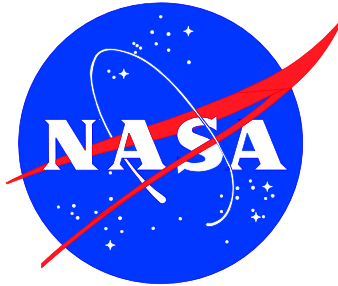


**WILSON CORNERS  
SWMU 001  
2014 ANNUAL LONG TERM MONITORING REPORT  
KENNEDY SPACE CENTER, FLORIDA**

**Prepared for:**



**National Aeronautics and Space Administration  
Kennedy Space Center, Florida**

**June 2015  
Revision: 0**

**Prepared by:**

**Geosyntec Consultants  
6770 South Washington Avenue, Suite 3  
Titusville, FL 32780  
(321) 269-5880**

## CERTIFICATION AND APPROVAL

Based on the information contained in the attached document titled *Wilson Corners, SWMU 001, 2014 Annual Long Term Monitoring Report, Kennedy Space Center, Florida* dated June 2015; I hereby certify that the scope of work described in the above-referenced document was performed using appropriate hydrogeologic and engineering standards of practices.

---

James Langenbach, P.E./Date  
Florida Professional Engineer No. 51413  
Geosyntec Consultants, Inc.  
Certificate of Authorization No. 4321  
Telephone: (321) 269-5880  
Facsimile: (321) 269-5813

## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	Executive Summary .....	ES-1
I	INTRODUCTION .....	1-1
1.1	Overview .....	1-1
1.2	Facility Location .....	1-1
1.3	Background .....	1-1
1.4	Purpose .....	1-3/1-4
1.5	Report Organization .....	1-3/1-4
II	FIELD ACTIVITIES .....	2-1
2.1	Overview .....	2-1
2.2	Depth to Groundwater Measurements .....	2-1
2.3	Annual Groundwater LTM Sampling .....	2-1
2.4	Additional Assessment Groundwater Sampling .....	2-2
III	SAMPLING RESULTS .....	3-1
3.1	Overview .....	3-1
3.2	Summary of Site Lithology .....	3-1
3.3	Groundwater Elevations, Flow Direction, and Gradient .....	3-1
3.4	Monitoring Well VOC Analytical Results .....	3-2
3.4.1	2 to 15 ft BLS VOC Results .....	3-2
3.4.2	15 to 25 ft BLS VOC Results .....	3-3
3.4.3	28 to 38 ft BLS VOC Results .....	3-3
3.4.4	38 to 48 ft BLS VOC Results .....	3-4
3.4.5	Greater than 48 ft BLS VOC Results .....	3-4
3.5	Trend Analysis .....	3-5
3.5.1	Peripheral Wells .....	3-5
3.5.2	Internal Plume Wells .....	3-5
3.5.3	Vertical Extent Wells .....	3-5
3.6	Natural Attenuation Evaluation .....	3-5
IV	CONCLUSIONS AND RECOMMENDATIONS .....	4-1

TABLE OF CONTENTS (continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
V	REFERENCES .....	R-1/R-2

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
2-1	2014 LTM and Additional Assessment Plan .....	2-3
2-2	Groundwater Elevations.....	2-4
3-1	Monitoring Well Sampling Results: Volatile Organic Compounds .....	3-7/3-20
3-2	Natural Attenuation Field Sampling Parameters .....	3-21/3-30
4-1	Proposed 2015 LTM Plan .....	4-2/4-4

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1-1	Wilson Corners Location Map.....	1-5/1-6
1-2	USGS Topographic Quadrangle Map.....	1-7/1-8
1-3	2014 LTM, Additional Assessment Well Network, and Hot Spot Areas....	1-9/1-10
2-1	Monitoring Well Network.....	2-5/2-6
3-1	2 to 15 ft BLS Groundwater Elevations and Contours – December 2014 .....	3-31/3-32
3-2	15 to 25 ft BLS Groundwater Elevations and Contours – December 2014 .....	3-33/3-34
3-3	28 to 38 ft BLS Groundwater Elevations and Contours – December 2014 .....	3-35/3-36
3-4	38 to 48 ft BLS Groundwater Elevations and Contours – December 2014 .....	3-37/3-38
3-5	Greater than 48 ft BLS Groundwater Elevations and Contours – December 2014 .....	3-39/3-40
3-6	2 to 15 ft BLS Groundwater VOC Results .....	3-41/3-42
3-7	15 to 25 ft BLS Groundwater VOC Results .....	3-43/3-44
3-8	28 to 38 ft BLS Groundwater VOC Results .....	3-45/3-46
3-9	38 to 48 ft BLS Groundwater VOC Results .....	3-47/3-48
3-10	Greater than 48 ft BLS Groundwater VOC Results.....	3-49/3-50
4-1	Proposed 2015 LTM Well Network .....	4-5/4-6

TABLE OF CONTENTS (continued)

LIST OF APPENDICES

Appendix A	Remediation Team Meeting Minutes and Decisions
Appendix B	Field Forms (Furnished on CD only)
Appendix C	Laboratory Analytical Reports (Furnished on CD only)
Appendix D	RIS Completion Tickets (Furnished on CD only)
Appendix E	VOC Trend Graphs (Furnished on CD only)

## ABBREVIATIONS AND ACRONYMS

ALS	ALS Environmental
BLS	below land surface
cDCE	<i>cis</i> -1,2-dichloroethene
°C	degrees Celsius
DO	dissolved oxygen
DOH	Department of Health
DPT	direct push technology
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
ft	feet
ft/ft	feet elevation per foot horizontal distance
GCTL	groundwater cleanup target level
Geosyntec	Geosyntec Consultants
IDW	investigation-derived waste
IM	Interim Measures
KSC	Kennedy Space Center
lbs	pounds
LTM	long-term monitoring
LTTD	low temperature thermal desorption
µg/L	micrograms per liter
mS/cm	milliSiemens per centimeter
mV	milliVolts
NADC	natural attenuation default concentration
NASA	National Aeronautics and Space Administration
NAVD88	North American Vertical Datum 1988
NELAC	National Environmental Laboratory Accreditation Conference
NTU	nephelometric turbidity units
ORP	oxidation-reduction potential
P&T	pump and treat
PDB	passive diffusion bag
POL	Paint and Oil Locker
RCRA	Resource Conservation and Recovery Act
RIS	Remediation Information System
RTM	Remediation Team Meeting
SAP	Sampling and Analysis Plan
SOP	standard operating procedure

ABBREVIATIONS AND ACRONYMS (continued)

SU	Standard units
SWMU	solid waste management unit
TCE	trichloroethene
USGS	United States Geological Survey
VC	vinyl chloride
VOC	volatile organic compound

## EXECUTIVE SUMMARY

This document presents the findings of the 2014 Long Term Monitoring (LTM) that was completed at the Wilson Corners site, located at the National Aeronautics and Space Administration (NASA) John F. Kennedy Space Center (KSC), Florida. The goals of the 2014 annual LTM event were to evaluate the groundwater flow direction and gradient and to monitor the vertical and downgradient horizontal extent of the volatile organic compounds (VOCs) in groundwater at the site.

The LTM activities consisted of an annual groundwater sampling event in December 2014, which included the collection of water levels from the LTM wells. During the annual groundwater sampling event, depth to groundwater was measured and VOC samples were collected using passive diffusion bags (PDBs) from 30 monitoring wells. In addition to the LTM sampling, additional assessment sampling was performed at the site using low-flow techniques based on previous LTM results and assessment activities. Assessment of monitoring well MW0052DD was performed by collecting VOC samples using low-flow techniques before and after purging 100 gallons from the well. Monitoring well MW0064 was sampled to supplement shallow VOC data north of Hot Spot 2 and east of Hot Spot 4. Monitoring well MW0089 was sampled due to its proximity to MW0090. MW0090 is screened in a deeper interval and had an unexpected detection of trichloroethene (TCE) during the 2013 LTM, which was corroborated during the March 2014 verification sampling. Monitoring well MW0130 was sampled to provide additional VOC data beneath the semi-confining clay layer in the Hot Spot 2 area.

The following conclusions can be made based on the 2014 annual LTM results:

- depth to groundwater measurements indicated a predominately southwest flow direction with a northwest flow component in the northwest portion of the site from the water table to approximately 48 feet below land surface (ft BLS);
- the current monitoring well network generally delineates VOCs to Groundwater Cleanup Target Levels (GCTLs) to the west and southwest (downgradient areas representing the focus of the LTM event);
- the current monitoring well network does not provide the full extent of the 28 to 38 ft BLS depth interval VOC plume in the area of monitoring wells MW0090 (vinyl chloride [VC] GCTL exceedance) and MW0088 (VC Natural Attenuation Default Concentration [NADC] exceedance);
- The vertical extents of the VOCs were evaluated using historically sampled monitoring wells screened greater than 60 ft BLS (MW0083 through MW0086, and



MW0078). The 2014 LTM results indicate that concentrations of *cis*-1,2-dichloroethene (cDCE) and VC are greater than NADCs for MW0078 and that the vertical extent of VOCs is not defined. MW0130 had a concentration of VC greater than NADC;

- The integrity of monitoring well MW0052DD is uncertain, and is therefore recommended for over drilling and abandonment; and
- Increasing concentration trends in peripheral monitoring wells in the northwest portion of the site indicate potential plume migration and expansion.

Geosyntec recommends continuing LTM on an annual schedule. It is anticipated that future interim measures conducted in the Hot Spot 2 and Hot Spot 4 areas will reduce VOC source mass that is currently acting as a continuing source to the dissolved plume. Evaluation of the plume northwest of the site will provide additional information enhancing the conceptual site model. The focus of the 2015 LTM will be to monitor potential plume migration/expansion in the downgradient (western/northwestern) portion of the site and also to verify plume delineation (verification every five years) in select upgradient and sidegradient monitoring wells in each depth interval.

## SECTION I

### INTRODUCTION

#### 1.1 OVERVIEW

This document summarizes field activities and presents the results of the 2014 Long Term Monitoring (LTM) activities conducted at the Wilson Corners site, located at the National Aeronautics and Space Administration (NASA) John F. Kennedy Space Center (KSC), Florida. This facility has been designated Solid Waste Management Unit (SWMU) Number 001 under the KSC Resource Conservation and Recovery Act (RCRA) Corrective Action program. This document was prepared by Geosyntec Consultants (Geosyntec) for NASA under contract number NNK12CA13B/NNK14CA20T.

#### 1.2 FACILITY LOCATION

The Wilson Corners site is situated on Merritt Island at the northernmost extent of KSC, in Brevard County on the east coast of Florida (Figure 1-1). The currently vacant site is located within Section 22 of Township 21S, Range 36E, as shown on the United States Geological Survey (USGS) 7.5-minute Wilson topographic Quadrangle Map (Figure 1-2). The site is located west of Kennedy Parkway/State Road 3 and north of Beach Road/State Road 402.

#### 1.3 BACKGROUND

The Propellant Systems Components Laboratory facility was previously located at the site and trichloroethene (TCE) was stored, used, and disposed at the facility. Site assessment activities were first conducted during the 1980s, identifying TCE impacts to soil and groundwater and recommending groundwater remediation using pump and treat (P&T). P&T was implemented in 1989 and the system continued to operate until 1999. During this time period, the system extracted and treated over 100 million gallons of groundwater, removing over 800 gallons of equivalent TCE (9,700 pounds [lbs]), and provided hydraulic control of the dissolved plume. The P&T system was shut down because (i) it was near the end of its useful life and was going to require costly replacement of the mechanical equipment, piping runs, and electrical systems, and (ii) because groundwater concentrations had become asymptotic over the last three to five years of operation, suggesting the presence of a residual source area(s).

In December 1999, following P&T system shut down, a source area investigation was implemented. Between 2000 and 2001, an extensive source area investigation was conducted,

which included the performance of over 170 soil borings and the collection of over 500 saturated zone soil samples, in addition to direct push technology (DPT) groundwater sampling. Interim Measures (IMs) were implemented in phases to address the identified soil and groundwater impacts. Phase I, conducted in 2003 through 2004, involved large scale shallow source area excavation with low temperature thermal desorption (LTTD) treatment of over 16,000 tons of excavated soil. The Phase I IM resulted in the treatment of an estimated 3,500 to 4,000 lbs of TCE. Phase II, initiated in 2004 involved limited deep zone “hot spot” sodium permanganate injection, followed by staggered ethyl lactate biostimulation. Following the excavation and LTTD treatment, long term monitoring was initiated to assess concentrations of volatile organic compounds (VOCs) in select monitoring wells within the VOC plume and to monitor the boundaries of the plume.

The central portion of the site is broken into four general areas where elevated VOC concentrations (greater than 10 times the Florida Department of Environmental Protection [FDEP] Natural Attenuation Default Concentrations [NADCs]) have been identified (Figure 1-3): (i) Former Cleaning Tower Area – Hot Spot 1, (ii) Former Laboratory and Above Ground Storage Tanks - Hot Spot 2, (iii) Former Spray Field Area, and (iv) Former Paint and Oil Locker (POL) – Hot Spot 4. Hot Spots 1 and 2 are areas where excavation of source material sorbed to the organic layer and treatment of soil from land surface to a maximum depth of 14 feet below land surface (ft BLS) was previously performed. In addition, Hot Spot 2 is located in the area where limited deep zone groundwater treatment via chemical oxidation (2004), biostimulation (2004) and limited P&T (2006 through 2007) were performed. The Hot Spot 1, 2, and 4 areas have been delineated to the TCE NADC. Implementation of large diameter auger treatment with steam and zero valent iron injection was completed in 2014 and early 2015 in Hot Spot 1. Preparation of Step 2 and Step 3 Engineering Evaluations for the Hot Spot 2 area is on hold until the Hot Spot 1 IM implementation results can be evaluated and additional DPT groundwater assessment has been completed. Hot Spot 4 assessment to assess whether air sparging of the organic interval will be effective is planned for 2015. While additional assessment activities are occurring, the remainder of the site is being monitored by an LTM program.

The goal of the LTM program is to annually evaluate groundwater flow direction and gradient and to monitor vertical and downgradient monitoring wells only (wells that are downgradient of the central portion of the site where additional assessment activities are occurring). Every five years upgradient and sidegradient monitoring wells will also be sampled to verify delineation in those areas. Results of the 2014 annual LTM activities and the proposed 2015 annual LTM plan were presented and approved at the April 2015 NASA Remediation Team Meeting (RTM). Draft meeting minutes and decisions are included in Appendix A.

#### 1.4 PURPOSE

The purpose of this report is to present the field activities and results of the December 2014 annual groundwater LTM event and additional assessment sampling activities performed at the site. Additionally, this report provides recommendations for future assessment and monitoring activities.

#### 1.5 REPORT ORGANIZATION

The remainder of this report is organized as follows:

Section II: *Field Activities*. This section describes the methodology used for the 2014 annual LTM activities and additional assessment sampling.

Section III: *Results*. This section summarizes the results of the LTM and additional assessment activities.

Section IV: *Recommendations*. This section presents recommendations for future activities at the site.

Section V: *References*. This section provides a listing of the documents used in developing this report.

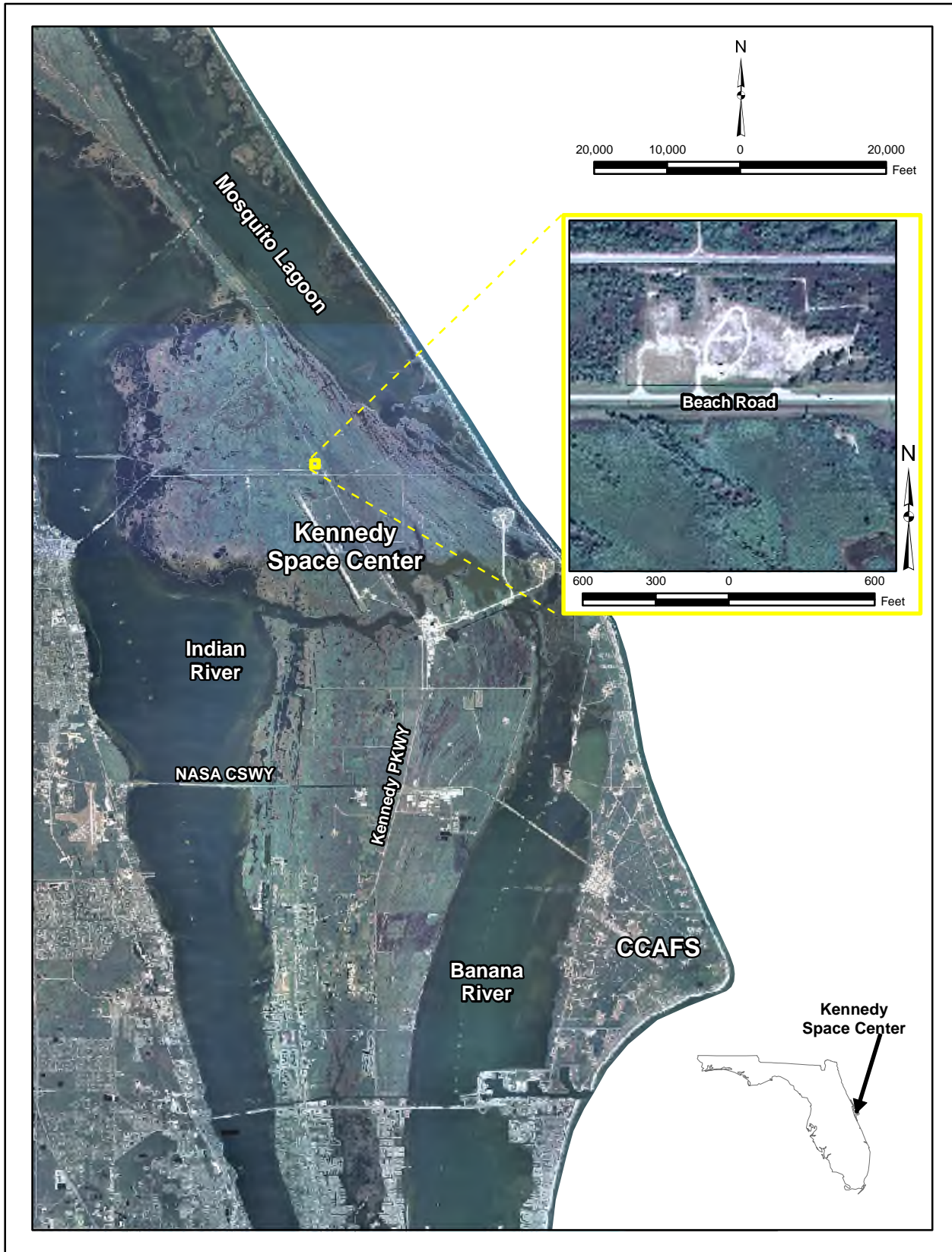
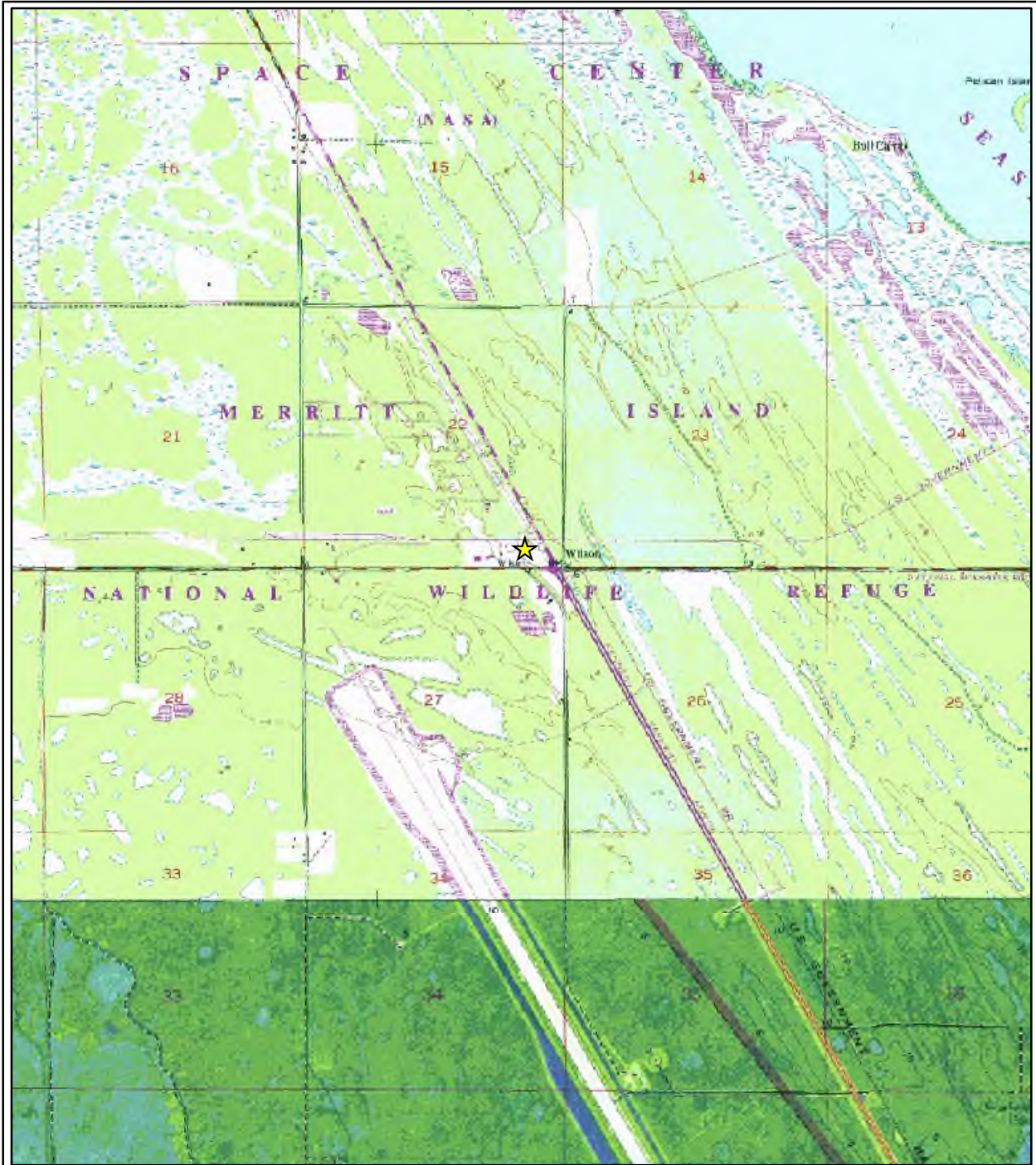


Figure 1-1  
Wilson Corners Location Map

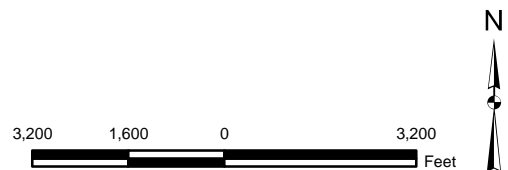


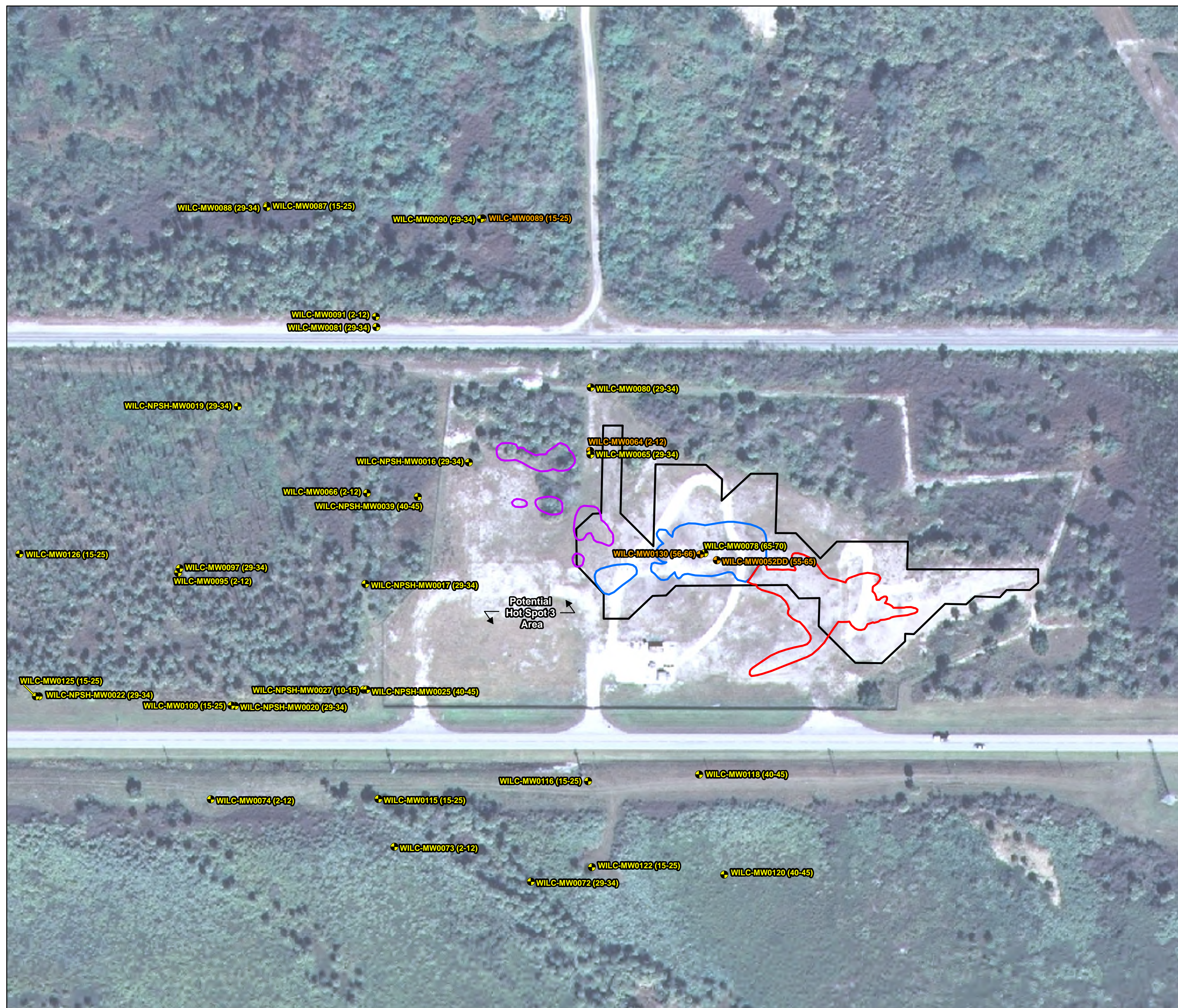
USGS Topographic Quadrangles: Wilson and Orsino

Figure 1-2  
USGS Topographic Quadrangle Map

**Legend**

★ Site Location





**Legend**

- LTM Well Location Sampled Annually showing screen interval (ft BLS)
- December 2014 Additional Assessment Well Location showing screen interval (ft BLS)
- Hot Spot 1
- Hot Spot 2
- Hot Spot 4
- Former Excavation Area

Note:  
 ft BLS indicates feet below land surface.

## SECTION II

### FIELD ACTIVITIES

#### 2.1 OVERVIEW

The location of all site monitoring wells is presented on Figure 2-1. The 2014 LTM sampling plan is presented in Table 2-1 and the location of the wells that were sampled as part of the 2014 LTM and as part of the additional assessment activities are presented on Figure 1-3. The 2014 LTM sampling locations, techniques, and parameters were approved by the NASA remediation team at the May 2014 meeting (decision item 1504–D68 and 1504-D69) and were presented in the 2013 Annual LTM Report [NASA 2014]. The evaluation of monitoring well MW0052DD by sampling, purging 100 gallons, then re-sampling was discussed with and approved by the NASA remediation project manager in November 2014. Sampling of additional monitoring wells (MW0064, MW0089, and MW0130) was approved by email correspondence with the NASA remediation project manager on 18 December 2014. Additional assessment monitoring well purging and sampling activities were conducted in general accordance with the FDEP standard operating procedures (SOPs) [FDEP 2014] and the KSC Sampling and Analysis Plan (SAP) [NASA 2011b]. The December 2014 groundwater LTM event utilized passive diffusion bag (PDB) sampling.

Field forms are provided in Appendix B, the laboratory analytical data is included in Appendix C, and Remediation Information System (RIS) Completion Tickets are included in Appendix D.

Investigation derived waste (IDW), comprised of purge and decontamination fluids, was added to the large diameter auger condensate water tank for treatment by the air stripper system.

#### 2.2 DEPTH TO GROUNDWATER MEASUREMENTS

Depth to groundwater measurements were collected from select monitoring wells to assess groundwater flow direction and gradient. The annual LTM event depth to groundwater measurements were collected on 19 December 2014 (Table 2-2). Measurements were made with an electronic measuring tape that was decontaminated in general accordance with FDEP SOPs [FDEP 2014] between monitoring wells.

#### 2.3 ANNUAL GROUNDWATER LTM SAMPLING

The LTM sampling event included the collection of groundwater samples from 30 monitoring wells for analysis of VOCs by Environmental Protection Agency (EPA) Method 8260B. VOC samples were submitted under chain-of-custody protocol to ALS Environmental (ALS) of



Jacksonville, Florida for analysis. ALS is certified under the National Environmental Laboratory Accreditation Conference (NELAC), Department of Health (DOH) Certification Number E82502.

2014 LTM groundwater samples were collected using PDBs. PDBs were deployed for a minimum of two weeks (per manufacturer recommendations). The deployment time allows VOCs to diffuse across the PDB into the analyte-free water within the PDB and achieve equilibrium conditions with the surrounding aquifer. During the 2014 LTM event, PDBs were deployed on 25 and 26 November and 1 December 2014 by lowering to and securing at the approximate midpoint of the well screen. The PDBs were recovered and samples were collected between 18 and 19 December 2014.

#### 2.4 ADDITIONAL ASSESSMENT GROUNDWATER SAMPLING

On 19 December 2014, VOC samples were collected from four additional monitoring wells. Assessment of MW0052DD (55 to 65 ft BLS) was performed by collecting VOC samples using low-flow techniques before and after purging 100 gallons from the well using a centrifugal pump. Monitoring well MW0064 (2 to 12 ft BLS) was sampled to supplement the shallow VOC data east of Hot Spot 4 and between the Hot Spot 2 Area and impacts observed in the northwest portion of the site (monitoring well MW0090). Monitoring well MW0089 (15 to 25 ft BLS) was sampled due to its proximity to MW0090 (29 to 34 ft BLS). MW0090 had an unexpected detection of TCE during the 2013 LTM, which was corroborated during the March 2014 verification sampling and was sampled to further evaluate groundwater at this location. Monitoring well MW0130 (56 to 66 ft BLS) was sampled to provide additional VOC data beneath the semi-confining clay layer in the Hot Spot 2 area. Collected samples were submitted under chain-of-custody protocol to ALS of Jacksonville, Florida for analysis.

In addition to collection of samples using low-flow sampling techniques, field geochemical parameters were collected from the four additional assessment monitoring wells (MW0052DD, MW0064, MW0089, and MW0130). During collection of the field geochemical parameters, the monitoring wells were purged and the following parameters were recorded at regular intervals: pH (standard units [SU]); conductivity (milliSiemens per centimeter [mS/cm]); temperature (degrees Celsius [°C]); oxidation-reduction potential (ORP, milliVolts [mV]); and turbidity (nephelometric turbidity units [NTUs]). Dissolved oxygen was not recorded due to a faulty water quality meter probe.

**Table 2-1. 2014 LTM and Additional Assessment Plan  
Wilson Corners, SWMU 001**

Monitoring Well	Screened Interval (ft BLS)	Annual LTM	Rationale
<b>2 to 15 ft BLS</b>			
NPSH-MW0027	10 to 15	VOCs 8260	Southwestern Downgradient Well
MW0064	2 to 12	VOCs 8260	Additional Assessment: Low Flow Sample East of Hot Spot 4 Area
MW0066	2 to 12	VOCs 8260	Western Downgradient Well
MW0073	2 to 12	VOCs 8260	Southwestern Peripheral Well
MW0074	2 to 12	VOCs 8260	Southwestern Peripheral Well
MW0091	2 to 12	VOCs 8260	Northwestern Peripheral Well
MW0095	2 to 12	VOCs 8260	Western Peripheral Well
<b>15 to 25 ft BLS</b>			
MW0087	15 to 25	VOCs 8260	Northwestern Peripheral Well
MW0089	15 to 25	VOCs 8260	Additional Assessment: Low Flow Sample Adjacent to and shallower than MW0090
MW0109	15 to 25	VOCs 8260	Southwestern Downgradient Well
MW0115	15 to 25	VOCs 8260	Southwestern Peripheral Well
MW0116	15 to 25	VOCs 8260	Southern Downgradient Well
MW0122	15 to 25	VOCs 8260	Southern Peripheral Well
MW0125	15 to 25	VOCs 8260	Western Peripheral Well
MW0126	15 to 25	VOCs 8260	Western Peripheral Well
<b>28 to 38 ft BLS</b>			
NPSH-MW0016	29 to 34	VOCs 8260	Northwestern Downgradient Well
NPSH-MW0017	29 to 34	VOCs 8260	Western Downgradient Well
NPSH-MW0019	29 to 34	VOCs 8260	Western Peripheral Well
NPSH-MW0020	29 to 34	VOCs 8260	Southwestern Downgradient Well
NPSH-MW0022	29 to 34	VOCs 8260	Southwestern Peripheral Well
MW0065	29 to 34	VOCs 8260	North-Central Well
MW0072	29 to 34	VOCs 8260	Southern Peripheral Well
MW0080	29 to 34	VOCs 8260	North-Central Well
MW0081	29 to 34	VOCs 8260	Northwestern Downgradient Well
MW0088	29 to 34	VOCs 8260	Northwestern Peripheral Well
MW0090	29 to 34	VOCs 8260	Northern Peripheral Well
MW0097	29 to 34	VOCs 8260	Western Peripheral Well
<b>38 to 48 ft BLS</b>			
NPSH-MW0025	40 to 45	VOCs 8260	Western Downgradient Well
NPSH-MW0039	40 to 45	VOCs 8260	Western Peripheral Well
MW0118	40 to 45	VOCs 8260	Southern Downgradient Well
MW0120	40 to 45	VOCs 8260	Replaces Destroyed Southern Peripheral Well
<b>Greater than 48 ft BLS</b>			
MW0052DD	55 to 65	VOCs 8260	Additional Assessment: Evaluate Well for Potential Hydraulic Connection across the Clay Layer
MW0078	65 to 70	VOCs 8260	Vertical Peripheral Well
MW0130	56 to 66	VOCs 8260	Additional Assessment: Low Flow Sample Vertically Beneath the Clay Layer

**Notes:**

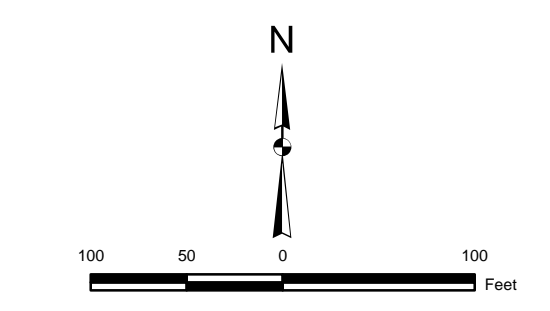
1. VOCs 8260 indicates volatile organic compound analysis by EPA Method 8260.
2. ft BLS indicates feet below land surface.
3. LTM indicates long term monitoring.

**Table 2-2. Groundwater Elevations  
Wilson Corners, SWMU 001**

			Dec-14	
Monitoring Well	Screened Interval (ft BLS)	TOC Elevation (ft NGVD88)	Water Level (ft BTOC)	Groundwater Elevation (ft NGVD88)
<b>2 to 15 ft BLS</b>				
MW0057S	2 to 12	7.55	4.25	3.30
NPSH-MW0027	10 to 15	4.93	2.35	2.58
MW0064	2 to 12	7.04	3.54	3.50
MW0066	2 to 12	7.03	4.10	2.93
MW0073	2 to 12	6.59	3.84	2.75
MW0074	2 to 12	6.48	3.91	2.57
MW0091	2 to 12	7.09	4.18	2.91
MW0095	2 to 12	6.22	3.65	2.57
<b>15 to 25 ft BLS</b>				
MW0087	15 to 25	8.24	5.42	2.82
MW0089	15 to 25	8.26	4.97	3.29
MW0106	15 to 25	8.91	5.00	3.91
MW0109	15 to 25	7.12	4.65	2.47
MW0115	15 to 25	7.17	4.59	2.58
MW0116	15 to 25	7.73	4.50	3.23
MW0122	15 to 25	7.00	3.75	3.25
MW0125	15 to 25	7.06	4.08	2.98
MW0126	15 to 25	7.99	5.54	2.45
<b>28 to 38 ft BLS</b>				
NPSH-MW0016	29 to 34	6.72	3.51	3.21
NPSH-MW0017	29 to 34	5.18	2.50	2.68
NPSH-MW0019	29 to 34	5.81	3.25	2.56
NPSH-MW0020	29 to 34	6.88	4.44	2.44
NPSH-MW0022	29 to 34	5.29	2.95	2.34
MW0057I	29 to 34	7.90	4.01	3.89
MW0065	29 to 34	7.39	3.94	3.45
MW0072	29 to 34	5.87	3.69	2.18
MW0080	29 to 34	4.86	1.35	3.51
MW0081	29 to 34	3.70	0.65	3.05
MW0088	29 to 34	8.29	5.50	2.79
MW0090	29 to 34	8.01	4.72	3.29
MW0097	29 to 34	6.33	3.75	2.58
<b>38 to 48 ft BLS</b>				
NPSH-MW0025	40 to 45	4.72	2.00	2.72
NPSH-MW0039	40 to 45	4.77	1.72	3.05
MW0057D	40 to 45	7.77	4.25	3.52
MW0118	40 to 45	8.43	4.96	3.47
MW0120	40 to 45	8.61	5.08	3.53
<b>Greater than 48 ft BLS</b>				
MW0052DD	55 to 65	8.85	5.55	3.30
MW0078	65 to 70	8.48	4.96	3.52
MW0130	56 to 66	NS	4.09	NS

**Notes:**

1. BLS indicates Below Land Surface.
2. NGVD indicates National Geodetic Vertical Datum.
3. BTOC indicates Below Top of Casing.
4. NS indicates not surveyed.



- Legend**
- 2 to 15 ft BLS Monitoring Well Location showing screen interval (ft BLS)
  - 15 to 25 ft BLS Monitoring Well Location showing screen interval (ft BLS)
  - 28 to 38 ft BLS Monitoring Well Location showing screen interval (ft BLS)
  - 38 to 48 ft BLS Monitoring Well Location showing screen interval (ft BLS)
  - > 48 ft BLS Monitoring Well Location showing screen interval (ft BLS)

Note:  
 ft BLS indicates feet below land surface.

Figure 2-1  
 Monitoring Well Network  
 2-5/2-6

## SECTION III

### SAMPLING RESULTS

#### 3.1 OVERVIEW

This annual LTM Report presents the results of the LTM groundwater sampling and additional assessment groundwater sampling performed in December 2014. The goals of the LTM activities performed in December 2014 were to evaluate groundwater flow direction and gradient, and to monitor the vertical and downgradient horizontal extents of the VOC plume.

#### 3.2 SUMMARY OF SITE LITHOLOGY

A summary of the site lithology is provided below:

- 2 to 15 ft BLS: consists of sand and organic hardpan;
- 15 to 25 ft BLS: consists of sand and shell hash;
- 28 to 38 ft BLS: consists of shell hash and silty sand;
- 38 to 48 ft BLS: consists of silty sand with shell transitioning into interbedded layers of fine clayey sand and sandy clay; and
- greater than 48 ft BLS: consists of silty sand with shell transitioning into interbedded layers of fine sandy clay and clayey sand, followed by silty sand, fine to medium clayey silty sand and very fine silty sand – includes the vertical extent monitoring wells.

These intervals are utilized for developing the groundwater flow maps and for presenting the groundwater VOC impacts at the site.

#### 3.3 GROUNDWATER ELEVATIONS, FLOW DIRECTION, AND GRADIENT

Depth to groundwater measurements were collected to assess the groundwater flow direction and gradient at the site. The recorded depth to groundwater measurements were converted to groundwater elevations with respect to the North America Vertical Datum of 1988 (NAVD88) and are summarized in Table 2-2.

The flow direction and horizontal gradient are presented below by depth interval:

- 2 to 15 ft BLS (Figure 3-1): groundwater elevations indicate a southwest flow direction and a gradient of 0.001 feet elevation per foot horizontal distance (ft/ft, from monitoring well MW0057S to NPSH-MW0027);
- 15 to 25 ft BLS (Figure 3-2): groundwater elevations indicated a southwest flow direction and a gradient of 0.001 ft/ft (from monitoring well MW0106 to MW0109);
- 28 to 38 ft BLS (Figure 3-3): groundwater elevations indicated a southwest flow direction and a gradient of 0.001 ft/ft (from monitoring well MW0057I to MW0097); and
- 38 to 48 ft BLS (Figure 3-4): groundwater elevations indicated northwest and southwest flow components and a gradient of 0.001 ft/ft (from monitoring well MW0057D to NPSH-MW0025).

For the greater than 48 ft BLS interval groundwater elevations are presented on Figure 3-5. A gradient was not calculated for this interval due to the proximity of monitoring wells to each other and generally flat gradient.

The groundwater gradient range and flow direction generally agree with historical data for the site; however, the southwest flow direction was more pronounced than previously and a west and west-northwest flow component, historically measured, was generally absent.

Vertical gradients were calculated at several well pairs across the site (MW0091/MW0081, MW0095/MW0097, and NPSH-MW0027/NPSH-MW0025). The vertical gradients were variable (ranging from 0.001 to 0.008 ft/ft upward). The low vertical gradients do not indicate a strong vertical flow component at the site.

### 3.4 MONITORING WELL VOC ANALYTICAL RESULTS

Groundwater VOC samples were collected to monitor the vertical and downgradient horizontal plume extents. Analytical results from the 2014 annual LTM activities revealed exceedances of Groundwater Cleanup Target Levels (GCTLs) and NADCs for TCE, *cis*-1,2-dichloroethene (cDCE), and vinyl chloride (VC). Monitoring well sampling results are summarized in Table 3-1.

3.4.1 2 TO 15 FT BLS VOC RESULTS. TCE, cDCE, and VC concentrations from 2 to 15 ft BLS are summarized on Figure 3-6, which also presents the overall VOC GCTL and NADC contours based on DPT groundwater sampling results through 2012, 2014 LTM sampling results, and the most recent sampling results for monitoring wells not sampled during the 2014 LTM sampling event. An additional assessment sample was collected from MW0064 in December 2014 to supplement the 2014 LTM samples.

The sampling results in the 2 to 15 ft BLS depth interval were consistent with historical sampling results, with the exception of the results from samples collected from monitoring wells MW0064, MW0095, and NPSH-MW0027. The sample collected from monitoring well MW0064 indicates GCTL exceedances of TCE (4.5 micrograms per liter [ $\mu\text{g/L}$ ]) and VC (23  $\mu\text{g/L}$ ) leaving the GCTL plume unbounded to the north. Individual VOCs were not detected above GCTLs in the sample collected from MW0095 (VC was 2.5  $\mu\text{g/L}$  in 2013). Monitoring well MW0095 now bounds the GCTL plume to the west. cDCE (880  $\mu\text{g/L}$ ) and VC (3,000  $\mu\text{g/L}$ ) exceeded NADCs in the sample collected from NPSH-MW0027, which was a variance from the results observed in December 2013, when only the VC concentration (480  $\mu\text{g/L}$ ) was above its NADC. The results from NPSH-MW0027 did not affect the overall GCTL or NADC contour.

**3.4.2 15 TO 25 FT BLS VOC RESULTS.** TCE, cDCE, and VC concentrations from 15 to 25 ft BLS are summarized on Figure 3-7, which also presents the overall GCTL and NADC contours based on DPT groundwater sampling results through 2012, 2014 LTM data, and the most recent sampling results for monitoring wells not sampled during the 2014 LTM sampling event. In addition to the 2014 LTM wells, MW0089 was sampled to provide a shallower sample adjacent to MW0090, which indicated the presence of TCE above the GCTL in the previous sampling event.

The sampling results in the 15 to 25 ft BLS depth interval were consistent with historical sampling results, with the exception of the results from the samples collected from monitoring wells MW0109, MW0087, and MW0089. VC was the only VOC detected above the GCTL in the sample collected from MW0109 (28  $\mu\text{g/L}$ ), which exceeded the NADC in December 2013 (830  $\mu\text{g/L}$ ). The overall NADC plume was modified to exclude monitoring well MW0109. VC concentrations in monitoring wells MW0087 (20  $\mu\text{g/L}$ ) and MW0089 (28  $\mu\text{g/L}$ ) increased above the GCTL and the GCTL plume contour was adjusted to include an inferred section to the north and northwest, where it is no longer bounded by existing monitoring wells.

**3.4.3 28 TO 38 FT BLS VOC RESULTS.** TCE, cDCE, and VC concentrations from 28 to 38 ft BLS are summarized on Figure 3-8, which also presents the overall GCTL and NADC contours based on DPT sampling results through 2012, 2014 LTM data, and the most recent sampling results for monitoring wells not sampled during the 2014 LTM sampling event.

The sampling results in the 28 to 38 ft BLS depth interval were consistent with historical sampling results, with the exception of the results from samples collected from monitoring wells MW0080, MW0088, MW0090, MW0097, and NPSH- MW0019. Groundwater samples from monitoring well MW0080 indicated TCE (0.4  $\mu\text{g/L}$ ) below the GCTL and cDCE (190  $\mu\text{g/L}$ ) increased to a GCTL exceedance. Sample results from monitoring well MW088 indicated an

increase in VC (130 µg/L) to above the NADC which is inconsistent with the GCTL exceedances from 2010 to 2013. VC (21 µg/L) in MW0097 decreased from NADC exceedances from years 2011 to 2013 to a GCTL exceedance in 2014. Samples collected from MW0090 indicated reductions in TCE (less than the detection limit of 0.36 µg/L) from a GCTL exceedance, cDCE (4.7 µg/L) from an NADC exceedance, and VC (47 µg/L) from an NADC exceedance. NPSH-M0019 sample concentrations indicated an increase in VC (8.9 µg/L) to a GCTL exceedance from no exceedances in all previously sampled years.

The GCTL contour was modified to include NPSH-MW0019. The NADC contour was modified to exclude MW0097 and MW0090. A new NADC contour was inserted around MW0088. The GCTL contour remains unbounded by monitoring wells north of MW0090 and the NADC contour is unbounded north of MW0088.

3.4.4 38 TO 48 FT BLS VOC RESULTS. TCE, cDCE, and VC concentrations from 38 to 48 ft BLS are summarized on Figure 3-9, which also presents the overall GCTL and NADC contours based on DPT sampling results through 2012, 2014 LTM data, and the most recent sampling results for monitoring wells not sampled during the 2014 LTM sampling event.

The sampling results in the 38 to 48 ft BLS depth interval were consistent with historical sampling results for all sampled wells. MW0118 was the only sampled well to indicate a GCTL exceedance for VC (9.3 µg/L).

3.4.5 GREATER THAN 48 FT BLS VOC RESULTS. TCE, cDCE, and VC concentrations from depth intervals greater than 48 ft BLS are summarized on Figure 3-10. Additional assessment samples were collected in conjunction with 2014 LTM samples; MW0052DD was sampled before and after having 100 gallons pumped from the well, and MW0130 was sampled to collect data beneath the clay layer in the Hot Spot 2 area.

The groundwater sample from MW0078 indicates a decrease in TCE (3.3 µg/L) concentration to the GCTL, a change from the GCTL exceedance documented 2013 LTM sampling. The vertical extent of contamination remains unbounded at this well due to cDCE and VC NADC exceedances.

MW0052DD samples indicated exceedances of the NADCs for TCE, cDCE, and VC prior to (19,000 µg/L, 26,000 µg/L, and 5,900 µg/L, respectively), and after (15,000 µg/L, 21,000 µg/L, and 3,500 µg/L, respectively), pumping of 100 gallons from the well. These concentrations fell within the historically fluctuating values.

The monitoring well MW0130 sample indicated an increase in TCE and VC concentrations. TCE (6.7 µg/L) increased from below the GCTL in 2012 to a GCTL exceedance, and VC (150 µg/L)



increased from a GCTL exceedance in 2012 to an NADC exceedance. MW0130 no longer provides vertical delineation of the plume.

### 3.5 TREND ANALYSIS

Trend plots were prepared for select LTM wells to evaluate the VOC concentration trends over time. The monitoring wells that were sampled as part of the 2014 LTM program are presented on Figure 1-3 and trend graphs are presented in Appendix E. A discussion of the trends is provided below based on the locations of the wells on the site.

**3.5.1 PERIPHERAL WELLS.** The peripheral wells, defining the edge of the GCTL plume in each depth interval, provide general delineation of VOCs to GCTL or near GCTL concentrations. Trend graphs for select west and northwest peripheral wells (MW0080, MW0088, MW0090, and MW0095) have been provided in Appendix E. Increasing trends have been observed in MW0080 and MW0088. Decreases have been observed to below GCTLs for TCE and cDCE and below the NADC for VC in monitoring well MW0090, and to below GCTLs in MW0095.

**3.5.2 INTERNAL PLUME WELLS.** The trend graphs for select internal plume LTM wells (MW0065, MW0097, MW0109, MW0116, NPSH-MW0016, NPSH-MW0017, NPSH-MW0020, NPSH-MW0027) are provided in Appendix E. Monitoring wells MW0065, MW0080, and NPSH-MW0016 in the northern area indicate VC exceeds the NADC, cDCE exceeds the GCTL and VOC concentrations are increasing. Southwestern and southern internal dissolved plume wells MW0109 and MW0116 have indicated decreases in concentrations from historical levels and only exceed the GCTL for VC. In the southwest area, MW0097, NPSH-MW0017, and NPSH-MW0020 indicate increasing or fluctuating VOC trends. Western downgradient well NPSH-MW0027 has fluctuated within the historical range of concentrations.

**3.5.3 VERTICAL EXTENT WELLS.** Sample results from the vertical extent monitoring well MW0078 historically (prior to 2012) documented VOC concentrations less than GCTLs; however, the results from the 2014 LTM event indicated cDCE and VC concentrations exceeding NADCs, and overall increasing VOC trends. MW0052DD continues fluctuating trends within the historical range with NADC exceedances of TCE, cDCE, and VC.

