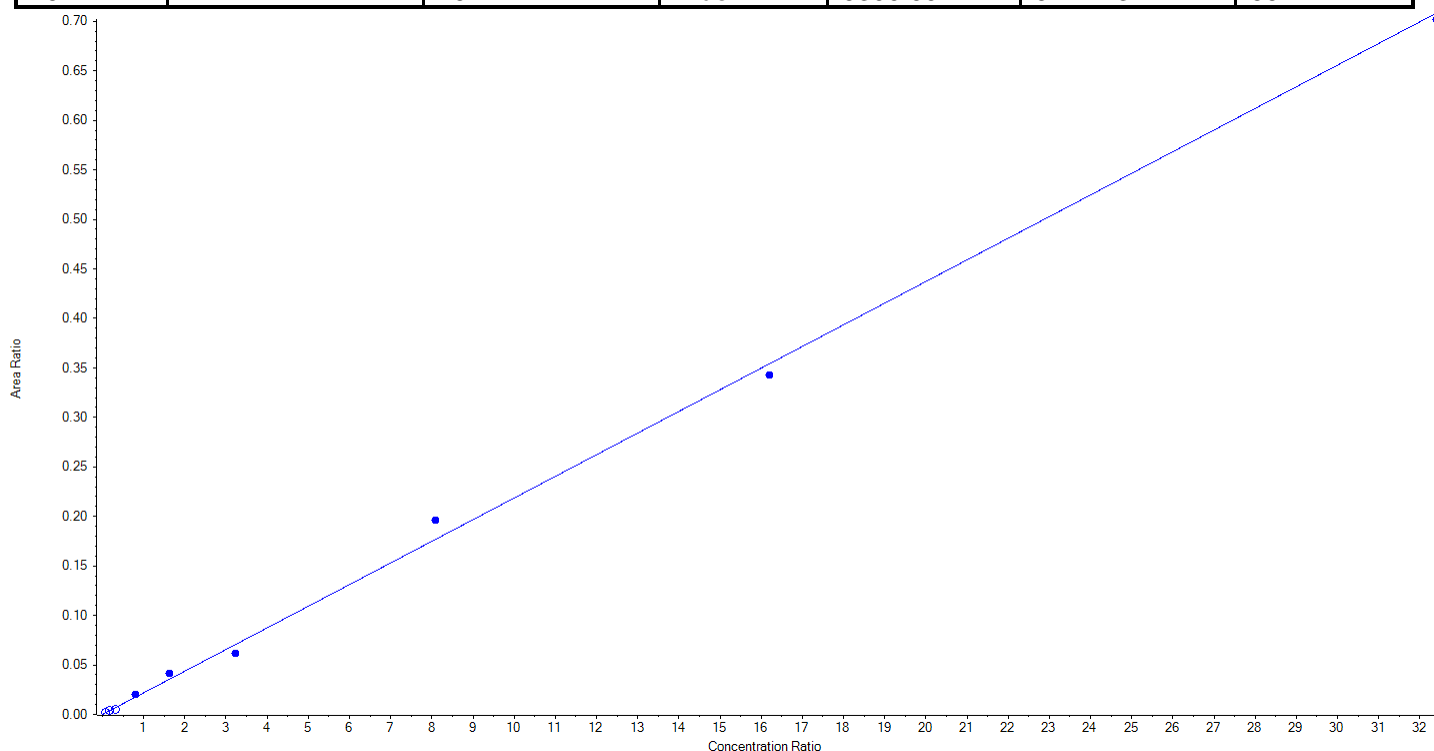
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	9CI-PF3ONS_2	Data File	AC_06072019_5-371.wiff
MRM Transition	531.0 / 83.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.02186 x$ ($r = 0.99779$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	23.25	21.66	93.2
22	KL65	L2	False	46.50	54.54	117.3
23	KL66	L3	False	93.00	61.82	66.5
24	KL67	L4	True	232.50	260.43	112.0
25	KL68	L5	True	465.00	543.71	116.9
26	KL69	L6	True	930.00	803.40	86.4
27	KL70	L7	True	2325.00	2576.81	110.8
28	KL71	L8	True	4650.00	4504.02	96.9
29	KL72	L9	True	9300.00	9214.13	99.1





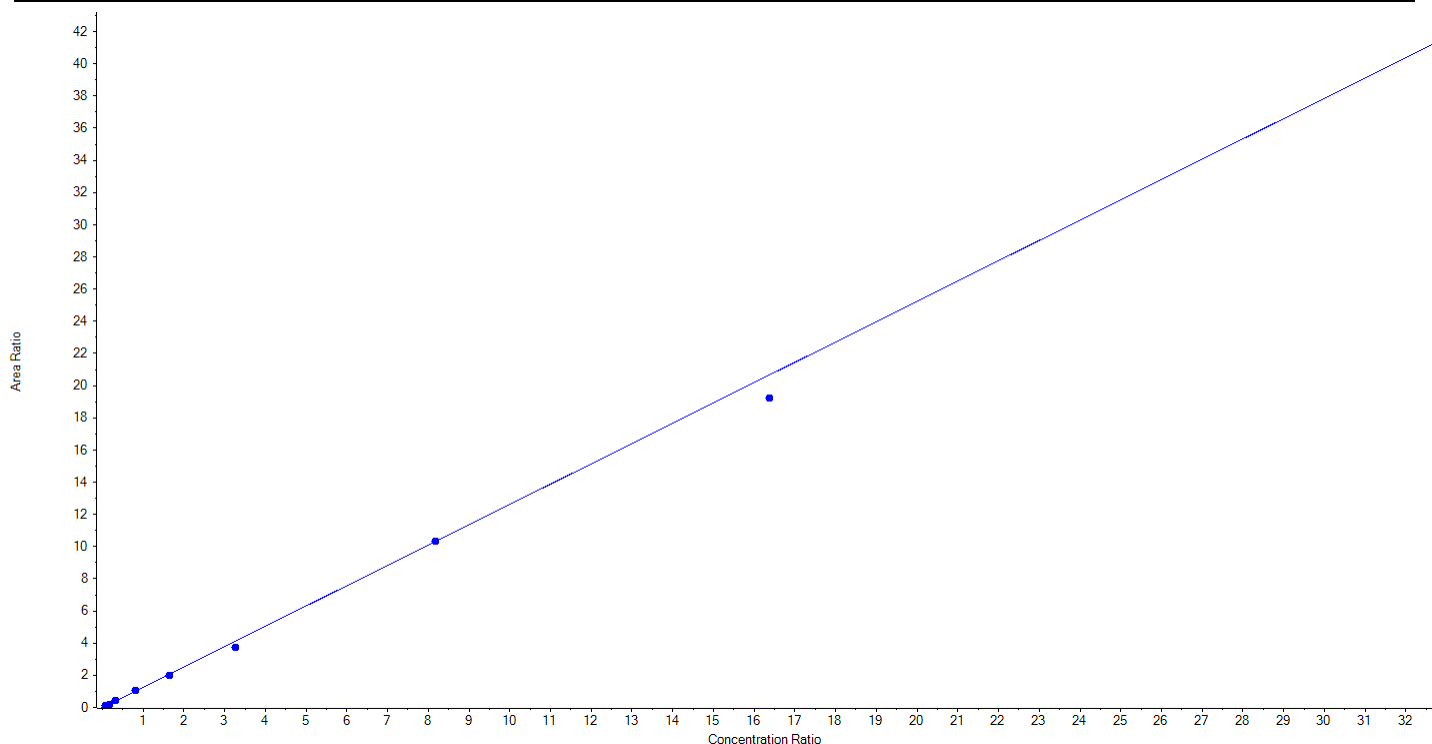
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	11CI-PF3OUdS_1	Data File	AC_06072019_5-371.wiff
MRM Transition	631.0 / 451.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 1.26185 x$ ($r = 0.99850$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	True	23.50	25.21	107.3
22	KL65	L2	True	47.00	45.63	97.1
23	KL66	L3	True	94.00	93.55	99.5
24	KL67	L4	True	235.00	247.17	105.2
25	KL68	L5	True	470.00	453.86	96.6
26	KL69	L6	True	940.00	844.38	89.8
27	KL70	L7	True	2350.00	2350.08	100.0
28	KL71	L8	True	4700.00	4377.20	93.1
29	KL72	L9	True	9400.00	9822.41	104.5





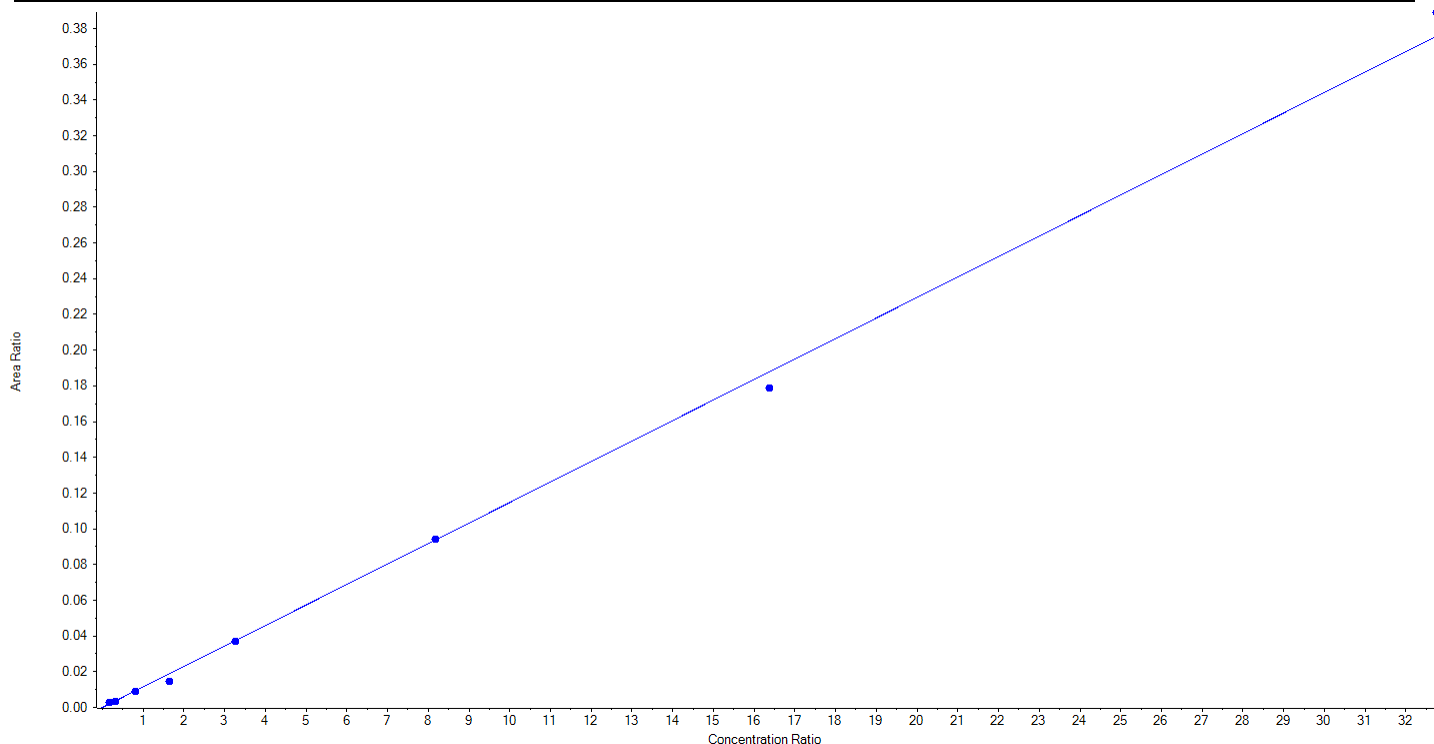
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/06/2019 2:36:21 PM

Analyte Name	11CI-PF3OUdS_2	Data File	AC_06072019_5-371.wiff
MRM Transition	631.0 / 83.0	Result Table	19-0485
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Acquisition Method	5-0371.dam

Regression Equation: $y = 0.01147 x$ ($r = 0.99834$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
21	KL64	L1	False	23.50	N/A	N/A
22	KL65	L2	True	47.00	69.76	148.4
23	KL66	L3	True	94.00	85.36	90.8
24	KL67	L4	True	235.00	225.69	96.0
25	KL68	L5	True	470.00	371.28	79.0
26	KL69	L6	True	940.00	925.89	98.5
27	KL70	L7	True	2350.00	2353.72	100.2
28	KL71	L8	True	4700.00	4474.14	95.2
29	KL72	L9	True	9400.00	9730.15	103.5





	Drinking Water Calibration Curve Concentrations (ng/L)									ICC (ng/L)
	KL64	KL65	KL66	KL67	KL68	KL69	KL70	KL71	KL72	KL74
PFHxA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFHpA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFOA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFNA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFUnA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFDoA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFTTrDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFTeDA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
NMeFOSAA (branched)	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
NEtFOSAA (branched)	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
PFBS	22.15	44.30	88.60	221.50	443.00	885.00	2,212.50	4,425.00	8,850.00	885.00
PFHxS (branched)	22.80	45.60	91.20	228.00	456.00	912.00	2,280.00	4,560.00	9,120.00	945.00
PFOS (branched)	23.15	46.30	92.60	231.50	463.00	925.60	2,314.00	4,628.00	9,256.00	955.00
HFPO-DA	25.00	50.00	100.00	250.00	500.00	1,000.00	2,500.00	5,000.00	10,000.00	1,000.00
Adona	23.65	47.30	94.60	236.50	473.00	945.00	2,362.50	4,725.00	9,450.00	945.00
9CI-PF3ONS	23.25	46.50	93.00	232.50	465.00	930.00	2,325.00	4,650.00	9,300.00	930.00
11CI-PF3OUdS	23.50	47.00	94.00	235.00	470.00	940.00	2,350.00	4,700.00	9,400.00	940.00
	Surrogates									
13C2-PFHxA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
13C2-PFDA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
d5-EtFOSAA	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00
13C3-HFPO-DA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Internal Standards									
13C2-PFOA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
13C4-PFOS	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00	287.00
d3-MeFOSAA	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00

ICC only contains linear isomers.

Sample Name	KL64	Injection Vial	21
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.49	8292.80	22.33	644.6	False	13C4-PFOS	177357.13	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.49	2666.39	24.13	147.9	False	13C4-PFOS	177357.13	287.00	PFBS	0.322	0.308	✓
PFHxA_1	313.0 / 269.0	1.83	9679.31	38.60	24.8	True	13C2-PFOA	40412.86	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	969.17	49.60	15.9	True	13C2-PFOA	40412.86	100.00	PFHxA	0.100	0.079	✓
PFHpA_1	363.0 / 319.0	2.24	6406.61	25.38	10.8	True	13C2-PFOA	40412.86	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	193.72	44.24	8.8	True	13C2-PFOA	40412.86	100.00	PFHpA	0.030	0.018	✓
PFHxS_1	399.0 / 80.0	2.26	11987.75	27.62	518.7	False	13C4-PFOS	177357.13	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	3800.12	30.30	64.6	False	13C4-PFOS	177357.13	287.00	PFHxS	0.317	0.299	✓
PFOA_1	413.0 / 369.0	2.65	11498.18	32.17	67.4	True	13C2-PFOA	40412.86	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	659.25	34.77	41.6	True	13C2-PFOA	40412.86	100.00	PFOA	0.057	0.051	✓
PFNA_1	463.0 / 419.0	3.04	10766.13	33.55	87.1	False	13C2-PFOA	40412.86	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.04	3429.89	31.91	64.7	False	13C2-PFOA	40412.86	100.00	PFNA	0.319	0.329	✓
PFOS_1	499.0 / 80.0	3.04	27056.84	39.09	184.2	True	13C4-PFOS	177357.13	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.03	5923.49	45.81	143.7	True	13C4-PFOS	177357.13	287.00	PFOS	0.219	0.189	✓
PFDA_1	513.0 / 469.0	3.39	9330.81	28.30	124.6	False	13C2-PFOA	40412.86	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.40	311.68	25.56	83.6	False	13C2-PFOA	40412.86	100.00	PFDA	0.033	0.037	✓
PFUnA_1	563.0 / 519.0	3.71	10364.59	33.42	134.1	False	13C2-PFOA	40412.86	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.70	317.91	23.02	49.0	True	13C2-PFOA	40412.86	100.00	PFUnA	0.031	0.046	✓
PFDoA_1	613.0 / 569.0	3.99	8517.00	29.69	99.9	False	13C2-PFOA	40412.86	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.99	1822.31	37.40	89.2	False	13C2-PFOA	40412.86	100.00	PFDoA	0.214	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.23	7080.40	27.97	114.7	False	13C2-PFOA	40412.86	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.23	259.48	14.51	31.5	False	13C2-PFOA	40412.86	100.00	PFTTrDA	0.037	0.069	✓
PFTeDA_1	713.0 / 669.0	4.44	6893.63	25.13	163.4	True	13C2-PFOA	40412.86	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.44	410.29	30.34	59.9	False	13C2-PFOA	40412.86	100.00	PFTeDA	0.060	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.54	1463.62	26.64	530593.5	False	d3-MeFOSAA	24971.05	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.54	394.39	15.76	201528.9	False	d3-MeFOSAA	24971.05	400.00	NMeFOSAA	0.269	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.70	1623.97	29.82	3978.6	False	d3-MeFOSAA	24971.05	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	24971.05	400.00	NEtFOSAA	N/A	0.065	
13C2-PFHxA	315.0 / 270.0	1.82	30023.31	103.96	975.1	False	13C2-PFOA	40412.86	100.00				
13C2-PFDA	515.0 / 470.0	3.38	39627.38	103.88	296.9	False	13C2-PFOA	40412.86	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.69	27257.15	408.51	742.6	False	d3-MeFOSAA	24971.05	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.95	5514.30	26.27	75.2	True	13C2-PFOA	40412.86	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.97	216.85	37.29	29.1	False	13C2-PFOA	40412.86	100.00	HFPO-DA	0.039	0.028	✓
ADONA_1	377.0 / 251.0	2.28	14374.11	27.58	309.6	False	13C2-PFOA	40412.86	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.29	127.15	24.06	19.2	False	13C2-PFOA	40412.86	100.00	ADONA	0.009	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.94	21173.08	96.54	245.7	False	13C2-PFOA	40412.86	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.23	23821.99	24.77	351.8	False	13C4-PFOS	177357.13	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.50	292.61	21.66	13.9	False	13C4-PFOS	177357.13	287.00	9CI-PF3ONS	0.012	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.84	19655.02	25.21	454.5	False	13C4-PFOS	177357.13	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	177357.13	287.00	11CI-PF3OUdS	N/A	0.009	

Sample Name	KL65	Injection Vial	22
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:24:55 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.49	16612.24	44.17	925.3	False	13C4-PFOS	179604.01	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.49	5546.61	49.56	242.2	False	13C4-PFOS	179604.01	287.00	PFBS	0.334	0.308	✓
PFHxA_1	313.0 / 269.0	1.82	19909.08	83.25	46.4	True	13C2-PFOA	38536.13	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	2163.02	116.09	31.9	False	13C2-PFOA	38536.13	100.00	PFHxA	0.109	0.079	✓
PFHpA_1	363.0 / 319.0	2.23	17681.99	73.46	28.5	True	13C2-PFOA	38536.13	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	590.26	141.36	30.7	True	13C2-PFOA	38536.13	100.00	PFHpA	0.033	0.018	✓
PFHxS_1	399.0 / 80.0	2.25	22659.83	51.55	354.5	False	13C4-PFOS	179604.01	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.25	6216.98	48.95	80.5	False	13C4-PFOS	179604.01	287.00	PFHxS	0.274	0.299	✓
PFOA_1	413.0 / 369.0	2.64	24256.57	71.16	105.1	True	13C2-PFOA	38536.13	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.64	1472.08	81.41	57.4	False	13C2-PFOA	38536.13	100.00	PFOA	0.061	0.051	✓
PFNA_1	463.0 / 419.0	3.02	21434.99	70.04	171.5	False	13C2-PFOA	38536.13	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	6297.02	61.44	119.6	False	13C2-PFOA	38536.13	100.00	PFNA	0.294	0.329	✓
PFOS_1	499.0 / 80.0	3.02	42032.31	59.96	255.1	True	13C4-PFOS	179604.01	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.02	9087.44	69.41	261.3	True	13C4-PFOS	179604.01	287.00	PFOS	0.216	0.189	✓
PFDA_1	513.0 / 469.0	3.38	17307.28	55.06	165.4	False	13C2-PFOA	38536.13	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.38	965.64	83.05	376.0	False	13C2-PFOA	38536.13	100.00	PFDA	0.056	0.037	✓
PFUnA_1	563.0 / 519.0	3.70	17720.55	59.92	199.6	False	13C2-PFOA	38536.13	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	961.62	73.01	115.6	False	13C2-PFOA	38536.13	100.00	PFUnA	0.054	0.046	✓
PFDoA_1	613.0 / 569.0	3.98	16306.22	59.62	171.1	False	13C2-PFOA	38536.13	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.98	2508.50	54.00	186.3	False	13C2-PFOA	38536.13	100.00	PFDoA	0.154	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.22	14774.34	61.21	155.9	False	13C2-PFOA	38536.13	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.23	1045.11	61.28	111.3	False	13C2-PFOA	38536.13	100.00	PFTTrDA	0.071	0.069	✓
PFTeDA_1	713.0 / 669.0	4.44	14812.47	56.63	341.6	True	13C2-PFOA	38536.13	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.43	669.68	51.93	116.0	False	13C2-PFOA	38536.13	100.00	PFTeDA	0.045	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.53	2979.51	55.29	1212.1	False	d3-MeFOSAA	24493.12	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	1766.33	71.97	24451.4	False	d3-MeFOSAA	24493.12	400.00	NMeFOSAA	0.593	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.69	2386.96	44.69	305.0	False	d3-MeFOSAA	24493.12	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	24493.12	400.00	NEtFOSAA	N/A	0.065	
13C2-PFHxA	315.0 / 270.0	1.81	29097.35	105.66	1166.2	False	13C2-PFOA	38536.13	100.00				
13C2-PFDA	515.0 / 470.0	3.37	37985.68	104.42	1121.7	False	13C2-PFOA	38536.13	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.69	27479.94	419.88	472.1	False	d3-MeFOSAA	24493.12	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.94	12670.90	63.30	129.4	False	13C2-PFOA	38536.13	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	585.83	105.65	43.7	False	13C2-PFOA	38536.13	100.00	HFPO-DA	0.046	0.028	✓
ADONA_1	377.0 / 251.0	2.27	28281.36	56.90	389.6	False	13C2-PFOA	38536.13	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.27	644.74	127.93	134.6	False	13C2-PFOA	38536.13	100.00	ADONA	0.023	0.010	
13C3-HFPO-DA	287.0 / 169.0	1.93	21575.77	103.17	314.2	False	13C2-PFOA	38536.13	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.22	48691.76	50.00	534.2	False	13C4-PFOS	179604.01	287.00	9CI-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.22	746.18	54.54	49.9	False	13C4-PFOS	179604.01	287.00	9CI-PF3ONS	0.015	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.83	36031.40	45.63	614.7	False	13C4-PFOS	179604.01	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.83	500.83	69.76	19.0	False	13C4-PFOS	179604.01	287.00	11CI-PF3OUdS	0.014	0.009	✓

Sample Name	KL66	Injection Vial	23
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:33:52 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	29499.92	81.76	1304.9	False	13C4-PFOS	172292.74	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	9669.99	90.08	313.7	False	13C4-PFOS	172292.74	287.00	PFBS	0.328	0.308	✓
PFHxA_1	313.0 / 269.0	1.81	30755.45	124.59	60.0	False	13C2-PFOA	39779.24	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	2568.55	133.55	35.7	True	13C2-PFOA	39779.24	100.00	PFHxA	0.084	0.079	✓
PFHpA_1	363.0 / 319.0	2.22	27665.52	111.34	34.3	True	13C2-PFOA	39779.24	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	736.42	170.86	23.1	True	13C2-PFOA	39779.24	100.00	PFHpA	0.027	0.018	✓
PFHxS_1	399.0 / 80.0	2.24	38145.22	90.46	386.3	False	13C4-PFOS	172292.74	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	11819.47	97.00	179.1	False	13C4-PFOS	172292.74	287.00	PFHxS	0.310	0.299	✓
PFOA_1	413.0 / 369.0	2.63	41773.97	118.73	131.5	False	13C2-PFOA	39779.24	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.63	1781.60	95.45	87.7	False	13C2-PFOA	39779.24	100.00	PFOA	0.043	0.051	✓
PFNA_1	463.0 / 419.0	3.02	37325.59	118.15	234.8	False	13C2-PFOA	39779.24	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	12134.89	114.69	209.0	False	13C2-PFOA	39779.24	100.00	PFNA	0.325	0.329	✓
PFOS_1	499.0 / 80.0	3.02	69633.50	103.56	342.0	True	13C4-PFOS	172292.74	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.02	13102.75	104.32	245.1	False	13C4-PFOS	172292.74	287.00	PFOS	0.188	0.189	✓
PFDA_1	513.0 / 469.0	3.38	37578.26	115.80	241.0	False	13C2-PFOA	39779.24	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	1278.94	106.56	303.1	False	13C2-PFOA	39779.24	100.00	PFDA	0.034	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	33651.46	110.22	228.5	False	13C2-PFOA	39779.24	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	1639.47	120.58	259.1	False	13C2-PFOA	39779.24	100.00	PFUnA	0.049	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	32273.31	114.31	190.1	False	13C2-PFOA	39779.24	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	4516.51	94.18	176.2	False	13C2-PFOA	39779.24	100.00	PFDoA	0.140	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.22	26354.55	105.77	237.9	False	13C2-PFOA	39779.24	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.22	1791.26	101.75	149.6	False	13C2-PFOA	39779.24	100.00	PFTTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.43	27862.80	103.20	391.7	True	13C2-PFOA	39779.24	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.43	1480.27	111.21	245.4	False	13C2-PFOA	39779.24	100.00	PFTeDA	0.053	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.53	5161.89	94.97	76765.0	False	d3-MeFOSAA	24704.73	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	3547.17	143.29	170.9	True	d3-MeFOSAA	24704.73	400.00	NMeFOSAA	0.687	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.69	5586.38	103.69	1922.8	False	d3-MeFOSAA	24704.73	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.69	399.58	106.10	1111.9	True	d3-MeFOSAA	24704.73	400.00	NEtFOSAA	0.072	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	27848.45	97.97	1025.3	False	13C2-PFOA	39779.24	100.00				
13C2-PFDA	515.0 / 470.0	3.37	40262.36	107.22	2428.1	False	13C2-PFOA	39779.24	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	25730.51	389.79	535.8	False	d3-MeFOSAA	24704.73	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	23503.25	113.75	232.4	False	13C2-PFOA	39779.24	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.94	585.98	102.37	51.8	False	13C2-PFOA	39779.24	100.00	HFPO-DA	0.025	0.028	✓
ADONA_1	377.0 / 251.0	2.26	50068.04	97.59	473.1	False	13C2-PFOA	39779.24	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	505.79	97.22	80.5	False	13C2-PFOA	39779.24	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	22847.71	105.84	271.7	False	13C2-PFOA	39779.24	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.22	90301.75	96.66	610.6	False	13C4-PFOS	172292.74	287.00	9CI-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.22	811.27	61.82	48.1	False	13C4-PFOS	172292.74	287.00	9CI-PF3ONS	0.009	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.82	70868.82	93.55	662.0	False	13C4-PFOS	172292.74	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.82	587.90	85.36	32.4	False	13C4-PFOS	172292.74	287.00	11CI-PF3OUdS	0.008	0.009	✓

Sample Name	KL67	Injection Vial	24
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:42:49 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	78477.74	215.67	2034.5	False	13C4-PFOS	173758.37	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	23614.03	218.11	632.1	False	13C4-PFOS	173758.37	287.00	PFBS	0.301	0.308	✓
PFHxA_1	313.0 / 269.0	1.81	73633.29	308.11	96.8	True	13C2-PFOA	38510.54	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	6045.43	324.68	71.8	False	13C2-PFOA	38510.54	100.00	PFHxA	0.082	0.079	✓
PFHpA_1	363.0 / 319.0	2.22	68621.19	285.26	54.7	False	13C2-PFOA	38510.54	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	1399.19	335.32	36.4	False	13C2-PFOA	38510.54	100.00	PFHpA	0.020	0.018	✓
PFHxS_1	399.0 / 80.0	2.24	93068.34	218.86	596.5	False	13C4-PFOS	173758.37	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	29532.81	240.33	286.1	False	13C4-PFOS	173758.37	287.00	PFHxS	0.317	0.299	✓
PFOA_1	413.0 / 369.0	2.63	96468.01	283.20	225.5	False	13C2-PFOA	38510.54	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.63	4720.49	261.24	135.9	False	13C2-PFOA	38510.54	100.00	PFOA	0.049	0.051	✓
PFNA_1	463.0 / 419.0	3.02	91014.20	297.60	317.3	False	13C2-PFOA	38510.54	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	32393.31	316.25	351.8	False	13C2-PFOA	38510.54	100.00	PFNA	0.356	0.329	✓
PFOS_1	499.0 / 80.0	3.01	176458.28	260.21	475.0	True	13C4-PFOS	173758.37	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.01	32036.50	252.92	404.2	True	13C4-PFOS	173758.37	287.00	PFOS	0.182	0.189	✓
PFDA_1	513.0 / 469.0	3.37	91087.33	289.95	368.7	False	13C2-PFOA	38510.54	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.38	3761.82	323.77	299.0	True	13C2-PFOA	38510.54	100.00	PFDA	0.041	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	85516.20	289.33	318.8	False	13C2-PFOA	38510.54	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	3684.50	279.92	330.3	False	13C2-PFOA	38510.54	100.00	PFUnA	0.043	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	78002.18	285.39	275.4	False	13C2-PFOA	38510.54	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	13492.28	290.61	271.7	False	13C2-PFOA	38510.54	100.00	PFDoA	0.173	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.22	68938.76	285.80	325.9	False	13C2-PFOA	38510.54	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.22	4246.33	249.15	252.0	False	13C2-PFOA	38510.54	100.00	PFTTrDA	0.062	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.43	71683.26	274.24	465.1	True	13C2-PFOA	38510.54	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.43	3593.17	278.84	393.0	False	13C2-PFOA	38510.54	100.00	PFTTeDA	0.050	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.53	14360.37	269.06	1544.7	False	d3-MeFOSAA	24258.94	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	7540.17	310.18	339.4	True	d3-MeFOSAA	24258.94	400.00	NMeFOSAA	0.525	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.69	14982.97	283.22	1404.6	False	d3-MeFOSAA	24258.94	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.68	669.92	181.16	1968.1	False	d3-MeFOSAA	24258.94	400.00	NEtFOSAA	0.045	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	28570.13	103.82	1033.8	False	13C2-PFOA	38510.54	100.00				
13C2-PFDA	515.0 / 470.0	3.36	36821.36	101.29	1306.4	False	13C2-PFOA	38510.54	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	27881.02	430.13	540.2	False	d3-MeFOSAA	24258.94	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	60128.86	300.60	358.9	False	13C2-PFOA	38510.54	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.94	1730.49	312.28	150.8	True	13C2-PFOA	38510.54	100.00	HFPO-DA	0.029	0.028	✓
ADONA_1	377.0 / 251.0	2.26	137098.15	276.02	722.4	False	13C2-PFOA	38510.54	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	1536.27	305.03	157.2	False	13C2-PFOA	38510.54	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	20688.59	98.99	356.2	False	13C2-PFOA	38510.54	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.22	228699.44	242.74	993.0	False	13C4-PFOS	173758.37	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	3446.79	260.43	146.5	False	13C4-PFOS	173758.37	287.00	9CI-PF3ONS	0.015	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.83	188831.29	247.17	1030.6	False	13C4-PFOS	173758.37	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.83	1567.66	225.69	47.4	False	13C4-PFOS	173758.37	287.00	11CI-PF3OUdS	0.008	0.009	✓

Sample Name	KL68	Injection Vial	25
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:51:45 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	171686.72	430.98	3560.3	False	13C4-PFOS	190219.13	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	51056.17	430.77	1053.4	False	13C4-PFOS	190219.13	287.00	PFBS	0.297	0.308	✓
PFHxA_1	313.0 / 269.0	1.80	151130.03	567.30	151.3	False	13C2-PFOA	42928.72	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	11146.11	537.01	115.0	False	13C2-PFOA	42928.72	100.00	PFHxA	0.074	0.079	✓
PFHpA_1	363.0 / 319.0	2.22	156033.29	581.88	87.5	False	13C2-PFOA	42928.72	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	2279.26	490.01	60.3	False	13C2-PFOA	42928.72	100.00	PFHpA	0.015	0.018	✓
PFHxS_1	399.0 / 80.0	2.23	205416.94	441.25	893.2	False	13C4-PFOS	190219.13	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	66108.06	491.42	409.0	False	13C4-PFOS	190219.13	287.00	PFHxS	0.322	0.299	✓
PFOA_1	413.0 / 369.0	2.63	217678.91	573.27	355.0	False	13C2-PFOA	42928.72	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.63	11830.28	587.33	267.5	False	13C2-PFOA	42928.72	100.00	PFOA	0.054	0.051	✓
PFNA_1	463.0 / 419.0	3.02	204586.13	600.10	508.2	False	13C2-PFOA	42928.72	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	65821.83	576.47	481.2	False	13C2-PFOA	42928.72	100.00	PFNA	0.322	0.329	✓
PFOS_1	499.0 / 80.0	3.02	354360.36	477.32	587.2	True	13C4-PFOS	190219.13	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.01	64707.70	466.64	507.4	True	13C4-PFOS	190219.13	287.00	PFOS	0.183	0.189	✓
PFDA_1	513.0 / 469.0	3.38	203566.99	581.31	575.3	False	13C2-PFOA	42928.72	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	7340.96	566.79	543.8	True	13C2-PFOA	42928.72	100.00	PFDA	0.036	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	193699.74	587.91	395.4	False	13C2-PFOA	42928.72	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	8327.23	567.54	372.0	False	13C2-PFOA	42928.72	100.00	PFUnA	0.043	0.046	✓
PFDoA_1	613.0 / 569.0	3.98	167140.54	548.58	352.6	False	13C2-PFOA	42928.72	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	28373.94	548.26	377.7	False	13C2-PFOA	42928.72	100.00	PFDoA	0.170	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.22	149517.69	556.06	481.5	False	13C2-PFOA	42928.72	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.22	10730.96	564.83	348.0	False	13C2-PFOA	42928.72	100.00	PFTTrDA	0.072	0.069	✓
PFTeDA_1	713.0 / 669.0	4.43	154329.48	529.66	552.0	True	13C2-PFOA	42928.72	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.43	7726.28	537.87	484.2	False	13C2-PFOA	42928.72	100.00	PFTeDA	0.050	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.53	30725.61	516.26	4097.9	False	d3-MeFOSAA	27051.71	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	16637.17	613.75	1021.2	False	d3-MeFOSAA	27051.71	400.00	NMeFOSAA	0.541	0.522	✓
NEiFOSAA_1	584.0 / 419.0	3.69	30655.41	519.65	5456.6	False	d3-MeFOSAA	27051.71	400.00	NEiFOSAA			
NEiFOSAA_2	584.0 / 483.0	3.69	1923.14	466.36	242.9	False	d3-MeFOSAA	27051.71	400.00	NEiFOSAA	0.063	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	30594.62	99.73	1009.7	False	13C2-PFOA	42928.72	100.00				
13C2-PFDA	515.0 / 470.0	3.37	40880.57	100.88	6219997.9	False	13C2-PFOA	42928.72	100.00		N/A	N/A	✓
d5-EiFOSAA	589.0 / 419.0	3.68	28634.36	396.14	489.3	False	d3-MeFOSAA	27051.71	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	124146.41	556.77	475.8	False	13C2-PFOA	42928.72	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.92	3185.90	515.74	170.0	False	13C2-PFOA	42928.72	100.00	HFPO-DA	0.026	0.028	✓
ADONA_1	377.0 / 251.0	2.26	283824.11	512.61	886.5	False	13C2-PFOA	42928.72	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.25	3125.40	556.69	231.4	False	13C2-PFOA	42928.72	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	21891.69	93.97	294.6	False	13C2-PFOA	42928.72	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.22	495485.99	480.39	1389.9	False	13C4-PFOS	190219.13	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.22	7877.78	543.71	274.6	False	13C4-PFOS	190219.13	287.00	9CI-PF3ONS	0.016	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.83	379580.88	453.86	1273.8	False	13C4-PFOS	190219.13	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.83	2823.25	371.28	87.7	False	13C4-PFOS	190219.13	287.00	11CI-PF3OUdS	0.007	0.009	✓

Sample Name	KL69	Injection Vial	26
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:00:43 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	318207.56	821.33	5051.5	False	13C4-PFOS	185000.84	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	95874.89	831.74	1340.4	False	13C4-PFOS	185000.84	287.00	PFBS	0.301	0.308	✓
PFHxA_1	313.0 / 269.0	1.81	275602.35	1002.63	186.6	False	13C2-PFOA	44294.52	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	22979.25	1072.97	178.6	False	13C2-PFOA	44294.52	100.00	PFHxA	0.083	0.079	✓
PFHpA_1	363.0 / 319.0	2.22	265101.01	958.14	117.8	False	13C2-PFOA	44294.52	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	5238.24	1091.44	103.8	False	13C2-PFOA	44294.52	100.00	PFHpA	0.020	0.018	✓
PFHxS_1	399.0 / 80.0	2.24	386377.90	853.38	1107.2	False	13C4-PFOS	185000.84	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	108982.12	832.98	591.1	False	13C4-PFOS	185000.84	287.00	PFHxS	0.282	0.299	✓
PFOA_1	413.0 / 369.0	2.63	412512.68	1052.89	418.5	False	13C2-PFOA	44294.52	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.63	21326.38	1026.13	387.2	False	13C2-PFOA	44294.52	100.00	PFOA	0.052	0.051	✓
PFNA_1	463.0 / 419.0	3.02	366528.35	1041.97	604.4	False	13C2-PFOA	44294.52	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	122650.83	1041.06	619.3	False	13C2-PFOA	44294.52	100.00	PFNA	0.335	0.329	✓
PFOS_1	499.0 / 80.0	3.01	647529.79	896.82	589.8	True	13C4-PFOS	185000.84	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.01	118047.86	875.31	724.0	True	13C4-PFOS	185000.84	287.00	PFOS	0.182	0.189	✓
PFDA_1	513.0 / 469.0	3.37	353942.02	979.55	563.5	False	13C2-PFOA	44294.52	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	13842.16	1035.78	595.8	False	13C2-PFOA	44294.52	100.00	PFDA	0.039	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	339199.08	997.78	761.0	False	13C2-PFOA	44294.52	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	15948.48	1053.44	559.9	False	13C2-PFOA	44294.52	100.00	PFUnA	0.047	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	315857.19	1004.72	461.3	False	13C2-PFOA	44294.52	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	52781.36	988.42	459.0	False	13C2-PFOA	44294.52	100.00	PFDoA	0.167	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.21	266272.49	959.74	538.2	False	13C2-PFOA	44294.52	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	19443.86	991.87	487.1	False	13C2-PFOA	44294.52	100.00	PFTTrDA	0.073	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.43	283213.42	942.03	852.1	True	13C2-PFOA	44294.52	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.42	15290.60	1031.65	598.1	False	13C2-PFOA	44294.52	100.00	PFTTeDA	0.054	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.53	58616.65	1074.27	1315.1	False	d3-MeFOSAA	24800.90	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	29190.66	1174.58	1566.0	False	d3-MeFOSAA	24800.90	400.00	NMeFOSAA	0.498	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.69	58888.71	1088.83	1317.6	False	d3-MeFOSAA	24800.90	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.69	3490.58	923.29	7321.2	False	d3-MeFOSAA	24800.90	400.00	NEtFOSAA	0.059	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	29552.92	93.37	1004.6	False	13C2-PFOA	44294.52	100.00				
13C2-PFDA	515.0 / 470.0	3.37	39254.24	93.88	1372.4	False	13C2-PFOA	44294.52	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	28181.24	425.26	723.7	False	d3-MeFOSAA	24800.90	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	224140.74	974.23	647.5	False	13C2-PFOA	44294.52	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	6195.63	972.04	251.1	False	13C2-PFOA	44294.52	100.00	HFPO-DA	0.028	0.028	✓
ADONA_1	377.0 / 251.0	2.26	522867.47	915.23	1116.9	False	13C2-PFOA	44294.52	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	5259.39	907.91	397.1	False	13C2-PFOA	44294.52	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	23027.64	95.80	258.6	False	13C2-PFOA	44294.52	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.22	894376.14	891.58	1814.2	False	13C4-PFOS	185000.84	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.22	11321.15	803.40	295.0	False	13C4-PFOS	185000.84	287.00	9CI-PF3ONS	0.013	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.82	686807.11	844.38	1599.3	False	13C4-PFOS	185000.84	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.82	6847.36	925.89	146.7	False	13C4-PFOS	185000.84	287.00	11CI-PF3OUdS	0.010	0.009	✓

Sample Name	KL70	Injection Vial	27
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:09:41 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.49	746498.21	2227.33	6340.2	False	13C4-PFOS	160037.80	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.49	221546.03	2221.76	1859.3	False	13C4-PFOS	160037.80	287.00	PFBS	0.297	0.308	✓
PFHxA_1	313.0 / 269.0	1.81	643721.84	2674.21	314.5	False	13C2-PFOA	38789.12	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	49073.13	2616.60	235.9	False	13C2-PFOA	38789.12	100.00	PFHxA	0.076	0.079	✓
PFHpA_1	363.0 / 319.0	2.22	652550.06	2693.21	176.4	False	13C2-PFOA	38789.12	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	10589.68	2519.62	213.9	False	13C2-PFOA	38789.12	100.00	PFHpA	0.016	0.018	✓
PFHxS_1	399.0 / 80.0	2.24	885523.25	2260.90	1212.2	False	13C4-PFOS	160037.80	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	262982.38	2323.57	755.7	False	13C4-PFOS	160037.80	287.00	PFHxS	0.297	0.299	✓
PFOA_1	413.0 / 369.0	2.63	927790.00	2704.17	676.9	False	13C2-PFOA	38789.12	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.63	49414.34	2715.05	475.1	False	13C2-PFOA	38789.12	100.00	PFOA	0.053	0.051	✓
PFNA_1	463.0 / 419.0	3.02	851729.31	2764.95	760.4	False	13C2-PFOA	38789.12	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.02	281350.23	2727.04	1013.4	False	13C2-PFOA	38789.12	100.00	PFNA	0.330	0.329	✓
PFOS_1	499.0 / 80.0	3.01	1457175.28	2332.97	750.4	True	13C4-PFOS	160037.80	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.01	266116.96	2281.01	1063.0	True	13C4-PFOS	160037.80	287.00	PFOS	0.183	0.189	✓
PFDA_1	513.0 / 469.0	3.37	844946.83	2670.33	1045.8	False	13C2-PFOA	38789.12	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	30827.73	2634.18	502.7	False	13C2-PFOA	38789.12	100.00	PFDA	0.036	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	766825.53	2575.82	835.1	False	13C2-PFOA	38789.12	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	36650.41	2764.46	847.3	False	13C2-PFOA	38789.12	100.00	PFUnA	0.048	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	726378.74	2638.51	669.1	False	13C2-PFOA	38789.12	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	122965.79	2629.57	686.1	False	13C2-PFOA	38789.12	100.00	PFDoA	0.169	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.21	629035.25	2589.07	746.4	False	13C2-PFOA	38789.12	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	42849.83	2496.11	533.5	False	13C2-PFOA	38789.12	100.00	PFTTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.43	664463.65	2523.83	1201.5	True	13C2-PFOA	38789.12	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	32566.98	2509.14	739.1	False	13C2-PFOA	38789.12	100.00	PFTeDA	0.049	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.53	134767.28	2638.80	1930.5	False	d3-MeFOSAA	23213.41	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	71733.61	3083.84	1144.0	False	d3-MeFOSAA	23213.41	400.00	NMeFOSAA	0.532	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.69	133648.83	2640.11	1210.1	False	d3-MeFOSAA	23213.41	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.69	10397.08	2938.20	2605.7	False	d3-MeFOSAA	23213.41	400.00	NEtFOSAA	0.078	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	26468.75	95.49	807.4	False	13C2-PFOA	38789.12	100.00				
13C2-PFDA	515.0 / 470.0	3.36	33066.09	90.30	6543.6	False	13C2-PFOA	38789.12	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	24510.35	395.16	496.8	False	d3-MeFOSAA	23213.41	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	528820.47	2624.76	1059.1	False	13C2-PFOA	38789.12	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	14474.62	2593.26	519.5	False	13C2-PFOA	38789.12	100.00	HFPO-DA	0.027	0.028	✓
ADONA_1	377.0 / 251.0	2.26	1234563.45	2467.69	1210.8	False	13C2-PFOA	38789.12	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	12483.97	2460.93	493.3	False	13C2-PFOA	38789.12	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.93	20626.29	97.99	275.6	False	13C2-PFOA	38789.12	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	2057437.41	2370.93	2681.0	False	13C4-PFOS	160037.80	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	31411.48	2576.81	575.2	False	13C4-PFOS	160037.80	287.00	9CI-PF3ONS	0.015	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.82	1653601.95	2350.08	1532.9	False	13C4-PFOS	160037.80	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.82	15057.98	2353.72	223.1	False	13C4-PFOS	160037.80	287.00	11CI-PF3OUdS	0.009	0.009	✓

