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Analysis of the Ability of United States and Russian Trace Contaminant Control Systems to Meet U.S. 180-Day and Russian 360-Day Spacecraft Maximum Allowable Concentrations

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July 2016

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ISS	International Space Station
ISSP	International Space Station program
LiOH	lithium hydroxide
RSA	Russian Space Agency
SMAC	spacecraft maximum allowable concentration
TCCS	trace contaminant control systems
U.S.	United States

TECHNICAL MEMORANDUM

ANALYSIS OF THE ABILITY OF UNITED STATES AND RUSSIAN TRACE CONTAMINANT CONTROL SYSTEMS TO MEET U.S. 180-DAY AND RUSSIAN 360-DAY SPACECRAFT MAXIMUM ALLOWABLE CONCENTRATIONS

1. INTRODUCTION

Analysis of the ability of the United States (U.S.) and Russian trace contaminant control systems (TCCSs) to comply with proposed U.S. 180-day and Russian 360-day spacecraft maximum allowable concentrations (SMACs) has been conducted to determine whether any impacts to operations, logistics, or hardware design are necessary. The analysis is an extension of work done to assess the U.S. TCCS's capabilities to meet 180-day SMACs proposed by NASA's Chief Scientist for Toxicology and approved by the National Research Council's Committee on Toxicology Subcommittee on SMAC Guidelines for Space Station. In addition, the analysis improves on the evaluation presented by reference 1. The analysis uses the most recent information for trace contaminant generation rates obtained from the Spacelab program and mass properties information from the International Space Station program (ISSP). Operational aspects of the ISSP and spacecraft buildup are not considered in the analysis; however, the results may be extrapolated to the buildup phases if necessary.

2. BACKGROUND

As part of the effort to provide the crewmembers aboard the International Space Station with a safe cabin environment, new long-duration SMACs have been developed for continuous exposures of 180 days or more. With the addition of Russian modules to the ISS, which comprise a large portion of the overall Station, it has been necessary to address the issue of a joint atmospheric quality standard. Russian Space Agency (RSA) personnel have provided information on SMACs for 32 chemical compounds commonly found onboard the Mir 1 spacecraft (table 1). As shown by table 2, NASA developed long-duration SMACs for 28 of the 32 chemical compounds addressed by the RSA. Table 3 compares the air quality standards for compounds that are common between the RSA and NASA air quality standard listings. It can be seen that, in several instances, the Russian SMACs are more stringent than those set by NASA. Resolution of these differences to adopt an atmospheric quality standard that is acceptable for an international crew is necessary for proper Station integration and operations to exist. Since the SMACs not only impact the crewmembers' health, analysis of the potential impact on the design of active contamination control systems has been conducted to determine whether any design or operations changes are necessary. This analysis is for the permanent human presence capability phase of the Station when all the elements will be present on orbit.

Table 1. Russian spacecraft air quality standards.

Contaminant	Spacecraft Maximum Allowable Concentration (mg/m^3)					
	15-Day	30-Day	60-Day	90-Day	180-Day	360-Day
Methanol	–	–	–	–	–	0.2
Ethanol	–	–	–	–	–	10
n-butanol	–	–	–	–	–	0.8
Phenol	–	–	–	–	–	0.1
Ethylene glycol	100	–	–	–	–	10
Methanal	–	–	–	–	–	0.05
Ethanal	1	1	1	1	1	1
Benzene	–	–	–	–	–	2
Isopropylbenzene	–	–	–	–	–	0.5
Methylbenzene	–	–	–	–	–	8
Dimethylbenzene (o-,m-,p-)	–	–	–	–	–	5
Styrene	–	–	–	–	–	0.25
Ethyl acetate	–	–	–	4	4	4
n-butyl acetate	–	–	–	–	–	2
1,2-dichloroethane	–	–	–	–	–	0.5
Octafluoropropane	–	–	–	–	–	150
Cyclohexane	–	–	–	–	–	3
Methane	3,342	3,342	3,342	3,342	3,342	3,342
Heptane	–	–	–	–	–	10
Octane	–	–	–	–	–	10
Total hydrocarbon	100	50	50	50	20	20
2-propanone	5	3	1	1	1	1
2-butanone	–	–	–	–	–	0.25
Hydrogen sulfide	–	–	–	–	–	0.5
Nitric oxide	0.4	0.4	0.4	0.4	0.1	0.1
Acetic acid	10	5	5	5	2	1
Ammonia	5	2	2	1	1	1
Hydrogen	1,677	1,677	1,677	1,677	1,677	1,677
Carbon monoxide	10	10	10	10	5	5
Hydrogen fluoride	–	–	–	–	–	0.05
Hydrogen chloride	–	–	–	–	–	0.05
Hydrogen cyanide	–	–	–	–	–	0.03

Table 2. Comparison of Russian and NASA spacecraft air quality standards.