### 3.6 NATURAL ATTENUATION EVALUATION

The current remediation strategy for the overall dissolved plume at the site is natural attenuation with LTM, while supplemental assessment and remedial actions (as IMs) are being completed for the Hot Spot areas. During previous LTM events an evaluation of site geochemical data has been performed in order to evaluate natural attenuation at the site. The historical field

geochemical data (pH, conductivity, temperature, dissolved oxygen [DO], ORP, and turbidity) and laboratory measured geochemical parameters (methane, ethane, and ethene) have consistently supported natural attenuation at the site since 2005. Field geochemical data was collected during the 2014 LTM event from monitoring wells where additional assessment was performed (MW0064, MW0089, MW0052DD, and MW0130). The geochemical data are included in Table 3-2.

The pH and ORP measured in monitoring well MW0064, screened in the 2 to 12 ft BLS interval, were 7.07 SU and -41.2 mV, respectively.

The pH and ORP measured in monitoring well MW0089, screened in the 15 to 25 ft BLS interval, were 7.01 SU and -121.1 mV, respectively.

The pH and ORP measured in monitoring wells MW0052DD and MW0130, screened in the greater than 48 ft BLS interval, were 6.79 and 7.12 SU and 80.4 and -70.5 mV, respectively.

The pH values observed at the site are generally neutral and the ORP is generally negative, indicating an anaerobic environment, which supports the conclusion that natural attenuation processes (naturally occurring dechlorination of VOCs) are and will continue to occur at the site.

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					
			TCE	cDCE	tDCE	1,1-DCE	VC	
MW0021D	Groundwater Cleanup Target Level (µg/L)		3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
MW0046D	12/17/2004	40 to 45	5.8	ND	ND	NA	ND	
	5/18/2005		1 U	1 U	1 U	1 U	1 U	
MW0046I	5/13/2004	40 to 45	ND	ND	ND	NA	234	
	5/20/2005		98.7	1,570	7.9	1 U	295	
	8/12/2009	29 to 34	230	2,900	100 U	33 I	2,600	
	5/13/2004		ND	ND	ND	NA	3.7	
MW0047D	12/17/2004	2 to 12	15	200	1.5 J	NA	47	
	12/17/2004 <sup>DL</sup>		16 J	200	ND	NA	81 J	
	5/20/2005		17	542	2.5	1 U	56.3	
	5/13/2004		ND	12,200	ND	NA	1,510	
	2/9/2005 <sup>DL</sup>		ND	13,000	NA	NA	1,100	
	7/25/2005		400 U	22,400	400 U	NA	1,800	
	7/25/2005(dup)		400 U	20,900	400 U	NA	1,700	
	12/21/2006		500 U	26,400	500 U	500 U	1,500	
	6/12/2007		200 U	30,400	129 I	200 U	2,090	
	7/31/2008	40 to 45	20.2 I	6,350	23 U	27 U	3,270	
	12/17/2008		80 U	22,600	110 U	140 U	2,770	
	7/21/2009		470	9,700	100 U	100 U	1,500	
MW0047I	12/8/2009		64 U	15,500	90 U	110 U	2,940	
	9/13/2010		160 U	25,200	120 U	160 U	5,690	
	3/17/2011		22.4	14,800	31	28.9	5,400	
	9/20/2011		36 U	14,300	19 U	16 U	6,690	
	9/6/2012		161	16,000	24.0 I	29.0 I	6,570	
	5/13/2004		6.1 J	245	ND	NA	73.5	
	2/9/2005		480 E	6,200 E	NA	NA	1,800 E	
	2/9/2005 <sup>DL</sup>		ND	3,300	NA	NA	640 J	
	7/27/2005		400 U	3,600	400 U	400 U	1,200	
	12/20/2006		711	2,290	50 U	50 U	2,030	
	6/12/2007	29 to 34	650	1,490	200 U	200 U	1,830	
	7/31/2008		557	2,390	16.1 I	11 U	1,650	
12/17/2008		1,160	2,800	45 U	169	2,230		
7/22/2009		2,100	6,400	500 U	500 U	1,300		
12/8/2009		169	1,190	9 U	11 U	1,740		
MW0047S	5/13/2004	2 to 12	ND	7	ND	NA	1.9	
	7/27/2005		1 U	1 U	1 U	1 U	1 U	
MW0048I	7/31/2008		0.32 U	0.2 U	0.45 U	0.54 U	0.3 U	
	5/13/2004		3,740	5,750	ND	NA	1,400	
	2/9/2005		1,200 E	2,100 E	NA	NA	660 E	
	2/9/2005 <sup>DL</sup>		1,300 J	2,100 J	NA	NA	570 J	
	7/28/2005		700	500	20 U	20 U	550	
	12/20/2006		117	143	2.6 I	5 U	1,230	
	6/12/2007		125	1,520	20 U	20 U	1,840	
	7/31/2008	29 to 34	30.9	669	4.7 I	10.4	2,330	
	12/17/2008		48.5	1,240	9 U	13.1 I	1,850	
	7/22/2009		150	1,800	100 U	100 U	890	
	12/8/2009		33.7 I	5,590	45 U	54 U	3,650	
	9/13/2010		8 U	157	12.7 I	8 U	5,550	
3/16/2011		4.9 I	161	13.5	2.58	2,360		
9/20/2011		7.2 U	134	6.6 I	3.2 U	2,120		
9/5/2012		1.4 I	60.6	4.15	0.480 I	260		
MW0048S	5/13/2004	2 to 12	0.54 J	6.8	ND	NA	2.7	
	7/28/2005		1 U	1 U	1 U	1 U	1 U	
MW0049D	5/13/2004		513	9,570	ND	NA	1,840	
	2/9/2005		1,700 E	13,000 E	NA	NA	4,100 E	
	2/9/2005 <sup>DL</sup>		1,900	8,800	NA	NA	2,300	
	12/21/2006		29.4 I	1,650	50 U	50 U	4,170	
	6/12/2007		92 I	1,310	100 U	100 U	2,850	
	7/23/2008		110	740	9.2 I	22	2,300 L	
	12/18/2008		45.8	337	7.2	2.7 U	2,320	
	7/20/2009	40 to 45	80 I	310	100 U	100 U	1,600	
	12/8/2009		64.9	379	7.5 I	5.4 U	2,380	
	9/8/2010 <sup>PBB</sup>		50.1	758	6 U	8 U	2,920	
	3/17/2011		76.5	711	6 U	8 U	3,100	
	9/20/2011		30.4	912	8.97	1.64	2,590	
9/5/2012		26.8	801	7 I	3.2 U	3,170		
MW0049I	5/13/2004		493	1,470	11.4 I	4.80 I	2,700	
	2/9/2005		998	4,420	ND	NA	845	
	2/9/2005 <sup>DL</sup>		ND	34 J	NA	NA	380 E	
	12/21/2006	29 to 34	22.3	80.1	0.91 I	1 U	410	
MW0049S	7/18/2008		100	290	33 U	27 U	102	
	7/20/2009		20	990	12	6.1	430	
	5/13/2004	2 to 12	109	558	ND	NA	1,200 L	
	7/28/2005		8	23	3 U	3 U	143	
	12/21/2006		7	14.1	1 U	1 U	190	
	7/23/2008		2.3	13.5	1 U	1 U	26.8	
7/20/2009		11.9	28.8	1 U	1 U	12.4		
9/13/2010		7.68	8.27	0.727 I	0.16 U	5.7		
9/20/2011		9.33	28	1.1	0.16 U	25.2		

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Target Level (µg/L)			3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
MW0050D	5/13/2004	40 to 45	13.7	42.2	ND	NA	21	
	12/21/2004		38	740 E	5.9	NA	930 E	
	12/21/2004 <sup>DL</sup>		23 J	890	ND	NA	1,500	
	2/9/2005		180	2,100 E	NA	NA	3,500 E	
	2/9/2005 <sup>DL</sup>		230 J	1,800	NA	NA	2,700	
	7/28/2005		7	5	3 U	3 U	3 U	
	8/12/2009		4,600	4,500	100 U	100 U	270	
	9/30/2014		770	2,800	161	7.0 U	190	
	5/13/2004		680	4,040	ND	NA	329	
	12/22/2004		81	160	5.5	NA	230 E	
MW0050S	12/22/2004 <sup>DL</sup>	2 to 12	89 J	200 J	ND	NA	370 J	
	7/28/2005		8	41	24	3 U	110	
MW0050SI	5/13/2004	20 to 25	38.3	34.3	ND	NA	1.9	
	12/22/2004		35	67	ND	NA	45	
	12/22/2004 <sup>DL</sup>		31 J	180	ND	NA	130	
	2/9/2005		32	100	NA	NA	92	
	2/9/2005 <sup>DL</sup>		36 J	76	NA	NA	67 J	
MW0050I	5/13/2004	29 to 34	18	8.5	ND	NA	0.57	
	12/22/2004		8.1	ND	ND	NA	ND	
	2/9/2005		2.1 J	1 J	NA	NA	ND	
	5/14/2004		10.9	2	ND	NA	ND	
	12/21/2004		280 E	86	ND	NA	ND	
MW0052D	12/21/2004 <sup>DL</sup>	40 to 45	730 J	ND	ND	NA	ND	
	2/10/2005		4.9 J	ND	NA	NA	ND	
	9/17/2009		ND	ND	NA	NA	ND	
	9/8/2010		41,100	32,500	29.4	41.1	1,090	
	5/14/2004		70,400	28,600	ND	NA	1,240	
MW0052DD	12/22/2004	55 to 65	5,100 E	5,600 E	43	NA	340 E	
	12/22/2004 <sup>DL</sup>		6,000	3,100	ND	NA	140 J	
	2/10/2005		32,000 E	32,000 E	NA	NA	1,900 E	
	2/10/2005 <sup>DL</sup>		89,000	94,000	NA	NA	2,300 J	
	7/21/2008		420	1,100	10.4	6	510	
	9/19/2011		6,550	8,800	19 U	16 U	651	
	9/5/2012		4,700	10,000	36.0 I	41.0 I	983	
	12/19/2014		19,000	26,000	80	84	5,900	
	12/19/2014-R		15,000	21,000	51	59	3,600	
	5/14/2004		240	166	ND	NA	7.4	
MW0052I	12/21/2004	29 to 34	50	18	ND	NA	13	
	12/21/2004 <sup>DL</sup>		ND	ND	ND	NA	ND	
	2/10/2005		71 J	ND	NA	NA	ND	
	7/28/2005		3	1	1 U	1 U	1 U	
	5/14/2004		42,300	33,200	ND	NA	2,730	
MW0052S	12/21/2004	2 to 12	160	2,800 E	48	NA	6,500 E	
	12/21/2004 <sup>DL</sup>		260 J	4,200	ND	NA	11,000	
	7/27/2005		350	350	40 U	40 U	590	
	12/21/2006		11,000	122,000	2,000 U	2,000 U	46,100	
	1/15/2007		22,200	71,700	2,000 U	2,000 U	21,300	
	6/13/2007		5,650	46,200	500 U	500 U	9,580	
	8/1/2008		30,200	15,600	160 U	190 U	2,000	
	12/18/2008		4,600	85 U	110 U	140 U	2,090	
	7/22/2009		840	2,300	100 U	100 U	390	
	12/7/2009		1,420	3,200	14.4 I	11 U	532	
MW0053D	9/8/2010	40 to 45	3,770	4,460	12 U	25 I	476	
	9/8/2010 <sup>PBB</sup>		6,500	6,360	12 U	30.7 I	587	
	3/17/2011		170	2,360	13.1	6.84	187	
	9/19/2011		126	9,100	181	8 U	1,310	
	9/5/2012		43.1	383	3.96 I	0.760 I	24.7	
	5/14/2004		0.59 J	ND	ND	NA	ND	
	2/9/2005		ND	ND	NA	NA	ND	
MW0053I	12/18/2006	29 to 34	1 U	1 U	1 U	1 U	1 U	
	10/5/2007		1 U	1 U	1 U	1 U	2.1	
	7/17/2008		1 U	1 U	1 U	1 U	1 U	
	7/16/2009		1 U	1.8	1 U	1 U	1.2	
	5/14/2004		ND	ND	ND	NA	ND	
MW0053S	2/9/2005	2 to 12	ND	1.2 J	NA	NA	1.7 J	
	12/18/2006		1 U	1 U	2.1	1 U	2.4	
	12/21/2006		0.93 I	3.2	3.8	1 U	12.4	
	6/13/2007		1 U	3.4	3.1	1 U	51.1	
	7/18/2008		1 U	4.3	1	1 U	170	
MW0053S	12/18/2008	2 to 12	0.43	7.3	0.79 I	0.54 U	10.5	
	7/16/2009		1 U	6.9	1 U	1 U	3.1	
	12/8/2009		0.42 I	10.8	1.1	0.54 U	8.2	

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Target Level (µg/L) Natural Attenuation Default Criteria (µg/L)			3	70	100	7	1	
			300	700	1,000	70	100	
MW0054D	5/17/2004	40 to 45	ND	1.0	ND	NA	3.2	
	2/9/2005		ND	2.0	NA	NA	5.0	
	10/5/2007		1.0	40.2	1.0	1.0	27.3	
	7/21/2008		1.0	1.2	1.0	1.0	1.0	
MW0054H	5/17/2004	29 to 34	553	640	ND	NA	85.8	
	2/9/2005 <sup>PL</sup>		1,900	600 J	NA	NA	ND	
	10/4/2007		44,000	18,000	200 U	200 U	2,500	
	7/21/2008		19.5	96.2	1.0	1.0	21.9	
	9/15/2010		16 U	9,720	12 U	16 U	2,080	
MW0054S	5/17/2004	2 to 12	9,070	9,230	ND	NA	10,900	
	5/20/2005		1.0	52.4	23	1.0	545	
	10/4/2007		7.1	13.6	1.0	1.0	1.3	
	7/21/2008		2.7	1.2	1.4	1.0	1.0	
MW0055D	5/17/2004	40 to 45	10.9	36.3	1.6 J	NA	374	
	2/9/2005		4 J	18	NA	NA	120	
	7/28/2005		3 U	7	3 U	3 U	200	
	12/19/2006		2.2	13.6	1.2	1.0	58.2	
	7/17/2008		4.6	35.8	1.1	1.0	51.3	
	7/17/2009		6.8	35.3	1.1	1.0	34.8	
	9/20/2011		0.36 U	83.4	0.82 I	0.16 U	71.3	
	5/17/2004		15.7	ND	ND	NA	ND	
	2/9/2005		ND	1.3 J	NA	NA	5.3 J	
	2/9/2005 <sup>PL</sup>		ND	ND	NA	NA	ND	
MW0055S	10/4/2007	2 to 12	240	2,600	100 U	100 U	1,000	
	9/15/2010		0.36 U	83.4	0.82 I	0.16 U	71.3	
	5/17/2004		432	680	ND	NA	244	
	5/19/2005		1.0	3.3	0.56 J	1.0	1.25	
MW0056S	10/4/2007	2 to 12	1.0	1.8	1.0	1.0	1.7	
	9/5/2012		1.10	4.21	0.190 U	0.160 U	0.360 U	
	5/17/2004		2,220	2,350	ND	NA	2,840	
	5/19/2005		1.0	4,280	63.7	1.0	1,410	
	12/19/2006		10 U	316	12.4	10 U	463	
	6/13/2007		100 U	11,000	128	100 U	6,800	
	10/8/2007		1.0	1.3	1.0	1.0	6.1	
	7/31/2008		0.23 U	29.6	1.1	0.39 U	62.2	
	12/17/2008		0.32 U	11.4	24.1	0.54 U	474	
	7/22/2009		1.0	3.5	7.8	1.0	95.6	
	12/8/2009		0.32 U	7.2	13.5	0.54 U	101	
	9/8/2010		3.2 U	54.6	12.3 I	3.2 U	630	
	9/8/2010 <sup>PDB</sup>		0.16 U	1.16	0.12 U	0.16 U	3.12	
	3/16/2011		0.36 U	1,920	73.6	6.23	1,110	
9/20/2011	29.5 I	6,890	140	8 U	760			
MW0057D	5/17/2004	40 to 45	ND	ND	ND	NA	ND	
	7/27/2005		1.0	1.0	1.0	1.0	1.0	
	10/8/2007		1.0	1.0	1.0	1.0	1.0	
	7/21/2008		1.0	1.0	1.0	1.0	1.0	
	9/13/2010		0.16 U	0.36 U	0.12 U	0.16 U	0.22 U	
	9/20/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/6/2012		465	77.8	0.960 I	0.370 I	5.46	
	10/25/2012		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
	5/17/2004		ND	ND	ND	NA	ND	
	MW0057I		7/27/2005	29 to 34	0.5 U	0.5 U	0.5 U	0.5 U
10/5/2007		1.0	1.0		1.0	1.0	1.0	
7/22/2008		1.0	1.0		1.0	1.0	1.0	
9/8/2010		0.16 U	0.36 U		0.12 U	0.16 U	0.22 U	
9/20/2011		0.36 U	0.36 U		0.19 U	0.16 U	0.36 U	
9/5/2012		0.360 U	0.360 U		0.190 U	0.160 U	0.360 U	
5/17/2004		ND	0.98 J		ND	NA	ND	
7/27/2005		1.0	1.0		1.0	1.0	1.0	
12/19/2006		1.0	1.0		1.0	1.0	1.0	
10/5/2007		1.0	1.0		1.0	1.0	1.0	
MW0057S	7/22/2008	2 to 12	1.0	1.0	1.0	1.0	1.0	
	9/8/2010		0.36 U	0.74 I	0.19 U	0.16 U	0.36 U	
	9/20/2011		0.36 U	0.41 I	0.19 U	0.16 U	0.36 U	
	9/5/2012		0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
	5/17/2004		550 E	560 E	ND	NA	110	
	12/20/2004 <sup>PL</sup>		620 J	570 J	ND	NA	ND	
	2/9/2005 <sup>PL</sup>		960 J	780 J	NA	NA	ND	
	2/9/2005 <sup>PL</sup>		770 J	680 J	NA	NA	ND	
	12/21/2006		375	394	100 U	100 U	124	
	6/13/2007		4,050	5,990	100 U	95 I	833	
10/4/2007	5,400	16,000	200 U	200 U	1,500			
7/31/2008	8,810	29,400	230 U	270 U	3,730			
12/17/2008	13,900	42,400	230 U	270 U	5,220			
7/22/2009	9,100	22,000	500 U	500 U	1,800			
12/7/2009	6,390	34,400	230 U	270 U	3,790			
9/8/2010	4,800	35,200	48 U	64 U	5,510			
9/8/2010 <sup>PDB</sup>	4,780	34,200	48 U	64 U	5,660			
3/17/2011	2,810	29,800	31.2	39.9	5,420			
9/20/2011	2,850	30,800	38 U	32 U	72 U			
9/6/2012	2,740	21,600	38.0 U	32.0 U	7,430			

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Natural Attenuation Default Criteria (µg/L)			3	70	100	7	1	
			300	700	1,000	70	100	
MW0060I	12/17/2004	29 to 34	930 E	1,600 E	15	NA	600 E	
	12/17/2004 <sup>DL</sup>		1,400 J	1,800 J	ND	NA	ND	
	7/28/2005		330	1,300	100 U	100 U	890	
	12/21/2006		10	123	2 U	2 U	303	
	7/23/2008		190	5,200	33 U	27 U	2,400	
	7/22/2009		260	6,700	100 U	100 U	2,900	
	9/15/2010		16 U	2,820	12 U	16 U	4,620	
	3/17/2011		14.1	1,880	25.2	9.37	6,230	
	9/20/2011		9 U	74.3	21.1	4 U	4,210	
	9/5/2012		3.60 U	188	11.1	1.60 U	1,610	
MW0060S	12/17/2004	2 to 12	ND	3 J	ND	NA	2.8 J	
	7/28/2005		3	1 U	1 U	7		
MW0061S	8/12/2009	2 to 12	1 U	1 U	1 U	1 U	1 U	
	12/17/2004		ND	ND	ND	NA	ND	
MW0062	7/27/2005	2 to 12	1 U	1 U	1 U	1 U	1 U	
	2/1/2006		0.5 U	1.5	1.8	0.5 U	5	
MW0063	12/18/2006	29 to 34	1 U	1 U	3.9	1 U	2	
	7/31/2008		0.23 U	0.14 U	2	0.39 U	0.21 U	
	7/16/2009		1 U	1 U	1 U	1 U	1 U	
	9/8/2010		0.16 U	0.36 U	0.246 I	0.16 U	0.556 I	
	3/16/2011		0.36 U	0.36 U	0.22 I	0.16 U	0.36 U	
	9/20/2011		0.36 U	0.42 I	2.71	0.16 U	1.89	
	9/5/2012		0.360 U	0.520 I	1.71	0.160 U	0.360 U	
	2/1/2006		0.5 U	3.2	0.5 U	0.5 U	5	
	12/18/2006		1 U	1 U	1 U	1 U	1 U	
	7/24/2008		1 U	1 U	1 U	1 U	1 U	
MW0064	7/16/2009	40 to 45	1 U	1 U	1 U	1 U	1 U	
	2/1/2006		0.5 U	1.3	2	0.5 U	2	
	12/19/2006		1 U	6.4	5.2	1 U	12.8	
	7/23/2008		1 U	14.4	3.3	1 U	23.1	
	7/20/2009		1 U	7.8	1.4	1 U	10.3	
	12/19/2014		4.5	26	1.2	0.16 U	23	
	2/1/2006		5 U	5 U	5 U	5 U	283	
	12/19/2006		4.3	141	4.5	2 U	1,070	
	6/13/2007		50 U	123	50 U	50 U	1,670	
	7/23/2008		4.6	14.3	8	1 U	450	
MW0065	12/18/2008	29 to 34	0.32 U	1.8	5.9	0.54 U	84.1	
	7/20/2009		1 U	4	6.2	1 U	16.1	
	12/7/2009		4.4	20.6	12.3	3.6	296	
	9/8/2010		0.64 U	146	3.45 I	0.64 U	337	
	9/20/2011		7.2 U	77.4	9.4 I	3.2 U	1,540	
	9/5/2012		3.60 U	196	6.30 I	1.60 U	1,090	
	3/14/2014		15 I	160	10 I	4 U	2,100	
	12/19/2014		7.2 U	78	14 I	3.2 U	1,700	
	2/1/2006		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0066	12/18/2014	2 to 12	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	2/1/2006		0.5 U	0.95 I	0.5 U	0.5 U	1.4	
MW0067	12/19/2006	29 to 34	0.79 I	1.7	1 U	1 U	3.2	
	7/31/2008		0.23 U	0.14 U	0.92	0.39 U	0.55 I	
	7/21/2009		18	12	1.8 I	2 U	1.8 I	
	8/12/2009		1 U	1 U	2	1 U	3.1	
	2/1/2006		0.5 U	9.6	0.5 U	0.5 U	33.8	
MW0068	12/19/2006	40 to 45	1.3	0.7 I	1.6	1 U	74.3	
	6/12/2007		0.59 I	1 U	1.6	1 U	0.88 I	
	8/1/2008		1.3	31.1	2.7	0.54 U	102	
	12/18/2008		0.45 I	2.2	1.1	0.54 U	24.9	
	7/17/2009		1 U	1 U	1 U	1 U	1 U	
	12/8/2009		0.32 U	0.2 U	0.45 U	0.54 U	0.3 U	
	9/8/2010		0.16 U	0.36 U	0.22 I	0.16 U	0.343 I	
	9/20/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0069	2/1/2006	29 to 34	0.5 U	20.8	0.5 U	0.5 U	22.4	
	12/19/2006		1 U	2.5	1 U	1 U	48.4	
	7/31/2008		0.23 U	4.9	0.45 I	0.39 U	61	
	7/20/2009		1.2	11.9	1.9	1 U	28.6	
	2/1/2006		0.5 U	0.5 U	0.5 U	0.5 U	23.7	
MW0070	12/20/2006	40 to 45	1 U	1 U	1 U	1 U	0.79 I	
	6/12/2007		1 U	1 U	0.74 I	1 U	1 U	
	7/31/2008		0.57 I	0.87	0.48 I	0.39 U	2	
	12/18/2008		0.32 U	0.2 U	0.63 I	0.54 U	0.3 U	
	7/22/2009		1 U	1 U	1 U	1 U	1 U	
	12/8/2009		0.32 U	0.2 U	0.47 I	0.54 U	0.31 I	
MW0071	1/31/2006	40 to 45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	1/31/2006		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	12/19/2006		1 U	1 U	1 U	1 U	1 U	
	8/1/2008		0.23 U	0.79	0.32 U	0.39 U	0.21 U	
	7/17/2009		1 U	4.1	1 U	1 U	1 U	
	9/15/2010		0.16 U	0.93 I	0.12 U	0.16 U	0.22 U	
	9/19/2011		0.36 U	1.14	0.19 U	0.16 U	3.07	
	9/6/2012		0.360 U	1.43	0.190 U	0.160 U	2.97	
	12/23/2013		0.36 U	0.37 I	0.19 U	0.16 U	0.36 U	
	12/18/2014		0.36 U	0.39 I	0.19 U	0.16 U	0.62 I	

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Target Level (µg/L)			3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
MW0073	1/31/2006	2 to 12	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	12/20/2006		1 U	1 U	1 U	1 U	1 U	
	7/31/2008		0.32 U	0.2 U	0.45 U	0.54 U	0.3 U	
	7/21/2009		1 U	1 U	1 U	1 U	1 U	
	12/23/2013		0.36 U	0.37 U	0.19 U	0.16 U	0.36 U	
	12/18/2014		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0074	1/31/2006	2 to 12	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	12/20/2006		1 U	1 U	1 U	1 U	1 U	
	7/31/2008		0.32 U	0.2 U	0.45 U	0.54 U	0.3 U	
	7/17/2009		1 U	1 U	1 U	1 U	1 U	
	9/15/2010		0.16 U	0.36 U	0.12 U	0.16 U	0.22 U	
	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0075	12/23/2013	2 to 12	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	12/18/2014		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	1/31/2006		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	8/12/2009		1 U	1 U	1 U	1 U	1 U	
	9/15/2010		0.16 U	0.36 U	0.12 U	0.16 U	0.22 U	
	3/17/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0076	9/19/2011	2 to 12	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	1/31/2006		0.5 U	0.58 U	0.5 U	0.5 U	0.5 U	
	12/19/2006		1 U	1 U	1 U	1 U	1 U	
	7/23/2008		1 U	1 U	1 U	1 U	1.2	
	7/22/2009		1 U	1 U	1 U	1 U	1 U	
	9/15/2010		0.16 U	0.44 U	0.12 U	0.16 U	0.57 U	
MW0077	1/31/2006	29 to 34	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	12/19/2006		1 U	1 U	1 U	1 U	1 U	
	7/23/2008		1 U	1 U	1 U	1 U	1 U	
	7/22/2009		1 U	1 U	1 U	1 U	1 U	
	2/1/2006		18.5	8	0.5 U	0.5 U	1.8	
	12/21/2006		1.1	1 U	1 U	1 U	1 U	
MW0078	7/22/2008	65 to 70	1 U	1 U	1 U	1 U	1 U	
	7/20/2009		1.8	1 U	1 U	1 U	1 U	
	9/8/2010		0.443 U	0.36 U	0.12 U	0.16 U	0.22 U	
	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/5/2012		16.9	238	0.190 U	0.960 U	31.8	
	10/25/2012		3.1	29.8	1.0 U	1.0 U	1.7	
MW0079	12/23/2013	40 to 45	28	1,500	12	9.3	100	
	1/22/2014		36 U	3,800	19 U	16 U	310	
	7/14/2014		171	2,200	191	6.21	200	
	12/18/2014		3.3	2,500	19	6.9	260	
	2/1/2006		3.2	33.6	0.5 U	0.5 U	32.6	
	12/20/2006		1 U	0.62 U	1 U	1 U	2.8	
MW0080	10/5/2007	29 to 34	1 U	1 U	1 U	1 U	1 U	
	7/31/2008		0.37 U	3.4	0.32 U	0.39 U	1.6	
	12/18/2014		1 U	1.1	1 U	1 U	1 U	
	12/21/2006		1.3	27.7	2.7	1 U	564	
	6/12/2007		1.8	21.3	3.2	1 U	463	
	7/31/2008		0.23 U	0.84	0.32 U	0.39 U	16.4	
MW0081	12/18/2008	29 to 34	0.32 U	0.2 U	1.5	0.54 U	2.8	
	7/20/2009		1 U	1 U	1.2	1 U	1 U	
	12/7/2009		0.32 U	0.2 U	4.5	0.54 U	0.3 U	
	3/14/2014		9 U	64	13.1	4 U	2,000	
	12/18/2014		0.41	190	13	0.96 U	2,500	
	12/21/2006		1 U	2.4	1 U	1 U	4.6	
MW0082	6/12/2007	29 to 34	1 U	4.7	1 U	1 U	7.3	
	7/24/2008		1 U	3.2	1 U	1 U	30.6	
	12/18/2008		0.44 U	4.4	0.45 U	0.54 U	60.9	
	7/17/2009		1 U	5.8	1 U	1 U	35.2	
	12/8/2009		1.1	10.6	1.2	0.54 U	83.2	
	12/23/2013		0.36 U	1.5	3.5	0.16 U	7.2	
MW0083	12/18/2014	71 to 76	0.36 U	0.88 U	0.38 U	0.16 U	12	
	10/12/2007		0.38 U	0.28 U	0.2 U	0.23 U	0.34 U	
	7/31/2008		0.32 U	0.2 U	0.45 U	0.54 U	0.3 U	
	12/17/2008		0.32 U	0.2 U	0.45 U	0.54 U	0.3 U	
	7/21/2009		1 U	1 U	1 U	1 U	1 U	
	12/8/2009		0.32 U	0.2 U	0.45 U	0.54 U	0.3 U	
MW0084	9/17/2009	71 to 76	1 U	1 U	1 U	1 U	1 U	
	9/20/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/17/2009		1 U	1 U	1 U	1 U	1 U	
	9/20/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/17/2009		1 U	1 U	1 U	1 U	1 U	
	9/20/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0085	9/17/2009	66 to 71	1 U	1 U	1 U	1 U	1 U	
	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	4/7/2010		0.24 U	0.38 U	0.34 U	0.29 U	1.3	
	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/5/2012		0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0086	12/18/2014	15 to 25	0.36 U	1.5	0.21 U	0.16 U	20	
	4/7/2010		0.36 U	0.93 U	0.34 U	0.29 U	2.1	
	9/19/2011		0.36 U	1.5	0.19 U	0.16 U	6.62	
	9/5/2012		0.360 U	1.67	0.190 U	0.160 U	9.04	
	12/23/2013		0.36 U	1.7	0.21	0.16 U	7.6	
	12/18/2014		0.36 U	5.5	2.6	0.16 U	130	

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
MW0089	Groundwater Cleanup Target Level (µg/L)		3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
MW0090	4/7/2010	15 to 25	0.24 U	0.32 U	0.34 U	0.29 U	0.79 I	
	12/19/2014		0.36 U	0.38 I	0.19 U	0.16 U	28 I	
	4/7/2010		0.24 U	0.32 U	0.34 U	0.29 U	9.5	
	9/19/2011		0.85 I	4.4	1.33	0.16 U	27.5	
	9/5/2012	29 to 34	0.360 U	5.35	0.840 I	0.160 U	32.8	
	12/23/2013		57	2,200	8.7	0.16 U	600	
MW0091	1/22/2014		24 I	1,200	9.5 U	8 U	370	
	12/18/2014		0.36 U	4.7	0.68 I	0.16 U	42	
	4/7/2010		0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/5/2012	2 to 12	0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0092	12/18/2014		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	4/7/2010		0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	3/16/2011	2 to 12	0.36 U	0.36 U	0.19 U	0.16 U	0.41 I	
	9/20/2011		0.36 U	0.75 I	1.62	0.16 U	2.45	
	9/5/2012		0.60 U	0.950 I	0.190 U	0.160 U	3.26	
	3/26/2010	15 to 25	0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
MW0093	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	4/7/2010		0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	9/19/2011	40 to 45	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/5/2012		0.360 U	0.360 U	0.190 U	0.160 U	0.680 I	
	3/25/2010		0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	3/16/2011	2 to 12	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0095	9/20/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	2.5	
	12/18/2014		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	3/25/2010	15 to 25	0.24 U	16.1	1.2	0.29 U	113	
	9/15/2010		0.64 U	7.68	0.48 U	0.64 U	84.6	
	9/20/2011		0.72 U	41.6	1.12 I	0.32 U	247	
MW0096	3/25/2010		0.25 I	8.2	0.34 U	0.29 U	15.7	
	3/17/2011		19.3	3.35	0.19 U	0.16 U	1.17	
	9/20/2011	29 to 34	0.72 U	51.8	0.81	0.32 U	181	
	9/5/2012		0.720 U	21.0	1.02 I	0.320 U	282	
	12/23/2013		0.72 U	6.1	1.31	0.32 U	160	
	12/18/2014		0.72 U	4.8	1.81	0.32 U	21	
MW0098	3/25/2010		4.270	12,200	68 U	58 U	6,500	
	9/8/2010		917	4,500	11.3 I	8 U	5,410	
	3/17/2011	15 to 25	49,900	27,300	26.4	49	8,440	
	9/20/2011		4,070	17,700	38 U	32 U	7,670	
	9/5/2012		1,870	7,500	19.0 U	16.0 U	1,390	
	4/7/2010		56.9	88.1	3.4 U	2.9 U	66.4	
MW0099	9/8/2010	55 to 65	47.3	73.6	0.395 I	0.522 I	58.6	
	9/19/2011		36	128	1.9 U	1.6 U	166	
	9/5/2012		16.1	44.1	0.380 U	0.540 I	154	
	4/7/2010		21,100	13,800	85 U	101 I	5,500	
	3/16/2011	15 to 25	3,840	9,630	106	80	9,290	
	9/19/2011		27,200	31,900	146 I	160 I	12,500	
MW0100	9/5/2012		6,990	15,800	124 I	118 I	7,760	
	3/25/2010	2 to 12	0.24 U	9.8	0.41	0.29 U	10.9	
	3/25/2010	15 to 25	3.3	176	7.7	2.2	708	
	3/25/2010	29 to 34	24 U	6,500	34 U	29 U	2,470	
	3/25/2010	40 to 45	30.2	1,160	9.5	0.29 U	3,280	
	9/20/2011		7.2 U	147	3.8 U	3.2 U	1,870	
MW0105	3/25/2010	15 to 25	862	1,500	17 U	15 U	1,140	
	9/20/2011		0.36 U	1.13	0.19 U	0.16 U	0.81 I	
	9/5/2012		0.360 U	1.08	0.190 U	0.160 U	0.360 U	
	3/25/2010		0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	3/16/2011	15 to 25	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/20/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0106	9/5/2012		0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
	4/8/2010	15 to 25	4.4	81	10.9	0.32 I	348	
	9/19/2011		3.8	9.95	3.17	0.16 U	71.8	
	4/8/2010	2 to 12	209	896	5.9 I	2.9 U	168	
	9/19/2011		113	2,360	19.6 I	3.2 U	331	
	3/26/2010		0.24 U	39.8	0.51 I	0.29 U	21.8	
MW0109	9/19/2011		1.44 U	93.2	2.16 I	0.64 U	514	
	9/5/2012	15 to 25	0.360 U	23.9	1.45	0.160 U	896	
	12/23/2013		1.5 U	51	2.41	0.64 U	830	
	12/18/2014		1.5 U	4.6	2.61	0.64 U	28	
	4/7/2010	15 to 25	167	3,690	17.5 I	15 U	3,630	
	3/17/2011		164	6,200	18.6	7.83	2,930	
MW0110	9/20/2011		112 I	3,130	38 U	32 U	2,610	
	3/25/2010	29 to 34	0.24 U	0.35 I	3.4	0.29 U	3	
	3/25/2010	40 to 45	0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	3/25/2010	2 to 12	0.24 U	4.6	0.34 I	0.29 U	8.4	
	3/25/2010	15 to 25	0.24 U	0.41 I	0.34 U	0.29 U	0.28 U	



Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Target Level (µg/L)			3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
MW0115	3/26/2010	15 to 25	0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	3/17/2011		2.65	24.3	0.19 U	0.16 U	36.1	
	9/19/2011		2.66	85.9	0.38 U	0.32 U	112	
	9/6/2012		0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0116	12/18/2014	15 to 25	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	3/26/2010		1.41	105	13.4	1.81	1,860	
	9/19/2011		18 U	1,110	29.1	8 U	3,260	
	9/6/2012		14.4 U	1,090	21.61	6.40 U	2,870	
	12/23/2013		0.36 U	9.9	5.6	0.16 U	64	
MW0117	12/18/2014	15 to 25	0.36 U	6.1	3	0.16 U	100	
	3/25/2010		362	11,200	68 U	58 U	2,770	
	3/17/2011		598	10,600	20.5	14.6	3,650	
	9/19/2011		0.36 U	4.45	0.361	0.16 U	6.3	
	9/6/2012		0.360 U	60.8	3.89	0.420 U	130	
MW0118	3/25/2010	40 to 45	3.6	82.6	0.661	0.29 U	210	
	9/19/2011		0.36 U	6.11	0.341	0.16 U	62.1	
	9/6/2012		0.380 U	2.63	0.380 U	0.160 U	26.7	
	12/23/2013		0.36 U	0.741	0.19 U	0.16 U	8	
	12/18/2014		0.36 U	1.4	0.51	0.16 U	9.3	
MW0119	3/26/2010	29 to 34	0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	3/26/2010		0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
MW0120	12/23/2013	40 to 45	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	12/18/2014		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0121	3/26/2010	40 to 45	0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
	3/26/2010		0.24 U	4.7	0.34 U	0.29 U	11.5	
MW0122	9/19/2011	15 to 25	0.36 U	0.36 U	0.19 U	0.16 U	6.89	
	9/6/2012		0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	0.661	
	12/18/2014		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	5/4/2010		0.24 U	0.32 U	0.34 U	0.29 U	0.28 U	
MW0123	9/19/2011	2 to 12	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/6/2012		0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
MW0124	5/4/2010	15 to 25	0.24 U	0.32 U	3.4	0.29 U	1.5	
	9/13/2010		0.16 U	0.36 U	0.12 U	0.16 U	0.22 U	
MW0125	3/17/2011	15 to 25	0.36 U	1.51	0.19 U	0.16 U	0.41	
	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	12/19/2014		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/13/2010		0.16 U	0.36 U	0.12 U	0.16 U	0.22 U	
MW0126	9/5/2012	15 to 25	0.360 U	0.360 U	0.190 U	0.160 U	0.360 U	
	12/23/2013		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0127	12/18/2014	15 to 25	0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
	9/13/2010		0.16 U	0.36 U	0.12 U	0.16 U	0.22 U	
MW0128	9/13/2010	15 to 25	0.16 U	0.36 U	0.12 U	0.16 U	0.22 U	
	9/19/2011		0.36 U	0.36 U	0.19 U	0.16 U	0.36 U	
MW0129	9/13/2010	15 to 25	0.16 U	2.3	0.228 U	0.16 U	1.51	
	3/16/2011		0.36 U	0.551	0.21	0.16 U	0.681	
MW0130	9/20/2011	56 to 66	2.71	30.6	1.22	0.16 U	7.15	
	10/26/2012		6.6 U	91	20 U	20 U	121	
	12/19/2014		6.7	11	0.19 U	0.16 U	150	
	10/26/2012		6,300	1,300	50 U	50 U	16 U	
	12/10/2012		1,500	4,400	100 U	100 U	85 U	
MW0131	07/16/2013	58 to 68	20,000	16,000	301	86 U	88 U	
	12/23/2013		0.79 U	8.3	0.19 U	0.16 U	28	
	1/22/2014		5.9	250	1.2	0.87 U	78	
	5/1/1989		37,000	NA	42,000	NA	1 U	
	5/15/1989		10,600	NA	13,000	NA	229	
NPSH-MW0005	5/17/1989	30 to 35	5,900	NA	8,000	NA	137	
	5/19/1989		14,000	NA	29,000	NA	1 U	
	5/22/1989		23,000	NA	40,000	NA	1 U	
	5/24/1989		15,000	NA	58,000	NA	1 U	
	5/26/1989		8,720	NA	26,300	NA	7,160	
	6/7/1989		10,000	NA	15,600	NA	2,170	
	6/14/1989		8,190	NA	1,052	NA	1,790	
	6/28/1989		6,130	NA	11,000	NA	1,880	
	8/3/1989		9,850	NA	20,700	NA	11,000	
	8/16/1989		12,200	NA	24,000	NA	5,300	
	8/30/1989		8,250	NA	14,000	NA	3,930	
	9/13/1989		9,200	NA	13,100	NA	6,400	
	9/27/1989		7,000	NA	16,000	NA	5,600	
	10/18/1989		7,600	NA	15,300	NA	2,900	
	11/15/1989		4,340	NA	1,480	NA	1,950	
	12/13/1989		3,500	NA	8,690	NA	2,360	
	1/18/1990		4,090	NA	11,700	NA	1,700	
	2/14/1990		3,890	NA	23,330	NA	1,020	
	3/14/1990		2,400	NA	11,000	NA	1,330	
	4/11/1990		3,800	NA	18,000	NA	100 U	
5/16/1990	3,920	NA	22,300	NA	3,920			
6/13/1990	4,670	NA	7,240	NA	3,130			
7/11/1990	2,840	NA	12,400	NA	640			
8/15/1990	3,560	NA	9,300	NA	5,140			
9/19/1990	4,160	NA	15,600	NA	100 U			
3/1/1991	3,010	NA	5,160	NA	1,040			
9/1/1999	1	190	1	NA	180			
3/27/2001	2 U	2	2 U	NA	1.3			
12/17/2001	1.6 J	33.3	1.2 J	NA	113			
4/2/2002	1.3	54.9	2.6	NA	207			

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
NPSH-MW0005	Groundwater Cleanup Target Level (µg/L)		3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
	10/17/2002*	30 to 35	10 U	68.5	4.5	NA	312	
	12/17/2002		1 U	69.8	3.67	NA	779	
	7/27/2005		1 U	1 U	1 U	1 U	1 U	
	9/17/2009		50	720	131	151	2,100	
	9/13/2010		60 I,Q	1,960 Q	12 Q,U	16 Q,U	3,300 Q	
	3/17/2011		115	4,050	19.8	10.4	4,570	
	9/19/2011		66 I	3,720	19 U	16 U	4,990	
	9/5/2012		18.0 U	2,140	13.5 I	8.00 U	6,090	
	5/2/1989		1 U	NA	1 U	NA	1 U	
	4/10/1990		1 U	NA	1 U	NA	1 U	
5/14/1990	1 U		NA	1 U	NA	1 U		
6/11/1990	1 U		NA	1 U	NA	1 U		
7/9/1990	1 U	NA	1 U	NA	1 U			
8/14/1990	1 U	NA	1 U	NA	1 U			
9/13/1990	1 U	NA	1 U	NA	1 U			
7/28/2005	1 U	1 U	1 U	1 U	1 U			
10/5/2007	1 U	1 U	1 U	1 U	1 U			
5/4/1989	1 U	NA	546	NA	NA	1 U		
6/16/1989	10 U	NA	585	NA	385	1 U		
8/17/1989	40	NA	10 U	NA	10 U	1 U		
9/13/1989	1 U	NA	1 U	NA	1 U	1 U		
10/19/1989	1 U	NA	1 U	NA	1 U	1 U		
11/15/1989	4	NA	1 U	NA	1 U	1 U		
1/18/1990	14	NA	1 U	NA	1 U	1 U		
2/14/1990	3	NA	15	NA	NA	1 U		
3/14/1990	1 U	NA	138	NA	75	1 U		
4/12/1990	5	NA	11	NA	1 U	1 U		
5/16/1990	1 U	NA	1 U	NA	1 U	1 U		
6/13/1990	7	NA	1 U	NA	1 U	1 U		
7/11/1990	5 U	NA	1 U	NA	1 U	1 U		
8/15/1990	7	NA	1 U	NA	1 U	1 U		
9/19/1990	15	NA	1 U	NA	1 U	1 U		
1/3/2002	2 U	2 U	2 U	NA	1 U	1 U		
3/27/2002	2 U	2 U	2 U	NA	1 U	1 U		
10/15/2002	27.4	2 U	2 U	NA	1 U	1 U		
5/19/2005	716	631	8.62	1.51	618	1 U		
7/25/2005	870	1,000	200 U	200 U	810	1 U		
12/19/2006	20 U	1,350	14.3 I	20 U	1,390	1 U		
6/12/2007	55.9	76	20 U	20 U	549	1 U		
7/23/2008	1 U	1 U	2.6	1 U	5.3	1 U		
12/18/2008	0.32 U	1.2	0.87 I	0.54 U	0.3 U	1 U		
7/22/2009	1.4 I	1.3 I	2.3	2 U	2.2	1 U		
12/8/2009	0.32 U	0.2 U	3.4	0.54 U	0.67 I	1 U		
10/5/2007	1 U	1 U	1 U	1 U	1 U	1 U		
7/25/2005	1 U	1 U	1 U	1 U	1 U	1 U		
5/2/1989	1 U	NA	1 U	NA	1 U	1 U		
6/13/1989	9	NA	1 U	NA	1 U	1 U		
7/17/1989	1 U	NA	1 U	NA	1 U	1 U		
8/15/1989	1 U	NA	1 U	NA	1 U	1 U		
9/11/1989	1 U	NA	1 U	NA	1 U	1 U		
10/16/1989	1 U	NA	1 U	NA	1 U	1 U		
11/14/1989	1 U	NA	1 U	NA	1 U	1 U		
12/11/1989	1 U	NA	1 U	NA	1 U	1 U		
1/16/1990	1 U	NA	1 U	NA	1 U	1 U		
2/12/1990	1 U	NA	1 U	NA	1 U	1 U		
3/12/1990	1 U	NA	1 U	NA	1 U	1 U		
4/9/1990	1 U	NA	1 U	NA	1 U	1 U		
5/14/1990	1 U	NA	1 U	NA	1 U	1 U		
6/11/1990	1 U	NA	1 U	NA	1 U	1 U		
7/9/1990	1 U	NA	1 U	NA	1 U	1 U		
8/13/1990	1 U	NA	1 U	NA	1 U	1 U		
9/13/1990	1 U	NA	1 U	NA	1 U	1 U		
4/4/2002	2 U	2 U	2 U	NA	1 U	1 U		
5/18/2005	1 U	4.94	1 U	1 U	1 U	1 U		
12/19/2006	1 U	0.75 I	1 U	1 U	56.6	1 U		
8/1/2008	0.23 U	0.32 I	0.32 U	0.39 U	0.96	1 U		
7/22/2009	1 U	1 U	1 U	1 U	1 U	1 U		
5/2/1989	1 U	NA	1 U	NA	1 U	1 U		
6/14/1989	1 U	NA	1 U	NA	1 U	1 U		
7/18/1989	1 U	NA	1 U	NA	1 U	1 U		
8/16/1989	1 U	NA	1 U	NA	1 U	1 U		
9/13/1989	1 U	NA	1 U	NA	1 U	1 U		
10/19/1989	1 U	NA	1 U	NA	1 U	1 U		
11/16/1989	1 U	NA	1 U	NA	1 U	1 U		
12/12/1989	1 U	NA	1 U	NA	1 U	1 U		
1/18/1990	1 U	NA	1 U	NA	1 U	1 U		
2/13/1990	1 U	NA	1 U	NA	1 U	1 U		
3/13/1990	1 U	NA	1 U	NA	1 U	1 U		
4/10/1990	1 U	NA	1 U	NA	1 U	1 U		
5/15/1990	1 U	NA	1 U	NA	1 U	1 U		
6/12/1990	1 U	NA	1 U	NA	1 U	1 U		
7/10/1990	1 U	NA	1 U	NA	1 U	1 U		
8/14/1990	1 U	NA	1 U	NA	1 U	1 U		
9/14/1990	1 U	NA	1 U	NA	1 U	1 U		
1/3/2002	2 U	2 U	2 U	NA	1 U	1 U		
3/28/2002	2 U	1.9 J	2 U	NA	1 U	1 U		
7/28/2005	1 U	1 U	1 U	1 U	1 U	1 U		