Sample Name	KL71	Injection Vial	28
Sample ID	L8	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:18:37 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	1824338.51	4336.74	10443.7	False	13C4-PFOS	200872.98	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	546606.15	4367.25	3333.4	False	13C4-PFOS	200872.98	287.00	PFBS	0.300	0.308	✓
PFHxA_1	313.0 / 269.0	1.80	1526979.28	4887.92	439.7	False	13C2-PFOA	50340.33	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.81	121197.74	4979.45	368.6	False	13C2-PFOA	50340.33	100.00	PFHxA	0.079	0.079	✓
PFHpA_1	363.0 / 319.0	2.22	1530987.47	4868.79	284.8	False	13C2-PFOA	50340.33	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	25794.28	4729.01	278.9	False	13C2-PFOA	50340.33	100.00	PFHpA	0.017	0.018	✓
PFHxS_1	399.0 / 80.0	2.24	2165027.41	4403.98	1409.6	False	13C4-PFOS	200872.98	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	625795.63	4405.18	1067.4	False	13C4-PFOS	200872.98	287.00	PFHxS	0.289	0.299	✓
PFOA_1	413.0 / 369.0	2.63	2195281.19	4930.24	917.4	False	13C2-PFOA	50340.33	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.62	113826.90	4819.08	748.2	False	13C2-PFOA	50340.33	100.00	PFOA	0.052	0.051	✓
PFNA_1	463.0 / 419.0	3.01	1969964.26	4927.63	1606.2	False	13C2-PFOA	50340.33	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.01	658482.68	4917.94	1271.9	False	13C2-PFOA	50340.33	100.00	PFNA	0.334	0.329	✓
PFOS_1	499.0 / 80.0	3.01	3528720.32	4501.08	761.0	True	13C4-PFOS	200872.98	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.01	675354.87	4611.98	1172.4	True	13C4-PFOS	200872.98	287.00	PFOS	0.191	0.189	✓
PFDA_1	513.0 / 469.0	3.37	2016071.94	4909.47	1283.8	False	13C2-PFOA	50340.33	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	71814.70	4728.37	979.1	False	13C2-PFOA	50340.33	100.00	PFDA	0.036	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	1979361.01	5123.16	1114.5	False	13C2-PFOA	50340.33	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	86441.91	5024.00	1116.6	False	13C2-PFOA	50340.33	100.00	PFUnA	0.044	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	1714821.74	4799.65	768.5	False	13C2-PFOA	50340.33	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	306590.27	5051.88	1062.9	False	13C2-PFOA	50340.33	100.00	PFDoA	0.179	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.22	1556708.93	4937.08	1115.7	False	13C2-PFOA	50340.33	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	106227.70	4768.10	787.1	False	13C2-PFOA	50340.33	100.00	PFTTrDA	0.068	0.069	✓
PFTeDA_1	713.0 / 669.0	4.43	1698229.51	4970.27	1654.0	True	13C2-PFOA	50340.33	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.43	81180.51	4819.41	1290.5	False	13C2-PFOA	50340.33	100.00	PFTeDA	0.048	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.53	317749.90	4938.41	1778.5	False	d3-MeFOSAA	29245.49	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.52	139606.67	4763.82	904.7	False	d3-MeFOSAA	29245.49	400.00	NMeFOSAA	0.439	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.69	328543.09	5151.44	1382.3	False	d3-MeFOSAA	29245.49	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.69	22538.58	5055.64	609.2	False	d3-MeFOSAA	29245.49	400.00	NEtFOSAA	0.069	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	31246.79	86.86	1018.7	False	13C2-PFOA	50340.33	100.00				
13C2-PFDA	515.0 / 470.0	3.36	46649.75	98.17	15973.2	False	13C2-PFOA	50340.33	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	28508.13	364.81	651.9	False	d3-MeFOSAA	29245.49	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.93	1277910.16	4887.36	1406.7	False	13C2-PFOA	50340.33	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.93	36487.40	5037.04	583.5	False	13C2-PFOA	50340.33	100.00	HFPO-DA	0.029	0.028	✓
ADONA_1	377.0 / 251.0	2.26	2978961.85	4588.14	1904.8	False	13C2-PFOA	50340.33	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.26	32920.40	5000.42	733.7	False	13C2-PFOA	50340.33	100.00	ADONA	0.011	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	27413.07	100.34	272.1	False	13C2-PFOA	50340.33	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	4934474.97	4530.37	1944.7	False	13C4-PFOS	200872.98	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	68913.65	4504.02	677.6	False	13C4-PFOS	200872.98	287.00	9CI-PF3ONS	0.014	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.82	3865829.03	4377.20	1687.9	False	13C4-PFOS	200872.98	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.82	35926.86	4474.14	366.2	False	13C4-PFOS	200872.98	287.00	11CI-PF3OUdS	0.009	0.009	✓

Sample Name	KL72	Injection Vial	29
Sample ID	L9	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:27:34 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	3247607.68	9011.75	13216.8	False	13C4-PFOS	172081.23	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.48	960550.82	8958.64	3844.1	False	13C4-PFOS	172081.23	287.00	PFBS	0.296	0.308	✓
PFHxA_1	313.0 / 269.0	1.80	2739023.52	9785.25	640.0	False	13C2-PFOA	45105.70	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	211232.78	9685.75	452.4	False	13C2-PFOA	45105.70	100.00	PFHxA	0.077	0.079	✓
PFHpA_1	363.0 / 319.0	2.21	2769030.71	9827.93	383.7	False	13C2-PFOA	45105.70	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	49286.36	10084.59	332.3	False	13C2-PFOA	45105.70	100.00	PFHpA	0.018	0.018	✓
PFHxS_1	399.0 / 80.0	2.23	3945104.77	9367.60	1449.4	False	13C4-PFOS	172081.23	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	1125197.07	9245.87	1115.8	False	13C4-PFOS	172081.23	287.00	PFHxS	0.285	0.299	✓
PFOA_1	413.0 / 369.0	2.62	3856557.25	9666.34	941.3	False	13C2-PFOA	45105.70	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.62	208373.62	9845.71	752.0	False	13C2-PFOA	45105.70	100.00	PFOA	0.054	0.051	✓
PFNA_1	463.0 / 419.0	3.01	3431472.17	9579.55	1323.6	False	13C2-PFOA	45105.70	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.01	1156305.41	9638.20	1522.4	False	13C2-PFOA	45105.70	100.00	PFNA	0.337	0.329	✓
PFOS_1	499.0 / 80.0	3.00	6262753.00	9325.08	827.6	True	13C4-PFOS	172081.23	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.00	1166071.23	9295.42	1157.4	False	13C4-PFOS	172081.23	287.00	PFOS	0.186	0.189	✓
PFDA_1	513.0 / 469.0	3.37	3604135.50	9795.23	1711.9	False	13C2-PFOA	45105.70	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	135468.81	9954.56	1246.8	True	13C2-PFOA	45105.70	100.00	PFDA	0.038	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	3339759.93	9647.45	1373.8	False	13C2-PFOA	45105.70	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	146720.90	9517.04	1733.7	False	13C2-PFOA	45105.70	100.00	PFUnA	0.044	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	3183530.18	9944.52	935.7	False	13C2-PFOA	45105.70	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	529131.16	9730.67	1011.8	False	13C2-PFOA	45105.70	100.00	PFDoA	0.166	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.21	2797617.28	9902.29	1081.6	False	13C2-PFOA	45105.70	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	202953.45	10166.91	975.2	False	13C2-PFOA	45105.70	100.00	PFTTrDA	0.073	0.069	✓
PFTeDA_1	713.0 / 669.0	4.43	2921814.46	9543.79	1826.1	False	13C2-PFOA	45105.70	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	151753.32	10054.60	1351.0	False	13C2-PFOA	45105.70	100.00	PFTeDA	0.052	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.52	588030.23	9811.30	1168.2	False	d3-MeFOSAA	27241.64	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.52	252791.17	9260.54	872.4	False	d3-MeFOSAA	27241.64	400.00	NMeFOSAA	0.430	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.68	568142.10	9563.55	1135.1	False	d3-MeFOSAA	27241.64	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.68	40194.41	9679.24	1031.2	False	d3-MeFOSAA	27241.64	400.00	NEtFOSAA	0.071	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	30332.08	94.10	1278.9	False	13C2-PFOA	45105.70	100.00				
13C2-PFDA	515.0 / 470.0	3.36	42562.39	99.96	2506.8	False	13C2-PFOA	45105.70	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	26956.41	370.33	643.3	False	d3-MeFOSAA	27241.64	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.92	2314237.03	9877.95	1474.6	False	13C2-PFOA	45105.70	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.92	63735.03	9819.64	751.3	False	13C2-PFOA	45105.70	100.00	HFPO-DA	0.028	0.028	✓
ADONA_1	377.0 / 251.0	2.25	5477730.86	9415.79	1489.4	False	13C2-PFOA	45105.70	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.25	52845.06	8958.39	887.6	False	13C2-PFOA	45105.70	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	26281.84	107.37	291.4	False	13C2-PFOA	45105.70	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	8750247.02	9377.81	2078.5	False	13C4-PFOS	172081.23	287.00	9Cl-PF3ONS			

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	120773.33	9214.13	656.5	False	13C4-PFOS	172081.23	287.00	9CI-PF3ONS	0.014	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.82	7431501.41	9822.41	1437.0	False	13C4-PFOS	172081.23	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.82	66933.25	9730.15	365.4	False	13C4-PFOS	172081.23	287.00	11CI-PF3OUdS	0.009	0.009	✓

Sample Name	KL74 ICC	Injection Vial	31
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:45:29 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.47	823.95	885.00	93.10
PFBS_2	298.9 / 99.0	1.47	832.10	885.00	94.02
PFHxA_1	313.0 / 269.0	1.80	1027.61	1000.00	102.76
PFHxA_2	313.0 / 119.0	1.79	1060.33	1000.00	106.03
PFHpA_1	363.0 / 319.0	2.21	991.48	1000.00	99.15
PFHpA_2	363.0 / 169.0	2.21	1031.74	1000.00	103.17
PFHxS_1	399.0 / 80.0	2.23	845.00	945.00	89.42
PFHxS_2	399.0 / 99.0	2.23	911.93	945.00	96.50
PFOA_1	413.0 / 369.0	2.62	1112.81	1000.00	111.28
PFOA_2	413.0 / 169.0	2.62	1097.51	1000.00	109.75
PFNA_1	463.0 / 419.0	3.00	1102.80	1000.00	110.28
PFNA_2	463.0 / 219.0	3.00	1066.32	1000.00	106.63
PFOS_1	499.0 / 80.0	3.00	871.61	955.00	91.27
PFOS_2	499.0 / 99.0	3.00	974.98	955.00	102.09
PFDA_1	513.0 / 469.0	3.36	1022.32	1000.00	102.23
PFDA_2	513.0 / 219.0	3.36	899.56	1000.00	89.96
PFUnA_1	563.0 / 519.0	3.68	1078.36	1000.00	107.84
PFUnA_2	563.0 / 269.0	3.68	988.94	1000.00	98.89
PFDoA_1	613.0 / 569.0	3.96	1050.10	1000.00	105.01
PFDoA_2	613.0 / 319.0	3.96	1042.43	1000.00	104.24
PFTrDA_1	663.0 / 619.0	4.20	1049.99	1000.00	105.00
PFTrDA_2	663.0 / 169.0	4.20	1089.37	1000.00	108.94
PFTeDA_1	713.0 / 669.0	4.42	991.40	1000.00	99.14
PFTeDA_2	713.0 / 169.0	4.42	1139.76	1000.00	113.98
NMeFOSAA_1	570.0 / 419.0	3.52	1123.62	1000.00	112.36
NMeFOSAA_2	570.0 / 512.0	3.52	1238.54	1000.00	123.85
NEtFOSAA_1	584.0 / 419.0	3.67	1165.30	1000.00	116.53
NEtFOSAA_2	584.0 / 483.0	3.67	1111.71	1000.00	111.17
13C2-PFHxA	315.0 / 270.0	1.79	95.74	100.00	95.74
13C2-PFDA	515.0 / 470.0	3.35	91.89	100.00	91.89
d5-EtFOSAA	589.0 / 419.0	3.67	429.71	400.00	107.43
HFPO-DA_1	285.0 / 169.0	1.92	1056.18	1000.00	105.62
HFPO-DA_2	285.0 / 118.8	1.92	1047.68	1000.00	104.77
ADONA_1	377.0 / 251.0	2.25	918.39	945.00	97.18
ADONA_2	377.0 / 85.0	2.25	1045.15	945.00	110.60
13C3-HFPO-DA	287.0 / 169.0	1.92	91.96	100.00	91.96
9Cl-PF3ONS_1	531.0 / 351.0	3.20	880.68	930.00	94.70
9Cl-PF3ONS_2	531.0 / 83.0	3.20	886.58	930.00	95.33
11Cl-PF3OUdS_1	631.0 / 451.0	3.81	854.54	940.00	90.91
11Cl-PF3OUdS_2	631.0 / 83.0	3.81	765.18	940.00	81.40

Sample Name	KL68 CCV	Injection Vial	37
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:39:10 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.47	437.96	443.00	98.86
PFBS_2	298.9 / 99.0	1.47	434.45	443.00	98.07
PFHxA_1	313.0 / 269.0	1.79	539.30	500.00	107.86
PFHxA_2	313.0 / 119.0	1.79	566.90	500.00	113.38
PFHpA_1	363.0 / 319.0	2.20	576.91	500.00	115.38
PFHpA_2	363.0 / 169.0	2.20	607.91	500.00	121.58
PFHxS_1	399.0 / 80.0	2.22	460.21	456.00	100.92
PFHxS_2	399.0 / 99.0	2.22	457.76	456.00	100.39
PFOA_1	413.0 / 369.0	2.62	601.10	500.00	120.22
PFOA_2	413.0 / 169.0	2.61	592.62	500.00	118.52
PFNA_1	463.0 / 419.0	3.01	603.79	500.00	120.76
PFNA_2	463.0 / 219.0	3.01	598.75	500.00	119.75
PFOS_1	499.0 / 80.0	3.00	467.37	463.00	100.94
PFOS_2	499.0 / 99.0	3.00	486.45	463.00	105.07
PFDA_1	513.0 / 469.0	3.36	598.77	500.00	119.75
PFDA_2	513.0 / 219.0	3.37	555.56	500.00	111.11
PFUnA_1	563.0 / 519.0	3.68	572.52	500.00	114.50
PFUnA_2	563.0 / 269.0	3.68	513.75	500.00	102.75
PFDoA_1	613.0 / 569.0	3.97	569.26	500.00	113.85
PFDoA_2	613.0 / 319.0	3.97	537.70	500.00	107.54
PFTrDA_1	663.0 / 619.0	4.21	562.62	500.00	112.52
PFTrDA_2	663.0 / 169.0	4.21	569.57	500.00	113.91
PFTeDA_1	713.0 / 669.0	4.42	544.22	500.00	108.84
PFTeDA_2	713.0 / 169.0	4.42	561.50	500.00	112.30
NMeFOSAA_1	570.0 / 419.0	3.52	573.05	500.00	114.61
NMeFOSAA_2	570.0 / 512.0	3.52	641.40	500.00	128.28
NEtFOSAA_1	584.0 / 419.0	3.68	627.25	500.00	125.45
NEtFOSAA_2	584.0 / 483.0	3.68	583.45	500.00	116.69
13C2-PFHxA	315.0 / 270.0	1.79	95.41	100.00	95.41
13C2-PFDA	515.0 / 470.0	3.36	98.37	100.00	98.37
d5-EtFOSAA	589.0 / 419.0	3.67	410.35	400.00	102.59
HFPO-DA_1	285.0 / 169.0	1.92	553.22	500.00	110.64
HFPO-DA_2	285.0 / 118.8	1.92	546.73	500.00	109.35
ADONA_1	377.0 / 251.0	2.24	538.83	473.00	113.92
ADONA_2	377.0 / 85.0	2.24	507.22	473.00	107.24
13C3-HFPO-DA	287.0 / 169.0	1.91	96.35	100.00	96.35
9CI-PF3ONS_1	531.0 / 351.0	3.21	478.22	465.00	102.84
9CI-PF3ONS_2	531.0 / 83.0	3.21	468.87	465.00	100.83
11CI-PF3OUdS_1	631.0 / 451.0	3.82	459.13	470.00	97.69
11CI-PF3OUdS_2	631.0 / 83.0	3.82	505.62	470.00	107.58

Sample Name	KL74 ICC	Injection Vial	31
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:45:29 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	331101.28	823.95	4461.1	False	13C4-PFOS	191883.85	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	99485.30	832.10	1375.7	False	13C4-PFOS	191883.85	287.00	PFBS	0.300	0.308	✓
PFHxA_1	313.0 / 269.0	1.80	283208.38	1027.61	187.5	False	13C2-PFOA	44410.55	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.79	22767.91	1060.33	168.8	False	13C2-PFOA	44410.55	100.00	PFHxA	0.080	0.079	✓
PFHpA_1	363.0 / 319.0	2.21	275045.10	991.48	123.7	False	13C2-PFOA	44410.55	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	4964.70	1031.74	104.7	False	13C2-PFOA	44410.55	100.00	PFHpA	0.018	0.018	✓
PFHxS_1	399.0 / 80.0	2.23	396817.56	845.00	1560.0	False	13C4-PFOS	191883.85	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	123750.81	911.93	546.6	False	13C4-PFOS	191883.85	287.00	PFHxS	0.312	0.299	✓
PFOA_1	413.0 / 369.0	2.62	437132.12	1112.81	381.3	False	13C2-PFOA	44410.55	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.62	22869.67	1097.51	319.9	False	13C2-PFOA	44410.55	100.00	PFOA	0.052	0.051	✓
PFNA_1	463.0 / 419.0	3.00	388943.57	1102.80	651.6	False	13C2-PFOA	44410.55	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.00	125955.93	1066.32	693.5	False	13C2-PFOA	44410.55	100.00	PFNA	0.324	0.329	✓
PFOS_1	499.0 / 80.0	3.00	652739.32	871.61	1019.6	False	13C4-PFOS	191883.85	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.00	136382.14	974.98	974.0	False	13C4-PFOS	191883.85	287.00	PFOS	0.209	0.189	✓
PFDA_1	513.0 / 469.0	3.36	370362.70	1022.32	635.0	False	13C2-PFOA	44410.55	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	12053.21	899.56	445.3	False	13C2-PFOA	44410.55	100.00	PFDA	0.033	0.037	✓
PFUnA_1	563.0 / 519.0	3.68	367553.21	1078.36	541.9	False	13C2-PFOA	44410.55	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.68	15011.10	988.94	367.0	False	13C2-PFOA	44410.55	100.00	PFUnA	0.041	0.046	✓
PFDoA_1	613.0 / 569.0	3.96	330985.14	1050.10	522.9	False	13C2-PFOA	44410.55	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	55811.44	1042.43	446.5	False	13C2-PFOA	44410.55	100.00	PFDoA	0.169	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.20	292074.75	1049.99	558.4	False	13C2-PFOA	44410.55	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.20	21411.03	1089.37	444.4	False	13C2-PFOA	44410.55	100.00	PFTTrDA	0.073	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	298838.70	991.40	735.1	False	13C2-PFOA	44410.55	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.42	16937.17	1139.76	695.4	False	13C2-PFOA	44410.55	100.00	PFTeDA	0.057	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.52	67294.32	1123.62	1088.4	False	d3-MeFOSAA	27222.00	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.52	33784.98	1238.54	1879.9	False	d3-MeFOSAA	27222.00	400.00	NMeFOSAA	0.502	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.67	69177.11	1165.30	39424.3	False	d3-MeFOSAA	27222.00	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.67	4613.19	1111.71	510.3	False	d3-MeFOSAA	27222.00	400.00	NEtFOSAA	0.067	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.79	30382.75	95.74	916.0	False	13C2-PFOA	44410.55	100.00				
13C2-PFDA	515.0 / 470.0	3.35	38523.49	91.89	15614.9	False	13C2-PFOA	44410.55	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	31256.36	429.71	414.8	False	d3-MeFOSAA	27222.00	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.92	243631.92	1056.18	777.3	False	13C2-PFOA	44410.55	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.92	6695.22	1047.68	271.6	False	13C2-PFOA	44410.55	100.00	HFPO-DA	0.027	0.028	✓
ADONA_1	377.0 / 251.0	2.25	526046.40	918.39	1212.1	False	13C2-PFOA	44410.55	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.25	6070.26	1045.15	432.7	False	13C2-PFOA	44410.55	100.00	ADONA	0.012	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	22162.70	91.96	234.4	False	13C2-PFOA	44410.55	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.20	916303.94	880.68	1478.3	False	13C4-PFOS	191883.85	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.20	12958.03	886.58	291.7	False	13C4-PFOS	191883.85	287.00	9CI-PF3ONS	0.014	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	720930.84	854.54	1457.8	False	13C4-PFOS	191883.85	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	5869.35	765.18	154.3	False	13C4-PFOS	191883.85	287.00	11CI-PF3OUdS	0.008	0.009	✓

Sample Name	KL68 CCV	Injection Vial	37
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:39:10 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	170833.42	437.96	2753.2	False	13C4-PFOS	186257.60	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	50419.77	434.45	828.9	False	13C4-PFOS	186257.60	287.00	PFBS	0.295	0.308	✓
PFHxA_1	313.0 / 269.0	1.79	142237.84	539.30	137.7	False	13C2-PFOA	42500.38	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.79	11649.23	566.90	91.4	False	13C2-PFOA	42500.38	100.00	PFHxA	0.082	0.079	✓
PFHpA_1	363.0 / 319.0	2.20	153155.65	576.91	88.6	False	13C2-PFOA	42500.38	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	2799.42	607.91	86.0	True	13C2-PFOA	42500.38	100.00	PFHpA	0.018	0.018	✓
PFHxS_1	399.0 / 80.0	2.22	209781.33	460.21	909.3	False	13C4-PFOS	186257.60	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	60296.94	457.76	438.6	False	13C4-PFOS	186257.60	287.00	PFHxS	0.287	0.299	✓
PFOA_1	413.0 / 369.0	2.62	225965.93	601.10	309.9	False	13C2-PFOA	42500.38	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.61	11817.67	592.62	343.9	False	13C2-PFOA	42500.38	100.00	PFOA	0.052	0.051	✓
PFNA_1	463.0 / 419.0	3.01	203790.63	603.79	428.3	False	13C2-PFOA	42500.38	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.01	67683.55	598.75	421.0	False	13C2-PFOA	42500.38	100.00	PFNA	0.332	0.329	✓
PFOS_1	499.0 / 80.0	3.00	339748.75	467.37	691.2	True	13C4-PFOS	186257.60	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.00	66050.87	486.45	664.5	False	13C4-PFOS	186257.60	287.00	PFOS	0.194	0.189	✓
PFDA_1	513.0 / 469.0	3.36	207589.38	598.77	524.5	False	13C2-PFOA	42500.38	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	7123.78	555.56	976.3	False	13C2-PFOA	42500.38	100.00	PFDA	0.034	0.037	✓
PFUnA_1	563.0 / 519.0	3.68	186748.22	572.52	521.7	False	13C2-PFOA	42500.38	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.68	7462.78	513.75	397.2	False	13C2-PFOA	42500.38	100.00	PFUnA	0.040	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	171710.66	569.26	356.6	False	13C2-PFOA	42500.38	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	27550.06	537.70	331.6	False	13C2-PFOA	42500.38	100.00	PFDoA	0.160	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.21	149771.88	562.62	444.2	False	13C2-PFOA	42500.38	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	10713.15	569.57	297.9	False	13C2-PFOA	42500.38	100.00	PFTTrDA	0.072	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.42	156989.01	544.22	680.7	False	13C2-PFOA	42500.38	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.42	7985.16	561.50	524.5	False	13C2-PFOA	42500.38	100.00	PFTTeDA	0.051	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.52	31638.55	573.05	636.6	False	d3-MeFOSAA	25094.99	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.52	16128.93	641.40	1433.3	True	d3-MeFOSAA	25094.99	400.00	NMeFOSAA	0.510	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.68	34326.49	627.25	261.0	False	d3-MeFOSAA	25094.99	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.68	2231.93	583.45	5261.2	False	d3-MeFOSAA	25094.99	400.00	NEtFOSAA	0.065	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.79	28977.12	95.41	1132.3	False	13C2-PFOA	42500.38	100.00				
13C2-PFDA	515.0 / 470.0	3.36	39465.72	98.37	1091.6	False	13C2-PFOA	42500.38	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	27515.92	410.35	822.2	False	d3-MeFOSAA	25094.99	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.92	122122.87	553.22	565.6	False	13C2-PFOA	42500.38	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.92	3343.62	546.73	162.3	False	13C2-PFOA	42500.38	100.00	HFPO-DA	0.027	0.028	✓
ADONA_1	377.0 / 251.0	2.24	295361.80	538.83	876.1	False	13C2-PFOA	42500.38	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.24	2819.26	507.22	160.2	False	13C2-PFOA	42500.38	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.91	22222.86	96.35	252.3	False	13C2-PFOA	42500.38	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	482976.40	478.22	1529.1	False	13C4-PFOS	186257.60	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	6652.03	468.87	233.1	False	13C4-PFOS	186257.60	287.00	9CI-PF3ONS	0.014	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.82	375990.17	459.13	1149.0	False	13C4-PFOS	186257.60	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.82	3764.68	505.62	99.3	False	13C4-PFOS	186257.60	287.00	11CI-PF3OUdS	0.010	0.009	✓

Raw Analytical Data

Sample Name	KL73 IB	Injection Vial	30
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:36:31 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	1778.32	4.56	177.7	False	13C4-PFOS	186343.80	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	186343.80	287.00	PFBS	N/A	0.308	
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFHxA	N/A	0.079	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFHpA	N/A	0.018	✓
PFHxS_1	399.0 / 80.0	2.25	3058.18	6.71	162.3	False	13C4-PFOS	186343.80	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	755.84	5.74	21.0	False	13C4-PFOS	186343.80	287.00	PFHxS	0.247	0.299	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFOA	N/A	0.051	✓
PFNA_1	463.0 / 419.0	3.02	2407.01	7.37	30.9	True	13C2-PFOA	41151.41	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFNA	N/A	0.329	
PFOS_1	499.0 / 80.0	3.02	6572.04	9.04	77.6	True	13C4-PFOS	186343.80	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.02	1592.05	11.71	55.7	False	13C4-PFOS	186343.80	287.00	PFOS	0.242	0.189	✓
PFDA_1	513.0 / 469.0	3.37	2974.19	8.86	67.6	False	13C2-PFOA	41151.41	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFDA	N/A	0.037	
PFUnA_1	563.0 / 519.0	3.69	2354.83	7.46	46.5	True	13C2-PFOA	41151.41	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	PFUnA	N/A	0.046	
PFDoA_1	613.0 / 569.0	3.97	1862.51	6.38	32.7	True	13C2-PFOA	41151.41	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	385.06	7.76	26.6	True	13C2-PFOA	41151.41	100.00	PFDoA	0.207	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.21	1584.24	6.15	62.2	False	13C2-PFOA	41151.41	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.20	269.06	14.77	29.5	False	13C2-PFOA	41151.41	100.00	PFTTrDA	0.170	0.069	
PFTTeDA_1	713.0 / 669.0	4.42	1856.96	6.65	79.1	False	13C2-PFOA	41151.41	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.43	155.42	11.29	32.2	False	13C2-PFOA	41151.41	100.00	PFTTeDA	0.084	0.051	✓
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	24906.21	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.51	379.20	15.19	1276.1	True	d3-MeFOSAA	24906.21	400.00	NMeFOSAA	N/A	0.522	
NEtFOSAA_1	584.0 / 419.0	3.68	843.67	15.53	1683.6	False	d3-MeFOSAA	24906.21	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	24906.21	400.00	NEtFOSAA	N/A	0.065	
13C2-PFHxA	315.0 / 270.0	1.80	28903.15	98.29	883.2	False	13C2-PFOA	41151.41	100.00				
13C2-PFDA	515.0 / 470.0	3.36	41014.81	105.58	1391.0	False	13C2-PFOA	41151.41	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	27544.54	413.89	703.8	False	d3-MeFOSAA	24906.21	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.96	1706.21	7.98	39.2	True	13C2-PFOA	41151.41	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	HFPO-DA	N/A	0.028	
ADONA_1	377.0 / 251.0	2.28	3787.20	7.14	112.4	False	13C2-PFOA	41151.41	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	41151.41	100.00	ADONA	N/A	0.010	
13C3-HFPO-DA	287.0 / 169.0	1.93	20155.08	90.25	218.1	False	13C2-PFOA	41151.41	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.21	4781.74	4.73	176.0	False	13C4-PFOS	186343.80	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	186343.80	287.00	9CI-PF3ONS	N/A	0.014	
11CI-PF3OUdS_1	631.0 / 451.0	3.82	3218.88	3.93	129.3	False	13C4-PFOS	186343.80	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	186343.80	287.00	11CI-PF3OUdS	N/A	0.009	

Sample Name	CU330PB-FS(0)	Injection Vial	33
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:03:23 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	PFBS	N/A	0.308	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFHxA	N/A	0.079	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFHpA	N/A	0.018	✓
PFHxS_1	399.0 / 80.0	2.25	1757.83	3.61	29.8	False	13C4-PFOS	198873.53	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	PFHxS	N/A	0.299	
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFOA	N/A	0.051	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFNA	N/A	0.329	✓
PFOS_1	499.0 / 80.0	2.99	5573.21	7.18	53.8	True	13C4-PFOS	198873.53	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	PFOS	N/A	0.189	
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFDA	N/A	0.037	✓
PFUnA_1	563.0 / 519.0	3.68	855.11	2.37	20.6	True	13C2-PFOA	46914.09	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFUnA	N/A	0.046	
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFDoA	N/A	0.170	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	4.41	11513.93	36.16	89.6	True	13C2-PFOA	46914.09	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	PFTeDA	N/A	0.051	
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	26501.45	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	26501.45	400.00	NMeFOSAA	N/A	0.522	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	26501.45	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	26501.45	400.00	NEtFOSAA	N/A	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	38302.73	114.25	785.2	False	13C2-PFOA	46914.09	100.00				
13C2-PFDA	515.0 / 470.0	3.36	45606.91	102.98	1390.2	False	13C2-PFOA	46914.09	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	29476.31	416.26	713.9	False	d3-MeFOSAA	26501.45	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	HFPO-DA	N/A	0.028	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	46914.09	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	26520.98	104.17	300.7	False	13C2-PFOA	46914.09	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	9CI-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	9CI-PF3ONS	N/A	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	198873.53	287.00	11CI-PF3OUdS	N/A	0.009	✓

Sample Name	CU331LCS-FS(0)	Injection Vial	34
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:12:20 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.48	937367.05	2653.37	4884.4	False	13C4-PFOS	168690.88	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	279325.09	2657.50	1882.1	False	13C4-PFOS	168690.88	287.00	PFBS	0.298	0.308	✓
PFHxA_1	313.0 / 269.0	1.80	807213.89	3206.83	317.9	False	13C2-PFOA	40562.01	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.80	62905.97	3207.57	291.8	False	13C2-PFOA	40562.01	100.00	PFHxA	0.078	0.079	✓
PFHpA_1	363.0 / 319.0	2.21	789741.16	3116.96	223.9	False	13C2-PFOA	40562.01	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	14721.65	3349.66	194.6	False	13C2-PFOA	40562.01	100.00	PFHpA	0.019	0.018	✓
PFHxS_1	399.0 / 80.0	2.23	1058511.24	2563.94	1632.5	False	13C4-PFOS	168690.88	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	316938.49	2656.66	933.4	False	13C4-PFOS	168690.88	287.00	PFHxS	0.299	0.299	✓
PFOA_1	413.0 / 369.0	2.62	1063046.92	2962.97	569.6	False	13C2-PFOA	40562.01	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.62	58809.36	3090.03	631.9	False	13C2-PFOA	40562.01	100.00	PFOA	0.055	0.051	✓
PFNA_1	463.0 / 419.0	3.01	963908.43	2992.35	776.8	False	13C2-PFOA	40562.01	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.01	312683.24	2898.28	852.2	False	13C2-PFOA	40562.01	100.00	PFNA	0.324	0.329	✓
PFOS_1	499.0 / 80.0	3.00	1554325.95	2360.87	1646.1	False	13C4-PFOS	168690.88	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.00	332800.66	2702.85	1037.2	False	13C4-PFOS	168690.88	287.00	PFOS	0.214	0.189	✓
PFDA_1	513.0 / 469.0	3.37	957298.04	2893.16	1037.9	False	13C2-PFOA	40562.01	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.37	37632.74	3075.11	633.8	False	13C2-PFOA	40562.01	100.00	PFDA	0.039	0.037	✓
PFUnA_1	563.0 / 519.0	3.69	913460.98	2934.26	881.7	False	13C2-PFOA	40562.01	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	47933.73	3461.20	742.0	False	13C2-PFOA	40562.01	100.00	PFUnA	0.052	0.046	✓
PFDoA_1	613.0 / 569.0	3.97	852984.25	2962.97	754.0	False	13C2-PFOA	40562.01	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.97	142447.03	2913.03	609.0	False	13C2-PFOA	40562.01	100.00	PFDoA	0.167	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.21	746761.18	2939.28	817.8	False	13C2-PFOA	40562.01	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.21	53030.30	2954.12	532.9	False	13C2-PFOA	40562.01	100.00	PFTTrDA	0.071	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.42	973564.30	3536.26	1284.4	False	13C2-PFOA	40562.01	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.42	50697.35	3735.29	982.0	False	13C2-PFOA	40562.01	100.00	PFTTeDA	0.052	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.52	172563.56	3029.20	1226.3	False	d3-MeFOSAA	25892.96	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.52	83701.42	3225.96	2019.0	False	d3-MeFOSAA	25892.96	400.00	NMeFOSAA	0.485	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.68	164348.43	2910.58	1348.6	False	d3-MeFOSAA	25892.96	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.69	10079.43	2553.66	432.7	False	d3-MeFOSAA	25892.96	400.00	NEtFOSAA	0.061	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.79	33518.81	115.64	781.8	False	13C2-PFOA	40562.01	100.00				
13C2-PFDA	515.0 / 470.0	3.36	40368.74	105.43	1053.1	False	13C2-PFOA	40562.01	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.68	26111.41	377.40	659.6	False	d3-MeFOSAA	25892.96	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.92	613004.03	2909.61	943.0	False	13C2-PFOA	40562.01	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.92	18222.68	3122.06	449.0	False	13C2-PFOA	40562.01	100.00	HFPO-DA	0.030	0.028	✓
ADONA_1	377.0 / 251.0	2.25	1475378.56	2820.15	1498.2	False	13C2-PFOA	40562.01	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.25	14340.22	2703.30	585.0	False	13C2-PFOA	40562.01	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	24239.05	110.11	239.5	False	13C2-PFOA	40562.01	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	2264940.42	2476.17	1967.0	False	13C4-PFOS	168690.88	287.00	9Cl-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 11/06/2019 2:39:40 PM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	31894.08	2482.19	435.1	False	13C4-PFOS	168690.88	287.00	9CI-PF3ONS	0.014	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.82	1831754.71	2469.74	1798.0	False	13C4-PFOS	168690.88	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.82	17278.53	2562.28	299.4	False	13C4-PFOS	168690.88	287.00	11CI-PF3OUdS	0.009	0.009	✓

Sample Name	I3532-FS(0)	Injection Vial	35
Sample ID	C2-1307-DW0001-20190605	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:21:17 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	20966.28	61.97	313.3	False	13C4-PFOS	161556.23	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.46	5948.00	59.09	135.4	False	13C4-PFOS	161556.23	287.00	PFBS	0.284	0.308	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFHxA	N/A	0.079	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFHpA	N/A	0.018	✓
PFHxS_1	399.0 / 80.0	2.23	152498.65	385.70	329.1	False	13C4-PFOS	161556.23	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	41681.80	364.82	258.5	False	13C4-PFOS	161556.23	287.00	PFHxS	0.273	0.299	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFOA	N/A	0.051	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFNA	N/A	0.329	✓
PFOS_1	499.0 / 80.0	2.88	440431.11	698.51	441.3	True	13C4-PFOS	161556.23	287.00	PFOS			
PFOS_2	499.0 / 99.0	2.89	39498.09	334.95	205.8	True	13C4-PFOS	161556.23	287.00	PFOS	0.090	0.189	✓
PFDA_1	513.0 / 469.0	3.38	1642.57	5.21	24.4	True	13C2-PFOA	38611.76	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFDA	N/A	0.037	
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFUnA	N/A	0.046	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFDoA	N/A	0.170	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	13799.59	52.66	101.1	True	13C2-PFOA	38611.76	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	PFTeDA	N/A	0.051	
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21970.41	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21970.41	400.00	NMeFOSAA	N/A	0.522	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21970.41	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21970.41	400.00	NEtFOSAA	N/A	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.79	35691.75	129.36	681.4	True	13C2-PFOA	38611.76	100.00				
13C2-PFDA	515.0 / 470.0	3.36	36718.01	100.74	989.4	False	13C2-PFOA	38611.76	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	25390.70	432.51	582.8	False	d3-MeFOSAA	21970.41	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	HFPO-DA	N/A	0.028	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38611.76	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.91	24855.54	118.62	282.4	False	13C2-PFOA	38611.76	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.21	846.24	0.97	29.5	True	13C4-PFOS	161556.23	287.00	9CI-PF3ONS			



PFAS Sample Quant Report

Created with Analyst Reporter
Printed: 11/06/2019 2:39:40 PM

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	161556.23	287.00	9CI-PF3ONS	N/A	0.014	
11CI-PF3OUdS_1	631.0 / 451.0	3.82	806.96	1.14	72.5	False	13C4-PFOS	161556.23	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	161556.23	287.00	11CI-PF3OUdS	N/A	0.009	

Sample Name	I3533-FS(0)	Injection Vial	36
Sample ID	C2-1307-FRB-20190605-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:30:13 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	174620.44	287.00	PFBS			
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	174620.44	287.00	PFBS	N/A	0.308	✓
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFHxA	N/A	0.079	✓
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFHpA	N/A	0.018	✓
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	174620.44	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	174620.44	287.00	PFHxS	N/A	0.299	✓
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFOA			
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFOA	N/A	0.051	✓
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFNA			
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFNA	N/A	0.329	✓
PFOS_1	499.0 / 80.0	3.01	4508.82	6.62	45.5	True	13C4-PFOS	174620.44	287.00	PFOS			
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	174620.44	287.00	PFOS	N/A	0.189	
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFDA			
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFDA	N/A	0.037	✓
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFUnA	N/A	0.046	✓
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFDoA	N/A	0.170	✓
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFTTrDA	N/A	0.069	✓
PFTeDA_1	713.0 / 669.0	4.42	12937.03	49.33	93.8	False	13C2-PFOA	38642.09	100.00	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	PFTeDA	N/A	0.051	
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21952.20	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21952.20	400.00	NMeFOSAA	N/A	0.522	✓
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21952.20	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	True	d3-MeFOSAA	21952.20	400.00	NEtFOSAA	N/A	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.80	31778.56	115.08	1245.8	False	13C2-PFOA	38642.09	100.00				
13C2-PFDA	515.0 / 470.0	3.36	36717.41	100.66	3845.4	False	13C2-PFOA	38642.09	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	24226.75	413.02	491.6	False	d3-MeFOSAA	21952.20	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	HFPO-DA	N/A	0.028	✓
ADONA_1	377.0 / 251.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	ADONA			
ADONA_2	377.0 / 85.0	N/A	N/A	N/A	N/A	True	13C2-PFOA	38642.09	100.00	ADONA	N/A	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	22875.86	109.09	272.4	False	13C2-PFOA	38642.09	100.00		N/A	N/A	✓
9CI-PF3ONS_1	531.0 / 351.0	3.21	1160.86	1.23	56.0	True	13C4-PFOS	174620.44	287.00	9CI-PF3ONS			



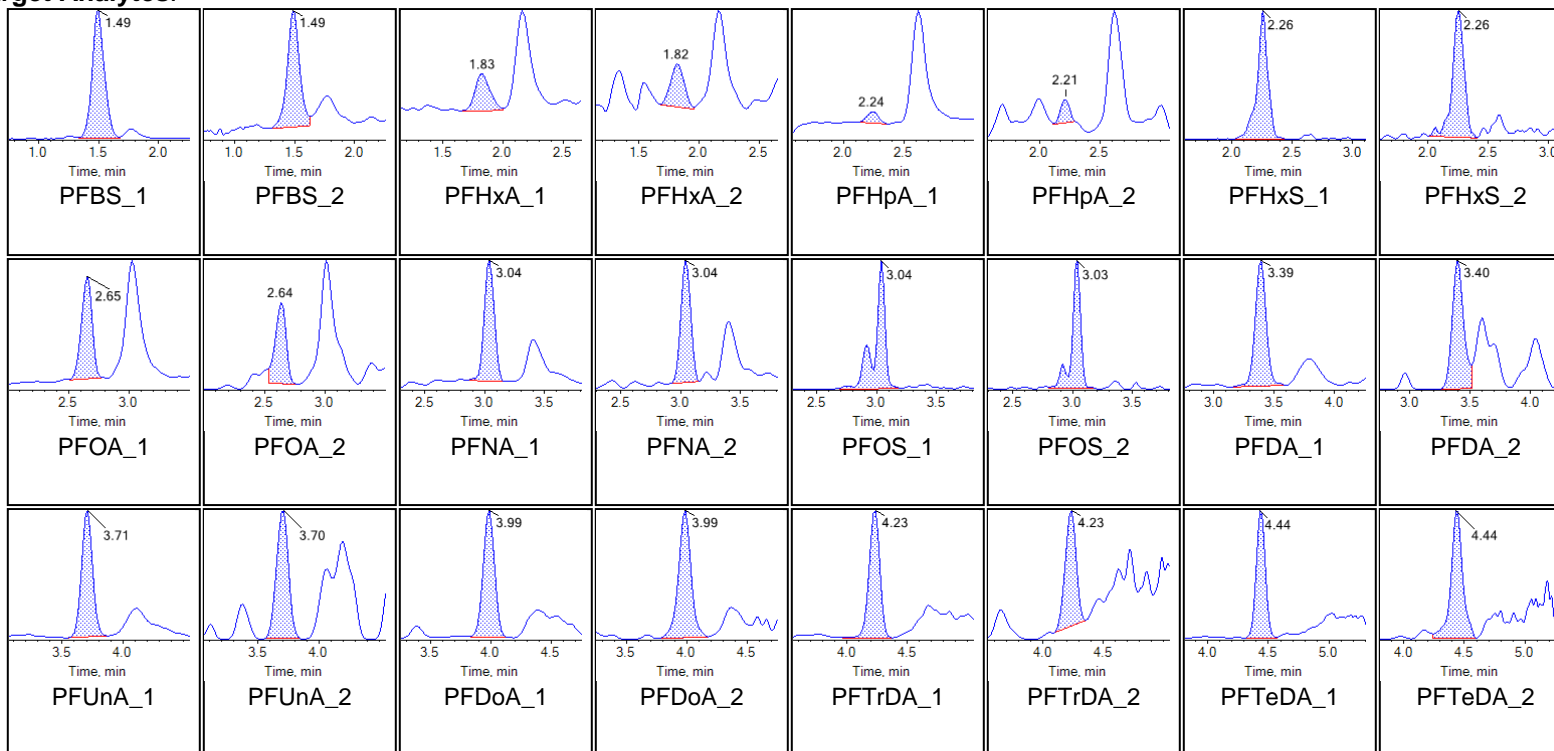
Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	174620.44	287.00	9CI-PF3ONS	N/A	0.014	
11CI-PF3OUdS_1	631.0 / 451.0	3.80	495.12	0.64	48.9	False	13C4-PFOS	174620.44	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	N/A	N/A	N/A	N/A	True	13C4-PFOS	174620.44	287.00	11CI-PF3OUdS	N/A	0.009	

Chromatograms

Sample Name	KL64	Injection Vial	21
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:15:59 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

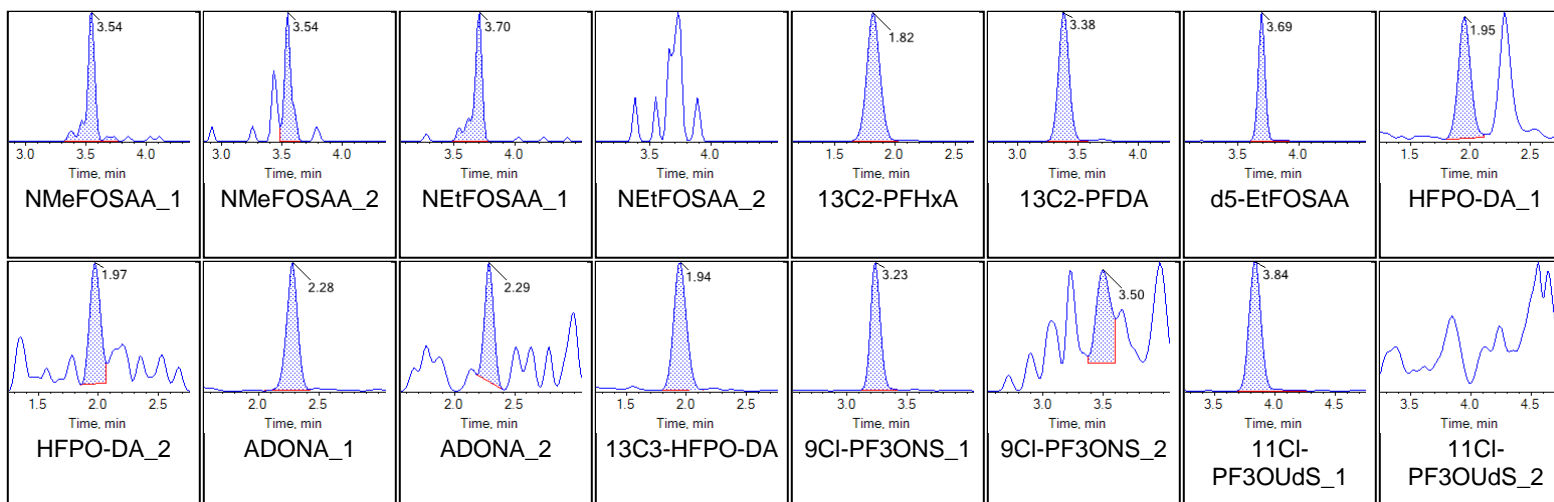
Chromatograms

Target Analytes:

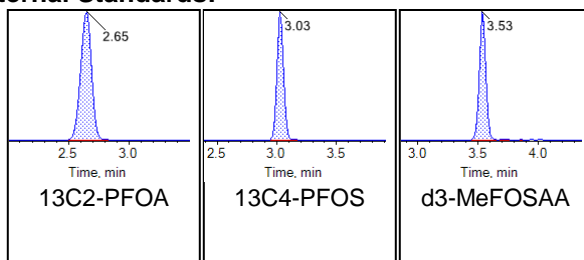




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

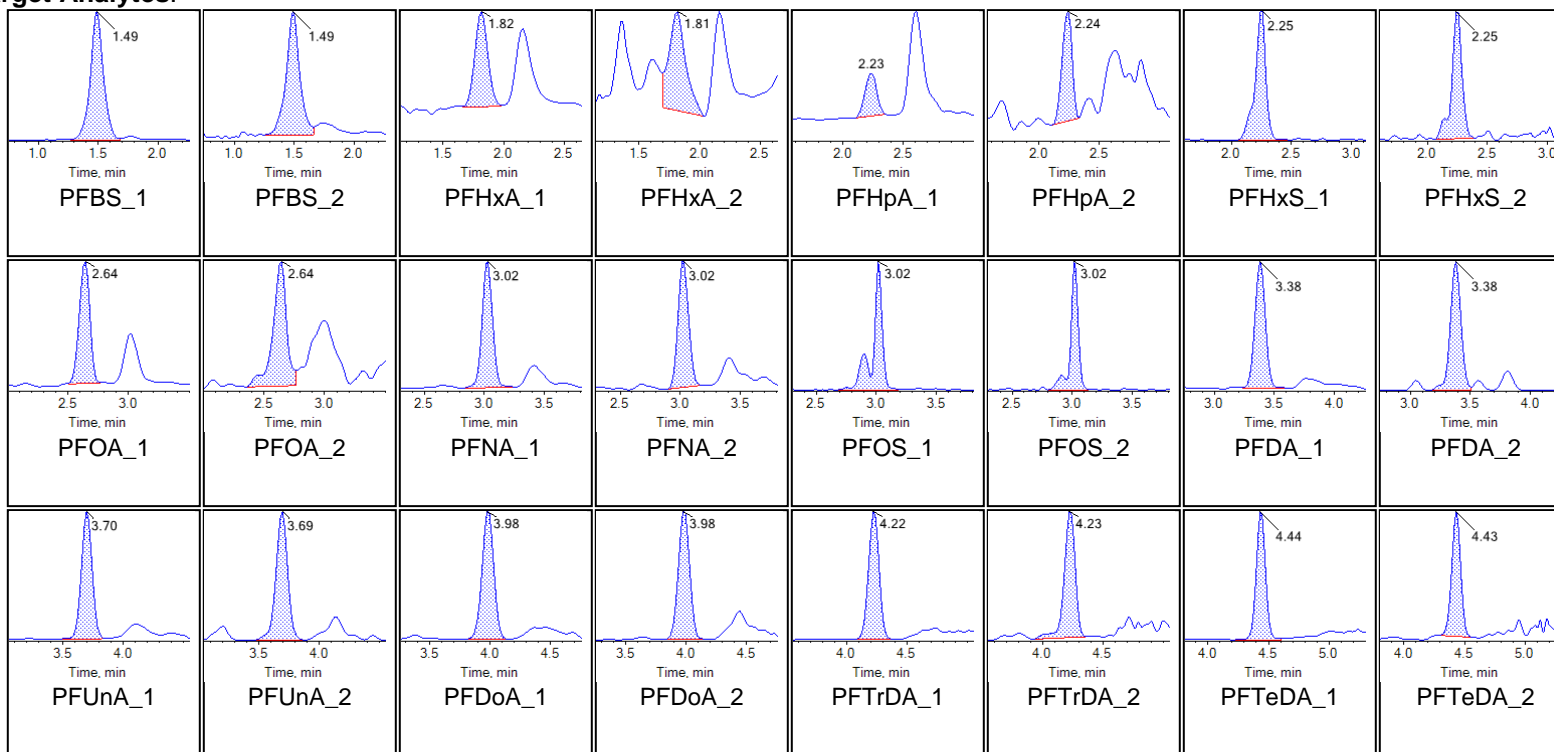
Internal Standards:



Sample Name	KL65	Injection Vial	22
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:24:55 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

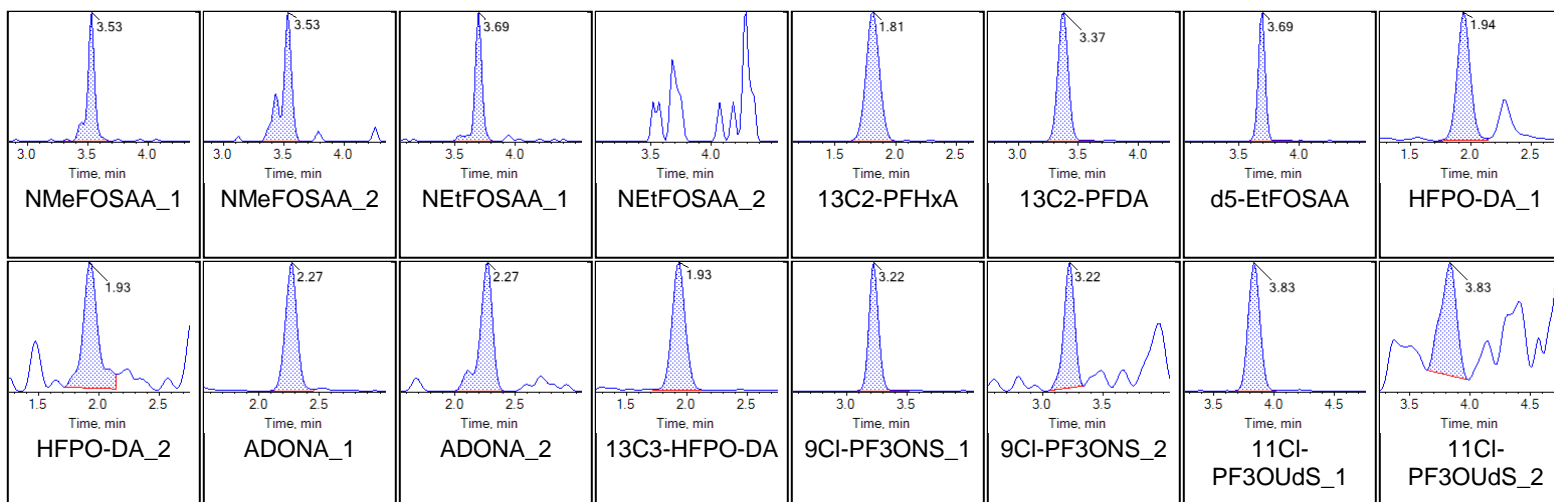
Chromatograms

Target Analytes:

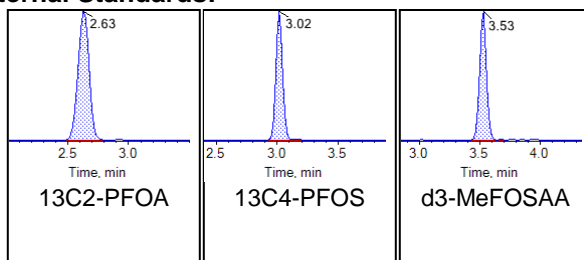




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

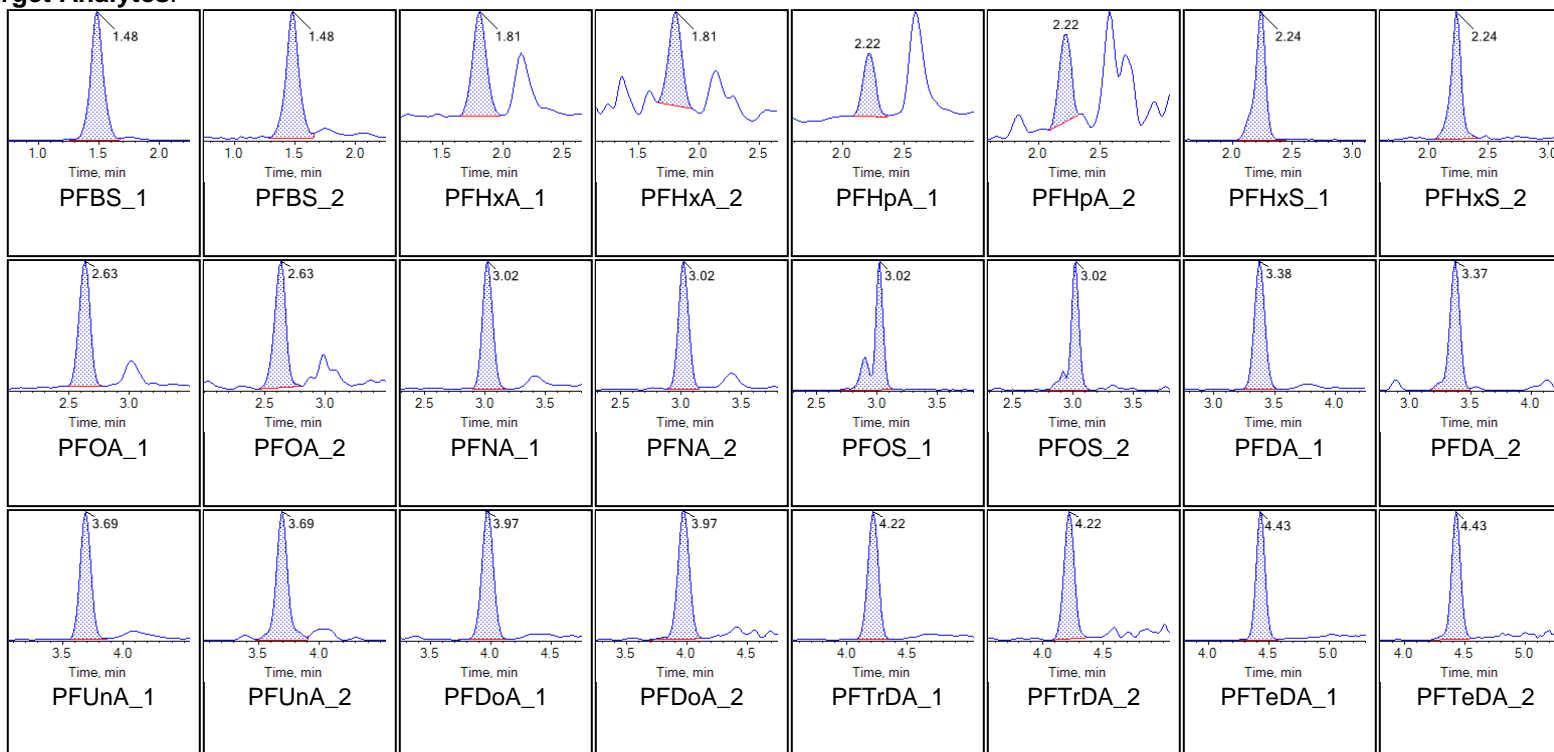
Internal Standards:



Sample Name	KL66	Injection Vial	23
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:33:52 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

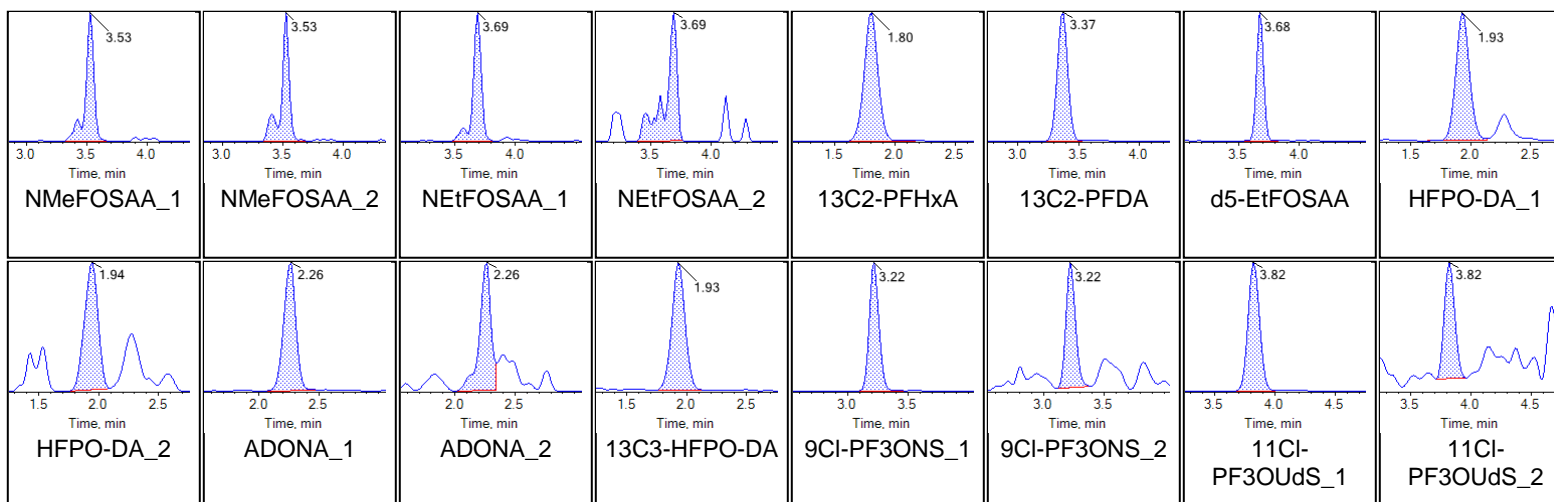
Chromatograms

Target Analytes:

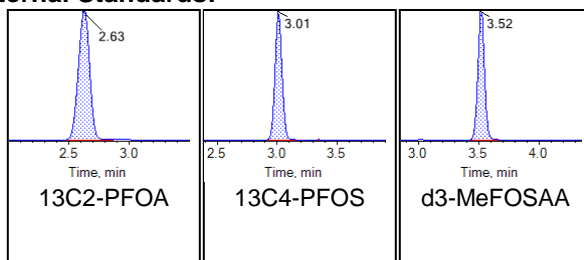




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

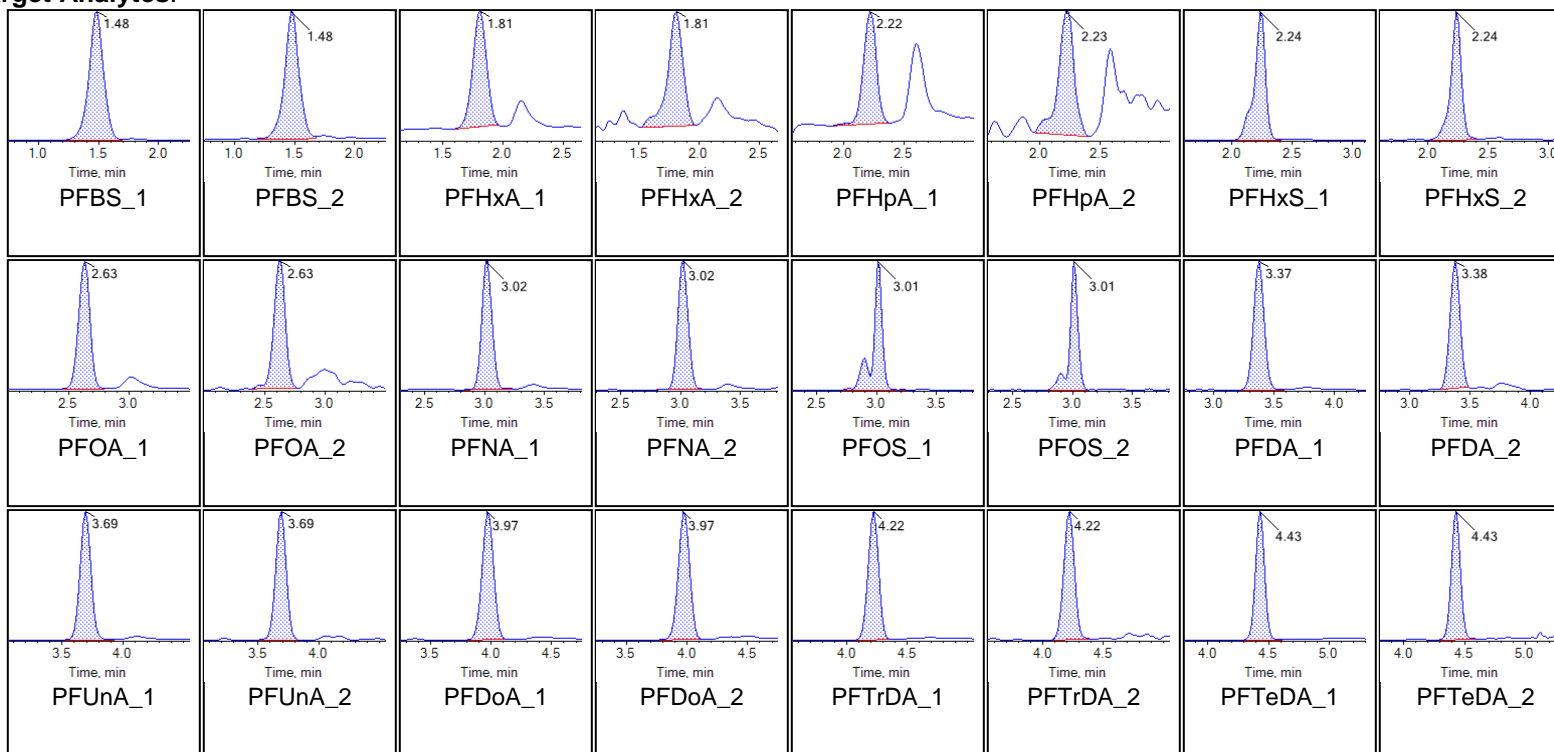
Internal Standards:



Sample Name	KL67	Injection Vial	24
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:42:49 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

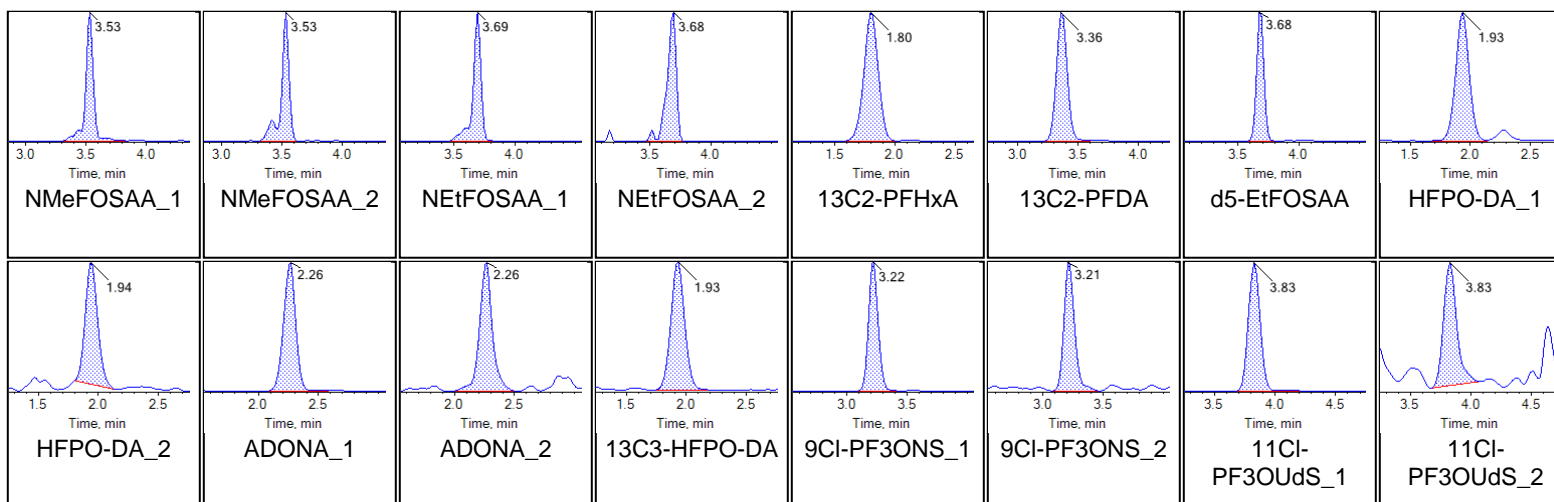
Chromatograms

Target Analytes:

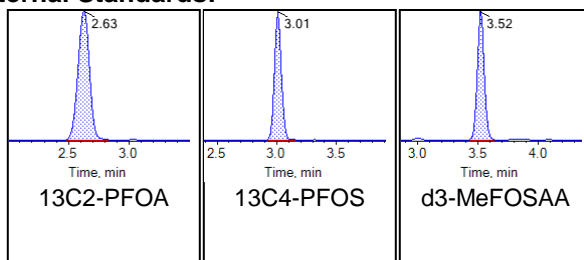




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

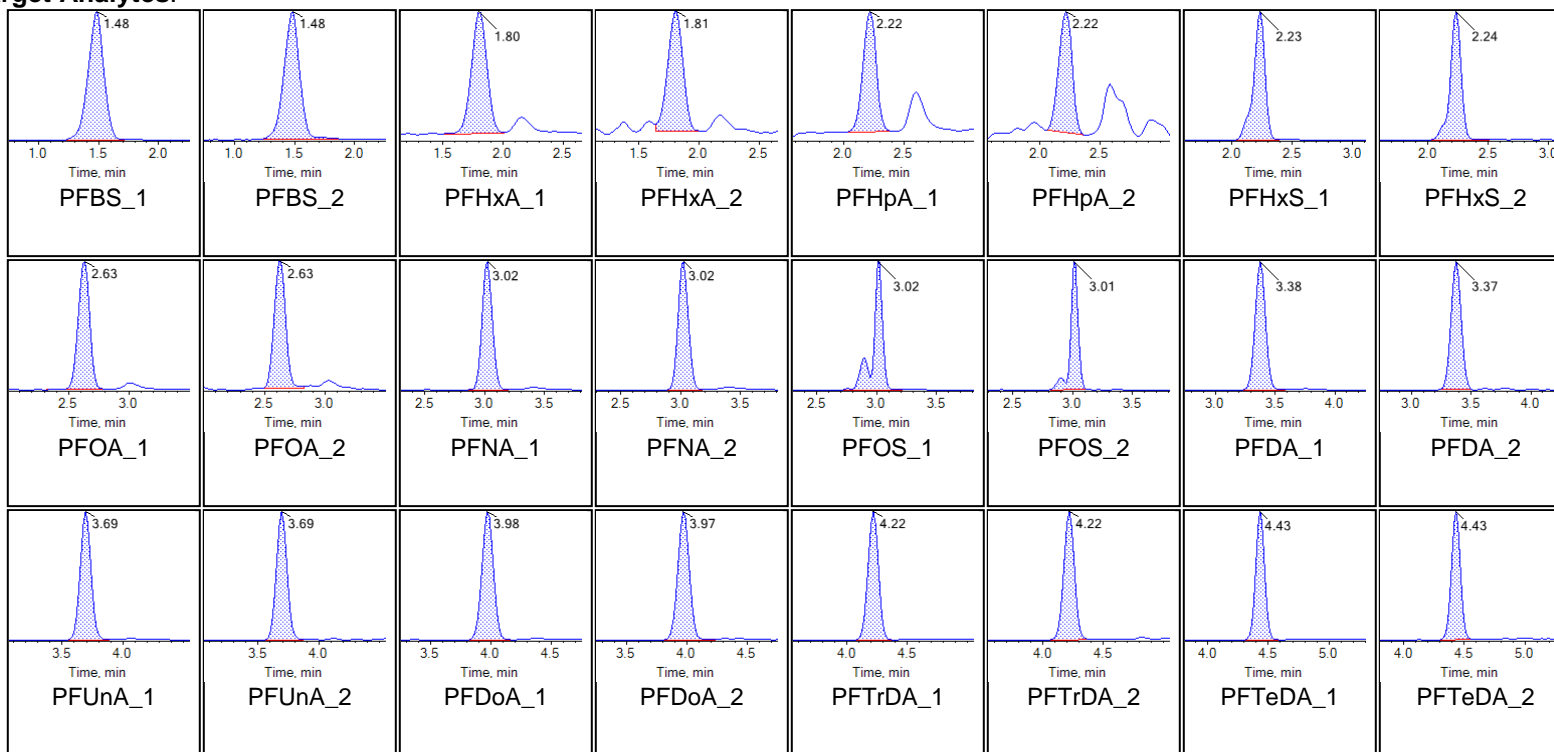
Internal Standards:



Sample Name	KL68	Injection Vial	25
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 10:51:45 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

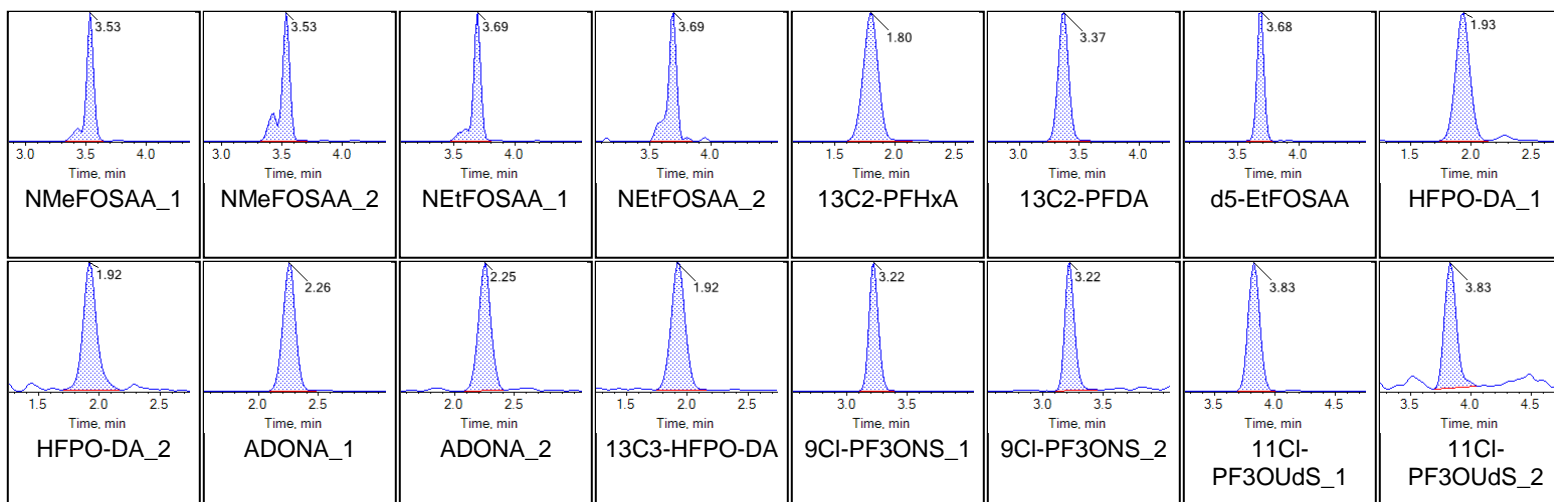
Chromatograms

Target Analytes:

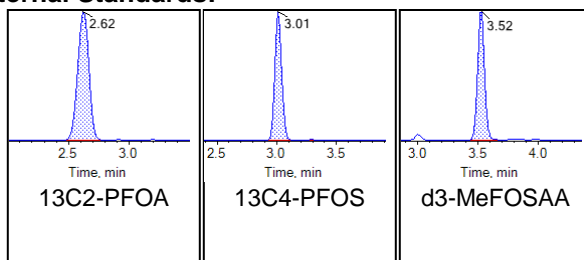




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

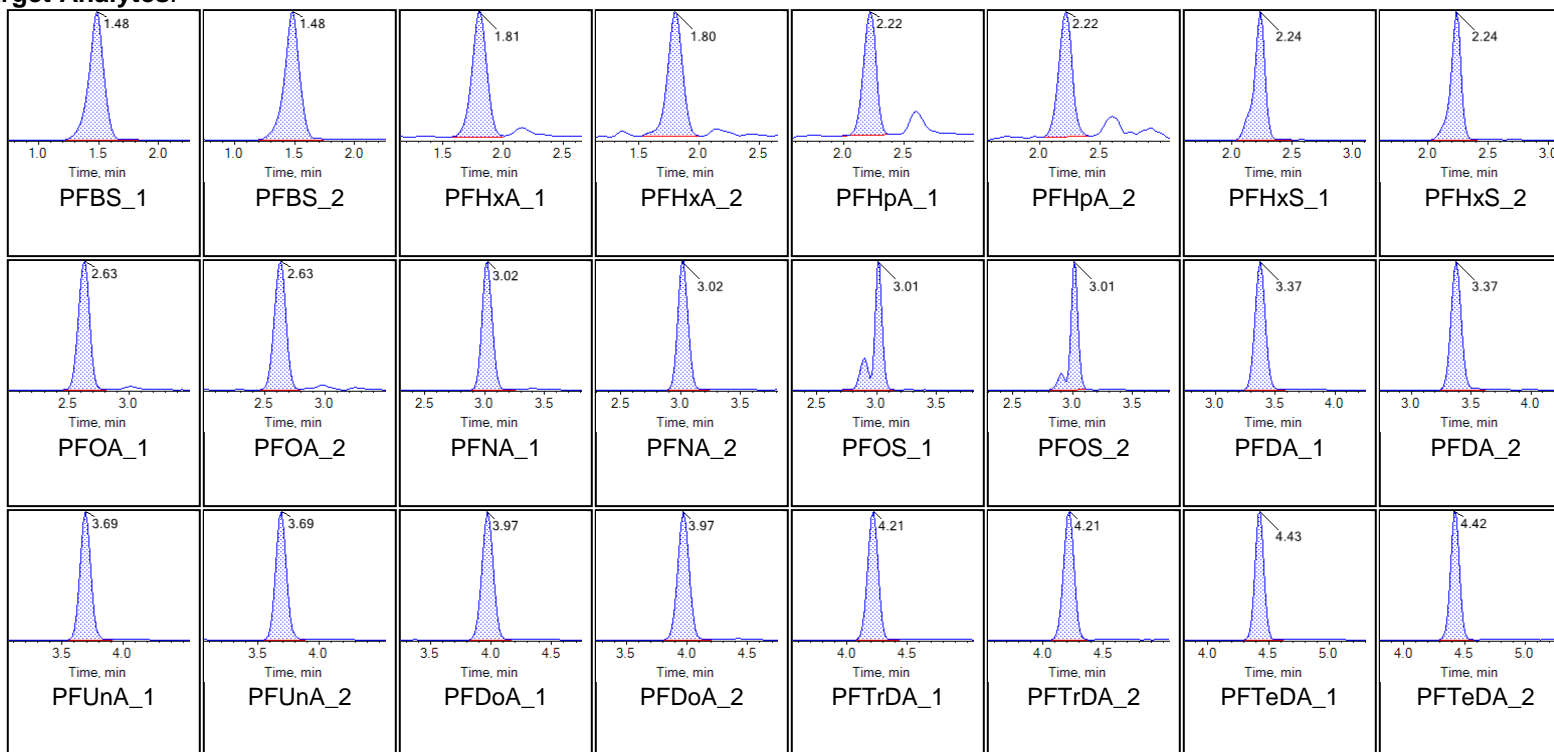
Internal Standards:



Sample Name	KL69	Injection Vial	26
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:00:43 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

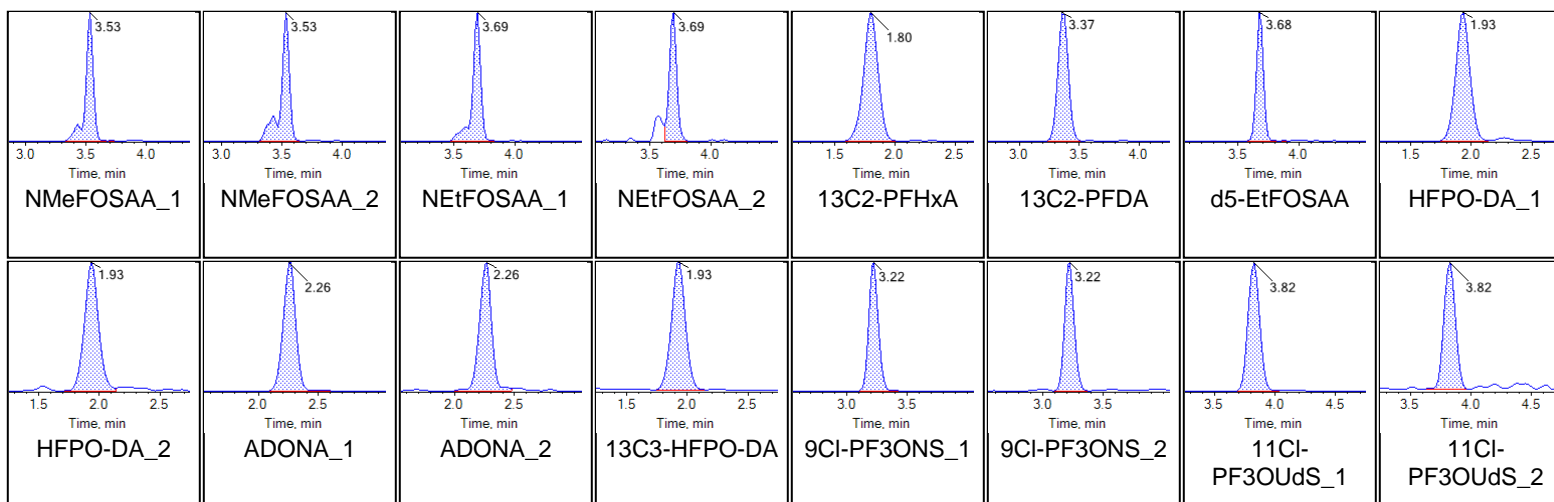
Chromatograms

Target Analytes:

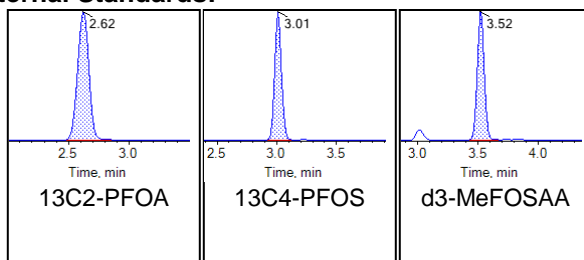




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

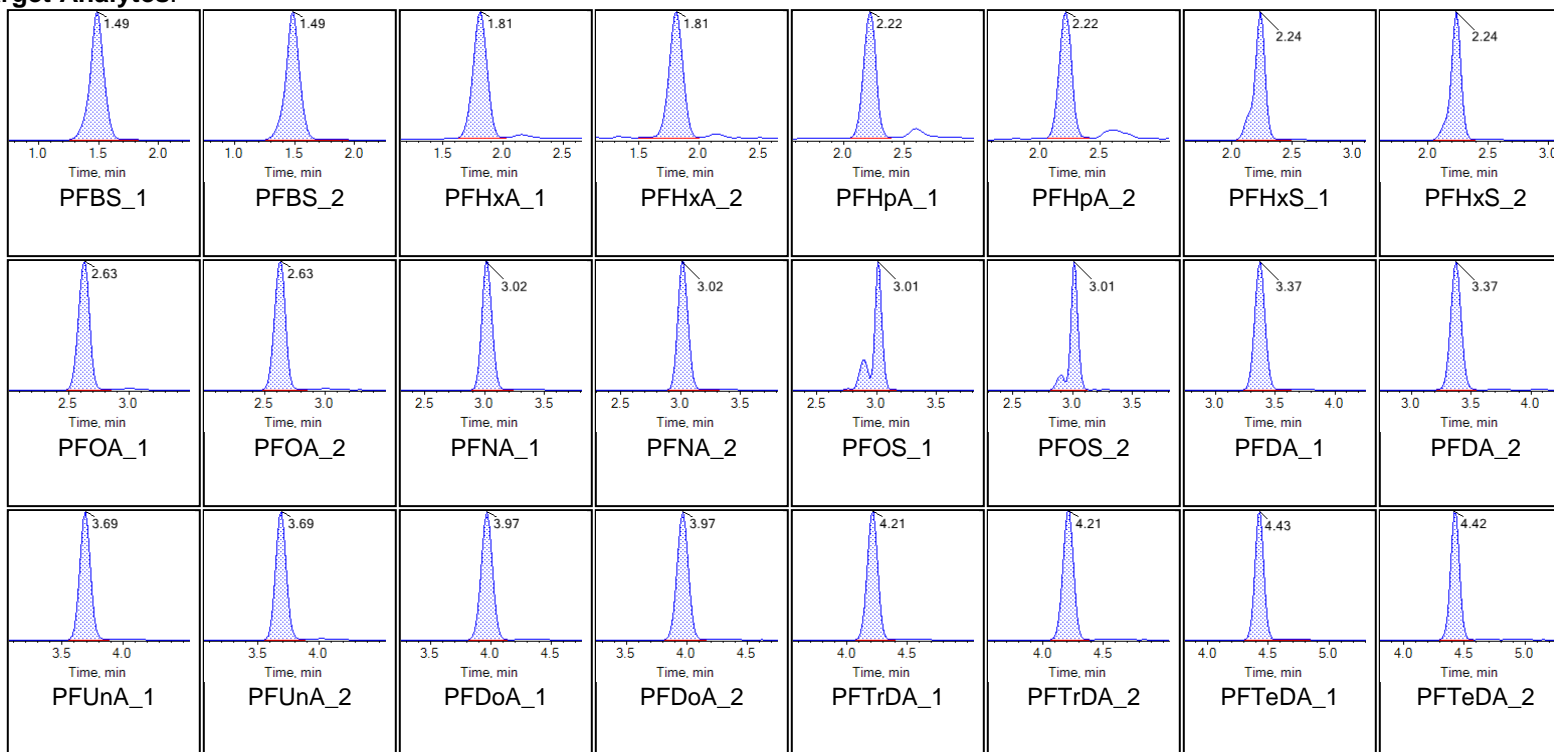
Internal Standards:



Sample Name	KL70	Injection Vial	27
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:09:41 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

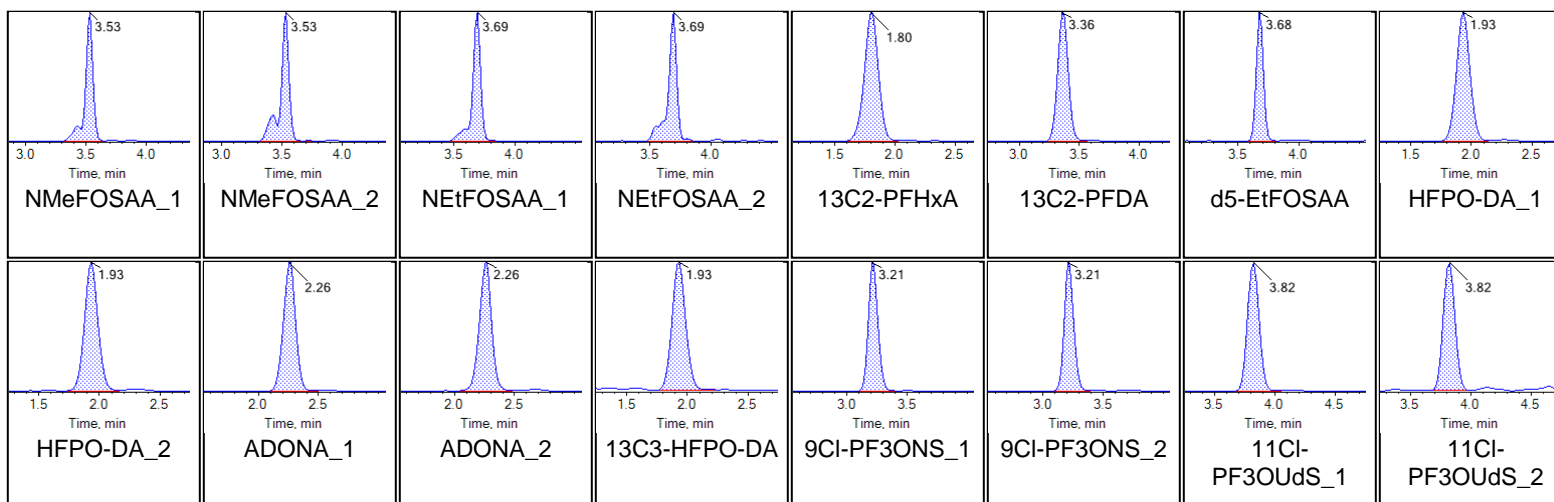
Chromatograms

Target Analytes:

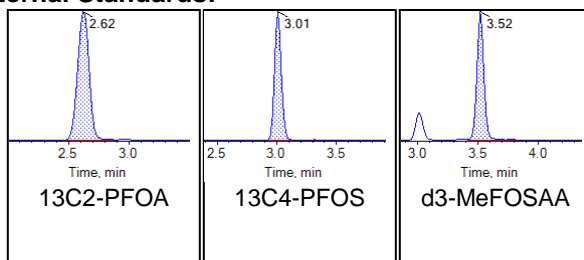




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Internal Standards:





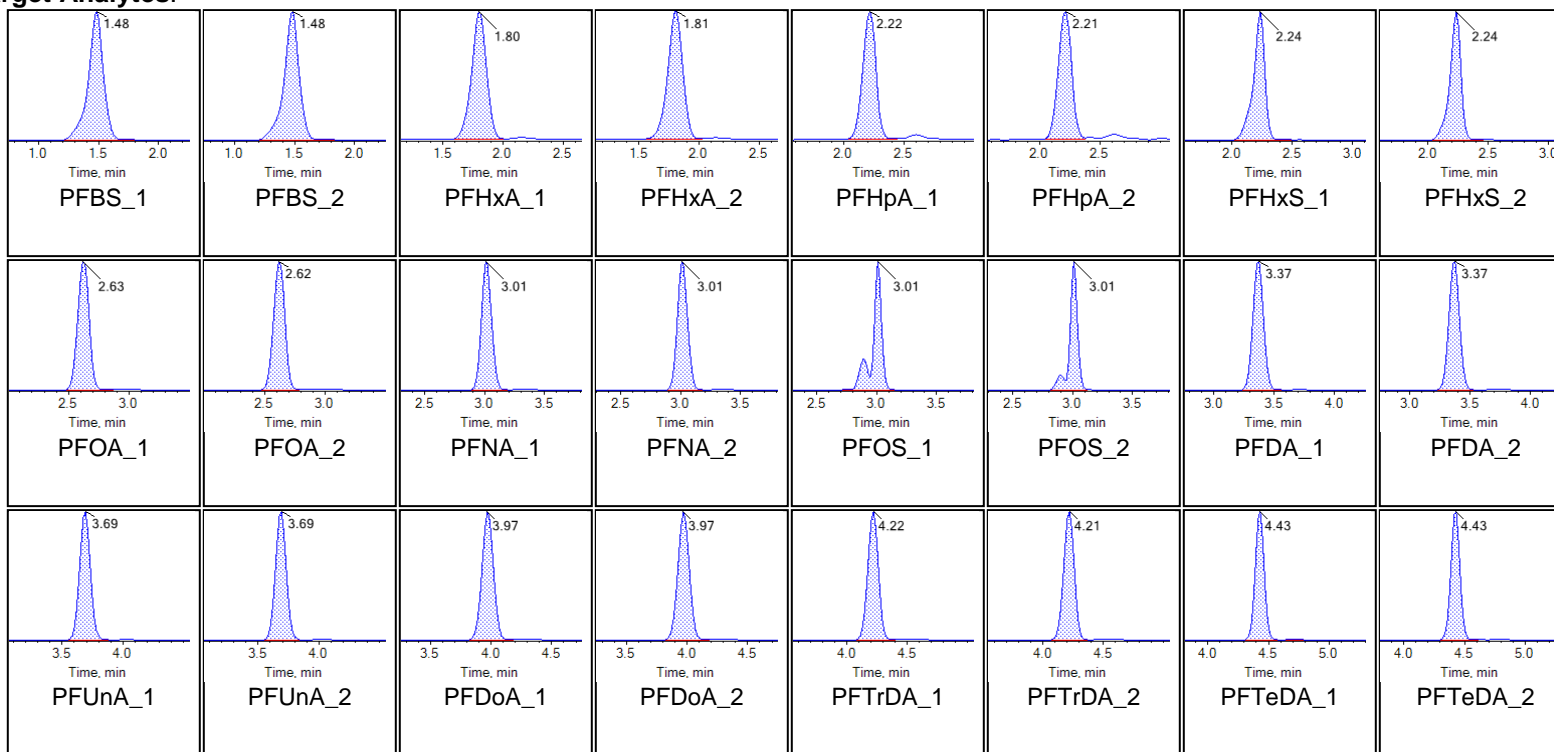
Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Sample Name	KL71	Injection Vial	28
Sample ID	L8	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:18:37 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

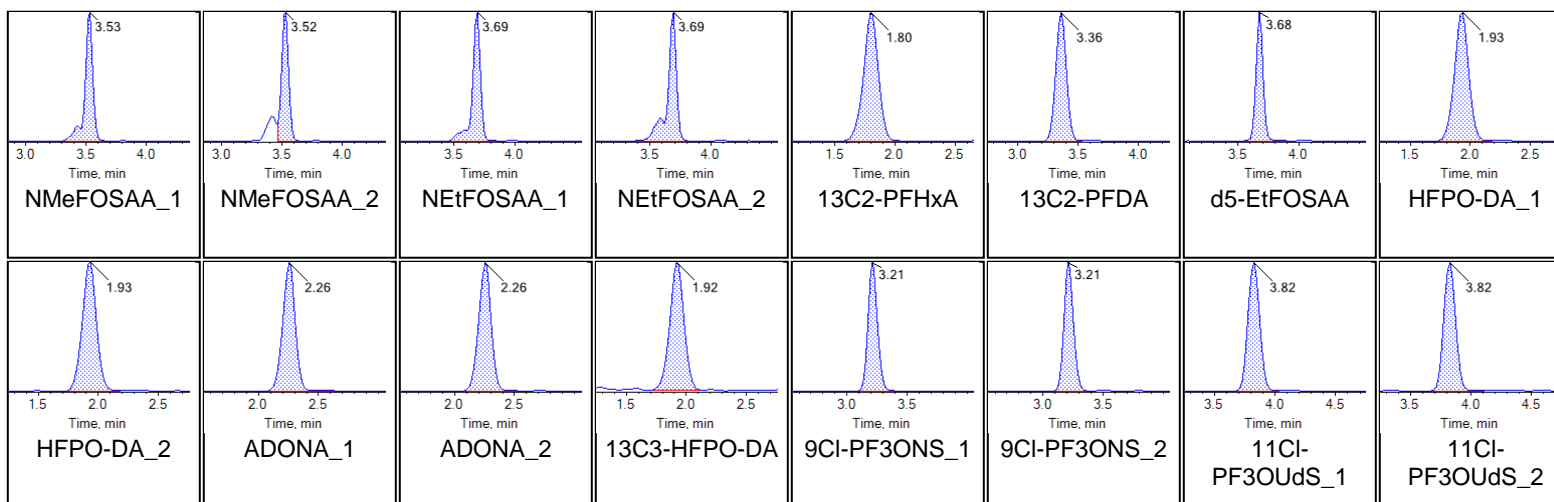
Chromatograms

Target Analytes:

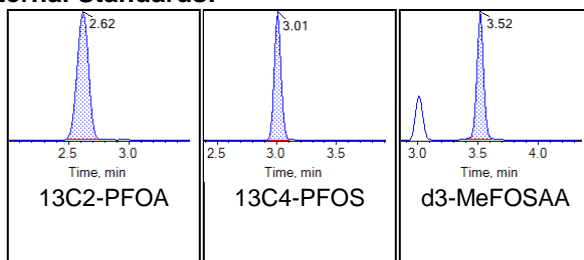




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Internal Standards:





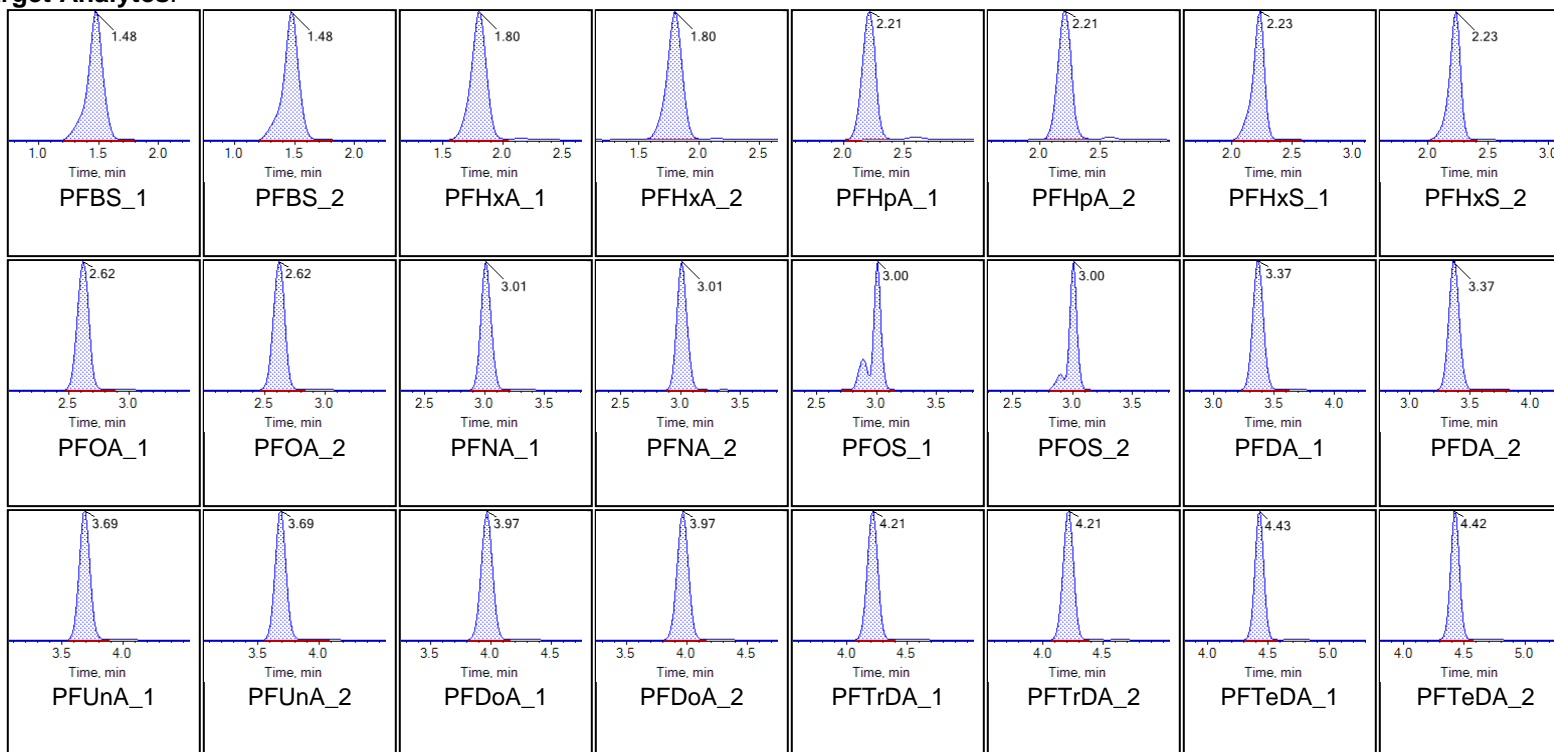
Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Sample Name	KL72	Injection Vial	29
Sample ID	L9	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:27:34 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