	Spacecraft Maximum Allowable Concentration (mg/m^3)											
	15-Day		30-Day		60-Day		90-Day		180-Day		360-Day	
Trace Contaminant	NASA	Russia	NASA	Russia	NASA	Russia	NASA	Russia	NASA	Russia	NASA	Russia
Methanol	9	–	9	–	–	–	–	–	9	–	–	0.2
Ethanol	93.5	–	–	–	–	–	–	–	–	–	–	10
n-butanol	120.7	–	–	–	–	–	–	–	–	–	–	0.8
Phenol	7.68	–	–	–	–	–	–	–	–	–	–	0.1
Ethylene glycol	126.3	100	–	–	–	–	–	–	–	–	–	10
Methanal	0.05	–	0.05	–	–	–	–	–	0.05	–	–	0.05
Ethanal	4	1	4	1	–	1	–	1	4	1	–	1
Benzene	0.32	–	–	–	–	–	–	–	–	–	–	2
Isopropylbenzene	73.3	–	–	–	–	–	–	–	–	–	–	0.5
Methylbenzene	60	–	60	–	–	–	–	–	60	–	–	8
Dimethylbenzene (o-,m-,p-)	220	–	220	–	–	–	–	–	220	–	–	5
Styrene	42.5	–	–	–	–	–	–	–	–	–	–	0.25
Ethyl acetate	179.3	–	–	–	–	–	–	4	–	4	–	4
n-butyl acetate	189.1	–	–	–	–	–	–	–	–	–	–	2
1,2-dichloroethane	43.1	–	–	–	–	–	–	–	–	–	–	0.5
Octafluoropropane	0.13	–	–	–	–	–	–	–	–	–	–	150
Cyclohexane	205.2	–	–	–	–	–	–	–	–	–	–	3
Methane	3,800	3,342	3,800	3,342	–	3,342	–	3,342	3,800	3,342	–	3,342
Heptane	204.5	–	–	–	–	–	–	–	–	–	–	10
Octane	348.9	–	–	–	–	–	–	–	–	–	–	10
Total hydrocarbon	–	100	–	50	–	50	–	50	–	20	–	20
2-propanone	710.4	5	–	3	–	1	–	1	–	1	–	1
2-butanone	30	–	30	–	–	–	–	–	30	–	–	0.25
Hydrogen sulfide	5.58	–	–	–	–	–	–	–	–	–	–	0.5
Nitric oxide	6.08	0.4	–	0.4	–	0.4	–	0.4	–	0.1	–	0.1
Acetic acid	7.4	10	–	5	–	5	–	5	–	2	–	1
Ammonia	7	5	7	2	–	2	–	1	7	1	–	1
Hydrogen	340	1,677	340	1,677	–	1,677	–	1,677	340	1,677	–	1,677
Carbon monoxide	10	10	10	10	–	10	–	10	10	5	–	5
Hydrogen fluoride	0.5	–	–	–	–	–	–	–	–	–	–	0.05
Hydrogen chloride	1.49	–	–	–	–	–	–	–	–	–	–	0.05
Hydrogen cyanide	1.1	–	–	–	–	–	–	–	–	–	–	0.03

Table 3. Priority long-duration SMACs for airborne contaminants.