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
NPSH-MW0015	Groundwater Cleanup Target Level (µg/L)		3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
	5/1/1989		1 U	NA	222	NA	1 U	
	6/14/1989		1 U	NA	85	NA	1 U	
	8/16/1989		59	NA	63	NA	374	
	9/13/1989		559	NA	47	NA	1 U	
	10/19/1989		1 U	NA	13	NA	249	
	11/15/1989		1 U	NA	28	NA	167	
	12/13/1989		1 U	NA	1 U	NA	217	
	1/18/1990		1 U	NA	16	NA	44	
	2/14/1990		1 U	NA	8	NA	62	
	3/14/1990		1 U	NA	25	NA	95	
	4/11/1990		1 U	NA	1 U	NA	422	
	5/16/1990		1 U	NA	1 U	NA	174	
	6/13/1990		3	NA	8	NA	1 U	
	7/11/1990		1 U	NA	1 U	NA	145	
	8/15/1990		1 U	NA	1 U	NA	169	
	9/19/1990		1 U	NA	1 U	NA	809	
	3/1/1991		3	NA	1	NA	121	
	9/1/1999		ND	ND	ND	NA	ND	
4/4/2002		2 U	2 U	2 U	NA	1 U		
5/18/2005		120	346	5.67	4.65	64.9		
7/23/2009		13	160	5 U	5 U	130		
5/1/1989		1 U	NA	1 U	NA	1 U		
6/14/1989		1 U	NA	8	NA	12		
8/16/1989		1 U	NA	1 U	NA	1 U		
9/13/1989		1 U	NA	1 U	NA	1 U		
10/19/1989		4	NA	9	NA	90		
11/15/1989		2	NA	1 U	NA	14		
12/13/1989		1 U	NA	4	NA	1 U		
1/18/1990		1 U	NA	9	NA	1 U		
2/14/1990		1 U	NA	5	NA	1 U		
3/14/1990		1 U	NA	1 U	NA	1 U		
4/11/1990		1 U	NA	1 U	NA	1 U		
5/16/1990		12	NA	24	NA	53		
6/13/1990		27	NA	43	NA	1 U		
7/11/1990		24	NA	113	NA	30		
8/15/1990		27	NA	85	NA	234		
9/19/1990		88	NA	503	NA	1,030		
3/1/1991		342	NA	1,290	NA	2,100		
9/1/1999		5	12	ND	NA	4		
3/27/2001		2 U	0.80 J	2 U	NA	1 U		
1/3/2002		2 U	2 U	2 U	NA	1 U		
3/28/2002		2 U	0.75 J	2 U	NA	1 U		
10/4/2002		2 U	2 U	2 U	NA	1 U		
7/27/2005		13	560	10 U	10 U	160		
8/12/2009		10	530	9	1.6 I	1,200		
9/8/2010		2.48 I	325	2.76 I	1.6 U	821		
3/16/2011		3	175	6.25	0.16 U	1,050		
9/20/2011		3.6 U	278	3.5 I	1.6 U	1,130		
9/16/2012		2.93	712	11.9	3.3 I	3,660		
12/23/2013		3.6 U	110	5.1 I	1.6 U	790		
12/18/2014		2.3 I	550	16	3.7 I	5,100		
5/1/1989		1 U	NA	131	NA	1 U		
6/14/1989		1 U	NA	131	NA	580		
8/16/1989		4	NA	639	NA	3,344		
9/13/1989		76	NA	545	NA	2,530		
10/19/1989		30	NA	820	NA	700		
11/15/1989		1,410	NA	6,930	NA	12,500		
12/13/1989		370	NA	752	NA	1,480		
1/18/1990		566	NA	2,200	NA	3,341		
2/14/1990		388	NA	1,760	NA	861		
3/14/1990		584	NA	2,540	NA	1,380		
4/11/1990		2,780	NA	4,850	NA	17,500		
5/16/1990		1,370	NA	2,520	NA	2,540		
6/13/1990		2,520	NA	3,370	NA	100 U		
7/11/1990		1,390	NA	5,990	NA	1,470		
8/15/1990		1,300	NA	7,080	NA	5,170		
9/19/1990		2,270	NA	9,940	NA	10,400		
3/1/1991		1,220	NA	3,970	NA	7,730		
9/1/1999		ND	60	ND	NA	90		
3/27/2001		2 U	2.3	2 U	NA	1.2		
1/3/2002		2 U	1.5 J	2 U	NA	0.88 J		
3/28/2002		1.2 J	1.6	2 U	NA	0.84 J		
10/15/2002*		23.7	2 U	2 U	NA	1.0		
12/17/2002		1 U	1 U	1 U	NA	1 U		
12/17/2004		1.9 J	1.6 J	ND	NA	ND		
7/27/2005		1	4	1 U	1 U	1 U		
8/12/2009		1.3	5.1	6.5	1 U	36.6		
12/23/2013		18 U	72	14 I	8 U	4,500		
12/18/2014		18 U	110	9.5 U	8 U	6,000		

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Target Level (µg/L)			3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
NPSH-MW0018	5/2/1989	29 to 34	1U	NA	1U	NA	1U	
	6/13/1989		1U	NA	1U	NA	1U	
	7/17/1989		1U	NA	1U	NA	1U	
	8/14/1989		1U	NA	1U	NA	1U	
	9/11/1989		1U	NA	1U	NA	1U	
	10/16/1989		1U	NA	1U	NA	1U	
	11/14/1989		1U	NA	1U	NA	1U	
	12/11/1989		1U	NA	1U	NA	1U	
	1/16/1990		1U	NA	1U	NA	1U	
	2/12/1990		1U	NA	1U	NA	1U	
	3/12/1990		1U	NA	1U	NA	1U	
	4/9/1990		1U	NA	1U	NA	1U	
	5/14/1990		1U	NA	1U	NA	1U	
	6/11/1990		1U	NA	1U	NA	1U	
	7/9/1990		1U	NA	1U	NA	1U	
	8/13/1990		1U	NA	1U	NA	1U	
	9/13/1990		1U	NA	1U	NA	1U	
	9/1/1999		ND	ND	ND	NA	ND	
	4/4/2002		2U	2U	2U	NA	1U	
	10/16/2002		15.2	6.7	2U	NA	1U	
12/17/2002	1U	1U	1U	NA	1U			
12/17/2004	ND	ND	ND	NA	ND			
5/19/2005	1U	1U	1U	1U	1U			
7/23/2009	1U	1U	1U	1U	1U			
NPSH-MW0019	5/3/1989	29 to 34	1U	NA	1U	NA	1U	
	6/14/1989		1U	NA	3	NA	45	
	7/18/1989		1U	NA	1U	NA	51	
	8/16/1989		1U	NA	1U	NA	1U	
	9/13/1989		1U	NA	1U	NA	1U	
	10/20/1989		1U	NA	1U	NA	1U	
	11/16/1989		1U	NA	1U	NA	25	
	12/13/1989		1U	NA	1U	NA	1U	
	1/18/1990		1U	NA	5	NA	10	
	2/14/1990		1U	NA	7	NA	25	
	3/13/1990		1U	NA	1U	NA	11	
	4/11/1990		1U	NA	2	NA	109	
	5/15/1990		1U	NA	1U	NA	1U	
	6/12/1990		1U	NA	1U	NA	1U	
	7/10/1990		1U	NA	1U	NA	13	
	8/14/1990		1U	NA	1U	NA	1U	
	9/13/1990		1U	NA	1U	NA	8	
	9/1/1999		ND	ND	ND	NA	ND	
	3/26/2001		2U	6.4	0.88J	NA	2.9	
	12/21/2001		2U	1.1J	1.0J	NA	1.5	
3/26/2002	2U	0.63J	0.58J	NA	1U			
6/12/2007	1U	1U	1U	1U	1U			
7/31/2008	0.23U	0.14U	0.32U	0.39U	0.21U			
7/21/2009	1U	1U	1U	1U	1U			
9/8/2010	0.16U	0.36U	0.12U	0.16U	0.759I			
9/5/2012	0.360U	0.360U	0.190U	0.160U	0.360U			
12/23/2013	0.36U	0.36U	0.3I	0.16U	0.36U			
12/18/2014	0.36U	0.91I	0.68I	0.16U	8.7			
NPSH-MW0020	5/4/1989	29 to 34	41	NA	153	NA	1U	
	6/15/1989		55	NA	66	NA	150	
	7/19/1989		39	NA	119	NA	411	
	8/17/1989		11	NA	81	NA	286	
	9/14/1989		35	NA	120	NA	35	
	10/20/1989		70	NA	235	NA	275	
	11/17/1989		182	NA	920	NA	243	
	12/13/1989		195	NA	579	NA	195	
	1/19/1990		258	NA	1,300	NA	51	
	2/14/1990		346	NA	2,250	NA	206	
	3/15/1990		524	NA	3,360	NA	218	
	4/12/1990		300	NA	1,870	NA	1,250	
	5/16/1990		184	NA	851	NA	390	
	6/13/1990		326	NA	2,060	NA	720	
	7/11/1990		366	NA	246	NA	888	
	8/15/1990		157	NA	1,030	NA	518	
	9/17/1990		200	NA	2,750	NA	10U	
	3/1/1991		76	NA	2,250	NA	1,500	
	9/1/1999		ND	ND	ND	NA	ND	
	4/4/2002		2U	2U	2U	NA	1U	
10/16/2002	7.8	2	2U	NA	1U			
12/17/2002	1U	1U	1U	NA	1U			
7/28/2005	1U	1U	1U	1U	1U			
12/19/2006	1U	1U	1U	1U	1U			
8/1/2008	0.23U	0.61I	0.32U	0.39U	0.88I			
7/22/2009	1U	8.7	1U	1U	1.1			
9/15/2010	0.16U	89.5	0.66I	0.16U	2.4			
9/19/2011	0.72U	24.3	0.71	0.32U	79.7			
9/5/2012	0.360U	4.80	0.210I	0.160U	180			
12/23/2013	0.36U	2	1.1	0.16U	45			
12/18/2014	0.36U	0.63I	1	0.16U	28			

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Target Level (µg/L)			3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
NPSH-MW0021	5/3/1989	29 to 34	1U	NA	1U	NA	1U	
	6/13/1989		1U	NA	1U	NA	1U	
	7/17/1989		1U	NA	1U	NA	1U	
	8/14/1989		1U	NA	1U	NA	1U	
	9/11/1989		1U	NA	1U	NA	1U	
	10/16/1989		1U	NA	1U	NA	1U	
	11/14/1989		1U	NA	1U	NA	1U	
	12/11/1989		1U	NA	1U	NA	1U	
	1/16/1990		1U	NA	1U	NA	1U	
	2/12/1990		1U	NA	1U	NA	1U	
	3/12/1990		1U	NA	1U	NA	1U	
	4/9/1990		1U	NA	1U	NA	1U	
	5/14/1990		1U	NA	1U	NA	1U	
	6/11/1990		1U	NA	1U	NA	1U	
	7/9/1990		1U	NA	1U	NA	1U	
	8/13/1990		1U	NA	1U	NA	1U	
	9/13/1990		1U	NA	1U	NA	1U	
9/1/1999	ND	ND	ND	NA	ND			
4/4/2002	2U	2U	2U	NA	1U			
12/17/2004	1.2J	ND	ND	NA	ND			
5/18/2005	1U	1U	1U	1U	1U			
8/12/2009	1U	1U	1U	1U	1U			
8/12/2009	1U	1U	1U	1U	1U			
9/15/2010	0.64U	1.44U	0.48U	0.64U	0.88U			
3/17/2011	0.36U	0.36U	0.19U	0.16U	0.36U			
9/20/2011	0.36U	0.36U	0.19U	0.16U	0.36U			
9/5/2012	0.360U	0.360U	0.190U	0.160U	0.360U			
12/23/2013	0.36U	0.36U	0.19U	0.16U	0.36U			
12/18/2014	0.36U	0.36U	0.19U	0.16U	0.36U			
5/1/1989	1U	NA	1U	NA	1U			
6/13/1989	1U	NA	1U	NA	1U			
7/17/1989	1U	NA	1U	NA	1U			
8/14/1989	1U	NA	1U	NA	1U			
9/11/1989	1U	NA	1U	NA	1U			
10/19/1989	1U	NA	1U	NA	1U			
11/14/1989	1U	NA	1U	NA	1U			
12/12/1989	1U	NA	1U	NA	1U			
1/16/1990	1U	NA	1U	NA	1U			
2/12/1990	1U	NA	1U	NA	1U			
3/12/1990	1U	NA	1U	NA	1U			
4/9/1990	1U	NA	1U	NA	1U			
5/14/1990	1U	NA	1U	NA	1U			
6/11/1990	1U	NA	1U	NA	1U			
7/9/1990	1U	NA	1U	NA	1U			
8/13/1990	1U	NA	1U	NA	1U			
9/13/1990	1U	NA	1U	NA	1U			
9/1/1999	ND	ND	ND	NA	ND			
5/18/2005	1U	1U	1U	1U	1U			
12/20/2006	1U	1U	1U	1U	1U			
8/1/2008	0.32U	3	0.45U	0.54U	0.71U			
7/21/2009	1U	3.8	1U	1U	1.3			
9/15/2010	0.16U	0.49U	0.12U	0.16U	0.78U			
9/19/2011	0.36U	1.63	0.19U	0.16U	3.37			
9/6/2012	0.360U	0.360U	0.190U	0.160U	0.360U			
5/17/1990	100U	NA	3,180	NA	100U			
6/13/1990	142	NA	376	NA	807			
7/11/1990	134	NA	154	NA	837			
8/16/1990	68	NA	131	NA	929			
9/17/1990	70	NA	470	NA	10U			
9/1/1999	2,000	6,600	21	NA	980			
3/26/2001	2,450	13,200	40U	NA	946			
12/17/2001	1,470	11,600	400U	NA	803			
3/26/2002	2,190	13,000	41	NA	841			
10/15/2002	1,420	13,400	1,000U	NA	981			
2/9/2005 <sup>DL</sup>	ND	2,000	NA	NA	430			
7/25/2005	200U	2,800	200U	200U	200U			
12/20/2006	2U	76.7	11	2U	189			
7/21/2008	1U	1U	1U	1U	1U			
7/16/2009	1U	1U	1U	1U	1U			
9/8/2010	80U	200I	1,490	80U	884			

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)				VC
			TCE	cDCE	tDCE	1,1-DCE	
Groundwater Cleanup Target Level (µg/L)			3	70	100	7	1
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100
NPSH-MW0025	5/16/1990	40 to 45	1U	NA	1U	NA	1U
	6/13/1990		NA	6	NA	NA	1U
	7/11/1990		NA	9	NA	NA	1U
	8/16/1990		NA	1U	NA	NA	1U
	9/14/1990		NA	1U	NA	NA	1U
	9/1/1999		ND	ND	NA	NA	ND
	4/2/2002		2U	2U	NA	NA	1U
	10/17/2002*		3.9	0.57J	2U	NA	1U
	12/17/2002		1U	1U	1U	NA	1U
	12/20/2006		1U	1U	1U	1U	1U
	7/31/2008		0.32U	0.2U	0.45U	0.54U	0.3U
	7/17/2009		1U	1U	1U	1U	1U
	9/15/2010		0.16U	0.36U	0.12U	0.16U	0.22U
	9/19/2011		0.36U	1.84	0.19U	0.16U	4.02
NPSH-MW0027	9/5/2012	10 to 15	0.360U	1.51	0.190U	0.160U	3.16
	12/23/2013		0.36U	0.36U	0.19U	0.16U	0.36U
	12/19/2014		0.36U	0.36U	0.19U	0.16U	0.37I
	5/16/1990		76	NA	607	NA	32
	6/13/1990		141	NA	389	NA	22
	7/11/1990		520	NA	1,050	NA	241
	8/16/1990		2	NA	7	NA	1U
	8/16/1990		1U	NA	5	NA	6
	9/1/1990		ND	ND	ND	NA	ND
	10/17/2002		2U	0.59J	2U	NA	0.59
	7/27/2005		26	600	3U	3U	390
	12/20/2006		100U	4,090	100U	100U	932
	6/13/2007		50U	2,290	50U	50U	498
	7/31/2008		6.3I	2,290	10	5.4U	741
NPSH-MW0030	12/18/2008	43 to 48	4.2	697	15.4	5.4U	2,380
	7/22/2009		13	140	12	5U	490
	12/8/2009		3.4	90.8	13.2	1.1U	940
	9/13/2010		74.4I	4,350	35.7I	16U	5,070
	3/17/2011		211	284	13.9	0.8U	3,400
	9/20/2011		7.2U	992	8.2I	3.2U	3,730
	9/6/2012		7.20U	1,840	13.2I	3.20U	3,820
	12/23/2013		1.5U	46	3I	0.64U	480
	12/18/2014		7.2U	880	13I	3.2U	3,000
	5/15/1990		1U	NA	1U	NA	1U
	6/12/1990		1U	NA	1U	NA	1U
	7/11/1990		1U	NA	1U	NA	1U
	8/15/1990		1U	NA	1U	NA	1U
	9/14/1990		1U	NA	1U	NA	1U
9/1/1999	3	ND	ND	NA	ND		
7/27/2005	1U	1U	1U	1U	1U		
9/5/2012	0.360U	0.360U	0.190U	0.160U	0.360U		
NPSH-MW0031	5/15/1990	10 to 15	1U	NA	1U	NA	1U
	6/13/1990		1U	NA	1U	NA	1U
	7/11/1990		1U	NA	1U	NA	1U
	8/15/1990		1U	NA	1U	NA	1U
	9/26/1990		1U	NA	1U	NA	1U
	9/1/1999		ND	ND	ND	NA	ND
	7/28/2005		1U	1U	1U	1U	1U
	12/20/2006		1U	1U	1U	1U	1U
	7/31/2008		0.32U	0.2U	0.45U	0.54U	0.3U
	7/22/2009		1U	1U	1U	1U	1U
	3/17/2011		0.36U	0.36U	0.19U	0.16U	0.36U
	9/20/2011		0.36U	0.36U	0.19U	0.16U	0.36U
	9/5/2012		0.360U	0.360U	0.190U	0.160U	0.360U
	7/27/2005		1U	1U	1U	1U	1U
7/28/2005	1U	1U	1U	1U	1U		
NPSH-MW0035	7/28/2005	66.7 to 71.5	1U	1U	1U	1U	1U
	10/5/2007	39 to 44	1U	1U	1U	1U	1U
NPSH-MW0036	4/1/2002	3 to 10	2U	3I	2U	NA	1.2
	7/28/2005		1U	1U	1U	1U	1U
	8/12/2009		5U	5U	5U	5U	5U
NPSH-MW0037	3/28/2002	3 to 10	2U	2U	2U	NA	1U
	7/27/2005		1U	1U	1U	1U	1U
	3/26/2001		2U	2.9	2U	NA	1U
NPSH-MW0038	12/21/2001	30 to 35	2U	2U	2U	NA	1U
	3/26/2002		2U	2U	2U	NA	1U
	7/27/2005		10U	160	10U	10U	700
	8/12/2009		1.1	31.8	3	1U	110
	3/28/2002		2U	2	2U	NA	1U
	10/14/2002		1.8J	2U	2U	NA	1.7
NPSH-MW0039	12/19/2006	40 to 45	1U	1U	1U	1U	1.2
	6/12/2007		1U	1U	0.52I	1U	0.82I
	7/31/2008		0.32U	0.58I	0.73I	0.54U	0.3U
	12/18/2008		0.32U	0.2U	0.85I	0.54U	0.3U
	7/21/2009		1U	1U	1U	1U	1U
	12/8/2009		0.32U	0.45I	1	0.54U	1
	9/15/2010		0.16U	14.4	1.28	0.16U	20.5
	3/16/2011		0.36U	1.55	2.76	0.16U	0.36U
	9/20/2011		0.36U	1.33	3.42	0.16U	1.86
	9/5/2012		0.360U	0.890I	2.15	0.160U	0.360U
	12/23/2013		0.36U	0.75I	0.82I	0.16U	0.58I
	12/18/2014		0.36U	0.36U	0.19U	0.16U	0.74I

Table 3-1. Monitoring Well Sampling Results: Volatile Organic Compounds  
Wilson Corners, SWMU 001

Location	Sample Date	Screen Interval (ft BLS)	Concentration (µg/L)					VC
			TCE	cDCE	tDCE	1,1-DCE	VC	
Groundwater Cleanup Target Level (µg/L)			3	70	100	7	1	
	Natural Attenuation Default Criteria (µg/L)		300	700	1,000	70	100	
NPSH-MW0040	7/27/2005	29 to 34	1 U	1 U	1 U	1 U	1 U	
	8/12/2009		1 U	1 U	1 U	1 U	1 U	
	7/25/2005	44 to 49	400 U	400 U	400 U	400 U	3,700	
OBS-MW0001D	7/14/2014		11 U	240	15 U	15 U	2,100	
	7/25/2005	44 to 49	400 U	4,400	400 U	400 U	2,400	
OBS-MW0002D	7/14/2014		0.19 U	1.7	5.7	0.30 U	83.3	
	5/18/2005		1,310,000	16,600	10,000 U	10,000 U	10,000 U	
OBS-MW0004D	12/18/2006		800,000	13,500 I	20,000 U	20,000 U	20,000 U	
	6/12/2007		664,000	30,500	1,000 U	1,000 U	11,800	
	7/22/2008		390,000	48,000	3,300 U	2,700 U	8,500 I	
	12/18/2008		181,000	174,000	900 U	1,100 U	12,700	
	7/20/2009	47 to 52	96,000	43,000	240 I	240 I	6,800	
	12/7/2009		294,000	191,000	647	1,340	18,800	
	9/8/2010 <sup>PDB</sup>		141,000	148,000	347 I	623 I	21,200	
	9/8/2010		175,000	77,600	468 I	664 I	28,300	
	3/16/2011		221,000	164,000	375 I	725	17,500	
	9/19/2011		309,000	200,000	950 U	800 U	17,300	
	9/6/2012		156,000	54,400	470 I	160 U	6,610	
	7/25/2005	47 to 52	310,000	53,600	3,300 U	3,300 U	3,300 U	
OBS-MW0005D	9/30/2014		62,000	54,000	460 I	260 I	22,000	
	2/16/1990		1 U	NA	1 U	NA	1 U	
	3/16/1990		5	NA	2	NA	3	
	4/13/1990		2	NA	5	NA	100	
	5/17/1990		1 U	NA	1 U	NA	1 U	
	6/14/1990		3	NA	1 U	NA	1 U	
	7/12/1990		1 U	NA	1 U	NA	1 U	
	8/16/1990		1 U	NA	1 U	NA	1 U	
	9/17/1990	10 to 15	1 U	NA	1 U	NA	1 U	
	4/4/2002		2 U	2 U	2 U	NA	1 U	
	5/19/2005		1 U	1 U	1 U	1 U	1 U	
	12/19/2006		1 U	1 U	1 U	1 U	3.2	
PW-MW1515	8/1/2008		0.32 U	0.2 U	0.45 U	0.54 U	3.5	
	7/17/2009		1 U	1 U	1 U	1 U	1.2	
	9/15/2010		0.16 U	0.36 U	0.12 U	0.16 U	1.02	

Notes:

- \* indicates Astersk reflects laboratory analytical results for October 2002, which were reported; however, confirmatory re-sampling performed to demonstrate that an unidentified quality assurance problem caused apparent false positive results.
- <sup>PL</sup> indicates re-run of sample at a different dilution. There was an "E" qualifier for an analyte at an earlier dilution.
- I indicates value is less than the practical quantitation limit and greater than the method detection limit.
- J indicates an estimated value.
- U indicates not detected above reporting limit.
- L indicates value exceeds the upper limit of the calibration range.
- Q indicates sample held beyond the accepted holding time.
- E indicates estimated quantity.
- Yellow shaded, bold text indicates exceedance of Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Level.
- Orange shaded, bold text indicates exceedance of FDEP Natural Attenuation Default Concentrations.
- ft BLS indicates feet below land surface.
- µg/l indicates micrograms per liter.
- TCE indicates trichloroethene.
- cDCE indicates *cis*-1,2-dichloroethene.
- tDCE indicates *trans*-1,2-dichloroethene.
- 1,1-DCE indicates 1,1-dichloroethene.
- VC indicates vinyl chloride.
- <sup>PDB</sup> indicates duplicate sample collected with a Passive Diffusion Bag.
- ND indicates not detected.
- NA indicates not applicable.
- (dup) indicates duplicate sample result.
- "R" at the end of the date indicates the sample was collected after 100 gallons were purged from the well.

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
<b>2 to 12 ft BLS</b>									
MW0046S	2 to 12	5/20/2005	7.24	1.66	22.5	0.9	-110.0	6.00	clear
MW0047S	2 to 12	7/27/2005	6.49	0.763	28.0	0.8	-18.2	0.64	clear brown
		7/31/2008	6.25	0.35	27.0	1.6	39.9	1.57	clear yellow
MW0049S	2 to 12	7/28/2005	6.80	0.119	28.0	0.0	-145.0	3.00	-
		12/21/2006	6.36	0.696	24.5	0.0	-142.0	1.60	clear yellow
		7/23/2008	6.40	0.672	26.5	0.2	-102.7	6.13	clear
		7/20/2009	6.84	0.597	27.1	0.3	-82.9	1.15	clear
		9/13/2010	6.42	0.653	27.9	0.4	13.6	3.60	clear
MW0050S	2 to 12	7/28/2005	6.74	0.18	26.7	0.0	-142.0	0.00	-
MW0052S	2 to 12	7/27/2005	6.05	0.821	26.8	0.0	-100.0	5.80	clear
		12/18/2008	6.80	0.828	24.2	0.6	-197.9	7.70	clear
		12/21/2006	5.60	1.63	24.8	1.4	-73.7	2.40	yellow-brown
		1/15/2007	6.15	1.395	24.4	2.1	-92.5	2.90	brownish
		6/13/2007	6.71	1.336	25.4	0.2	-126.6	0.00	clear
		8/1/2008	6.33	0.919	27.1	0.5	-67.7	0.00	clear
		7/22/2009	6.39	0.792	26.9	0.4	-127.6	0.46	clear/orange
		12/7/2009	6.35	0.905	25.97	0.26	-112.4	4.5	lt. yellow
		9/8/2010	6.26	1.038	28.08	0.52	-198.6	4.1	lt. yellow
MW0053S	2 to 12	3/17/2011	6.95	1.796	23.78	1.06	-110.2	4.5	clear
		9/19/2011	6.13	0.929	27.19	0.16	-96.5	1.5	clear
		5/19/2005	6.50	1.5	24.6	0.0	-128.0	0.67	clear
		12/18/2006	6.00	1.382	24.2	0.3	1.2	1.38	clear yellow
		6/13/2007	5.85	0.71	25.5	0.4	-160.0	5.90	clear
		7/18/2008	6.40	0.73	26.6	0.3	-48.2	2.21	clear yellow
		12/18/2008	7.01	0.912	23.8	0.4	-149.2	4.90	clear
MW0054S	2 to 12	7/16/2009	6.72	1.075	27.2	0.3	-69.7	1.84	clear
		12/8/2009	6.26	0.821	26.41	0.13	-204.1	4.56	clr yellow
MW0055S	2 to 12	7/21/2008	6.65	0.942	27.4	0.1	-101.7	2.58	clear
MW0055S	2 to 12	5/19/2005	6.19	1.48	24.9	0.0	-83.0	12.03	yellow
MW0056S	2 to 12	5/19/2005	6.11	1.31	24.7	0.0	-119.0	18.80	yellow
		12/19/2006	6.01	0.836	23.9	0.1	-40.6	13.00	brownish yellow
		6/13/2007	6.44	1.224	24.8	0.4	-57.5	0.00	tan
		7/31/2008	7.11	0.115	27.5	0.3	-53.9	12.50	clear
		12/17/2008	7.12	0.483	24.2	1.4	-158	12.9	clear
		7/22/2009	6.20	0.250	27.1	0.9	-41.9	13.1	clear/orange
		12/8/2009	6.18	0.424	26.24	0.18	-112.4	16	lt. yellow
MW0057S	2 to 12	9/8/2010	6.19	0.239	28.32	0.51	-149.8	12	lt. yellow
		7/27/2005	6.29	0.971	27.2	0.2	68.4	8.64	clear
		12/19/2006	6.37	0.589	23.3	0.2	-57.4	4.10	brownish yellow
		7/22/2008	6.58	2.211	26.9	0.2	-132.1	1.48	clear amber
		7/31/2008	6.96	0.829	28.2	1.5	-62.7	10.56	yellow
7/22/2009	6.55	0.753	27.1	0.3	-101.3	0.64	clear/orange		



**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
MW0060S	2 to 12	7/28/2005	6.24	0.435	26.7	0.5	-51.8	14.70	dark brownish red
		8/12/2009	6.85 *	0.574	27.4	1.28 *	65.1	13.00	yellow/clear
MW0061S	2 to 12	7/27/2005	6.03	0.530	28.1	0.1	-78.0	4.50	clear
MW0064	2 to 12	12/19/2014	7.07	0.580	24.03	-	-41.2	13.0	brown
NPSH-MW0007	9.5 to 14.5	7/28/2005	6.27	0.00	26.6	0.0	-96.0	0.00	-
		7/27/2005	7.09	0.1	25.3	0.0	-105.0	1.30	-
		12/20/2006	6.82	1.45	24.3	0.0	-133.0	0.00	clear
		6/13/2007	6.70	3.42	24.1	0.2	-135.0	7.70	clear
		7/31/2008	6.71	2.026	25.2	1.7	-44.4	5.81	gray cloudy
		12/18/2008	6.94	1.836	23.1	0.1	-205.9	7.20	clear
		7/22/2009	6.53	1.930	24.2	0.3	-117.2	1.13	clear
		12/8/2009	6.59	1.9	25.07	0.24	-108.8	6.8	clear
		9/13/2010	6.57	2.563	26.84	0.22	-97.1	5.8	clear
3/17/2011	6.10	1.740	22.90	1.20	-22.0	6.3	clear		
9/20/2011	6.70	2.172	25.56	0.16	-182.1	2.77	clear		
NPSH-MW0027	10 to 15	9/6/2012	6.49	2.683	25.39	0.92	-125.3	2.18	clear
NPSH-MW0031	10 to 15	7/28/2005	6.39	6.2	24.2	0.0	-118.0	1.00	clear
		12/20/2006	6.67	0.648	24.0	0.0	-110.0	0.00	clear yellow
		7/31/2008	6.71	0.566	24.7	0.9	-44.2	0.59	tea clear
		7/22/2009	6.79	0.636	24.1	0.3	-89.8	0.00	clear
NPSH-MW0036	3 to 10	7/28/2005	5.98	26.7	24.6	0.0	-59.0	0.00	-
		8/12/2009	6.72	2.9	24.8	2.2	-177.2	6.00	clear
NPSH-MW0037	3 to 10	7/27/2005	6.82	0.00	25.0	0.0	-32.0	3.50	-
PW-MW1515	10 to 15	5/19/2005	6.66	0.527	25.0	0.0	-104.0	0.93	clear
		12/19/2006	6.59	0.559	24.1	0.2	-65.8	1.20	clear yellow
		8/1/2008	5.95	0.588	24.2	0.3	-28.9	0.00	clear
		7/17/2009	6.64	0.637	24.1	0.3	-59.9	0.00	clear
MW0064	2 to 12	2/1/2006	7.30	0.666	21.2	0.5	-15.7	29.90	clear yellow
		12/19/2006	6.21	0.538	23.6	0.0	-136.0	6.50	brown
		7/23/2008	5.92	0.486	27.2	0.2	-101.6	18.00	clear red
		7/20/2009	6.55	0.612	27.8	0.4	-83.3	1.44	brown/clear
MW0066	2 to 12	2/1/2006	6.57	0.423	18.8	0.6	15.6	36.80	clear yellow
MW0073	2 to 12	2/1/2006	5.99	0.532	21.1	0.2	-83.0	15.00	yellow
		12/20/2006	6.25	0.536	22.9	0.3	-31.7	6.00	clear yellow
		7/31/2008	6.81	0.484	24.9	0.5	-69.9	12.50	clear
		7/21/2009	6.34	0.346	26.8	0.4	-47.6	3.71	brown
MW0074	2 to 12	2/1/2006	5.28	0.639	20.4	0.4	82.2	62.90	cloudy, light tan
		12/20/2006	6.52	0.652	22.5	0.4	2.5	3.10	clear yellow
		7/31/2008	6.87	0.612	24.5	0.4	-75.6	0.00	clear
		7/17/2009	6.97	0.684	23.6	0.3	-33.6	0.00	clear

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
MW0075	2 to 12	2/1/2006	5.56	0.439	18.8	0.6	-0.6	18.40	slight brown color
		8/12/2009	6.35 *	0.589	25.9	0.59 *	21.1	15.00	clear
MW0076	2 to 12	2/1/2006	5.64	0.908	20.2	1.4	0.6	6.70	clear
		12/19/2006	6.61	0.495	23.0	0.0	-29.0	2.40	clear
		7/23/2008	6.49	0.438	26.5	0.6	-102.1	4.91	clear
		7/22/2009	6.56	0.818	25.5	0.5	-114.4	0.00	clear/brown
MW0091	2 to 12	4/7/2010	6.5	0.363	22.12	1.21	-50.9	5.4	clear
MW0092	2 to 12	4/7/2010	6.65	0.293	22.6	0.19	-36.9	15	yellow
MW0095	2 to 12	3/25/2010	6.8	0.398	19.9	0.19	-104.2	17.8	slight yellow
MW0101	2 to 12	3/25/2010	6.76	0.631	20.44	0.56	-136.6	68.1	red brown
MW0108	2 to 12	4/8/2010	6.17	0.582	20.95	0.23	-62.1	2.8	slight yellow
		9/20/2011	6.1	0.619	25.5	0.24	-87.1	0.65	clear
MW0113	2 to 12	3/25/2010	6.7	0.289	19.45	1.02	-56.7	27.7	clr brown
<b>15 to 25 ft BLS</b>									
MW0087	15 to 25	4/7/2010	6.72	0.953	29.95	1.21	-65.3	97.9	cloudy
MW0089	15 to 25	4/7/2010	7.02	0.756	22.39	0.79	-122.9	2.3	clear
		12/19/2014	7.01	0.756	22.21	-	-121.1	6.1	clear
MW0093	15 to 25	3/26/2010	7.02	0.779	22.05	0.15	-105.9	53.7	tan cloudy
MW0096	15 to 25	3/25/2010	6.86	0.948	22.1	0.16	-80.3	29	slt cloudy
MW0098	15 to 25	3/25/2010	6.55	1.127	24.27	0.19	-107.3	39.5	yellow clear
MW0100	15 to 25	4/7/2010	6.36	1.714	23.81	0.18	-109.5	6.6	yellow
		3/16/2011	5.76	1.584	24.34	1.46	-104.7	10.10	yellow-clear
		9/19/2011	6.26	1.402	25.23	0.6	-86.1	9.83	light green
MW0102	15 to 25	3/25/2010	6.99	0.792	24.58	0.11	-174.7	8.93	clear
MW0105	15 to 25	3/25/2010	6.64	1.335	24.04	0.16	-114.6	32.4	yellow clear
MW0106	15 to 25	3/25/2010	6.94	1.348	23.87	0.08	-183.7	17.4	yellow clear
MW0107	15 to 25	4/8/2010	6.76	0.966	24.84	0.48	-141.3	16	slight yellow clear
		9/19/2011	6.64	0.797	25.98	0.16	-158.6	3.52	clear
MW0109	15 to 25	3/26/2010	7.14	0.823	23.31	0.29	-90.5	12	clear
MW0110	15 to 25	4/7/2010	6.66	4.51	22.74	0.16	-223.1	12	slight yellow clear
		3/17/2011	7.03	3.04	23.41	0.55	-150.2	14.3	clear
		9/20/2011	6.75	3.413	25.2	0.21	-202.3	11.6	clear
MW0114	15 to 25	3/25/2010	6.87	0.797	23.32	0.25	-103.7	15.5	yellow clear
MW0115	15 to 25	3/26/2010	6.93	0.834	22.07	0.37	-40.6	29.1	clear
MW0116	15 to 25	3/26/2010	6.94	1.423	22.39	0.32	-127.1	35.8	tan cloudy
MW0117	15 to 25	3/25/2010	6.76	1.074	23.28	0.19	-99.9	18.1	clear
		3/17/2011	6.81	1.05	23.58	0.74	19.2	10.1	clear
MW0122	15 to 25	3/26/2010	6.98	0.971	21.89	0.26	-94.9	19.2	tan cloudy
MW0125	15 to 25	9/13/2010	6.79	1.026	25.06	0.21	-87.6	19	clear

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color		
MW0126	15 to 25	9/13/2010	6.73	0.684	23.62	0.2	-105.7	12	clear		
MW0127	15 to 25	9/13/2010	6.78	0.798	23.89	0.2	-82.4	15	clear		
MW0128	15 to 25	9/13/2010	6.79	0.76	24.42	0.19	-109.7	15	clear		
MW0129	15 to 25	9/13/2010	6.94	0.762	22.55	0.33	-124.9	16	clear		
<b>28 to 38 ft BLS</b>											
MW0046I	29 to 34	5/20/2005	6.42	1.02	25.8	0.2	-90.0	3.00	clear		
		8/12/2009	7.28 *	4.683	24.4	0.82 *	-94.7	7.00	clear		
MW0047I	29 to 34	7/27/2005	6.71	2.816	25.4	0.1	-24.0	1.16	clear yellow		
		12/20/2006	6.36	7.034	24.2	0.2	-276.8	2.40	clear		
		6/12/2007	6.88	6.096	24.4	0.1	-335.0	0.25	clear yellow		
		7/31/2008	6.59	6.534	24.6	1.0	-243.3	2.78	brownish		
		12/17/2008	7.88	6.480	24.5	0.4	-261	14.7	clear		
		7/22/2009	6.55	3.628	24.6	0.3	-135.7	0.67	clear		
MW0048I	29 to 34	12/8/2009	6.74	5.937	24.36	0.34	-239.8	8.51	clr yellow		
		7/28/2005	6.36	10.5	25.1	0.0	-380.0	2.10	clear		
		12/20/2006	7.24	11.9	24.6	0.0	-298.0	1.20	clear yellow		
		6/12/2007	7.38	6.737	24.2	0.4	-249.0	0.00	clear		
		7/31/2008	7.03	5.373	24.7	0.2	-146.3	14.60	clear		
		12/17/2008	8.20	5.27	24.5	0.2	-280	13.20	clear		
		7/22/2009	6.92	2.28	24.9	0.2	-151.6	0.80	clear		
		12/8/2009	7.04	2.85	24.7	0.09	-250.1	6.07	clr yellow		
MW0049I	29 to 34	9/12/2010	6.98	1.642	24.79	0.2	-148	3.9	clear		
		12/21/2006	7.13	9.29	24.8	0.0	-301.0	1.40	clear		
		7/18/2008	7.34	2.578	24.9	0.2	-98.4	4.08	clear		
MW0050I	29 to 34	7/20/2009	7.34	2.964	24.8	0.2	-172.5	0.56	clear/yellow		
		MW0050I	29 to 34	7/28/2005	7.43	1.5	25.8	0.0	-265.0	0.00	-
		MW0052I	29 to 34	7/28/2005	7.35	9.317	24.6	0.1	-180.5	0.00	clear
MW0053I	29 to 34	12/18/2006	6.44	1.194	23.7	0.1	-54.8	1.83	clear		
		7/17/2008	6.85	1.75	24.3	0.3	-80.2	2.27	clear yellow		
		7/16/2009	6.85	1.65	24.7	0.3	-74.2	1.24	clear		
MW0054I	29 to 34	7/21/2008	6.60	1.633	25.0	0.2	-46.8	2.84	clear		
MW0057I	29 to 34	7/27/2005	6.76	1.047	24.2	0.2	-14.2	2.64	clear		
		7/22/2008	6.74	2.536	24.0	0.3	-112.2	2.46	clear yellow		
		7/31/2008	6.60	2.539	24.7	1.9	-85.0	6.46	brown		

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
MW0059I	29 to 34	12/21/2006	6.12	1.169	24.6	0.8	-59.7	2.50	clear yellow
		6/13/2007	6.95	1.332	24.9	0.3	-85.6	0.00	clear
		7/31/2008	6.60	1.372	25.1	0.2	-119.8	15.10	clear
		12/17/2008	7.43	1.82	24.6	0.9	-171	12.5	clear
		7/22/2009	6.31	1.49	25.0	0.4	-76	1.1	clear
		12/7/2009	6.42	1.256	24.65	0.9	-128.2	12.3	clear
		9/8/2010	6.34	1.832	25.73	0.86	-130.3	9.4	lt. yellow
		3/17/2011	6.53	1.443	24.07	0.75	-27.1	8.7	clear
		9/20/2011	6.41	1.865	24.42	0.19	-64.3	2.12	clear
		9/6/2012	6.16	2.6	26.62	0.4	-61.1	11.2	cloudy
MW0060I	29 to 34	7/28/2005	6.90	8.172	25.2	0.2	-87.7	1.15	clear brown
		12/21/2006	6.90	7.55	25.0	0.0	-267.0	0.80	clear
		7/23/2008	6.95	6.686	25.1	0.3	-212.4	1.22	clear yellow
		7/22/2009	6.96	4.810	25.0	0.2	-295.1	2.05	clear
		3/17/2011	7.38	2.320	24.53	0.37	-157.0	4.30	clear
		9/20/2011	6.88	2.422	24.64	0.20	-211.4	0.99	clear
NPSH-MW0005	30 to 35	9/17/2009	7.30	4.244	24.9	1.0	-64.7	19.20	clear/black debris
		9/13/2010	6.38	4.263	24.8	0.2	-183.9	13.00	clear
		9/6/2012	6.46	5.483	24.6	0.4	-183.9	4.53	clear
NPSH-MW0008	20 to 35	5/19/2005	6.72	0.902	24.5	0.0	-98.0	2.30	clear
		7/27/2005	6.12	1.28	25.7	0.0	-80.0	<1.0	clear
		12/19/2006	6.64	1.249	23.9	0.2	-77.8	3	clear
		6/12/2007	8.65	2.23	23.4	0.2	-192.0	17.6	clear
		7/23/2008	6.75	0.889	24.3	0.3	-99.7	0.6	clear
		12/18/2008	7.55	0.749	23.6	0.0	-163.1	0.8	clear
		7/22/2009	6.61	0.935	24.0	0.3	-71.6	0.0	clear
		12/8/2009	6.72	1.053	23.94	0.15	-213.8	4.65	clear yellow
NPSH-MW0010	29 to 34	7/27/2005	6.25	0.67	23.2	0.0	-80.0	<1.0	clear
NPSH-MW0011	29 to 34	5/18/2005	7.10	1.18	25.3	0.0	-57.0	1	clear
		12/19/2006	6.80	1.184	24.0	0.4	5.9	6	clear
		8/1/2008	7.21	1.107	23.9	0.5	-137.4	1	clear
		7/22/2009	6.76	0.967	23.5	0.4	-71.2	11.9	clear
NPSH-MW0013	29 to 34	7/28/2005	7.34	0.12	25.2	0.0	-168.0	0.00	-
NPSH-MW0015	29 to 34	5/18/2005	6.86	2.49	24.9	0.0	-112.0	4.68	clear
		7/27/2005	7.19	0.58	26.5	0.0	-110.0	0.00	-
		7/23/2009	6.76	1.84	23.5	1.4	-154.6	0.98	clear
NPSH-MW0016	29 to 34	7/27/2005	7.17	0.184	25.4	0.0	-40.0	0.30	-
		8/12/2009	6.95 *	4.435	24.5	0.79 *	-27.2	2.90	clear
NPSH-MW0017	29 to 34	7/27/2005	7.18	0.1	23.1	0.0	-178.0	0.00	-
		8/12/2009	7.30	2.5	23.7	0.56 *	-153.0	5.80	clear

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
NPSH-MW0018	29 to 34	5/19/2005	7.01	1.64	24.1	0.0	-84.0	2.48	clear
		7/23/2009	6.83	1.45	22.5	1.7	-108.8	0.00	clear
NPSH-MW0019	29 to 34	6/12/2007	9.40	2.31	22.8	0.2	-231.0	17.70	clear
		7/31/2008	6.80	0.699	22.7	0.2	-54.3	1.07	clear
		7/21/2009	7.14	0.908	23.5	0.3	-27.5	0.23	clear
NPSH-MW0020	29 to 34	7/28/2005	7.20	0.132	27.8	0.0	-103.0	0.00	-
		12/19/2006	7.06	0.865	23.8	0.0	-70.0	0.00	clear
		8/1/2008	7.27	0.722	24.4	0.5	-90.2	0.00	clear
		7/22/2009	6.85	0.802	23.8	0.3	-109.4	0.04	clear
NPSH-MW0021	29 to 34	5/18/2005	7.17	1.28	24.4	0.0	-84.0	3.05	clear
		8/12/2009	7.16	0.96	23.5	1.1	-111.3	6.50	clear
NPSH-MW0022	29 to 34	8/12/2009	7.50 *	3.91	25.4	0.65 *	-56.8	5.80	clear
NPSH-MW0038	30 to 35	7/27/2005	7.12	0.11	26.1	0.0	-120.0	0.10	-
		8/12/2009	7.16 *	3.76	23.6	0.75 *	-27.5	10.00	clear/yellow
NPSH-MW0040	29 to 34	7/27/2005	7.21	0.383	23.8	0.0	-102.0	0.00	-
		8/12/2009	7.03	2.409	22.5	1.1	-109.1	2.90	clear
MW0062	29 to 34	2/1/2006	6.63	0.742	22.3	0.3	-140.9	15.24	clear
		12/18/2006	6.98	0.903	23.3	0.0	-274.0	0.00	clear
		7/31/2008	7.10	0.607	24.1	0.3	-135.9	7.94	clear
		7/16/2009	7.19	0.709	25.1	0.2	-95.7	0.32	clear
MW0065	29 to 34	2/1/2006	7.09	7.39	23.3	0.2	-147.5	15.22	clear yellow
		12/19/2006	7.10	6.41	24.0	0.0	-248.0	0.00	clear
		6/13/2007	7.31	6.636	24.2	0.2	-199.2	0.00	clear
		7/23/2008	6.89	5.146	24.8	0.2	-145.5	2.37	clear
		12/18/2008	7.15	3.606	23.8	0.2	-233.5	4.4	clear
		7/20/2009	6.97	2.991	24.3	0.5	-122.6	0.2	clear
MW0067	29 to 34	12/7/2009	6.83	2.03	23.96	0.4	-168.6	4.6	clear
		2/1/2006	6.94	0.779	21.4	0.3	-26.6	65.10	cloudy light tan
		12/19/2006	6.89	0.885	22.8	0.0	-145.0	3.80	clear
		7/31/2008	6.95	0.677	23.7	0.4	-110.9	13.90	clear
		7/21/2009	6.79	0.945	23.8	0.5	-67.3	15.3	clear
		8/12/2009	22.85	0.875	22.9	5.60**	-120.5	11.0	clear
MW0069	29 to 34	2/1/2006	6.62	0.792	22.7	0.2	-42.2	24.20	cloudy yellow
		12/19/2006	6.90	0.95	23.9	0.0	-125.0	0.00	clear
		7/31/2008	6.58	1.103	26.4	1.0	-41.7	4.02	-
		7/20/2009	6.88	3.486	23.6	0.5	-63.8	2.34	clear
MW0072	29 to 34	2/1/2006	6.14	0.880	20.7	0.6	-16.5	84.00	slightly cloudy
		8/1/2008	7.08	0.845	22.6	0.4	-111.7	2.47	Clear
		7/17/2009	6.97	1.073	22.4	0.4	-56.1	1.78	clear
MW0077	29 to 34	2/1/2006	5.89	1.082	22.5	0.3	-1.8	47.80	slightly cloudy
		12/19/2006	6.89	1.02	23.4	0.0	-66.0	15.30	yellow
		7/23/2008	6.76	1.065	24.5	0.2	-97.0	13.10	clear
		7/22/2009	6.59	0.937	23.6	0.7	-18.2	1.08	clear

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
MW0080	29 to 34	12/21/2006	6.87	5.38	23.5	0.0	-193.0	3.80	clear
		6/13/2007	6.93	5.68	24.0	0.2	-232.0	10.90	clear
		7/31/2008	6.76	2.533	23.9	0.7	-91.2	0.00	-
		12/18/2008	7.34	1.459	23.1	0.4	-236.8	3.2	clear
		7/20/2009	7.11	1.052	23.4	0.4	-101.1	0.0	clear
		12/7/2009	6.92	1.181	23.26	0.16	-193.7	2.91	clear
MW0081	29 to 34	12/21/2006	6.37	0.818	24.0	1.0	-51.9	6.50	clear
		7/24/2008	6.97	0.991	24.6	0.5	-82.1	0.00	clear
		12/18/2008	7.15	1.251	23.6	0.0	-181.6	9.2	clear
		7/17/2009	6.94	2.071	25.3	0.4	-68.7	7.71	clear
		12/8/2009	6.73	2.468	24.4	0.18	-105.6	7.7	clear
MW0082	29 to 34	10/12/2007	6.40	1.07	23.5	1.3	-97.2	10.90	clear
		7/31/2008	6.77	0.907	23.2	0.7	-96.4	14.60	clear
		12/17/2008	7.45	1.390	23.0	0.4	-75.0	10.2	clear
		7/21/2009	6.69	1.027	23.0	0.6	-49.0	0.31	clear
		12/8/2009	6.70	1.047	22.91	0.22	-53.7	4.5	clear
MW0088	29 to 34	4/7/2010	6.91	0.83	22.49	1.25	-34.7	7.3	clear
MW0090	29 to 34	4/7/2010	7.05	0.83	22.7	1.07	-35.1	7.6	clear
MW0097	29 to 34	3/25/2010	7.12	0.831	22.21	0.12	-201.1	4.89	clear
MW0103	29 to 34	3/25/2010	6.70	1.208	24.67	0.15	-193.4	5.98	clear
MW0111	29 to 34	3/25/2010	6.78	1.325	24.46	0.08	-111	13	clear
MW0119	29 to 34	3/26/2010	6.93	1.163	23.36	0.2	-92.5	19	clear
<b>38 to 48 ft BLS</b>									
MW0021D	40 to 45	5/18/2005	6.98	3.18	24.4	0.0	-137.0	3.73	clear
MW0046D	40 to 45	7/27/2005	7.22	0.411	25.3	0.0	-137.0	0.00	-
MW0047D	40 to 45	7/27/2005	6.97	1.13	25.2	0.1	-81.2	73.10	milky
		12/20/2006	7.05	1.04	24.6	0.0	-118.0	15.00	gray
		6/12/2007	7.09	1.057	24.6	0.2	-122.0	15.00	clear
		7/31/2008	6.62	4.739	24.7	0.8	-135.2	40.90	yellow-brown
		12/17/2008	7.85	3.580	24.1	0.2	-202	12.7	clear
		7/21/2009	6.68	3.030	24.3	0.8	-101.4	42.1	clear/white
		12/8/2009	6.76	3.698	24.45	0.12	-250	178	light tan
		9/13/2010	6.86	2.88	25.79	0.15	-52.3	55	clear
		3/17/2011	7.05	2.44	24.16	1.13	-55.3	7.3	clear
		9/20/2011	6.81	3.586	24.1	0.18	-88	55.9	clear
9/6/2012	6.6	4.164	24.77	0.39	-120.5	124	cloudy		