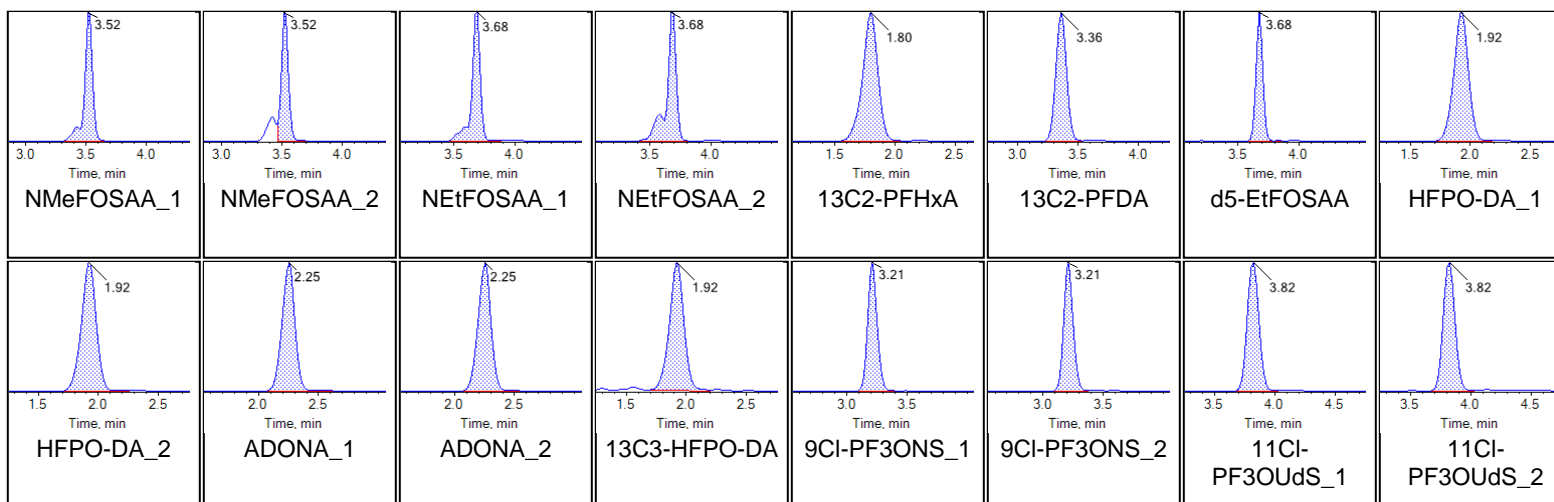
Chromatograms

Target Analytes:

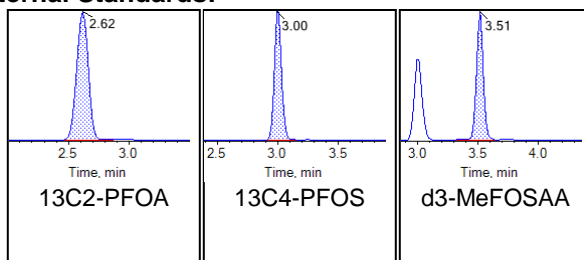




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

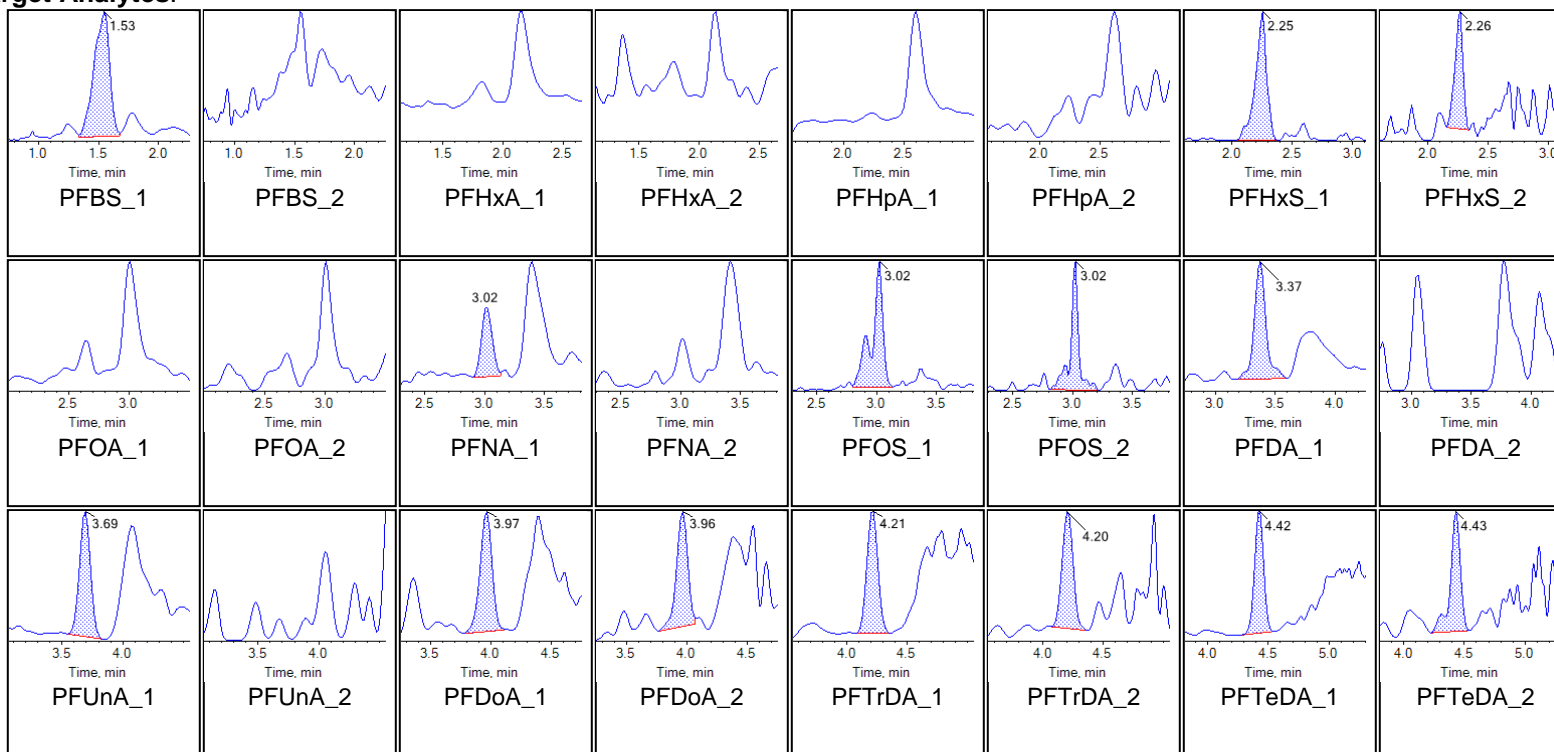
Internal Standards:



Sample Name	KL73 IB	Injection Vial	30
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:36:31 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

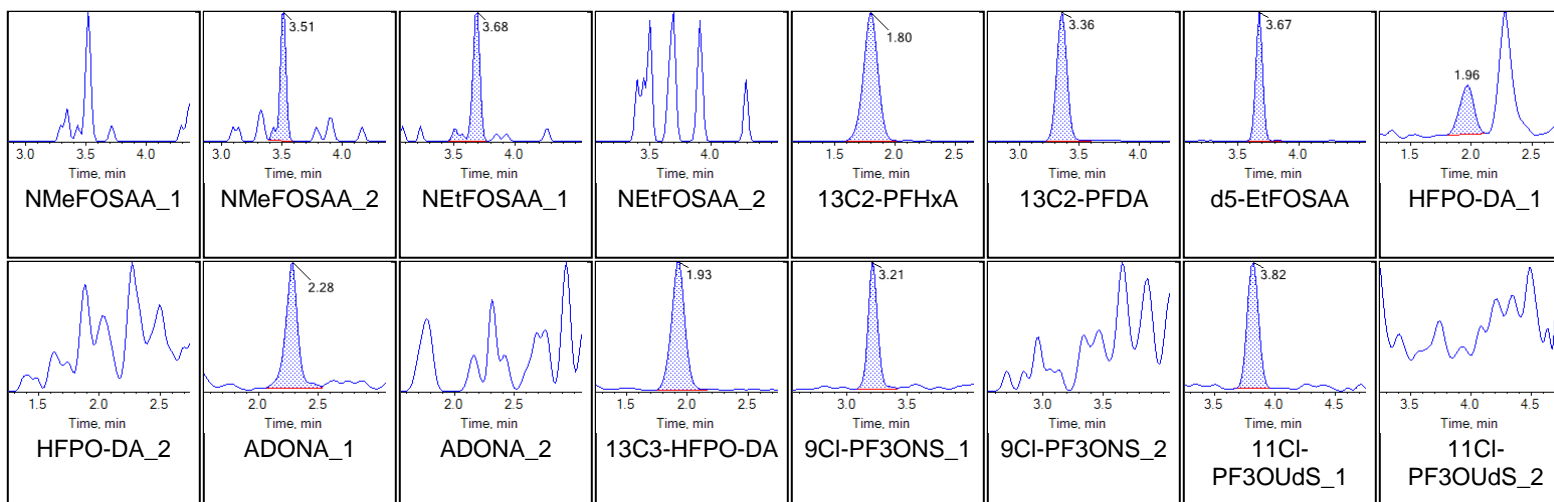
Chromatograms

Target Analytes:

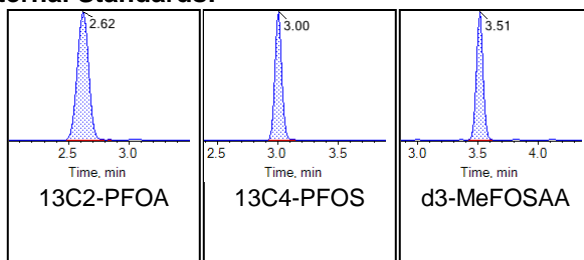




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Internal Standards:





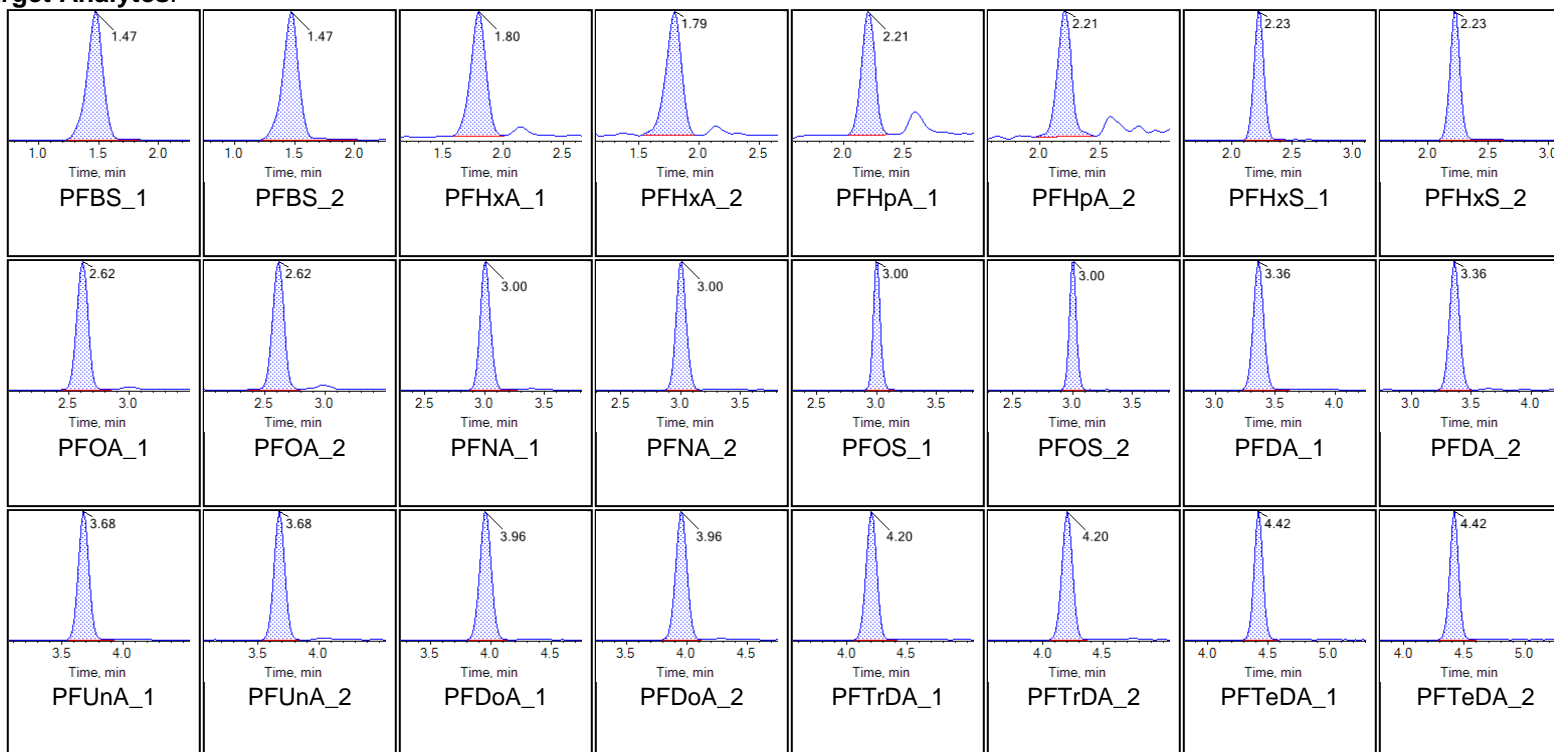
Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Sample Name	KL74 ICC	Injection Vial	31
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 11:45:29 AM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

Chromatograms

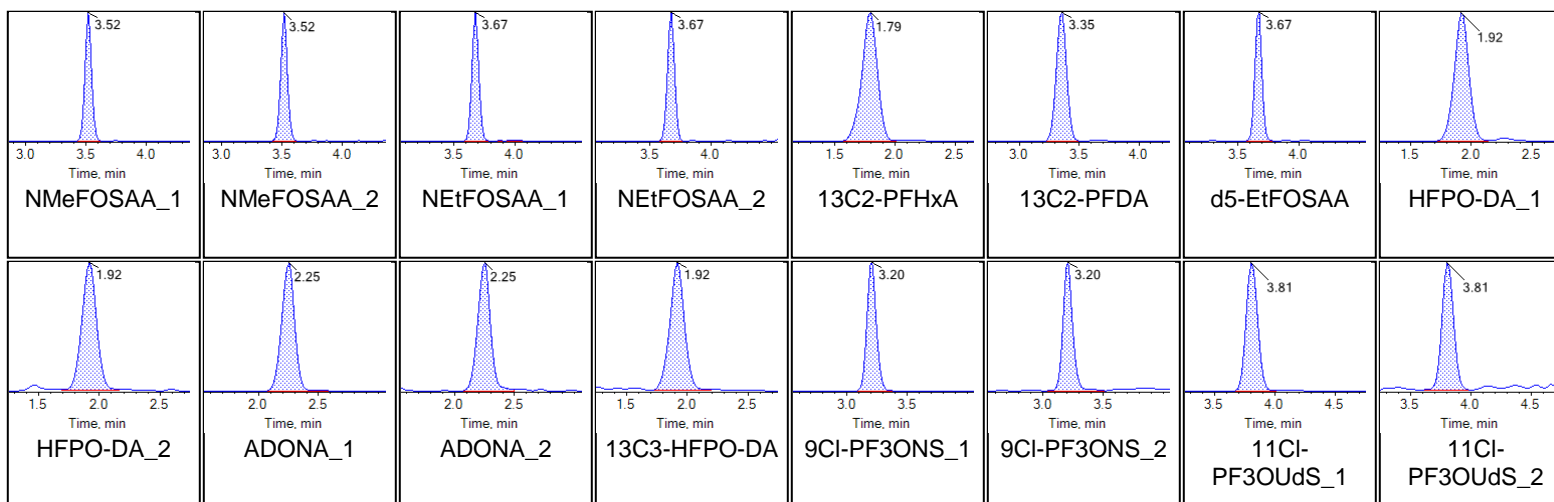
Target Analytes:



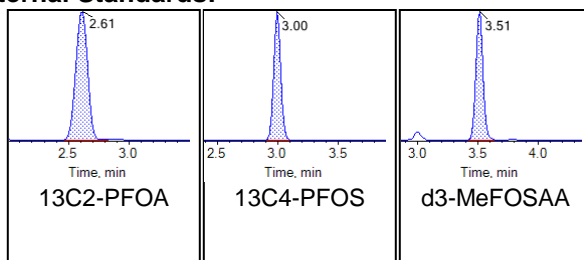


Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM



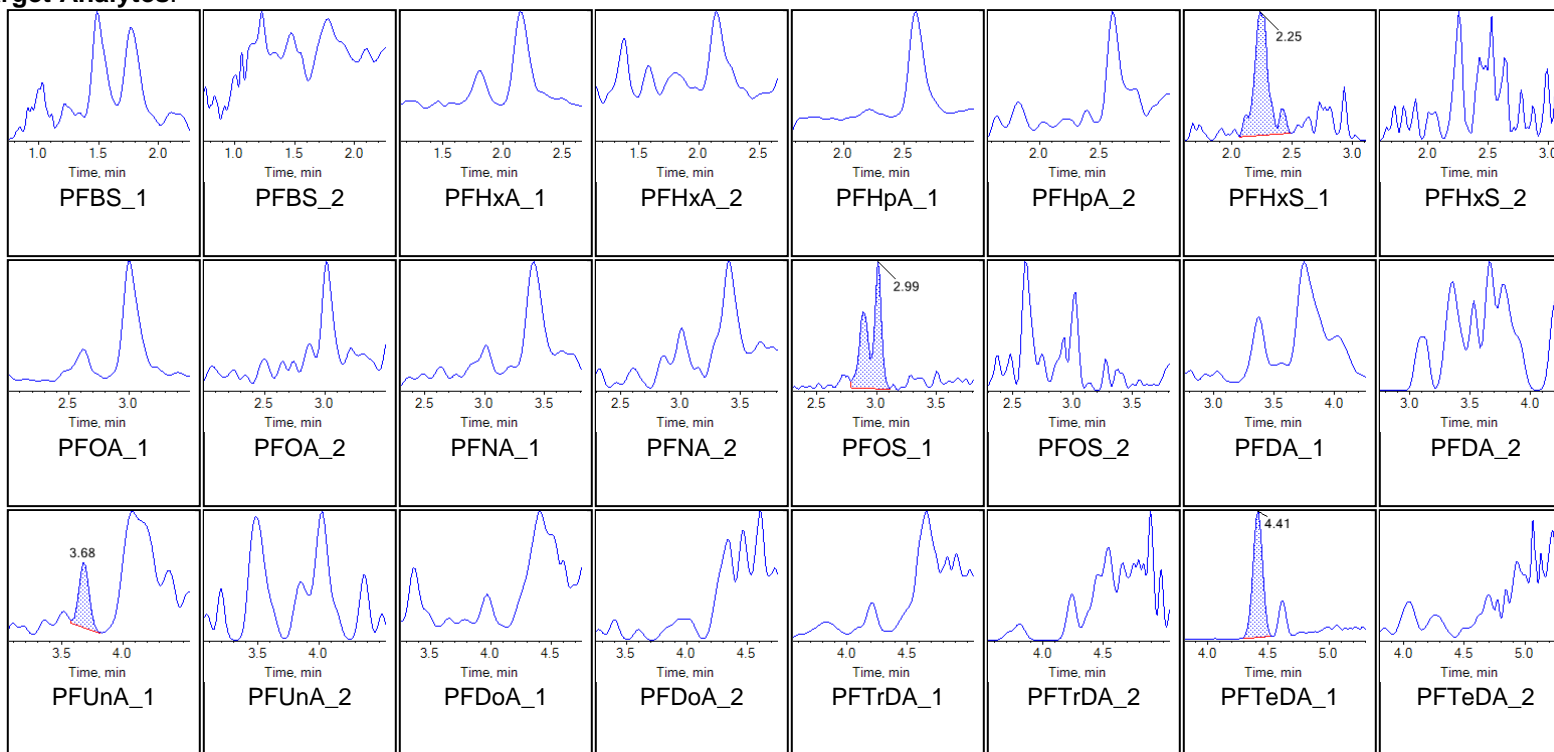
Internal Standards:



Sample Name	CU330PB-FS(0)	Injection Vial	33
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:03:23 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

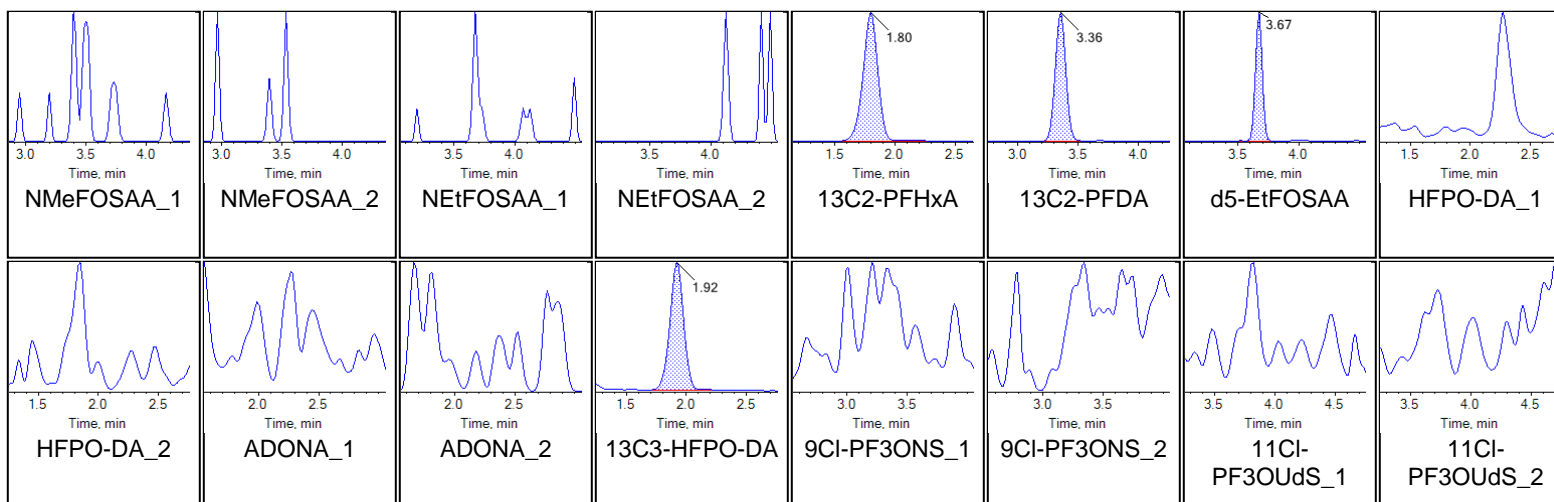
Chromatograms

Target Analytes:

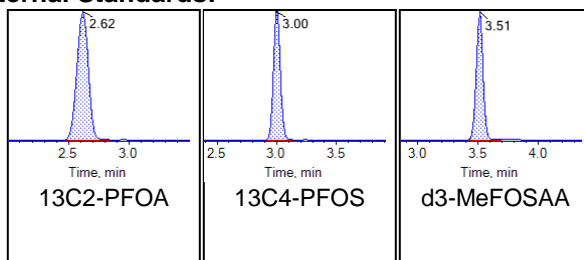




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Internal Standards:





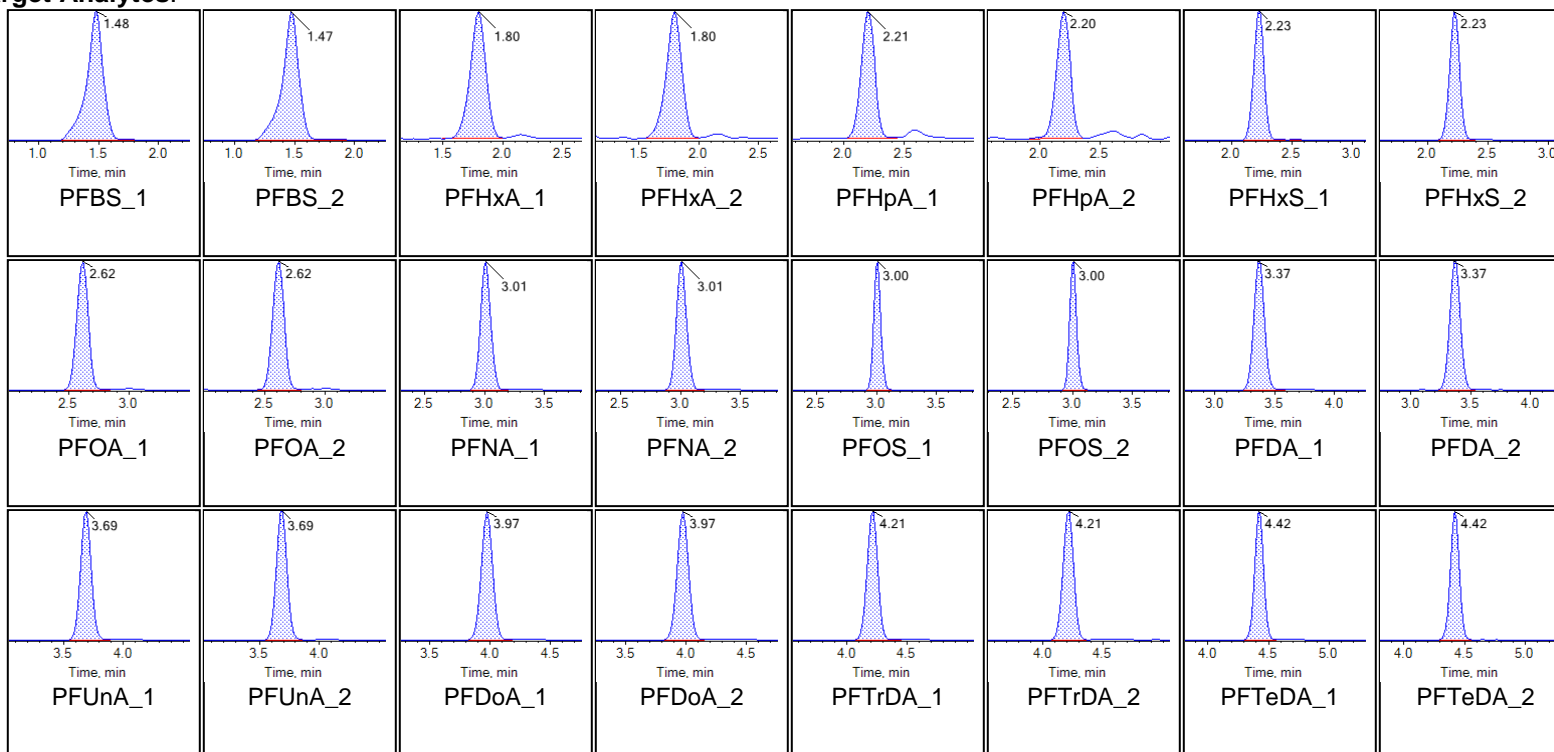
Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Sample Name	CU331LCS-FS(0)	Injection Vial	34
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:12:20 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

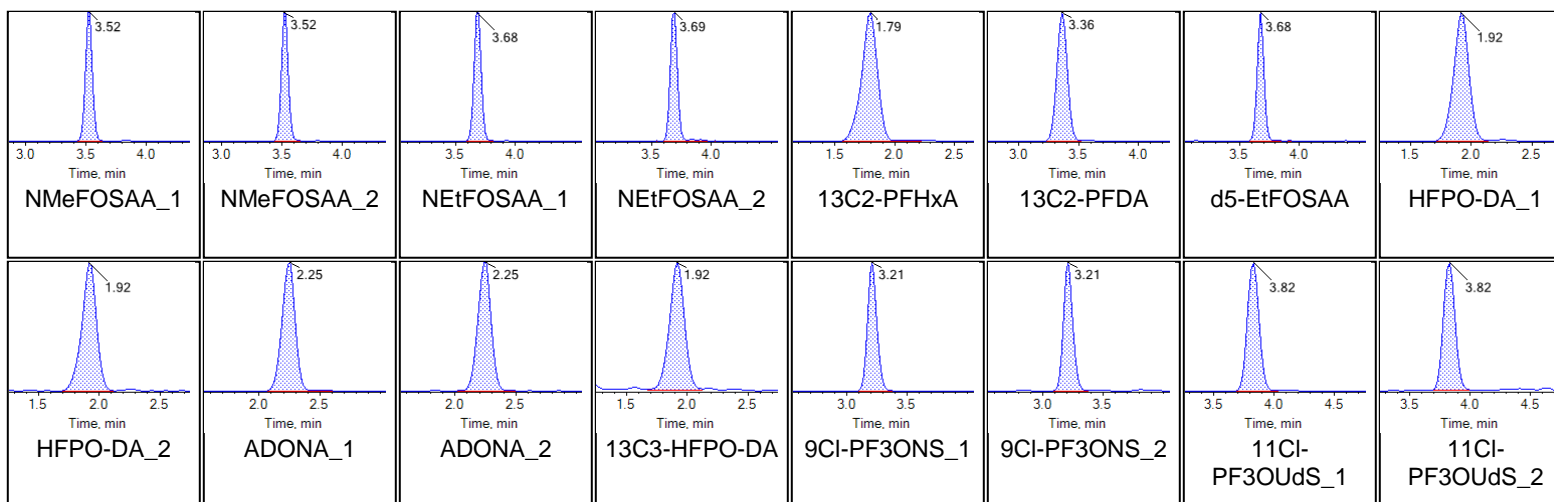
Chromatograms

Target Analytes:

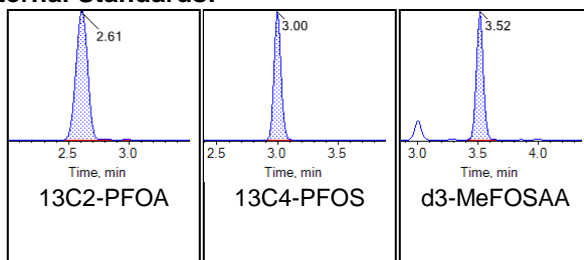




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Internal Standards:





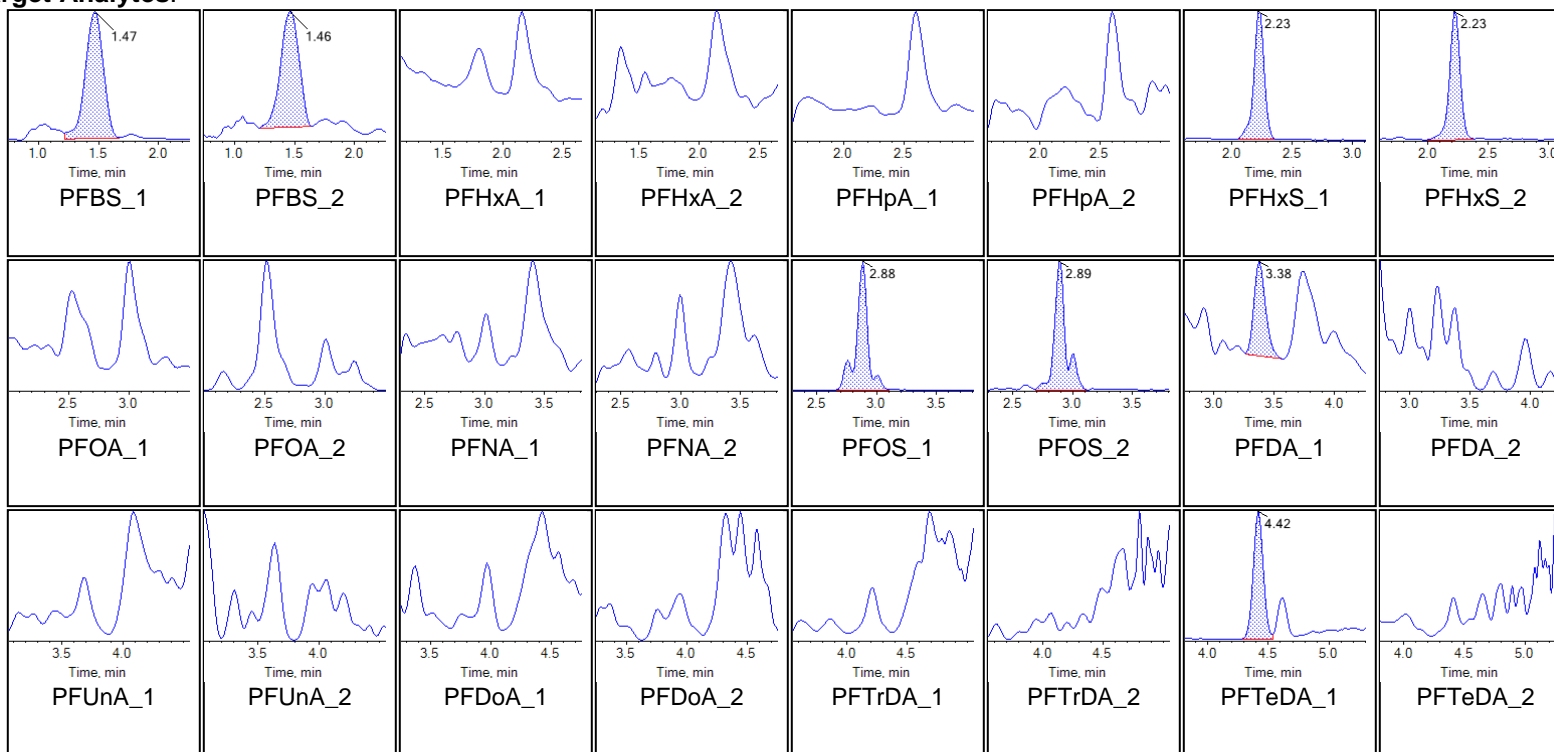
Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Sample Name	I3532-FS(0)	Injection Vial	35
Sample ID	C2-1307-DW0001-20190605	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:21:17 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

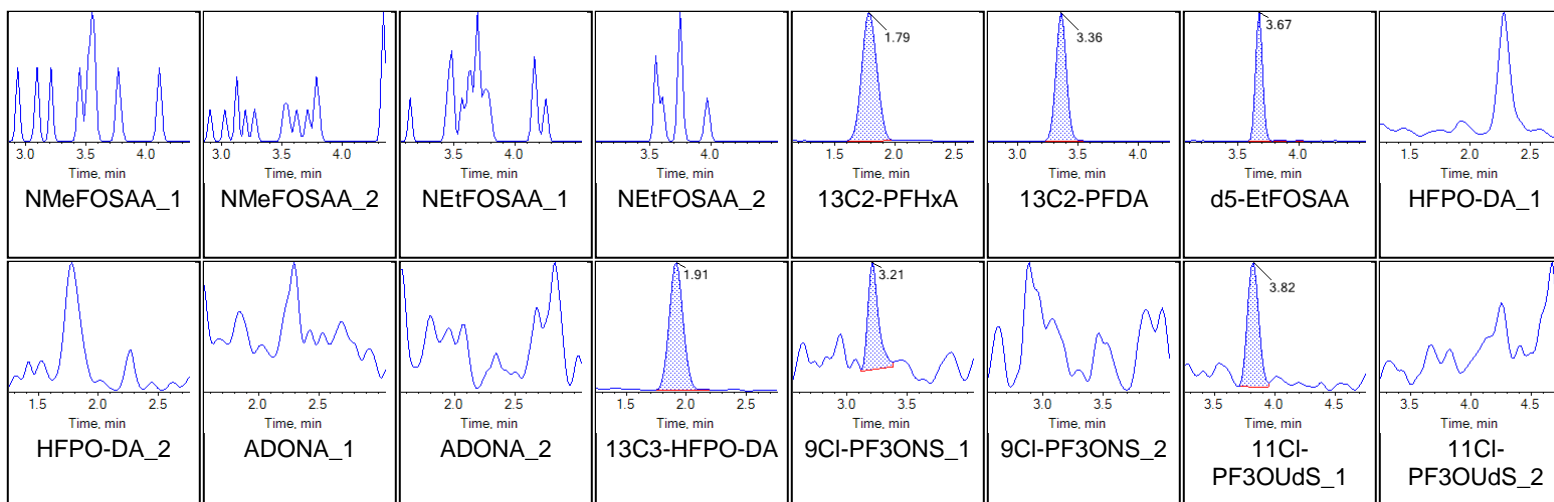
Chromatograms

Target Analytes:

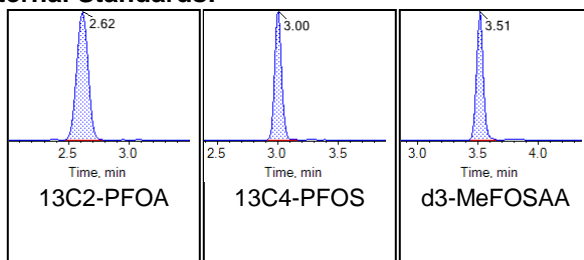




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

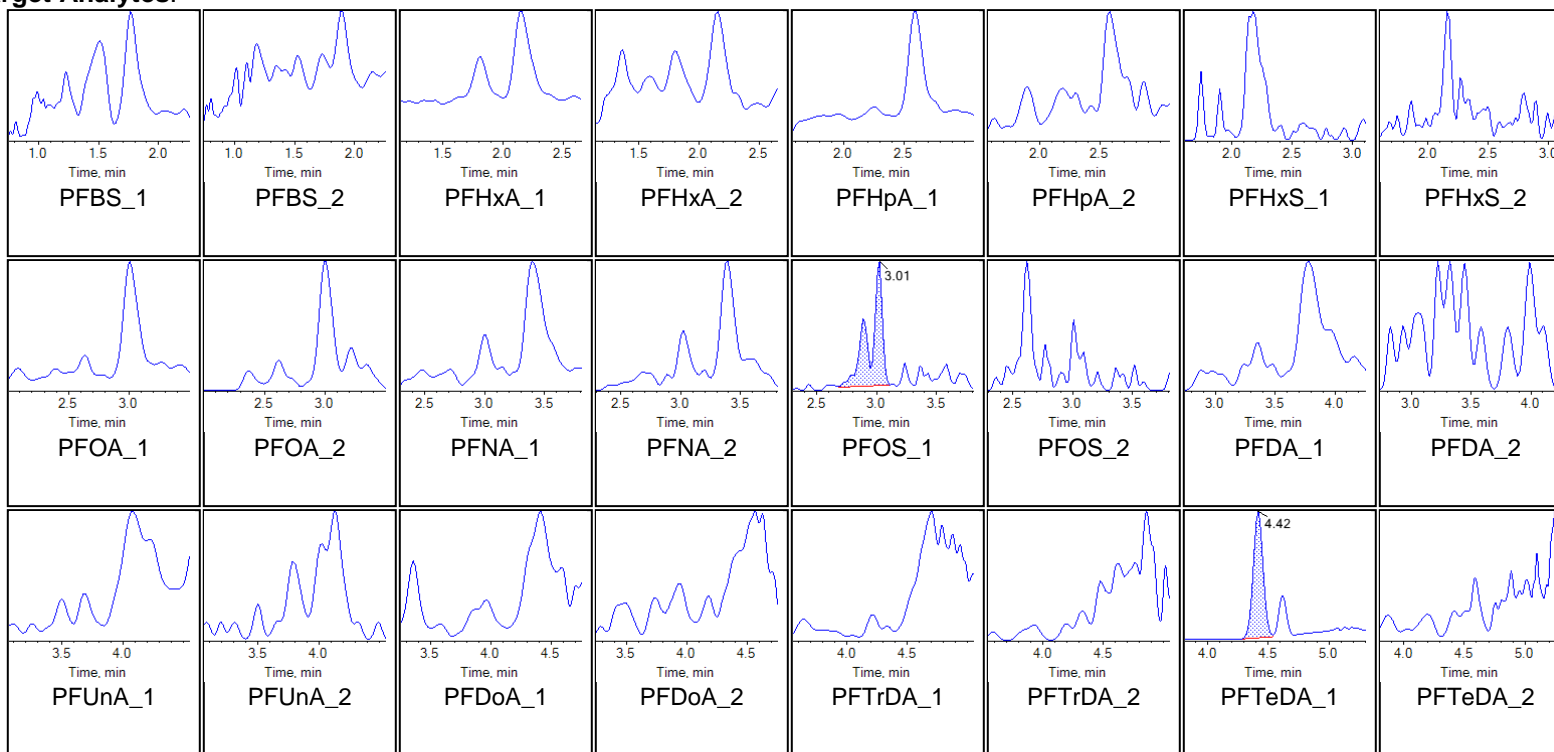
Internal Standards:



Sample Name	I3533-FS(0)	Injection Vial	36
Sample ID	C2-1307-FRB-20190605-01	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:30:13 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

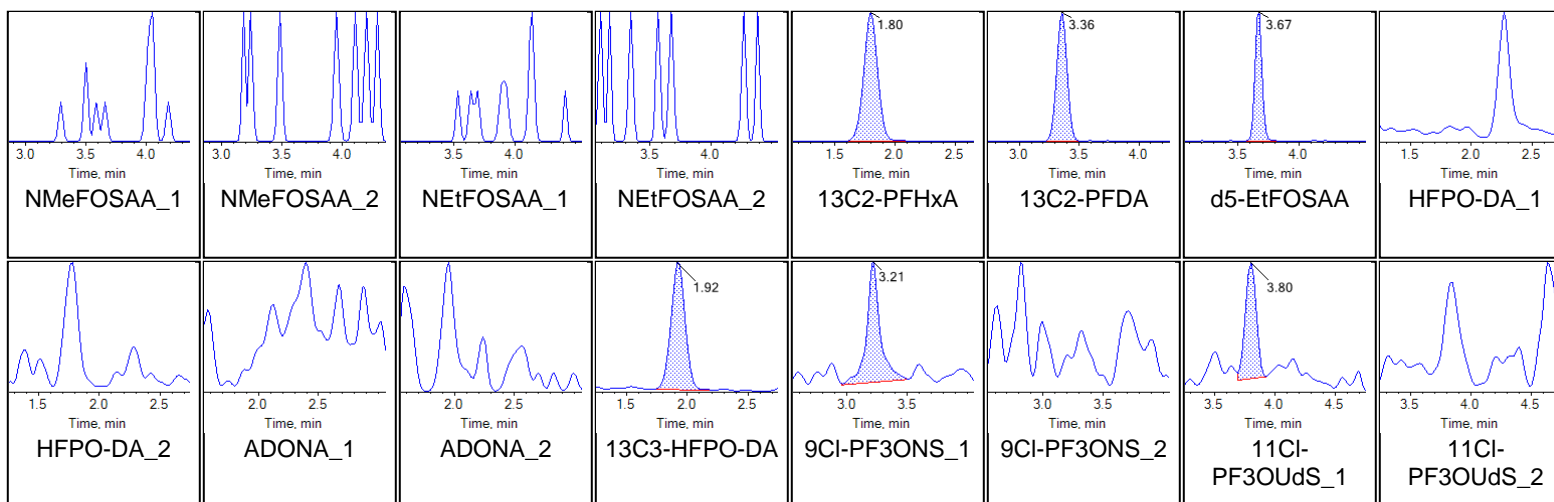
Chromatograms

Target Analytes:

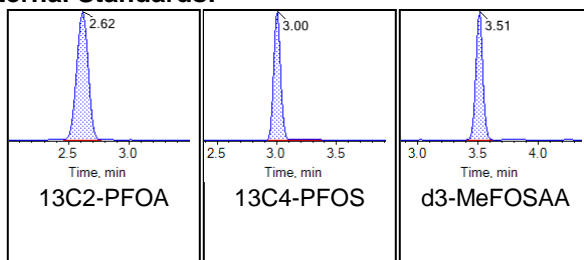




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

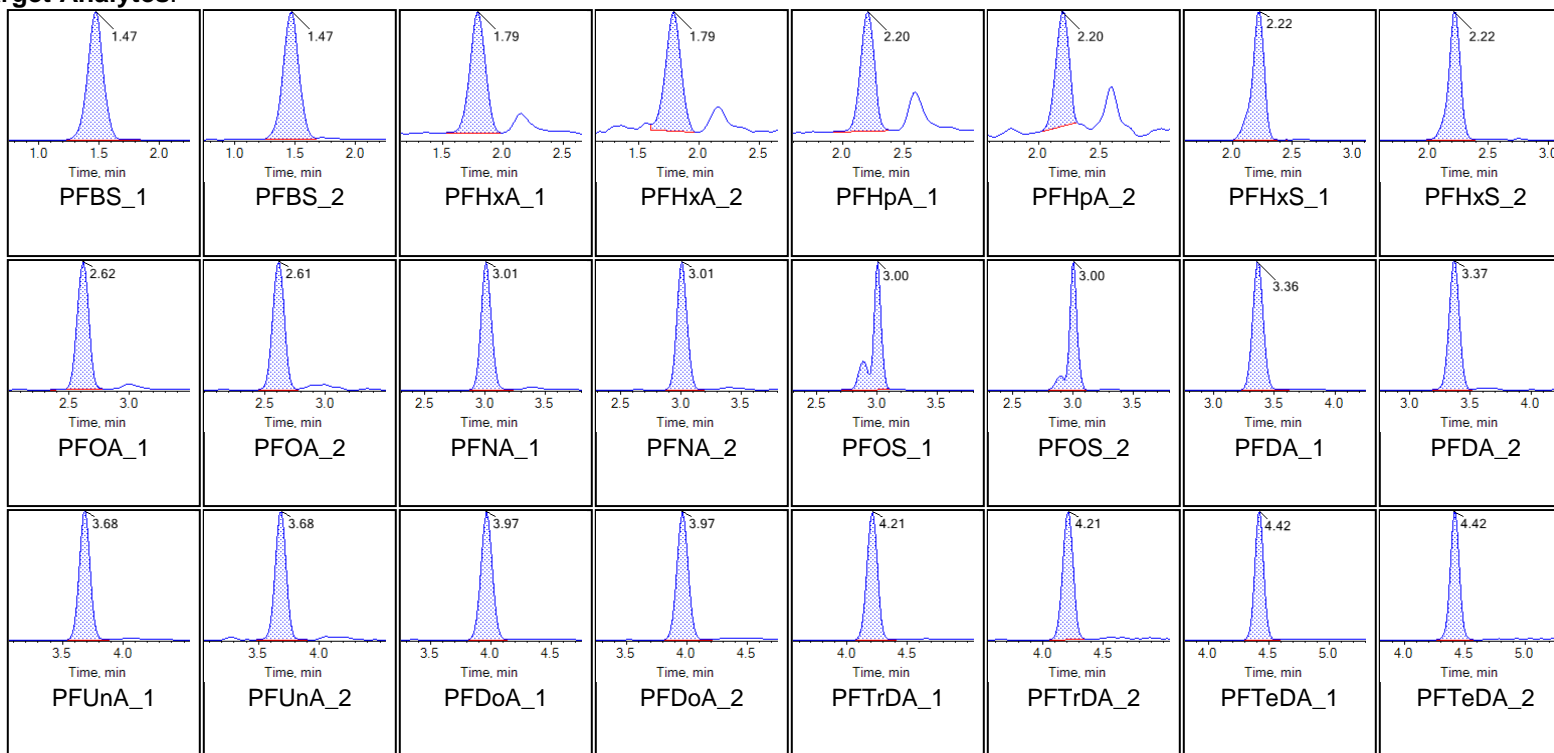
Internal Standards:



Sample Name	KL68 CCV	Injection Vial	37
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	6/8/2019 12:39:10 PM	Data File	AC_06072019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485

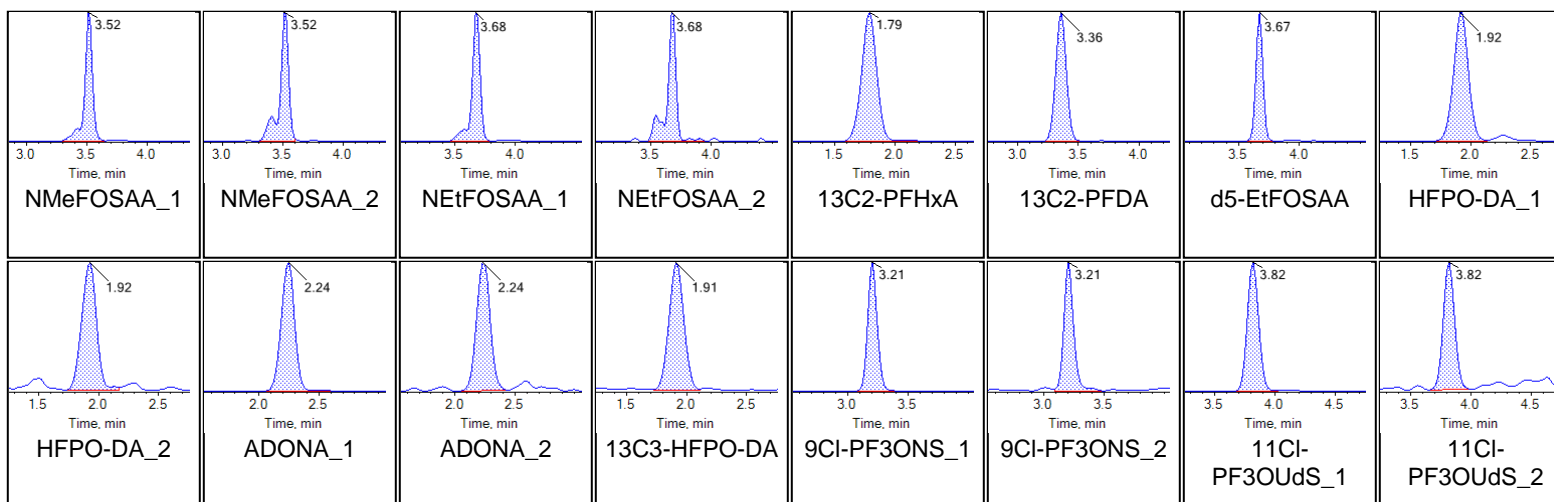
Chromatograms

Target Analytes:

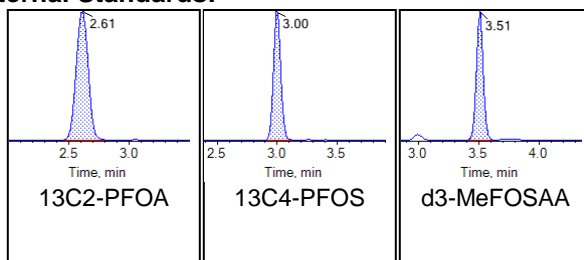




Chromatogram Report

Created with Analyst Reporter
Printed: 11/06/2019 3:29:22 PM

Internal Standards:



Unused Data

Sample Name	CU331LCS-FS(0)	Injection Vial	12
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	6/10/2019 1:13:15 PM	Data File	AC_06102019_5-371.wiff
Acquisition Method	5-0371.dam	Result Table	19-0485-unused
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.47	929779.33	2482.98	5012.9	False	13C4-PFOS	178807.72	287.00	PFBS			
PFBS_2	298.9 / 99.0	1.47	270670.99	2429.47	1921.5	False	13C4-PFOS	178807.72	287.00	PFBS	0.291	0.308	✓
PFHxA_1	313.0 / 269.0	1.80	782520.22	2975.68	308.0	False	13C2-PFOA	42375.74	100.00	PFHxA			
PFHxA_2	313.0 / 119.0	1.79	61747.19	3013.72	236.9	False	13C2-PFOA	42375.74	100.00	PFHxA	0.079	0.079	✓
PFHpA_1	363.0 / 319.0	2.21	808204.29	3053.30	205.5	False	13C2-PFOA	42375.74	100.00	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	15887.22	3460.14	203.5	False	13C2-PFOA	42375.74	100.00	PFHpA	0.020	0.018	✓
PFHxS_1	399.0 / 80.0	2.23	1102944.71	2520.41	1851.6	False	13C4-PFOS	178807.72	287.00	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	326511.04	2582.05	653.9	False	13C4-PFOS	178807.72	287.00	PFHxS	0.296	0.299	✓
PFOA_1	413.0 / 369.0	2.62	1102011.29	2940.10	496.0	False	13C2-PFOA	42375.74	100.00	PFOA			
PFOA_2	413.0 / 169.0	2.62	61118.23	3073.89	460.1	False	13C2-PFOA	42375.74	100.00	PFOA	0.055	0.051	✓
PFNA_1	463.0 / 419.0	3.01	992392.64	2948.92	640.5	False	13C2-PFOA	42375.74	100.00	PFNA			
PFNA_2	463.0 / 219.0	3.01	327463.14	2905.36	746.9	False	13C2-PFOA	42375.74	100.00	PFNA	0.330	0.329	✓
PFOS_1	499.0 / 80.0	3.01	1614198.36	2313.08	2250.8	False	13C4-PFOS	178807.72	287.00	PFOS			
PFOS_2	499.0 / 99.0	3.00	349960.91	2681.41	1080.4	False	13C4-PFOS	178807.72	287.00	PFOS	0.217	0.189	✓
PFDA_1	513.0 / 469.0	3.37	1000003.29	2892.87	804.1	False	13C2-PFOA	42375.74	100.00	PFDA			
PFDA_2	513.0 / 219.0	3.36	38014.29	2973.33	798.8	False	13C2-PFOA	42375.74	100.00	PFDA	0.038	0.037	✓
PFUnA_1	563.0 / 519.0	3.68	957874.51	2945.24	690.1	False	13C2-PFOA	42375.74	100.00	PFUnA			
PFUnA_2	563.0 / 269.0	3.68	43492.48	3006.09	462.9	False	13C2-PFOA	42375.74	100.00	PFUnA	0.045	0.046	✓
PFDoA_1	613.0 / 569.0	3.96	893166.44	2969.76	670.3	False	13C2-PFOA	42375.74	100.00	PFDoA			
PFDoA_2	613.0 / 319.0	3.96	163948.90	3209.24	748.6	False	13C2-PFOA	42375.74	100.00	PFDoA	0.184	0.170	✓
PFTTrDA_1	663.0 / 619.0	4.20	831866.64	3134.12	706.3	False	13C2-PFOA	42375.74	100.00	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.20	57386.43	3059.96	669.4	False	13C2-PFOA	42375.74	100.00	PFTTrDA	0.069	0.069	✓
PFTTeDA_1	713.0 / 669.0	4.42	1002335.55	3484.94	885.6	True	13C2-PFOA	42375.74	100.00	PFTTeDA			
PFTTeDA_2	713.0 / 169.0	4.41	53919.63	3802.66	1116.1	False	13C2-PFOA	42375.74	100.00	PFTTeDA	0.054	0.051	✓
NMeFOSAA_1	570.0 / 419.0	3.52	182632.11	3149.96	2334.1	False	d3-MeFOSAA	26353.16	400.00	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.52	86240.99	3265.79	4381.3	False	d3-MeFOSAA	26353.16	400.00	NMeFOSAA	0.472	0.522	✓
NEtFOSAA_1	584.0 / 419.0	3.68	173158.80	3013.06	1472.2	False	d3-MeFOSAA	26353.16	400.00	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.68	10322.54	2569.58	820.7	False	d3-MeFOSAA	26353.16	400.00	NEtFOSAA	0.060	0.065	✓
13C2-PFHxA	315.0 / 270.0	1.79	32690.03	107.95	1134.2	False	13C2-PFOA	42375.74	100.00				
13C2-PFDA	515.0 / 470.0	3.36	42875.60	107.18	1372.0	False	13C2-PFOA	42375.74	100.00		N/A	N/A	✓
d5-EtFOSAA	589.0 / 419.0	3.67	28653.32	406.91	639.6	False	d3-MeFOSAA	26353.16	400.00		N/A	N/A	✓
HFPO-DA_1	285.0 / 169.0	1.92	619121.34	2812.86	987.9	False	13C2-PFOA	42375.74	100.00	HFPO-DA			
HFPO-DA_2	285.0 / 118.8	1.91	16746.74	2746.39	523.6	False	13C2-PFOA	42375.74	100.00	HFPO-DA	0.027	0.028	✓
ADONA_1	377.0 / 251.0	2.25	1438738.41	2632.40	1281.9	False	13C2-PFOA	42375.74	100.00	ADONA			
ADONA_2	377.0 / 85.0	2.25	14852.62	2680.05	515.8	False	13C2-PFOA	42375.74	100.00	ADONA	0.010	0.010	✓
13C3-HFPO-DA	287.0 / 169.0	1.92	25203.62	109.60	329.3	False	13C2-PFOA	42375.74	100.00		N/A	N/A	✓
9Cl-PF3ONS_1	531.0 / 351.0	3.21	2285215.09	2356.98	2323.0	False	13C4-PFOS	178807.72	287.00	9Cl-PF3ONS			



Analyte	MRM Transition	RT	Area	Conc. (ng/L)	S/N Ratio	Modified	IS	IS Area	IS Conc. (ng/L)	Ratio Group	Ion Ratio	Expected Ion Ratio	Ratio OK
9CI-PF3ONS_2	531.0 / 83.0	3.21	33672.41	2472.32	380.1	False	13C4-PFOS	178807.72	287.00	9CI-PF3ONS	0.015	0.014	✓
11CI-PF3OUdS_1	631.0 / 451.0	3.81	1885201.77	2397.99	1811.5	False	13C4-PFOS	178807.72	287.00	11CI-PF3OUdS			
11CI-PF3OUdS_2	631.0 / 83.0	3.81	16949.97	2371.34	190.2	False	13C4-PFOS	178807.72	287.00	11CI-PF3OUdS	0.009	0.009	✓

Appendix F

Field Sampling Forms

Phase II and III SWMU Assessment and Confirmatory Sampling Report
Center-Wide PFAS PRL 237
Revision: 0
May 2022

This page intentionally left blank.

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0146-008.0-20210105 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0146 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/5/2021	11:44	6.72	219	0.24		24.3	-211.7		Brown	None
1/5/2021	11:49	6.51	217	0.23		24.3	-233.5		Clear	None
1/5/2021	11:54	6.52	214	0.16		24.3	-235.6		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:44	11:54	10	6.52	214	0.16		24.3	-235.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0147-008.0-20210105 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0147 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/5/2021	15:43	7.09	551	0.33		23.6	-130.2		Cloudy	None
1/5/2021	15:48	7.03	550	0.09		23.5	-142.3		Clear	None
1/5/2021	15:53	6.99	548	0.08		23.6	-144.4		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:43	15:53	10	6.99	548	0.08		23.6	-144.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0147-023.0-20210105 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0147 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/5/2021	16:09	7.17	825	0.24		25.0	-238.3		Brown	None
1/5/2021	16:14	7.05	802	0.11		25.1	-278.5		Clear	None
1/5/2021	16:18	7.05	800	0.11		25.2	-276.0		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:09	16:18	9	7.05	800	0.11		25.2	-276.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0147-043.0-20210106 **Sampler:** Ethan House
Well ID: PFAS-DPT0147 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	8:55	7.47	2512	0.23		22.62	-124.1		Clear	Slight Odor
1/6/2021	9:00	7.36	2525	0.16		22.62	-124.5		Clear	Slight Odor
1/6/2021	9:05	7.30	2555	0.12		22.81	-131.2		Clear	Slight Odor
1/6/2021	9:10	7.27	2568	0.11		22.70	-133.5		Clear	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:55	9:10	15	7.27	2568	0.11		22.70	-133.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0148-008.0-20210106 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0148 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	11:50	6.89	414	0.76		24.38	-70.4		Clear	None
1/6/2021	11:55	6.74	411	0.66		24.12	-68.7		Clear	None
1/6/2021	12:00	6.61	409	0.43		23.99	-67.9		Clear	None
1/6/2021	12:05	6.57	408	0.47		24.23	-65.8		Clear	None
1/6/2021	12:10	6.55	407	0.49		24.18	-63.4		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:50	12:10	20	6.55	407	0.49		24.18	-63.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0148-023.0-20210106 Sampler: Brittany Follett
 Well ID: PFAS-DPT0148 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	12:45	6.93	809	0.25		26.15	-137.5		Clear	None
1/6/2021	12:50	6.97	802	0.18		26.10	-140.6		Clear	None
1/6/2021	12:55	6.98	800	0.18		26.08	-142.0		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:45	12:55	10	6.98	800	0.18		26.08	-142.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0148-033.0-20210105 Sampler: Brittany Follett
 Well ID: PFAS-DPT0148 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/5/2021	13:51	6.80	1302	0.07		25.5	-209.2		Cloudy	None
1/5/2021	13:56	6.71	1300	0.11		25.4	-218.7		Cloudy	None
1/5/2021	14:01	6.71	1292	0.06		25.4	-208.8		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:51	14:01	10	6.71	1292	0.06		25.4	-208.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0148-033.0-20210106 Sampler: Brittany Follett
 Well ID: PFAS-DPT0148 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	13:45	7.30	988	0.04		25.79	-159.4		Clear	None
1/6/2021	13:50	7.27	987	0.06		25.85	-152.2		Clear	None
1/6/2021	13:55	7.26	977	0.06		25.68	-147.3		Clear	None
1/6/2021	14:00	7.24	977	0.08		25.67	-147.0		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:45	14:00	15	7.24	977	0.08		25.67	-147.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0148-043.0-20210106 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0148 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	14:37	7.32	1657	0.17		25.76	-168.8		Clear	None
1/6/2021	14:42	7.36	1648	0.07		25.51	-169.5		Clear	None
1/6/2021	14:47	7.38	1656	0.06		25.63	-170.5		Clear	None
1/6/2021	14:52	7.38	1648	0.06		25.60	-169.9		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:37	14:52	15	7.38	1648	0.06		25.60	-169.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0149-008.0-20210106 Sampler: Ethan House
 Well ID: PFAS-DPT0149 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	15:35	6.68	636	7.48		21.53	-56.4		Clear	None
1/6/2021	15:40	6.63	611	7.49		21.31	-57		Clear	None
1/6/2021	15:45	6.61	619	7.54		21.31	-59.8		Clear	None
1/6/2021	15:50	6.62	617	7.57		21.27	-60.8		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:35	15:50	15	6.62	617	7.57		21.27	-60.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0149-023.0-20210106 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0149 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	16:05	6.82	908	0.11		24.31	-85.5		Clear	None
1/6/2021	16:10	6.90	904	0.11		24.26	-88.4		Clear	None
1/6/2021	16:15	6.91	900	0.10		24.23	-90.5		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:05	16:15	10	6.91	900	0.10		24.23	-90.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0149-033.0-20210106 Sampler: Ethan House
 Well ID: PFAS-DPT0149 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	16:40	7.01	1186	0.47		25.36	-126.8		Clear	None
1/6/2021	16:45	6.99	1173	0.07		25.21	-124.6		Clear	None
1/6/2021	16:50	6.98	1163	0.06		25.19	-124.2		Clear	None
1/6/2021	16:55	6.97	1161	0.05		25.17	-123.2		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:40	16:55	15	6.97	1161	0.05		25.17	-123.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0149-043.0-20210105 Sampler: Brittany Follett
 Well ID: PFAS-DPT0149 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/5/2021	14:40	7.25	2827	0.10		25.3	-139.7		Cloudy	None
1/5/2021	14:45	7.18	2852	0.10		25.2	-150.2		Cloudy	None
1/5/2021	14:50	7.16	2858	0.11		25.2	-153.5		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:40	14:50	10	7.16	2858	0.11		25.2	-153.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0149-043.0-20210106 Sampler: Ethan House
 Well ID: PFAS-DPT0149 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/6/2021	17:20	7.42	2600	0.06		24.85	-164.8		Clear	None
1/6/2021	17:25	7.42	2592	0.05		24.73	-164.8		Clear	None
1/6/2021	17:30	7.41	2596	0.04		24.66	-165		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
17:20	17:30	10	7.41	2596	0.04		24.66	-165

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0150-008.0-20210107 Sampler: Brittany Follett
 Well ID: PFAS-DPT0150 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	9:35	6.53	473	0.26		22.57	-104.8		Dark Brown	Slight Odor
1/7/2021	9:40	6.46	471	0.25		22.64	-105.4		Dark Brown	Slight Odor
1/7/2021	9:45	6.43	466	0.25		22.61	-106.4		Dark Brown	Slight Odor
1/7/2021	9:50	6.41	462	0.24		22.53	-108		Dark Brown	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:35	9:50	15	6.41	462	0.24		22.53	-108

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0150-023.0-20210107 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0150 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	10:35	7.04	4044	3.72		24.27	-88.7		Clear	None
1/7/2021	10:40	7.06	4057	3.05		24.31	-90.0		Clear	None
1/7/2021	10:45	7.14	4099	2.20		24.41	-84.7		Clear	None
1/7/2021	10:50	7.17	4115	3.03		24.36	-91.0		Clear	None
1/7/2021	10:55	7.17	4095	3.28		24.30	-88.5		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:35	10:55	20	7.17	4095	3.28		24.30	-88.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0150-033.0-20210107 Sampler: Brittany Follett
 Well ID: PFAS-DPT0150 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	11:34	7.23	6501	0.05		24.93	-158.3		Brown	None
1/7/2021	11:39	7.19	6674	0.04		24.83	-152.0		Brown	None
1/7/2021	11:44	7.17	6672	0.05		24.84	-147.6		Brown	None
1/7/2021	11:49	7.15	6676	0.06		24.91	-144.5		Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:34	11:49	15	7.15	6676	0.06		24.91	-144.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0150-043.0-20210107 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0150 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	13:12	7.12	7016	0.03		24.46	-130.4		Cloudy	None
1/7/2021	13:17	7.09	6998	0.04		24.35	-130.6		Cloudy	None
1/7/2021	13:22	7.08	7004	0.04		24.36	-131.8		Cloudy	None
1/7/2021	13:27	7.08	7013	0.04		24.33	-131.8		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:12	13:27	15	7.08	7013	0.04		24.33	-131.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0151-008.0-20210107 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0151 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	14:18	7.85	461	0.33		23.70	-139.2		Brown	None
1/7/2021	14:23	6.37	426	0.10		23.46	-150.2		Brown	None
1/7/2021	14:28	6.28	421	0.08		23.35	-169.7		Brown	None
1/7/2021	14:33	6.22	425	0.07		23.35	-188.3		Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:18	14:33	15	6.22	425	0.07		23.35	-188.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0151-023.0-20210107 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0151 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	14:50	6.97	5840	4.93		23.34	-142.4		Cloudy	None
1/7/2021	14:55	7.14	5822	6.12		25.31	-140.9		Cloudy	None
1/7/2021	15:00	7.22	5772	6.57		25.32	-139.2		Cloudy	None
1/7/2021	15:05	7.25	5805	6.82		25.34	-139.3		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:50	15:05	15	7.25	5805	6.82		25.34	-139.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0151-033.0-20210107 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0151 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	15:40	7.22	8331	0.05		25.60	-127.7		Cloudy	None
1/7/2021	15:45	7.29	8296	0.05		25.78	-154.6		Cloudy	None
1/7/2021	15:50	7.32	8258	0.05		25.72	-165.3		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:40	15:50	10	7.32	8258	0.05		25.72	-165.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0151-043.0-20210107 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0151 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/7/2021	16:15	7.38	8313	0.04		25.36	-160.6		Cloudy	None
1/7/2021	16:20	7.37	8228	0.04		25.26	-180.1		Cloudy	None
1/7/2021	16:25	7.36	8048	0.04		25.0	-185.4		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:15	16:25	10	7.36	8048	0.04		25.0	-185.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0152-008.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0152 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	8:47	6.17	112	0.37		23.21	-56.0		Brown	None
1/8/2021	8:52	5.25	111	0.24		23.11	-46.2		Brown	None
1/8/2021	8:57	5.02	105	0.17		23.20	-50.7		Brown	None
1/8/2021	9:02	5.06	108	0.16		23.27	-55.9		Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:47	9:02	15	5.06	108	0.16		23.27	-55.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0152-023.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0152 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	9:39	6.62	701	5.90		22.19	-58.0		CLEAR	NONE
1/8/2021	9:44	6.96	685	7.31		22.10	-57.6		CLEAR	NONE
1/8/2021	9:49	7.10	669	7.59		22.05	-57.8		CLEAR	NONE
1/8/2021	9:54	7.19	679	7.64		22.10	-61.8		CLEAR	NONE

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:39	9:54	15	7.19	679	7.64		22.10	-61.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0152-033.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0152 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	10:17	7.07	1618	0.05		24.34	-103.6		Brown	None
1/8/2021	10:22	7.03	1609	0.05		24.21	-118.3		Brown	None
1/8/2021	10:27	7.01	1607	0.06		24.20	-116.7		Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:17	10:27	10	7.01	1607	0.06		24.20	-116.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0152-043.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0152 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	11:00	7.25	3453	0.35		22.36	-127.1		Cloudy	None
1/8/2021	11:05	7.07	3607	0.04		22.08	-138.5		Cloudy	None
1/8/2021	11:10	7.06	3620	0.05		22.11	-137.3		Cloudy	None
1/8/2021	11:15	7.04	3648	0.07		22.11	-134.3		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:00	11:15	15	7.04	3648	0.07		22.11	-134.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0153-008.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0153 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	11:48	6.87	479	0.07		21.27	-140.9		Clear	None
1/8/2021	11:53	6.71	471	0.17		21.10	-163.4		Clear	None
1/8/2021	11:58	6.68	462	0.59		21.10	-167.4		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:48	11:58	10	6.68	462	0.59		21.10	-167.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0153-023.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0153 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	12:17	7.00	1486	0.05		23.80	-167.6		Cloudy	None
1/8/2021	12:22	7.03	1475	0.09		23.60	-174.6		Cloudy	None
1/8/2021	12:27	7.02	1459	0.07		23.60	-176.7		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:17	12:27	10	7.02	1459	0.07		23.60	-176.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0153-033.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0153 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	12:55	7.05	3789	0.04		23.62	-122.4		Cloudy	None
1/8/2021	13:00	7.02	3809	0.04		23.47	-125.6		Cloudy	None
1/8/2021	13:05	7.01	3803	0.04		23.48	-123.2		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:55	13:05	10	7.01	3803	0.04		23.48	-123.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0153-043.0-20210108 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0153 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/8/2021	13:35	7.10	4749	0.05		23.20	-139.8		Brown	None
1/8/2021	13:40	7.09	4820	0.04		23.34	-143.5		Brown	None
1/8/2021	13:45	7.08	4853	0.04		23.30	-143.5		Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:35	13:45	10	7.08	4853	0.04		23.30	-143.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0154-008.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0154 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	10:19	7.07	345	6.48	45	24.22	-62.7		Cloudy	None
1/11/2021	10:24	6.94	348	7.43	32.7	23.86	-66.2		Cloudy	None
1/11/2021	10:29	6.91	344	7.66	34.0	23.66	-68.1		Cloudy	None
1/11/2021	10:34	6.90	345	7.60	35.9	23.70	-68.7		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:19	10:34	15	6.90	345	7.60	35.9	23.70	-68.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0154-023.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0154 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	11:05	6.46	517	0.18	750	26.26	-141.4		Brown	None
1/11/2021	11:10	6.37	500	0.11	757	26.09	-162.5		Brown	None
1/11/2021	11:15	6.32	503	0.11	800	26.14	-183.7		Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:05	11:15	10	6.32	503	0.11	800	26.14	-183.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0154-033.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0154 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	11:42	6.83	740	0.05		26.35	-209.5	0.35	Brown	None
1/11/2021	11:47	6.87	734	0.07		26.22	-218.9	0.35	Brown	None
1/11/2021	11:52	6.87	734	0.06		26.29	-220.6	0.35	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:42	11:52	10	6.87	734	0.06		26.29	-220.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0154-043.0-20210111 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0154 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	12:18	6.72	66429	0.04	1000	26.57	-139.9	43.80	Cloudy	None
1/11/2021	12:23	6.79	67192	0.03	1000	26.41	-142.1	44.46	Cloudy	None
1/11/2021	12:28	6.80	67418	0.04	1000	26.42	-144.1	44.75	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:18	12:28	10	6.80	67418	0.04	1000	26.42	-144.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0155-008.0-20210111 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0155 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	13:06	7.05	1491	5.76		26.69	-56.2	0.69	Dark Brown	None
1/11/2021	13:11	6.75	829	6.30		26.41	-55.1	0.44	Dark Brown	None
1/11/2021	13:16	6.65	807	6.51		26.64	-55.3	0.37	Dark Brown	None
1/11/2021	13:21	6.59	812	6.75		26.63	-55.2	0.37	Dark Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:06	13:21	15	6.59	812	6.75		26.63	-55.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0155-023.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0155 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	13:46	7.59	534	0.05	67	28.07	-204.5	0.24	Cloudy	None
1/11/2021	13:51	7.65	526	0.05	66	28.00	-222.1	0.24	Cloudy	None
1/11/2021	13:56	7.65	521	0.04	62	28.00	-230.2	0.24	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:46	13:56	10	7.65	521	0.04	62	28.00	-230.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0155-033.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0155 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	14:19	7.92	622	0.04	1000	28.36	-253.9	0.28	Brown	None
1/11/2021	14:24	7.94	620	0.03		28.32	-261.2			
1/11/2021	14:29	7.95	610	0.04	1000	28.29	-267.1	0.28	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:19	14:29	10	7.95	610	0.04	1000	28.29	-267.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0155-043.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0155 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	14:53	7.10	26424	0.16	769	27.28	-144.6	15.30	Brown	None
1/11/2021	14:58	7.09	26868	0.09	765	27.55	-154.9	15.61	Brown	None
1/11/2021	15:03	7.08	26887	0.07	766	27.63	-160.5	15.68	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:53	15:03	10	7.08	26887	0.07	766	27.63	-160.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0156-008.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0156 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	15:53	6.15	997	6.15	1000	23.45	-188.4	0.51	Dark Brown	None
1/11/2021	15:58	6.77	987	3.70	1000	23.32	-217.2	0.50	Dark Brown	None
1/11/2021	16:03	6.71	981	3.07	1000	23.31	-238.3	0.50	Dark Brown	None
1/11/2021	16:08	6.69	982	3.02	1000	23.30	-250.3	0.50	Dark Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:53	16:08	15	6.69	982	3.02	1000	23.30	-250.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0156-023.0-20210111 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0156 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/11/2021	16:27	7.37	501	0.10	1000	24.74	-287.3	0.24	Brown	None
1/11/2021	16:32	7.37	502	0.09	1000	24.62	-283.1	0.24	Brown	None
1/11/2021	16:37	7.36	500	0.09	1000	24.62	-281.5	0.24	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:27	16:37	10	7.36	500	0.09	1000	24.62	-281.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0156-033.0-20210112 Sampler: Ethan House
 Well ID: PFAS-DPT0156 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	7:55	6.76	30759	0.34		23.87	-149.2		Brown	None
1/12/2021	8:00	6.85	31185	0.33		23.84	-162.5		Brown	None
1/12/2021	8:05	6.92	31140	0.19		23.79	-178.7		Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:55	8:05	10	6.92	31140	0.19		23.79	-178.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0156-043.0-20210112 Sampler: Ethan House
 Well ID: PFAS-DPT0156 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	8:45	6.79	70487	0.08		23.76	-104.8		Cloudy	None
1/12/2021	8:50	6.88	70278	0.08		23.60	-122.8		Cloudy	None
1/12/2021	8:55	6.88	69960	0.09		23.56	-127.2		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:45	8:55	10	6.88	69960	0.09		23.56	-127.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0157-008.0-20210112 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0157 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	10:56	7.49	580	0.20	1000	21.68	-110.6	0.30	Cloudy	None
1/12/2021	11:01	7.11	573	0.23	1000	21.58	-111.9	0.30	Cloudy	None
1/12/2021	11:06	6.97	569	0.28	1000	21.55	-113.1	0.30	Cloudy	None
1/12/2021	11:11	6.93	568	0.29	1000	21.66	-113.8	0.29	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:56	11:11	15	6.93	568	0.29	1000	21.66	-113.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0157-023.0-20210112 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0157 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	11:33	6.77	1192	0.21	1000	23.86	-104.9	0.60	Cloudy	None
1/12/2021	11:38	6.74	1162	0.18	1000	23.63	-112.8	0.59	Cloudy	None
1/12/2021	11:43	6.71	1150	0.17	1000	23.66	-116.3	0.59	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:33	11:43	10	6.71	1150	0.17	1000	23.66	-116.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0157-033.0-20210112 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0157 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	12:07	6.96	2569	0.10	1000	23.65	-133.2	1.36	Gray	None
1/12/2021	12:12	6.91	2566	0.13	1000	23.45	-126.2	1.37	Gray	None
1/12/2021	12:17	6.87	2553	0.13	1000	23.46	-121.3	1.36	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:07	12:17	10	6.87	2553	0.13	1000	23.46	-121.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0157-043.0-20210112 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0157 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	12:42	7.20	3038	0.07	1000	24.46	-130.4	1.60	Cloudy	None
1/12/2021	12:47	7.17	3030	0.07	1000	24.40	-132.0	1.58	Cloudy	None
1/12/2021	12:52	7.16	2981	0.06	1000	24.36	-132.4	1.55	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:42	12:52	10	7.16	2981	0.06	1000	24.36	-132.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0158-008.0-20210112 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0158 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	13:31	6.79	1220	4.50	26	21.71	-123.6	0.66	Clear	None
1/12/2021	13:36	6.71	1219	4.78	26	21.51	-130.5	0.65	Clear	None
1/12/2021	13:41	6.78	1221	4.82	21	21.57	-136.1	0.65	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:31	13:41	10	6.78	1221	4.82	21	21.57	-136.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0158-023.0-20210112 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0158 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	14:01	6.73	2217	0.14	48	24.02	-162.9	1.15	Clear	None
1/12/2021	14:06	6.66	2183	0.13	43	24.01	-168.1	1.14	Clear	None
1/12/2021	14:11	6.64	2169	0.13	39	24.01	-172.0	1.14	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:01	14:11	10	6.64	2169	0.13	39	24.01	-172.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0158-033.0-20210112 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0158 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	14:33	7.34	7209	0.07	1000	24.39	-188.6	4.01	Gray	None
1/12/2021	14:38	7.28	7104	0.08	1000	24.38	-198.0	4.00	Gray	None
1/12/2021	14:43	7.21	7082	0.09	1000	24.36	-200.4	4.03	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:33	14:43	10	7.21	7082	0.09	1000	24.36	-200.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0158-043.0-20210112 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0158 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/12/2021	15:04	7.07	27548	0.06	1000	23.63	-132.0	17.49	Gray	None
1/12/2021	15:09	7.06	27709	0.08	1000	23.51	-139.9	17.64	Gray	None
1/12/2021	15:14	7.06	27743	0.10	1000	23.51	-143.4	17.70	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:04	15:14	10	7.06	27743	0.10	1000	23.51	-143.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0159-023.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0159 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	9:16	6.46	822	0.41		24.11	-118.6	0.41	Gray	None
1/13/2021	9:21	6.23	827	0.27		24.00	-135.4	0.40	Gray	None
1/13/2021	9:26	6.17	845	0.17		24.09	-149.7	0.42	Gray	None
1/13/2021	9:31	6.15	849	0.14		24.00	-154.6	0.42	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:16	9:31	15	6.15	849	0.14		24.00	-154.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0159-033.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0159 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	9:55	6.59	1179	0.09		23.78	-203.3	0.60	Gray	None
1/13/2021	10:00	6.66	1159	0.05		23.87	-210.0	0.59	Gray	None
1/13/2021	10:05	6.66	1150	0.06		23.78	-212.8	0.59	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:55	10:05	10	6.66	1150	0.06		23.78	-212.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0159-043.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0159 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	10:30	7.00	2285	0.07		24.14	-116.8	1.19	Gray	None
1/13/2021	10:35	6.96	2222	0.10		24.00	-120.0	1.17	Gray	None
1/13/2021	10:40	6.94	2175	0.07		23.95	-120.3	1.13	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:30	10:40	10	6.94	2175	0.07		23.95	-120.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0160-023.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0160 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	11:24	6.81	1070	0.19	124	25.60	-98.0	0.52	Cloudy	None
1/13/2021	11:29	6.71	1048	0.11	112	25.50	-104.0	0.51	Cloudy	None
1/13/2021	11:34	6.65	1041	0.10	117	25.68	-108.8	0.51	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:24	11:34	10	6.65	1041	0.10	117	25.68	-108.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0160-033.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0160 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	11:57	6.74	5046	0.09		26.10	-110.9	2.66	White	None
1/13/2021	12:02	6.71	5064	0.07		26.10	-112.9	2.68	White	None
1/13/2021	12:07	6.70	5129	0.08		26.10	-127.7	2.71	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:57	12:07	10	6.70	5129	0.08		26.10	-127.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0160-043.0-20210113 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0160 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	12:27	6.86	19614	0.11	794	25.50	-117.4	11.58	Cloudy	None
1/13/2021	12:32	6.86	18819	0.08	810	25.46	-126.5	11.71	Cloudy	None
1/13/2021	12:37	6.85	19792	0.07	852	25.37	-130.6	11.73	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:27	12:37	10	6.85	19792	0.07	852	25.37	-130.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0161-023.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0161 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	13:04	7.24	1299	0.09	900	25.01	-100.0	0.64	White	None
1/13/2021	13:09	7.14	1274	0.15	861	25.04	-102.4	0.64	White	None
1/13/2021	13:14	7.04	1257	0.10	859	24.89	-106.3	0.63	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:04	13:14	10	7.04	1257	0.10	859	24.89	-106.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0161-033.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0161 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	13:37	7.03	1923	0.07		25.96	-141.5	0.96	Gray	None
1/13/2021	13:42	6.95	1883	0.08		25.82	-153.2	0.94	Gray	None
1/13/2021	13:47	6.92	1865	0.08		25.78	-156.0	0.94	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:37	13:47	10	6.92	1865	0.08		25.78	-156.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0161-043.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0161 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	14:13	7.06	7285	0.08		25.30	-176.6	3.98	Cloudy	None
1/13/2021	14:18	7.06	7240	0.09		25.25	-185.5	3.96	Cloudy	None
1/13/2021	14:23	7.05	7313	0.07		25.25	-185.5	4.03	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:13	14:23	10	7.05	7313	0.07		25.25	-185.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0162-008.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0162 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	15:03	6.33	395	0.59	615	25.53	-209.8	0.20	Cloudy	None
1/13/2021	15:08	6.24	401	0.33	239	25.50	-232.0	0.20	Cloudy	None
1/13/2021	15:13	6.15	408	0.31	124	25.50	-249.7	0.20	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:03	15:13	10	6.15	408	0.31	124	25.50	-249.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0162-023.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0162 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	15:29	6.76	854	0.25		24.47	-202.3	0.42	White	None
1/13/2021	15:34	6.82	848	0.19		24.43	-207.3	0.42	White	None
1/13/2021	15:39	6.84	844	0.11		24.33	-210.2	0.42	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:29	15:39	10	6.84	844	0.11		24.33	-210.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0162-033.0-20210113 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0162 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/13/2021	15:55	7.20	1017	0.30		24.19	-171.9	0.51	Gray	None
1/13/2021	16:00	7.13	1000	0.11		24.00	-192.1	0.50	Gray	None
1/13/2021	16:05	7.09	988	0.12		24.00	-196.6	0.50	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:55	16:05	10	7.09	988	0.12		24.00	-196.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0162-043.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0162 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	8:20	7.45	3387	0.30		21.90	-222.6		Gray	None
1/14/2021	8:25	7.43	3476	0.24		22.17	-231.4		Gray	None
1/14/2021	8:30	7.43	3548	0.15		22.26	-247.4		Gray	None
1/14/2021	8:35	7.43	3579	0.15		22.03	-254.1		Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:20	8:35	15	7.43	3579	0.15		22.03	-254.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0163-008.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0163 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	9:30	7.26	640	0.30	827	25.31	-195.4		Cloudy	None
1/14/2021	9:35	6.95	638	0.27	630	25.47	-214.5		Cloudy	None
1/14/2021	9:40	6.87	633	0.33	380	25.51	-229.3		Cloudy	None
1/14/2021	9:45	6.89	588	0.19	51	25.50	-253.7		Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:30	9:45	15	6.89	588	0.19	51	25.50	-253.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0163-023.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0163 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	10:10	7.17	734	3.71	1000	27.79	-239.3	0.22	Gray	None
1/14/2021	10:15	7.39	1103	0.22	1000	26.19	-270.5	0.53	Gray	None
1/14/2021	10:20	7.48	1116	0.20	1000	26.27	-292.7	0.54	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:10	10:20	10	7.48	1116	0.20	1000	26.27	-292.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0163-033.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0163 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	10:50	7.17	734	3.71	1000	27.79	-239.3	0.22	Gray	None
1/14/2021	10:55	7.39	1103	0.22	1000	26.19	-270.5	0.53	Gray	None
1/14/2021	11:00	7.48	1116	0.20	1000	26.27	-292.7	0.54	Gray	None
1/14/2021	11:05	7.49	1114	0.16	1000	26.17	-298.9	0.54	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:50	11:05	15	7.49	1114	0.16	1000	26.17	-298.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0163-043.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0163 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	11:30	7.68	1332	1.13	1000	27.67	-315.2	0.63	Brown	None
1/14/2021	11:35	7.61	1330	0.35	1000	27.77	-310.3	0.63	Brown	None
1/14/2021	11:40	7.56	1337	0.23	1000	27.83	-322.6	0.63	Brown	None
1/14/2021	11:45	7.55	1341	0.18	1000	27.75	-324.5	0.63	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:30	11:45	15	7.55	1341	0.18	1000	27.75	-324.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0164-008.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0164 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	13:50	7.45	554	2.32	146	22.46	-165.7	0.28	Cloudy	None
1/14/2021	13:55	6.76	549	3.91	152	22.62	-185.2	0.28	Cloudy	None
1/14/2021	14:00	6.24	537	0.74	25	22.05	-241	0.28	Cloudy	None
1/14/2021	14:05	6.21	536	0.70	19	21.99	-241.1	0.28	Cloudy	None
1/14/2021	14:10	6.17	534	0.64	17	21.96	-241.5	0.28	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:50	14:10	20	6.17	534	0.64	17	21.96	-241.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0164-023.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0164 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	14:25	6.59	842	2.62	1000	22.48	-110.2	0.43	Brown	None
1/14/2021	14:30	6.77	806	6.39	807	22.03	-80.5	0.42	Brown	None
1/14/2021	14:35	6.82	790	6.82	782	21.65	-80.1	0.41	Brown	None
1/14/2021	14:40	6.87	776	6.87	100	21.49	-86.3	0.41	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:25	14:40	15	6.87	776	6.87	100	21.49	-86.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0164-043.0-20210114 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0164 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/14/2021	15:35	7.25	1510	7.99	1000	24.33	-124.1	0.77	Brown	None
1/14/2021	15:40	7.25	1524	1.12	519	24.14	-140.6	0.78	Cloudy	None
1/14/2021	15:45	7.20	1526	0.85	850	23.99	-145	0.78	Cloudy	None
1/14/2021	15:50	7.17	1523	0.72	812	23.93	-158.7	0.78	Cloudy	None
1/14/2021	15:55	7.16	1524	0.73	793	23.90	-162.6	0.78	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:35	15:55	20	7.16	1524	0.73	793	23.90	-162.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0165-008.0-20210115 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0165 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/15/2021	9:27	6.90	785	1.41	81	21.31	-95.3	0.41	Cloudy	None
1/15/2021	9:32	6.79	778	1.05	38	21.48	-106.7	0.41	Cloudy	None
1/15/2021	9:37	6.76	782	0.85	8	21.37	-115.9	0.41	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:27	9:37	10	6.76	782	0.85	8	21.37	-115.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0165-033.0-20210115 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0165 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/15/2021	10:16	3.71	2762	1.86	231	25.45	340.7	1.43	Cloudy	None
1/15/2021	10:21	3.56	2997	2.38	216	25.56	340.9	1.54	Cloudy	None
1/15/2021	10:26	3.50	3167	2.87	281	25.62	343.4	1.63	Cloudy	None
1/15/2021	10:31	3.49	3248	3.12	255	25.60	338.7	1.67	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:16	10:31	15	3.49	3248	3.12	255	25.60	338.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0166-008.0-20210115 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0166 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/15/2021	11:41	6.13	1076	0.97	1000	22.22	-232.1	0.57	Cloudy	None
1/15/2021	11:46	6.27	1062	0.93	504	22.28	-271.8	0.56	Cloudy	None
1/15/2021	11:51	6.33	1052	0.53	167	22.33	-235.2	0.55	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:41	11:51	10	6.33	1052	0.53	167	22.33	-235.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0166-023.0-20210115 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0166 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/15/2021	12:09	6.43	801	0.66	1000	24.69	-291.7	0.39	Brown	None
1/15/2021	12:14	6.41	800	0.58	1000	24.65	-284.2	0.39	Brown	None
1/15/2021	12:19	6.39	799	0.52	1000	24.62	-283.1	0.39	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:09	12:19	10	6.39	799	0.52	1000	24.62	-283.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0166-033.0-20210115 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0166 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/15/2021	12:41	6.15	451	0.66	1000	24.39	-275.8	0.22	Brown	None
1/15/2021	12:46	6.18	453	0.63	1000	24.45	-287.7	0.22	Brown	None
1/15/2021	12:51	6.19	459	0.58	1000	24.36	-295.9	0.22	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:41	12:51	10	6.19	459	0.58	1000	24.36	-295.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0167-043.0-20210118 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0167 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/18/2021	10:17	7.19	5577	0.82	1000	26.03	-269.7	2.96	Gray	None
1/18/2021	10:22	7.29	5785	0.45	1000	26.01	-301.6	3.09	Gray	None
1/18/2021	10:27	7.31	5787	0.26	1000	26.05	-313.2	3.19	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:17	10:27	10	7.31	5787	0.26	1000	26.05	-313.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0168-023.0-20210118 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0168 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/18/2021	11:35	7.45	905	1.25	33	26.49	-286.3	0.43	Clear	None
1/18/2021	11:40	7.40	882	1.17	33	26.45	-297.6	0.42	Clear	None
1/18/2021	11:45	7.37	877	1.58	7	26.40	-283.2	0.42	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:35	11:45	10	7.37	877	1.58	7	26.40	-283.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0168-033.0-20210118 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0168 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/18/2021	12:07	7.84	2798	0.60	1000	27.51	-327.5	1.38	White	None
1/18/2021	12:12	7.86	2798	0.32	1000	27.68	-336.7	1.40	White	None
1/18/2021	12:17	7.86	2833	0.27	1000	27.56	-339.6	1.41	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:07	12:17	10	7.86	2833	0.27	1000	27.56	-339.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0168-043.0-20210118 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0168 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/18/2021	12:39	7.32	31291	1.00	1000	26.69	-173.5	18.79	Brown	None
1/18/2021	12:44	7.27	31288	1.10	1000	26.57	-187.4	18.98	Brown	None
1/18/2021	12:49	7.24	31610	0.39	1000	26.50	-192.2	19.14	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:39	12:49	10	7.24	31610	0.39	1000	26.50	-192.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0169-023.0-20210118 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0169 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/18/2021	13:47	7.66	548	0.76	104	24.96	-214.5	0.26	Cloudy	None
1/18/2021	13:52	7.66	541	2.84	20	24.87	-189.5	0.26	Clear	None
1/18/2021	13:57	7.66	536	3.83	9	24.78	-187.6	0.26	Clear	None
1/18/2021	14:02	7.66	512	4.95	7	24.72	-183.7	0.26	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:47	14:02	15	7.66	512	4.95	7	24.72	-183.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0169-033.0-20210118 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0169 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/18/2021	14:22	7.80	602	0.57	1000	24.79	-279.6	0.29	Gray	None
1/18/2021	14:27	7.79	597	0.59	1000	24.59	-205.7	0.29	Gray	None
1/18/2021	14:32	7.77	596	0.53	1000	24.61	-329.7	0.29	Gray	None
1/18/2021	14:37	7.76	592	0.47	1000	24.60	-333.1	0.29	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:22	14:37	15	7.76	592	0.47	1000	24.60	-333.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0170-008.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0170 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	9:03	7.93	349	1.23	68	21.15	-184	0.18	Clear	None
1/19/2021	9:08	7.79	350	0.83	67	21.25	-195.7	0.18	Clear	None
1/19/2021	9:13	7.72	353	0.62	67	21.36	-203.4	0.18	Clear	None
1/19/2021	9:18	7.67	350	0.60	67	21.41	-204.9	0.18	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:03	9:18	15	7.67	350	0.60	67	21.41	-204.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0170-023.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0170 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	9:37	7.49	739	0.37	1000	24.55	-314.5	0.36	Gray	Sulfur
1/19/2021	9:42	7.45	736	0.32	1000	24.47	-316.7	0.36	Gray	Sulfur
1/19/2021	9:47	7.42	736	0.26	1000	24.63	-318.0	0.36	Gray	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:37	9:47	10	7.42	736	0.26	1000	24.63	-318.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0170-033.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0170 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	10:04	7.66	842	0.33	1000	25.65	-300.0	0.41	Gray	None
1/19/2021	10:09	7.59	824	0.33	1000	25.60	-313.0	0.40	Gray	None
1/19/2021	10:14	7.52	818	0.28	1000	25.56	-312.0	0.40	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:04	10:14	10	7.52	818	0.28	1000	25.56	-312.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0170-043.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0170 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	10:37	7.41	22525	0.33	1000	25.19	-311.9	13.54	Gray	Sulur
1/19/2021	10:42	7.42	22580	0.32	1000	25.16	-311.4	13.58	Gray	Sulfur
1/19/2021	10:47	7.38	22832	0.29	1000	25.13	-311.4	13.72	Gray	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:37	10:47	10	7.38	22832	0.29	1000	25.13	-311.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0171-023.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0171 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	12:19	7.75	528	1.19	1000	25.36	-302.7	0.25	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:19	12:19	0	7.75	528	1.19	1000	25.36	-302.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0171-043.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0171 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	13:11	7.97	2172	1.09	1000	25.24	-326.0	1.10	Gray	None
1/19/2021	13:16	7.98	2190	1.09	1000	25.13	-335.5	1.12	Gray	None
1/19/2021	13:21	7.97	2189	0.96	1000	25.10	-338.7	1.12	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:11	13:21	10	7.97	2189	0.96	1000	25.10	-338.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0172-023.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0172 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	15:07	6.85	371	0.74	1000	25.87	-283.3	0.17	Brown	Sulfur
1/19/2021	15:12	6.73	356	0.72	1000	25.71	-285.8	0.17	Brown	Sulfur
1/19/2021	15:17	6.76	353	0.69	1000	25.65	-278.1	0.17	Brown	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:07	15:17	10	6.76	353	0.69	1000	25.65	-278.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0172-033.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0172 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	15:33	6.65	551	0.86	390	25.56	-494.3	0.26	Brown	None
1/19/2021	15:38	6.63	548	0.69	248	25.49	-491.4	0.26	Brown	None
1/19/2021	15:43	6.57	545	0.57	344	25.45	-486.9	0.26	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:33	15:43	10	6.57	545	0.57	344	25.45	-486.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0172-043.0-20210119 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0172 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/19/2021	16:07	6.72	58378	0.20	1000	25.48	-178.8	38.67	Brown	None
1/19/2021	16:12	6.74	58821	0.17	1000	25.27	-186.7	39.07	Brown	None
1/19/2021	16:17	6.76	58849	0.17	1000	25.29	-191.5	39.19	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:07	16:17	10	6.76	58849	0.17	1000	25.29	-191.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0173-008.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0173 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	9:25	6.76	673	2.06	1000	22.20	-166.8		Tannic	Slight Odor
1/20/2021	9:30	5.86	628	0.87	809	22.25	-204.6		Tannic	Slight Odor
1/20/2021	9:35	5.54	602	0.58	412	22.33	-216.4		Tannic	Slight Odor
1/20/2021	9:40	5.45	591	0.48	206	22.28	-223		Tannic	Slight Odor
1/20/2021	9:45	5.46	587	0.41	134	22.35	-222		Tanic	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:25	9:45	20	5.46	587	0.41	134	22.35	-222