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
MW0049D	40 to 45	12/21/2006	6.54	6.72	24.6	0.0	-296.0	6.90	clear
		6/12/2007	6.89	6.006	24.5	0.4	-282.5	0.00	clear
		7/23/2008	6.83	6.607	24.6	0.2	-166.1	19.02	clear
		12/18/2008	7.14	6.239	24.2	0.5	-255.4	32	clear
		7/20/2009	7.02	7.472	24.7	0.3	-138.9	4.51	clear
		12/8/2009	6.87	7.252	25.14	0.13	-253.5	10.1	tan, cloudy
		9/8/2010	6.83	7.042	26.32	0.47	-179	13	clear
MW0050D	40 to 45	8/12/2009	6.98 *	7.421	24.8	0.50 *	-27.8	190.00	white/slightly cloudy
MW0052D	40 to 45	9/17/2009	7.15	1.135	25.5	0.8	5.1	11.10	clear
MW0053D	40 to 45	12/18/2006	6.55	3.227	24.0	0.4	-29.6	4.23	clear
		7/18/2008	6.97	2.042	25.1	0.3	-80.0	4.11	clear
		7/16/2009	6.52	2.528	24.8	0.5	-86.4	3.10	clear
MW0054D	40 to 45	7/18/2008	7.04	1.154	25.0	0.7	-83.8	115.00	cloudy
MW0055D	40 to 45	7/28/2005	7.12	0.303	25.9	0.0	-141.0	0.00	-
		12/19/2006	6.86	2.457	23.5	0.2	-65.0	1.60	clear
		7/17/2008	7.14	2.026	24.9	0.2	-111.5	1.41	clear
		7/17/2009	7.00	2.280	24.3	0.4	-111.6	1.09	clear
MW0057D	40 to 45	7/27/2005	6.85	1.991	24.3	0.2	-14.9	0.71	clear brown
		7/22/2008	6.90	1.674	23.9	0.2	-111.3	19.90	clear
		7/31/2008	6.71	1.35	24.5	0.3	-60.6	0.40	clear
		9/13/2010	6.91	1.75	25.3	0.4	-70.0	34.00	clear
		9/20/2011	6.77	2.29	23.9	0.3	-79.8	18.70	clear
		9/6/2012	6.57	3.20	25.2	0.4	-77.5	18.90	cloudy
		10/15/2012	6.76	2.21	24.0	2.0	-	19.60	cloudy
OBS-MW0001D	44 to 49	7/27/2005	7.13	4.508	26.2	0.0	-146.7	1.53	clear brown
		7/14/2014	6.95	5.571	25.13	0.32	-126.7	3.77	clear
OBS-MW0002D	44 to 49	7/27/2005	7.02	5.548	25.7	0.1	-98.3	6.29	clear brown
		7/14/2014	6.74	5.754	24.83	0.31	-97.3	3.6	clear
OBS-MW0004D	47 to 52	5/18/2005	6.52	6.22	26.3	0.0	-134.0	8.77	clear
		7/27/2005	6.55	5.377	26.0	0.2	-51.0	1.10	clear yellow
		12/18/2006	6.59	4.129	24.3	0.3	-108.6	2.21	clear
		6/12/2007	6.81	2.692	24.7	0.3	-109.9	3.50	tan
		7/22/2008	6.58	2.372	25.1	0.2	-86.2	0.22	clear yellow
		12/18/2008	6.97	1.880	24.3	1.1	-177.6	5.00	clear
		7/20/2009	6.70	1.750	24.8	0.5	-104.1	0.00	clear
		12/7/2009	6.54	3.083	24.43	0.51	-66.4	2.8	clear
		9/8/2010	6.43	2.117	25.61	0.71	-101.2	3.2	light yellow
		3/16/2011	6.24	2.373	24.48	1.45	-59.7	8.41	yellow-clear
		9/19/2011	6.38	3.191	24.98	0.29	-73.9	1.96	clear
		9/6/2012	6.96	2.48	26.28	0.3	1.586	4.54	cloudy

**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
OBS-MW0005D	47 to 52	7/27/2005	6.41	4.49	26.4	0.0	-152.0	0.90	clear
NPSH-MW0023	40 to 45	5/18/2005	7.69	0.522	24.2	1.2	46.0	8.78	clear
		12/20/2006	6.50	3.128	22.4	0.4	-33.3	2.30	clear
		8/1/2008	6.62	2.75	23.9	0.2	-75.0	1.90	clear
		7/21/2009	6.81	3.15	23.7	0.4	-109.1	0.00	clear
NPSH-MW0024	46 to 51	7/27/2005	6.10	1.97	26.1	0.2	-173.0	2.10	clear
		12/20/2006	6.44	3.141	24.1	0.9	-130.9	49.80	clear yellow
		7/18/2008	7.89	5.682	25.5	0.2	-146.5	1.37	clear
		7/16/2009	6.55	2.898	25.4	0.4	-57.0	1.19	clear
NPSH-MW0025	40 to 45	12/20/2006	7.08	5.13	23.9	0.0	-131.0	2.90	clear
		7/31/2008	6.86	4.74	23.9	1.7	-91.9	201.00	grey
		7/17/2009	7.10	4.98	24.1	0.3	-103.9	2.26	clear
NPSH-MW0030	43 to 48	7/27/2005	7.25	0.832	25.6	0.0	-119.0	0.00	-
NPSH-MW0035	39 to 44	7/28/2005	7.00	0.278	27.1	0.0	-81.0	0.00	-
NPSH-MW0039	40 to 45	12/19/2006	6.98	0.931	23.5	0.0	-208.0	6.50	clear
		6/12/2007	8.75	2.47	23.6	0.2	-213.0	17.30	clear
		7/31/2008	6.47	0.905	23.7	1.0	-84.6	0.00	brownish-clear
		12/18/2008	7.15	0.924	23.1	0.5	-180.1	3.7	clear
		7/21/2009	6.81	1.096	25.3	0.3	-118.0	0.0	clear
		12/8/2009	6.83	1.102	23.26	0.11	-166.9	7.04	clear
MW0063	40 to 45	12/18/2006	7.02	2.23	23.4	0.0	-211.0	0.00	clear
		2/1/2006	6.82	1.96	22.4	0.5	-60.2	5.90	clear
		7/24/2008	7.12	2.069	24.2	0.5	-118.1	2.42	clear
		7/16/2009	7.07	1.864	24.5	0.4	-131.8	1.23	clear
MW0068	40 to 45	2/1/2006	6.98	1.587	23.3	0.3	-20.5	46.80	slightly cloudy, yellow
		12/19/2006	6.99	3.41	23.7	0.0	-223.0	11.50	clear
		6/13/2007	6.82	3.52	24.5	0.2	-259.0	12.60	clear
		8/1/2008	7.10	2.924	23.8	0.4	-164.1	16.30	clear
		12/18/2008	7.23	2.110	23.3	0.3	-200.4	14	clear
		7/17/2009	7.06	2.019	23.7	0.3	-56.7	0.68	clear
		12/8/2009	6.92	1.892	23.48	0.14	-157.8	2.84	clear
MW0070	40 to 45	2/1/2006	7.11	2.353	22.5	0.3	-58.4	39.00	light tan, cloudy
		12/20/2006	7.06	2.47	23.1	0.0	-142.0	15.30	clear
		6/12/2007	8.87	5.14	23.0	0.2	-136.0	14.30	clear
		7/31/2008	6.67	1.973	23.2	1.4	-74.3	19.80	-
		12/18/2008	7.14	2.064	22.9	0.0	-135.7	4.20	clear
		7/22/2009	6.83	2.093	23.0	0.3	-117.7	2.95	clear
		12/8/2009	6.88	2.094	23	0.3	-87	16	clear
MW0071	40 to 45	2/1/2006	5.89	3.814	21.4	0.3	-55.1	48.30	cloudy white

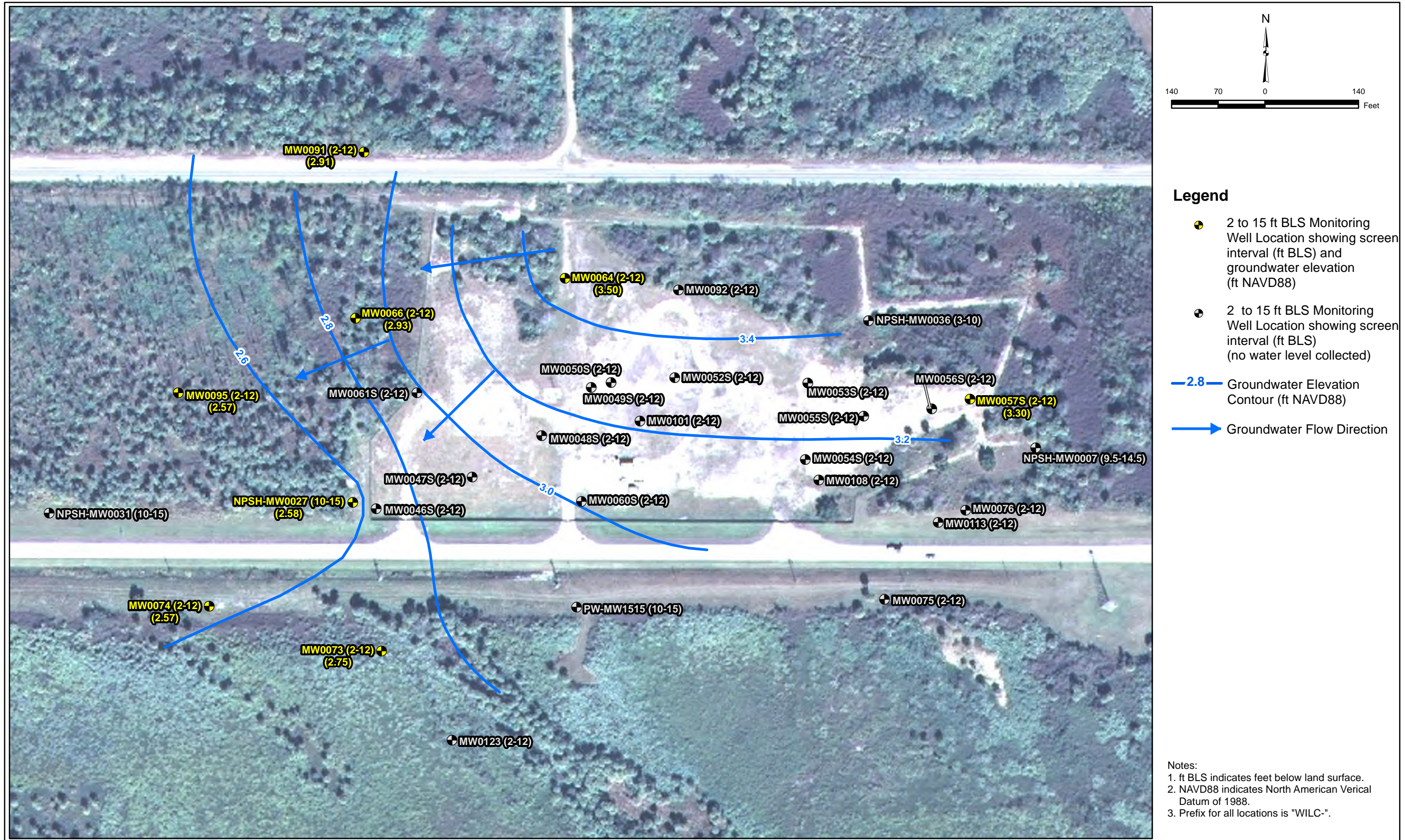


**Table 3-2. Natural Attenuation Field Sampling Parameters  
Wilson Corners, SWMU 001**

Sample Location	Screened Interval (ft BLS)	Sample Date	pH	Cond (mS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)	Turb (NTUs)	Color
MW0079	40 to 45	2/1/2006	5.85	2.221	22.8	0.4	-56.7	14.76	clear yellow
		12/19/2006	7.06	2.53	23.8	0.0	-144.0	0.00	clear yellow
		7/31/2008	6.78	1.343	24.5	0.3	-48.3	4.66	clear
		7/20/2009	7.13	2.126	24.2	0.2	-173.0	1.36	clear
MW0094	40 to 45	4/7/2010	7.06	2.156	23.51	0.15	-152.4	11	slight yellow
MW0104	40 to 45	3/25/2010	6.9	4.788	23.99	0.08	-184.6	9.69	clear
MW0112	40 to 45	3/25/2010	7.16	2.594	22.8	0.36	-154.1	19.3	clear
MW0118	40 to 45	3/25/2010	7.07	2.395	23.78	0.11	-249	1522	gray/tan cloudy
MW0120	40 to 45	3/26/2010	7.19	2.419	22.32	0.26	-166.2	48.9	clear
MW0121	40 to 45	3/26/2010	7.17	1.835	22.85	0.24	-128.4	14.8	clear
MW0099	40 to 45	4/7/2010	7.08	4.977	24.02	0.41	-48.5	3.5	clear
<b>Greater than 48 ft BLS</b>									
MW0052DD	55 to 65	7/22/2008	7.28	5.668	26.0	0.3	-95.1	3.35	clear
		12/19/2014	6.79	5.775	23.16	-	80.4	2.50	clear
NPSH-MW0034	66.7 to 71.5	7/27/2005	9.23	1.1	25.7	0.0	-163.0	0.00	-
MW0078	65 to 70	2/1/2006	8.08	4.639	23.7	0.4	-102.3	7.32	clear
		12/21/2006	6.83	6.078	24.3	1.0	-36.6	1.60	clear
		7/22/2008	7.39	5.754	25.4	0.2	-78.7	1.87	clear
		7/20/2009	7.45	6.068	26.0	0.5	-101.7	4.64	clear
		10/25/2012	7.35	4.759	25.5	0.8	-	1.16	clear
		7/14/2014	7.3	5.056	26.61	1.43	-88.1	9.85	clear
MW0083	71 to 76	9/17/2009	7.85	1.086	26.3	0.5	34.2	2.20	clear
MW0084	71 to 76	9/17/2009	7.79	2.540	26.1	0.9	19.7	7.19	clear
MW0085	71 to 76	9/17/2009	8.03	1.779	25.1	1.1	13.9	9.30	clear
MW0086	71 to 76	9/17/2009	7.80	2.925	25.5	0.7	17.4	4.81	clear
MW0130	56 to 66	10/26/2012	7.12	5.575	24.8	0.9	-	26.1	cloudy
		12/19/2014	7.12	5.600	24.44	-	-70.5	4.1	clear
MW0131	58 to 68	10/26/2012	7.20	5.645	23.8	0.6	-	18.90	cloudy
		12/10/2012	6.88	6.314	24.6	1.5	-84.1	-	clear
		7/16/2013	7.55	1.147	26.02	0.44	-189.5	10.5	clear

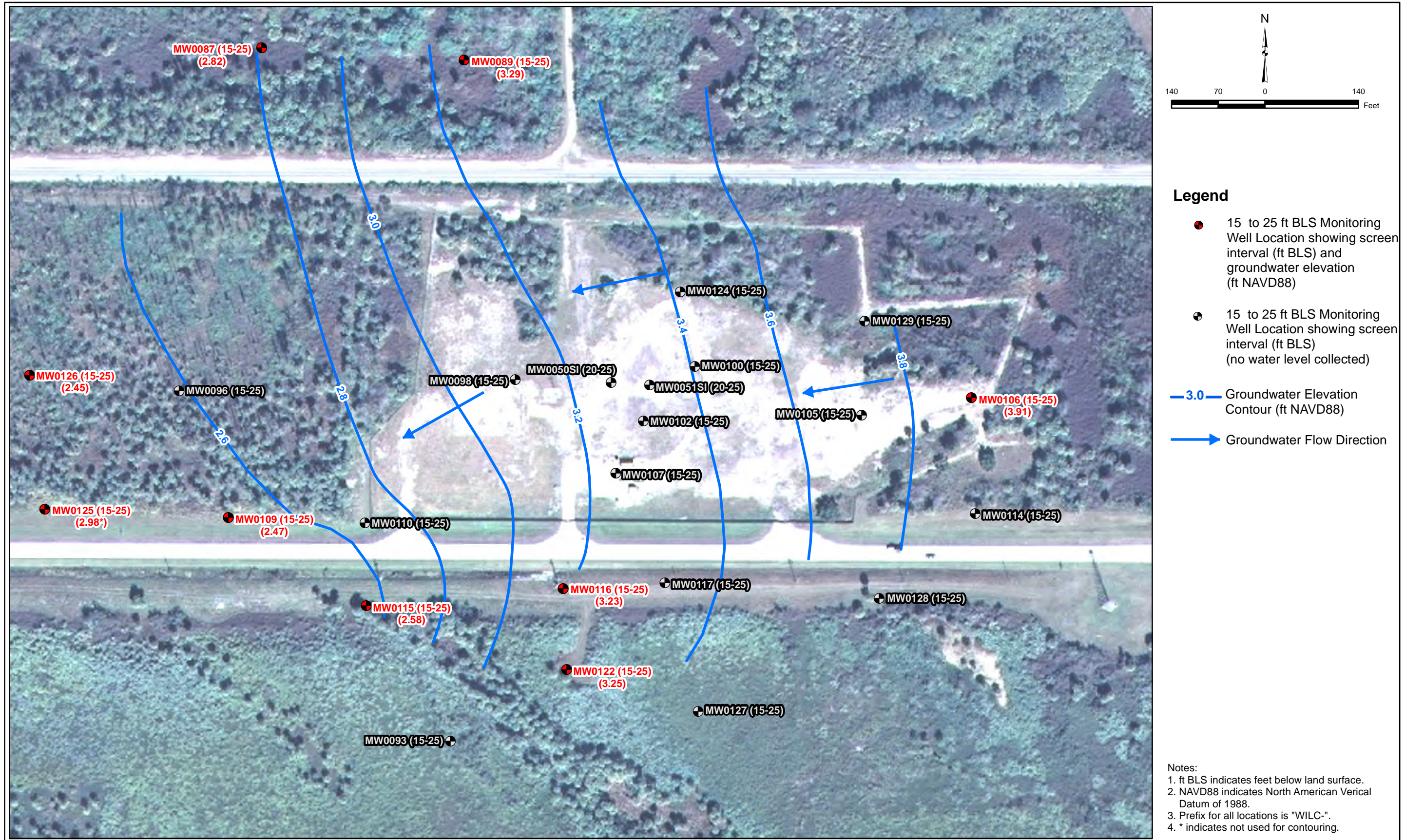
## Notes:

1. "-" indicates values not determined for these samples.
2. Cond mS/cm indicates conductivity in milliSiemens (millimhos) per centimeter.
3. ft BLS indicates feet below land surface.
4. DO mg/L indicates dissolved oxygen in milligram per liter.
5. Data obtained from final purge volume.
6. Turb NTUs indicates turbidity in Nephelometric Turbidity Units.
7. ORP mV indicates oxidation reduction potential in millivolts.
8. \* indicates calibration failed CCV for these parameters.
9. Temp °C indicates temperature in degrees Celsius.



Path: (Titusville-01\DATA) T:\GIS\FR0743\MXD\LTMR\_DEC2014\GW\_elev\_2\_to\_15\_DEC2014.mxd 21 May 2015 JRB

Figure 3-1  
2 to 15 ft BLS Groundwater Elevations and Contours - December 2014



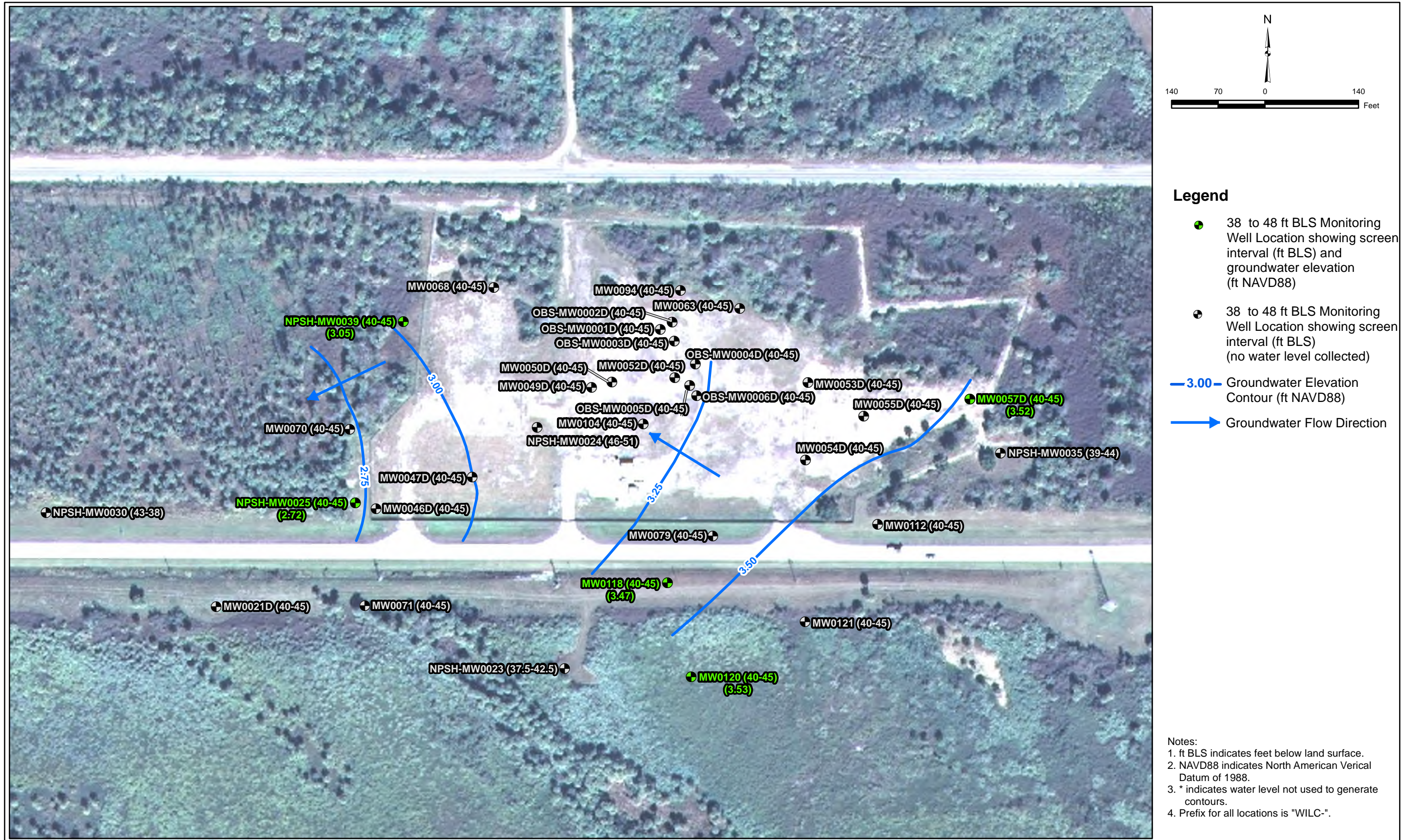
Path: (Titusville-01\DATA) T:\OGIS\FR0743\MXDs\LTMR\_DEC2014\GW\_elev\_15\_to\_25\_DEC2014.mxd 21 May 2015 JRB

Figure 3-2  
15 to 25 ft BLS Groundwater Elevations and Contours - December 2014



Path: (Titusville-01)DATA T:\OGIS\FR0743\MXD\LTMR\_DEC2014\GW\_elev\_28\_to\_38\_DEC2014.mxd 21 May 2015 JRB

Figure 3-3  
28 to 38 ft BLS Groundwater Elevations and Contours - December 2014



Path: (Titusville-01\DATA) T:\OGIS\FR0743\MXD\LTMR\_DEC2014\GW\_elev\_38\_to\_48\_DEC2014.mxd 22 May 2015 JRB

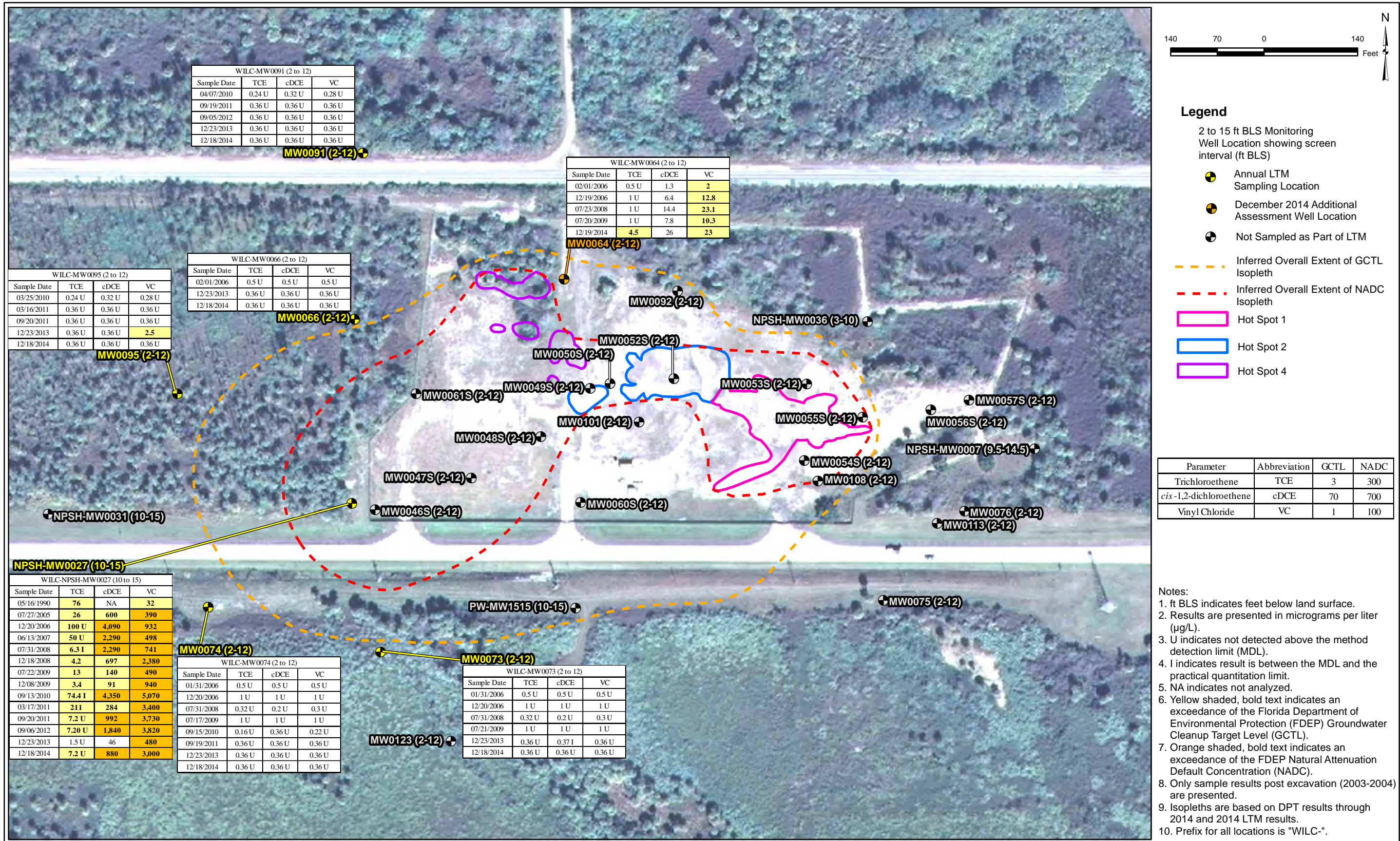
Figure 3-4

38 to 48 ft BLS Groundwater Elevations and Contours - December 2014



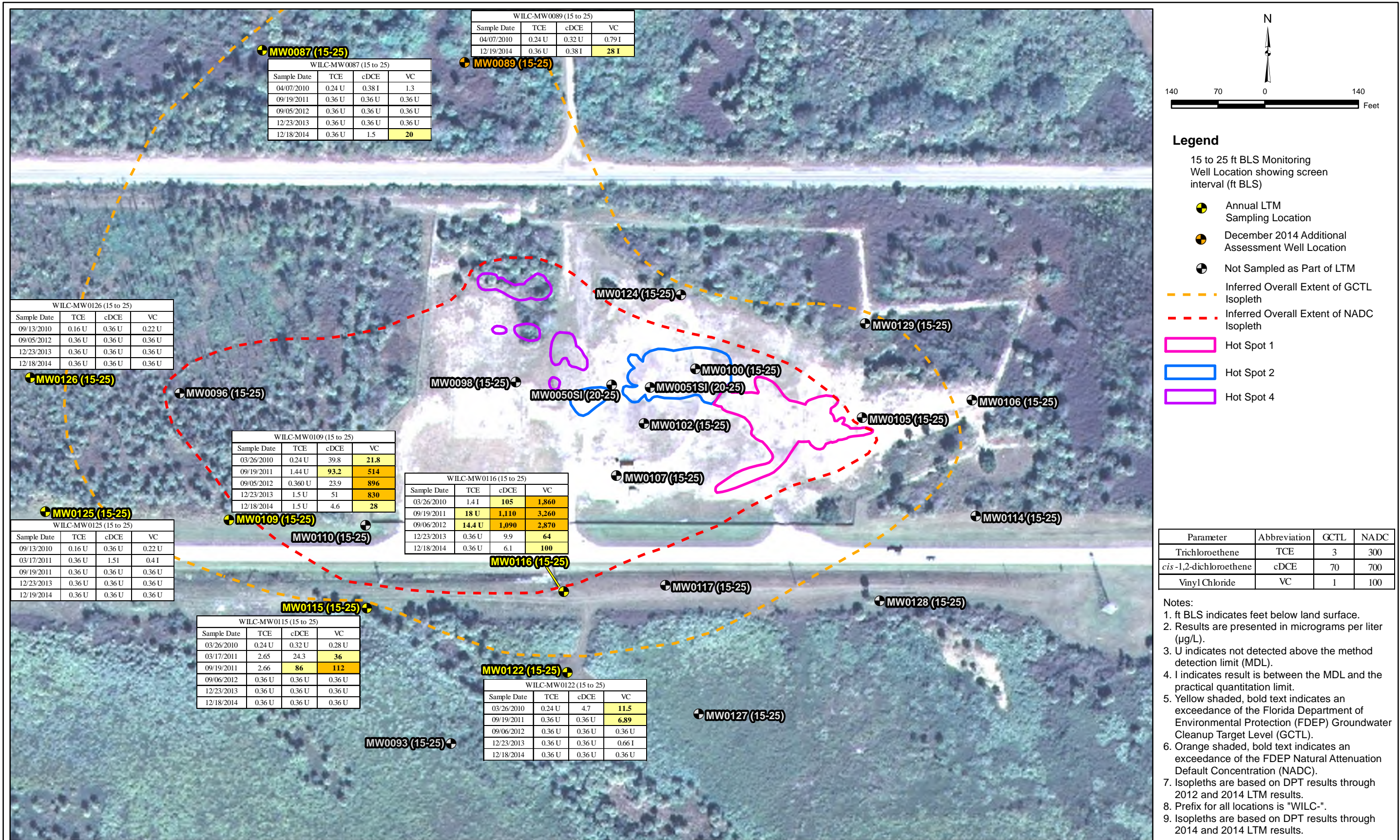
Path: (Titusville-01\DATA) T:\OGIS\FR0743\MXD\LTMR\_DEC2014\GW\_elev\_greater\_48\_DEC2014.mxd 21 May 2015 JRB

Figure 3-5  
 Greater than 48 ft BLS Groundwater Elevations and Contours - December 2014  
 3-39/3-40



- Notes:
1. ft BLS indicates feet below land surface.
  2. Results are presented in micrograms per liter (µg/L).
  3. U indicates not detected above the method detection limit (MDL).
  4. I indicates result is between the MDL and the practical quantitation limit.
  5. NA indicates not analyzed.
  6. Yellow shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Level (GCTL).
  7. Orange shaded, bold text indicates an exceedance of the FDEP Natural Attenuation Default Concentration (NADC).
  8. Only sample results post excavation (2003-2004) are presented.
  9. Isopleths are based on DPT results through 2014 and 2014 LTM results.
  10. Prefix for all locations is "WILC-".

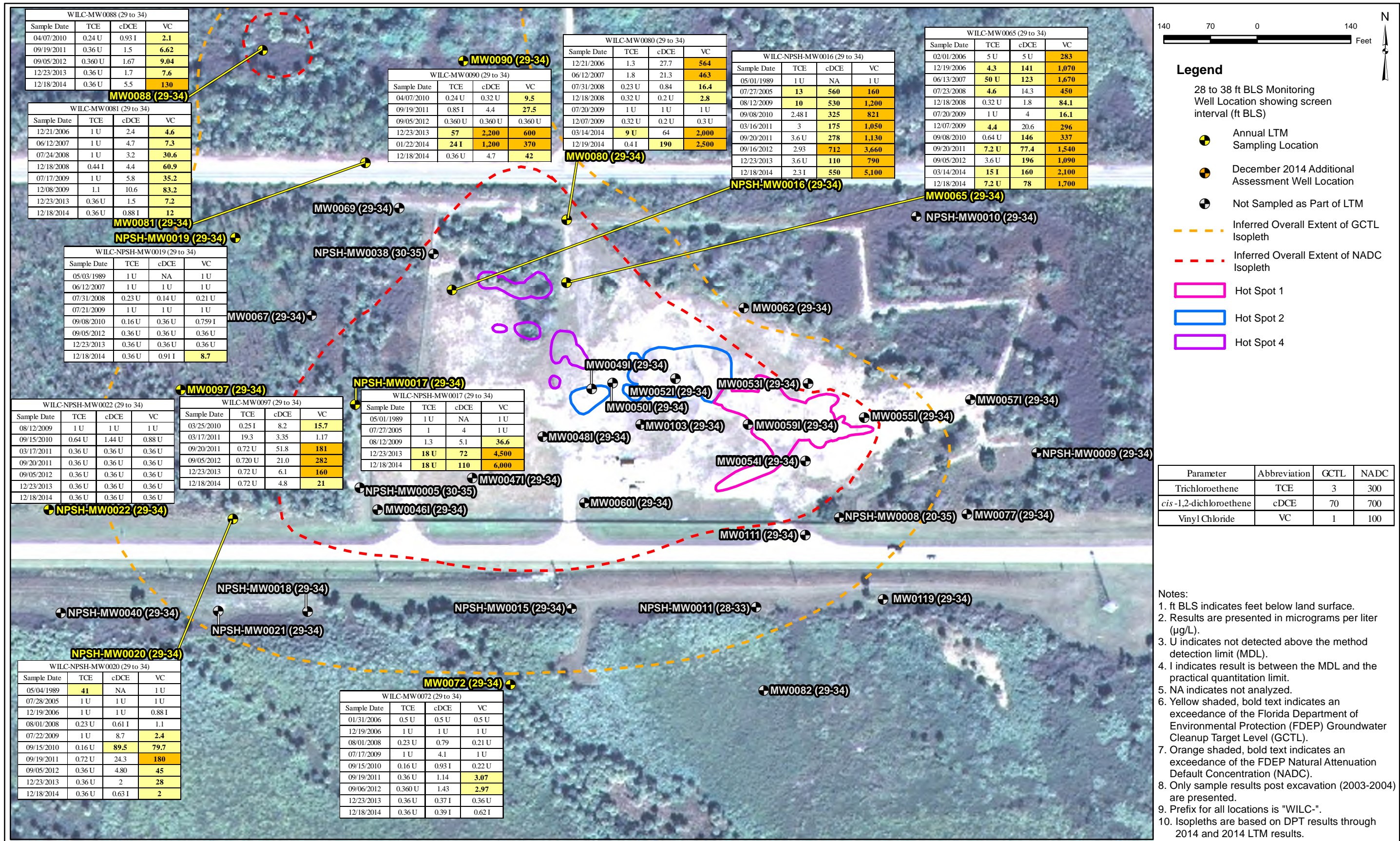
Figure 3-6  
2 to 15 ft BLS Groundwater VOC Results



Path: (Titusville-01\DATA) T:\0GIS\FR0743\MXD\LTMR\_DEC2014\GW\_Results\_15\_to\_25\_DEC2014.mxd 21 May 2015 JRB

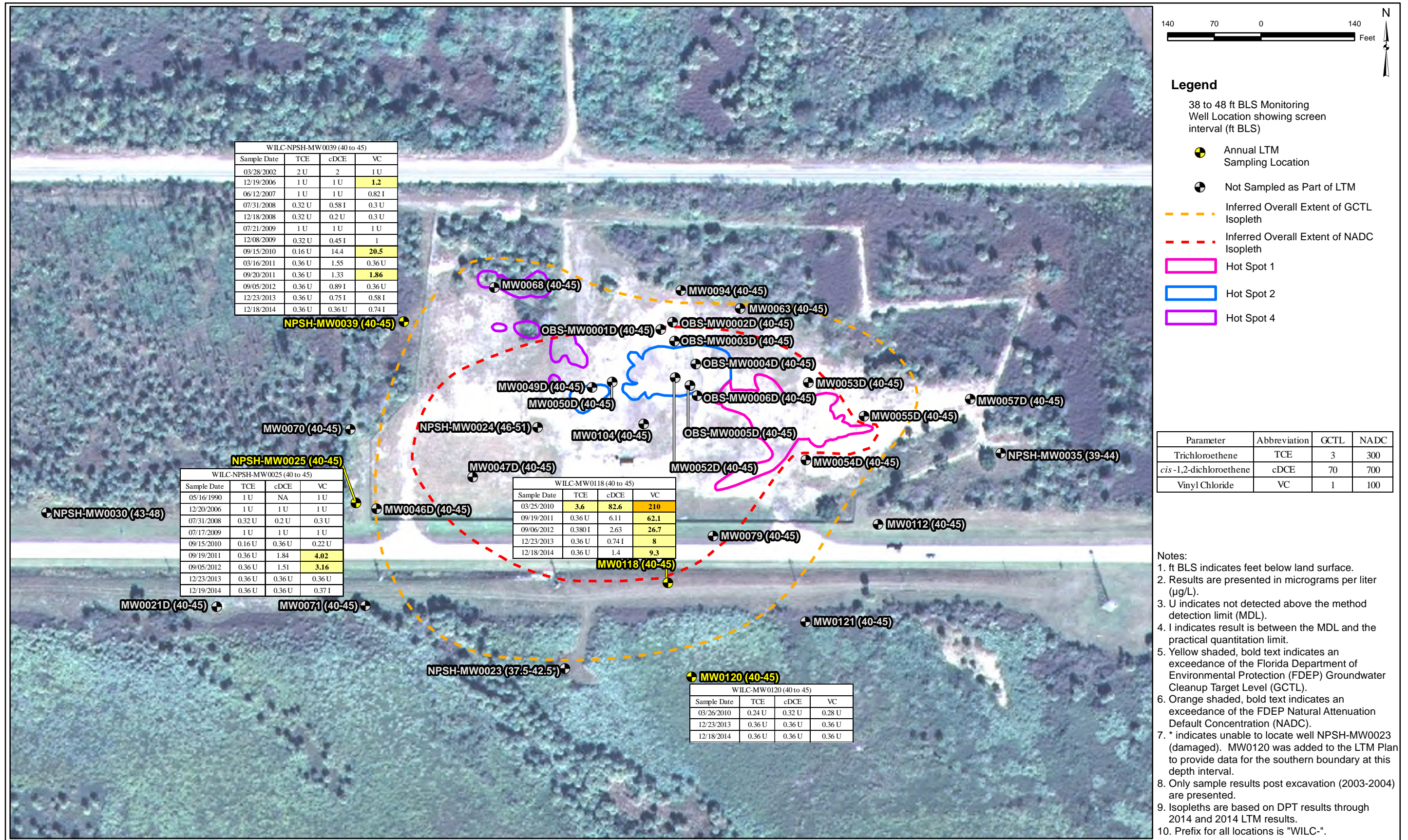
Figure 3-7  
15 to 25 ft BLS Groundwater VOC Results





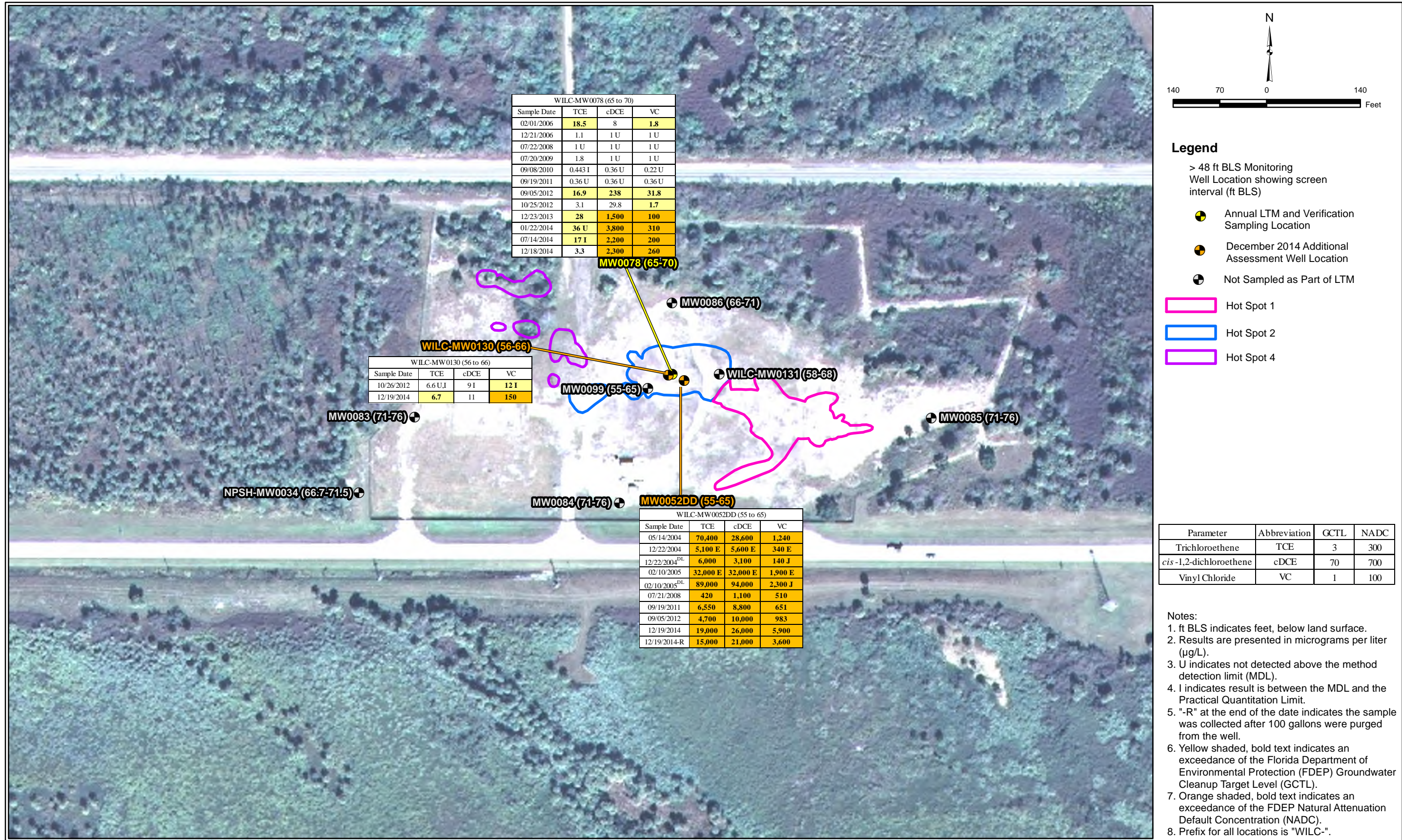
Path: (Titusville-01\DATA) T:\OGIS\FR0743\MXD\LTMR\_DEC2014\GW\_Results\_28\_to\_38\_DEC2014.mxd 22 May 2015 MAH

Figure 3-8  
28 to 38 ft BLS Groundwater VOC Results  
3-45/3-46



Path: (Titusville-01\DATA) T:\OGIS\FR0743\MXD\LTMR\_DEC2014\GW\_Results\_38\_to\_48\_DEC2014.mxd 22 May 2015 JRB

Figure 3-9  
38 to 48 ft BLS Groundwater VOC Results



Path: (Titusville-01)DATA) T:\OGIS\FR0743\MXD\LTMR\_DEC2014\GW\_Results\_greater\_48\_DEC2014.mxd 21 May 2015 JRB

Figure 3-10  
Greater than 48 ft BLS Groundwater VOC Results  
3-49/3-50

## SECTION IV

### CONCLUSIONS AND RECOMMENDATIONS

The following conclusions can be made based on the annual LTM results and additional assessment sampling activities:

- groundwater flow direction is generally to the southwest from the water table to approximately 48 ft BLS;
- the current monitoring well network generally delineates VOCs to GCTLs to the west and southwest;
- the current monitoring well network does not provide monitoring of the 28 to 38 ft BLS depth interval VOC plume in the area north and west of monitoring wells MW0090 (VC GCTL exceedances) and MW0088 (VC NADC exceedance);
- monitoring of the vertical extent of the plume was performed by sampling monitoring wells MW0078 and MW0130. The results from the 2014 samples collected from monitoring wells MW0078 and MW0130 indicate that the VOC impacts are not fully delineated to GCTLs vertically in this area of the site;
- the integrity of monitoring well MW0052DD is uncertain; and
- increasing VOC trends occurring in northwestern monitoring wells may indicate plume migration or expansion.

Geosyntec recommends modifying the LTM program (Table 4-1 and Figure 4-1). Objectives of the LTM will be to: (i) continue monitoring the downgradient VOC trends in the northern and western portions of the site; and (ii) to verify delineation in the upgradient and sidegradient directions (these select additional monitoring wells will be sampled every five years). It is recommended that all 41 VOC samples be collected using PDBs. Depth to water measurements will be collected from only the sampled monitoring wells to assess groundwater flow direction and gradient.

Due to the uncertainty with regard to the integrity of monitoring well MW0052DD, it is recommended that this well be over drilled and abandoned.

In consideration of the apparent plume migration or expansion in the northwestern portion of the site, Geosyntec recommends additional groundwater assessment in this area.

**Table 4-1. Proposed 2015 LTM Plan  
Wilson Corners, SWMU 001**

Monitoring Well	Screened Interval (ft BLS)	Rationale
<b>2 to 15 ft BLS</b>		
NPSH-MW0027	10 to 15	Southwestern Downgradient Well
<del>MW0057S</del>	<del>2 to 12</del>	<del>5 Year Sample Location: East</del>
MW0064	2 to 12	Provides downgradient data north of Hot Spot 2 and east of Hot Spot 4 Areas
<del>MW0066</del>	<del>2 to 12</del>	<del>Western Downgradient Well</del> multiple clean events, data provided by MW0095 and MW0091
<del>MW0073</del>	<del>2 to 12</del>	<del>Southwestern Peripheral Well</del> multiple clean events, data provided by MW0074
MW0074	2 to 12	Southwestern Peripheral Well
MW0091	2 to 12	Northwestern Peripheral Well
MW0095	2 to 12	Western Peripheral Well
<b>15 to 25 ft BLS</b>		
MW0087	15 to 25	Northwestern Peripheral Well
<del>MW0089</del>	<del>15 to 25</del>	<del>Provides downgradient data north of the Site</del>
<del>MW0106</del>	<del>15 to 25</del>	<del>5 Year Sample Location: East</del>
MW0109	15 to 25	Southwestern Downgradient Well
MW0115	15 to 25	Southwestern Peripheral Well
MW0116	15 to 25	Southern Downgradient Well
MW0122	15 to 25	Southern Peripheral Well
MW0125	15 to 25	Western Peripheral Well
MW0126	15 to 25	Western Peripheral Well
<b>28 to 38 ft BLS</b>		
<del>NPSH-MW0015</del>	<del>29 to 34</del>	<del>5 Year Sample Location: South</del>
NPSH-MW0016	29 to 34	Northwestern Downgradient Well
NPSH-MW0017	29 to 34	Western Downgradient Well
NPSH-MW0019	29 to 34	Western Peripheral Well
NPSH-MW0020	29 to 34	Southwestern Downgradient Well
NPSH-MW0022	29 to 34	Southwestern Peripheral Well
<del>MW0057I</del>	<del>29 to 34</del>	<del>5 Year Sample Location: East</del>
<del>MW0060I</del>	<del>29 to 34</del>	<del>5 Year Sample Location: South NADC Plume</del>
<del>MW0062</del>	<del>29 to 34</del>	<del>5 Year Sample Location: North</del>
MW0065	29 to 34	North-Central Well
MW0072	29 to 34	Southern Peripheral Well
MW0080	29 to 34	North-Central Well
<del>MW0081</del>	<del>29 to 34</del>	<del>Northwestern Downgradient Well</del> stable results, peripheral data provided by MW0088, MW0090, and NPSH-MW0019
MW0088	29 to 34	Northwestern Peripheral Well
MW0090	29 to 34	Northern Peripheral Well
MW0097	29 to 34	Western Peripheral Well

**Table 4-1. Proposed 2015 LTM Plan  
Wilson Corners, SWMU 001**





Monitoring Well	Screened Interval (ft BLS)	Rationale
<b>38 to 48 ft BLS</b>		
NPSH-MW0025	40 to 45	Western Downgradient Well
NPSH-MW0039	40 to 45	Western Peripheral Well
<del>MW0057D</del>	<del>40 to 45</del>	<del>5 Year Sample Location: East</del>
<del>MW0094</del>	<del>40 to 45</del>	<del>5 Year Sample Location: North</del>
MW0118	40 to 45	Southern Downgradient Well
MW0120	40 to 45	Replaces Destroyed Southern Peripheral Well
<b>Greater than 48 ft BLS</b>		
<del>MW0052DD</del>	<del>55 to 65</del>	<del>Additional Assessment: Low Flow Sample to Evaluate Well for Potential Hydraulic Connection across the Clay Layer Recommend Abandoning this well</del>
MW0078	65 to 70	Vertical Peripheral Well
<del>MW0083</del>	<del>71 to 76</del>	<del>Vertical/Western Peripheral Well</del>
<del>MW0086</del>	<del>66 to 71</del>	<del>Vertical/Nothern Peripheral Well</del>
MW0130	56 to 66	Low Flow Sample Vertically Beneath the Clay Layer in Hot Spot 2 Area

**Notes:**

1. All samples will be analyzed for volatile organic compounds (VOCs) by EPA Method 8260B.
2. ft BLS indicates feet below land surface.
3. LTM indicates long term monitoring.
4. Red font indicates a change from the 2014 LTM Plan and strikethroughs represent monitoring well removal.



**Legend**

-  LTM Well Location Sampled Annually showing screen interval (ft BLS)
-  Hot Spot 1
-  Hot Spot 2
-  Hot Spot 4

Note:  
 ft BLS indicates feet below land surface.

## SECTION V

### REFERENCES

Florida Department of Environmental Protection, 31 July 2014. Chapter 62-160, Florida Administrative Code, Quality Assurance, Standard Operating Procedures for Field Activities, DEP-SOP-001/01.

National Aeronautics and Space Administration. May 2006. *Wilson Corners SWMU No. 1 Supplemental Site Assessment Report, Kennedy Space Center, Florida, (Revision 0)*, prepared by Geosyntec Consultants, NASA Document Number KSC-TA-8152.

National Aeronautics and Space Administration. March 2011a. *Wilson Corners SWMU No. 1 2010 Annual Long Term Monitoring and Supplemental Assessment Report, Kennedy Space Center, Florida, (Revision 0)*, prepared by Geosyntec Consultants, NASA Document Number KSC-TA-11486.

National Aeronautics and Space Administration. June 2011b. *Sampling and Analysis Plan for the RCRA Corrective Action Program at the Kennedy Space Center, Florida (Revision 4)*, prepared by Geosyntec Consultants, NASA Document Number KSC-TA-6169.

National Aeronautics and Space Administration. January 2013. *Wilson Corners SWMU No. 1 2012 Annual Long Term Monitoring and Supplemental Assessment Report, Kennedy Space Center, Florida, (Revision 0)*, prepared by Geosyntec Consultants.

National Aeronautics and Space Administration. June 2014. *Wilson Corners SWMU 001, 2013 Annual Long Term Monitoring Report, Kennedy Space Center, Florida, (Revision 0)*, prepared by Geosyntec Consultants.



**APPENDIX A**

**REMEDATION TEAM MEETING**  
**MINUTES AND DECISIONS**

## Revision 1 Meeting Minutes for April 23 and 24th, 2015

### Revision 1 Meeting Minutes for April 23 and 24, 2015

#### Attendees:

John Armstrong/FDEP (via telephone)	Jim Langenbach/Geosyntec
Rosalyn Santos-Ebaugh/NASA	Lane Dorman/Geosyntec
Mike Deliz/NASA (via telephone)	Whitney Morrison/Geosyntec
Anne Chrest/NASA	Mike Burcham/Geosyntec
Dinh Vo/NASA	Emily Lawson/Geosyntec
Harry Plaza/NASA	Crystal Towns/Geosyntec (via telephone)
John Matthews/NASA	Mark Speranza/Tetra Tech
Tim Mrdjenovich/IHA	Mark Jonnet/Tetra Tech
Michele Cielukowski/IHA	Jennifer Buel/Tetra Tech
Dan Scarini/IHA	Chris Hook/Tetra Tech
Amanda Beatty/IHA	Harlan Faircloth/ CORE
Guy Fazzio/Jacobs	Gordon Kirkland/FECC
Melissa Hensley/Geosyntec	Scott Starr/Arcadis
Rebecca Daprato/Geosyntec	

1504-M17     Emily Lawson/  
Geosyntec

#### Wilson Corners (SWMU 001)

**Goal:** Present annual long term monitoring, additional assessment monitoring well sampling, and obtain team consensus on proposed 2015 LTM plan.

**Discussion:** The objective of the LTM is to document conditions around downgradient periphery of dissolved plume and select locations internal to the dissolved plume. Based on the sampling results, the downgradient peripheral wells generally delineate the plume to GCTLs. Increasing trends in peripheral monitoring wells in northwest portion of site indicate potential plume migration/expansion. Vertical extents of VOCs were provided by historically sampled monitoring wells screened greater than 60 ft BLS (MW0083 through MW0086, and MW0078). 2014 LTM results indicate:

- MW0078 concentrations of cDCE and VC greater than NADCs,
- MW0130 concentration of VC greater than NADC, and
- MW0052DD VOC concentrations inconsistent with other monitoring wells screened in the same depth interval uncertainty regarding well integrity.

Team consensus reached on proposed 2015 LTM plan as presented in the April 2015 ADP.

Team consensus reached to abandon monitoring well MW0052DD via over-drilling.

## Revision 1 Meeting Minutes for April 23 and 24th, 2015

### Results: Decision items 1504-D68 to D69

Decision No.	Minutes reference	Decision
1504-D68	1504-M17	<u>Wilson Corners (SWMU 001)</u> - Team consensus reached on proposed 2015 LTM plan as presented in the April 2015 ADP.
1504-D69	1504-M17	<u>Wilson Corners (SWMU 001)</u> - Team consensus reached to abandon monitoring well MW0052DD via over-drilling.

**APPENDIX B**

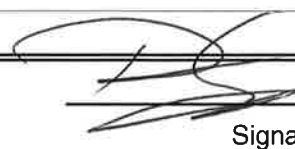
**FIELD FORMS**  
(FURNISHED ON CD ONLY)

Project: <u>Wilson Corners</u>	Date: <u>11/25/14</u>
Project No.: <u>FR0743 C</u>	Task No.: <u>04</u>
Contractors: <u>None</u>	

Work Performed	
Well Installation: _____	Sampling Soil: _____
Soil Borings: _____	Sampling SW/Sediment: _____
DPT: _____	Sampling Monitor Wells: _____
Well Inventory: _____	Sampling Hazardous Waste: _____
Other: _____	Sampling Drums: _____
<u>PDB deployment</u>	

Observations/Issues of Concern
<u>1130 Load Equip / material.</u>
<u>1300 Arrive site, walk site, look for historically hard to find well - 'Could not' locate MW80. Contact FMB to determine if notes from previous events help locate MW80.</u>
<u>1400 Begin Deploy PDBs. Heavy Rain and Flooding conditions, many wells are difficult to access.</u>
<u>1530 due to heavy rain &amp; Flooding, discontinue PDB deployment for the day.</u>
<u>See Attached Field forms for PDBs deployed.</u>

Plans/Future Activities

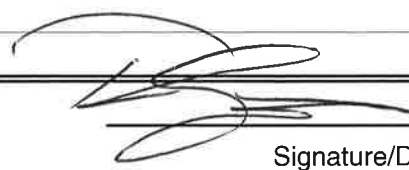

11/25/14  
 Signature/Date

Project: <u>Wilson Corners</u>	Date: <u>11/26/14</u>
Project No.: <u>F20743C</u>	Task No.: <u>84</u>
Contractors: <u>Nine</u>	

Work Performed	
Well Installation: _____	Sampling Soil: _____
Soil Borings: _____	Sampling SW/Sediment: _____
DPT: _____	Sampling Monitor Wells: _____
Well Inventory: _____	Sampling Hazardous Waste: _____
Other: _____	Sampling Drums: _____
_____	
_____	

Observations/Issues of Concern
800 Travel to site
814 Continue PDB deployment - Continue heavy rain and site flooding
1100 Still many wells inaccessible due to heavy rain & flooding. Secure site and depart for office.
See attached field forms for PDBs deployed.

Plans/Future Activities

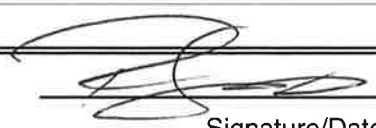
 11/26/14  
Signature/Date

Project: <u>Wilson Corners</u>	Date: <u>12/1/14</u>
Project No.: <u>FL0743C</u>	Task No.: <u>04</u>
Contractors: <u>None</u>	

Work Performed	
Well Installation: _____	Sampling Soil: _____
Soil Borings: _____	Sampling SW/Sediment: _____
DPT: _____	Sampling Monitor Wells: _____
Well Inventory: _____	Sampling Hazardous Waste: _____
Other: _____	Sampling Drums: _____
<u>PDB deployment</u>	

Observations/Issues of Concern
<p>800 load Equip / material. Locate wells that were inaccessible on 11/25 &amp; 11/26 due to Flooding, still standing water in low lying areas across site but all wells are accessible by foot if not by truck.</p> <p>Begin deploying PDBs - see Attached Field forms.</p> <p>1500 Cleanup &amp; secure site.</p> <p>1630 Return to office</p>

Plans/Future Activities


 12/1/14  
Signature/Date

Project: <u>Wilson Corners</u>	Date: <u>12/17/14</u>
Project No.: <u>FR0743 DTC</u>	Task No.: <u>09</u>
Contractors: <u>DMS</u>	

Work Performed	
Well Installation: _____	Sampling Soil: _____
Soil Borings: _____	Sampling SW/Sediment: _____
DPT: _____	Sampling Monitor Wells: _____
Well Inventory: _____	Sampling Hazardous Waste: _____
Other: _____	Sampling Drums: _____
_____	
_____	
_____	

Observations/Issues of Concern
1000 Change fittings and <sup>DMS</sup> procure Procure those and other material needed to pump ~100 gallons for MW52DD.

Plans/Future Activities

  
Signature/Date 12/17/14






Project: <u>Wilson Corneil</u>	Date: <u>12/19/14</u>
Project No.: <u>FR0743C</u>	Task No.: <u>04</u>
Contractors: <u>NONE</u>	

Work Performed	
Well Installation: _____	Sampling Soil: _____
Soil Borings: _____	Sampling SW/Sediment: _____
DPT: _____	Sampling Monitor Wells: _____
Well Inventory: _____	Sampling Hazardous Waste: _____
Other: _____	Sampling Drums: _____
<u>PDB retrieval 1mw sampling.</u>	

Observations/Issues of Concern
<u>730 Load Equipment, Calibrate WQms.</u>
<u>900 Arrive site, set up &amp; begin GW sampling - See attached field forms for sampling details. Purge water added to 21000 Gallon frac tank onsite for LDA work.</u>
<u>1025 Sampling mw52DD complete. Set up and pump 100 Gallons for mw52DD w/ 1/2 hp centrifugal pump, discharging into onsite frac tank. Approx. flow rate 2.5 Gpm. Re-sample mw52DD after removing 100 gallons.</u>
<u>1645 Return to office, unload equip, complete WQm CCV. See attached field forms.</u>

Plans/Future Activities

 12/19/14  
Signature/Date

**Table 2. 2014 LTM  
Wilson Corners, SWMU 001**

Monitoring Well	Screened Interval (ft BLS)	Annual LTM	Deploy Date	Deploy Time	Sample Date	Sample Time
<b>2 to 15 ft BLS</b>						
NPSH-MW0027	10 to 15	VOCs 8260	12/1/14	1049	12/18/14	1127
MW0066	2 to 12	VOCs 8260	11/20/14	942	12/18/14	1407
MW0073	2 to 12	VOCs 8260	11/25/14	1473	12/18/14	1006
MW0074	2 to 12	VOCs 8260	11/25/14	1412	12/18/14	946
MW0091	2 to 12	VOCs 8260	12/1/14	1357	12/18/14	915
MW0095	2 to 12	VOCs 8260	12/1/14	1143	12/18/14	1202
<b>15 to 25 ft BLS</b>						
MW0087	15 to 25	VOCs 8260	12/1/14	1309	12/18/14	836
MW0109	15 to 25	VOCs 8260	12/1/14	1110	12/18/14	1221
MW0115	15 to 25	VOCs 8260	11/25/14	1419	12/18/14	958
MW0116	15 to 25	VOCs 8260	11/25/14	1438	12/18/14	1013
MW0122	15 to 25	VOCs 8260	12/1/14	1472	12/18/14	1020
MW0125	15 to 25	VOCs 8260	12/1/14	1153	12/19/14	1543
MW0126	15 to 25	VOCs 8260	12/1/14	1205	12/18/14	1241
<b>28 to 38 ft BLS</b>						
NPSH-MW0016	29 to 34	VOCs 8260	11/26/14	927	12/18/14	1502
NPSH-MW0017	29 to 34	VOCs 8260	12/1/14	1091	12/18/14	1119
NPSH-MW0019	29 to 34	VOCs 8260	11/20/14	814	12/18/14	1343
NPSH-MW0020	29 to 34	VOCs 8260	12/1/14	1100	12/18/14	1216
NPSH-MW0022	29 to 34	VOCs 8260	12/1/14	1200	12/18/14	1233
MW0065	29 to 34	VOCs 8260	11/20/14	827	12/18/14	1452
MW0072	29 to 34	VOCs 8260	11/20/14	818	12/18/14	1625
MW0080	29 to 34	VOCs 8260	12/1/14	1334	12/19/14	1425
MW0081	29 to 34	VOCs 8260	12/1/14	1340	12/18/14	921
MW0088	29 to 34	VOCs 8260	12/1/14	1312	12/18/14	832
MW0090	29 to 34	VOCs 8260	12/1/14	1330	12/18/14	850
MW0097	29 to 34	VOCs 8260	12/1/14	1140	12/18/14	1208
<b>38 to 48 ft BLS</b>						
NPSH-MW0025	37.5 to 42.5	VOCs 8260	12/1/14	1053	12/19/14	1530
NPSH-MW0039	40 to 45	VOCs 8260	11/20/14	947	12/18/14	1437
MW0118	40 to 45	VOCs 8260	11/25/14	1506	12/18/14	1027
MW0120	40 to 45	VOCs 8260	11/25/14	1455	12/18/14	1039
<b>Greater than 48 ft BLS</b>						
MW0078	65 to 70	VOCs 8260	11/26/14	916	12/18/14	1512

**Notes:**

1. VOCs 8260 indicates volatile organic compound analysis by EPA Method 8260.
2. ft BLS indicates feet below land surface.
3. LTM indicates long term monitoring.
4. SWMU indicates solid waste management unit.

**Table 1. 2014 Depth to Water Measurements  
Wilson Corners, SWMU 001**

Date Collected: 12/8/14

Monitoring Well	Screened Interval (ft BLS)	Rationale	Depth to Water (ft BTOC)	Time
<b>2 to 15 ft BLS</b>				
NPSH-MW0027	10 to 15	Southwestern Downgradient Well	8.35	1126
MW0057S	2 to 12	Eastern Well	4.25	1530 *
MW0066	2 to 12	Western Downgradient Well	4.10	1406
MW0073	2 to 12	Southwestern Peripheral Well	3.84	1006
MW0074	2 to 12	Southwestern Peripheral Well	3.91	945
MW0091	2 to 12	Northwestern Peripheral Well	4.18	914
MW0095	2 to 12	Western Peripheral Well	3.65	1261
<b>15 to 25 ft BLS</b>				
MW0087	15 to 25	Northwestern Peripheral Well	5.42	875
MW0106	15 to 25	Eastern Well	5.00	1532 *
MW0109	15 to 25	Southwestern Downgradient Well	4.65	1220
MW0115	15 to 25	Southwestern Peripheral Well	4.59	958
MW0116	15 to 25	Southern Downgradient Well	4.50	1012
MW0122	15 to 25	Southern Peripheral Well	3.75	1020
MW0125	15 to 25	Western Peripheral Well	4.08	1542
MW0126	15 to 25	Western Peripheral Well	5.54	1240
<b>28 to 38 ft BLS</b>				
NPSH-MW0016	29 to 34	Northwestern Downgradient Well	3.51	1502
NPSH-MW0017	29 to 34	Western Downgradient Well	2.50	1119
NPSH-MW0019	29 to 34	Western Peripheral Well	3.25	1342
NPSH-MW0020	29 to 34	Southwestern Downgradient Well	4.44	1215
NPSH-MW0022	29 to 34	Southwestern Peripheral Well	2.95	1232
MW0057I	29 to 34	Eastern Well	4.01	1535 *
MW0065	29 to 34	Northwest Downgradient Well	3.94	1451
MW0072	29 to 34	Southern Peripheral Well	3.69	1625
MW0080	29 to 34	Northwestern Downgradient Well	1.35	1624
MW0081	29 to 34	Northwestern Downgradient Well	0.65	920
MW0088	29 to 34	Northwestern Peripheral Well	5.50	831
MW0090	29 to 34	Northern Peripheral Well	4.724 from	850
MW0097	29 to 34	Western Peripheral Well	3.75	1207
<b>38 to 48 ft BLS</b>				
NPSH-MW002523	40 to 45	Western Downgradient Well	2.00	1125
NPSH-MW0039	40 to 45	Western Peripheral Well	1.72	1436
MW0057D	40 to 45	Eastern Well	4.25	1539 *
MW0118	40 to 45	Southern Downgradient Well	4.96	1026
MW0120	40 to 45	Southern Downgradient Well	5.08	1038
<b>Greater than 48 ft BLS</b>				
MW0078	65 to 70	Vertical Peripheral Well	4.96	1511
MW0131	58 to 60	Vertical Impacted Well	4.35	1645

**Notes:**

1. ft BLS indicates feet below land surface.
2. SWMU indicates solid waste management unit.

*Handwritten notes:*  
~~MW 89 5.55 1523~~  
~~MW 52 DP 3.54 1526~~  
~~MW 64~~

*Handwritten notes:*  
 MW 89 4.97 855  
 MW 52 DP 5.55 1523  
 MW 64 3.54 1526  
 MW 130 4.09 1520

\* Monitoring wells MW0057S, MW0057I, MW0057D, and MW0106 are near the current large diameter auger treatment area which may affect groundwater elevation.

**Monitoring Well Sampling**

Site: Wilson Corners Project No.: F20743B Task: 04 Date: 12/19/14 Sampled By: D. Sizemore  
 Station (Well ID): mw064 Purge Method: Pump Bailer Pump Type: \_\_\_ Submersible (\_\_\_ Teflon \_\_\_ SS \_\_\_ Other) Peristaltic \_\_\_ Centrifugal \_\_\_ Bladder  
 Pump (Make & Model): Coopump Purge Rate: 2.1 gpm Water Quality Meter (Make & Model) YSI 556 Water Level Meter: Solinst  
 Time @ Start of Purging: 1430 Time @ End of Purging: 1510 Total Purging Time: 40 min Depth of Pump or Intake Tubing: 37.5 ft. (BTOC) 7.8  
 Water Level: 3.54' bTOC Total Well Depth: 12' bLS Reference: 2'-12' bLS Well diameter: 2 in. Volume in well: 1.35  
(12 - 3.54) x .16

Time (hrs)	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Color	Comments
1500	Start 3.0	24.01	7.09	.579	19.5	.26	-40.9	-	.34	Brown	
1505	3.5	24.02	7.08	.579	12.8	.27	-41.0	-	.34	"	
1510	4.0	24.03	7.07	.580	13.0	.27	-41.2	-	.35	"	

Correction Factors: (2" use 0.163, 4" use 0.653, 6" use 1.469)

Note: When purging well with pump or intake tubing within the well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.  
 Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 1/4 well volume until purging requirements are satisfied.  
 Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature: ± 0.2 °C; pH: ± 0.2 standard units; Specific Conductance: ± 5.0% of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity ≤ 20 NTUs  
 If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO ± 0.2 mg/L or 10%, whichever is greater; and Turbidity ± 5 NTUs or 10%, whichever is greater  
 For high turbidity and DO, check flow through cell for air bubbles, which may be causing erroneous readings. Turbidity should be verified visually and with a separate Turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Check water quality meter calibration before using again.

MILC - mw064 - 007-B - 2014/12/19  
 Sample ID: \_\_\_\_\_ Time Collected: 1510 Comments: VOC  
 When using 3/16-in. ID tubing EV= ((0.041) (0.035x tubing length))+0.5(flow tru vol)= \_\_\_ gal

**Monitoring Well Sampling**

Site: Wilson Corners Project No.: F20743B Task: 04 Date: 12/19/14 Sampled By: D. Sizemore  
 Station (Well ID): MW 89 Purge Method: Pump ~~Boiler~~ Pump Type: \_\_\_ Submersible (\_\_\_ Teflon \_\_\_ SS \_\_\_ Other) Peristaltic \_\_\_ Centrifugal \_\_\_ Bladder  
 Pump (Make & Model): Geopump Purge Rate: ~1 gpm Water Quality Meter (Make & Model) YCF556 Water Level Meter: Solinst  
 Time @ Start of Purging: 915 Time @ End of Purging: 940 Total Purging Time: 25 min. Depth of Pump or Intake Tubing: 22.5 ft. (BTOC)  
 Water Level: 4.97' Total Well Depth: 25' b1s Reference: 15'-25' b1s Well diameter: 1 in. Volume in well: NA

Time (hrs)	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Color	Comments
930	1.5 Start	22.19	7.00	.756	6.3	.39	-119.2	—	.43	Clear	
935	2.0	22.20	7.02	.756	5.9	.39	-120.1	—	.43	—	
940	2.5	22.21	7.01	.756	6.1	.39	-121.1	—	.43	—	

Correction Factors: (2" use 0.163, 4" use 0.653, 6" use 1.469)

Note: When purging well with pump or intake tubing within the well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.  
 Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 1/4 well volume until purging requirements are satisfied.  
 Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature: ± 0.2 °C; pH: ± 0.2 standard units; Specific Conductance: ± 5.0% of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity ≤ 20 NTUs  
 If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO ± 0.2 mg/L or 10%, whichever is greater; and Turbidity ± 5 NTUs or 10%, whichever is greater

Sample ID: **WILC-MW0089-020.0-20141219**

~~WILC-MW0089-022.5-20141219~~ Sample ID: \_\_\_\_\_ Time Collected: 944 Comments: Volcs

When using 3/16-in. ID tubing EV= ((0.041) (0.035x tubing length))+0.5(flow tru vol)= 1 gal

$(25-5) \times .0026 + .3(\text{Flow through}) = .35$

**Monitoring Well Sampling**

Site: Wilson Corners Project No.: FRT043B Task: 04 Date: 12/19/14 Sampled By: D. Szemore

Station (Well ID): MW52 DD Purge Method: Pump Bailer \_\_\_\_\_ Pump Type: \_\_\_\_\_ Submersible (\_\_\_\_ Teflon \_\_\_\_ SS \_\_\_\_ Other) Peristaltic \_\_\_\_\_ Centrifugal \_\_\_\_\_ Bladder \_\_\_\_\_

Pump (Make & Model): 6000mp Purge Rate: ~.07 gpm Water Quality Meter (Make & Model) YSI 556 Water Level Meter: SOLINST

Time @ Start of Purging: ~~945~~ 948 Time @ End of Purging: 1025 Total Purging Time: 37 Depth of Pump or Intake Tubing: 57.5' ft. (BTOC)

Water Level: 555' Total Well Depth: 60' b15 Reference: 55'-60' b15 Well diameter: 1 in. Volume in well: NA

Time (hrs)	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Color	Comments
1015	3.0 Start	23.09	6.76	5.769	2.5	3.13	81.6	—	3.75	Clear	
1020	3.5	23.15	6.78	5.772	1.9	3.14	80.0	—	3.76	u	
1025	4.0	23.16	6.79	5.775	2.5	3.14	80.4	—	3.76	u	

Correction Factors: (2" use 0.163, 4" use 0.653, 6" use 1.469)

Note: When purging well with pump or intake tubing within the well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 1/4 well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature: ± 0.2 °C; pH: ±0.2 standard units; Specific Conductance: ± 5.0% of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity ≤ 20 NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO ± 0.2 mg/L or 10%, whichever is greater; and Turbidity ± 5 NTUs or 10%, whichever is greater

**WILC-MW0052DD-060.0-20141219** For high turbidity and DO check flow through cell for air bubbles, which may be causing erroneous readings. Turbidity should be verified visually and with a separate meter. A check should be made to get the parameters within the specified limits. Check water quality meter calibration before using again.

~~WILC-MW0052DD-057.5-20141219~~ Sample ID: \_\_\_\_\_ Time Collected: 1025 Comments: Remove 100 Gallons @ ~ 2.5 Gpm AFTER

When using 3/16-in. ID tubing EV= ((0.041) (0.035x tubing length))+0.5(flow thru vol)= gal  
(60 - 5.6) x .0026 + .3 (Flow through) = .4 Collecting this sample

**Monitoring Well Sampling**

Site: Wilson Corners Project No.: FRO143B Task: 04 Date: 12/19/14 Sampled By: D. Sizamore  
 Station (Well ID): MW130 Purge Method: Pump Bailer \_\_\_\_\_ Pump Type: Peristaltic Submersible (    Teflon    SS    Other) \_\_\_\_\_ Centrifugal \_\_\_\_\_ Bladder \_\_\_\_\_  
 Pump (Make & Model): Geopump Purge Rate: 2.1 gpm Water Quality Meter (Make & Model): YSF 556 Water Level Meter: Solinst  
 Time @ Start of Purging: 1205 Time @ End of Purging: 1240 Total Purging Time: 35min Depth of Pump or Intake Tubing: 61' ft. (BTOC)  
 Water Level: 4.09' Total Well Depth: 66' Reference: 56'-66' bbs Well diameter: 2 in. Volume in well: NA

Time (hrs)	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Color	Comments
1225	Start 2	24.44	7.14	5.556	3.9	3.01	<del>3.63</del> -56.4	—	3.64	Clear	
1230	2.5	24.38	7.13	5.559	4.1	3.01	-58.3	—	3.66	"	
1235	3.0	24.39	7.12	5.595	3.7	3.05	-59.9	—	3.67	"	
1240	3.5	24.44	7.12	5.600	4.1	3.06	-70.5	—	3.68	"	

Correction Factors: (2" use 0.163, 4" use 0.653, 6" use 1.469)

Note: When purging well with pump or intake tubing within the well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.  
 Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.  
 Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature: ± 0.2 °C; pH: ± 0.2 standard units; Specific Conductance: ± 5.0% of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity ≤ 20 NTUs  
 If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO ± 0.2 mg/L or 10%, whichever is greater; and Turbidity ± 5 NTUs or 10%, whichever is greater  
 For high turbidity and DO, check flow through cell for air bubbles, which may be causing erroneous readings. Turbidity should be verified visually and with a separate Turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Check water quality meter calibration before using again.

Sample ID: WILC - MW0130 - 001.0 - 20141219 Time Collected: 1240 Comments: VOCs

When using 3/16-in. ID tubing EV = ((0.041) (0.035x tubing length)) + 0.5(flow thru vol) =    gal

$(66 - 4.1) \times .0026 + .3 (\text{Flow through}) = .19$



**Monitoring Well Sampling**

Site: Wilson Corners Project No.: FROTH3B Task: 04 Date: 12/19/14 Sampled By: D. Siemore  
 Station (Well ID): MW052DD Purge Method: Pump Bailer \_\_\_\_\_ Pump Type: \_\_\_\_\_ Submersible (\_\_\_\_ Teflon \_\_\_\_ SS \_\_\_\_ Other) Peristaltic \_\_\_\_\_ Centrifugal \_\_\_\_\_ Bladder \_\_\_\_\_  
 Pump (Make & Model): Geopump Purge Rate: 2.1 gpm Water Quality Meter (Make & Model) YSI 556 Water Level Meter: Solinst  
 Time @ Start of Purging: 1253 Time @ End of Purging: 1350 Total Purging Time: 57 min. Depth of Pump or Intake Tubing: 57.5 ft. (BTOC)  
 Water Level: 5.55' BTOC Total Well Depth: 60' b1s Reference: 55'-60' b1s Well diameter: 1 in. Volume in well: NA

Time (hrs)	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Appearance Color	Comments
<u>1253</u>	<u>6.0 Start</u>	<u>23.59</u>	<u>6.98</u>	<u>5.891</u>	<u>103</u>	<u>3.20</u>	<u>-0.1</u>	<u>—</u>	<u>3.83</u>	<u>Cloudy</u>	
<u>1335</u>	<u>6.04</u>	<u>23.59</u>	<u>6.97</u>	<u>5.886</u>	<u>76.9</u>	<u>3.19</u>	<u>-3.0</u>	<u>—</u>	<u>3.82</u>	<u>Clear</u>	
<u>1340</u>	<u>6.54</u>	<u>23.58</u>	<u>6.97</u>	<u>5.891</u>	<u>15.6</u>	<u>3.20</u>	<u>-5.4</u>	<u>—</u>	<u>3.83</u>	<u>u</u>	
<u>1345</u>	<u>7.04</u>	<u>23.58</u>	<u>6.96</u>	<u>5.878</u>	<u>10.3</u>	<u>3.19</u>	<u>-8.9</u>	<u>—</u>	<u>3.82</u>	<u>u</u>	
<u>1350</u>	<u>7.5</u>	<u>23.84</u>	<u>6.96</u>	<u>5.879</u>	<u>9.7</u>	<u>3.19</u>	<u>-11.0</u>	<u>—</u>	<u>3.81</u>	<u>u</u>	

Correction Factors: (2" use 0.163, 4" use 0.653, 6" use 1.469)

Note: When purging well with pump or intake tubing within the well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.  
 Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.  
 Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature: ± 0.2 °C; pH: ± 0.2 standard units; Specific Conductance: ± 5.0% of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity ≤ 20 NTUs  
 If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO ± 0.2 mg/L or 10%, whichever is greater; and Turbidity ± 5 NTUs or 10%, whichever is greater

WILC-MW0052DD-060.0-20141219-R for air bubbles, which may be causing erroneous readings. Turbidity should be verified visually and with a separate meter made to get the parameters within the specified limits. Check water quality meter calibration before using again.

Sample ID: WILC-MW0052DD-057.5-20141219 Time Collected: 1350 Comments: AFTER pumping out 100 Gallons @ ~

When using 3/16-in. ID tubing EV = ((0.041) (0.035x tubing length)) + 0.5(flow thru vol) = 1 gal  
 $(60 - 5.6) \times 0.0026 + 0.3 (\text{Flow through}) = 14$

2.5 @ pmv

**Geosyntec Consultants  
Water Quality Instrument Calibration Form**

Project/Site: Wilson Corners

Project #: FRO743C

Field Personnel: D. Sizemore

YSI 556 MPS

Turbidimeter - Model/Serial #

Hach 2100

Water Quality Meter - Model/Serial #:

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L) <sup>1</sup>	Reading (mg/L)	Reading (%)	Pass or Fail
CAL ICV CCV		12/19/14	819	21.60	8.812			P F
CAL ICV CCV		<del>12/19/14</del>	<del>1745</del>	<del>22.2</del>	<del>8.71</del>	Acceptance Criteria: +/- 0.3 mg/L <i>See Comments</i>		P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (mS/cm)	Standard Lot #	Standard Exp. Date	Reading (mS/cm)	Pass or Fail
CAL ICV CCV		12/19/14	824	1.413	3AK643	11/16	1.33-1.413	P F
CAL ICV CCV		<del>12/19/14</del>	<del>1745</del>	<del>1.413</del>	<del>3AK643</del>	<del>11/16</del>	<del>1.415</del>	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
CAL ICV CCV		12/19/14	825	7.00	2402961	2/16	7.11-7.00	P F
CAL ICV CCV			829	4.00	2312485	12/15	4.10-4.00	P F
CAL ICV CCV			835	10.00	2404751	10/15	10.00-10.00	P F
CAL ICV CCV		12/19/14	1750	7	SAME		7.10	P F
CAL ICV CCV			1751	9			4.10	P F
CAL ICV CCV			1752	10			10.05	P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
CAL ICV CCV		12/19/14	836	240e25	5701	2/16	240-4	P F
CAL ICV CCV							241-1-2400	P F
CAL ICV CCV							241-5	P F
CAL ICV CCV								P F

0.1 - 10 NTU	Std 10 NTU	Date	Reading (NTU)	Pass or Fail
CAL ICV CCV		12/19/14	10.1	P F
CAL ICV CCV		12/19/14	10.2	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

11 - 40 NTU	Std 20 NTU	Date	Reading (NTU)	Pass or Fail
CAL ICV CCV		12/19/14	20.0	P F
CAL ICV CCV		12/19/14	20.0	P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

41 - 100 NTU	Std ___ NTU	Date	Reading (NTU)	Pass or Fail
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

>100 NTU	Std ___ NTU	Date	Reading (NTU)	Pass or Fail
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Specific Conductance Probe Cleaned? Yes No      Dissolved Oxygen membrane Changed? Yes No

1. See Table FS 2200-2 on the back of this form  
 CAL - Initial Calibration  
 ICV - Initial Calibration Verification  
 CCV - Continuing Calibration Verification  
 Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration  
 Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)  
 Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)  
 If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments: DO meter broken - failed to change membrane (not helpful)



## **APPENDIX C**

### **LABORATORY ANALYTICAL REPORTS (FURNISHED ON CD ONLY)**



January 12, 2015

Service Request No:J1409873

Emily Lawson  
Geosyntec Consultants  
6770 South Washington Ave  
Suite 3  
Titusville, FL 32780

**Laboratory Results for: Wilson Corners**

Dear Emily,

Enclosed are the results of the sample(s) submitted to our laboratory December 22, 2014  
For your reference, these analyses have been assigned our service request number **J1409873**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at [Craig.Myers@alsglobal.com](mailto:Craig.Myers@alsglobal.com).

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

Craig Myers  
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256  
PHONE +1 904 739 2277 | FAX +1 904 739 2011  
ALS Group USA, Corp.  
dba ALS Environmental



**SAMPLE DETECTION SUMMARY**

**CLIENT ID: WILC-NPSH-MW0027-012.5-20141218      Lab ID: J1409873-001**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	880		7.2	20	ug/L	8260B
Dichlorodifluoromethane	470		4.7	400	ug/L	8260B
trans-1,2-Dichloroethene	13	I	3.8	20	ug/L	8260B
Vinyl Chloride	3000		7.2	20	ug/L	8260B

**CLIENT ID: WILC-MW0066-007.0-20141218      Lab ID: J1409873-002**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.38	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0073-007.0-20141218      Lab ID: J1409873-003**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.42	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0074-007.0-20141218      Lab ID: J1409873-004**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.44	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0087-020.0-20141218      Lab ID: J1409873-007**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.73	I	0.36	1.0	ug/L	8260B
cis-1,2-Dichloroethene	1.5		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	3.3	I	0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	0.21	I	0.19	1.0	ug/L	8260B
Vinyl Chloride	20		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0109-020.0-20141218      Lab ID: J1409873-008**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	4.6		1.5	4.0	ug/L	8260B
Dichlorodifluoromethane	5.6	I	0.92	80	ug/L	8260B
trans-1,2-Dichloroethene	2.6	I	0.76	4.0	ug/L	8260B
Vinyl Chloride	28		1.5	4.0	ug/L	8260B

**CLIENT ID: WILC-MW0116-020.0-20141218      Lab ID: J1409873-010**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	6.1		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	38		0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	3.0		0.19	1.0	ug/L	8260B
Vinyl Chloride	100		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0125-020.0-20141219      Lab ID: J1409873-012**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.49	I	0.36	1.0	ug/L	8260B



**SAMPLE DETECTION SUMMARY**

**CLIENT ID: WILC-MW0126-020.0-20141218** **Lab ID: J1409873-013**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.46	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-NPSH-MW0016-031.5-20141218** **Lab ID: J1409873-014**

Analyte	Results	Flag	MDL	PQL	Units	Method
1,1-Dichloroethene (1,1-DCE)	3.7	I	0.80	5.0	ug/L	8260B
cis-1,2-Dichloroethene	550		1.8	5.0	ug/L	8260B
Dichlorodifluoromethane	790		1.2	100	ug/L	8260B
trans-1,2-Dichloroethene	16		0.95	5.0	ug/L	8260B
Trichloroethene (TCE)	2.3	I	1.8	5.0	ug/L	8260B
Vinyl Chloride	5100		18	50	ug/L	8260B

**CLIENT ID: WILC-NPSH-MW0017-031.5-20141218** **Lab ID: J1409873-015**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	110		18	50	ug/L	8260B
Dichlorodifluoromethane	260	I	12	1000	ug/L	8260B
Methylene Chloride	24	I	11	250	ug/L	8260B
Vinyl Chloride	6000		18	50	ug/L	8260B

**CLIENT ID: WILC-NPSH-MW0019-031.5-20141218** **Lab ID: J1409873-016**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	0.91	I	0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	1.7	I	0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	0.68	I	0.19	1.0	ug/L	8260B
Vinyl Chloride	8.7		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-NPSH-MW0020-031.5-20141218** **Lab ID: J1409873-017**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	0.63	I	0.36	1.0	ug/L	8260B
trans-1,2-Dichloroethene	1.0		0.19	1.0	ug/L	8260B
Vinyl Chloride	2.0		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-NPSH-MW0022-031.5-20141218** **Lab ID: J1409873-018**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.36	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0065-031.5-20141218** **Lab ID: J1409873-019**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	78		7.2	20	ug/L	8260B
Dichlorodifluoromethane	450		4.7	400	ug/L	8260B
Tetrachloroethene (PCE)	4.8	I	4.4	20	ug/L	8260B
trans-1,2-Dichloroethene	14	I	3.8	20	ug/L	8260B
Vinyl Chloride	1700		7.2	20	ug/L	8260B



**SAMPLE DETECTION SUMMARY**

**CLIENT ID: WILC-MW0072-031.5-20141218** **Lab ID: J1409873-020**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.66	I	0.36	1.0	ug/L	8260B
cis-1,2-Dichloroethene	0.39	I	0.36	1.0	ug/L	8260B
Vinyl Chloride	0.62	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0080-031.5-20141219** **Lab ID: J1409873-021**

Analyte	Results	Flag	MDL	PQL	Units	Method
1,1-Dichloroethene (1,1-DCE)	0.96	I	0.16	1.0	ug/L	8260B
Bromodichloromethane	0.37	I	0.22	1.0	ug/L	8260B
cis-1,2-Dichloroethene	190		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	880		5.8	500	ug/L	8260B
trans-1,2-Dichloroethene	13		0.19	1.0	ug/L	8260B
Trichloroethene (TCE)	0.40	I	0.36	1.0	ug/L	8260B
Vinyl Chloride	2500		9.0	25	ug/L	8260B

**CLIENT ID: WILC-MW0081-031.5-20141218** **Lab ID: J1409873-022**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	0.88	I	0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	3.3	I	0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	0.38	I	0.19	1.0	ug/L	8260B
Vinyl Chloride	12		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0088-031.5-20141218** **Lab ID: J1409873-023**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	5.5		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	23		0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	2.6		0.19	1.0	ug/L	8260B
Vinyl Chloride	130		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0090-031.5-20141218** **Lab ID: J1409873-024**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.52	I	0.36	1.0	ug/L	8260B
cis-1,2-Dichloroethene	4.7		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	5.3	I	0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	0.68	I	0.19	1.0	ug/L	8260B
Vinyl Chloride	42		7.2	20	ug/L	8260B

**CLIENT ID: WILC-MW0097-031.5-20141218** **Lab ID: J1409873-025**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	4.8		0.72	2.0	ug/L	8260B
Dichlorodifluoromethane	9.4	I	0.46	40	ug/L	8260B
trans-1,2-Dichloroethene	1.8	I	0.38	2.0	ug/L	8260B
Vinyl Chloride	21		0.72	2.0	ug/L	8260B



**SAMPLE DETECTION SUMMARY**

**CLIENT ID: WILC-NPSH-MW0025-042.5-20141219**      **Lab ID: J1409873-026**

Analyte	Results	Flag	MDL	PQL	Units	Method
Chloromethane	0.52	I	0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	0.39	I	0.23	20	ug/L	8260B
Vinyl Chloride	0.37	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-NPSH-MW0039-042.5-20141218**      **Lab ID: J1409873-027**

Analyte	Results	Flag	MDL	PQL	Units	Method
Dichlorodifluoromethane	0.39	I	0.23	20	ug/L	8260B
Vinyl Chloride	0.74	I	0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0118-042.5-20141218**      **Lab ID: J1409873-028**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	1.4		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	5.2	I	0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	0.50	I	0.19	1.0	ug/L	8260B
Vinyl Chloride	9.3		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0120-042.5-20141218**      **Lab ID: J1409873-029**

Analyte	Results	Flag	MDL	PQL	Units	Method
Dichlorodifluoromethane	0.23	I	0.23	20	ug/L	8260B

**CLIENT ID: WILC-MW0078-067.5-20141218**      **Lab ID: J1409873-030**

Analyte	Results	Flag	MDL	PQL	Units	Method
1,1-Dichloroethene (1,1-DCE)	6.9		0.16	1.0	ug/L	8260B
cis-1,2-Dichloroethene	2300		9.0	25	ug/L	8260B
Dichlorodifluoromethane	2.3	I	0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	19		0.19	1.0	ug/L	8260B
Trichloroethene (TCE)	3.3		0.36	1.0	ug/L	8260B
Vinyl Chloride	260		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0089-020.0-20141219**      **Lab ID: J1409873-031**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	0.38	I	0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	0.28	I	0.23	20	ug/L	8260B
Vinyl Chloride	28	I	18	50	ug/L	8260B

**CLIENT ID: WILC-MW0052DD-060.0-20141219**      **Lab ID: J1409873-032**

Analyte	Results	Flag	MDL	PQL	Units	Method
1,1-Dichloroethene (1,1-DCE)	84		8.0	50	ug/L	8260B
cis-1,2-Dichloroethene	26000		180	500	ug/L	8260B
Dichlorodifluoromethane	46	I	12	1000	ug/L	8260B
trans-1,2-Dichloroethene	80		9.5	50	ug/L	8260B
Trichloroethene (TCE)	19000		180	500	ug/L	8260B
Trichlorofluoromethane	19	I	12	1000	ug/L	8260B
Vinyl Chloride	5900		180	500	ug/L	8260B



**SAMPLE DETECTION SUMMARY**

**CLIENT ID: WILC-MW0130-061.0-20141219** **Lab ID: J1409873-033**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	11		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	17	I	0.23	20	ug/L	8260B
Trichloroethene (TCE)	6.7		0.36	1.0	ug/L	8260B
Vinyl Chloride	150		0.36	1.0	ug/L	8260B

**CLIENT ID: WILC-MW0052DD-060.0-20141219** **Lab ID: J1409873-034**

Analyte	Results	Flag	MDL	PQL	Units	Method
1,1-Dichloroethene (1,1-DCE)	59		8.0	50	ug/L	8260B
cis-1,2-Dichloroethene	21000		72	200	ug/L	8260B
Dichlorodifluoromethane	50	I	12	1000	ug/L	8260B
trans-1,2-Dichloroethene	51		9.5	50	ug/L	8260B
Trichloroethene (TCE)	15000		72	200	ug/L	8260B
Trichlorofluoromethane	19	I	12	1000	ug/L	8260B
Vinyl Chloride	3600		72	200	ug/L	8260B

**CLIENT ID: WILC-MW0064-007.8-20141219** **Lab ID: J1409873-035**

Analyte	Results	Flag	MDL	PQL	Units	Method
cis-1,2-Dichloroethene	26		0.36	1.0	ug/L	8260B
Dichlorodifluoromethane	0.55	I	0.23	20	ug/L	8260B
trans-1,2-Dichloroethene	1.2		0.19	1.0	ug/L	8260B
Trichloroethene (TCE)	4.5		0.36	1.0	ug/L	8260B
Vinyl Chloride	23		0.36	1.0	ug/L	8260B



**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Received:** 12/22/14

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Thirty-six water samples were received for analysis at ALS Environmental on 12/22/14. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $\leq 6^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

#### Volatile Organic Analyses:

Method 8260B: The upper control criterion was exceeded for a couple surrogates in some of the samples and associated QC. No target analytes associated to the surrogates in question were detected in the samples above the Method Reporting Limit (MRL). The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected and no further corrective action was appropriate.

Method 8260B: The upper control criterion was exceeded for the following analyte in Laboratory Control Samples (LCS/DLCS) JQ1409964-01 and -02: 1,2-Dichloroethane. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected and no further corrective action was appropriate.

Method 8260B: The upper control criterion was exceeded for the following analyte in Laboratory Control Sample (LCS) JQ1409964-01: Chloroform. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected and no further corrective action was appropriate.

Method 8260B: The upper control criterion was exceeded for the following analyte in Laboratory Control Sample (LCS) JQ1410021-01: Chloromethane. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected and no further corrective action was appropriate.

Method 8260B: The lower control criterion was exceeded for the following analyte in the Duplicate Laboratory Control Sample (DLCS) JQ1410021-02: 1,4-Dichlorobenzene. The analyte in question was not detected in the associated field samples. Since the analyte was detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Method 8260B: Several samples required dilution due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilution.