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0173-023.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0173 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	9:55	5.91	942	1.31	1000	24.91	-191.8		Gray	None
1/20/2021	10:00	6.30	926	0.88	1000	24.99	-199.7		Gray	None
1/20/2021	10:05	6.44	919	0.89	338	24.84	-195.9		Gray	None
1/20/2021	10:10	6.47	911	0.82	93	24.87	-195.6		Cloudy	None
1/20/2021	10:15	6.52	911	0.79	43	24.92	-193.3		Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:55	10:15	20	6.52	911	0.79	43	24.92	-193.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0173-043.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0173 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	11:00	6.71	1377	1.40	1000	25.38	-154.7		Gray	None
1/20/2021	11:05	6.77	1324	0.35	1000	25.22	-172.9		Gray	None
1/20/2021	11:10	6.82	1277	0.29	1000	24.75	-184.6		Gray	None
1/20/2021	11:15	6.84	1281	0.27	1000	24.91	-190		Gray	None
1/20/2021	11:20	6.85	1294	0.27	1000	24.97	-196.1		Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:00	11:20	20	6.85	1294	0.27	1000	24.97	-196.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0174-008.0-20210120 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0174 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	12:02	6.92	815	1.75	128	21.00	-75.5	0.43	Cloudy	None
1/20/2021	12:07	6.75	797	1.49	59	20.82	-74.1	0.43	Clear	None
1/20/2021	12:12	6.79	781	1.35	25	20.77	-86.9	0.43	Clear	None
1/20/2021	12:17	6.83	780	1.31	19	20.69	-92	0.43	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:02	12:17	15	6.83	780	1.31	19	20.69	-92

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0174-023.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0174 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	12:40	7.04	731	0.36	1000	23.79	-190.5	0.37	Gray	None
1/20/2021	12:45	7.08	713	0.31	1000	23.57	-219.9	0.36	Gray	None
1/20/2021	12:50	7.09	707	0.29	1000	23.53	-228.3	0.36	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:40	12:50	10	7.09	707	0.29	1000	23.53	-228.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0174-033.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0174 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	13:29	7.11	1848	0.81	1000	24.13	-218.1	0.94	Gray	Slight Odor
1/20/2021	13:34	7.09	1734	0.53	1000	24.20	-235.8	0.89	Gray	Slight Odor
1/20/2021	13:39	7.06	1720	0.33	1000	24.21	-242.6	0.87	Gray	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:29	13:39	10	7.06	1720	0.33	1000	24.21	-242.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0174-043.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0174 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	14:15	7.25	14522	0.41	1000	25.16	-215.2	8.45	Gray	None
1/20/2021	14:20	7.26	15231	0.27	1000	25.10	-259.6	8.91	Gray	None
1/20/2021	14:25	7.26	15601	0.21	1000	24.94	-281.2	9.12	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:15	14:25	10	7.26	15601	0.21	1000	24.94	-281.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0175-008.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0175 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	15:10	6.94	600	0.56	429	23.69	-163.9	0.30	Cloudy	None
1/20/2021	15:15	6.74	589	0.37	115	23.61	-170.7	0.29	Cloudy	None
1/20/2021	15:20	6.66	585	0.32	55	23.56	-176	0.29	Cloudy	None
1/20/2021	15:25	6.62	578	0.28	23	23.47	-184.6	0.29	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:10	15:25	15	6.62	578	0.28	23	23.47	-184.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0175-043.0-20210120 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0175 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/20/2021	16:17	7.16	1819	0.39	1000	26.35	-124.9	0.89	Cloudy	None
1/20/2021	16:22	7.13	1803	0.35	1000	26.21	-139.3	0.89	Cloudy	None
1/20/2021	16:27	7.12	1794	0.33	1000	26.22	-146.7	0.89	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:17	16:27	10	7.12	1794	0.33	1000	26.22	-146.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0176-008.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0176 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	8:35	6.82	417	0.02	573	20.26	-130.6	0.22	Tannic	None
1/21/2021	8:40	6.73	415	0.05	509	20.54	-138.6	0.22	Tannic	None
1/21/2021	8:45	6.70	413	0.04	408	20.46	-143.5	0.22	Tannic	None
1/21/2021	8:50	6.64	411	0.08	241	20.51	-154.4	0.22	Tannic	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:35	8:50	15	6.64	411	0.08	241	20.51	-154.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0176-023.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0176 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	9:20	7.22	437	0.13	1000	23.96	-139.4	0.21	Clear	Slight Odor
1/21/2021	9:25	7.26	420	0.26	159	23.42	-90.6	0.21	Clear	Slight Odor
1/21/2021	9:30	7.32	405	0.14	52	21.84	-100.1	0.21	Clear	Slight Odor
1/21/2021	9:35	7.35	404	0.13	31	21.82	-130.5	0.21	Clear	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:20	9:35	15	7.35	404	0.13	31	21.82	-130.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0176-033.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0176 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	10:00	7.25	676	0.37	1000	23.97	-334	0.33	Brown	None
1/21/2021	10:05	7.23	650	0.32	1000	23.63	-382	0.32	Brown	None
1/21/2021	10:10	7.20	635	0.22	1000	23.27	-403	0.32	Brown	None
1/21/2021	10:15	7.20	638	0.30	1000	23.67	-410.6	0.32	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:00	10:15	15	7.20	638	0.30	1000	23.67	-410.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0176-043.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0176 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	11:15	7.21	2057	0.13	1000	25.11	-241.2	1.04	Brown	None
1/21/2021	11:20	7.21	2057	0.13	1000	25.06	-241.7	1.04	Brown	None
1/21/2021	11:25	7.20	2069	0.21	1000	25.14	-242.3	1.05	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:15	11:25	10	7.20	2069	0.21	1000	25.14	-242.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0177-008.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0177 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	12:15	6.62	109	0.43	1000	23.30	-347.2	0.05	Tannic Brown	None
1/21/2021	12:20	6.48	108	0.38	1000	23.28	-358.2	0.05	Tannic Brown	None
1/21/2021	12:25	6.44	107	0.29	1000	23.29	-370.3	0.05	Tannic Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:15	12:25	10	6.44	107	0.29	1000	23.29	-370.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0177-023.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0177 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	12:45	6.72	519	0.26	1000	27.83	-312.4	0.23	Brown	None
1/21/2021	12:50	6.91	512	0.25	1000	27.82	-358.9	0.23	Brown	None
1/21/2021	12:55	7.11	501	0.22	1000	27.53	-386.7	0.23	Brown	None
1/21/2021	13:00	7.14	496	0.22	1000	27.43	-386.7	0.23	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:45	13:00	15	7.14	496	0.22	1000	27.43	-386.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0177-033.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0177 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	13:15	7.37	555	0.24	1000	27.63	-373	0.25	Gray	None
1/21/2021	13:20	7.45	547	0.25	1000	27.21	-415.4	0.25	Gray	None
1/21/2021	13:25	7.46	542	0.27	1000	27.09	-421.5	0.25	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:15	13:25	10	7.46	542	0.27	1000	27.09	-421.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0177-043.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0177 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	13:50	7.22	2247	1.42	1000	27.90	-263.7	1.07	Gray	None
1/21/2021	13:55	7.27	2231	0.23	1000	27.05	-327	1.09	Gray	None
1/21/2021	14:00	7.26	2239	0.18	1000	27.00	-334.1	1.10	Gray	None
1/21/2021	14:05	7.26	2232	0.17	1000	26.93	-334.1	1.10	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:50	14:05	15	7.26	2232	0.17	1000	26.93	-334.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0178-008.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0178 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	15:20	7.10	386	1.26	211	23.49	-243.1	0.19	Clear	None
1/21/2021	15:25	6.45	374	0.26	73	23.47	-280.2	0.18	Clear	None
1/21/2021	15:30	6.41	372	0.23	71	23.44	-294.2	0.18	Clear	None
1/21/2021	15:35	6.37	369	0.18	64	23.38	-301.7	0.18	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:20	15:35	15	6.37	369	0.18	64	23.38	-301.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0178-023.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0178 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	15:55	6.72	1183	0.90	1000	27.77	-222.2	0.55	Light Grav	None
1/21/2021	16:00	6.79	1168	0.32	1000	27.01	-276.8	0.55	Light Grav	None
1/21/2021	16:05	6.81	1153	0.31	1000	26.62	-302	0.55	Light Grav	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:55	16:05	10	6.81	1153	0.31	1000	26.62	-302

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0178-033.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0178 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	16:25	7.04	1258	0.42	1000	27.88	-211	0.59	Gray	None
1/21/2021	16:30	6.97	1222	0.22	1000	27.03	-272.6	0.58	Gray	None
1/21/2021	16:35	6.95	1212	0.18	1000	27.10	-289.4	0.58	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:25	16:35	10	6.95	1212	0.18	1000	27.10	-289.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0178-043.0-20210121 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0178 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/21/2021	17:00	7.03	1985	1.10	1000	26.53	-192.5	0.98	Gray	None
1/21/2021	17:05	7.04	1989	0.33	1000	26.37	-237.5	0.98	Gray	None
1/21/2021	17:10	7.04	1983	0.25	1000	26.18	-260.2	0.98	Gray	None
1/21/2021	17:15	7.04	1978	0.20	1000	26.11	-278	0.98	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
17:00	17:15	15	7.04	1978	0.20	1000	26.11	-278

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0179-008.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0179 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	8:30	7.14	698	0.81	1000	22.22	-54.6	0.36	White	None
1/22/2021	8:35	7.04	690	0.81	877	22.26	-69.7	0.35	White	None
1/22/2021	8:40	7.00	684	0.82	1000	22.28	-76.3	0.35	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:30	8:40	10	7.00	684	0.82	1000	22.28	-76.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0179-023.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0179 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	8:58	7.06	1452	0.26	1000	25.44	-130.8	0.72	White	None
1/22/2021	9:03	7.00	1437	0.34	1000	25.37	-134.3	0.72	White	None
1/22/2021	9:08	6.98	1431	0.26	1000	25.35	-136.1	0.71	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:58	9:08	10	6.98	1431	0.26	1000	25.35	-136.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0179-033.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0179 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	9:55	7.01	1888	0.23	1000	25.27	-145.5	0.95	Brown	None
1/22/2021	10:00	6.98	1886	0.20	1000	25.31	-147.2	0.95	Brown	None
1/22/2021	10:05	6.98	1879	0.21	1000	25.34	-150.6	0.94	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:55	10:05	10	6.98	1879	0.21	1000	25.34	-150.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0179-043.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0179 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	10:43	7.17	2104	0.22	1000	25.40	-134.1	1.06	Gray	None
1/22/2021	10:48	7.10	2115	0.19	1000	25.56	-133.3	1.06	Gray	None
1/22/2021	10:53	7.10	2095	0.18	1000	25.45	-140.4	1.06	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:43	10:53	10	7.10	2095	0.18	1000	25.45	-140.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0180-008.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0180 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	11:29	7.16	389	0.32	966	23.63	-94.8	0.19	Gray	None
1/22/2021	11:34	7.00	383	0.35	389	23.59	-100.9	0.19	Gray	None
1/22/2021	11:39	6.98	382	0.46	309	23.45	-107.1	0.19	Gray	None
1/22/2021	11:44	6.98	380	0.48	258	23.46	-107.5	0.19	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:29	11:44	15	6.98	380	0.48	258	23.46	-107.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0180-023.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0180 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	12:02	6.97	1569	0.41	34	27.96	-113.6	0.74	Clear	None
1/22/2021	12:07	6.89	1553	0.25	18	27.94	-120.5	0.74	Clear	None
1/22/2021	12:12	6.88	1532	0.30	12	27.90	-121.4	0.74	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:02	12:12	10	6.88	1532	0.30	12	27.90	-121.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0180-033.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0180 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	12:34	7.01	1738	0.22	1000	27.92	-128.2	0.83	Gray	None
1/22/2021	12:39	6.94	1717	0.20	1000	27.87	-136.3	0.82	Gray	None
1/22/2021	12:44	6.90	1707	0.17	1000	27.86	-139.6	0.82	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:34	12:44	10	6.90	1707	0.17	1000	27.86	-139.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0180-043.0-20210122 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0180 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/22/2021	13:11	7.18	1879	0.16	1000	28.94	-389.1	0.88	Gray	None
1/22/2021	13:16	7.11	1885	0.23	1000	29.03	-406.7	0.88	Gray	None
1/22/2021	13:21	7.10	1879	0.16	1000	28.89	-415.6	0.88	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:11	13:21	10	7.10	1879	0.16	1000	28.89	-415.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0181-008.0-20210125 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0181 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/25/2021	9:05	4.42	154	1.04	309	20.46	190.9	0.08	Yellow	None
1/25/2021	9:10	3.95	153	1.05	88	20.48	199.9	0.08	Yellow	None
1/25/2021	9:15	3.85	153	0.50	48	20.49	192.4	0.08	Yellow	None
1/25/2021	9:20	3.80	154	0.35	23	20.50	181.4	0.08	Yellow	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:05	9:20	15	3.80	154	0.35	23	20.50	181.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0181-043.0-20210125 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0181 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/25/2021	10:25	6.37	2901	0.57	1000	24.01	-33.6	1.58	Gray	None
1/25/2021	10:30	6.73	2960	0.68	1000	23.89	-68.2	1.58	Gray	None
1/25/2021	10:35	6.83	2981	0.75	1000	23.82	-76.7	1.58	Gray	None
1/25/2021	10:40	6.90	2997	0.75	1000	23.80	-85.6	1.59	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:25	10:40	15	6.90	2997	0.75	1000	23.80	-85.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0182-008.0-20210125 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0182 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/25/2021	11:20	6.39	263	0.58	857	23.12	-83.2	0.13	Brown	None
1/25/2021	11:25	6.25	263	0.33	792	23.0	-83.8	0.13	Brown	None
1/25/2021	11:30	6.25	262	0.29	790	23.03	-79.0	0.13	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:20	11:30	10	6.25	262	0.29	790	23.03	-79.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0182-023.0-20210125 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0182 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/25/2021	11:52	6.69	1798	0.21	1000	27.06	-109.9	0.87	Brown	None
1/25/2021	11:57	6.77	1774	0.17	1000	27.00	-119.8	0.87	Brown	None
1/25/2021	12:02	6.80	1762	0.17	1000	27.00	-123.3	0.86	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:52	12:02	10	6.80	1762	0.17	1000	27.00	-123.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0182-033.0-20210125 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0182 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/25/2021	12:32	6.99	1665	0.19	1000	26.70	-92.5	0.81	White	None
1/25/2021	12:37	6.98	1650	0.21	1000	26.71	-104.0	0.81	White	None
1/25/2021	12:42	6.97	1676	0.17	1000	26.67	-116.7	0.80	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:32	12:42	10	6.97	1676	0.17	1000	26.67	-116.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0182-043.0-20210125 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0182 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/25/2021	13:14	7.33	3191	0.17	1000	26.55	-150.6	1.61	Gray	None
1/25/2021	13:19	7.36	3197	0.18	1000	26.63	-167.6	1.61	Gray	None
1/25/2021	13:24	7.30	2991	0.18	1000	26.59	-159.5	1.50	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:14	13:24	10	7.30	2991	0.18	1000	26.59	-159.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0183-023.0-20210126 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0183 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	9:05	7.75	712	0.17	790	25.80	-161.4	0.34	Clear	Slight Odor
1/26/2021	9:10	7.58	692	0.18	42	25.42	-146.9	0.33	Clear	Slight Odor
1/26/2021	9:15	7.51	685	0.21	253	25.39	-130	0.33	Clear	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:05	9:15	10	7.51	685	0.21	253	25.39	-130

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0183-033.0-20210126 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0183 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	9:36	7.62	565	0.13	1000	25.02	-170.7	0.27	Gray	None
1/26/2021	9:41	7.54	559	0.29	1000	25.21	-191.2	0.27	Gray	None
1/26/2021	9:46	7.52	556	0.16	1000	25.23	-206.2	0.27	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:36	9:46	10	7.52	556	0.16	1000	25.23	-206.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0184-008.0-20210126 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0184 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	11:01	6.39	124	0.31	1000	24.20	-88.1	0.06	Brown	None
1/26/2021	11:06	5.86	120	0.28	1000	24.10	-60.4	0.06	Brown	None
1/26/2021	11:11	5.63	121	0.25	1000	24.14	-59.6	0.06	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:01	11:11	10	5.63	121	0.25	1000	24.14	-59.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0184-023.0-20210126 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0184 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	11:27	6.67	916	1.82	312	28.11	-94.5	0.42	Cloudy	None
1/26/2021	11:32	6.81	902	1.95	126	27.93	-98.9	0.42	Cloudy	None
1/26/2021	11:37	6.84	900	1.96	485	28.00	-95.5	0.41	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:27	11:37	10	6.84	900	1.96	485	28.00	-95.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0184-043.0-20210126 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0184 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	12:21	7.15	1314	0.11	1000	28.10	-129.3	0.61	Brown	None
1/26/2021	12:26	7.11	1319	0.13	1000	28.12	-130.6	0.62	Brown	None
1/26/2021	12:31	7.08	1314	0.11	1000	28.02	-126.7	0.61	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:21	12:31	10	7.08	1314	0.11	1000	28.02	-126.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0185-023.0-20210126 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0185 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	13:22	6.53	230	0.31	498	27.18	-68.5	0.10	Cloudy	None
1/26/2021	13:27	5.89	208	0.29	325	26.62	-34.5	0.09	Cloudy	None
1/26/2021	13:32	5.54	195	0.17	216	26.19	-28.6	0.09	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:22	13:32	10	5.54	195	0.17	216	26.19	-28.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0186-023.0-20210126 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0186 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	15:25	5.07	137	0.12	1000	26.35	-72.6	0.06	Brown	None
1/26/2021	15:30	4.98	122	0.23	1000	25.96	-180.2	0.06	Brown	None
1/26/2021	15:35	4.99	118	0.17	1000	25.85	-119.5	0.06	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:25	15:35	10	4.99	118	0.17	1000	25.85	-119.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0186-043.0-20210126 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0186 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/26/2021	16:16	6.37	444	0.14	1000	26.38	-117.4	0.20	Brown	None
1/26/2021	16:21	6.26	418	0.16	1000	26.39	-126.3	0.19	Brown	None
1/26/2021	16:26	6.20	414	0.16	1000	26.30	-130.0	0.19	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:16	16:26	10	6.20	414	0.16	1000	26.30	-130.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0187-023.0-20210127 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0187 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/27/2021	7:56	5.91	260	0.05	1000	24.61	-61.0	0.12	Brown	None
1/27/2021	8:01	5.74	257	0.04	1000	24.45	-81.0	0.12	Brown	None
1/27/2021	8:06	5.71	258	0.03	1000	24.39	-93.0	0.12	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:56	8:06	10	5.71	258	0.03	1000	24.39	-93.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0188-023.0-20210127 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0188 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/27/2021	9:26	6.89	491	0.10	1000	25.73	-118.6	0.23	Cloudy	None
1/27/2021	9:31	7.12	484	0.08	108	25.62	-140.7	0.23	Cloudy	None
1/27/2021	9:36	7.21	481	0.10	52	25.49	-123.7	0.23	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:26	9:36	10	7.21	481	0.10	52	25.49	-123.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0189-023.0-20210127 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0189 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/27/2021	11:14	7.16	670	0.53	1000	25.15	-177.9	0.32	Brown	None
1/27/2021	11:19	7.18	665	0.32	804	25.02	-192.1	0.32	Brown	None
1/27/2021	11:24	7.21	663	0.27	947	24.91	-204.3	0.32	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:14	11:24	10	7.21	663	0.27	947	24.91	-204.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0189-043.0-20210127 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0189 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/27/2021	12:04	7.01	1944	0.42	1000	25.72	-75.9	0.97	Cloudy	None
1/27/2021	12:09	6.99	1931	0.27	899	25.42	-75.1	0.97	Cloudy	None
1/27/2021	12:14	6.92	1942	0.29	913	25.29	-76.5	0.98	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:04	12:14	10	6.92	1942	0.29	913	25.29	-76.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0190-008.0-20210127 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0190 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/27/2021	13:01	6.96	535	0.46	550	22.82	-50.6	0.27	Brown	None
1/27/2021	13:06	6.68	525	0.39	159	22.44	-53.2	0.27	Cloudy	None
1/27/2021	13:11	6.69	521	0.15	55	22.39	-63.0	0.26	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:01	13:11	10	6.69	521	0.15	55	22.39	-63.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0190-023.0-20210127 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0190 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/27/2021	13:25	6.82	767	0.35	1000	25.73	-69.0	0.37	Brown	None
1/27/2021	13:30	6.81	753	0.17	1000	25.44	-81.0	0.36	Brown	None
1/27/2021	13:35	6.81	744	0.13	1000	25.40	-88.4	0.36	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:25	13:35	10	6.81	744	0.13	1000	25.40	-88.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0191-008.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0191 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	7:50	6.37	778	0.75	1000	20.84	-84.6	0.41	Brown	Sulfur
1/28/2021	7:55	6.23	765	1.07	1000	20.74	-85.1	0.41	Brown	Sulfur
1/28/2021	8:00	6.16	757	1.41	1000	20.68	-86.2	0.41	Brown	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:50	8:00	10	6.16	757	1.41	1000	20.68	-86.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0191-023.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0191 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	8:20	6.45	4314	0.27	1000	24.10	-76.3	2.35	Brown	None
1/28/2021	8:25	6.57	4567	0.24	1000	24.17	-89.0	2.48	Brown	None
1/28/2021	8:30	6.61	4676	0.22	1000	24.17	-93.4	2.54	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:20	8:30	10	6.61	4676	0.22	1000	24.17	-93.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0191-033.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0191 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	8:45	6.76	30821	0.07	1000	24.52	-73.3	19.07	Gray	None
1/28/2021	8:50	6.83	32480	0.10	1000	24.49	-95.5	20.58	Gray	None
1/28/2021	8:55	6.85	32773	0.12	1000	24.55	-99.4	20.72	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:45	8:55	10	6.85	32773	0.12	1000	24.55	-99.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0192-008.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0192 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	10:30	7.63	620	2.43	1000	20.36	-100	0.33	Clear	None
1/28/2021	10:35	7.41	612	2.60	136	20.28	-96.4	0.33	Clear	None
1/28/2021	10:40	7.23	610	2.76	26	20.31	-82.6	0.33	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:30	10:40	10	7.23	610	2.76	26	20.31	-82.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0192-023.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0192 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	11:20	7.18	1034	0.73	1000	22.91	-103.1	0.55	Gray	None
1/28/2021	11:25	7.38	935	0.19	1000	22.55	-145	0.48	Gray	None
1/28/2021	11:30	7.47	893	0.10	1000	22.53	-165.8	0.46	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:20	11:30	10	7.47	893	0.10	1000	22.53	-165.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0192-033.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0192 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	12:00	7.29	3111	0.12	1000	24.22	-150	1.66	Gray	None
1/28/2021	12:05	7.28	3214	0.20	1000	24.18	-148.1	1.70	Gray	None
1/28/2021	12:10	7.26	3223	0.15	1000	24.19	-146.9	1.71	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:00	12:10	10	7.26	3223	0.15	1000	24.19	-146.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0193-008.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0193 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	13:35	7.39	675	0.27	48	21.98	-159.3	0.35	Cloudy	None
1/28/2021	13:40	7.36	665	0.30	58	21.70	-161.9	0.35	Cloudy	None
1/28/2021	13:45	7.28	660	0.19	62	21.88	-166.7	0.34	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:35	13:45	10	7.28	660	0.19	62	21.88	-166.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0193-023.0-20210128 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0193 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	13:55	7.59	840	0.08	1000	25.12	-260	0.41	Gray	Slight Odor
1/28/2021	14:00	8.05	841	0.05	1000	24.96	-319.9	0.41	Gray	Slight Odor
1/28/2021	14:05	8.11	835	0.06	1000	24.73	-338.1	0.41	Gray	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:55	14:05	10	8.11	835	0.06	1000	24.73	-338.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0193-033.0-20210128 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0193 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/28/2021	14:15	7.78	22211	0.28	1000	24.96	-301.2	13.92	Gray	None
1/28/2021	14:20	7.68	26602	0.21	931	25.00	-312.9	16.86	Gray	None
1/28/2021	14:25	7.62	27390	0.16	807	24.82	-320.5	16.93	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:15	14:25	10	7.62	27390	0.16	807	24.82	-320.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0194-008.0-20210129 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0194 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/29/2021	11:20	6.06	300	0.49	371	21.04	-62.5	0.16	Clear	None
1/29/2021	11:25	6.04	298	0.50	312	21.05	-62.6	0.16	Clear	None
1/29/2021	11:30	5.99	293	0.49	30	20.97	-64.0	0.15	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:20	11:30	10	5.99	293	0.49	30	20.97	-64.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0194-023.0-20210129 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0194 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/29/2021	11:40	6.36	858	1.49	1000	22.82	-49.2	0.44	Clear	None
1/29/2021	11:45	6.73	845	0.45	1000	23.07	-106.9	0.43	Clear	None
1/29/2021	11:50	6.88	823	0.42	401	22.66	-116.6	0.42	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:40	11:50	10	6.88	823	0.42	401	22.66	-116.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0194-033.0-20210129 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0194 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
1/29/2021	12:10	7.14	840	0.98	1000	24.21	-74.3	0.42	Turbid	None
1/29/2021	12:15	6.98	823	0.66	1000	23.83	-101	0.41	Turbid	None
1/29/2021	12:20	6.98	810	0.47	1000	23.70	-122.5	0.41	Turbid	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:10	12:20	10	6.98	810	0.47	1000	23.70	-122.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0195-008.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0195 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	9:35	7.70	404	2.70	1000	20.85	-21.1	0.21	Turbid	None
2/1/2021	9:40	7.42	432	1.44	568	20.85	-49.5	0.21	Turbid	None
2/1/2021	9:45	7.33	395	1.17	391	20.91	-64.9	0.21	Turbid	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:35	9:45	10	7.33	395	1.17	391	20.91	-64.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0195-023.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0195 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	10:05	7.42	541	1.04	1000	23.86	-120.4	0.27	Brown	None
2/1/2021	10:10	7.42	539	0.76	1000	23.84	-127.3	0.27	Brown	None
2/1/2021	10:15	7.44	537	0.57	1000	23.90	-133.2	0.26	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:05	10:15	10	7.44	537	0.57	1000	23.90	-133.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0195-033.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0195 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	10:35	7.35	630	1.38	1000	24.01	-100.1	0.31	Gray	None
2/1/2021	10:40	7.24	631	0.74	1000	23.87	-108.7	0.31	Gray	None
2/1/2021	10:45	7.24	621	0.32	1000	23.78	-119.7	0.31	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:35	10:45	10	7.24	621	0.32	1000	23.78	-119.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0195-043.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0195 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	11:05	7.35	640	0.38	1000	24.38	-135.9	0.31	Gray	None
2/1/2021	11:10	7.35	632	0.34	1000	24.09	-142.9	0.31	Gray	None
2/1/2021	11:15	7.35	628	0.32	1000	23.98	-144	0.31	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:05	11:15	10	7.35	628	0.32	1000	23.98	-144

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0196-008.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0196 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	11:50	6.62	203	1.04	1000	22.32	-42.8	0.10	Clear	None
2/1/2021	11:55	6.50	203	1.07	210	22.24	-41.6	0.10	Clear	None
2/1/2021	12:00	6.27	201	0.68	91	22.16	-41.1	0.10	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:50	12:00	10	6.27	201	0.68	91	22.16	-41.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0196-023.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0196 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	12:15	6.24	152	0.56	607	25.86	-87.2	0.07	Brown	Slight Odor
2/1/2021	12:20	6.03	144	0.32	631	25.30	-89.6	0.07	Brown	Slight Odor
2/1/2021	12:25	5.90	141	0.26	498	25.01	-90.9	0.06	Brown	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:15	12:25	10	5.90	141	0.26	498	25.01	-90.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0197-008.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0197 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	13:45	5.98	161	0.76	1000	23.65	-68	0.08	Brown	None
2/1/2021	13:50	5.88	155	0.50	552	23.27	-83.3	0.07	Brown	None
2/1/2021	13:55	5.78	149	0.34	202	23.03	-94.5	0.07	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:45	13:55	10	5.78	149	0.34	202	23.03	-94.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0197-023.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0197 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	14:10	5.67	32080	0.68	145	24.79	9.2	21.46	Brown	None
2/1/2021	14:15	6.19	37123	0.29	135	24.68	-36.1	24.06	Brown	None
2/1/2021	14:20	6.41	38551	0.24	246	24.60	-60.8	24.76	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:10	14:20	10	6.41	38551	0.24	246	24.60	-60.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0198-008.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0198 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	16:23	7.28	853	5.32	302	19.75	-55.3	0.46	Cloudy	None
2/1/2021	16:28	7.13	818	5.78	275	19.79	-51.3	0.45	Cloudy	None
2/1/2021	16:33	7.08	804	5.99	262	19.62	-48.9	0.44	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:23	16:33	10	7.08	804	5.99	262	19.62	-48.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0198-023.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0198 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	16:48	7.04	1102	0.68	591	25.75	-133.1	0.56	Cloudy	None
2/1/2021	16:53	6.99	1077	0.42	1000	23.47	-157.2	0.55	cloudy	None
2/1/2021	16:58	6.96	1049	0.24	1000	23.47	-157.2	0.53	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:48	16:58	10	6.96	1049	0.24	1000	23.47	-157.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0198-033.0-20210201 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0198 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	8:22	7.45	708	0.46	1000	22.36	-113.9	0.36	Cloudy	None
2/1/2021	8:27	7.35	697	0.31	1000	22.45	-123.5	0.36	Cloudy	None
2/1/2021	8:32	7.31	695	0.22	1000	22.57	-132.4	0.36	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:22	8:32	10	7.31	695	0.22	1000	22.57	-132.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0198-043.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0198 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/1/2021	8:55	7.24	2459	0.24	1000	20.73	-119.4	1.40	Gray	None
2/1/2021	9:00	7.21	2579	0.19	1000	20.77	-130.1	1.46	Gray	None
2/1/2021	9:05	7.21	2618	0.19	1000	20.76	-136.0	1.48	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:55	9:05	10	7.21	2618	0.19	1000	20.76	-136.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0199-023.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0199 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	10:17	6.78	1295	0.48	1000	22.46	-95.8	0.68	Cloudy	None
2/2/2021	10:22	6.64	1246	0.32	1000	22.72	-108.5	0.65	Cloudy	None
2/2/2021	10:27	6.59	1212	0.30	1000	22.56	-113.9	0.63	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:17	10:27	10	6.59	1212	0.30	1000	22.56	-113.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0199-033.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0199 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	10:55	7.28	679	0.17	1000	22.99	-130.8	0.34	White	None
2/2/2021	11:00	7.24	671	0.15	1000	22.92	-142.4	0.34	White	None
2/2/2021	11:05	7.23	668	0.14	1000	22.98	-150.2	0.34	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:55	11:05	10	7.23	668	0.14	1000	22.98	-150.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0199-043.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0199 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	11:38	7.19	3598	0.18	1000	22.90	-113.2	1.99	White	None
2/2/2021	11:43	7.13	3812	0.13	1000	22.91	-122.9	2.11	White	None
2/2/2021	11:48	7.11	3908	0.12	1000	22.91	-127.1	2.16	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:38	11:48	10	7.11	3908	0.12	1000	22.91	-127.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0200-008.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0200 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	12:52	6.95	657	4.43	281	20.93	-54.1	0.35	Clear	None
2/2/2021	12:57	6.80	645	4.78	59	21.05	-47.8	0.34	Clear	None
2/2/2021	13:02	6.75	634	4.90	35	21.15	-46.5	0.33	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:52	13:02	10	6.75	634	4.90	35	21.15	-46.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0200-023.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0200 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	13:17	6.94	782	0.22	824	24.32	-97.3	0.39	White	None
2/2/2021	13:22	6.87	762	0.20	1000	24.05	-103	0.38	White	None
2/2/2021	13:27	6.85	754	0.17	1000	24.01	-107.3	0.37	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:17	13:27	10	6.85	754	0.17	1000	24.01	-107.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0200-033.0-20210202 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0200 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	13:45	7.49	988	0.17	1000	24.55	-192.2	0.49	White	Sulfur
2/2/2021	13:50	7.50	991	0.11	1000	24.38	-197.6	0.49	White	Sulfur
2/2/2021	13:55	7.51	988	0.10	1000	24.25	-228.0	0.49	White	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:45	13:55	10	7.51	988	0.10	1000	24.25	-228.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0200-043.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0200 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	14:15	7.23	3568	0.16	1000	22.17	-136.0	1.99	White	None
2/2/2021	14:20	7.15	3779	0.10	1000	22.53	-138.4	2.11	White	None
2/2/2021	14:25	7.13	3803	0.10	1000	22.12	-138.4	2.12	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:15	14:25	10	7.13	3803	0.10	1000	22.12	-138.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0201-008.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0201 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	14:59	6.97	935	0.28	561	21.25	-244.9	0.50	Cloudy	Sulfur
2/2/2021	15:04	6.85	923	0.28	468	21.30	-251.7	0.49	Cloudy	Sulfur
2/2/2021	15:09	6.82	919	0.25	297	21.23	-263.3	0.49	Cloudy	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:59	15:09	10	6.82	919	0.25	297	21.23	-263.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0201-023.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0201 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	15:25	7.20	834	0.23	1000	23.12	-185.1	0.42	Clear	None
2/2/2021	15:30	7.12	780	0.22	876	22.54	-193.7	0.40	Clear	None
2/2/2021	15:35	7.02	764	0.22	114	22.50	-185.6	0.39	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:25	15:35	10	7.02	764	0.22	114	22.50	-185.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0201-033.0-20210202 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0201 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	16:02	7.00	3330	1.86	1000	23.43	-160.7	1.81	Gray	None
2/2/2021	16:07	7.05	3569	1.17	1000	23.74	-195.2	1.93	Gray	None
2/2/2021	16:12	7.04	3644	1.11	1000	23.67	-205.3	1.97	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:02	16:12	10	7.04	3644	1.11	1000	23.67	-205.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0201-043.0-20210202 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0201 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/2/2021	16:32	7.11	4499	0.81	1000	23.42	-139.9	2.47	Gray	None
2/2/2021	16:37	7.07	4505	0.45	1000	23.42	-139.9	2.48	Gray	None
2/2/2021	16:42	7.06	4499	0.38	1000	23.22	-145.4	2.49	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:32	16:42	10	7.06	4499	0.38	1000	23.22	-145.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0202-023.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0202 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	9:28	7.05	978	0.63	1000	20.38	-205.7	0.53	Gray	Sulfur
2/3/2021	9:33	7.00	940	0.49	1000	19.75	-238.7	0.52	Gray	Sulfur
2/3/2021	9:38	6.95	933	0.46	1000	20.01	-254.8	0.51	Gray	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:28	9:38	10	6.95	933	0.46	1000	20.01	-254.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0202-033.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0202 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	10:01	6.96	1447	0.55	1000	21.92	-220.6	0.77	Cloudy	Sulfur
2/3/2021	10:06	6.85	1439	0.50	1000	21.89	-234.9	0.77	Cloudy	Sulfur
2/3/2021	10:11	6.84	1442	0.47	1000	21.92	-240.7	0.77	Cloudy	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:01	10:11	10	6.84	1442	0.47	1000	21.92	-240.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0202-043.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0202 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	10:36	7.03	4829	0.47	1000	21.82	-115.0	2.78	White	None
2/3/2021	10:41	6.95	5022	0.42	1000	21.60	-122.9	2.91	White	None
2/3/2021	10:46	6.90	5178	0.42	1000	21.71	-127.6	3.00	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:36	10:46	10	6.90	5178	0.42	1000	21.71	-127.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0203-008.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0203 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	11:10	6.77	979	0.56	229	19.56	-173.1	0.54	Clear	None
2/3/2021	11:15	6.72	960	0.50	88	19.70	-190.1	0.53	Clear	None
2/3/2021	11:20	6.70	944	0.47	59	19.63	-199.2	0.52	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:10	11:20	10	6.70	944	0.47	59	19.63	-199.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0203-023.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0203 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	11:39	6.93	879	0.59	389	22.33	-164	0.45	Clear	None
2/3/2021	11:44	6.88	864	0.48	298	22.56	-171.7	0.45	Clear	None
2/3/2021	11:49	6.85	852	0.47	354	22.21	-175.4	0.44	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:39	11:49	10	6.85	852	0.47	354	22.21	-175.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0203-033.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0203 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	12:05	7.01	3186	0.52	1000	22.23	-125.9	1.79	Gray	Slight Odor
2/3/2021	12:10	6.92	3379	0.46	945	21.51	-128.7	1.92	Gray	Slight Odor
2/3/2021	12:15	6.90	3466	0.46	729	21.29	-135.2	1.97	Gray	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:05	12:15	10	6.90	3466	0.46	729	21.29	-135.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0203-043.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0203 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	12:40	7.27	4572	0.56	1000	22.04	-122.9	2.62	Clear	None
2/3/2021	12:45	7.03	4667	0.43	547	21.53	-124.7	2.69	Clear	None
2/3/2021	12:50	7.01	4679	0.45	491	21.36	-125.6	2.70	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:40	12:50	10	7.01	4679	0.45	491	21.36	-125.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0204-008.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0204 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	14:09	7.22	725	1.51	336	20.75	-73.7	0.38	Cloudy	None
2/3/2021	14:14	6.96	703	0.88	27	20.70	-75.7	0.38	Cloudy	None
2/3/2021	14:19	6.89	690	0.83	19	20.60	-80	0.37	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:09	14:19	10	6.89	690	0.83	19	20.60	-80

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0204-023.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0204 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	14:45	7.38	18382	1.38	1000	23.76	-298.5	11.38	Black	Sulfur
2/3/2021	14:50	7.47	19582	0.96	1000	22.22	-326.4	12.46	Black	Sulfur
2/3/2021	14:55	7.40	20256	0.92	1000	21.87	-334.6	12.99	Black	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:45	14:55	10	7.40	20256	0.92	1000	21.87	-334.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0204-033.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0204 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	15:21	7.24	29936	0.32	1000	24.13	-199.7	18.87	Gray	None
2/3/2021	15:26	7.14	29725	0.31	1000	23.83	-196.8	18.89	Gray	None
2/3/2021	15:31	7.08	29702	0.31	1000	23.60	-194.7	18.94	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:21	15:31	10	7.08	29702	0.31	1000	23.60	-194.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0204-043.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0204 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	15:57	7.07	29192	0.37	708	23.38	-163.2	18.68	Cloudy	None
2/3/2021	16:02	6.99	29104	0.35	795	23.17	-162.6	18.17	Cloudy	None
2/3/2021	16:07	6.94	28958	0.37	738	22.98	-162.5	18.69	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:57	16:07	10	6.94	28958	0.37	738	22.98	-162.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0205-008.0-20210203 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0205 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/3/2021	8:25	6.05	228	0.48	63	18.48	-106.3	0.12	Clear	Slight Odor
2/3/2021	8:30	5.91	230	0.42	23	18.49	-99.6	0.12	Clear	Slight Odor
2/3/2021	8:35	5.63	226	0.37	23	18.80	-86.5	0.12	Clear	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:25	8:35	10	5.63	226	0.37	23	18.80	-86.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0205-023.0-20210204 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0205 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	9:07	7.64	33811	0.85	198	21.21	-268.9	23.07	Clear	Slight Odor
2/4/2021	9:12	7.65	34159	0.37	109	21.56	-270	23.19	Clear	Slight Odor
2/4/2021	9:17	7.66	34257	0.21	56	21.31	-292.4	23.33	Clear	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:07	9:17	10	7.66	34257	0.21	56	21.31	-292.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0205-033.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0205 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	9:55	7.66	44020	0.60	1000	23.66	-161.7	29.38	Gray	Slight Odor
2/4/2021	10:00	7.55	44409	0.25	1000	22.89	-217.8	28.62	Gray	Slight Odor
2/4/2021	10:05	7.57	41638	0.19	1000	23.15	-241.1	27.81	Gray	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:55	10:05	10	7.57	41638	0.19	1000	23.15	-241.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0205-043.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0205 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	10:35	7.48	51036	3.31	1000	23.41	-177.5	34.75	Gray	Slight Odor
2/4/2021	10:40	7.41	51140	0.87	1000	23.31	-182.6	34.85	Gray	Slight Odor
2/4/2021	10:45	7.37	51362	0.37	1000	23.41	-188.8	34.89	Gray	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:35	10:45	10	7.37	51362	0.37	1000	23.41	-188.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0206-008.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0206 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	11:30	6.61	11121	0.85	24	21.75	-153.8	6.78	Clear	Slight Odor
2/4/2021	11:35	6.41	10989	0.49	14	21.64	-164.8	6.71	Clear	Slight Odor
2/4/2021	11:40	6.25	19875	0.35	11	21.59	-166.9	6.64	Clear	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:30	11:40	10	6.25	19875	0.35	11	21.59	-166.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0206-023.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0206 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	11:55	7.04	35255	0.23	1000	26.09	-338.9	21.69	Gray	None
2/4/2021	12:00	7.41	34434	0.30	1000	24.57	-353.1	21.86	Gray	None
2/4/2021	12:05	7.35	34488	0.35	1000	24.53	-358.1	21.93	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:55	12:05	10	7.35	34488	0.35	1000	24.53	-358.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0206-033.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0206 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	12:35	8.00	41695	1.19	1000	25.01	-339.7	26.84	Cloudy	None
2/4/2021	12:40	7.78	41494	0.55	460	24.54	-350.9	26.85	Cloudy	None
2/4/2021	12:45	7.44	41419	0.45	641	24.40	-358.1	26.99	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:35	12:45	10	7.44	41419	0.45	641	24.40	-358.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0206-043.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0206 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	13:05	7.98	47224	4.27	1000	26.21	-326.7	29.83	Gray	None
2/4/2021	13:10	7.86	46430	0.61	1000	25.06	-343.3	30.08	Gray	None
2/4/2021	13:15	7.67	46086	0.58	1000	24.72	-356	30.07	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:05	13:15	10	7.67	46086	0.58	1000	24.72	-356

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0207-008.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0207 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	14:50	7.54	736	9.91	1000	24.88	119.6	0.35	Gray	None
2/4/2021	14:55	7.35	727	9.00	265	24.75	112.0	0.36	Gray	None
2/4/2021	15:00	7.11	715	4.39	48	24.40	52.6	0.35	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:50	15:00	10	7.11	715	4.39	48	24.40	52.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0207-033.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0207 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	15:55	7.18	2691	5.45	1000	27.27	-179.3	1.34	Gray	None
2/4/2021	16:00	7.21	2757	4.27	1000	26.54	-208.7	1.39	Gray	None
2/4/2021	16:05	7.22	2782	2.81	1000	26.14	-224.3	1.40	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:55	16:05	10	7.22	2782	2.81	1000	26.14	-224.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0207-043.0-20210204 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0207 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/4/2021	16:30	7.28	4042	3.12	1000	26.60	-148.7	2.07	Gray	None
2/4/2021	16:35	7.25	4017	3.23	1000	26.37	-164.1	2.06	Gray	None
2/4/2021	16:40	7.22	4027	3.08	1000	26.55	-180.3	2.06	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:30	16:40	10	7.22	4027	3.08	1000	26.55	-180.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0208-008.0-20210205 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0208 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/5/2021	8:55	7.20	606	2.83	1000	21.12	-29.9	0.32	White	None
2/5/2021	9:00	6.98	595	1.03	1000	21.26	-33.1	0.31	White	None
2/5/2021	9:05	6.90	590	0.73	1000	21.35	-35.7	0.31	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:55	9:05	10	6.90	590	0.73	1000	21.35	-35.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0208-023.0-20210205 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0208 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/5/2021	9:21	7.01	810	0.70	1000	24.27	-107.4	0.40	Gray	Sulfur
2/5/2021	9:26	6.90	805	0.54	1000	24.33	-117.1	0.40	Gray	Sulfur
2/5/2021	9:31	6.87	798	0.44	1000	24.31	-123.0	0.39	Gray	Sulfur

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:21	9:31	10	6.87	798	0.44	1000	24.31	-123.0