Approved by  Date 1/12/2015

### State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Department of Defense	66206	9/20/2016
Florida Department of Health	E82502	6/30/2015
Georgia Department of Natural Resources	958	6/30/2015
Kentucky Division of Waste Management	63	6/30/2015
Louisiana Department of Environmental Quality	02086	6/30/2015
Maine Department of Health and Human Services	2011006	2/3/2015
North Carolina Department of Environment and Natural Resources	527	12/31/2015
Pennsylvania Department of Environmental Protection	68-04835	8/31/2015
South Carolina Department of Health and Environmental Control	96021001	6/30/2015
Texas Commision on Environmental Quality	T104704197-13-5	5/31/2015
Virginia Environmental Accreditation Program	460191	12/14/2015

## Data Qualifiers

### Florida-DEP

- ! Data deviates from historically established concentration ranges
- \* Not reported due to interference
- ? Data is rejected and should not be used
- A Value reported is the arithmetic mean of two or more determinations
- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- E Extra samples were taken at composite stations
- H Value based on field kit determination; results may not be accurate.
- I The reported value is between the laboratory method detection limit and the laboratory PQL.
- J Estimated value.
- K Off scale low. The value is less than the lowest calibration standard.
- L Off scale high. The analyte is above the acceptable level of quantitation.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified.
- N Presumptive evidence of presence of material.
- O Sampled, but analysis lost or not performed
- Q Sample held beyond the acceptable holding time.
- R Significant rain in the past 48 hours (typically in excess of 0.5 inches)
- T Estimated value, less than the MDL
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- X Insufficient individuals were present in the sample to achieve a minimum of 280 organisms for identification (Stream Condition Index Analysis only)
- Y The laboratory analysis was from an unpreserved or improperly preserved sample.
- Z Too many colonies were present, the numeric value represents the filtration volume

# ALS Laboratory Group

---

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04

**Service Request:**J1409873

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1409873-001	WILC-NPSH-MW0027-012.5-20141218	12/18/2014	1127
J1409873-002	WILC-MW0066-007.0-20141218	12/18/2014	1407
J1409873-003	WILC-MW0073-007.0-20141218	12/18/2014	1006
J1409873-004	WILC-MW0074-007.0-20141218	12/18/2014	0946
J1409873-005	WILC-MW0091-007.0-20141218	12/18/2014	0915
J1409873-006	WILC-MW0095-007.0-20141218	12/18/2014	1202
J1409873-007	WILC-MW0087-020.0-20141218	12/18/2014	0836
J1409873-008	WILC-MW0109-020.0-20141218	12/18/2014	1221
J1409873-009	WILC-MW0115-020.0-20141218	12/18/2014	0958
J1409873-010	WILC-MW0116-020.0-20141218	12/18/2014	1013
J1409873-011	WILC-MW0122-020.0-20141218	12/18/2014	1020
J1409873-012	WILC-MW0125-020.0-20141219	12/19/2014	1543
J1409873-013	WILC-MW0126-020.0-20141218	12/18/2014	1241
J1409873-014	WILC-NPSH-MW0016-031.5-20141218	12/18/2014	1502
J1409873-015	WILC-NPSH-MW0017-031.5-20141218	12/18/2014	1119
J1409873-016	WILC-NPSH-MW0019-031.5-20141218	12/18/2014	1343
J1409873-017	WILC-NPSH-MW0020-031.5-20141218	12/18/2014	1216
J1409873-018	WILC-NPSH-MW0022-031.5-20141218	12/18/2014	1233
J1409873-019	WILC-MW0065-031.5-20141218	12/18/2014	1452
J1409873-020	WILC-MW0072-031.5-20141218	12/18/2014	1625
J1409873-021	WILC-MW0080-031.5-20141219	12/19/2014	1425
J1409873-022	WILC-MW0081-031.5-20141218	12/18/2014	0921
J1409873-023	WILC-MW0088-031.5-20141218	12/18/2014	0832
J1409873-024	WILC-MW0090-031.5-20141218	12/18/2014	0850
J1409873-025	WILC-MW0097-031.5-20141218	12/18/2014	1208
J1409873-026	WILC-NPSH-MW0025-042.5-20141219	12/19/2014	1530
J1409873-027	WILC-NPSH-MW0039-042.5-20141218	12/18/2014	1437
J1409873-028	WILC-MW0118-042.5-20141218	12/18/2014	1027
J1409873-029	WILC-MW0120-042.5-20141218	12/18/2014	1039
J1409873-030	WILC-MW0078-067.5-20141218	12/18/2014	1512
J1409873-031	WILC-MW0089-020.0-20141219	12/19/2014	0944
J1409873-032	WILC-MW0052DD-060.0-20141219	12/19/2014	1025
J1409873-033	WILC-MW0130-061.0-20141219	12/19/2014	1240
J1409873-034	WILC-MW0052DD-060.0-20141219	12/19/2014	1350
J1409873-035	WILC-MW0064-007.8-20141219	12/19/2014	1510
J1409873-036	Trip Blank	12/18/2014	0000

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 11:27  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0027-012.5-20141218  
**Lab Code:** J1409873-001

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	3.5 U	20	3.5	20	12/30/14 04:08	
1,1,2,2-Tetrachloroethane	5.8 U	20	5.8	20	12/30/14 04:08	
1,1,2-Trichloroethane	8.0 U	20	8.0	20	12/30/14 04:08	
1,1-Dichloroethane (1,1-DCA)	6.0 U	20	6.0	20	12/30/14 04:08	
1,1-Dichloroethene (1,1-DCE)	3.2 U	20	3.2	20	12/30/14 04:08	
1,2-Dichlorobenzene	9.6 U	20	9.6	20	12/30/14 04:08	
1,2-Dichloroethane	4.4 U	20	4.4	20	12/30/14 04:08	*
1,2-Dichloropropane	3.8 U	20	3.8	20	12/30/14 04:08	
1,3-Dichlorobenzene	4.4 U	20	4.4	20	12/30/14 04:08	
1,4-Dichlorobenzene	3.2 U	20	3.2	20	12/30/14 04:08	
Bromochloromethane	5.4 U	100	5.4	20	12/30/14 04:08	
Bromodichloromethane	4.4 U	20	4.4	20	12/30/14 04:08	
Bromoform	8.4 U	40	8.4	20	12/30/14 04:08	
Bromomethane	4.7 U	100	4.7	20	12/30/14 04:08	
Carbon Tetrachloride	6.9 U	20	6.9	20	12/30/14 04:08	
Chlorobenzene	3.2 U	20	3.2	20	12/30/14 04:08	
Chloroethane	11 U	100	11	20	12/30/14 04:08	
Chloroform	7.0 U	20	7.0	20	12/30/14 04:08	*
Chloromethane	7.2 U	20	7.2	20	12/30/14 04:08	
cis-1,2-Dichloroethene	<b>880</b>	20	7.2	20	12/30/14 04:08	
cis-1,3-Dichloropropene	4.0 U	20	4.0	20	12/30/14 04:08	
Dibromochloromethane	4.2 U	20	4.2	20	12/30/14 04:08	
Dichlorodifluoromethane	<b>470</b>	400	4.7	20	12/30/14 04:08	
Methylene Chloride	4.2 U	100	4.2	20	12/30/14 04:08	
Tetrachloroethene (PCE)	4.4 U	20	4.4	20	12/30/14 04:08	
trans-1,2-Dichloroethene	<b>13 I</b>	20	3.8	20	12/30/14 04:08	
trans-1,3-Dichloropropene	4.7 U	20	4.7	20	12/30/14 04:08	
Trichloroethene (TCE)	7.2 U	20	7.2	20	12/30/14 04:08	
Trichlorofluoromethane	4.8 U	400	4.8	20	12/30/14 04:08	
Vinyl Chloride	<b>3000</b>	20	7.2	20	12/30/14 04:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	129	72 - 121	12/30/14 04:08	*
4-Bromofluorobenzene	104	86 - 113	12/30/14 04:08	
Dibromofluoromethane	109	86 - 112	12/30/14 04:08	
Toluene-d8	93	88 - 115	12/30/14 04:08	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 14:07  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0066-007.0-20141218  
**Lab Code:** J1409873-002

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 04:36	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 04:36	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 04:36	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 04:36	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 04:36	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 04:36	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 04:36	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 04:36	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 04:36	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 04:36	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 04:36	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 04:36	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 04:36	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 04:36	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 04:36	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 04:36	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 04:36	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 04:36	*
Chloromethane	0.38 I	1.0	0.36	1	12/30/14 04:36	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 04:36	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 04:36	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 04:36	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 04:36	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 04:36	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 04:36	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 04:36	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 04:36	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 04:36	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 04:36	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 04:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	134	72 - 121	12/30/14 04:36	*
4-Bromofluorobenzene	99	86 - 113	12/30/14 04:36	
Dibromofluoromethane	114	86 - 112	12/30/14 04:36	*
Toluene-d8	92	88 - 115	12/30/14 04:36	



ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 10:06  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0073-007.0-20141218  
**Lab Code:** J1409873-003

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 05:03	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 05:03	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 05:03	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 05:03	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 05:03	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 05:03	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 05:03	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 05:03	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 05:03	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 05:03	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 05:03	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 05:03	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 05:03	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 05:03	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 05:03	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 05:03	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 05:03	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 05:03	*
Chloromethane	0.42 I	1.0	0.36	1	12/30/14 05:03	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 05:03	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 05:03	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 05:03	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 05:03	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 05:03	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 05:03	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 05:03	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 05:03	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 05:03	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 05:03	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 05:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	132	72 - 121	12/30/14 05:03	*
4-Bromofluorobenzene	102	86 - 113	12/30/14 05:03	
Dibromofluoromethane	118	86 - 112	12/30/14 05:03	*
Toluene-d8	94	88 - 115	12/30/14 05:03	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 09:46  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0074-007.0-20141218  
**Lab Code:** J1409873-004

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 05:30	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 05:30	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 05:30	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 05:30	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 05:30	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 05:30	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 05:30	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 05:30	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 05:30	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 05:30	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 05:30	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 05:30	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 05:30	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 05:30	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 05:30	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 05:30	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 05:30	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 05:30	*
Chloromethane	0.44 I	1.0	0.36	1	12/30/14 05:30	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 05:30	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 05:30	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 05:30	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 05:30	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 05:30	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 05:30	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 05:30	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 05:30	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 05:30	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 05:30	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 05:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	134	72 - 121	12/30/14 05:30	*
4-Bromofluorobenzene	96	86 - 113	12/30/14 05:30	
Dibromofluoromethane	110	86 - 112	12/30/14 05:30	
Toluene-d8	96	88 - 115	12/30/14 05:30	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 09:15  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0091-007.0-20141218  
**Lab Code:** J1409873-005

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 05:57	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 05:57	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 05:57	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 05:57	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 05:57	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 05:57	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 05:57	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 05:57	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 05:57	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 05:57	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 05:57	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 05:57	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 05:57	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 05:57	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 05:57	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 05:57	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 05:57	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 05:57	*
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 05:57	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 05:57	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 05:57	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 05:57	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 05:57	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 05:57	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 05:57	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 05:57	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 05:57	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 05:57	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 05:57	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 05:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	129	72 - 121	12/30/14 05:57	*
4-Bromofluorobenzene	100	86 - 113	12/30/14 05:57	
Dibromofluoromethane	112	86 - 112	12/30/14 05:57	
Toluene-d8	93	88 - 115	12/30/14 05:57	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 12:02  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0095-007.0-20141218  
**Lab Code:** J1409873-006

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 06:25	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 06:25	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 06:25	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 06:25	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 06:25	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 06:25	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 06:25	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 06:25	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 06:25	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 06:25	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 06:25	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 06:25	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 06:25	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 06:25	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 06:25	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 06:25	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 06:25	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 06:25	*
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 06:25	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 06:25	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 06:25	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 06:25	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 06:25	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 06:25	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 06:25	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 06:25	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 06:25	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 06:25	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 06:25	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 06:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	133	72 - 121	12/30/14 06:25	*
4-Bromofluorobenzene	100	86 - 113	12/30/14 06:25	
Dibromofluoromethane	113	86 - 112	12/30/14 06:25	*
Toluene-d8	93	88 - 115	12/30/14 06:25	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 08:36  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0087-020.0-20141218  
**Lab Code:** J1409873-007

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 06:52	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 06:52	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 06:52	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 06:52	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 06:52	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 06:52	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 06:52	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 06:52	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 06:52	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 06:52	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 06:52	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 06:52	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 06:52	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 06:52	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 06:52	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 06:52	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 06:52	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 06:52	*
Chloromethane	0.73 I	1.0	0.36	1	12/30/14 06:52	
cis-1,2-Dichloroethene	1.5	1.0	0.36	1	12/30/14 06:52	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 06:52	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 06:52	
Dichlorodifluoromethane	3.3 I	20	0.23	1	12/30/14 06:52	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 06:52	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 06:52	
trans-1,2-Dichloroethene	0.21 I	1.0	0.19	1	12/30/14 06:52	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 06:52	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 06:52	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 06:52	
Vinyl Chloride	20	1.0	0.36	1	12/30/14 06:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	130	72 - 121	12/30/14 06:52	*
4-Bromofluorobenzene	104	86 - 113	12/30/14 06:52	
Dibromofluoromethane	110	86 - 112	12/30/14 06:52	
Toluene-d8	94	88 - 115	12/30/14 06:52	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 12:21  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0109-020.0-20141218  
**Lab Code:** J1409873-008

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.68 U	4.0	0.68	4	12/30/14 07:19	
1,1,2,2-Tetrachloroethane	1.2 U	4.0	1.2	4	12/30/14 07:19	
1,1,2-Trichloroethane	1.6 U	4.0	1.6	4	12/30/14 07:19	
1,1-Dichloroethane (1,1-DCA)	1.2 U	4.0	1.2	4	12/30/14 07:19	
1,1-Dichloroethene (1,1-DCE)	0.64 U	4.0	0.64	4	12/30/14 07:19	
1,2-Dichlorobenzene	2.0 U	4.0	2.0	4	12/30/14 07:19	
1,2-Dichloroethane	0.88 U	4.0	0.88	4	12/30/14 07:19	*
1,2-Dichloropropane	0.76 U	4.0	0.76	4	12/30/14 07:19	
1,3-Dichlorobenzene	0.88 U	4.0	0.88	4	12/30/14 07:19	
1,4-Dichlorobenzene	0.64 U	4.0	0.64	4	12/30/14 07:19	
Bromochloromethane	1.1 U	20	1.1	4	12/30/14 07:19	
Bromodichloromethane	0.88 U	4.0	0.88	4	12/30/14 07:19	
Bromoform	1.7 U	8.0	1.7	4	12/30/14 07:19	
Bromomethane	0.92 U	20	0.92	4	12/30/14 07:19	
Carbon Tetrachloride	1.4 U	4.0	1.4	4	12/30/14 07:19	
Chlorobenzene	0.64 U	4.0	0.64	4	12/30/14 07:19	
Chloroethane	2.1 U	20	2.1	4	12/30/14 07:19	
Chloroform	1.4 U	4.0	1.4	4	12/30/14 07:19	*
Chloromethane	1.5 U	4.0	1.5	4	12/30/14 07:19	
cis-1,2-Dichloroethene	<b>4.6</b>	4.0	1.5	4	12/30/14 07:19	
cis-1,3-Dichloropropene	0.80 U	4.0	0.80	4	12/30/14 07:19	
Dibromochloromethane	0.84 U	4.0	0.84	4	12/30/14 07:19	
Dichlorodifluoromethane	<b>5.6 I</b>	80	0.92	4	12/30/14 07:19	
Methylene Chloride	0.84 U	20	0.84	4	12/30/14 07:19	
Tetrachloroethene (PCE)	0.88 U	4.0	0.88	4	12/30/14 07:19	
trans-1,2-Dichloroethene	<b>2.6 I</b>	4.0	0.76	4	12/30/14 07:19	
trans-1,3-Dichloropropene	0.92 U	4.0	0.92	4	12/30/14 07:19	
Trichloroethene (TCE)	1.5 U	4.0	1.5	4	12/30/14 07:19	
Trichlorofluoromethane	0.96 U	80	0.96	4	12/30/14 07:19	
Vinyl Chloride	<b>28</b>	4.0	1.5	4	12/30/14 07:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	133	72 - 121	12/30/14 07:19	*
4-Bromofluorobenzene	105	86 - 113	12/30/14 07:19	
Dibromofluoromethane	115	86 - 112	12/30/14 07:19	*
Toluene-d8	95	88 - 115	12/30/14 07:19	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 09:58  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0115-020.0-20141218  
**Lab Code:** J1409873-009

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 07:46	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 07:46	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 07:46	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 07:46	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 07:46	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 07:46	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 07:46	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 07:46	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 07:46	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 07:46	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 07:46	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 07:46	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 07:46	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 07:46	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 07:46	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 07:46	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 07:46	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 07:46	*
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 07:46	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 07:46	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 07:46	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 07:46	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 07:46	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 07:46	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 07:46	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 07:46	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 07:46	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 07:46	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 07:46	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 07:46	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	137	72 - 121	12/30/14 07:46	*
4-Bromofluorobenzene	102	86 - 113	12/30/14 07:46	
Dibromofluoromethane	114	86 - 112	12/30/14 07:46	*
Toluene-d8	95	88 - 115	12/30/14 07:46	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 10:13  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0116-020.0-20141218  
**Lab Code:** J1409873-010

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 08:14	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 08:14	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 08:14	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 08:14	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 08:14	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 08:14	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 08:14	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 08:14	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 08:14	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 08:14	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 08:14	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 08:14	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 08:14	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 08:14	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 08:14	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 08:14	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 08:14	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 08:14	*
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 08:14	
cis-1,2-Dichloroethene	<b>6.1</b>	1.0	0.36	1	12/30/14 08:14	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 08:14	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 08:14	
Dichlorodifluoromethane	<b>38</b>	20	0.23	1	12/30/14 08:14	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 08:14	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 08:14	
trans-1,2-Dichloroethene	<b>3.0</b>	1.0	0.19	1	12/30/14 08:14	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 08:14	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 08:14	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 08:14	
Vinyl Chloride	<b>100</b>	1.0	0.36	1	12/30/14 08:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	134	72 - 121	12/30/14 08:14	*
4-Bromofluorobenzene	113	86 - 113	12/30/14 08:14	
Dibromofluoromethane	115	86 - 112	12/30/14 08:14	*
Toluene-d8	96	88 - 115	12/30/14 08:14	



**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 10:20  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0122-020.0-20141218  
**Lab Code:** J1409873-011

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 08:41	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 08:41	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 08:41	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 08:41	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 08:41	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 08:41	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 08:41	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 08:41	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 08:41	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 08:41	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 08:41	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 08:41	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 08:41	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 08:41	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 08:41	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 08:41	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 08:41	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 08:41	*
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 08:41	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 08:41	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 08:41	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 08:41	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 08:41	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 08:41	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 08:41	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 08:41	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 08:41	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 08:41	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 08:41	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 08:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	134	72 - 121	12/30/14 08:41	*
4-Bromofluorobenzene	100	86 - 113	12/30/14 08:41	
Dibromofluoromethane	114	86 - 112	12/30/14 08:41	*
Toluene-d8	97	88 - 115	12/30/14 08:41	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 15:43  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0125-020.0-20141219  
**Lab Code:** J1409873-012

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 09:08	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 09:08	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 09:08	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 09:08	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 09:08	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 09:08	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 09:08	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 09:08	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 09:08	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 09:08	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 09:08	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 09:08	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 09:08	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 09:08	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 09:08	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 09:08	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 09:08	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 09:08	*
Chloromethane	0.49 I	1.0	0.36	1	12/30/14 09:08	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 09:08	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 09:08	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 09:08	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 09:08	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 09:08	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 09:08	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 09:08	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 09:08	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 09:08	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 09:08	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 09:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	134	72 - 121	12/30/14 09:08	*
4-Bromofluorobenzene	100	86 - 113	12/30/14 09:08	
Dibromofluoromethane	112	86 - 112	12/30/14 09:08	
Toluene-d8	94	88 - 115	12/30/14 09:08	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 12:41  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0126-020.0-20141218  
**Lab Code:** J1409873-013

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 09:35	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 09:35	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 09:35	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 09:35	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 09:35	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 09:35	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 09:35	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 09:35	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 09:35	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 09:35	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 09:35	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 09:35	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 09:35	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 09:35	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 09:35	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 09:35	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 09:35	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 09:35	*
Chloromethane	<b>0.46 I</b>	1.0	0.36	1	12/30/14 09:35	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 09:35	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 09:35	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 09:35	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 09:35	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 09:35	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 09:35	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 09:35	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 09:35	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 09:35	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 09:35	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 09:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	131	72 - 121	12/30/14 09:35	*
4-Bromofluorobenzene	100	86 - 113	12/30/14 09:35	
Dibromofluoromethane	116	86 - 112	12/30/14 09:35	*
Toluene-d8	95	88 - 115	12/30/14 09:35	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 15:02  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0016-031.5-20141218  
**Lab Code:** J1409873-014

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.86 U	5.0	0.86	5	12/30/14 10:03	
1,1,2,2-Tetrachloroethane	1.5 U	5.0	1.5	5	12/30/14 10:03	
1,1,2-Trichloroethane	2.0 U	5.0	2.0	5	12/30/14 10:03	
1,1-Dichloroethane (1,1-DCA)	1.5 U	5.0	1.5	5	12/30/14 10:03	
1,1-Dichloroethene (1,1-DCE)	<b>3.7 I</b>	5.0	0.80	5	12/30/14 10:03	
1,2-Dichlorobenzene	2.4 U	5.0	2.4	5	12/30/14 10:03	
1,2-Dichloroethane	1.1 U	5.0	1.1	5	12/30/14 10:03	*
1,2-Dichloropropane	0.95 U	5.0	0.95	5	12/30/14 10:03	
1,3-Dichlorobenzene	1.1 U	5.0	1.1	5	12/30/14 10:03	
1,4-Dichlorobenzene	0.80 U	5.0	0.80	5	12/30/14 10:03	
Bromochloromethane	1.4 U	25	1.4	5	12/30/14 10:03	
Bromodichloromethane	1.1 U	5.0	1.1	5	12/30/14 10:03	
Bromoform	2.1 U	10	2.1	5	12/30/14 10:03	
Bromomethane	1.2 U	25	1.2	5	12/30/14 10:03	
Carbon Tetrachloride	1.8 U	5.0	1.8	5	12/30/14 10:03	
Chlorobenzene	0.80 U	5.0	0.80	5	12/30/14 10:03	
Chloroethane	2.6 U	25	2.6	5	12/30/14 10:03	
Chloroform	1.8 U	5.0	1.8	5	12/30/14 10:03	*
Chloromethane	1.8 U	5.0	1.8	5	12/30/14 10:03	
cis-1,2-Dichloroethene	<b>550</b>	5.0	1.8	5	12/30/14 10:03	
cis-1,3-Dichloropropene	1.0 U	5.0	1.0	5	12/30/14 10:03	
Dibromochloromethane	1.1 U	5.0	1.1	5	12/30/14 10:03	
Dichlorodifluoromethane	<b>790</b>	100	1.2	5	12/30/14 10:03	
Methylene Chloride	1.1 U	25	1.1	5	12/30/14 10:03	
Tetrachloroethene (PCE)	1.1 U	5.0	1.1	5	12/30/14 10:03	
trans-1,2-Dichloroethene	<b>16</b>	5.0	0.95	5	12/30/14 10:03	
trans-1,3-Dichloropropene	1.2 U	5.0	1.2	5	12/30/14 10:03	
Trichloroethene (TCE)	<b>2.3 I</b>	5.0	1.8	5	12/30/14 10:03	
Trichlorofluoromethane	1.2 U	100	1.2	5	12/30/14 10:03	
Vinyl Chloride	<b>5100</b>	50	18	50	01/01/15 08:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	132	72 - 121	12/30/14 10:03	*
4-Bromofluorobenzene	101	86 - 113	12/30/14 10:03	
Dibromofluoromethane	114	86 - 112	12/30/14 10:03	*
Toluene-d8	96	88 - 115	12/30/14 10:03	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 11:19  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0017-031.5-20141218  
**Lab Code:** J1409873-015

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	8.5 U	50	8.5	50	12/30/14 10:30	
1,1,2,2-Tetrachloroethane	15 U	50	15	50	12/30/14 10:30	
1,1,2-Trichloroethane	20 U	50	20	50	12/30/14 10:30	
1,1-Dichloroethane (1,1-DCA)	15 U	50	15	50	12/30/14 10:30	
1,1-Dichloroethene (1,1-DCE)	8.0 U	50	8.0	50	12/30/14 10:30	
1,2-Dichlorobenzene	24 U	50	24	50	12/30/14 10:30	
1,2-Dichloroethane	11 U	50	11	50	12/30/14 10:30	*
1,2-Dichloropropane	9.5 U	50	9.5	50	12/30/14 10:30	
1,3-Dichlorobenzene	11 U	50	11	50	12/30/14 10:30	
1,4-Dichlorobenzene	8.0 U	50	8.0	50	12/30/14 10:30	
Bromochloromethane	14 U	250	14	50	12/30/14 10:30	
Bromodichloromethane	11 U	50	11	50	12/30/14 10:30	
Bromoform	21 U	100	21	50	12/30/14 10:30	
Bromomethane	12 U	250	12	50	12/30/14 10:30	
Carbon Tetrachloride	17 U	50	17	50	12/30/14 10:30	
Chlorobenzene	8.0 U	50	8.0	50	12/30/14 10:30	
Chloroethane	26 U	250	26	50	12/30/14 10:30	
Chloroform	18 U	50	18	50	12/30/14 10:30	*
Chloromethane	18 U	50	18	50	12/30/14 10:30	
cis-1,2-Dichloroethene	<b>110</b>	50	18	50	12/30/14 10:30	
cis-1,3-Dichloropropene	10 U	50	10	50	12/30/14 10:30	
Dibromochloromethane	11 U	50	11	50	12/30/14 10:30	
Dichlorodifluoromethane	<b>260 I</b>	1000	12	50	12/30/14 10:30	
Methylene Chloride	<b>24 I</b>	250	11	50	12/30/14 10:30	
Tetrachloroethene (PCE)	11 U	50	11	50	12/30/14 10:30	
trans-1,2-Dichloroethene	9.5 U	50	9.5	50	12/30/14 10:30	
trans-1,3-Dichloropropene	12 U	50	12	50	12/30/14 10:30	
Trichloroethene (TCE)	18 U	50	18	50	12/30/14 10:30	
Trichlorofluoromethane	12 U	1000	12	50	12/30/14 10:30	
Vinyl Chloride	<b>6000</b>	50	18	50	12/30/14 10:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	132	72 - 121	12/30/14 10:30	*
4-Bromofluorobenzene	103	86 - 113	12/30/14 10:30	
Dibromofluoromethane	113	86 - 112	12/30/14 10:30	*
Toluene-d8	92	88 - 115	12/30/14 10:30	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 13:43  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0019-031.5-20141218  
**Lab Code:** J1409873-016

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 10:57	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 10:57	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 10:57	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 10:57	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 10:57	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 10:57	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 10:57	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 10:57	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 10:57	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 10:57	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 10:57	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 10:57	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 10:57	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 10:57	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 10:57	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 10:57	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 10:57	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 10:57	*
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 10:57	
cis-1,2-Dichloroethene	<b>0.91 I</b>	1.0	0.36	1	12/30/14 10:57	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 10:57	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 10:57	
Dichlorodifluoromethane	<b>1.7 I</b>	20	0.23	1	12/30/14 10:57	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 10:57	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 10:57	
trans-1,2-Dichloroethene	<b>0.68 I</b>	1.0	0.19	1	12/30/14 10:57	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 10:57	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 10:57	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 10:57	
Vinyl Chloride	<b>8.7</b>	1.0	0.36	1	12/30/14 10:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	135	72 - 121	12/30/14 10:57	*
4-Bromofluorobenzene	102	86 - 113	12/30/14 10:57	
Dibromofluoromethane	113	86 - 112	12/30/14 10:57	*
Toluene-d8	94	88 - 115	12/30/14 10:57	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 12:16  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0020-031.5-20141218  
**Lab Code:** J1409873-017

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 11:25	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 11:25	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 11:25	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 11:25	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 11:25	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 11:25	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 11:25	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 11:25	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 11:25	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 11:25	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 11:25	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 11:25	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 11:25	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 11:25	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 11:25	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 11:25	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 11:25	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 11:25	*
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 11:25	
cis-1,2-Dichloroethene	<b>0.63 I</b>	1.0	0.36	1	12/30/14 11:25	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 11:25	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 11:25	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 11:25	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 11:25	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 11:25	
trans-1,2-Dichloroethene	<b>1.0</b>	1.0	0.19	1	12/30/14 11:25	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 11:25	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 11:25	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 11:25	
Vinyl Chloride	<b>2.0</b>	1.0	0.36	1	12/30/14 11:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	133	72 - 121	12/30/14 11:25	*
4-Bromofluorobenzene	111	86 - 113	12/30/14 11:25	
Dibromofluoromethane	114	86 - 112	12/30/14 11:25	*
Toluene-d8	92	88 - 115	12/30/14 11:25	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 12:33  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0022-031.5-20141218  
**Lab Code:** J1409873-018

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 11:52	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 11:52	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 11:52	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 11:52	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 11:52	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 11:52	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 11:52	*
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 11:52	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 11:52	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 11:52	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 11:52	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 11:52	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 11:52	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 11:52	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 11:52	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 11:52	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 11:52	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 11:52	*
Chloromethane	0.36 I	1.0	0.36	1	12/30/14 11:52	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 11:52	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 11:52	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 11:52	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 11:52	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 11:52	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 11:52	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 11:52	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 11:52	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 11:52	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 11:52	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 11:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	137	72 - 121	12/30/14 11:52	*
4-Bromofluorobenzene	101	86 - 113	12/30/14 11:52	
Dibromofluoromethane	116	86 - 112	12/30/14 11:52	*
Toluene-d8	92	88 - 115	12/30/14 11:52	



ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 14:52  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0065-031.5-20141218  
**Lab Code:** J1409873-019

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	3.5 U	20	3.5	20	12/30/14 23:24	
1,1,2,2-Tetrachloroethane	5.8 U	20	5.8	20	12/30/14 23:24	
1,1,2-Trichloroethane	8.0 U	20	8.0	20	12/30/14 23:24	
1,1-Dichloroethane (1,1-DCA)	6.0 U	20	6.0	20	12/30/14 23:24	
1,1-Dichloroethene (1,1-DCE)	3.2 U	20	3.2	20	12/30/14 23:24	
1,2-Dichlorobenzene	9.6 U	20	9.6	20	12/30/14 23:24	
1,2-Dichloroethane	4.4 U	20	4.4	20	12/30/14 23:24	
1,2-Dichloropropane	3.8 U	20	3.8	20	12/30/14 23:24	
1,3-Dichlorobenzene	4.4 U	20	4.4	20	12/30/14 23:24	
1,4-Dichlorobenzene	3.2 U	20	3.2	20	12/30/14 23:24	
Bromochloromethane	5.4 U	100	5.4	20	12/30/14 23:24	
Bromodichloromethane	4.4 U	20	4.4	20	12/30/14 23:24	
Bromoform	8.4 U	40	8.4	20	12/30/14 23:24	
Bromomethane	4.7 U	100	4.7	20	12/30/14 23:24	
Carbon Tetrachloride	6.9 U	20	6.9	20	12/30/14 23:24	
Chlorobenzene	3.2 U	20	3.2	20	12/30/14 23:24	
Chloroethane	11 U	100	11	20	12/30/14 23:24	
Chloroform	7.0 U	20	7.0	20	12/30/14 23:24	
Chloromethane	7.2 U	20	7.2	20	12/30/14 23:24	
cis-1,2-Dichloroethene	<b>78</b>	20	7.2	20	12/30/14 23:24	
cis-1,3-Dichloropropene	4.0 U	20	4.0	20	12/30/14 23:24	
Dibromochloromethane	4.2 U	20	4.2	20	12/30/14 23:24	
Dichlorodifluoromethane	<b>450</b>	400	4.7	20	12/30/14 23:24	
Methylene Chloride	4.2 U	100	4.2	20	12/30/14 23:24	
Tetrachloroethene (PCE)	<b>4.8 I</b>	20	4.4	20	12/30/14 23:24	
trans-1,2-Dichloroethene	<b>14 I</b>	20	3.8	20	12/30/14 23:24	
trans-1,3-Dichloropropene	4.7 U	20	4.7	20	12/30/14 23:24	
Trichloroethene (TCE)	7.2 U	20	7.2	20	12/30/14 23:24	
Trichlorofluoromethane	4.8 U	400	4.8	20	12/30/14 23:24	
Vinyl Chloride	<b>1700</b>	20	7.2	20	12/30/14 23:24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	108	72 - 121	12/30/14 23:24	
4-Bromofluorobenzene	97	86 - 113	12/30/14 23:24	
Dibromofluoromethane	106	86 - 112	12/30/14 23:24	
Toluene-d8	98	88 - 115	12/30/14 23:24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 16:25  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0072-031.5-20141218  
**Lab Code:** J1409873-020

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 23:51	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 23:51	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 23:51	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 23:51	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 23:51	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 23:51	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 23:51	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 23:51	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 23:51	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 23:51	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 23:51	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 23:51	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 23:51	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 23:51	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 23:51	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 23:51	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 23:51	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 23:51	
Chloromethane	0.66 I	1.0	0.36	1	12/30/14 23:51	
cis-1,2-Dichloroethene	0.39 I	1.0	0.36	1	12/30/14 23:51	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 23:51	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 23:51	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 23:51	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 23:51	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 23:51	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 23:51	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 23:51	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 23:51	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 23:51	
Vinyl Chloride	0.62 I	1.0	0.36	1	12/30/14 23:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	110	72 - 121	12/30/14 23:51	
4-Bromofluorobenzene	96	86 - 113	12/30/14 23:51	
Dibromofluoromethane	106	86 - 112	12/30/14 23:51	
Toluene-d8	98	88 - 115	12/30/14 23:51	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 14:25  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0080-031.5-20141219  
**Lab Code:** J1409873-021

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 00:18	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 00:18	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 00:18	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 00:18	
1,1-Dichloroethene (1,1-DCE)	<b>0.96 I</b>	1.0	0.16	1	12/31/14 00:18	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 00:18	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 00:18	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 00:18	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 00:18	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 00:18	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 00:18	
Bromodichloromethane	<b>0.37 I</b>	1.0	0.22	1	12/31/14 00:18	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 00:18	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 00:18	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 00:18	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 00:18	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 00:18	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 00:18	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 00:18	
cis-1,2-Dichloroethene	<b>190</b>	1.0	0.36	1	12/31/14 00:18	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 00:18	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 00:18	
Dichlorodifluoromethane	<b>880</b>	500	5.8	25	01/01/15 00:50	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 00:18	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 00:18	
trans-1,2-Dichloroethene	<b>13</b>	1.0	0.19	1	12/31/14 00:18	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 00:18	
Trichloroethene (TCE)	<b>0.40 I</b>	1.0	0.36	1	12/31/14 00:18	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 00:18	
Vinyl Chloride	<b>2500</b>	25	9.0	25	01/01/15 00:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	107	72 - 121	12/31/14 00:18	
4-Bromofluorobenzene	95	86 - 113	12/31/14 00:18	
Dibromofluoromethane	106	86 - 112	12/31/14 00:18	
Toluene-d8	97	88 - 115	12/31/14 00:18	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 09:21  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0081-031.5-20141218  
**Lab Code:** J1409873-022

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 00:45	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 00:45	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 00:45	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 00:45	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 00:45	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 00:45	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 00:45	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 00:45	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 00:45	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 00:45	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 00:45	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 00:45	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 00:45	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 00:45	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 00:45	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 00:45	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 00:45	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 00:45	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 00:45	
cis-1,2-Dichloroethene	<b>0.88 I</b>	1.0	0.36	1	12/31/14 00:45	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 00:45	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 00:45	
Dichlorodifluoromethane	<b>3.3 I</b>	20	0.23	1	12/31/14 00:45	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 00:45	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 00:45	
trans-1,2-Dichloroethene	<b>0.38 I</b>	1.0	0.19	1	12/31/14 00:45	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 00:45	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 00:45	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 00:45	
Vinyl Chloride	<b>12</b>	1.0	0.36	1	12/31/14 00:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	113	72 - 121	12/31/14 00:45	
4-Bromofluorobenzene	96	86 - 113	12/31/14 00:45	
Dibromofluoromethane	107	86 - 112	12/31/14 00:45	
Toluene-d8	99	88 - 115	12/31/14 00:45	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 08:32  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0088-031.5-20141218  
**Lab Code:** J1409873-023

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 01:13	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 01:13	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 01:13	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 01:13	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 01:13	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 01:13	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 01:13	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 01:13	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 01:13	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 01:13	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 01:13	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 01:13	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 01:13	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 01:13	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 01:13	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 01:13	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 01:13	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 01:13	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 01:13	
cis-1,2-Dichloroethene	<b>5.5</b>	1.0	0.36	1	12/31/14 01:13	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 01:13	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 01:13	
Dichlorodifluoromethane	<b>23</b>	20	0.23	1	12/31/14 01:13	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 01:13	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 01:13	
trans-1,2-Dichloroethene	<b>2.6</b>	1.0	0.19	1	12/31/14 01:13	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 01:13	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 01:13	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 01:13	
Vinyl Chloride	<b>130</b>	1.0	0.36	1	12/31/14 01:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	108	72 - 121	12/31/14 01:13	
4-Bromofluorobenzene	99	86 - 113	12/31/14 01:13	
Dibromofluoromethane	106	86 - 112	12/31/14 01:13	
Toluene-d8	97	88 - 115	12/31/14 01:13	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 08:50  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0090-031.5-20141218  
**Lab Code:** J1409873-024

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 23:53	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 23:53	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 23:53	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 23:53	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 23:53	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 23:53	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 23:53	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 23:53	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 23:53	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 23:53	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 23:53	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 23:53	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 23:53	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 23:53	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 23:53	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 23:53	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 23:53	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 23:53	
Chloromethane	0.52 I	1.0	0.36	1	12/31/14 23:53	
cis-1,2-Dichloroethene	4.7	1.0	0.36	1	12/31/14 23:53	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 23:53	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 23:53	
Dichlorodifluoromethane	5.3 I	20	0.23	1	12/31/14 23:53	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 23:53	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 23:53	
trans-1,2-Dichloroethene	0.68 I	1.0	0.19	1	12/31/14 23:53	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 23:53	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 23:53	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 23:53	
Vinyl Chloride	42	20	7.2	20	12/31/14 01:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	111	72 - 121	12/31/14 23:53	
4-Bromofluorobenzene	98	86 - 113	12/31/14 23:53	
Dibromofluoromethane	106	86 - 112	12/31/14 23:53	
Toluene-d8	99	88 - 115	12/31/14 23:53	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 12:08  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0097-031.5-20141218  
**Lab Code:** J1409873-025

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.34 U	2.0	0.34	2	12/31/14 02:07	
1,1,2,2-Tetrachloroethane	0.58 U	2.0	0.58	2	12/31/14 02:07	
1,1,2-Trichloroethane	0.80 U	2.0	0.80	2	12/31/14 02:07	
1,1-Dichloroethane (1,1-DCA)	0.60 U	2.0	0.60	2	12/31/14 02:07	
1,1-Dichloroethene (1,1-DCE)	0.32 U	2.0	0.32	2	12/31/14 02:07	
1,2-Dichlorobenzene	0.96 U	2.0	0.96	2	12/31/14 02:07	
1,2-Dichloroethane	0.44 U	2.0	0.44	2	12/31/14 02:07	
1,2-Dichloropropane	0.38 U	2.0	0.38	2	12/31/14 02:07	
1,3-Dichlorobenzene	0.44 U	2.0	0.44	2	12/31/14 02:07	
1,4-Dichlorobenzene	0.32 U	2.0	0.32	2	12/31/14 02:07	
Bromochloromethane	0.54 U	10	0.54	2	12/31/14 02:07	
Bromodichloromethane	0.44 U	2.0	0.44	2	12/31/14 02:07	
Bromoform	0.84 U	4.0	0.84	2	12/31/14 02:07	
Bromomethane	0.46 U	10	0.46	2	12/31/14 02:07	
Carbon Tetrachloride	0.68 U	2.0	0.68	2	12/31/14 02:07	
Chlorobenzene	0.32 U	2.0	0.32	2	12/31/14 02:07	
Chloroethane	1.1 U	10	1.1	2	12/31/14 02:07	
Chloroform	0.70 U	2.0	0.70	2	12/31/14 02:07	
Chloromethane	0.72 U	2.0	0.72	2	12/31/14 02:07	
cis-1,2-Dichloroethene	<b>4.8</b>	2.0	0.72	2	12/31/14 02:07	
cis-1,3-Dichloropropene	0.40 U	2.0	0.40	2	12/31/14 02:07	
Dibromochloromethane	0.42 U	2.0	0.42	2	12/31/14 02:07	
Dichlorodifluoromethane	<b>9.4 I</b>	40	0.46	2	12/31/14 02:07	
Methylene Chloride	0.42 U	10	0.42	2	12/31/14 02:07	
Tetrachloroethene (PCE)	0.44 U	2.0	0.44	2	12/31/14 02:07	
trans-1,2-Dichloroethene	<b>1.8 I</b>	2.0	0.38	2	12/31/14 02:07	
trans-1,3-Dichloropropene	0.46 U	2.0	0.46	2	12/31/14 02:07	
Trichloroethene (TCE)	0.72 U	2.0	0.72	2	12/31/14 02:07	
Trichlorofluoromethane	0.48 U	40	0.48	2	12/31/14 02:07	
Vinyl Chloride	<b>21</b>	2.0	0.72	2	12/31/14 02:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	113	72 - 121	12/31/14 02:07	
4-Bromofluorobenzene	95	86 - 113	12/31/14 02:07	
Dibromofluoromethane	106	86 - 112	12/31/14 02:07	
Toluene-d8	96	88 - 115	12/31/14 02:07	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 15:30  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0025-042.5-20141219  
**Lab Code:** J1409873-026

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 02:34	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 02:34	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 02:34	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 02:34	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 02:34	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 02:34	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 02:34	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 02:34	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 02:34	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 02:34	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 02:34	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 02:34	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 02:34	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 02:34	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 02:34	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 02:34	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 02:34	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 02:34	
Chloromethane	0.52 I	1.0	0.36	1	12/31/14 02:34	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/31/14 02:34	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 02:34	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 02:34	
Dichlorodifluoromethane	0.39 I	20	0.23	1	12/31/14 02:34	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 02:34	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 02:34	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/31/14 02:34	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 02:34	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 02:34	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 02:34	
Vinyl Chloride	0.37 I	1.0	0.36	1	12/31/14 02:34	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	112	72 - 121	12/31/14 02:34	
4-Bromofluorobenzene	94	86 - 113	12/31/14 02:34	
Dibromofluoromethane	108	86 - 112	12/31/14 02:34	
Toluene-d8	99	88 - 115	12/31/14 02:34	



**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 14:37  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-NPSH-MW0039-042.5-20141218  
**Lab Code:** J1409873-027

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 03:02	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 03:02	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 03:02	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 03:02	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 03:02	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 03:02	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 03:02	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 03:02	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 03:02	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 03:02	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 03:02	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 03:02	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 03:02	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 03:02	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 03:02	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 03:02	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 03:02	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 03:02	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 03:02	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/31/14 03:02	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 03:02	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 03:02	
Dichlorodifluoromethane	<b>0.39 I</b>	20	0.23	1	12/31/14 03:02	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 03:02	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 03:02	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/31/14 03:02	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 03:02	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 03:02	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 03:02	
Vinyl Chloride	<b>0.74 I</b>	1.0	0.36	1	12/31/14 03:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	111	72 - 121	12/31/14 03:02	
4-Bromofluorobenzene	93	86 - 113	12/31/14 03:02	
Dibromofluoromethane	108	86 - 112	12/31/14 03:02	
Toluene-d8	98	88 - 115	12/31/14 03:02	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 10:27  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0118-042.5-20141218  
**Lab Code:** J1409873-028

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 03:29	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 03:29	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 03:29	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 03:29	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 03:29	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 03:29	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 03:29	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 03:29	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 03:29	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 03:29	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 03:29	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 03:29	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 03:29	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 03:29	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 03:29	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 03:29	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 03:29	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 03:29	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 03:29	
cis-1,2-Dichloroethene	<b>1.4</b>	1.0	0.36	1	12/31/14 03:29	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 03:29	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 03:29	
Dichlorodifluoromethane	<b>5.2 I</b>	20	0.23	1	12/31/14 03:29	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 03:29	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 03:29	
trans-1,2-Dichloroethene	<b>0.50 I</b>	1.0	0.19	1	12/31/14 03:29	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 03:29	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 03:29	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 03:29	
Vinyl Chloride	<b>9.3</b>	1.0	0.36	1	12/31/14 03:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	113	72 - 121	12/31/14 03:29	
4-Bromofluorobenzene	94	86 - 113	12/31/14 03:29	
Dibromofluoromethane	108	86 - 112	12/31/14 03:29	
Toluene-d8	95	88 - 115	12/31/14 03:29	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 10:39  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0120-042.5-20141218  
**Lab Code:** J1409873-029

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 03:56	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 03:56	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 03:56	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 03:56	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 03:56	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 03:56	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 03:56	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 03:56	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 03:56	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 03:56	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 03:56	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 03:56	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 03:56	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 03:56	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 03:56	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 03:56	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 03:56	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 03:56	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 03:56	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/31/14 03:56	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 03:56	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 03:56	
Dichlorodifluoromethane	<b>0.23 I</b>	20	0.23	1	12/31/14 03:56	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 03:56	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 03:56	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/31/14 03:56	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 03:56	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 03:56	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 03:56	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/31/14 03:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	111	72 - 121	12/31/14 03:56	
4-Bromofluorobenzene	93	86 - 113	12/31/14 03:56	
Dibromofluoromethane	107	86 - 112	12/31/14 03:56	
Toluene-d8	99	88 - 115	12/31/14 03:56	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 15:12  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0078-067.5-20141218  
**Lab Code:** J1409873-030

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 04:24	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 04:24	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 04:24	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 04:24	
1,1-Dichloroethene (1,1-DCE)	<b>6.9</b>	1.0	0.16	1	12/31/14 04:24	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 04:24	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 04:24	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 04:24	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 04:24	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 04:24	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 04:24	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 04:24	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 04:24	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 04:24	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 04:24	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 04:24	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 04:24	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 04:24	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 04:24	
cis-1,2-Dichloroethene	<b>2300</b>	25	9.0	25	01/01/15 01:20	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 04:24	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 04:24	
Dichlorodifluoromethane	<b>2.3 I</b>	20	0.23	1	12/31/14 04:24	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 04:24	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 04:24	
trans-1,2-Dichloroethene	<b>19</b>	1.0	0.19	1	12/31/14 04:24	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 04:24	
Trichloroethene (TCE)	<b>3.3</b>	1.0	0.36	1	12/31/14 04:24	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 04:24	
Vinyl Chloride	<b>260</b>	1.0	0.36	1	12/31/14 04:24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	109	72 - 121	12/31/14 04:24	
4-Bromofluorobenzene	94	86 - 113	12/31/14 04:24	
Dibromofluoromethane	104	86 - 112	12/31/14 04:24	
Toluene-d8	99	88 - 115	12/31/14 04:24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 09:44  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0089-020.0-20141219  
**Lab Code:** J1409873-031

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	01/01/15 00:20	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	01/01/15 00:20	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	01/01/15 00:20	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	01/01/15 00:20	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	01/01/15 00:20	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	01/01/15 00:20	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	01/01/15 00:20	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	01/01/15 00:20	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	01/01/15 00:20	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	01/01/15 00:20	
Bromochloromethane	0.27 U	5.0	0.27	1	01/01/15 00:20	
Bromodichloromethane	0.22 U	1.0	0.22	1	01/01/15 00:20	
Bromoform	0.42 U	2.0	0.42	1	01/01/15 00:20	
Bromomethane	0.23 U	5.0	0.23	1	01/01/15 00:20	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	01/01/15 00:20	
Chlorobenzene	0.16 U	1.0	0.16	1	01/01/15 00:20	
Chloroethane	0.52 U	5.0	0.52	1	01/01/15 00:20	
Chloroform	0.35 U	1.0	0.35	1	01/01/15 00:20	
Chloromethane	0.36 U	1.0	0.36	1	01/01/15 00:20	
cis-1,2-Dichloroethene	<b>0.38 I</b>	1.0	0.36	1	01/01/15 00:20	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	01/01/15 00:20	
Dibromochloromethane	0.21 U	1.0	0.21	1	01/01/15 00:20	
Dichlorodifluoromethane	<b>0.28 I</b>	20	0.23	1	01/01/15 00:20	
Methylene Chloride	0.21 U	5.0	0.21	1	01/01/15 00:20	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	01/01/15 00:20	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	01/01/15 00:20	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	01/01/15 00:20	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	01/01/15 00:20	
Trichlorofluoromethane	0.24 U	20	0.24	1	01/01/15 00:20	
Vinyl Chloride	<b>28 I</b>	50	18	50	12/31/14 04:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	114	72 - 121	01/01/15 00:20	
4-Bromofluorobenzene	95	86 - 113	01/01/15 00:20	
Dibromofluoromethane	107	86 - 112	01/01/15 00:20	
Toluene-d8	95	88 - 115	01/01/15 00:20	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 10:25  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0052DD-060.0-20141219  
**Lab Code:** J1409873-032

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	8.5 U	50	8.5	50	12/31/14 00:02	
1,1,2,2-Tetrachloroethane	15 U	50	15	50	12/31/14 00:02	
1,1,2-Trichloroethane	20 U	50	20	50	12/31/14 00:02	
1,1-Dichloroethane (1,1-DCA)	15 U	50	15	50	12/31/14 00:02	
1,1-Dichloroethene (1,1-DCE)	<b>84</b>	50	8.0	50	12/31/14 00:02	
1,2-Dichlorobenzene	24 U	50	24	50	12/31/14 00:02	
1,2-Dichloroethane	11 U	50	11	50	12/31/14 00:02	
1,2-Dichloropropane	9.5 U	50	9.5	50	12/31/14 00:02	
1,3-Dichlorobenzene	11 U	50	11	50	12/31/14 00:02	
1,4-Dichlorobenzene	8.0 U	50	8.0	50	12/31/14 00:02	
Bromochloromethane	14 U	250	14	50	12/31/14 00:02	
Bromodichloromethane	11 U	50	11	50	12/31/14 00:02	
Bromoform	21 U	100	21	50	12/31/14 00:02	
Bromomethane	12 U	250	12	50	12/31/14 00:02	
Carbon Tetrachloride	17 U	50	17	50	12/31/14 00:02	
Chlorobenzene	8.0 U	50	8.0	50	12/31/14 00:02	
Chloroethane	26 U	250	26	50	12/31/14 00:02	
Chloroform	18 U	50	18	50	12/31/14 00:02	
Chloromethane	18 U	50	18	50	12/31/14 00:02	
cis-1,2-Dichloroethene	<b>26000</b>	500	180	500	12/31/14 13:31	
cis-1,3-Dichloropropene	10 U	50	10	50	12/31/14 00:02	
Dibromochloromethane	11 U	50	11	50	12/31/14 00:02	
Dichlorodifluoromethane	<b>46 I</b>	1000	12	50	12/31/14 00:02	
Methylene Chloride	11 U	250	11	50	12/31/14 00:02	
Tetrachloroethene (PCE)	11 U	50	11	50	12/31/14 00:02	
trans-1,2-Dichloroethene	<b>80</b>	50	9.5	50	12/31/14 00:02	
trans-1,3-Dichloropropene	12 U	50	12	50	12/31/14 00:02	
Trichloroethene (TCE)	<b>19000</b>	500	180	500	12/31/14 13:31	
Trichlorofluoromethane	<b>19 I</b>	1000	12	50	12/31/14 00:02	
Vinyl Chloride	<b>5900</b>	500	180	500	12/31/14 13:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	100	72 - 121	12/31/14 00:02	
4-Bromofluorobenzene	98	86 - 113	12/31/14 00:02	
Dibromofluoromethane	102	86 - 112	12/31/14 00:02	
Toluene-d8	114	88 - 115	12/31/14 00:02	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 12:40  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0130-061.0-20141219  
**Lab Code:** J1409873-033

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 12:35	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 12:35	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 12:35	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 12:35	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 12:35	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 12:35	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 12:35	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 12:35	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 12:35	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 12:35	*
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 12:35	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 12:35	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 12:35	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 12:35	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 12:35	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 12:35	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 12:35	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 12:35	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 12:35	*
cis-1,2-Dichloroethene	<b>11</b>	1.0	0.36	1	12/31/14 12:35	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 12:35	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 12:35	
Dichlorodifluoromethane	<b>17 I</b>	20	0.23	1	12/31/14 12:35	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 12:35	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 12:35	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/31/14 12:35	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 12:35	
Trichloroethene (TCE)	<b>6.7</b>	1.0	0.36	1	12/31/14 12:35	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 12:35	
Vinyl Chloride	<b>150</b>	1.0	0.36	1	12/31/14 12:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	72 - 121	12/31/14 12:35	
4-Bromofluorobenzene	96	86 - 113	12/31/14 12:35	
Dibromofluoromethane	103	86 - 112	12/31/14 12:35	
Toluene-d8	112	88 - 115	12/31/14 12:35	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 13:50  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0052DD-060.0-20141219  
**Lab Code:** J1409873-034

**Units:** ug/L  
**Basis:** NA

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	8.5 U	50	8.5	50	12/31/14 00:57	
1,1,2,2-Tetrachloroethane	15 U	50	15	50	12/31/14 00:57	
1,1,2-Trichloroethane	20 U	50	20	50	12/31/14 00:57	
1,1-Dichloroethane (1,1-DCA)	15 U	50	15	50	12/31/14 00:57	
1,1-Dichloroethene (1,1-DCE)	<b>59</b>	50	8.0	50	12/31/14 00:57	
1,2-Dichlorobenzene	24 U	50	24	50	12/31/14 00:57	
1,2-Dichloroethane	11 U	50	11	50	12/31/14 00:57	
1,2-Dichloropropane	9.5 U	50	9.5	50	12/31/14 00:57	
1,3-Dichlorobenzene	11 U	50	11	50	12/31/14 00:57	
1,4-Dichlorobenzene	8.0 U	50	8.0	50	12/31/14 00:57	
Bromochloromethane	14 U	250	14	50	12/31/14 00:57	
Bromodichloromethane	11 U	50	11	50	12/31/14 00:57	
Bromoform	21 U	100	21	50	12/31/14 00:57	
Bromomethane	12 U	250	12	50	12/31/14 00:57	
Carbon Tetrachloride	17 U	50	17	50	12/31/14 00:57	
Chlorobenzene	8.0 U	50	8.0	50	12/31/14 00:57	
Chloroethane	26 U	250	26	50	12/31/14 00:57	
Chloroform	18 U	50	18	50	12/31/14 00:57	
Chloromethane	18 U	50	18	50	12/31/14 00:57	
cis-1,2-Dichloroethene	<b>21000</b>	200	72	200	12/31/14 13:59	
cis-1,3-Dichloropropene	10 U	50	10	50	12/31/14 00:57	
Dibromochloromethane	11 U	50	11	50	12/31/14 00:57	
Dichlorodifluoromethane	<b>50 I</b>	1000	12	50	12/31/14 00:57	
Methylene Chloride	11 U	250	11	50	12/31/14 00:57	
Tetrachloroethene (PCE)	11 U	50	11	50	12/31/14 00:57	
trans-1,2-Dichloroethene	<b>51</b>	50	9.5	50	12/31/14 00:57	
trans-1,3-Dichloropropene	12 U	50	12	50	12/31/14 00:57	
Trichloroethene (TCE)	<b>15000</b>	200	72	200	12/31/14 13:59	
Trichlorofluoromethane	<b>19 I</b>	1000	12	50	12/31/14 00:57	
Vinyl Chloride	<b>3600</b>	200	72	200	12/31/14 13:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	101	72 - 121	12/31/14 00:57	
4-Bromofluorobenzene	100	86 - 113	12/31/14 00:57	
Dibromofluoromethane	103	86 - 112	12/31/14 00:57	
Toluene-d8	114	88 - 115	12/31/14 00:57	



**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/19/14 15:10  
**Date Received:** 12/22/14 13:04

**Sample Name:** WILC-MW0064-007.8-20141219  
**Lab Code:** J1409873-035

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 13:04	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 13:04	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 13:04	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 13:04	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 13:04	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 13:04	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 13:04	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 13:04	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 13:04	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 13:04	*
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 13:04	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 13:04	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 13:04	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 13:04	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 13:04	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 13:04	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 13:04	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 13:04	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 13:04	*
cis-1,2-Dichloroethene	<b>26</b>	1.0	0.36	1	12/31/14 13:04	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 13:04	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 13:04	
Dichlorodifluoromethane	<b>0.55 I</b>	20	0.23	1	12/31/14 13:04	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 13:04	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 13:04	
trans-1,2-Dichloroethene	<b>1.2</b>	1.0	0.19	1	12/31/14 13:04	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 13:04	
Trichloroethene (TCE)	<b>4.5</b>	1.0	0.36	1	12/31/14 13:04	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 13:04	
Vinyl Chloride	<b>23</b>	1.0	0.36	1	12/31/14 13:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	72 - 121	12/31/14 13:04	
4-Bromofluorobenzene	93	86 - 113	12/31/14 13:04	
Dibromofluoromethane	106	86 - 112	12/31/14 13:04	
Toluene-d8	114	88 - 115	12/31/14 13:04	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** 12/18/14 00:00  
**Date Received:** 12/22/14 13:04