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0208-033.0-20210205 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0208 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/5/2021	9:53	7.03	1991	1.06	1000	25.10	-143	1.01	White	None
2/5/2021	9:58	6.96	1976	0.60	1000	24.85	-168.1	1.01	White	None
2/5/2021	10:03	6.93	1983	0.50	1000	24.88	-181.5	1.01	White	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:53	10:03	10	6.93	1983	0.50	1000	24.88	-181.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0208-043.0-20210205 **Sampler:** Brittany Follett/Ethan House
Well ID: PFAS-DPT0208 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/5/2021	10:20	7.08	7465	0.75	1000	24.77	-103.1	4.19	Gray	None
2/5/2021	10:25	7.04	8344	0.32	966	24.76	-131	4.64	Cloudy	None
2/5/2021	10:30	7.03	8642	0.29	1000	24.94	-143.2	4.82	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:20	10:30	10	7.03	8642	0.29	1000	24.94	-143.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0209-008.0-20210205 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0209 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/5/2021	11:14	6.80	672	0.48	1000	22.79	-92.1	0.34	Brown	None
2/5/2021	11:19	6.75	659	0.33	1000	22.80	-113.1	0.33	Brown	None
2/5/2021	11:24	6.71	649	0.32	1000	22.79	-123.7	0.33	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:14	11:24	10	6.71	649	0.32	1000	22.79	-123.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0209-033.0-20210205 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0209 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/5/2021	12:08	6.91	719	0.40	1000	25.60	-94.3	0.34	Gray	None
2/5/2021	12:15	6.88	704	0.24	1000	25.30	-115.8	0.34	Gray	None
2/5/2021	12:18	6.88	695	0.24	1000	25.10	-122.8	0.34	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:08	12:18	10	6.88	695	0.24	1000	25.10	-122.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0209-043.0-20210205 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0209 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/5/2021	12:45	7.15	1927	0.45	1000	25.83	-112.6	0.96	Gray	None
2/5/2021	12:50	6.98	1918	0.23	1000	25.37	-130.4	0.96	Gray	None
2/5/2021	12:55	6.96	1910	0.20	1000	25.16	-140.9	0.97	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:45	12:55	10	6.96	1910	0.20	1000	25.16	-140.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0210-008.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0210 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	9:50	6.97	552	6.32	160	21.90	-71.3	0.28	Clear	None
2/8/2021	9:55	6.83	548	0.74	73	21.86	-71.7	0.28	Clear	None
2/8/2021	10:00	6.80	546	0.57	40	21.85	-67.7	0.28	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:50	10:00	10	6.80	546	0.57	40	21.85	-67.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0210-023.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0210 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	10:20	7.09	2853	1.26	1000	25.51	-117.6	1.47	Brown	None
2/8/2021	10:25	7.09	2891	0.46	1000	25.00	-128.8	1.50	Brown	None
2/8/2021	10:30	7.10	2953	0.32	1000	24.92	-143	1.54	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:20	10:30	10	7.10	2953	0.32	1000	24.92	-143

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0210-033.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0210 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	10:55	7.17	4441	1.55	1000	26.07	-115.2	2.25	Brown	None
2/8/2021	11:00	7.18	4614	1.79	1000	25.67	-151.9	2.42	Brown	None
2/8/2021	11:05	7.18	4600	1.22	1000	25.30	-164.2	2.44	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:55	11:05	10	7.18	4600	1.22	1000	25.30	-164.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0211-008.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0211 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	12:20	6.42	503	0.78	1000	22.01	-83	0.26	Brown	Slight Odor
2/8/2021	12:25	6.35	588	0.65	1000	21.80	-85.2	0.25	Brown	Slight Odor
2/8/2021	12:30	6.12	451	0.53	1000	21.35	-82.4	0.23	Brown	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:20	12:30	10	6.12	451	0.53	1000	21.35	-82.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0211-023.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0211 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	13:25	6.70	2953	1.57	1000	24.46	0.6	1.64	Brown	None
2/8/2021	13:30	7.04	3713	1.21	1000	25.14	-76.4	2.00	Brown	None
2/8/2021	13:35	7.12	3912	1.28	1000	25.08	-97.3	2.08	Brown	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:25	13:35	10	7.12	3912	1.28	1000	25.08	-97.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0211-033.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0211 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	14:05	6.99	22417	0.57	148	25.69	-100.7	13.31	Gray	None
2/8/2021	14:10	7.05	22343	0.29	76	25.41	-116.1	13.35	Gray	None
2/8/2021	14:15	7.08	22619	0.24	156	25.16	-126.4	13.59	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:05	14:15	10	7.08	22619	0.24	156	25.16	-126.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0211-043.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0211 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	14:40	7.07	37252	1.61	191	25.17	-104.2	23.52	Cloudy	None
2/8/2021	14:45	7.05	37726	0.66	128	25.13	-108.2	23.60	Cloudy	None
2/8/2021	14:50	7.04	37395	0.40	116	25.09	-112.2	23.65	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:40	14:50	10	7.04	37395	0.40	116	25.09	-112.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0212-023.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0212 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	15:45	6.71	43	6.87	1000	26.01	-45.2	0.02	Brown	Slight Odor
2/8/2021	15:50	6.20	36	4.86	797	25.59	-53.7	0.01	Brown	Slight Odor
2/8/2021	15:55	6.00	32	4.72	574	25.43	-64.9	0.01	Brown	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:45	15:55	10	6.00	32	4.72	574	25.43	-64.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0212-033.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0212 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	16:25	6.67	10357	0.33	596	26.22	-64.7	5.72	Clear	None
2/8/2021	16:30	6.95	10128	0.29	60	26.12	-102.1	5.57	Clear	None
2/8/2021	16:35	7.06	10147	0.25	46	25.90	-121.1	5.65	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:25	16:35	10	7.06	10147	0.25	46	25.90	-121.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0212-043.0-20210208 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0212 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/8/2021	17:00	7.10	28064	0.56	448	26.26	-86.9	16.87	Clear	None
2/8/2021	17:05	7.11	28448	0.56	166	26.10	-107.4	17.08	Clear	None
2/8/2021	17:10	7.13	28791	0.52	146	26.07	-122.4	17.32	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
17:00	17:10	10	7.13	28791	0.52	146	26.07	-122.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0213-008.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0213 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	9:10	4.29	96	0.24	275	21.93	125.8	0.05	Brown	Slight Odor
2/9/2021	9:15	4.29	95	0.27	219	21.92	124.3	0.05	Brown	Slight Odor
2/9/2021	9:20	4.26	95	0.28	171	22.00	123	0.05	Brown	Slight Odor

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:10	9:20	10	4.26	95	0.28	171	22.00	123

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0213-023.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0213 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	9:40	5.98	2702	0.27	1000	26.54	-39.3	1.36	Gray	None
2/9/2021	9:45	6.49	2750	0.32	126	25.75	-88.5	1.40	Gray	None
2/9/2021	9:50	6.80	2776	0.27	719	25.34	-128.6	1.42	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:40	9:50	10	6.80	2776	0.27	719	25.34	-128.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0213-033.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0213 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	10:20	6.96	2248	1.89	1000	26.61	-143.9	1.11	Gray	None
2/9/2021	10:25	6.96	2238	1.65	1000	26.49	-146.5	1.11	Gray	None
2/9/2021	10:35	6.95	2224	1.17	354	26.24	-140.1	1.11	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:20	10:35	15	6.95	2224	1.17	354	26.24	-140.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0214-008.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0214 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	12:55	5.75	251	1.17	294	24.78	-42.9	0.12	Clear	None
2/9/2021	13:00	5.63	246	0.49	135	24.57	-37.3	0.12	Clear	None
2/9/2021	13:05	5.56	244	0.38	84	24.53	-33.5	0.12	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:55	13:05	10	5.56	244	0.38	84	24.53	-33.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0214-023.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0214 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	13:15	6.52	2271	0.83	1000	31.04	-134	1.02	Gray	None
2/9/2021	13:20	6.95	2248	0.17	1000	29.38	-163.4	1.05	Gray	None
2/9/2021	13:25	7.13	2191	0.17	801	28.02	-158.6	1.05	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:15	13:25	10	7.13	2191	0.17	801	28.02	-158.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0214-033.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0214 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	13:50	7.39	2918	3.08	1000	28.67	-113.8	1.40	Clear	None
2/9/2021	13:55	7.37	2872	0.49	167	27.97	-118.3	1.40	Clear	None
2/9/2021	14:00	7.37	2849	0.25	156	27.56	-130.4	1.40	Clear	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:50	14:00	10	7.37	2849	0.25	156	27.56	-130.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0215-008.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0215 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	15:40	7.33	271	1.66	1000	24.64	-102.2	0.13	Cloudy	None
2/9/2021	15:45	5.46	255	0.66	471	24.01	-35.2	0.12	Cloudy	None
2/9/2021	15:50	5.30	247	0.54	195	23.69	-30.1	0.12	Cloudy	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:40	15:50	10	5.30	247	0.54	195	23.69	-30.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0215-023.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0215 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	16:15	6.02	762	0.52	1000	27.25	-78.5	0.35	Gray	None
2/9/2021	16:20	6.46	732	0.26	1000	26.68	-129.5	0.34	Gray	None
2/9/2021	16:25	6.70	709	0.16	1000	26.27	-155.3	0.34	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:15	16:25	10	6.70	709	0.16	1000	26.27	-155.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0215-043.0-20210209 Sampler: Brittany Follett/Ethan House
 Well ID: PFAS-DPT0215 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
2/9/2021	17:15	7.25	1505	0.59	1000	24.86	-107.5	0.75	Gray	None
2/9/2021	17:20	7.24	1513	0.39	1000	25.06	-116.1	0.76	Gray	None
2/9/2021	17:25	7.23	1516	0.31	654	24.92	-122.3	0.76	Gray	None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
17:15	17:25	10	7.23	1516	0.31	654	24.92	-122.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0216-008.0-20210816 Sampler: Brittany Follett
 Well ID: PFAS-DPT0216 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	10:15	7.38	1485	0.06		26.1	-177.9			None
8/16/2021	10:20	7.31	1471	0.08		26	-179.1			None
8/16/2021	10:25	7.28	1471	0.05		26	-87.3			None
8/16/2021	10:26									

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:15	10:26	11	0						

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0216-023.0-20210816 Sampler: Brittany Follett
 Well ID: PFAS-DPT0216 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	10:52	7.23	3436	0.23		26.8	-134.5			None
8/16/2021	10:57	7.2	3433	0.07		26.4	-140.7			None
8/16/2021	11:02	7.15	3385	0.07		26.4	-146.9			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:52	11:02	10	0	7.15	3385	0.07		26.4	-146.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0216-033.0-20210816 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0216 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	11:35	7.42	7557	0.04		25.2	-137.7			None
8/16/2021	11:40	7.36	7600	0.07		25.2	-160.1			None
8/16/2021	11:45	7.32	7441	0.03		25.2	-169			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:35	11:45	10	0	7.32	7441	0.03		25.2	-169

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0216-043.0-20210816 Sampler: Brittany Follett
 Well ID: PFAS-DPT0216 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	12:11	7.44	8695	0.08		26.2	-173.3			
8/16/2021	12:16	7.37	8608	0.04		25.8	-178			
8/16/2021	12:29	7.38	8689	0.03		26.6	181.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:11	12:29	18	0	7.38	8689	0.03		26.6	181.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0217-008.0-20210816 Sampler: Brittany Follett
 Well ID: PFAS-DPT0217 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	15:25	6.07	278.3	0.05		31.1	-81.8			None
8/16/2021	15:30	6	266	0.04		31.2	-72.8			None
8/16/2021	15:35	5.97	257.9	0.03		31.2	-72.7			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:25	15:35	10	0	5.97	257.9	0.03		31.2	-72.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0217-023.0-20210816 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0217 **Analysis:** PFAS
Remark: FD01-08/16 sampled @23 ft

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	16:00	6.92	853	0.07		29.8	-177.1			None
8/16/2021	16:05	6.98	839	0.04		29.7	-184.7			None
8/16/2021	16:10	7.03	834	0.03		29.6	-190.9			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:00	16:10	10	0	7.03	834	0.03		29.6	-190.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0217-033.0-20210816 Sampler: Brittany Follett
 Well ID: PFAS-DPT0217 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	16:35	7.25	2781	0.1		28.3	-176.4			None
8/16/2021	16:40	7.2	2771	0.03		28.1	-184.2			None
8/16/2021	16:45	7.13	2760	0.02		28.1	-185.7			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:35	16:45	10	0	7.13	2760	0.02		28.1	-185.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0217-043.0-20210816 Sampler: Brittany Follett
 Well ID: PFAS-DPT0217 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/16/2021	17:05	7.29	3573	0.06		28.4	-163.2			None
8/16/2021	17:10	7.2	3546	0.04		28.2	-168.1			None
8/16/2021	17:15	7.16	3528	0.03		28.2	-169.5			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
17:05	17:15	10	0	7.16	3528	0.03		28.2	-169.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0218-008.0-20210817 Sampler: Brittany Follett
 Well ID: PFAS-DPT0218 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	8:35	7.61	513	0.11		27.1	-147.4			None
8/17/2021	8:40	7.35	502	0.06		27	-150.6			None
8/17/2021	8:45	7.34	496.6	0.05		27	-153.8			None
8/17/2021	8:50	7.3	494.5	0.05		27	-155.5			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:35	8:50	15	0	7.3	494.5	0.05		27	-155.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0218-023.0-20210817 Sampler: Brittany Follett
 Well ID: PFAS-DPT0218 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	9:10	7.16	462.6	0.03		26.9	-146.7			None
8/17/2021	9:15	7.1	458.2	0.04		26.9	-134			None
8/17/2021	9:20	7.11	458.6	0.04		27	-54.2			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:10	9:20	10	0	7.11	458.6	0.04		27	-54.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0218-033.0-20210817 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0218 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	9:44	7.2	553	0.03		28.1	-163.6			None
8/17/2021	9:49	7.18	548	0.02		27.9	-165.9			None
8/17/2021	9:54	7.13	550	0.02		27.7	-167.5			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:44	9:54	10	0	7.13	550	0.02		27.7	-167.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0218-043.0-20210817 Sampler: Brittany Follett
 Well ID: PFAS-DPT0218 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	10:25	7.37	2508	0.03		28.1	-152.4			None
8/17/2021	10:30	7.34	2598	0.04		28	-163.7			None
8/17/2021	10:35	7.37	2569	0.04		27.9	-164.1			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:25	10:35	10	0	7.37	2569	0.04		27.9	-164.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0219-008.0-20210817 Sampler: Brittany Follett
 Well ID: PFAS-DPT0219 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	12:32	6.71	740	0.19		29.5	-136.2			None
8/17/2021	12:37	6.61	734	0.17		29.4	-139			None
8/17/2021	12:42	6.65	736	0.26		29.6	-142			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:32	12:42	10	0	6.65	736	0.26		29.6	-142

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0219-023.0-20210817 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0219 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	13:05	7.32	987	0.03		30.5	-210.5			None
8/17/2021	13:10	7.25	988	0.01		30.5	-212.5			None
8/17/2021	13:15	7.29	958	0.03		30.5	-222.6			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:05	13:15	10	0	7.29	958	0.03		30.5	-222.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0219-033.0-20210817 Sampler: Brittany Follett
 Well ID: PFAS-DPT0219 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	13:40	7.14	821	2.47		28.8	-134.5			None
8/17/2021	13:45	7.12	825	2.46		28	-143.3			None
8/17/2021	13:50	7.08	910	2.4		28.6	-147.9			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:40	13:50	10	0	7.08	910	2.4		28.6	-147.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0219-043.0-20210817 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0219 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	14:15	7.42	2623	0.32		31.3	-176.7			None
8/17/2021	14:20	7.4	3001	0.19		31.1	-17.7			None
8/17/2021	14:25	7.36	2602	0.06		31.3	-175.1			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:15	14:25	10	0	7.36	2602	0.06		31.3	-175.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0220-008.0-20210817 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0220 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	15:18	7.48	396.3	0.09		30.6	-196.9			None
8/17/2021	15:23	7.43	396.9	0.03		30.6	-192.4			None
8/17/2021	15:28	7.43	383.4	0.02		30.8	-193			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:18	15:28	10	0	7.43	383.4	0.02		30.8	-193

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0220-023.0-20210817 Sampler: Brittany Follett
 Well ID: PFAS-DPT0220 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	15:52	6.94	761	0.05		29.7	-152.8			None
8/17/2021	15:57	6.87	764	0.03		29.6	-159.6			None
8/17/2021	16:02	6.81	746	0.03		29.5	-162.1			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:52	16:02	10	0	6.81	746	0.03		29.5	-162.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0220-033.0-20210817 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0220 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	16:26	6.98	937	0.02		28.9	-153.9			None
8/17/2021	16:31	6.95	874	0.02		28.8	-141.4			None
8/17/2021	16:36	6.91	876	0.02		28.6	-142.2			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:26	16:36	10	0	6.91	876	0.02		28.6	-142.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0220-043.0-20210817 Sampler: Brittany Follett
 Well ID: PFAS-DPT0220 Analysis: PFAS
 Remark: MS/MSD@1713 and1715

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/17/2021	17:00	7.08	1907	0.05		29	-172.4			None
8/17/2021	17:05	6.96	1899	0.06		28.9	-174.8			None
8/17/2021	17:10	6.68	1885	0.06		28.6	-181.6			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
17:00	17:10	10	0	6.68	1885	0.06		28.6	-181.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0221-008.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0221 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	9:12	6.73	536	0.03	862	28.8	-258.6			None
8/18/2021	9:17	6.7	528	0.07	686	28.8	-268.7			None
8/18/2021	9:22	6.64	523	0.06	902	28.7	-262.1			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:12	9:22	10	2.0	6.64	523	0.06	902	28.7	-262.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0221-023.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0221 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	9:45	6.91	945	0.09	902	27.4	-146.1			None
8/18/2021	9:50	6.9	964	0.07	508	27.4	-154.4			None
8/18/2021	9:55	6.91	963	0.06	603	27.1	-159.5			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:45	9:55	10	3	6.91	963	0.06	603	27.1	-159.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0221-033.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0221 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	10:20	7.31	32243	0.1	804	28	-201			None
8/18/2021	10:25	7.31	32208	0.09	547	28	-202.3			None
8/18/2021	10:30	7.31	32198	0.09	770	27.8	-203.7			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:20	10:30	10	2.0	7.31	32198	0.09	770	27.8	-203.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0221-043.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0221 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	10:54	7.11	69125	0.08	552	27.7	-158.1			None
8/18/2021	10:59	7.1	69160	0.08	427	27.6	-162.1			None
8/18/2021	11:04	7.09	69288	0.06	519	27.8	-166.3			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:54	11:04	10	3	7.09	69288	0.06	519	27.8	-166.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0222-008.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0222 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	11:20	5.94	304.5	0.06	943	27.9	-130.5			None
8/18/2021	11:46	6.18	320.8	0.09	1000	28	-108.8			None
8/18/2021	11:51	6.06	310.4	0.07	1000	27.8	-120.3			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:20	11:51	31	0	6.06	310.4	0.07	1000	27.8	-120.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0222-023.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0222 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	12:20	6.95	15762	0.11	693	26.7	-192.9			None
8/18/2021	12:25	6.97	15712	0.07	473	26.6	-192.5			None
8/18/2021	12:30	6.96	15812	0.05	454	26.7	-193.5			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:20	12:30	10	0	6.96	15812	0.05	454	26.7	-193.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0222-033.0-20210818 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0222 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	12:56	7.15	65647	0.05	1000	29	-204.3			None
8/18/2021	13:01	7.13	65150	0.06	1000	28.4	-200.5			None
8/18/2021	13:06	7.09	65414	0.05	1000	28.4	-196.7			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:56	13:06	10	2	7.09	65414	0.05	1000	28.4	-196.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0222-043.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0222 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	13:44	7.03	75327	0.07	291	28.3	-164.2			None
8/18/2021	13:49	7.01	75339	0.08	272	29	-166.3			None
8/18/2021	13:54	7	74120	0.06	341	27.7	-170.9			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:44	13:54	10	0	7	74120	0.06	341	27.7	-170.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0223-008.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0223 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	15:44	7.18	617	0.31	967	28.9	-227.2			None
8/18/2021	15:49	7.1	615	0.48	396	28.8	-222.5			None
8/18/2021	15:50	7.06	617	0.48	483	28.8	-219.9			None
8/18/2021	15:55									

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:44	15:55	11	0						

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0223-023.0-20210818 Sampler: Brittany Follett
 Well ID: PFAS-DPT0223 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	16:13	7.51	874	0.07	1000	29.3	-326.8			Sulfur
8/18/2021	16:18	7.53	856	0.09	1000	29.1	-347.2			Sulfur
8/18/2021	16:23	7.48	855	0.06		29.2	-394.1			Sulfur

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:13	16:23	10	0	7.48	855	0.06		29.2	-394.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0223-033.0-20210818 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0223 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/18/2021	16:46	7.59	1176	0.07	37428.1	28	-344.1			Sulfur
8/18/2021	16:51	7.49	1169	0.08	386	28	-351.8			Sulfur
8/18/2021	16:56	7.45	1159	0.07	433	27.7	360.4			Sulfur

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:46	16:56	10	0	7.45	1159	0.07	433	27.7	360.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0223-043.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0223 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	7:42	7.63	35020	0.09	1000	27	-332.3			Sulfur
8/19/2021	7:47	7.61	34992	0.08	1000	27	-335.1			Sulfur
8/19/2021	7:52	7.61	34850	0.08	1000	26.9	-340.2			Sulfur

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:42	7:52	10	3	7.61	34850	0.08	1000	26.9	-340.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0224-008.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0224 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	9:02	7.2	405.1	0.34	646	28.3	-292.8			Sulfur
8/19/2021	9:07	7.18	398.1	0.33	284	28.1	-292.8			Sulfur
8/19/2021	9:12	7.15	396.8	0.3	168	28.1	-293.8			Sulfur

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:02	9:12	10	2.0	7.15	396.8	0.3	168	28.1	-293.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0224-023.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0224 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	9:38	7.43	803	0.53	1000	28.4	-336.6			Sulfur
8/19/2021	9:43	7.42	816	0.51	1000	28.4	-341.2			Sulfur
8/19/2021	9:48	7.37	800	0.5	1000	28.5	-345.5			Sulfur

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:38	9:48	10	2.0	7.37	800	0.5	1000	28.5	-345.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0224-033.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0224 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	10:18	7.53	983	0.52	1000	28.3	-313.4			None
8/19/2021	10:23	7.49	959	0.5	1000	28.2	-326.7			None
8/19/2021	10:28	7.5	952	0.51	1000	28.2	-330.1			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:18	10:28	10	2.0	7.5	952	0.51	1000	28.2	-330.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0224-043.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0224 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	10:58	7.57	16168	0.6	1000	31.6	-320			None
8/19/2021	11:03	7.54	16480	0.61	1000	32.1	-321			None
8/19/2021	11:08	7.54	16112	0.62	1000	32.1	-322.2			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:58	11:08	10	2.0	7.54	16112	0.62	1000	32.1	-322.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0225-008.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0225 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	14:08	7.69	447.8	2.47	34.6	30.3	-170.9			None
8/19/2021	14:13	7.67	448.1	2.47	181	30.3	-169.6			None
8/19/2021	14:18	7.63	444.6	2.44	110	30.1	-173.5			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:08	14:18	10	2.0	7.63	444.6	2.44	110	30.1	-173.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0225-023.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0225 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	14:42	7.49	574	0.41	1000	30.4	-290.8			None
8/19/2021	14:47	7.47	574	0.5	1000	30.6	-297.7			None
8/19/2021	14:52	7.46	577	0.47	1000	30.6	-300.6			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:42	14:52	10	2.0	7.46	577	0.47	1000	30.6	-300.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0225-033.0-20210819 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0225 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	15:16	7.61	647	0.33	1000	30.4	-314.4			None
8/19/2021	15:21	7.61	640	0.28	1000	30.3	-318.9			None
8/19/2021	15:26	7.6	637	0.24	1000	30.4	-319.3			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:16	15:26	10	2.0	7.6	637	0.24	1000	30.4	-319.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0225-043.0-20210819 Sampler: Brittany Follett
 Well ID: PFAS-DPT0225 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/19/2021	16:14	7.64	624	0.24	1000	29.5	-328.6			None
8/19/2021	16:19	7.63	625	0.21	1000	29.7	-330.7			None
8/19/2021	16:24	7.57	619	0.16	1000	29.5	-329.7			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:14	16:24	10	2.5	7.57	619	0.16	1000	29.5	-329.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0226-008.0-20210820 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0226 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/20/2021	7:14	7.5	484.9	1.63	52	28.6	-133			None
8/20/2021	7:19	7.48	482.9	1.62	134	28.4	-132.3			None
8/20/2021	7:24	7.45	481.8	1.6	37.3	28.3	-133.6			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:14	7:24	10	2.0	7.45	481.8	1.6	37.3	28.3	-133.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0226-023.0-20210820 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0226 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/20/2021	7:52	7.78	347.2	0.55	1000	27	-290.1			None
8/20/2021	7:57	7.79	374.6	0.55	1000	27	-292.6			None
8/20/2021	8:02	7.81	369.8	0.51	1000	27	-296.9			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:52	8:02	10	2.0	7.81	369.8	0.51	1000	27	-296.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0226-033.0-20210820 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0226 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/20/2021	8:34	7.54	614	0.35	1000	27.2	-326.8			None
8/20/2021	8:39	7.54	611	0.29	1000	27.3	-329			None
8/20/2021	8:44	7.53	608	0.3	1000	27.2	-331.4			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:34	8:44	10	2.0	7.53	608	0.3	1000	27.2	-331.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0226-043.0-20210820 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0226 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/20/2021	9:14	7.37	1013	0.3	1000	27.9	-327.8			None
8/20/2021	9:19	7.36	1003	0.28	1000	27.8	-328.4			None
8/20/2021	9:24	7.34	1000	0.28	1000	27.8	-329.8			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:14	9:24	10	2.0	7.34	1000	0.28	1000	27.8	-329.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0227-008.0-20210820 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0227 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/20/2021	12:19	7.04	548	1.15	1000	28.7	-214.7			None
8/20/2021	12:24	7.02	553	1.15	1000	28.9	-218.9			None
8/20/2021	12:29	7	551	1.14	1000	28.8	-233.8			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:19	12:29	10	2.0	7	551	1.14	1000	28.8	-233.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0227-023.0-20210820 Sampler: Brittany Follett
 Well ID: PFAS-DPT0227 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
8/20/2021	12:52	7.49	626	1.15	1000	29.1	-308.6			None
8/20/2021	12:57	7.49	625	1.09	1000	29.1	-308.1			None
8/20/2021	13:02	7.49	624	1.06	1000	29.2	-309.7			None

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:52	13:02	10	2.0	7.49	624	1.06	1000	29.2	-309.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0227-033.0-20210913 Sampler: Brittany Follett
 Well ID: PFAS-DPT0227 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/13/2021	9:35	10.65	0.2	6.31		28.6	185			
9/13/2021	9:50	10.64	0.5	6.31		28.6	182			
9/13/2021	10:15	10.63	0.5	6.31		28.5	183			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:35	10:15	40	0	10.63	0.5	6.31		28.5	183

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0227-043.0-20210913 Sampler: Brittany Follett
 Well ID: PFAS-DPT0227 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/13/2021	10:55	11.76	87.4	7.744		28.6	126			
9/13/2021	11:00	11.76	87.5	7.745		28.6	126			
9/13/2021	11:05	11.75	87.4	7.745		28.6	126			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:55	11:05	10	0	11.75	87.4	7.745		28.6	126

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0228-008.0-20210913 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0228 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/13/2021	12:16	7.86	102.5	5.1		29	132			
9/13/2021	12:22	7.92	103.2	5.2		29	135			
9/13/2021	12:30	7.88	102.6	5.3		29	133			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:16	12:30	14	0	7.88	102.6	5.3		29	133

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0228-023.0-20210913 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0228 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/13/2021	12:47	8.2	120.5	3.3		28.3	145			
9/13/2021	12:54	8.2	121.1	3.4		28	140			
9/13/2021	12:59	8.2	123.4	3.2		27.9	142			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:47	12:59	12	0	8.2	123.4	3.2		27.9	142

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0228-033.0-20210913 Sampler: Brittany Follett
 Well ID: PFAS-DPT0228 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/13/2021	13:26	7.2	140.3	2.8		27.8	126			
9/13/2021	13:34	7.3	142.5	3.2		27.8	121			
9/13/2021	13:40	7.2	142.8	2.8		27.7	120			No

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:26	13:40	14	3.0	7.2	142.8	2.8		27.7	120

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0228-043.0-20210913 Sampler: Brittany Follett
 Well ID: PFAS-DPT0228 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/13/2021	14:05	7.8	138.4	2.8		27.7	160			
9/13/2021	14:11	7.6	135.5	3		27.7	162			
9/13/2021	14:18	7.8	140.1	2.9		27.7	160			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:05	14:18	13	2.5	7.8	140.1	2.9		27.7	160

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0229-008.0-20210914 Sampler: Brittany Follett
 Well ID: PFAS-DPT0229 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	7:45	7.56	138.8	4.65		27.8	153.5			
9/14/2021	7:51	7.58	139	4.65		27.7	154			
9/14/2021	7:59	7.56	138.5	4.67		27.8	153.6			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:45	7:59	14	0	7.56	138.5	4.67		27.8	153.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0229-023.0-20210914 Sampler: Brittany Follett
 Well ID: PFAS-DPT0229 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	8:16	8.04	142.1	3.923	850	27.8	153			
9/14/2021	8:23	8.05	141.8	3.929	847	27.8	154			
9/14/2021	8:30	8.05	142.7	4.001	845	27.8	153			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:16	8:30	14	0	8.05	142.7	4.001	845	27.8	153

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0229-033.0-20210914 Sampler: Brittany Follett
 Well ID: PFAS-DPT0229 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	8:50	7.08	182.8	3.69	900	27.6	143			
9/14/2021	8:57	7.08	181.4	3.65	898	27.6	142			
9/14/2021	9:04	7.09	182.3	3.64	896	27.7	143			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:50	9:04	14	0	7.09	182.3	3.64	896	27.7	143

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0229-043.0-20210914 Sampler: Brittany Follett
 Well ID: PFAS-DPT0229 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	9:24	7.1	162.5	3.56	810	27.6	32			
9/14/2021	9:27	7.11	161.9	3.5	806	27.6	35			
9/14/2021	9:40	7.13	163	3.56	807	27.5	31			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:24	9:40	16	1.5	7.13	163	3.56	807	27.5	31

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0230-008.0-20210914 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0230 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	10:45	7.4	1002	7.73	890	27.9	-120			
9/14/2021	10:52	7.5	1009	7.8	850	27.2	-120			
9/14/2021	10:58	7.5	1004	7.78	826	27.6	-123			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:45	10:58	13	1.5	7.5	1004	7.78	826	27.6	-123

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0230-023.0-20210914 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0230 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	11:25	7.2	150.4	5.87	759	27.8	-123			
9/14/2021	11:30	7.2	151	5.87	755	27.7	-122			
9/14/2021	11:37	7.2	150.6	5.88	754	27.7	-123			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:25	11:37	12	0	7.2	150.6	5.88	754	27.7	-123

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0230-033.0-20210914 Sampler: Brittany Follett
 Well ID: PFAS-DPT0230 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	12:05	7.4	155.3	4.98	760	27.7	-130			
9/14/2021	12:12	7.4	155.7	4.99	758	27.6	-131			
9/14/2021	12:18	7.5	155.1	4.96	750	27.6	-131			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:05	12:18	13	2.5	7.5	155.1	4.96	750	27.6	-131

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0230-043.0-20210914 Sampler: Brittany Follett
 Well ID: PFAS-DPT0230 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	12:40	7.6	132.7	4.55	701	27.5	-110			
9/14/2021	12:45	7.6	132.2	4.43	700	27.5	-111			
9/14/2021	12:49	7.7	132.1	4.51	699	27.4	-111			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:40	12:49	9	0	7.7	132.1	4.51	699	27.4	-111

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0231-023.0-20210914 Sampler: Brittany Follett
 Well ID: PFAS-DPT0231 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/14/2021	15:13	7.76	1398	0.62	629	27.64	-218			
9/14/2021	15:19	7.74	1406	0.5	627	28	-264.5			
9/14/2021	15:26	7.74	1393	0.25	625	27.5	-254.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:13	15:26	13	0	7.74	1393	0.25	625	27.5	-254.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0231-033.0-20210915 Sampler: Brittany Follett
 Well ID: PFAS-DPT0231 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	7:48	6.7	1998	0.6	759	24.79	-233			
9/15/2021	7:51	6.69	1978	0.59	758	24.74	-222.3			
9/15/2021	8:00	6.63	1980	0.59	757	24.78	-211.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:48	8:00	12	0	6.63	1980	0.59	757	24.78	-211.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0231-043.0-20210915 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0231 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	8:23	6.05	4245	0.74	962	25.56	-155.1			
9/15/2021	8:28	6.09	4228	0.5	961	25.75	-171.3			
9/15/2021	8:35	6.07	4212	0.39	960	25.78	-162.6			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:23	8:35	12	0	6.07	4212	0.39	960	25.78	-162.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0232-008.0-20210915 Sampler: Brittany Follett
 Well ID: PFAS-DPT0232 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	9:51	4.91	149	0.55	900	29.05	-200.2			
9/15/2021	9:56	5.05	164	0.58	900	29.67	-160.6			
9/15/2021	10:01	5.11	167	0.37	900	29.71	-168.3			
9/15/2021	10:07	5.03	153	0.5	900	29	-150.9			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:51	10:07	16	0	5.03	153	0.5	900	29	-150.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0232-023.0-20210915 Sampler: Brittany Follett
 Well ID: PFAS-DPT0232 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	10:28	6.64	938	0.43	900	28.88	-320.4			
9/15/2021	10:36	6.7	876	0.45	900	28.2	-282.8			
9/15/2021	10:43	6.65	858	0.45	900	28.52	-236.5			
9/15/2021	10:48	6.65	833	0.6	900	28.18	-204.4			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:28	10:48	20	0	6.65	833	0.6	900	28.18	-204.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0232-033.0-20210915 Sampler: Brittany Follett
 Well ID: PFAS-DPT0232 Analysis: PFAS
 Remark: FD and EB

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	11:17	6.52	1454	0.75	900	29.63	-90.5			
9/15/2021	11:25	6.4	1412	0.55	900	29.19	-89.5			
9/15/2021	11:30	6.32	1400	0.73	900	29.06	-90.7			
9/15/2021	11:35	6.4	1386	0.98	900	29	-92			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:17	11:35	18	0	6.4	1386	0.98	900	29	-92

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0232-043.0-20210915 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0232 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	11:58	6.78	2000	0.51	449	28.86	-108.9			
9/15/2021	12:04	6.69	1985	0.87	447	28.83	-104.6			
9/15/2021	12:10	6.72	1984	0.48	445	28.83	-108.3			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:58	12:10	12	0	6.72	1984	0.48	445	28.83	-108.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0233-008.0-20210915 Sampler: Brittany Follett
 Well ID: PFAS-DPT0233 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	13:01	4.56	69	0.56	900	29.04	-9.1			
9/15/2021	13:06	4.55	69	0.74	900	29.12	-8.8			
9/15/2021	13:11	4.47	67	0.88	900	28.9	-104.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:01	13:11	10	0	4.47	67	0.88	900	28.9	-104.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0233-023.0-20210915 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0233 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	13:33	5.8	232	0.73	900	28.45	-111			
9/15/2021	13:38	5.78	213	0.5	900	28.2	-105.2			
9/15/2021	13:43	5.79	203	0.43	900	28.01	-101.8			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:33	13:43	10	0	5.79	203	0.43	900	28.01	-101.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0233-033.0-20210915 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0233 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	14:13	6.9	750	1	89.8	29.66	-88.5			
9/15/2021	14:18	6.87	777	0.95	89.7	29.51	-79.4			
9/15/2021	14:23	6.85	745	0.88	89.1	28.79	-97.1			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:13	14:23	10	0	6.85	745	0.88	89.1	28.79	-97.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0233-043.0-20210915 Sampler: Brittany Follett
 Well ID: PFAS-DPT0233 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/15/2021	14:43	6.98	930	0.97	900	29.6	-123.1			
9/15/2021	14:48	6.95	927	1	900	29.63	-116.2			
9/15/2021	14:54	6.93	920	0.98	900	29.63	-119.6			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:43	14:54	11	0	6.93	920	0.98	900	29.63	-119.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0234-008.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0234 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	7:43	5.19	45	0.41	900	27.32	-10.4			
9/16/2021	7:48	5.13	45	0.55	900	27.21	-43.7			
9/16/2021	7:53	5.19	46	0.78	900	27.18	-57			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:43	7:53	10	0	5.19	46	0.78	900	27.18	-57

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0234-023.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0234 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	8:09	7.31	663	0.66	900	27.05	-142.4			
9/16/2021	8:15	7.31	678	0.52	900	27.01	-146.4			
9/16/2021	8:20	7.26	675	0.47	900	26.99	-147.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:09	8:20	11	0	7.26	675	0.47	900	26.99	-147.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0234-033.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0234 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	8:39	7.27	660	0.81	900	27.27	-105.7			
9/16/2021	8:44	7.29	656	0.87	900	27.21	-112.4			
9/16/2021	8:49	7.36	660	0.93	900	27.34	-118.8			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:39	8:49	10	0	7.36	660	0.93	900	27.34	-118.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0234-043.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0234 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	9:12	7.53	1190	0.67	715	28.3	-114.4			
9/16/2021	9:17	7.48	1222	0.85	714	28.28	-114.8			
9/16/2021	9:23	7.43	1201	0.9	713	28.31	-109.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:12	9:23	11	0	7.43	1201	0.9	713	28.31	-109.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0235-008.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0235 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	10:17	8.48	520	0.79	900	28.73	-144.4			
9/16/2021	10:23	8.5	503	0.91	900	28.48	-145.2			
9/16/2021	10:28	8.5	500	0.94	900	28.34	-135.6			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:17	10:28	11	0	8.5	500	0.94	900	28.34	-135.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0235-023.0-20210916 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0235 **Analysis:** PFAS
Remark: Poor water flow

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	10:59	7.99	493	0.94	900	28.87	-163.7			
9/16/2021	11:05	8.09	488	0.93	900	28.89	-182.6			
9/16/2021	11:10	8.08	485	0.97	900	28.95	-196.3			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:59	11:10	11	0	8.08	485	0.97	900	28.95	-196.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0235-033.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0235 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	11:37	8.34	607	0.64	900	28.63	-291.3			
9/16/2021	11:43	8.44	605	0.69	900	28.73	-295.5			
9/16/2021	11:49	8.43	602	0.7	900	28.57	-296.4			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:37	11:49	12	0	8.43	602	0.7	900	28.57	-296.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0235-043.0-20210916 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0235 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	12:13	7.97	8777	0.77	900	28.72	-277.9			
9/16/2021	12:18	8.02	8793	0.79	900	28.49	-259.2			
9/16/2021	12:25	8.06	8707	0.81	900	28.2	-265.4			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:13	12:25	12	0	8.06	8707	0.81	900	28.2	-265.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0236-008.0-20210916 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0236 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	13:33	7.42	858	0.73	900	34.42	-265.7			
9/16/2021	13:38	7.24	853	0.4	900	34.2	-272.9			
9/16/2021	13:43	7.21	852	0.47	900	34.15	-277.3			
9/16/2021	13:48	7.22	833	0.41	900	34.2	-243.4			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:33	13:48	15	0	7.22	833	0.41	900	34.2	-243.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0236-023.0-20210916 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0236 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	14:01	7.21	1236	1.11	797	32.39	-135.1			
9/16/2021	14:06	7.19	1230	1	796	31.94	-134.7			
9/16/2021	14:11	7.18	1228	0.86	793	31.81	-127.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:01	14:11	10	0	7.18	1228	0.86	793	31.81	-127.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0236-033.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0236 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	14:31	7.26	1348	0.8	900	30.6	-125.9			
9/16/2021	14:36	7.22	1360	0.81	900	30.62	-126.9			
9/16/2021	14:42	7.19	1345	0.73	900	30.45	-127.9			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:31	14:42	11	0	7.19	1345	0.73	900	30.45	-127.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0236-043.0-20210916 Sampler: Brittany Follett
 Well ID: PFAS-DPT0236 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/16/2021	15:07	7.43	1304	0.72	439	31.66	-117.3			
9/16/2021	15:12	7.31	1407	1.27	435	31.63	-96			
9/16/2021	15:17	7.25	1402	1.1	431	31.8	-94			
9/16/2021	15:23	7.21	1400	1.08	431	31.75	-94.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:07	15:23	16	0	7.21	1400	1.08	431	31.75	-94.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0237-008.0-20210917 Sampler: Brittany Follett
 Well ID: PFAS-DPT0237 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	8:13	6.79	545	1.94	900	26.76	-85.9			
9/17/2021	8:18	6.77	544	1.73	900	26.83	-87.2			
9/17/2021	8:24	6.77	542	1.2	900	26.82	-91.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:13	8:24	11	0	6.77	542	1.2	900	26.82	-91.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0237-023.0-20210917 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0237 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	8:41	7.42	699	0.94	900	26.57	-217.5			
9/17/2021	8:46	7.36	697	0.83	900	26.33	-228.3			
9/17/2021	8:51	7.33	691	0.81	900	26.17	-238.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:41	8:51	10	0	7.33	691	0.81	900	26.17	-238.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0237-033.0-20210917 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0237 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	9:25	7.91	664	7.69	900	27.69	-75.2			
9/17/2021	9:30	7.92	679	7.79	900	28.56	-76			
9/17/2021	9:35	7.96	679	7.35	900	28.37	-76.12			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:25	9:35	10	0	7.96	679	7.35	900	28.37	-76.12

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0237-043.0-20210917 Sampler: Brittany Follett
 Well ID: PFAS-DPT0237 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	10:04	7.64	1080	0.93	900	27.12	-233.7			
9/17/2021	10:09	7.56	1087	0.9	900	26.94	-233.9			
9/17/2021	10:14	7.56	1036	0.89	900	26.77	-230.4			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:04	10:14	10	0	7.56	1036	0.89	900	26.77	-230.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0238-008.0-20210917 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0238 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	10:51	6.69	477	6.8	900	29.02	-60			
9/17/2021	10:56	6.71	478	6.77	900	29.22	-59.7			
9/17/2021	11:01	6.71	480	6.81	900	29.66	-58.9			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:51	11:01	10	0	6.71	480	6.81	900	29.66	-58.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0238-023.0-20210917 Sampler: Brittany Follett
 Well ID: PFAS-DPT0238 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	11:17	7.08	598	0.97		27.85	-197.3			
9/17/2021	11:22	7.05	618	0.88		27.38	-207.7			
9/17/2021	11:27	7.05	618	0.95		27.55	-208.6			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:17	11:27	10	0	7.05	618	0.95		27.55	-208.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0238-033.0-20210917 Sampler: Brittany Follett
 Well ID: PFAS-DPT0238 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	11:49	7.5	705	0.76		29.75	-237.5			
9/17/2021	11:54	7.48	705	0.7		29.28	-241.4			
9/17/2021	12:00	7.46	701	0.65		29.66	-242.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:49	12:00	11	0	7.46	701	0.65		29.66	-242.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0238-043.0-20210917 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0238 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	12:27	7.68	1046	0.88		29.18	-212			
9/17/2021	12:32	7.67	1032	0.72		28.59	-210.2			
9/17/2021	12:37	7.65	1035	0.77		28.33	-208.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:27	12:37	10	0	7.65	1035	0.77		28.33	-208.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0239-008.0-20210917 Sampler: Brittany Follett
 Well ID: PFAS-DPT0239 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	13:14									

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:14	13:14	0	0						

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0239-023.0-20210917 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0239 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/17/2021	13:26	7.43	872	0.99		28	-183.1			
9/17/2021	13:32	7.41	854	0.83		28.23	-188.2			
9/17/2021	13:38	7.42	850	0.91		27.85	-190.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:26	13:38	12	0	7.42	850	0.91		27.85	-190.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0239-033.0-20210920 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0239 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	10:31	7.39	697	0.8		27.68	-243.4			
9/20/2021	10:36	7.34	772	0.55		27.71	-258.1			
9/20/2021	10:41	7.29	772	0.64		28.16	-265.9			
9/20/2021	10:44	7.28	772	0.67		28.29	-271.3			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:31	10:44	13	0	7.28	772	0.67		28.29	-271.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0239-043.0-20210920 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0239 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	11:09	7.64	1157	0.84		28.73	-268.9			
9/20/2021	11:14	7.47	1156	0.63		28.57	-277.5			
9/20/2021	11:19	7.43	1157	0.62		28.53	-282.2			
9/20/2021	11:24	7.42	1152	0.61		28.69	-286.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:09	11:24	15	0	7.42	1152	0.61		28.69	-286.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0240-008.0-20210920 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0240 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	13:21	6.94	1019	1.63		27.95	-245.1			
9/20/2021	13:26	6.87	1081	1.39		28.17	-263.4			
9/20/2021	13:31	6.86	1109	1.28		27.93	-227			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:21	13:31	10	0	6.86	1109	1.28		27.93	-227

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0240-023.0-20210920 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0240 **Analysis:** PFAS
Remark: FD-20210920-01

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	13:49	6.95	2074	1.78	780	28.73	-143.7			
9/20/2021	13:54	6.96	2108	1.19	779	28.69	-147.6			
9/20/2021	13:59	6.99	2065	0.95	776	28.59	-147.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:49	13:59	10	0	6.99	2065	0.95	776	28.59	-147.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0240-033.0-20210920 Sampler: Brittany Follett
 Well ID: PFAS-DPT0240 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	14:15	7.55	35000	146	215	28.74	-111.1			
9/20/2021	14:20	6.99	34842	1.27	160	28.59	-103.3			
9/20/2021	14:25	6.95	34620	1.21	158	28.01	-93.1			
9/20/2021	14:30	6.94	34560	1.17	165	28.01	-90.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:15	14:30	15	0	6.94	34560	1.17	165	28.01	-90.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0240-043.0-20210920 Sampler: Brittany Follett
 Well ID: PFAS-DPT0240 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	14:49	7.04	56508	1.2	160	27.52	-92.2			
9/20/2021	14:54	6.97	56509	0.9	158	27.56	-95			
9/20/2021	14:59	6.97	56366	0.9	157	27.16	-94.1			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:49	14:59	10	0	6.97	56366	0.9	157	27.16	-94.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0241-008.0-20210921 Sampler: Brittany Follett
 Well ID: PFAS-DPT0241 Analysis: PFAS
 Remark: MS&MSD