**Sample Name:** Trip Blank  
**Lab Code:** J1409873-036

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 23:35	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 23:35	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 23:35	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 23:35	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 23:35	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 23:35	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 23:35	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 23:35	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 23:35	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 23:35	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 23:35	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 23:35	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 23:35	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 23:35	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 23:35	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 23:35	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 23:35	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 23:35	
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 23:35	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 23:35	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 23:35	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 23:35	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 23:35	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 23:35	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 23:35	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 23:35	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 23:35	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 23:35	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 23:35	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 23:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	101	72 - 121	12/30/14 23:35	
4-Bromofluorobenzene	96	86 - 113	12/30/14 23:35	
Dibromofluoromethane	103	86 - 112	12/30/14 23:35	
Toluene-d8	113	88 - 115	12/30/14 23:35	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1409964-03

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 03:41	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 03:41	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 03:41	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 03:41	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 03:41	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 03:41	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 03:41	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 03:41	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 03:41	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 03:41	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 03:41	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 03:41	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 03:41	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 03:41	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 03:41	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 03:41	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 03:41	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 03:41	
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 03:41	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 03:41	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 03:41	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 03:41	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 03:41	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 03:41	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 03:41	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 03:41	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 03:41	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 03:41	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 03:41	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 03:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	131	72 - 121	12/30/14 03:41	*
4-Bromofluorobenzene	104	86 - 113	12/30/14 03:41	
Dibromofluoromethane	110	86 - 112	12/30/14 03:41	
Toluene-d8	93	88 - 115	12/30/14 03:41	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1409964-04

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	17 U	100	17	100	12/30/14 12:19	
1,1,2,2-Tetrachloroethane	29 U	100	29	100	12/30/14 12:19	
1,1,2-Trichloroethane	40 U	100	40	100	12/30/14 12:19	
1,1-Dichloroethane (1,1-DCA)	30 U	100	30	100	12/30/14 12:19	
1,1-Dichloroethene (1,1-DCE)	16 U	100	16	100	12/30/14 12:19	
1,2-Dichlorobenzene	48 U	100	48	100	12/30/14 12:19	
1,2-Dichloroethane	22 U	100	22	100	12/30/14 12:19	
1,2-Dichloropropane	19 U	100	19	100	12/30/14 12:19	
1,3-Dichlorobenzene	22 U	100	22	100	12/30/14 12:19	
1,4-Dichlorobenzene	16 U	100	16	100	12/30/14 12:19	
Bromochloromethane	27 U	500	27	100	12/30/14 12:19	
Bromodichloromethane	22 U	100	22	100	12/30/14 12:19	
Bromoform	42 U	200	42	100	12/30/14 12:19	
Bromomethane	23 U	500	23	100	12/30/14 12:19	
Carbon Tetrachloride	34 U	100	34	100	12/30/14 12:19	
Chlorobenzene	16 U	100	16	100	12/30/14 12:19	
Chloroethane	52 U	500	52	100	12/30/14 12:19	
Chloroform	35 U	100	35	100	12/30/14 12:19	
Chloromethane	36 U	100	36	100	12/30/14 12:19	
cis-1,2-Dichloroethene	36 U	100	36	100	12/30/14 12:19	
cis-1,3-Dichloropropene	20 U	100	20	100	12/30/14 12:19	
Dibromochloromethane	21 U	100	21	100	12/30/14 12:19	
Dichlorodifluoromethane	23 U	2000	23	100	12/30/14 12:19	
Methylene Chloride	21 U	500	21	100	12/30/14 12:19	
Tetrachloroethene (PCE)	22 U	100	22	100	12/30/14 12:19	
trans-1,2-Dichloroethene	19 U	100	19	100	12/30/14 12:19	
trans-1,3-Dichloropropene	23 U	100	23	100	12/30/14 12:19	
Trichloroethene (TCE)	36 U	100	36	100	12/30/14 12:19	
Trichlorofluoromethane	24 U	2000	24	100	12/30/14 12:19	
Vinyl Chloride	36 U	100	36	100	12/30/14 12:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	135	72 - 121	12/30/14 12:19	*
4-Bromofluorobenzene	99	86 - 113	12/30/14 12:19	
Dibromofluoromethane	114	86 - 112	12/30/14 12:19	*
Toluene-d8	95	88 - 115	12/30/14 12:19	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** JQ1410000-03

**Service Request:** J1409873  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 21:07	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 21:07	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 21:07	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 21:07	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 21:07	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 21:07	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 21:07	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 21:07	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 21:07	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 21:07	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 21:07	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 21:07	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 21:07	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 21:07	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 21:07	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 21:07	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 21:07	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 21:07	
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 21:07	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 21:07	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 21:07	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 21:07	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 21:07	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 21:07	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 21:07	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 21:07	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 21:07	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 21:07	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 21:07	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 21:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	110	72 - 121	12/30/14 21:07	
4-Bromofluorobenzene	94	86 - 113	12/30/14 21:07	
Dibromofluoromethane	103	86 - 112	12/30/14 21:07	
Toluene-d8	99	88 - 115	12/30/14 21:07	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1410004-03

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/30/14 23:07	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/30/14 23:07	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/30/14 23:07	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/30/14 23:07	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/30/14 23:07	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/30/14 23:07	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/30/14 23:07	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/30/14 23:07	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/30/14 23:07	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/30/14 23:07	
Bromochloromethane	0.27 U	5.0	0.27	1	12/30/14 23:07	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/30/14 23:07	
Bromoform	0.42 U	2.0	0.42	1	12/30/14 23:07	
Bromomethane	0.23 U	5.0	0.23	1	12/30/14 23:07	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/30/14 23:07	
Chlorobenzene	0.16 U	1.0	0.16	1	12/30/14 23:07	
Chloroethane	0.52 U	5.0	0.52	1	12/30/14 23:07	
Chloroform	0.35 U	1.0	0.35	1	12/30/14 23:07	
Chloromethane	0.36 U	1.0	0.36	1	12/30/14 23:07	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/30/14 23:07	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/30/14 23:07	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/30/14 23:07	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/30/14 23:07	
Methylene Chloride	0.21 U	5.0	0.21	1	12/30/14 23:07	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/30/14 23:07	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/30/14 23:07	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/30/14 23:07	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/30/14 23:07	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/30/14 23:07	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/30/14 23:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	99	72 - 121	12/30/14 23:07	
4-Bromofluorobenzene	96	86 - 113	12/30/14 23:07	
Dibromofluoromethane	102	86 - 112	12/30/14 23:07	
Toluene-d8	116	88 - 115	12/30/14 23:07	*

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** JQ1410021-03

**Service Request:** J1409873  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 11:40	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 11:40	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 11:40	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 11:40	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 11:40	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 11:40	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 11:40	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 11:40	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 11:40	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 11:40	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 11:40	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 11:40	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 11:40	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 11:40	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 11:40	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 11:40	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 11:40	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 11:40	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 11:40	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/31/14 11:40	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 11:40	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 11:40	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/31/14 11:40	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 11:40	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 11:40	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/31/14 11:40	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 11:40	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 11:40	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 11:40	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/31/14 11:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	72 - 121	12/31/14 11:40	
4-Bromofluorobenzene	98	86 - 113	12/31/14 11:40	
Dibromofluoromethane	103	86 - 112	12/31/14 11:40	
Toluene-d8	114	88 - 115	12/31/14 11:40	

**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1410023-03

**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	01/01/15 01:28	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	01/01/15 01:28	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	01/01/15 01:28	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	01/01/15 01:28	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	01/01/15 01:28	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	01/01/15 01:28	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	01/01/15 01:28	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	01/01/15 01:28	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	01/01/15 01:28	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	01/01/15 01:28	
Bromochloromethane	0.27 U	5.0	0.27	1	01/01/15 01:28	
Bromodichloromethane	0.22 U	1.0	0.22	1	01/01/15 01:28	
Bromoform	0.42 U	2.0	0.42	1	01/01/15 01:28	
Bromomethane	0.23 U	5.0	0.23	1	01/01/15 01:28	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	01/01/15 01:28	
Chlorobenzene	0.16 U	1.0	0.16	1	01/01/15 01:28	
Chloroethane	0.52 U	5.0	0.52	1	01/01/15 01:28	
Chloroform	0.35 U	1.0	0.35	1	01/01/15 01:28	
Chloromethane	0.36 U	1.0	0.36	1	01/01/15 01:28	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	01/01/15 01:28	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	01/01/15 01:28	
Dibromochloromethane	0.21 U	1.0	0.21	1	01/01/15 01:28	
Dichlorodifluoromethane	0.23 U	20	0.23	1	01/01/15 01:28	
Methylene Chloride	0.21 U	5.0	0.21	1	01/01/15 01:28	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	01/01/15 01:28	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	01/01/15 01:28	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	01/01/15 01:28	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	01/01/15 01:28	
Trichlorofluoromethane	0.24 U	20	0.24	1	01/01/15 01:28	
Vinyl Chloride	0.36 U	1.0	0.36	1	01/01/15 01:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	100	72 - 121	01/01/15 01:28	
4-Bromofluorobenzene	97	86 - 113	01/01/15 01:28	
Dibromofluoromethane	105	86 - 112	01/01/15 01:28	
Toluene-d8	114	88 - 115	01/01/15 01:28	



**ALS Group USA, Corp.**  
dba ALS Environmental

Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** JQ1500025-03

**Service Request:** J1409873  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** ug/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/31/14 22:58	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/31/14 22:58	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/31/14 22:58	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/31/14 22:58	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/31/14 22:58	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/31/14 22:58	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/31/14 22:58	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/31/14 22:58	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/31/14 22:58	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/31/14 22:58	
Bromochloromethane	0.27 U	5.0	0.27	1	12/31/14 22:58	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/31/14 22:58	
Bromoform	0.42 U	2.0	0.42	1	12/31/14 22:58	
Bromomethane	0.23 U	5.0	0.23	1	12/31/14 22:58	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/31/14 22:58	
Chlorobenzene	0.16 U	1.0	0.16	1	12/31/14 22:58	
Chloroethane	0.52 U	5.0	0.52	1	12/31/14 22:58	
Chloroform	0.35 U	1.0	0.35	1	12/31/14 22:58	
Chloromethane	0.36 U	1.0	0.36	1	12/31/14 22:58	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/31/14 22:58	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/31/14 22:58	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/31/14 22:58	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/31/14 22:58	
Methylene Chloride	0.21 U	5.0	0.21	1	12/31/14 22:58	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/31/14 22:58	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/31/14 22:58	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/31/14 22:58	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/31/14 22:58	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/31/14 22:58	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/31/14 22:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	116	72 - 121	12/31/14 22:58	
4-Bromofluorobenzene	100	86 - 113	12/31/14 22:58	
Dibromofluoromethane	110	86 - 112	12/31/14 22:58	
Toluene-d8	98	88 - 115	12/31/14 22:58	

ALS Group USA, Corp.  
dba ALS Environmental

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873

**SURROGATE RECOVERY SUMMARY**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		72 - 121	86 - 113	86 - 112
WILC-NPSH-MW0027-012.5-20141218	J1409873-001	129 *	104	109
WILC-MW0066-007.0-20141218J1409873-002		134 *	99	114 *
WILC-MW0073-007.0-20141218J1409873-003		132 *	102	118 *
WILC-MW0074-007.0-20141218J1409873-004		134 *	96	110
WILC-MW0091-007.0-20141218J1409873-005		129 *	100	112
WILC-MW0095-007.0-20141218J1409873-006		133 *	100	113 *
WILC-MW0087-020.0-20141218J1409873-007		130 *	104	110
WILC-MW0109-020.0-20141218J1409873-008		133 *	105	115 *
WILC-MW0115-020.0-20141218J1409873-009		137 *	102	114 *
WILC-MW0116-020.0-20141218J1409873-010		134 *	113	115 *
WILC-MW0122-020.0-20141218J1409873-011		134 *	100	114 *
WILC-MW0125-020.0-20141219J1409873-012		134 *	100	112
WILC-MW0126-020.0-20141218J1409873-013		131 *	100	116 *
WILC-NPSH-MW0016-031.5-20141218	J1409873-014	132 *	101	114 *
WILC-NPSH-MW0017-031.5-20141218	J1409873-015	132 *	103	113 *
WILC-NPSH-MW0019-031.5-20141218	J1409873-016	135 *	102	113 *
WILC-NPSH-MW0020-031.5-20141218	J1409873-017	133 *	111	114 *
WILC-NPSH-MW0022-031.5-20141218	J1409873-018	137 *	101	116 *
WILC-MW0065-031.5-20141218J1409873-019		108	97	106
WILC-MW0072-031.5-20141218J1409873-020		110	96	106
WILC-MW0080-031.5-20141219J1409873-021		107	95	106
WILC-MW0081-031.5-20141218J1409873-022		113	96	107
WILC-MW0088-031.5-20141218J1409873-023		108	99	106
WILC-MW0090-031.5-20141218J1409873-024		111	98	106
WILC-MW0097-031.5-20141218J1409873-025		113	95	106
WILC-NPSH-MW0025-042.5-20141219	J1409873-026	112	94	108
WILC-NPSH-MW0039-042.5-20141218	J1409873-027	111	93	108
WILC-MW0118-042.5-20141218J1409873-028		113	94	108
WILC-MW0120-042.5-20141218J1409873-029		111	93	107
WILC-MW0078-067.5-20141218J1409873-030		109	94	104
WILC-MW0089-020.0-20141219J1409873-031		114	95	107
WILC-MW0052DD-060.0-20141219	J1409873-032	100	98	102

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873

**SURROGATE RECOVERY SUMMARY**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		72 - 121	86 - 113	86 - 112
WILC-MW0130-061.0-20141219J1409873-033		103	96	103
WILC-MW0052DD-060.0-20141219	J1409873-034	101	100	103
WILC-MW0064-007.8-20141219J1409873-035		102	93	106
Trip Blank	J1409873-036	101	96	103
Lab Control Sample	JQ1409964-01	119	106	105
Duplicate Lab Control Sample	JQ1409964-02	121	108	104
Method Blank	JQ1409964-03	131 *	104	110
Method Blank	JQ1409964-04	135 *	99	114 *
Lab Control Sample	JQ1410000-01	100	100	98
Duplicate Lab Control Sample	JQ1410000-02	102	101	100
Method Blank	JQ1410000-03	110	94	103
Lab Control Sample	JQ1410004-01	98	98	102
Duplicate Lab Control Sample	JQ1410004-02	96	97	101
Method Blank	JQ1410004-03	99	96	102
Lab Control Sample	JQ1410021-01	95	97	101
Duplicate Lab Control Sample	JQ1410021-02	97	95	100
Method Blank	JQ1410021-03	103	98	103
Lab Control Sample	JQ1410023-01	97	95	105
Duplicate Lab Control Sample	JQ1410023-02	96	93	102
Method Blank	JQ1410023-03	100	97	105
Lab Control Sample	JQ1500025-01	98	93	94
Duplicate Lab Control Sample	JQ1500025-02	103	99	100
Method Blank	JQ1500025-03	116	100	110

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873

**SURROGATE RECOVERY SUMMARY**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Sample Name	Lab Code	Toluene-d8
		88 - 115
WILC-NPSH-MW0027-012.5-20141218	J1409873-001	93
WILC-MW0066-007.0-20141218J1409873-002		92
WILC-MW0073-007.0-20141218J1409873-003		94
WILC-MW0074-007.0-20141218J1409873-004		96
WILC-MW0091-007.0-20141218J1409873-005		93
WILC-MW0095-007.0-20141218J1409873-006		93
WILC-MW0087-020.0-20141218J1409873-007		94
WILC-MW0109-020.0-20141218J1409873-008		95
WILC-MW0115-020.0-20141218J1409873-009		95
WILC-MW0116-020.0-20141218J1409873-010		96
WILC-MW0122-020.0-20141218J1409873-011		97
WILC-MW0125-020.0-20141219J1409873-012		94
WILC-MW0126-020.0-20141218J1409873-013		95
WILC-NPSH-MW0016-031.5-20141218	J1409873-014	96
WILC-NPSH-MW0017-031.5-20141218	J1409873-015	92
WILC-NPSH-MW0019-031.5-20141218	J1409873-016	94
WILC-NPSH-MW0020-031.5-20141218	J1409873-017	92
WILC-NPSH-MW0022-031.5-20141218	J1409873-018	92
WILC-MW0065-031.5-20141218J1409873-019		98
WILC-MW0072-031.5-20141218J1409873-020		98
WILC-MW0080-031.5-20141219J1409873-021		97
WILC-MW0081-031.5-20141218J1409873-022		99
WILC-MW0088-031.5-20141218J1409873-023		97
WILC-MW0090-031.5-20141218J1409873-024		99
WILC-MW0097-031.5-20141218J1409873-025		96
WILC-NPSH-MW0025-042.5-20141219	J1409873-026	99
WILC-NPSH-MW0039-042.5-20141218	J1409873-027	98
WILC-MW0118-042.5-20141218J1409873-028		95
WILC-MW0120-042.5-20141218J1409873-029		99
WILC-MW0078-067.5-20141218J1409873-030		99
WILC-MW0089-020.0-20141219J1409873-031		95
WILC-MW0052DD-060.0-20141219	J1409873-032	114

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873

**SURROGATE RECOVERY SUMMARY**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

Sample Name	Lab Code	Toluene-d8
		88 - 115
WILC-MW0130-061.0-20141219J1409873-033		112
WILC-MW0052DD-060.0-20141219	J1409873-034	114
WILC-MW0064-007.8-20141219J1409873-035		114
Trip Blank	J1409873-036	113
Lab Control Sample	JQ1409964-01	98
Duplicate Lab Control Sample	JQ1409964-02	98
Method Blank	JQ1409964-03	93
Method Blank	JQ1409964-04	95
Lab Control Sample	JQ1410000-01	98
Duplicate Lab Control Sample	JQ1410000-02	98
Method Blank	JQ1410000-03	99
Lab Control Sample	JQ1410004-01	107
Duplicate Lab Control Sample	JQ1410004-02	105
Method Blank	JQ1410004-03	116 *
Lab Control Sample	JQ1410021-01	105
Duplicate Lab Control Sample	JQ1410021-02	107
Method Blank	JQ1410021-03	114
Lab Control Sample	JQ1410023-01	106
Duplicate Lab Control Sample	JQ1410023-02	109
Method Blank	JQ1410023-03	114
Lab Control Sample	JQ1500025-01	95
Duplicate Lab Control Sample	JQ1500025-02	99
Method Blank	JQ1500025-03	98

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Analyzed:** 12/30/14

**Duplicate Lab Control Sample Summary  
Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 427352

Analyte Name	Lab Control Sample JQ1409964-01			Duplicate Lab Control Sample JQ1409964-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	56.6	50.0	113	56.7	50.0	113	70-122	<1	30
1,1,2,2-Tetrachloroethane	52.0	50.0	104	50.8	50.0	102	66-135	2	30
1,1,2-Trichloroethane	54.1	50.0	108	52.4	50.0	105	75-122	3	30
1,1-Dichloroethane (1,1-DCA)	56.8	50.0	114	57.6	50.0	115	79-117	1	30
1,1-Dichloroethene (1,1-DCE)	58.4	50.0	117	58.0	50.0	116	72-128	<1	30
1,2-Dichlorobenzene	52.2	50.0	104	54.1	50.0	108	81-115	4	30
1,2-Dichloroethane	66.1	50.0	132 *	64.2	50.0	128 *	70-117	3	30
1,2-Dichloropropane	54.5	50.0	109	53.2	50.0	106	79-117	2	30
1,3-Dichlorobenzene	53.6	50.0	107	55.4	50.0	111	82-116	3	30
1,4-Dichlorobenzene	53.8	50.0	108	53.3	50.0	106	82-115	<1	30
Bromochloromethane	51.8	50.0	104	51.0	50.0	102	78-118	2	30
Bromodichloromethane	58.9	50.0	118	58.4	50.0	117	75-118	<1	30
Bromoform	55.5	50.0	111	53.3	50.0	107	63-121	4	30
Bromomethane	58.4	50.0	117	60.5	50.0	121	31-153	4	30
Carbon Tetrachloride	56.5	50.0	113	57.8	50.0	116	67-124	2	30
Chlorobenzene	52.7	50.0	105	51.2	50.0	102	83-118	3	30
Chloroethane	53.0	50.0	106	53.8	50.0	108	68-132	1	30
Chloroform	60.2	50.0	120 *	57.8	50.0	116	77-116	4	30
Chloromethane	42.7	50.0	85	45.4	50.0	91	60-128	6	30
cis-1,2-Dichloroethene	58.5	50.0	117	57.0	50.0	114	78-117	3	30
cis-1,3-Dichloropropene	54.8	50.0	110	53.9	50.0	108	80-119	2	30
Dibromochloromethane	53.7	50.0	107	51.5	50.0	103	74-121	4	30
Dichlorodifluoromethane	47.8	50.0	96	46.7	50.0	93	49-132	2	30
Methylene Chloride	53.0	50.0	106	52.9	50.0	106	75-123	<1	30
Tetrachloroethene (PCE)	51.8	50.0	104	50.0	50.0	100	75-126	4	30
trans-1,2-Dichloroethene	56.4	50.0	113	58.2	50.0	116	75-121	3	30
trans-1,3-Dichloropropene	57.2	50.0	114	55.6	50.0	111	76-118	3	30
Trichloroethene (TCE)	51.6	50.0	103	52.3	50.0	105	78-122	1	30
Trichlorofluoromethane	62.3	50.0	125	62.6	50.0	125	58-134	<1	30
Vinyl Chloride	59.2	50.0	118	61.8	50.0	124	69-138	4	30

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Analyzed:** 12/30/14

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 427551

Analyte Name	Lab Control Sample JQ1410000-01			Duplicate Lab Control Sample JQ1410000-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	46.8	50.0	94	51.2	50.0	102	70-122	9	30
1,1,2,2-Tetrachloroethane	47.5	50.0	95	47.4	50.0	95	66-135	<1	30
1,1,2-Trichloroethane	49.0	50.0	98	49.6	50.0	99	75-122	1	30
1,1-Dichloroethane (1,1-DCA)	48.7	50.0	97	51.6	50.0	103	79-117	6	30
1,1-Dichloroethene (1,1-DCE)	48.9	50.0	98	52.8	50.0	106	72-128	8	30
1,2-Dichlorobenzene	49.0	50.0	98	50.1	50.0	100	81-115	2	30
1,2-Dichloroethane	50.7	50.0	101	53.1	50.0	106	70-117	5	30
1,2-Dichloropropane	47.7	50.0	95	50.3	50.0	101	79-117	5	30
1,3-Dichlorobenzene	50.8	50.0	102	53.8	50.0	108	82-116	6	30
1,4-Dichlorobenzene	49.4	50.0	99	50.1	50.0	100	82-115	1	30
Bromochloromethane	47.9	50.0	96	49.2	50.0	98	78-118	3	30
Bromodichloromethane	49.8	50.0	100	51.8	50.0	104	75-118	4	30
Bromoform	49.7	50.0	99	49.3	50.0	98	63-121	<1	30
Bromomethane	58.7	50.0	117	61.4	50.0	123	31-153	4	30
Carbon Tetrachloride	47.4	50.0	95	51.2	50.0	102	67-124	8	30
Chlorobenzene	51.1	50.0	102	52.8	50.0	106	83-118	3	30
Chloroethane	49.7	50.0	99	55.0	50.0	110	68-132	10	30
Chloroform	49.9	50.0	100	52.1	50.0	104	77-116	4	30
Chloromethane	40.5	50.0	81	44.4	50.0	89	60-128	9	30
cis-1,2-Dichloroethene	49.0	50.0	98	51.7	50.0	103	78-117	5	30
cis-1,3-Dichloropropene	50.3	50.0	101	50.6	50.0	101	80-119	<1	30
Dibromochloromethane	49.5	50.0	99	50.1	50.0	100	74-121	1	30
Dichlorodifluoromethane	37.1	50.0	74	42.0	50.0	84	49-132	12	30
Methylene Chloride	47.0	50.0	94	49.7	50.0	99	75-123	6	30
Tetrachloroethene (PCE)	50.1	50.0	100	53.7	50.0	107	75-126	7	30
trans-1,2-Dichloroethene	49.9	50.0	100	52.4	50.0	105	75-121	5	30
trans-1,3-Dichloropropene	50.6	50.0	101	49.8	50.0	100	76-118	2	30
Trichloroethene (TCE)	49.4	50.0	99	53.3	50.0	107	78-122	8	30
Trichlorofluoromethane	53.6	50.0	107	57.3	50.0	115	58-134	7	30
Vinyl Chloride	54.6	50.0	109	57.4	50.0	115	69-138	5	30

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Analyzed:** 12/30/14

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 427562

Analyte Name	Lab Control Sample JQ1410004-01			Duplicate Lab Control Sample JQ1410004-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	44.1	50.0	88	41.3	50.0	83	70-122	6	30
1,1,2,2-Tetrachloroethane	56.1	50.0	112	54.3	50.0	108	66-135	3	30
1,1,2-Trichloroethane	48.4	50.0	97	48.2	50.0	96	75-122	<1	30
1,1-Dichloroethane (1,1-DCA)	47.8	50.0	96	45.9	50.0	92	79-117	4	30
1,1-Dichloroethene (1,1-DCE)	47.9	50.0	96	45.0	50.0	90	72-128	6	30
1,2-Dichlorobenzene	49.4	50.0	99	49.1	50.0	98	81-115	<1	30
1,2-Dichloroethane	46.6	50.0	93	46.2	50.0	92	70-117	<1	30
1,2-Dichloropropane	46.1	50.0	92	44.9	50.0	90	79-117	3	30
1,3-Dichlorobenzene	49.6	50.0	99	48.4	50.0	97	82-116	3	30
1,4-Dichlorobenzene	42.8	50.0	86	42.3	50.0	85	82-115	1	30
Bromochloromethane	46.8	50.0	94	45.8	50.0	92	78-118	2	30
Bromodichloromethane	43.5	50.0	87	42.5	50.0	85	75-118	2	30
Bromoform	51.1	50.0	102	51.1	50.0	102	63-121	<1	30
Bromomethane	52.8	50.0	106	52.8	50.0	106	31-153	<1	30
Carbon Tetrachloride	45.8	50.0	92	43.0	50.0	86	67-124	6	30
Chlorobenzene	52.3	50.0	105	49.5	50.0	99	83-118	6	30
Chloroethane	35.8	50.0	72	34.3	50.0	68	68-132	4	30
Chloroform	46.8	50.0	94	45.9	50.0	92	77-116	2	30
Chloromethane	53.7	50.0	107	49.1	50.0	98	60-128	9	30
cis-1,2-Dichloroethene	47.8	50.0	96	45.9	50.0	92	78-117	4	30
cis-1,3-Dichloropropene	52.3	50.0	105	50.7	50.0	101	80-119	3	30
Dibromochloromethane	49.9	50.0	100	48.7	50.0	97	74-121	3	30
Dichlorodifluoromethane	32.0	50.0	64	29.6	50.0	59	49-132	8	30
Methylene Chloride	45.4	50.0	91	44.4	50.0	89	75-123	2	30
Tetrachloroethene (PCE)	52.5	50.0	105	49.7	50.0	99	75-126	6	30
trans-1,2-Dichloroethene	49.0	50.0	98	46.3	50.0	93	75-121	6	30
trans-1,3-Dichloropropene	51.6	50.0	103	49.6	50.0	99	76-118	4	30
Trichloroethene (TCE)	42.2	50.0	84	41.5	50.0	83	78-122	2	30
Trichlorofluoromethane	44.7	50.0	89	41.8	50.0	84	58-134	7	30
Vinyl Chloride	54.7	50.0	109	47.0	50.0	94	69-138	15	30



**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Analyzed:** 12/31/14

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 427621

Analyte Name	Lab Control Sample JQ1410021-01			Duplicate Lab Control Sample JQ1410021-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	42.5	50.0	85	41.2	50.0	82	70-122	3	30
1,1,2,2-Tetrachloroethane	54.3	50.0	109	54.8	50.0	110	66-135	<1	30
1,1,2-Trichloroethane	48.6	50.0	97	48.4	50.0	97	75-122	<1	30
1,1-Dichloroethane (1,1-DCA)	45.8	50.0	92	44.9	50.0	90	79-117	2	30
1,1-Dichloroethene (1,1-DCE)	45.1	50.0	90	43.8	50.0	88	72-128	3	30
1,2-Dichlorobenzene	49.0	50.0	98	48.3	50.0	97	81-115	2	30
1,2-Dichloroethane	46.0	50.0	92	45.7	50.0	91	70-117	<1	30
1,2-Dichloropropane	44.4	50.0	89	43.5	50.0	87	79-117	2	30
1,3-Dichlorobenzene	48.2	50.0	96	47.5	50.0	95	82-116	2	30
1,4-Dichlorobenzene	42.5	50.0	85	40.5	50.0	81 *	82-115	5	30
Bromochloromethane	46.7	50.0	93	45.3	50.0	91	78-118	3	30
Bromodichloromethane	43.1	50.0	86	42.4	50.0	85	75-118	2	30
Bromoform	50.4	50.0	101	51.1	50.0	102	63-121	1	30
Bromomethane	61.0	50.0	122	58.0	50.0	116	31-153	5	30
Carbon Tetrachloride	43.3	50.0	86	41.3	50.0	83	67-124	5	30
Chlorobenzene	49.7	50.0	99	48.8	50.0	98	83-118	2	30
Chloroethane	36.7	50.0	73	34.7	50.0	69	68-132	6	30
Chloroform	45.6	50.0	91	43.9	50.0	88	77-116	4	30
Chloromethane	66.3	50.0	133 *	60.0	50.0	120	60-128	10	30
cis-1,2-Dichloroethene	45.7	50.0	91	44.3	50.0	89	78-117	3	30
cis-1,3-Dichloropropene	50.6	50.0	101	51.3	50.0	103	80-119	1	30
Dibromochloromethane	49.2	50.0	98	49.4	50.0	99	74-121	<1	30
Dichlorodifluoromethane	48.4	50.0	97	45.2	50.0	90	49-132	7	30
Methylene Chloride	45.4	50.0	91	44.7	50.0	89	75-123	2	30
Tetrachloroethene (PCE)	49.5	50.0	99	48.9	50.0	98	75-126	1	30
trans-1,2-Dichloroethene	47.0	50.0	94	43.5	50.0	87	75-121	8	30
trans-1,3-Dichloropropene	49.7	50.0	99	49.5	50.0	99	76-118	<1	30
Trichloroethene (TCE)	40.3	50.0	81	39.4	50.0	79	78-122	2	30
Trichlorofluoromethane	44.9	50.0	90	42.0	50.0	84	58-134	7	30
Vinyl Chloride	57.9	50.0	116	52.1	50.0	104	69-138	11	30

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Analyzed:** 12/31/14 - 01/01/15

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 427684

Analyte Name	Lab Control Sample JQ1410023-01			Duplicate Lab Control Sample JQ1410023-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	44.2	50.0	88	42.4	50.0	85	70-122	4	30
1,1,2,2-Tetrachloroethane	57.1	50.0	114	57.4	50.0	115	66-135	<1	30
1,1,2-Trichloroethane	49.6	50.0	99	50.0	50.0	100	75-122	<1	30
1,1-Dichloroethane (1,1-DCA)	47.9	50.0	96	45.7	50.0	91	79-117	5	30
1,1-Dichloroethene (1,1-DCE)	49.2	50.0	98	45.8	50.0	92	72-128	7	30
1,2-Dichlorobenzene	49.5	50.0	99	48.3	50.0	97	81-115	2	30
1,2-Dichloroethane	47.5	50.0	95	45.5	50.0	91	70-117	4	30
1,2-Dichloropropane	46.5	50.0	93	44.0	50.0	88	79-117	6	30
1,3-Dichlorobenzene	50.1	50.0	100	47.6	50.0	95	82-116	5	30
1,4-Dichlorobenzene	42.5	50.0	85	41.5	50.0	83	82-115	2	30
Bromochloromethane	47.6	50.0	95	45.2	50.0	90	78-118	5	30
Bromodichloromethane	44.1	50.0	88	43.1	50.0	86	75-118	2	30
Bromoform	53.0	50.0	106	53.3	50.0	107	63-121	<1	30
Bromomethane	45.9	50.0	92	43.8	50.0	88	31-153	5	30
Carbon Tetrachloride	44.8	50.0	90	43.4	50.0	87	67-124	3	30
Chlorobenzene	52.0	50.0	104	51.5	50.0	103	83-118	<1	30
Chloroethane	49.4	50.0	99	44.9	50.0	90	68-132	10	30
Chloroform	47.1	50.0	94	45.0	50.0	90	77-116	5	30
Chloromethane	51.5	50.0	103	47.0	50.0	94	60-128	9	30
cis-1,2-Dichloroethene	47.6	50.0	95	44.7	50.0	89	78-117	6	30
cis-1,3-Dichloropropene	50.7	50.0	101	51.2	50.0	102	80-119	<1	30
Dibromochloromethane	51.1	50.0	102	51.7	50.0	103	74-121	1	30
Dichlorodifluoromethane	46.8	50.0	94	43.6	50.0	87	49-132	7	30
Methylene Chloride	47.2	50.0	94	45.5	50.0	91	75-123	4	30
Tetrachloroethene (PCE)	52.5	50.0	105	51.8	50.0	104	75-126	1	30
trans-1,2-Dichloroethene	48.1	50.0	96	46.0	50.0	92	75-121	5	30
trans-1,3-Dichloropropene	50.3	50.0	101	49.8	50.0	100	76-118	<1	30
Trichloroethene (TCE)	43.1	50.0	86	40.5	50.0	81	78-122	6	30
Trichlorofluoromethane	45.2	50.0	90	43.7	50.0	87	58-134	3	30
Vinyl Chloride	59.2	50.0	118	51.3	50.0	103	69-138	14	30

**Client:** GeoSyntec Consultants  
**Project:** Wilson Corners/FR0743C-04  
**Sample Matrix:** Water

**Service Request:** J1409873  
**Date Analyzed:** 12/31/14

**Duplicate Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 427846

Analyte Name	Lab Control Sample JQ1500025-01			Duplicate Lab Control Sample JQ1500025-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	52.6	50.0	105	52.9	50.0	106	70-122	<1	30
1,1,2,2-Tetrachloroethane	48.6	50.0	97	51.5	50.0	103	66-135	6	30
1,1,2-Trichloroethane	54.7	50.0	109	54.3	50.0	109	75-122	<1	30
1,1-Dichloroethane (1,1-DCA)	55.9	50.0	112	55.7	50.0	111	79-117	<1	30
1,1-Dichloroethene (1,1-DCE)	56.6	50.0	113	56.6	50.0	113	72-128	<1	30
1,2-Dichlorobenzene	53.9	50.0	108	53.6	50.0	107	81-115	<1	30
1,2-Dichloroethane	54.6	50.0	109	57.5	50.0	115	70-117	5	30
1,2-Dichloropropane	54.1	50.0	108	54.8	50.0	110	79-117	1	30
1,3-Dichlorobenzene	55.2	50.0	110	56.1	50.0	112	82-116	2	30
1,4-Dichlorobenzene	53.7	50.0	107	53.5	50.0	107	82-115	<1	30
Bromochloromethane	53.9	50.0	108	55.3	50.0	111	78-118	3	30
Bromodichloromethane	54.5	50.0	109	54.5	50.0	109	75-118	<1	30
Bromoform	52.1	50.0	104	51.9	50.0	104	63-121	<1	30
Bromomethane	70.0	50.0	140	69.1	50.0	138	31-153	1	30
Carbon Tetrachloride	52.6	50.0	105	53.6	50.0	107	67-124	2	30
Chlorobenzene	57.8	50.0	116	54.8	50.0	110	83-118	5	30
Chloroethane	60.0	50.0	120	60.1	50.0	120	68-132	<1	30
Chloroform	55.3	50.0	111	55.4	50.0	111	77-116	<1	30
Chloromethane	53.5	50.0	107	53.8	50.0	108	60-128	<1	30
cis-1,2-Dichloroethene	54.4	50.0	109	55.7	50.0	111	78-117	2	30
cis-1,3-Dichloropropene	54.5	50.0	109	54.3	50.0	109	80-119	<1	30
Dibromochloromethane	52.3	50.0	105	53.0	50.0	106	74-121	1	30
Dichlorodifluoromethane	57.6	50.0	115	56.7	50.0	113	49-132	2	30
Methylene Chloride	50.9	50.0	102	54.1	50.0	108	75-123	6	30
Tetrachloroethene (PCE)	55.2	50.0	110	54.1	50.0	108	75-126	2	30
trans-1,2-Dichloroethene	55.9	50.0	112	55.8	50.0	112	75-121	<1	30
trans-1,3-Dichloropropene	56.9	50.0	114	56.5	50.0	113	76-118	<1	30
Trichloroethene (TCE)	57.9	50.0	116	56.6	50.0	113	78-122	2	30
Trichlorofluoromethane	61.5	50.0	123	62.0	50.0	124	58-134	<1	30
Vinyl Chloride	66.3	50.0	133	66.7	50.0	133	69-138	<1	30

**Cooler Receipt Form**

Client: GeoSyntec Service Request #: 51409873  
 Project: Wilson Corners  
 Cooler received on 12.22.14 and opened on 12.23.14 by ELT  
 COURIER: ALS UPS FEDEX Client Other \_\_\_\_\_ Airbill # \_\_\_\_\_

- 1 Were custody seals on outside of cooler? Yes  No   
 If yes, how many and where? #: \_\_\_ on lid other
- 2 Were seals intact and signature and date correct? Yes  No  N/A
- 3 Were custody papers properly filled out? Yes  No  N/A
- 4 Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C) 1.8°C \_\_\_\_\_  
TN \_\_\_\_\_
- 5 Thermometer ID \_\_\_\_\_
- 6 Temperature Blank Present? Yes  No
- 7 Were Ice or Ice Packs present Ice  Ice Packs \_\_\_\_\_ No
- 8 Did all bottles arrive in good condition (unbroken, etc....)? Yes  No  N/A
- 9 Type of packing material present Netting \_\_\_\_\_ Vial Holder \_\_\_\_\_ Bubble Wrap   
 Paper \_\_\_\_\_ Styrofoam \_\_\_\_\_ Other \_\_\_\_\_ N/A \_\_\_\_\_
- 10 Were all bottle labels complete (sample ID, preservation, etc....)? Yes  No  N/A
- 11 Did all bottle labels and tags agree with custody papers? Yes  No  N/A
- 12 Were the correct bottles used for the tests indicated? Yes  No  N/A
- 13 Were all of the preserved bottles received with the appropriate preservative?  
 HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2  
 Preservative additions noted below Yes  No  N/A
- 14 Were all samples received within analysis holding times? Yes  No  N/A
- 15 Were all VOA vials free of air bubbles? If present, note below Yes  No  N/A
- 16 Where did the bottles originate? ALS  Client

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above: Headspace on one of three vials for samples MW0115-020.0, MW0006-031.5, MW005200-057.5  
Trip Blank included

Client approval to run samples if discrepancies noted: \_\_\_\_\_ Date: \_\_\_\_\_

SR# **57409873**  
ALS Contact

**CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM**

Page 1 of 1

9143 Philips Highway, Suite 200 Jacksonville, FL 32256 / Ph(904) 739-2277 / FAX (904) 739-2011



Project Name Wilson Corners		Project Number FR0743C-04		ANALYSIS REQUESTED (Include Method Number and #)		5	
Report To Emily Lawson		Report CC		Preservative D		J1409873 Geosyntec Consultants Wilson Corners	
Company/Address Elawson@Geosyntec.com		FAX # 321-269-5880		NUMBER OF CONTAINERS 1		2. HNO3	
Geosyntec Consultants 6770 S. Washington Ave, Ste. 3 Titusville, FL 32780		Sampler's Printed Name David Sizemore		VOCs (8260B)		3. H2SO4	
Phone # 321-269-5880		Sampler's Signature David Sizemore				4. NaOH	
CLIENT SAMPLE ID		LAB ID		SAMPLING DATE		5. Zn, Acetate	
WILC-NPSH-MW0027-012.5-201412				12/18/14 1127		6. MeOH	
WILC-MW0066-007.0-201412				12/18/14 1407		7. NaHSO4	
WILC-MW0073-007.0-201412				12/18/14 1006		8. Other	
WILC-MW0074-007.0-201412				12/18/14 946		REMARKS	
WILC-MW0091-007.0-201412				12/18/14 915			
WILC-MW0095-007.0-201412				12/18/14 1202			
WILC-MW0087-020.0-201412				12/18/14 836			
WILC-MW0109-020.0-201412				12/18/14 1221			
WILC-MW0115-020.0-201412				12/18/14 958			
WILC-MW0116-020.0-201412				12/18/14 1013			

TURNAROUND REQUIREMENTS		REPORT REQUIREMENTS		INVOICE INFORMATION	
<input type="checkbox"/> RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD REQUESTED FAX DATE: _____ REQUESTED REPORT DATE: _____		<input checked="" type="checkbox"/> I. Results Only <input type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data Edata: <input type="checkbox"/> Yes <input type="checkbox"/> No		P.O. # _____ Bill to _____ _____ _____	
Signature: <i>David Sizemore</i>		Signature: _____		Received By: _____	
Printed Name: David Sizemore		Printed Name: _____		Printed Name: _____	
Firm: A.C.S.		Firm: _____		Firm: _____	
Date/Time: 12/22/14 12:24		Date/Time: _____		Date/Time: _____	

Please include data in NASA KEDD format.

SR # **J1409873**  
ALS Contact

**CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM**

Page **2** of **4**

9143 Philips Highway, Suite 200 Jacksonville, FL 32256 / Ph(904) 739-2277 / FAX (904) 739-2011



Project Name: **Wilson Corners**  
 Report To: **Family Lawson**  
 Company/Address: **Elawson@Geosyntec.com**  
 Geosyntec Consultants  
 6770 S. Washington Ave, Ste. 3  
 Titusville, FL 32780  
 Phone #: **321-269-5880**  
 Sampler's Signature: **David Sizemore**  
 Project Number: **FR0743C-04**  
 Report CC: \_\_\_\_\_  
 FAX #: **321-269-5813**  
 Sampler's Printed Name: **David Sizemore**

ANALYSIS REQUESTED (Include Method Number and Container Preservative)  
**J1409873**  
 Geosyntec Consultants  
 Wilson Corners  
**5**



- 4. NaOH
- 5. Zn. Acetate
- 6. MeOH
- 7. NaHSO4
- 8. Other

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE TIME		Matrix	NUMBER OF CONTAINERS	REMARKS
		DATE	TIME			
WILC-MW0122-010.0-201412		12/18/14	1020	W	3	
WILC-MW0125-010.0-201412		12/19/14	1543	W	3	
WILC-MW0126-010.0-201412		12/18/14	1241	W	3	
WILC-NPSH-MW0016-031.5-201412		12/18/14	1502	W	3	
WILC-NPSH-MW0017-031.5-201412		12/18/14	1119	W	3	
WILC-NPSH-MW0019-031.5-201412		12/18/14	1343	W	3	
WILC-NPSH-MW0020-031.5-201412		12/18/14	1216	W	3	
WILC-NPSH-MW0022-031.5-201412		12/18/14	1233	W	3	
WILC-MW0065-031.5-201412		12/18/14	1452	W	3	
WILC-MW0072-031.5-201412		12/18/14	1625	W	3	

Special Instructions/Comments: \_\_\_\_\_

**Please include data in NASA KEDD format.**

TURNAROUND REQUIREMENTS		REPORT REQUIREMENTS		INVOICE INFORMATION	
<input type="checkbox"/> RUSH (SURCHARGES APPLY)	<input checked="" type="checkbox"/> STANDARD	<input checked="" type="checkbox"/> I. Results Only	<input type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MSMSD as required)	PO # _____	Received By _____
REQUESTED FAX DATE _____	REQUESTED REPORT DATE _____	<input type="checkbox"/> III. Results + QC and Calibration Summaries	<input type="checkbox"/> IV. Data Validation Report with Raw Data	Bill to _____	Signature _____
EDATA _____ Yes _____ No	EDATA _____ Yes _____ No	Relinquished By _____	Signature _____	Printed Name _____	Printed Name _____
Received By _____	Signature _____	Printed Name _____	Firm _____	Date/Time _____	Date/Time _____

SR # **5409873**  
ALS Contact

**CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM**

Page **3** of **4**

9143 Phillips Highway, Suite 200 Jacksonville, FL 32256 / Ph(904) 739-2277 / FAX (904) 739-2011



Project Name: **Wilson Corners**  
 Report To: **Emily Lawson**  
 Company/Address: **Elawson@Geosyntec.com**  
 Geosyntec Consultants  
 6770 S. Washington Ave, Ste. 3  
 Titusville, FL 32780  
 Phone #: **321-269-5880**  
 Sampler's Signature: **David Sizemore**  
 Project Number: **FR0743C-04**  
 Report CC

ANALYSIS REQUESTED (Include Method Number)  
**J1409873**  
 Geosyntec Consultants  
 Wilson Corners



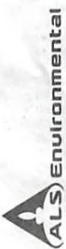
- 2. HNO3
- 3. H2SO4
- 4. NaOH
- 5. Zn, Acetate
- 6. MeOH
- 7. NaHSO4
- 8. Other

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE TIME		Matrix	NUMBER OF CONTAINERS	REMARKS
		DATE	TIME			
WILC-MW0080-031.5-201412		12/19/14	1425	W	3	
WILC-MW0081-031.5-201412		12/18/14	1921	W	3	
WILC-MW0088-031.5-201412		12/18/14	1832	W	3	
WILC-MW0090-031.5-201412		12/18/14	1850	W	3	
WILC-MW0097-031.5-201412		12/18/14	1208	W	3	
WILC-NPSH-MW0025-042.5-201412		12/18/14	1530	W	3	
WILC-NPSH-MW0039-042.5-201412		12/18/14	1437	W	3	
WILC-MW0118-042.5-201412		12/18/14	1027	W	3	
WILC-MW0120-042.5-201412		12/18/14	1039	W	3	
WILC-MW0078-067.5-201412		12/18/14	1512	W	3	

Special Instructions/Comments: **Please include data in NASA KEDD format.**

Signature: <i>[Signature]</i>	Received By: <i>[Signature]</i>	Relinquished By: <i>[Signature]</i>	Received By: <i>[Signature]</i>
Printed Name: David Sizemore	Printed Name: R. Nicholas	Printed Name: R. Nicholas	Printed Name: R. Nicholas
Firm: Geosyntec Consultants	Firm: ALS	Firm: ALS	Firm: ALS
Date/Time: 12/22/14 1229	Date/Time: 12/23/14 1:04	Date/Time: 12/23/14 1:04	Date/Time: 12/23/14 1:04

TURNAROUND REQUIREMENTS: RUSH (SURCHARGES APPLY)  STANDARD   
 REQUESTED FAX DATE: \_\_\_\_\_ REQUESTED REPORT DATE: \_\_\_\_\_  
 REPORT REQUIREMENTS: I. Results Only  II. Results + QC Summaries  III. Results + QC and Calibration Summaries  IV. Data Validation Report with Raw Data   
 Edata: Yes  No



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

9143 Phillips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011 PAGE 4 OF 4

SF# 51409873  
CAS Contract

Project Name <b>Wilson Corneers</b>		Project Number <b>FR0743-C</b>		ANALYSIS REQUESTED (Include Method Number and Container Preservative)	
Project Manager <b>Emily Lawson</b>		Email Address		PRESERVATIVE <b>HCL</b>	
Company/Address <b>Geosyntec Consultants Titusville, FL</b>		NUMBER OF CONTAINERS		J1409873 Geosyntec Consultants Wilson Corneers	
Phone # <b>321 269 5880</b>		FAX #		5	
Sampler's Signature <i>[Signature]</i>		Sampler's Printed Name <b>David Simone</b>		REMARKS/ ALTERNATE DESCRIPTION	
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	
<b>WJLC-MW0089-022.5-20141219</b>		<b>12/19/14</b>	<b>944</b>	<b>GLU</b>	
<b>MW0052DD-057.5</b>		<b>1025</b>			
<b>MW0130-061.0</b>		<b>1240</b>			
<b>MW0052DD-057.5</b>		<b>1350</b>			
<b>MW0064-007.8</b>		<b>1510</b>			
SPECIAL INSTRUCTIONS/COMMENTS					
TURNAROUND REQUIREMENTS		RUSH (SURCHARGES APPLY)		REPORT REQUIREMENTS	
STANDARD		REQUESTED FAX DATE		I. Results Only	
REQUESTED REPORT DATE		REQUESTED REPORT DATE		II. Results + QC Summaries (LCS, DUP, MS/MSD as required)	
RECEIVED BY		RECEIVED BY		III. Results + QC and Calibration Summaries	
RELINQUISHED BY		RELINQUISHED BY		IV. Data Validation Report with Raw Data	
CUSTODY SEALS: Y N		CUSTODY SEALS: Y N		V. Specialized Forms / Custom Report	
Signature <i>[Signature]</i>		Signature <i>[Signature]</i>		Edata Yes No	
Printed Name <b>David Simon</b>		Printed Name <b>David Simon</b>		PO #	
Firm <b>Geosyntec</b>		Firm <b>Geosyntec</b>		BILL TO:	
Date/Time <b>12/22/14 12:29</b>		Date/Time <b>12-22-14 11:04</b>		INVOICE INFORMATION	
Distribution: White - Return to Originator; Yellow - Retained by Client		Distribution: White - Return to Originator; Yellow - Retained by Client		Copyright 2012 by ALS Group	



## **APPENDIX D**

### **RIS COMPLETION TICKETS (FURNISHED ON CD ONLY)**

**DATA CHECKER****Completion Ticket**

On 2/4/2015 at 6:01 AM the following files were submitted to TtNUS

**Completion\_GSTTI\_WILC\_20150204.txt**

**Lithology\_GSTTI\_WILC\_20150204.txt**

**Location\_GSTTI\_WILC\_20150204.txt**

**Project\_GSTTI\_WILC\_20150204.txt**

**Result\_GSTTI\_WILC\_20150204.txt**

**Sample\_GSTTI\_WILC\_20150204.txt**

**Water\_GSTTI\_WILC\_20150204.txt**

The following comment was provided with this submission:

**Dec 2014 LTM GW**

If you need to identify this session at a later date you may use the Ticket Key:

**Repository201524\_663137290\_kedd\_GSTTI**

You may print this page by clicking on the "Print This Page" button

Thank you for using the Data Checker, to upload more files click the "Upload Files" link in the menu.