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	7:50	6.41	1400	1.57		25.41	-78.8			
9/21/2021	7:55	6.4	1401	1.59		25.42	-78.9			
9/21/2021	8:00	6.4	1399	1.52		25.43	-79.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:50	8:00	10	0	6.4	1399	1.52		25.43	-79.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0241-023.0-20210921 Sampler: Brittany Follett
 Well ID: PFAS-DPT0241 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	8:42	9.96	16501	1.15	900	25.02	-126.5			
9/21/2021	8:47	9.95	16795	1.26	900	25.25	-116.5			
9/21/2021	8:52	9.94	16777	1.29	900	25.36	-113.8			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:42	8:52	10	0	9.94	16777	1.29	900	25.36	-113.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0241-033.0-20210921 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0241 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	9:09	10.36	50650	1.86	900	26.24	-90.8			
9/21/2021	9:15	10.35	50667	1.01	900	26.47	-93.1			
9/21/2021	9:21	10.4	50675	0.99	900	26.56	-93.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:09	9:21	12	0	10.4	50675	0.99	900	26.56	-93.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0241-043.0-20210921 Sampler: Brittany Follett
 Well ID: PFAS-DPT0241 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	9:41	11.08	56800	1.15	900	27.7	-127			
9/21/2021	9:46	11.11	56850	0.76	900	27.3	-117.5			
9/21/2021	9:51	11.09	56815	0.63	900	27.17	-115.9			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:41	9:51	10	0	11.09	56815	0.63	900	27.17	-115.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0242-008.0-20210921 Sampler: Brittany Follett
 Well ID: PFAS-DPT0242 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	11:27	11.59	726	1.43	230	29.09	-159.3			
9/21/2021	11:32	11.34	731	0.92	227	28.68	-147.6			
9/21/2021	11:37	11.29	722	0.93	234	28.16	-141.2			
9/21/2021	11:42	11.27	720	0.86	229	28.11	-137.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:27	11:42	15	0	11.27	720	0.86	229	28.11	-137.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0242-023.0-20210921 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0242 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	12:00	12.15	1753	0.98	900	27.76	-225.7			
9/21/2021	12:05	12.15	1734	0.92	900	27.25	-238.8			
9/21/2021	12:10	12.13	1719	0.9	900	26.95	-241.6			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:00	12:10	10	0	12.13	1719	0.9	900	26.95	-241.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0242-033.0-20210921 Sampler: Brittany Follett
 Well ID: PFAS-DPT0242 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	12:33	11.98	8783	0.84	900	27.6	-264.8			
9/21/2021	12:38	11.73	8802	0.7	900	27.48	-281.2			
9/21/2021	12:43	11.76	8777	0.75	900	27.4	-291.3			
9/21/2021	12:48	11.75	8786	0.84	900	27.22	-296.3			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:33	12:48	15	0	11.75	8786	0.84	900	27.22	-296.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0242-043.0-20210921 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0242 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	13:12	11.16	50674	1.12	900	27.39	-317.2			
9/21/2021	13:17	11.14	50605	1.04	900	27.38	-324.9			
9/21/2021	13:22	11.14	50654	1.02	900	27.37	-327.7			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:12	13:22	10	0	11.14	50654	1.02	900	27.37	-327.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0243-008.0-20210921 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0243 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	14:03	11.77	483	1.65	900	29.42	-214.6			
9/21/2021	14:08	11.7	479	1.72	900	29.5	-208.2			
9/21/2021	14:13	11.69	477	1.91	900	29.17	-189.4			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:03	14:13	10	0	11.69	477	1.91	900	29.17	-189.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0243-023.0-20210921 Sampler: Brittany Follett
 Well ID: PFAS-DPT0243 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	14:28	11.85	689	1.9	900	29.4	-245.8			
9/21/2021	14:34	11.78	834	1.84	900	27.99	-252.1			
9/21/2021	14:39	11.74	896	1.63	900	27.97	-256.1			
9/21/2021	14:44	11.75	890	1.56	900	27.98	-261.1			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:28	14:44	16	0	11.75	890	1.56	900	27.98	-261.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0243-033.0-20210921 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0243 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	14:59	11	67653	1.75	900	28.5	-130.5			
9/21/2021	15:04	10.96	67652	1.77	900	28.65	-126.8			
9/21/2021	15:09	10.93	67660	1.6	900	28.4	-119.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:59	15:09	10	0	10.93	67660	1.6	900	28.4	-119.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0243-043.0-20210921 Sampler: Brittany Follett
 Well ID: PFAS-DPT0243 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	15:50	11.16	76687	1.9	900	27.58	-99.1			
9/21/2021	15:55	11.06	77683	1.48	900	27.8	-97.9			
9/21/2021	16:00	11.07	77859	1.22	900	28.1	-98.9			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:50	16:00	10	0	11.07	77859	1.22	900	28.1	-98.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0244-008.0-20210922 Sampler: Brittany Follett
 Well ID: PFAS-DPT0244 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/22/2021	8:17	7.79	503	2.73	900	27.11	-60			
9/22/2021	8:22	7.82	502	1.8	900	27.16	-65.3			
9/22/2021	8:27	7.76	503	1.49	900	27.11	-66.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:17	8:27	10	0	7.76	503	1.49	900	27.11	-66.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0244-023.0-20210922 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0244 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/22/2021	8:39	8.56	780	1.79	900	26.54	-107.4			
9/22/2021	8:44	8.54	781	1.75	900	26.24	-100			
9/22/2021	8:49	8.58	775	1.07	900	26.35	-107.6			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:39	8:49	10	0	8.58	775	1.07	900	26.35	-107.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0244-033.0-20210923 Sampler: Brittany Follett
 Well ID: PFAS-DPT0244 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	7:50	8.12	1791	2.23	900	26.34	-155.2			
9/23/2021	7:55	8.02	1786	2.27	900	26.18	-144.8			
9/23/2021	8:00	8.07	1792	2.31	900	26.25	-139.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:50	8:00	10	0	8.07	1792	2.31	900	26.25	-139.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0244-043.0-20210923 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0244 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	8:18	8.61	3401	2.83	900	26.91	-202.7			
9/23/2021	8:23	8.59	3404	2.88	900	26.85	-180.6			
9/23/2021	8:28	8.54	3396	2.6	900	26.59	-166.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:18	8:28	10	0	8.54	3396	2.6	900	26.59	-166.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0245-023.0-20210922 Sampler: Brittany Follett
 Well ID: PFAS-DPT0245 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/22/2021	15:13	10.95	959	1.95	900	27.1	-330.5			
9/22/2021	15:18	10.99	952	1.88	900	27.2	-337.8			
9/22/2021	15:23	10.98	951	1.89	900	27.02	-330			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:13	15:23	10	0	10.98	951	1.89	900	27.02	-330

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0245-033.0-20210922 Sampler: Brittany Follett
 Well ID: PFAS-DPT0245 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/22/2021	15:37	10.84	4178	1.95	900	28.78	-300.1			
9/22/2021	15:43	10.93	4131	2	900	27.97	-304			
9/22/2021	15:48	10.91	4123	1.94	900	27.88	-306.3			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:37	15:48	11	0	10.91	4123	1.94	900	27.88	-306.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0245-043.0-20210922 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0245 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/22/2021	16:03	10.72	16850	2.01	900	27.9	-324.6			
9/22/2021	16:08	10.63	16915	2	900	27.98	-330.2			
9/22/2021	16:13	10.62	16884	2.03	900	28.05	-333.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:03	16:13	10	0	10.62	16884	2.03	900	28.05	-333.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0246-008.0-20210923 Sampler: Brittany Follett
 Well ID: PFAS-DPT0246 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	9:09	7.08	258	3.73	900	29.33	-48.4			
9/23/2021	9:14	7.09	256	3.43	900	29.26	-54.2			
9/23/2021	9:19	7.09	261	2.29	900	29.51	-59.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:09	9:19	10	0	7.09	261	2.29	900	29.51	-59.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0246-023.0-20210923 Sampler: Brittany Follett
 Well ID: PFAS-DPT0246 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	9:35	8.28	928	1.95	900	27.99	-106			
9/23/2021	9:40	8.2	915	1.76	900	27.91	-101			
9/23/2021	9:45	8.18	916	1.74	900	27.88	-98			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:35	9:45	10	0	8.18	916	1.74	900	27.88	-98

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0246-033.0-20210923 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0246 **Analysis:** PFAS
Remark: MS & MSD collected

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	10:05	8.38	1615	1.72	511	28.17	-130.5			
9/23/2021	10:10	8.34	1630	1.68	510	27.66	-119.9			
9/23/2021	10:15	8.28	1626	1.29	509	27.21	-120.5			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:05	10:15	10	0	8.28	1626	1.29	509	27.21	-120.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0246-043.0-20210923 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0246 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	10:35	8.7	3800	1.45	900	28.92	-181.6			
9/23/2021	10:40	8.62	3798	1.4	900	28.95	169.9			
9/23/2021	10:45	8.66	3776	1.34	900	28.92	170.9			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:35	10:45	10	0	8.66	3776	1.34	900	28.92	170.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0247-008.0-20210923 Sampler: Brittany Follett
 Well ID: PFAS-DPT0247 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	11:21	7.71	419	1.72	900	32.82	-38.2			
9/23/2021	11:26	7.68	419	1.34	900	32.96	-44.4			
9/23/2021	11:31	7.64	425	1.19	900	32.09	-50.2			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:21	11:31	10	0	7.64	425	1.19	900	32.09	-50.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0247-023.0-20210923 Sampler: Brittany Follett
 Well ID: PFAS-DPT0247 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	11:48	8.59	877	0.8	900	31.6	-144.9			
9/23/2021	11:53	8.52	871	0.57	900	31.87	-139.9			
9/23/2021	11:58	8.5	866	0.52	900	32.09	-144.4			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:48	11:58	10	0	8.5	866	0.52	900	32.09	-144.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0247-033.0-20210923 Sampler: Brittany Follett
 Well ID: PFAS-DPT0247 Analysis: PFAS
 Remark: Pumped dry twice and let it recharge, then sampled all that we could manage to collect

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	12:40									

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:40	12:40	0	0						

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0247-043.0-20210923 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0247 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/23/2021	12:56	8.8	3937	0.83	900	31.66	-160.3			
9/23/2021	13:01	8.71	3928	0.85	900	31.54	-152.1			
9/23/2021	13:06	8.7	3926	0.86	900	31.78	-169.3			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:56	13:06	10	0	8.7	3926	0.86	900	31.78	-169.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0248-008.0-20210924 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0248 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/24/2021	13:50	7.89	1435	1.2	900	28.45	-315			
9/24/2021	13:55	7.88	1432	1.23	900	28.34	-315			
9/24/2021	14:07	7.87	1331	1.21	900	28.34	-314			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:50	14:07	17	0	7.87	1331	1.21	900	28.34	-314

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0248-023.0-20210924 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0248 **Analysis:** PFAS
Remark: FD&EB collected

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/24/2021	14:18	7.12	3456	0.89	261	28.1	-230			
9/24/2021	14:23	7.19	3457	0.81	260	28.13	-228			
9/24/2021	14:28	7.2	3459	0.9	260	28.14	-240			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:18	14:28	10	0	7.2	3459	0.9	260	28.14	-240

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0248-033.0-20210924 Sampler: Brittany Follett
 Well ID: PFAS-DPT0248 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/24/2021	14:35	8.01	1324	0.9	900	28.01	-475			
9/24/2021	14:40	8.01	1325	0.92	900	28.01	-436			
9/24/2021	14:45	8.06	1328	0.95	900	28.05	-439			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:35	14:45	10	0	8.06	1328	0.95	900	28.05	-439

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0248-043.0-20210924 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0248 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/24/2021	15:15	8.06	5321	0.75	900	27.9	-321			
9/24/2021	15:20	8.1	5319	0.73	900	27.92	-324			
9/24/2021	15:25	8.11	5329	0.8	900	27.89	-330			

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:15	15:25	10	0	8.11	5329	0.8	900	27.89	-330

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0249-008.0-20211115 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0249 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	10:30	5.75	184	0.42	115	25.2	-138.8	0.09		None
11/15/2021	10:35	5.71	186	0.42	85.4	25.4	-147.2	0.09		lo odor
11/15/2021	10:40	5.73	188	0.36	98	25.3	-276	0.09		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:30	10:40	10	5.73	188	0.36	98	25.3	-276

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0249-023.0-20211115 Sampler: Brittany Follett
 Well ID: PFAS-DPT0249 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	11:05	7.18	557	0.04	1000	25.8	-185.1	0.26		No
11/15/2021	11:10	7.09	540	0.07	1000	25.5	-179.8	0.26		No
11/15/2021	11:15	7.08	538	0.07	1000	25.5	-176.4	0.26		None

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:05	11:15	10	7.08	538	0.07	1000	25.5	-176.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0249-033.0-20211115 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0249 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	11:35	7.1	788	0.06	1000	25.5	-130.3	0.38		No
11/15/2021	11:40	7.06	780	0.08	1000	25.4	-144.7	0.38		No
11/15/2021	11:45	7.05	773	0.07	1000	25.3	-149.7	0.37		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:35	11:45	10	7.05	773	0.07	1000	25.3	-149.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0249-043.0-20211115 Sampler: Brittany Follett
 Well ID: PFAS-DPT0249 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	12:05	8.58	1076	0.08	1000	25.48	-315.1	0.53		No
11/15/2021	12:10	8.4	1077	0.11	1000	25.26	241.6	0.53		No
11/15/2021	12:15	8.42	1064	0.09	1000	24.98	-201.3	0.52		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:05	12:15	10	8.42	1064	0.09	1000	24.98	-201.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0250-008.0-20211115 Sampler: Brittany Follett
 Well ID: PFAS-DPT0250 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	13:15	12.52	186	0.11	1000	24.79	-469	0.09		Slight
11/15/2021	13:20	7	186	0.11	1000	24.75	-334	0.09		Slight
11/15/2021	13:25	12.89	186	0.07	1000	24.62	-296.9	0.09		Slight

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:15	13:25	10	12.89	186	0.07	1000	24.62	-296.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0250-023.0-20211115 Sampler: Brittany Follett
 Well ID: PFAS-DPT0250 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	13:50	9.32	529	0.12	1000	24.66	-206	0.26		No
11/15/2021	13:55	9.95	517	0.06	1000	24.59	-221.7	0.7		No
11/15/2021	14:00	10.53	508	0.05	1000	24.43	-227.9	0.5		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:50	14:00	10	10.53	508	0.05	1000	24.43	-227.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0250-033.0-20211115 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0250 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	14:20	9.14	751	0.03	1000	25.06	-82.9	0.36		No
11/15/2021	14:25	9.25	727	0.03	1000	25.13	-132.9	0.35		No
11/15/2021	14:30	9.29	714	0.07	1000	24.89	-157.2	0.35		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:20	14:30	10	9.29	714	0.07	1000	24.89	-157.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0250-043.0-20211115 Sampler: Brittany Follett
 Well ID: PFAS-DPT0250 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/15/2021	15:05	9.71	1009	0.08	1000	24.72	-121.7	0.5		No
11/15/2021	15:10	9.42	1017	0.07	1000	24.71	-128.3	0.52		No
11/15/2021	15:15	9.26	1024	0.07	1000	24.81	-133	0.51		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:05	15:15	10	9.26	1024	0.07	1000	24.81	-133

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0251-008.0-20211116 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0251 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	11:15	0	856	5.23	320	27.33	-97.2	0.39		No
11/16/2021	11:20	0	844	6.4	378	27.24	-98	0.38		No
11/16/2021	11:25	0	817	6.65	85.1	27.45	-97.9	0.38		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:15	11:25	10	0	817	6.65	85.1	27.45	-97.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0251-023.0-20211116 Sampler: Brittany Follett
 Well ID: PFAS-DPT0251 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	11:50	0	729	3.34	1000	27.64	-183.1	0.33		No
11/16/2021	11:55	0	664	0.86	1000	26.59	-255	0.31		No
11/16/2021	12:00	0	652	0.31	1000	26.34	-296.2	0.31		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:50	12:00	10	0	652	0.31	1000	26.34	-296.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0251-033.0-20211116 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0251 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	12:20	0	391	0.55	1000	30.88	-92.5	0.16		No
11/16/2021	12:25	0	382	1.44	1000	28.96	-126	0.17		No
11/16/2021	12:30	0	375	1.14	1000	28.32	-122.1	0.17		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:20	12:30	10	0	375	1.14	1000	28.32	-122.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0251-043.0-20211116 Sampler: Brittany Follett
 Well ID: PFAS-DPT0251 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	12:50	0	607	0.6	1000	28.33	-176.6	0.29		No
11/16/2021	12:55	0	631	0.39	1000	27.59	-211.7	0.29		No
11/16/2021	13:00	0	618	0.4	1000	27.23	-224	0.29		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:50	13:00	10	0	618	0.4	1000	27.23	-224

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0252-008.0-20211116 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0252 **Analysis:** PFAS
Remark: Collect MS/MSD

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	8:15	10.23	729	0.2	888	27.27	-170.9	0.33		No
11/16/2021	8:20	10.32	727	0.18	340	27.59	-185.4	0.34		No
11/16/2021	8:25	10.51	724	0.11	258	27.81	-198.5	0.33		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:15	8:25	10	10.51	724	0.11	258	27.81	-198.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0252-023.0-20211116 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0252 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	8:50	10.92	674	0.07	1000	26.77	-260.8	0.31		No
11/16/2021	8:55	11.53	661	0.08	1000	26.76	-287.5	0.31		No
11/16/2021	9:00	12.32	649	0.08	1000	27.06	-291.8	0.3		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:50	9:00	10	12.32	649	0.08	1000	27.06	-291.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0252-033.0-20211116 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0252 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	9:30	11.97	724	2	1000	27.17	-286.9	0.34		No
11/16/2021	9:35	12.12	718	0.13	1000	27.25	-305.1	0.33		No
11/16/2021	9:40	12.39	719	0.1	1000	27.2	-300.2	0.33		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:30	9:40	10	12.39	719	0.1	1000	27.2	-300.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0252-043.0-20211116 Sampler: Brittany Follett
 Well ID: PFAS-DPT0252 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	10:05	0	1790	0.38	1000	27.69	-159.6	0.85		No
11/16/2021	10:10	0	1675	0.18	1000	27.39	-169	0.79		No
11/16/2021	10:15	0	1653	0.17	1000	27.38	-170.2	0.78		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:05	10:15	10	0	1653	0.17	1000	27.38	-170.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0253-008.0-20211116 Sampler: Brittany Follett
 Well ID: PFAS-DPT0253 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	14:30	0	15	1.97	1000	28.04	-143.8	0.25		No
11/16/2021	14:35	0	543	1.17	1000	27.58	-162.8	0.25		No
11/16/2021	14:40	0	539	0.18	502	27.36	-191.1	0.25		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:30	14:40	10	0	539	0.18	502	27.36	-191.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0253-023.0-20211116 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0253 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	14:55	0	955	0.06	1000	27.71	-251.1	0.44		No
11/16/2021	15:00	0	935	0.49	1000	26.94	-308.9	0.44		No
11/16/2021	15:05	0	930	0.37	1000	26.75	-329.3	0.44		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:55	15:05	10	0	930	0.37	1000	26.75	-329.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0253-033.0-20211116 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0253 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	15:20	0	1042	0.51	1000	26.96	-300.1	0.49		No
11/16/2021	15:25	0	1037	0.27	1000	26.71	-313	0.49		No
11/16/2021	15:30	0	1031	0.2	1000	26.51	-318.2	0.49		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:20	15:30	10	0	1031	0.2	1000	26.51	-318.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0253-043.0-20211116 Sampler: Brittany Follett
 Well ID: PFAS-DPT0253 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/16/2021	15:45	0	3894	0.79	1000	26.76	-179.9	1.95		No
11/16/2021	15:50	0	3724	0.47	415	26.73	-183.5	1.89		No
11/16/2021	15:55	0	3742	0.47	429	26.58	-185.2	1.91		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:45	15:55	10	0	3742	0.47	429	26.58	-185.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0254-008.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0254 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	7:20	0	377	1.98	564	25.05	-134.6	0.18		No
11/17/2021	7:25	0	371	1.41	467	24.93	-141.2	0.18		No
11/17/2021	7:30	0	367	0.86	202	25.17	-146.9	0.17		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:20	7:30	10	0	367	0.86	202	25.17	-146.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0254-023.0-20211117 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0254 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	7:50	0	560	1.98	1000	26.29	-171.1	0.27		No
11/17/2021	7:55	0	558	1.22	1000	26.22	-181.6	0.26		No
11/17/2021	8:02	0	554	1.12	1000	26.15	-183.9	0.26		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
7:50	8:02	12	0	554	1.12	1000	26.15	-183.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0254-033.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0254 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	8:25	0	646	0.02	1000	25.64	-219	0.31		No
11/17/2021	8:30	0	643	0.49	1000	25.56	-234.6	0.31		No
11/17/2021	8:35	0	638	0.48	1000	25.53	-253.6	0.31		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:25	8:35	10	0	638	0.48	1000	25.53	-253.6

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0254-043.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0254 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	8:55	0	2349	-0.65	1000	26.53	-175.5	1.17		No
11/17/2021	9:00	0	2373	0.38	1000	26.32	-177.3	1.18		No
11/17/2021	9:05	0	2363	0.36	1000	26.25	-178.8	1.18		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:55	9:05	10	0	2363	0.36	1000	26.25	-178.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0255-008.0-20211117 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0255 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	10:35	0	440	0.34	245	26.75	-115.4	0.2		No
11/17/2021	10:40	0	435	0.39	130	26.79	-121.4	0.2		No
11/17/2021	10:45	0	427	0.36	85.4	26.79	-132.5	0.2		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:35	10:45	10	0	427	0.36	85.4	26.79	-132.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0255-023.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0255 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	11:05	0	619	0.49	1000	28.2	-199.7	0.28		No
11/17/2021	11:10	0	612	0.17	1000	27.77	-222.5	0.22		No
11/17/2021	11:15	0	609	0.14	1000	27.69	-231.1	0.28		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:05	11:15	10	0	609	0.14	1000	27.69	-231.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0255-033.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0255 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	11:35	0	860	0.48	1000	28.83	-171	0.39		No
11/17/2021	11:40	0	828	0.17	1000	27.79	-175.6	0.38		No
11/17/2021	11:45	0	807	0.25	1000	27.27	-172.3	0.37		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:35	11:45	10	0	807	0.25	1000	27.27	-172.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0255-043.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0255 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	12:05	0	9045	0.25	1000	25.96	-113.2	4.95		No
11/17/2021	12:10	0	9025	0.2	1000	25.85	-125.5	4.95		No
11/17/2021	12:15	0	8930	0.13	1000	25.51	-129.8	4.93		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:05	12:15	10	0	8930	0.13	1000	25.51	-129.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0256-008.0-20211117 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0256 **Analysis:** PFAS
Remark: Collected MS/MSD

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	13:15	0	550	0.89	1000	28.56	-197.7	0.25		No
11/17/2021	13:20	0	567	0.56	1000	28.45	-222.1	0.26		No
11/17/2021	13:25	0	557	0.2	1000	27.97	-247.7	0.25		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:15	13:25	10	0	557	0.2	1000	27.97	-247.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0256-023.0-20211117 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0256 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	14:00	0	617	0.18	1000	26.86	-257.8	0.29		No
11/17/2021	14:05	0	606	0.17	1000	26.73	-290	0.28		No
11/17/2021	14:10	0	600	0.18	1000	26.57	-299.8	0.28		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:00	14:10	10	0	600	0.18	1000	26.57	-299.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0256-033.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0256 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	14:25	0	799	0.32	1000	27.85	-240.7	0.37		No
11/17/2021	14:30	0	808	0.18	1000	26.91	-316.4	0.38		No
11/17/2021	14:35	0	798	0.18	1000	26.57	-332.8	0.38		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:25	14:35	10	0	798	0.18	1000	26.57	-332.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0256-043.0-20211117 Sampler: Brittany Follett
 Well ID: PFAS-DPT0256 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/17/2021	14:55	0	6591	0.34	1000	27.51	-295.7	2.39		No
11/17/2021	15:00	0	4287	0.23	1000	26.78	-327.1	2.19		No
11/17/2021	15:05	0	4275	0.27	1000	26.61	-335.3	2.2		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:55	15:05	10	0	4275	0.27	1000	26.61	-335.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0257-008.0-20211118 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0257 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	10:15	0	729	2.06	98.6	26.1	-169.7	0.34		No
11/18/2021	10:20	0	704	1.31	84.7	26.12	-213.9	0.33		No
11/18/2021	10:25	0	685	1.05	24.2	26.11	-242.5	0.32		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:15	10:25	10	0	685	1.05	24.2	26.11	-242.5

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0257-023.0-20211118 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0257 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	10:45	0	629	0.65	1000	27.18	-240.8	0.29		No
11/18/2021	10:50	0	626	0.66	1000	26.83	-240.3	0.29		No
11/18/2021	10:55	0	616	0.64	1000	26.21	-65.7	0.29		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:45	10:55	10	0	616	0.64	1000	26.21	-65.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0257-033.0-20211118 Sampler: Brittany Follett
 Well ID: PFAS-DPT0257 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	11:15	0	1561	0.53	1000	26.35	-274.9	0.75		No
11/18/2021	11:20	0	1554	0.54	1000	25.95	-288.5	0.77		No
11/18/2021	11:25	0	1568	0.54	1000	25.82	-307.7	0.77		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:15	11:25	10	0	1568	0.54	1000	25.82	-307.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0257-043.0-20211118 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0257 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	11:40	0	27734	0.42	1000	26.23	-315.6	16.65		Slight
11/18/2021	11:45	0	27818	0.42	1000	26.07	-327.3	16.7		Slight
11/18/2021	11:50	0	27891	0.42	1000	25.94	-336.3	16.75		Slight

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:40	11:50	10	0	27891	0.42	1000	25.94	-336.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0258-008.0-20211118 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0258 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	14:55	0	578	1.15	1000	26.5	-245.9	0.27		No
11/18/2021	15:00	0	571	0.83	1000	26.5	-250.6	0.27		No
11/18/2021	15:05	0	558	0.49	711	26.43	-263.7	0.26		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:55	15:05	10	0	558	0.49	711	26.43	-263.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0258-023.0-20211118 Sampler: Brittany Follett
 Well ID: PFAS-DPT0258 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	15:20	0	1155	0.36	1000	24.68	-320.4	0.58		No
11/18/2021	15:25	0	1149	0.51	1000	24.72	-338.6	0.57		No
11/18/2021	15:30	0	1145	0.52	1000	24.57	-344.8	0.57		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:20	15:30	10	0	1145	0.52	1000	24.57	-344.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0258-033.0-20211118 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0258 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	15:45	0	1292	0.54	1000	24.87	-321.1	0.65		No
11/18/2021	15:50	0	1293	0.58	1000	24.61	-335.1	0.65		No
11/18/2021	15:55	0	1285	0.57	1000	24.42	-349.2	0.65		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
15:45	15:55	10	0	1285	0.57	1000	24.42	-349.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0258-043.0-20211118 Sampler: Brittany Follett
 Well ID: PFAS-DPT0258 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/18/2021	16:15	0	11319	0.46	1000	24.89	-290.5	6.45		No
11/18/2021	16:20	0	11262	0.58	1000	24.62	-342.7	6.44		No
11/18/2021	16:25	0	11218	0.59	1000	24.5	-321.2	6.44		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
16:15	16:25	10	0	11218	0.59	1000	24.5	-321.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0259-008.0-20211119 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0259 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	8:25	0	143	0.42	1000	25.74	-102.4	0.07		No
11/19/2021	8:30	0	143	0.4	1000	25.65	-104.5	0.07		No
11/19/2021	8:35	0	141	0.37	540	25.64	-108.1	0.06		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:25	8:35	10	0	141	0.37	540	25.64	-108.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0259-023.0-20211119 Sampler: Brittany Follett
 Well ID: PFAS-DPT0259 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	8:55	0	811	0.8	1000	26.52	-197.2	0.38		No
11/19/2021	9:00	0	808	0.62	1000	26.39	-200.4	0.38		No
11/19/2021	9:05	0	798	0.39	1000	26.26	-212.7	0.38		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:55	9:05	10	0	798	0.39	1000	26.26	-212.7

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0259-033.0-20211119 Sampler: Brittany Follett
 Well ID: PFAS-DPT0259 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	9:25	0	455	0.92	1000	26.19	-204.8	0.21		No
11/19/2021	9:30	0	449	0.9	1000	26.2	-201.3	0.21		No
11/19/2021	9:35	0	451	0.64	1000	26.35	-198.9	0.21		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:25	9:35	10	0	451	0.64	1000	26.35	-198.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0259-043.0-20211119 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0259 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	10:25	0	625	0.45	1000	26.55	-184.4	0.29		No
11/19/2021	10:30	0	622	0.41	1000	26.6	-186.7	0.29		No
11/19/2021	10:35	0	615	0.35	1000	616	-187.3	0.29		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:25	10:35	10	0	615	0.35	1000	616	-187.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0260-008.0-20211119 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0260 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	11:20	0	144	0.72	1000	25.46	-96.6	0.07		No
11/19/2021	11:25	0	138	0.31	1000	25.45	-94.9	0.06		No
11/19/2021	11:30	0	139	0.28	1000	25.39	-100.2	0.06		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:20	11:30	10	0	139	0.28	1000	25.39	-100.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0260-023.0-20211119 Sampler: Brittany Follett
 Well ID: PFAS-DPT0260 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	11:50	0	1128	0.34	1000	25.32	-279.5	0.55		No
11/19/2021	11:55	0	1128	0.29	1000	25.33	-280.5	0.55		No
11/19/2021	12:00	0	1127	0.27	1000	25.35	-280.1	0.55		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:50	12:00	10	0	1127	0.27	1000	25.35	-280.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0260-033.0-20211119 Sampler: Brittany Follett
 Well ID: PFAS-DPT0260 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	12:25	0	1099	0.87	1000	26.02	-195.8	0.53		No
11/19/2021	12:30	0	1080	0.37	1000	25.67	-217.2	0.53		No
11/19/2021	12:35	0	1067	0.24	1000	25.54	-233.4	0.52		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:25	12:35	10	0	1067	0.24	1000	25.54	-233.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0260-043.0-20211119 Sampler: Brittany Follett
 Well ID: PFAS-DPT0260 Analysis: PFAS
 Remark: Collected MS/MSD

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/19/2021	13:00	0	979	0.54	1000	26.81	-167.8	0.46		No
11/19/2021	13:05	0	972	0.5	1000	26.31	-165.3	0.46		No
11/19/2021	13:10	0	954	0.39	1000	25.83	-158.2	0.46		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
13:00	13:10	10	0	954	0.39	1000	25.83	-158.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0261-008.0-20211122 Sampler: Brittany Follett
 Well ID: PFAS-DPT0261 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/22/2021	9:55	0	881	1.23	183	26.14	-299.1	0.42		No
11/22/2021	10:00	0	887	1.26	140	26.16	-290.2	0.43		No
11/22/2021	10:05	0	1.14	1.13	91.4	26.12	-304.1	0.43		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:55	10:05	10	0	1.14	1.13	91.4	26.12	-304.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0261-023.0-20211122 Sampler: Brittany Follett
 Well ID: PFAS-DPT0261 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/22/2021	10:35	0	643	1.03	1000	27.21	-335.7	0.3		No
11/22/2021	10:40	0	638	0.9	1000	27.13	-339.1	0.3		No
11/22/2021	10:45	0	617	0.69	1000	26.08	-371.8	0.29		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:35	10:45	10	0	617	0.69	1000	26.08	-371.8

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0261-033.0-20211122 Sampler: Brittany Follett
 Well ID: PFAS-DPT0261 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/22/2021	11:35	0	11481	3.43	1000	26.29	-313.5	6.35		No
11/22/2021	11:40	0	11428	0.72	1000	25.86	-322.2	6.38		No
11/22/2021	11:45	0	11257	0.68	1000	25.65	-329.4	6.3		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:35	11:45	10	0	11257	0.68	1000	25.65	-329.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0261-043.0-20211122 Sampler: Brittany Follett
 Well ID: PFAS-DPT0261 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/22/2021	12:25	0	24770	0.85	1000	24.91	-314.6	15.08		No
11/22/2021	12:30	0	24753	0.87	1000	24.9	-341.9	15.07		No
11/22/2021	12:35	0	24758	0.86	1000	24.9	-374.2	15.08		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:25	12:35	10	0	24758	0.86	1000	24.9	-374.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0262-008.0-20211122 Sampler: Brittany Follett
 Well ID: PFAS-DPT0262 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/22/2021	14:10	0	143	1.1	1000	24.3	-132.1	0.07		No
11/22/2021	14:15	0	142	1	1000	24.3	-129.6	0.07		No
11/22/2021	14:20									

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:10	14:20	10						

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0262-023.0-20211122 Sampler: Brittany Follett
 Well ID: PFAS-DPT0262 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/22/2021	14:35	0	722	0.86	1000	24.81	-162.5	0.35		No
11/22/2021	14:40	0	718	0.96	1000	24.95	-171.9	0.35		No
11/22/2021	14:45	0	715	2.58	1000	25.02	-178.3	0.35		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:35	14:45	10	0	715	2.58	1000	25.02	-178.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0262-033.0-20211122 Sampler: Brittany Follett
 Well ID: PFAS-DPT0262 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/22/2021	14:55	0	1068	0.62	1000	25.32	-136.1	0.52		No
11/22/2021	15:00	0	1059	0.65	1000	24.93	-140.3	0.52		No
11/22/2021	15:05	0	1050	0.67	1000	24.56	-150.2	0.52		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
14:55	15:05	10	0	1050	0.67	1000	24.56	-150.2

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0262-043.0-20211123 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0262 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/23/2021	8:25	0	1500	0.53	1000	19.5	-200.6	0.85		No
11/23/2021	8:30	0	1500	0.61	1000	19.58	-204.2	0.85		No
11/23/2021	8:35	0	1493	1.86	1000	18.77	-216.3	0.86		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:25	8:35	10	0	1493	1.86	1000	18.77	-216.3

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0263-008.0-20211123 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0263 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/23/2021	10:05	0	426	0.26	1000	24.42	-283.1	0.2		No
11/23/2021	10:10	0	440	0.41	1000	24.59	-397.2	0.21		No
11/23/2021	10:15	0	443	0.34	1000	24.61	-420.1	0.21		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:05	10:15	10	0	443	0.34	1000	24.61	-420.1

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
Project No: 60615673

Sample ID: PFAS-DPT0263-023.0-20211123 **Sampler:** Brittany Follett
Well ID: PFAS-DPT0263 **Analysis:** PFAS
Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/23/2021	10:30	0	1302	0.37	1000	24.59	-296.5	0.65		No
11/23/2021	10:35	0	1291	0.3	1000	24.32	-296.8	0.65		No
11/23/2021	10:40	0	1282	0.26	1000	24.23	-296.9	0.65		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:30	10:40	10	0	1282	0.26	1000	24.23	-296.9

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: PFAS-DPT0263-033.0-20211123 Sampler: Brittany Follett
 Well ID: PFAS-DPT0263 Analysis: PFAS
 Remark:

Purge Information										
Date	Time	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
11/23/2021	11:00	0	1848	0.29	1000	23.91	-271.1	0.96		No
11/23/2021	11:05	0	1884	0.35	1000	24.29	-270.2	0.97		No
11/23/2021	11:10	0	1884	0.35	1000	24.06	-270.4	0.98		No

Start Purge	End Purge	Duration (min)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:00	11:10	10	0	1884	0.35	1000	24.06	-270.4

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: A3RB-MW0002-002.0-20210921 Sampler: Dustin Slater
 Well ID: A3RB-MW0002 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	1.14
Top of Screen (ft-BTOR):	2	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	12	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	12	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	9:26			0	1.14									
9/21/2021	10:01	0.05	1.75	1.75	1.22	6.13	186	0.23	5.31	29.13	-54.09	0.09		
9/21/2021	10:11	0.05	0.5	2.25	1.22	6.14	187	0.23	4.32	29.36	-47.94	0.09		
9/21/2021	10:21	0.05	0.5	2.75	1.22	6.17	188	0.20	4.87	29.43	-44.49	0.09		
9/21/2021	10:31	0.05	0.5	3.25	1.22	6.14	191	0.21	3.26	29.51	-40.80	0.10		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:26	10:31	65	3.25	6.14	191	0.21	3.26	29.51	-40.80

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: FCDC-MW0001-012.0-20210921 Sampler: Brittany Follett
 Well ID: FCDC-MW0001 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	1	Static Water Level (ft-BTOR):	7.41
Top of Screen (ft-BTOR):	7	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	17	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	17	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	10:53			0	7.41									
9/21/2021	11:13	0.06	1.25	1.25	7.81	7.08	924	0.54	2.08	28.24	26.14	0.46		
9/21/2021	11:15	0.06	0.12	1.37	7.81	7.09	919	0.50	1.96	28.14	29.49	0.46		
9/21/2021	11:17	0.06	0.12	1.49	7.81	7.08	919	0.50	2.02	28.12	32.89	0.46		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:53	11:17	24	1.49	7.08	919	0.50	2.02	28.12	32.89

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: LC39OGA-MW0004-010.0-20210920 Sampler: Brittany Follett
 Well ID: LC39OGA-MW0004 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	1	Static Water Level (ft-BTOR):	4.54
Top of Screen (ft-BTOR):	5	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	15	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	15	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	12:08			0	N/A									
9/20/2021	12:18	0.05	0.5	0.5	N/A	7.12	1250	0.09	40.80	28.48	-175.98	0.63		
9/20/2021	12:20	0.05	0.1	0.6	N/A	7.13	1226	0.09	28.58	28.43	-179.19	0.62		
9/20/2021	12:22	0.05	0.1	0.7	N/A	7.14	1242	0.06	25.20	28.38	-180.31	0.63		
9/20/2021	12:24	0.05	0.1	0.8	N/A	7.13	1241	0.06	24.88	28.40	-180.73	0.63		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:08	12:24	16	0.6	7.13	1241	0.06	24.88	28.40	-180.73

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: LC39OGA-MW0008-024.5-20210920 Sampler: Brittany Follett
 Well ID: LC39OGA-MW0008 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	1	Static Water Level (ft-BTOR):	4.23
Top of Screen (ft-BTOR):	22	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	27	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	27	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	12:46			0	4.23									
9/20/2021	12:56	0.05	0.5	0.5	N/A	7.25	9477	0.13	3.45	27.49	-180.46	5.40		
9/20/2021	12:58	0.05	0.1	0.6	N/A	7.24	9919	0.11	11.16	27.48	-189.04	5.67		
9/20/2021	13:00	0.05	0.1	0.7	N/A	7.24	10041	0.10	4.89	27.40	-194.53	5.74		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (μS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
12:46	13:00	14	0.6	7.24	10041	0.10	4.89	27.40	-194.53

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: MLPV-IW0019D-052.5-20210922 Sampler: Brittany Follett
 Well ID: MLPV-IW0019D Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	2.58
Top of Screen (ft-BTOR):	50	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	55	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	55	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/22/2021	9:53			0	2.58									
9/22/2021	10:03	0.05	0.5	0.5	2.64	7.18	4176	0.18	1.73	29.22	4.50	2.25		
9/22/2021	10:05	0.05	0.1	0.6	2.64	7.18	4173	0.14	1.88	29.14	-0.76	2.24		
9/22/2021	10:07	0.05	0.1	0.7	N/A	7.18	4175	0.12	1.86	29.18	-3.50	2.25		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:53	10:07	14	0.6	7.18	4175	0.12	1.86	29.18	-3.50

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: MLPV-IW0019I-037.5-20210922 Sampler: Brittany Follett
 Well ID: MLPV-IW0019I Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	2.61
Top of Screen (ft-BTOR):	35	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	40	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	40	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/22/2021	10:12			0	2.61									
9/22/2021	10:22	0.05	0.5	0.5	2.64	7.33	555	0.09	1.87	28.62	-178.31	0.27		
9/22/2021	10:24	0.05	0.1	0.6	2.64	7.32	555	0.07	1.88	28.65	-179.16	0.27		
9/22/2021	10:26	0.05	0.1	0.7	N/A	7.32	554	0.06	1.96	28.68	-182.27	0.27		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:12	10:26	14	0.6	7.32	554	0.06	1.96	28.68	-182.27

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: MLPV-VAB-IW0005D-054.5-20210920 Sampler: Brittany Follett
 Well ID: MLPV-VAB-IW0005D Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.65
Top of Screen (ft-BTOR):	52	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	57	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	57	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	11:02			0	N/A									
9/20/2021	11:13	0.05	0.5	0.5	3.65	6.54	218	0.16	1.98	28.93	-65.99	0.10		
9/20/2021	11:15	0.05	0.1	0.6	3.65	6.53	218	0.15	1.89	28.78	-68.63	0.10		
9/20/2021	11:17	0.05	0.1	0.7	3.65	6.54	216	0.14	1.90	28.85	-74.68	0.10		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:02	11:17	15	0.7	6.54	216	0.14	1.90	28.85	-74.68

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: MLPV-VAB-IW0006D-044.5-20210920 Sampler: Dustin Slater
 Well ID: MLPV-VAB-IW0006D Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.88
Top of Screen (ft-BTOR):	42	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	47	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	47	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	9:45			0	3.88									
9/20/2021	10:15	0.05	1.5	1.5	3.88	7.00	1646	1.19	1.81	29.24	-22.11	0.84		
9/20/2021	10:17	0.05	0.1	1.6	3.88	6.96	1658	0.46	1.49	28.92	-55.64	0.85		
9/20/2021	10:19	0.05	0.1	1.7	3.88	6.95	1666	0.35	1.84	28.78	-68.12	0.85		
9/20/2021	10:21	0.05	0.1	1.8	3.88	6.95	1594	0.27	1.46	28.75	-78.06	0.81		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:45	10:21	36	1.8	6.95	1594	0.27	1.46	28.75	-78.06

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: Q6RS-MW0001-010.0-20210921 Sampler: Dustin Slater
 Well ID: Q6RS-MW0001 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	1	Static Water Level (ft-BTOR):	4.07
Top of Screen (ft-BTOR):	5	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	15	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	15	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	8:18			0	4.07									
9/21/2021	8:38	0.05	0.1	0.1	4.11	6.35	385	0.11	8.71	26.09	-190.43	0.19		
9/21/2021	8:40	0.05	0.1	0.2	4.11	6.36	386	0.11	13.97	26.10	-191.92	0.19		
9/21/2021	8:42	0.05	0.1	0.3	4.11	6.36	371	0.11	3.06	26.11	-191.51	0.18		
9/21/2021	8:44	0.05	0.1	0.4	4.11	6.37	375	0.11	3.01	26.11	-191.57	0.18		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:18	8:44	26	0.4	6.37	375	0.11	3.01	26.11	-191.57

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: Q6RS-MW0003-010.0-20210921 Sampler: Dustin Slater
 Well ID: Q6RS-MW0003 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	1	Static Water Level (ft-BTOR):	4.07
Top of Screen (ft-BTOR):	3.5	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	8.5	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	8.5	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	8:18			0	4.07									
9/21/2021	8:38	0.05	0.1	0.1	4.11	6.35	385	0.11	8.71	26.09	-190.43	0.19		
9/21/2021	8:40	0.05	0.1	0.2	4.11	6.36	386	0.11	13.97	26.10	-191.92	0.19		
9/21/2021	8:42	0.05	0.1	0.3	4.11	6.36	371	0.11	3.06	26.11	-191.51	0.18		
9/21/2021	8:44	0.05	0.1	0.4	4.11	6.37	375	0.11	3.01	26.11	-191.57	0.18		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
8:18	8:44	26	0.4	6.37	375	0.11	3.01	26.11	-191.57

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: SAE-MW0002-009.0-20210921 Sampler: Brittany Follett
 Well ID: SAE-MW0002 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	1.17
Top of Screen (ft-BTOR):	4	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	14	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):		Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	9:48			0	1.17									
9/21/2021	10:00	0.04	0.5	0.5	1.21	6.53	366	0.18	6.20	28.87	103.47	0.18		
9/21/2021	10:02	0.04	0.08	0.58	1.21	6.52	366	0.20	9.71	28.71	101.90	0.18		
9/21/2021	10:04	0.04	0.08	0.66	1.21	6.53	365	0.18	6.55	28.68	99.94	0.18		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
9:48	10:04	16	0.66	6.53	365	0.18	6.55	28.68	99.94

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: SAEW-MW0003-004.5-20210921 Sampler: Dustin Slater
 Well ID: SAEW-MW0003 Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.42
Top of Screen (ft-BTOR):	4	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	14	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):		Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/21/2021	10:57			0	3.42									
9/21/2021	11:37	0.05	2	2	3.67	6.75	709	0.08	6.30	26.91	-99.32	0.35		
9/21/2021	11:47	0.05	0.5	2.5	3.67	6.75	709	0.08	5.67	26.88	-100.5	0.35		
9/21/2021	11:57	0.05	0.5	3.0	3.67	6.75	710	0.07	5.12	26.90	-101.15	0.35		
9/21/2021	12:07	0.05	0.5	3.5	3.67	6.75	708	0.07	6.08	26.81	-100.40	0.35		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:57	12:07	70	3.5	6.75	708	0.07	6.08	26.81	-100.40

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: WCPS-IW0001SR-003.5-20210920 Sampler: Dustin Slater
 Well ID: WCPS-IW0001SR Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	1	Static Water Level (ft-BTOR):	2.25
Top of Screen (ft-BTOR):	2.5	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	12.5	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	12.5	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	10:42			0	2.25									
9/20/2021	11:02	0.05	1	1	2.64	7.39	334	0.50	1.46	28.66	-134.49	0.16		
9/20/2021	11:04	0.05	0.1	1.1	2.64	7.39	332	0.51	1.39	28.67	-134.08	0.16		
9/20/2021	11:06	0.05	0.1	1.2	2.64	7.39	331	0.53	1.36	28.77	-136.61	0.16		
9/20/2021	11:08	0.05	0.1	1.3	2.64	7.39	331	0.53	1.41	28.78	-136.33	0.16		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
10:42	11:08	26	1.3	7.39	331	0.53	1.41	28.78	-136.33

GROUNDWATER SAMPLE LOG SHEET



Event: Kennedy Space Center PFAS Investigation
 Site Name: Centerwide Per- and Polyfluoroalkyl Substances (PFAS) Investigation (PRL 237)
 Project No: 60615673

Sample ID: WCPS-IW0009S-004.0-20210920 Sampler: Dustin Slater
 Well ID: WCPS-IW0009S Well Type: Monitoring Well
 Remark:

Well Information			
Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3
Top of Screen (ft-BTOR):	2.5	H/S PID Monitor Reading (ppm):	0
Bottom of Screen (ft-BTOR):	12.5	Purge/Sample Method:	Low flow - peristaltic
Total Depth of Well (ft-BTOR):	12.5	Sample Analysis:	PFAS

Purge Information														
Date	Time	Purge Rate (gal/min)	Volume Purged (gal)	Cum Vol Purged (gal)	Depth To Water (ft)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (S.U.)	Color	Odor
9/20/2021	11:45			0	3									
9/20/2021	12:25	0.05	2	2	3.23	6.79	1031	0.33	1.63	29.42	42.37	0.52		
9/20/2021	12:27	0.05	0.1	2.1	3.23	6.79	1032	0.32	2.55	29.40	37.98	0.52		
9/20/2021	12:29	0.05	0.1	2.2	3.23	6.78	1031	0.32	2.89	29.38	33.07	0.52		
9/20/2021	12:31	0.05	0.1	2.3	3.23	6.79	1031	0.32	1.64	29.38	30.74	0.52		

Start Purge	End Purge	Duration (min)	Total Vol (gal)	pH (S.U.)	S.C. (µS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)
11:45	12:31	46	2.3	6.79	1031	0.32	1.64	29.38	30.74

Phase II and III SWMU Assessment and Confirmatory Sampling
Report Center-Wide PFAS PRL 237
Revision: 0
May 2022

This page intentionally left blank.