Print this Page

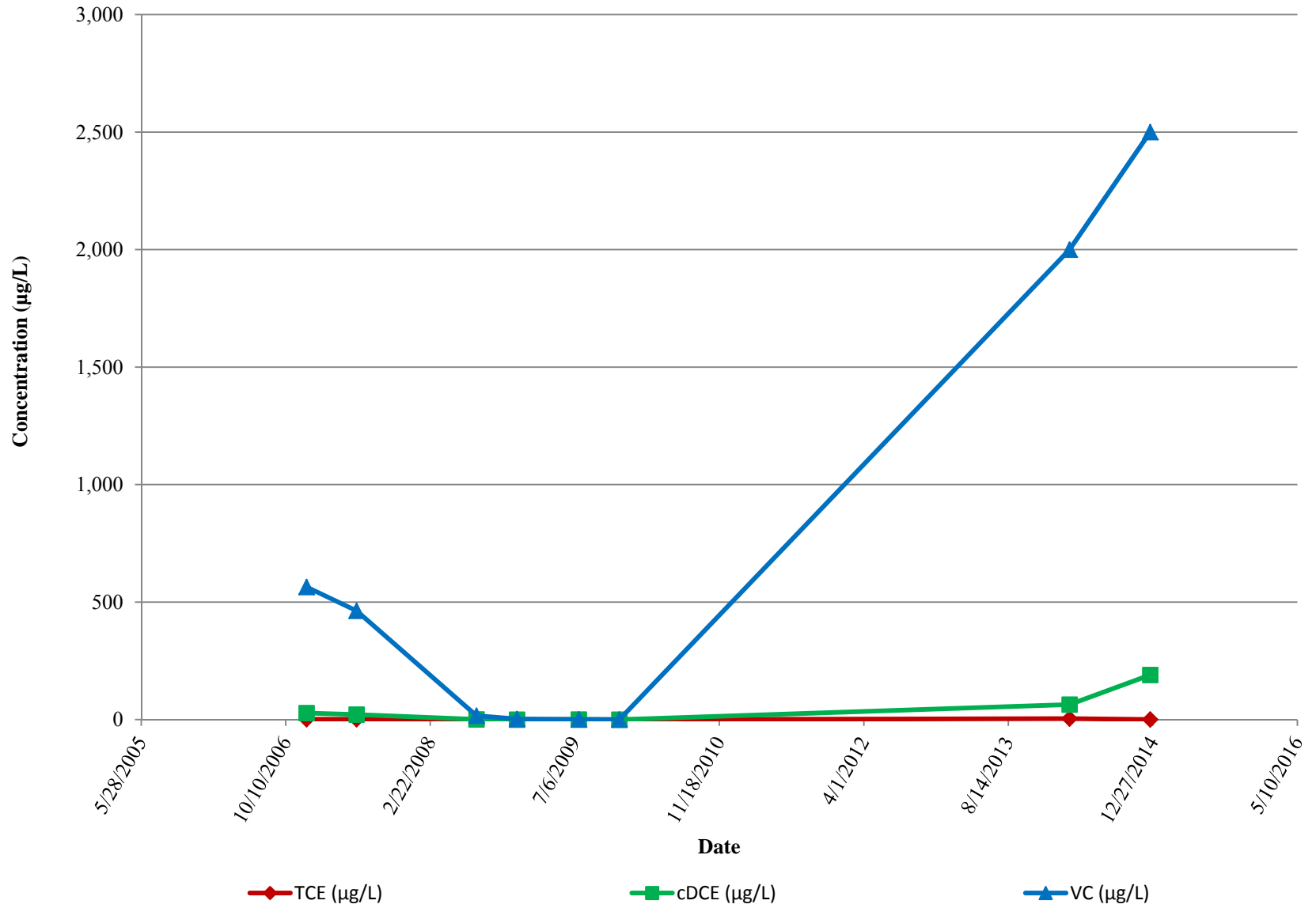
## **APPENDIX E**

### **VOC TREND GRAPHS (FURNISHED ON CD ONLY)**

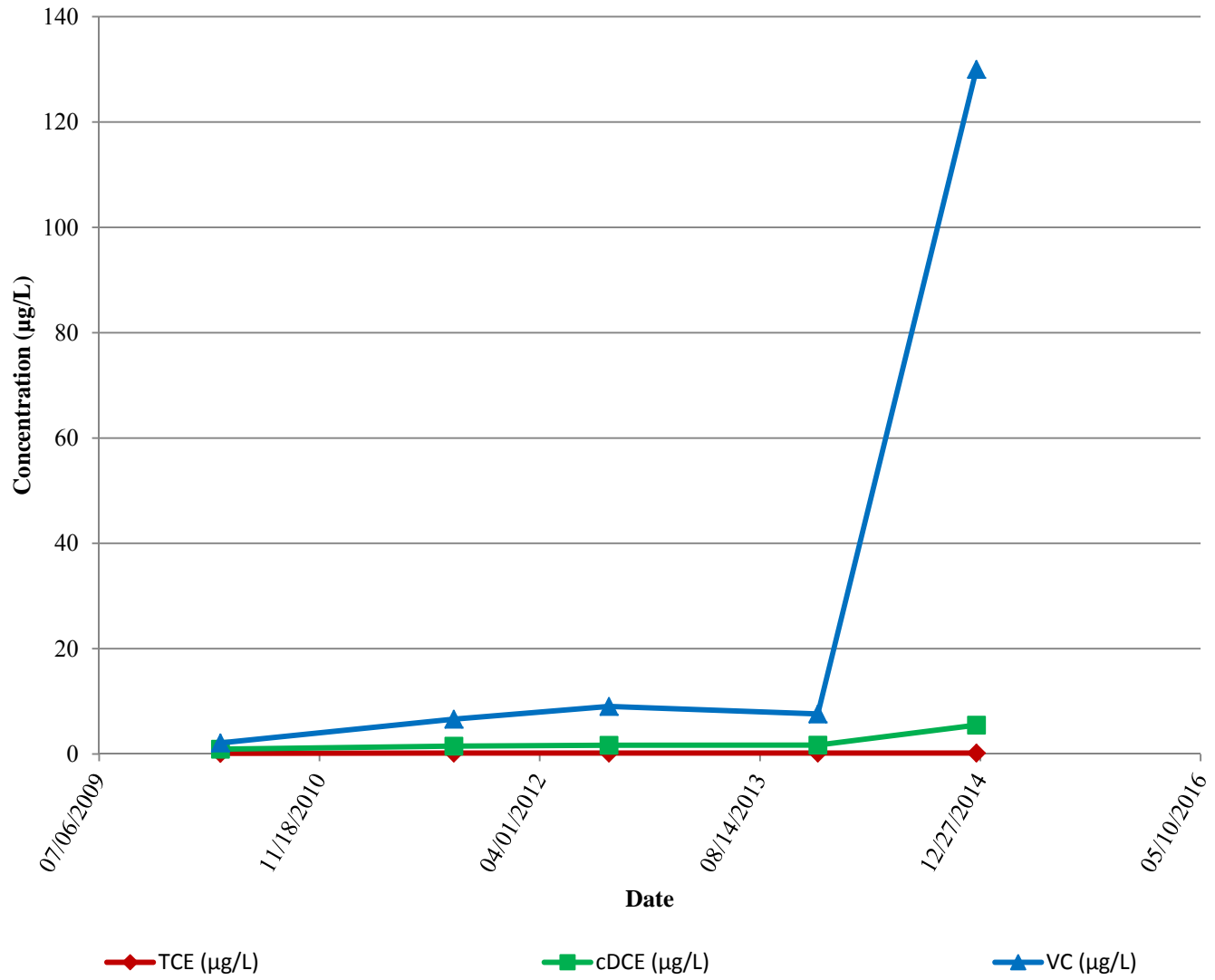
**Trend Graphs are Provided for Monitoring Wells:**

<b>Peripheral Wells</b>	
<b>Well ID</b>	<b>Screen Depth Interval (feet below land surface)</b>
MW0080	29 to 34
MW0088	29 to 34
MW0090	29 to 34
MW0095	2 to 12
<b>Internal Plume Wells</b>	
<b>Well ID</b>	<b>Screen Depth Interval (feet below land surface)</b>
MW0065	29 to 34
MW0097	29 to 34
MW0109	15 to 25
MW0116	15 to 25
NPSH-MW0016	29 to 34
NPSH-MW0017	29 to 34
NPSH-MW0020	29 to 34
NPSH-MW0027	10 to 15
<b>Vertical Extent Wells</b>	
<b>Well ID</b>	<b>Screen Depth Interval (feet below land surface)</b>
MW052DD	55 to 65
MW0078	65 to 70

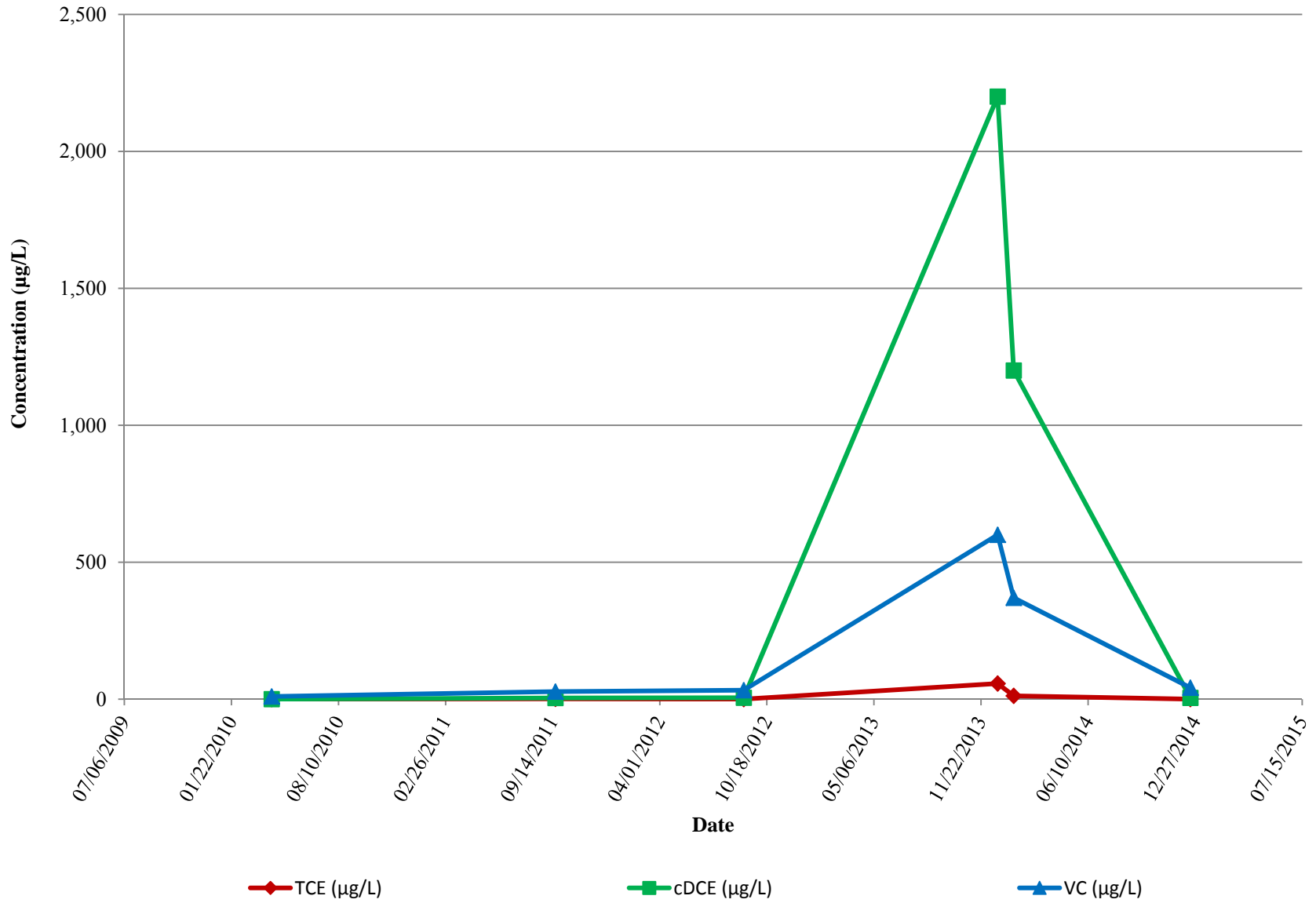
**MW0080 (screened 29 to 34 feet below land surface)**



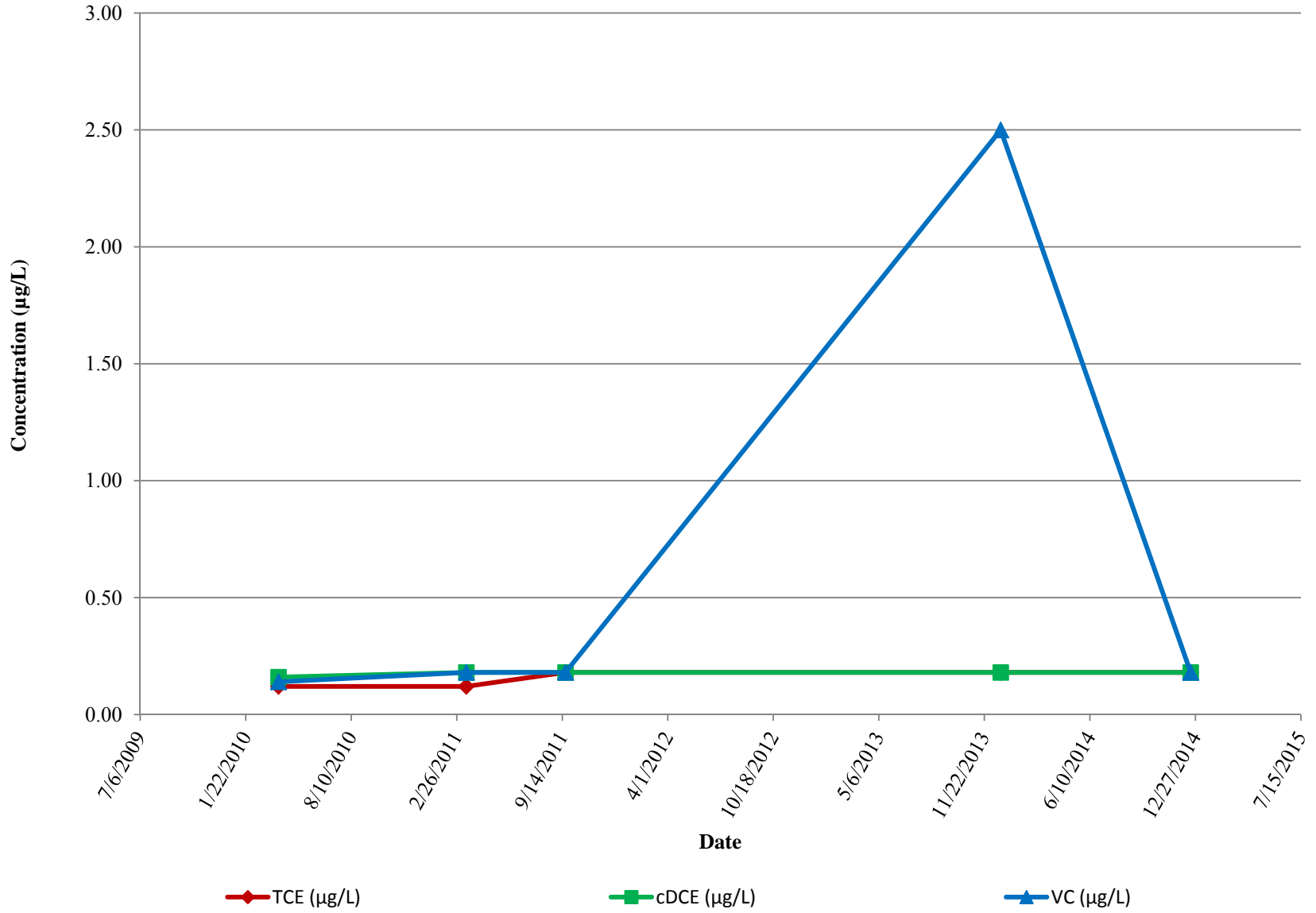
### MW0088 (screened 29 to 34 feet below land surface)



**MW0090 (screened 29 to 34 feet below land surface)**

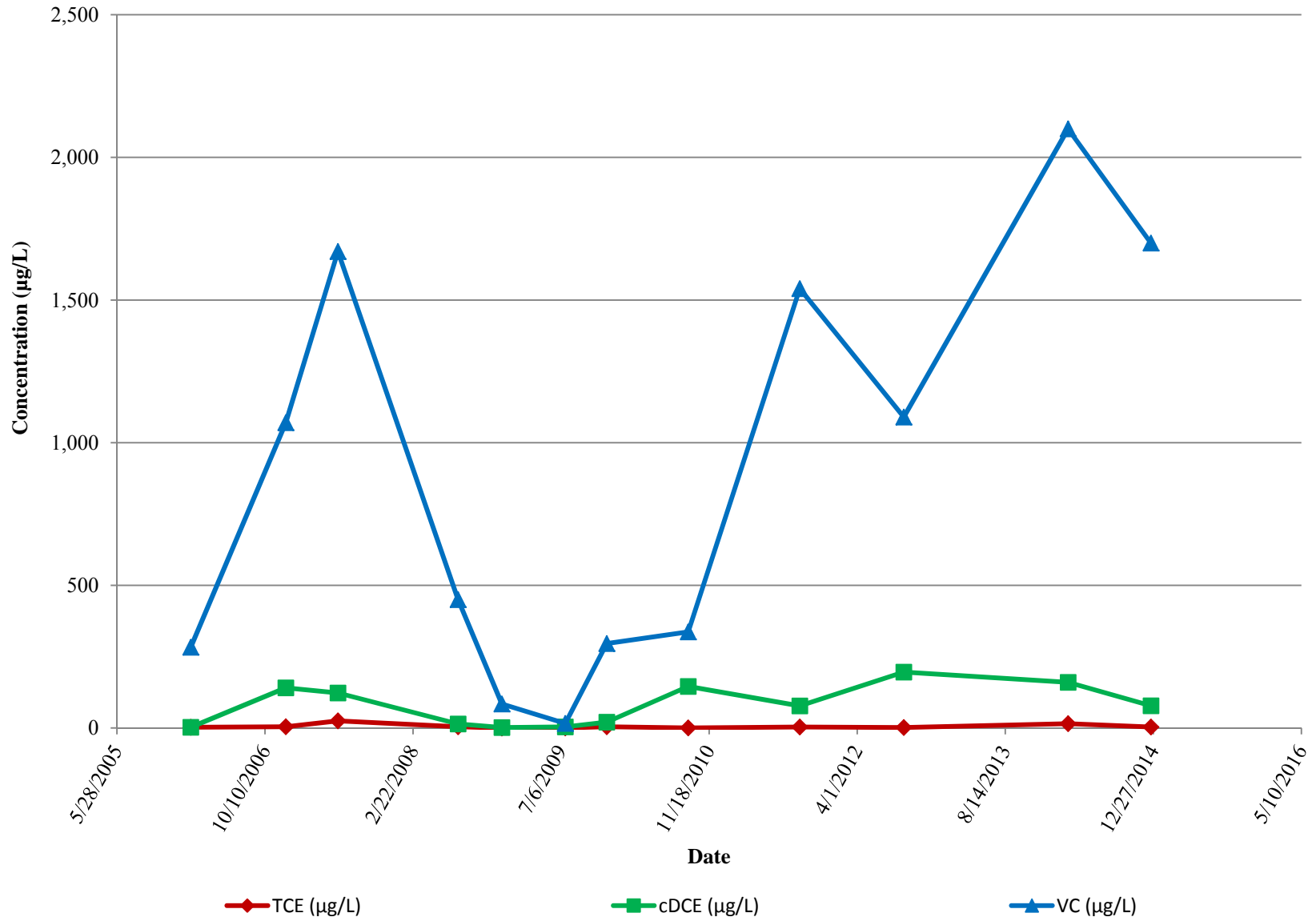


**MW0095 (screened 2 to 12 feet below land surface)**

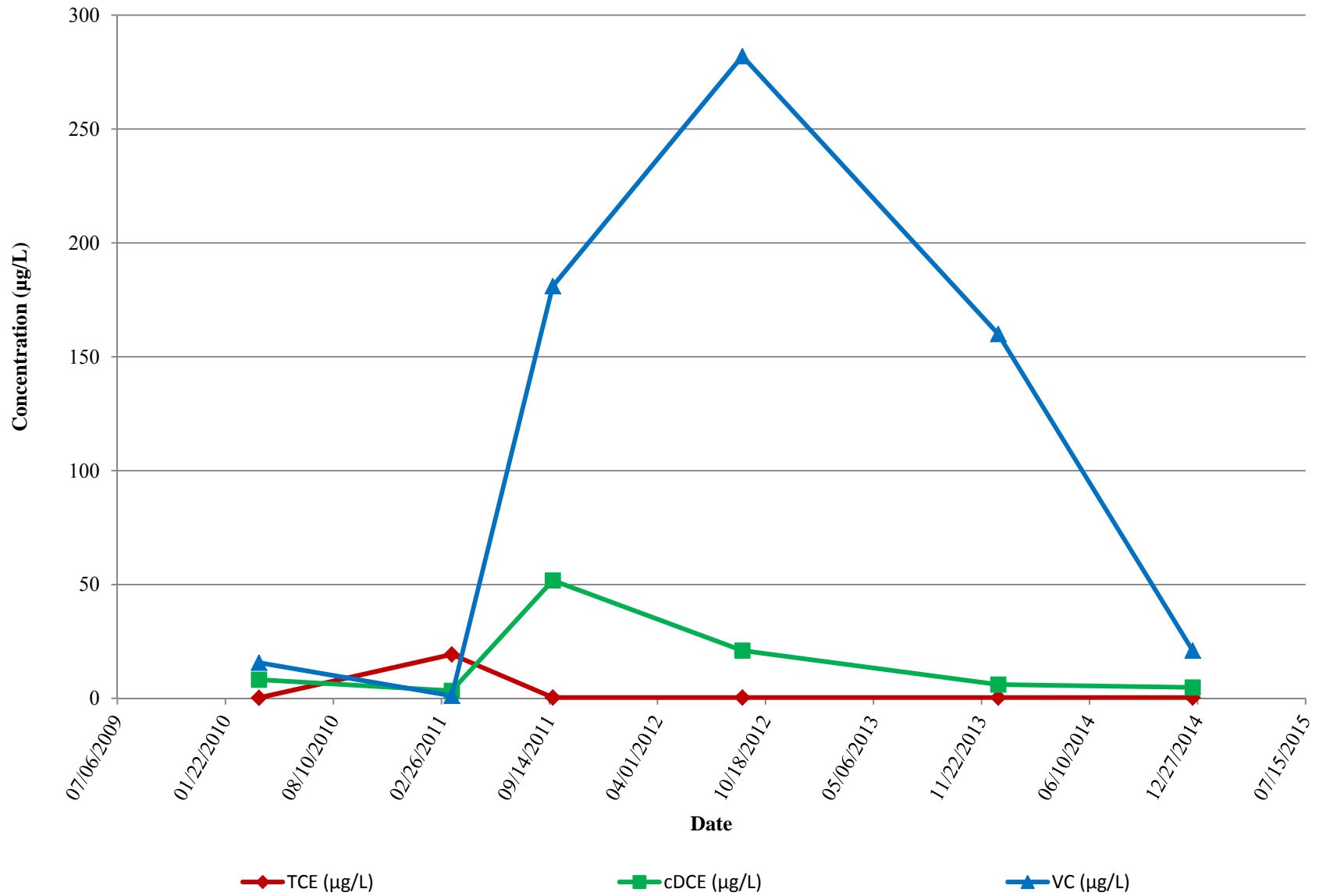




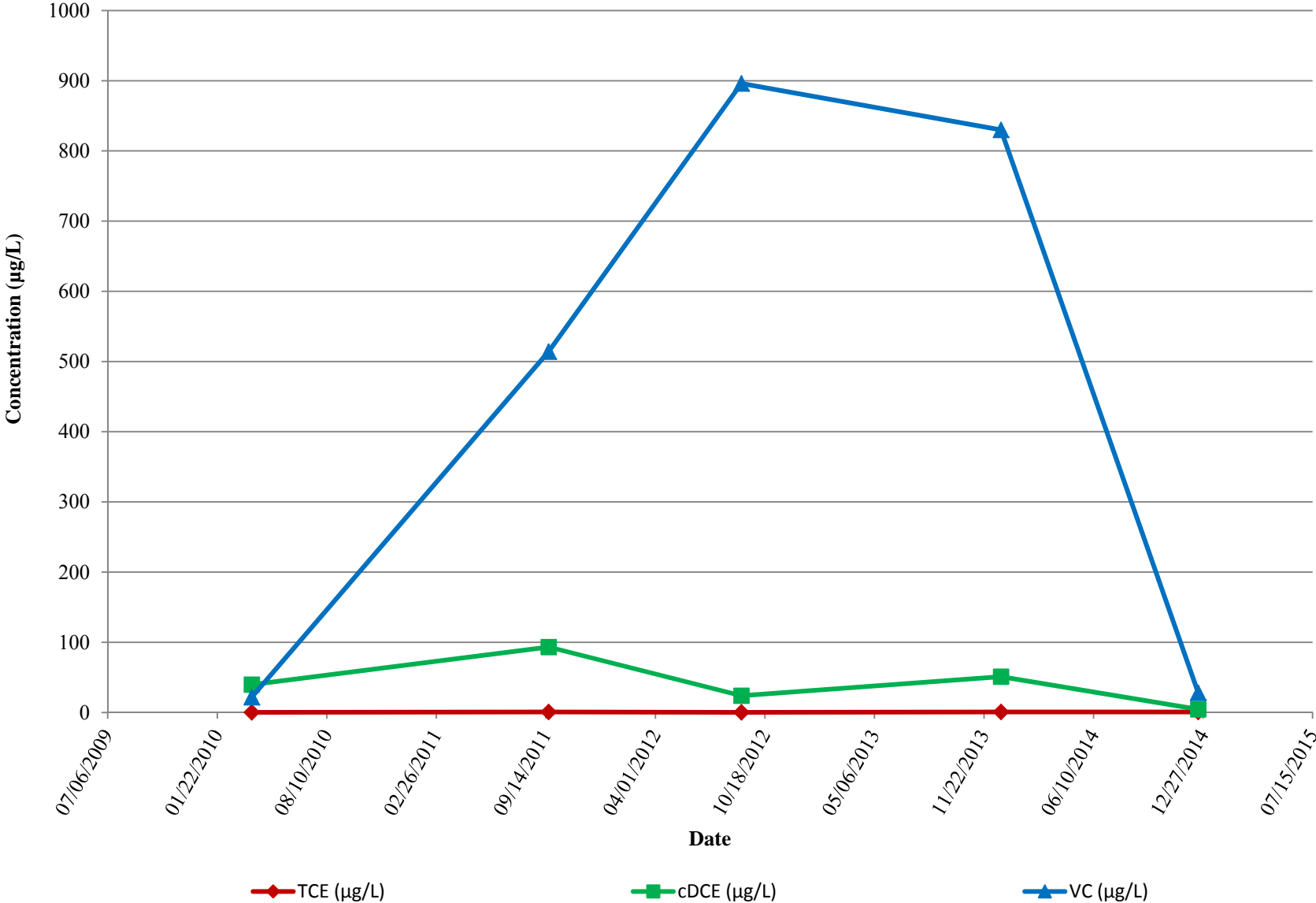
### MW0065 (screened 29 to 34 feet below land surface)



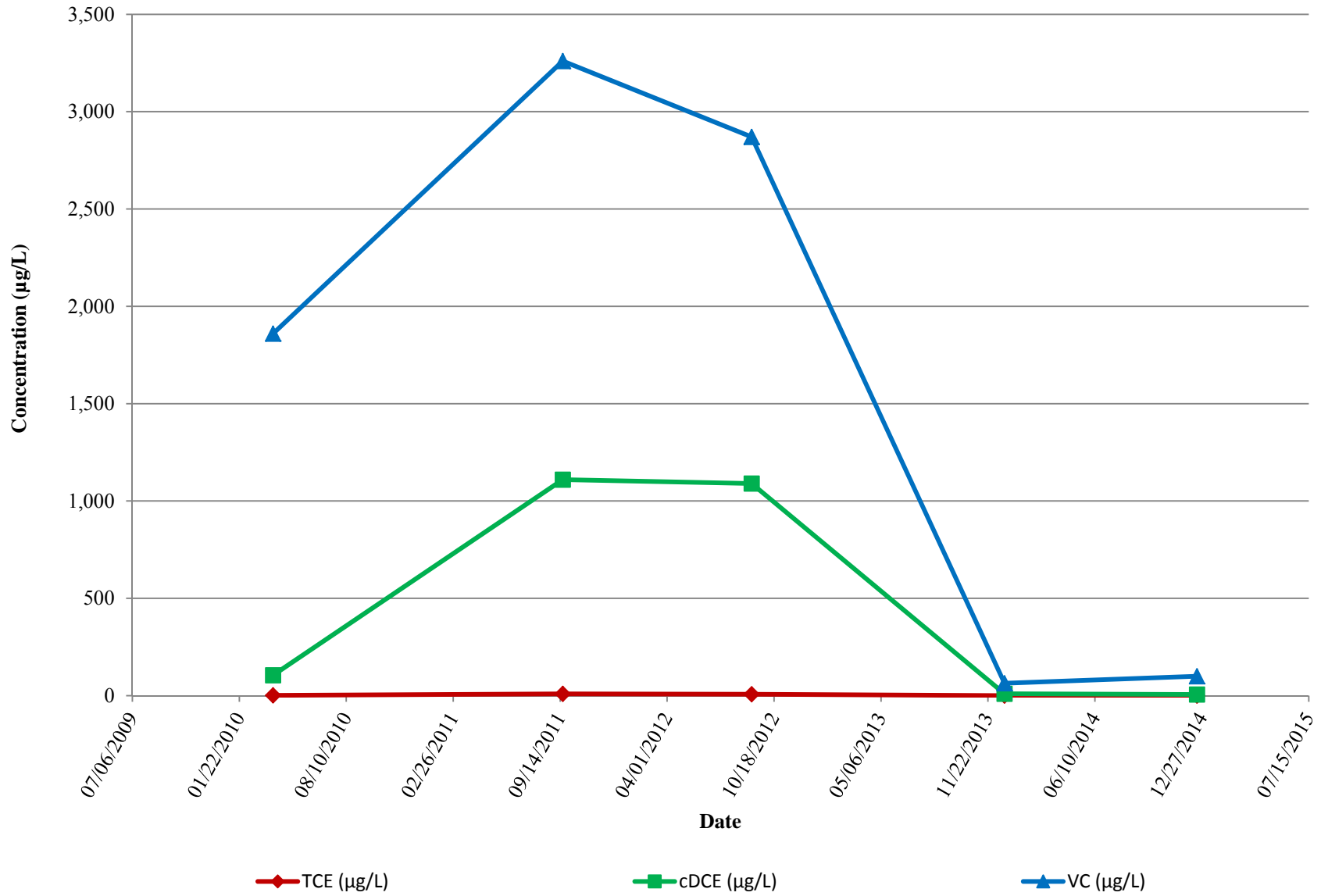
**MW0097 (screened 29 to 34 feet below land surface)**



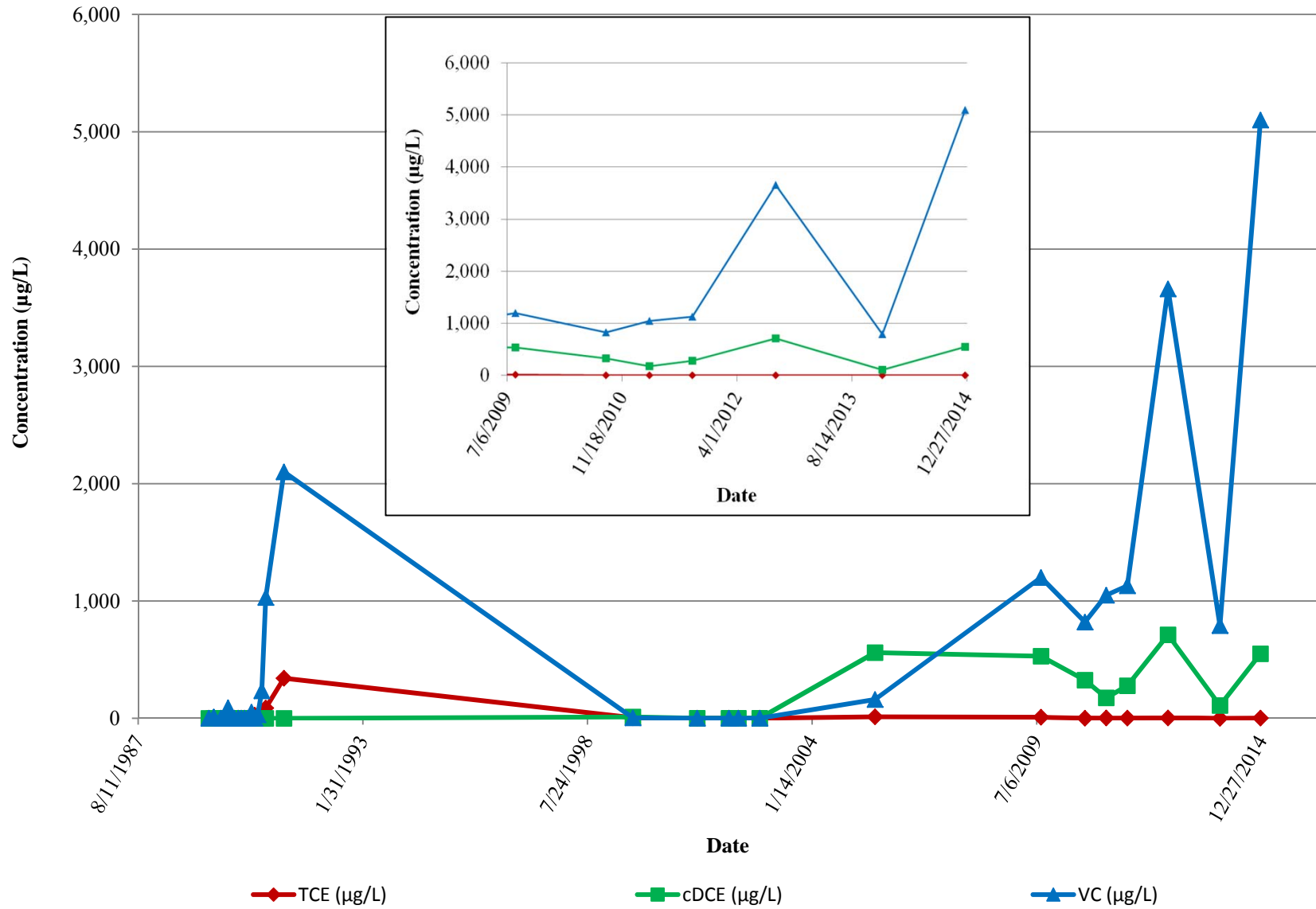
**MW0109 (screened 15 to 25 feet below land surface)**



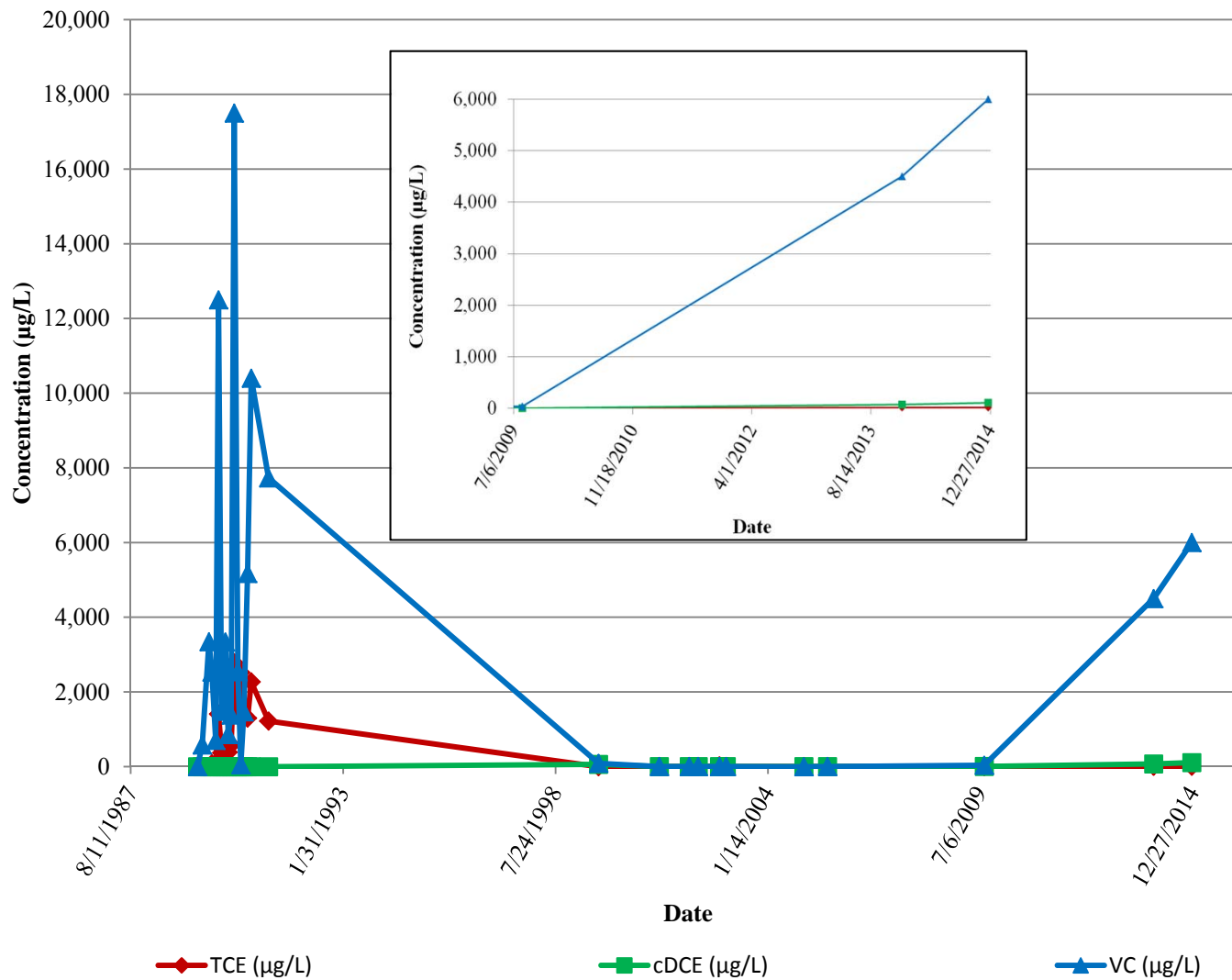
### MW0116 (screened 15 to 25 feet below land surface)



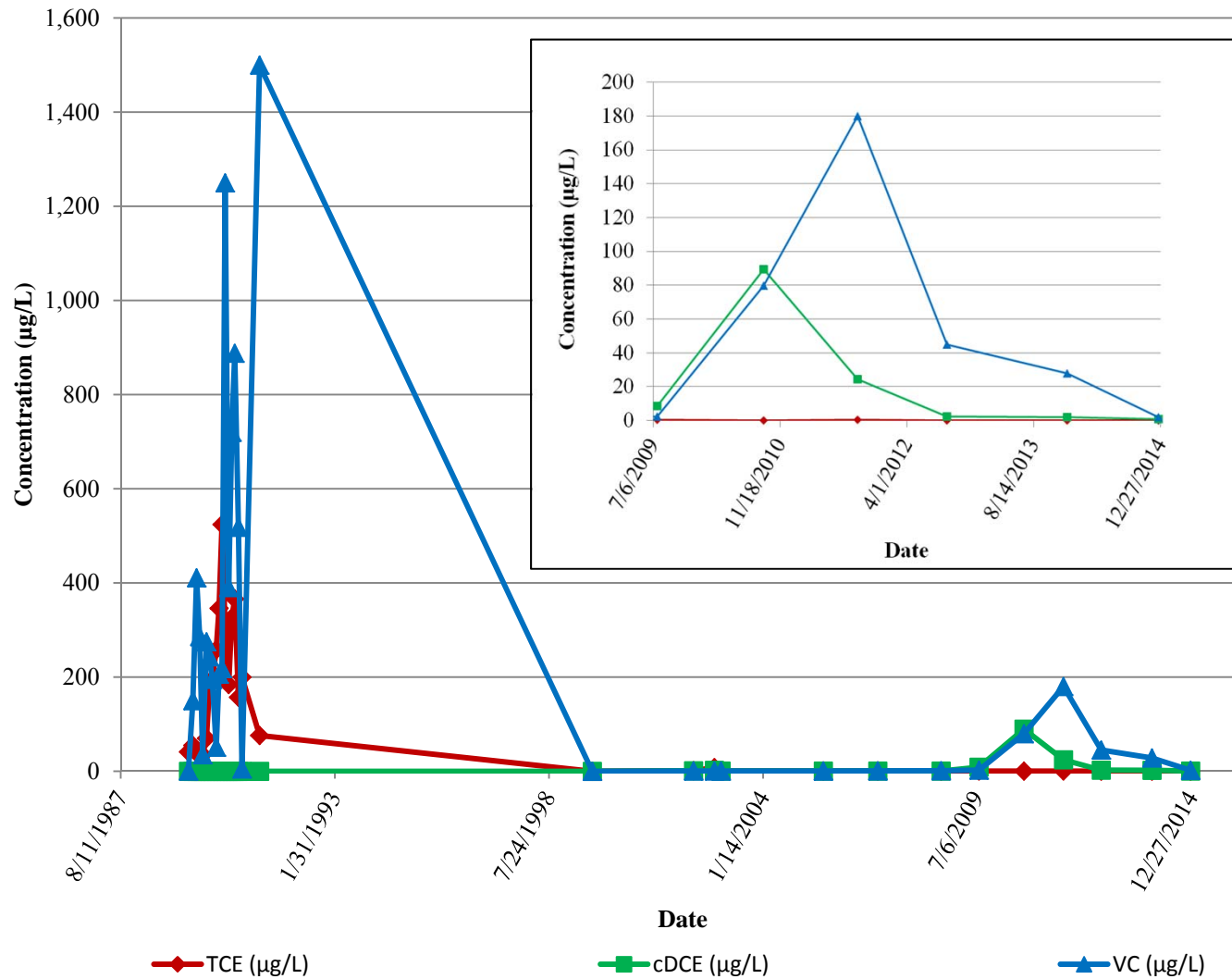
### NPSH-MW0016 (screened 20 to 34 feet below land surface)



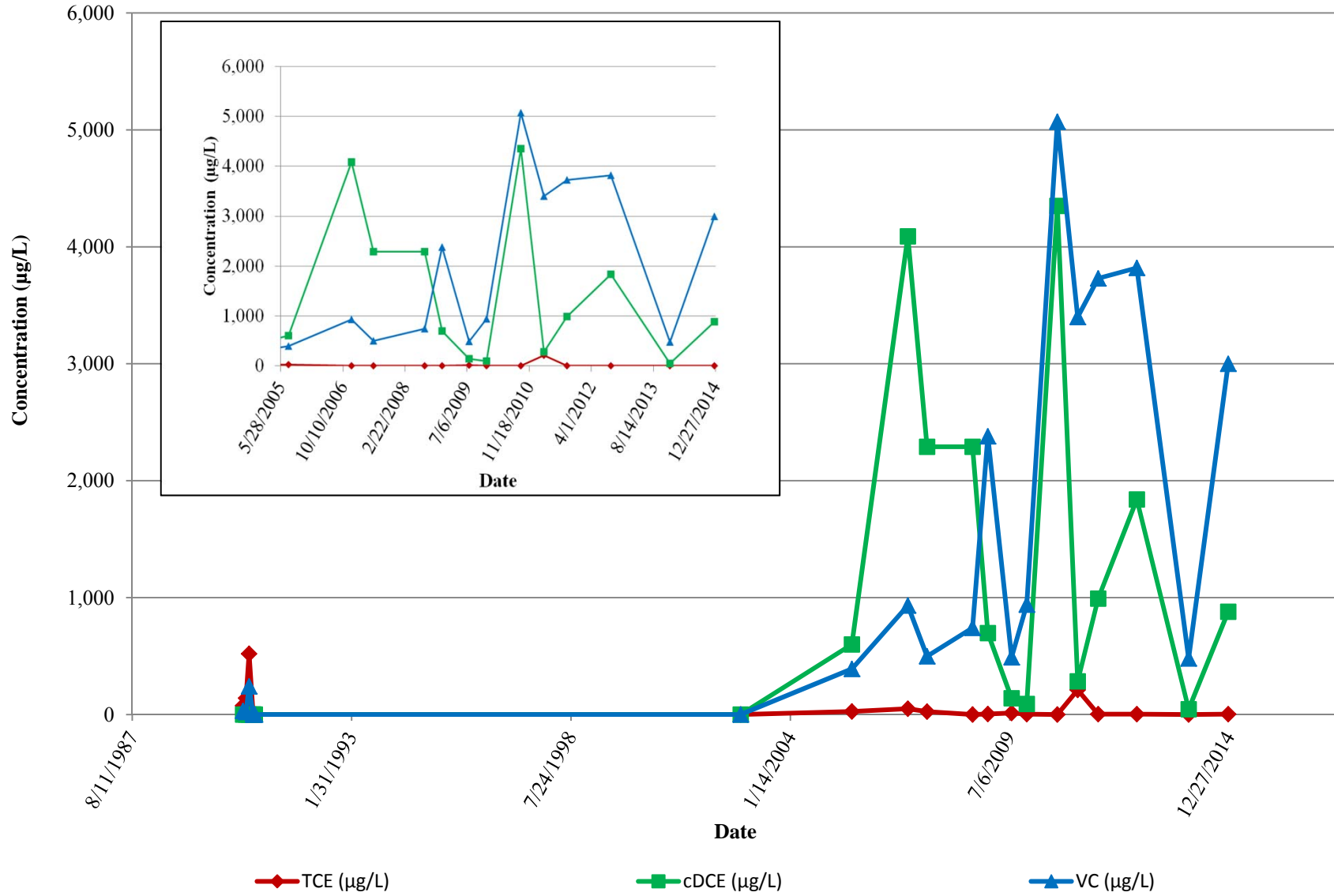
### NPSH-MW0017 (screened 29 to 34 feet below land surface)



### NPSH-MW0020 (screened 29 to 34 feet below land surface)

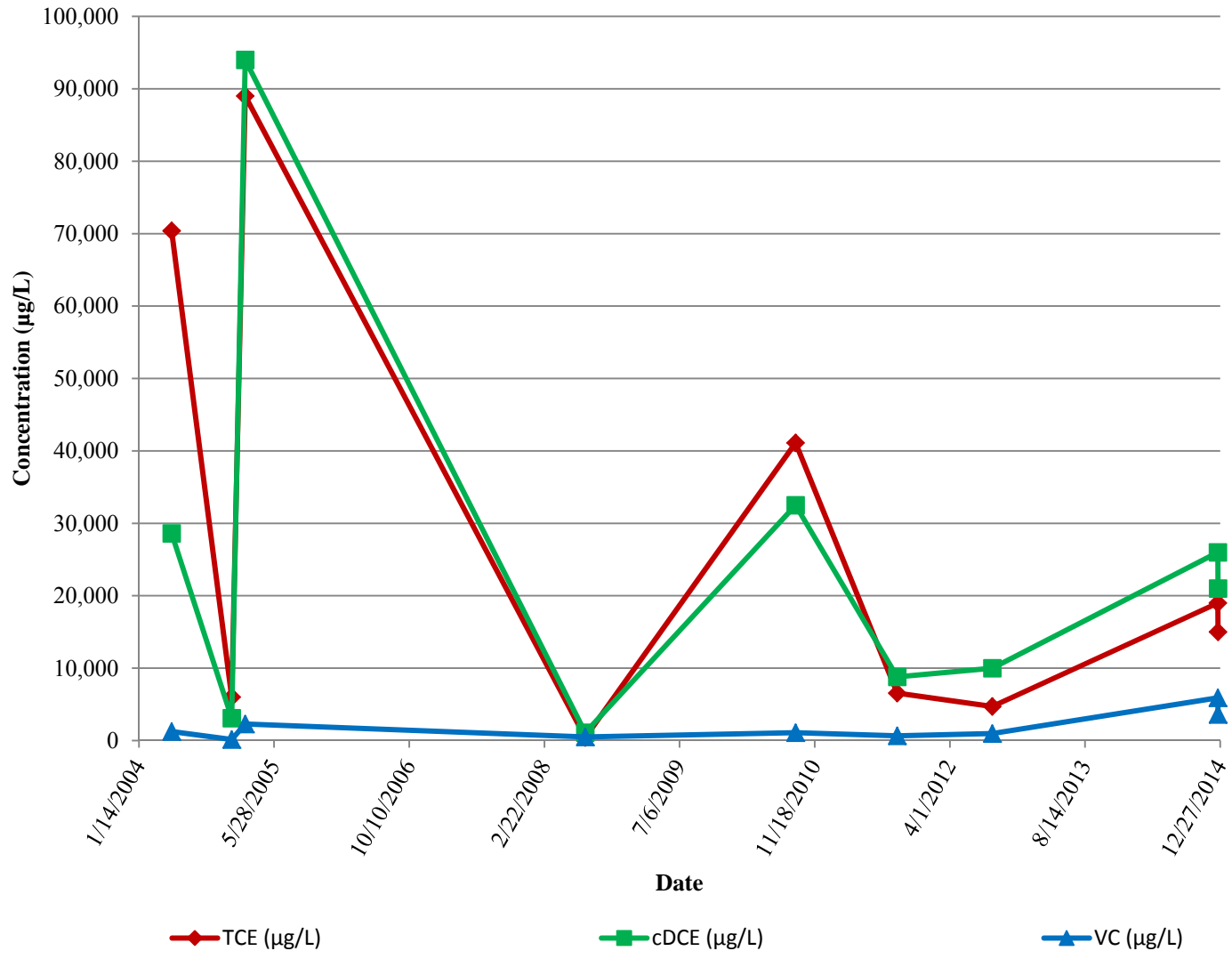


**NPSH-MW0027 (screened 10 to 15 feet below land surface)**





### MW0052DD (screened 55 to 65 feet below land surface)



### MW0078 (screened 65 to 70 feet below land surface)