Compound	NHB 8,060.1B 7-Day SMAC (mg/m^3)	1-Hr SMAC (mg/m^3)	24-Hr SMAC (mg/m^3)	7-Day SMAC (mg/m^3)	30-Day SMAC (mg/m^3)	180-Day SMAC (mg/m^3)
Methane*	1,771	3,800	3,800	3,800	3,800	3,800
1,3-butadiene	221.2	4	4	0.7	0.3	0.13
Methanol	52.4	40	13	9	9	9
2-propanol	60.09	1,000	240	150	150	150
Methanal	0.12	0.5	0.12	0.05	0.05	0.05
2-propenal	0.11	0.2	0.08	0.03	0.03	0.03
Ethanal	54	20	10	4	4	4
2-butanone	59	150	150	30	30	30
Benzene	0.32	NA	NA	NA	NA	NA
Dimethylbenzenes	86.8	430	430	220	220	220
Methylbenzene	98.13	60	60	60	60	60
Chloroethene	0.26	330	75	3	3	3
Dichloromethane*	86.8	350	120	50	20	10
Dichloroethyne	0.1	2.4	0.16	0.12	0.10	0.06
1,2-Dichloroethane	98.97	2	2	2	2	1
Trichloroethene	0.54	270	60	50	20	10
1,1,2-trichoro-1,2,2-trifluoroethane	383	400	400	400	400	400
2-ethoxyethanol	73.7	40	40	3	2	0.3
Trimethylsilanol	1.8	600	70	40	40	40
Octamethyltrisiloxane	114	4,000	2,000	1,000	200	40
Methyl hydrazine	0.08	0.004	0.004	0.004	0.004	0.004
Nitromethane	0.1	65	40	18	18	13
2,3-benzopyrrole	0.48	5	1.5	0.25	0.25	0.25
Hydrogen*	247.3	340	340	340	340	340
Carbon monoxide*	28.6	60	20	10	10	10
Carbon dioxide	7,102.5	23,000	23,000	13,000	13,000	13,000
Hydrazine	0.05	5	0.4	0.05	0.03	0.005
Nitrogen dioxide	0.94	NA	NA	NA	NA	NA
Ammonia*	17.4	20	14	7	7	7
Mercury	0.006	0.1	0.02	0.01	0.01	0.01

* Denotes TCCS design driver. NA = Not available. Note: All SMACs are at standard temperature and pressure.

3. ANALYSIS SUMMARY

3.1 Assumptions and Spacecraft Data

The analysis conducted uses the trace contaminant generation rates documented in appendix A. These rates are based on off-gassing tests and mass properties data collected from six Spacelab module missions. They are considered to be excellent predictions of the early off-gassing rates from spacecraft hardware, especially since the U.S. hardware used onboard the ISS will meet the same material selection, control, and off-gassing test criteria as the Spacelab program. Mass properties data listed in table 4 were used to derive the equipment off-gassing rate. The metabolic contribution from six crewmembers was added to arrive at the final generation rate. Element volumes used are shown in table 5. It was assumed that the Russian modules would add an additional 70 m^3 to the ISS volume and an additional 15,000 kg of internally mounted hardware. These numbers are based on a best guess of the size and comparisons to Spacelab modules. It also has been assumed that the materials used onboard the Russian modules are similar to those used in the U.S., European, and Japanese modules. Whether these assumptions are correct or not, the analysis should provide a reasonable estimate of the respective abilities of the U.S. and Russian TCCS units to control trace contaminants below the proposed U.S. 180-day and Russian 360-day SMACs. If significant errors are found in these assumptions, the analysis can be repeated to correct the results.

Table 4. Element internal hardware mass properties.

Element	Internal Hardware Mass (kg)
U.S. Laboratory Module	11,307
U.S. Habitation Module	14,937
Node 1	7,221
Node 2	7,359
Japanese Experiment Module	14,152
Columbus APM	6,994
Russian Segment	15,000
Simultation Total	76,970

Table 5. Element internal free volumes.

Element	Internal Hardware Mass (kg)
U.S. Laboratory Module	74.2
U.S. Habitation Module	74.2
Node 1	43.3
Node 2	43.7
Japanese Experiment Module	90.2
Japanese Airlock	2.4
Japanese Logistics Module	31.6
Columbus APM	99.1
U.S. Logistics Module	59.9
Pressurized Docking Adapter	8.5
Cupola	1.3
Airlock	23.5
Mini Logistics Module	30.0
Russian Segment	170.4
Total for Simulation	752.3

3.2 Trace Contaminant Control Systems Hardware Summaries

The TCCS hardware process flow diagrams used for the analysis are shown in figures 1 and 2. Characteristics of the two units are summarized in tables 6 and 7. It should be noted that the catalytic oxidation unit provided in the Russian life support module has not been included because not enough information has been provided for it to be included in the simulation. When information becomes available, it can be added and a more representative performance prediction for methane control by the Russian TCCS can be determined. In all cases, the contaminant control contribution from absorption by humidity condensate has been included as a lumped parameter. This method may not be the most accurate approach and may result in low predictions for contaminant removal via humidity condensate because the removal efficiency calculation used in the simulation is proportional to the cabin contamination concentration divided by the ratio of condensate flow to gas flow plus the ratio of the Henry's law constant to total cabin pressure. By lumping condensing heat exchanger contributions together, the denominator can be increased by up to a factor of 4 or more causing the projected condensate removal to be reduced by that factor. Until more detailed information of the ISS humidity control systems can be obtained though, the lumped condensate removal approach will continue to be used. This is actually a conservative approach since the condensate removal route does not become dominant.

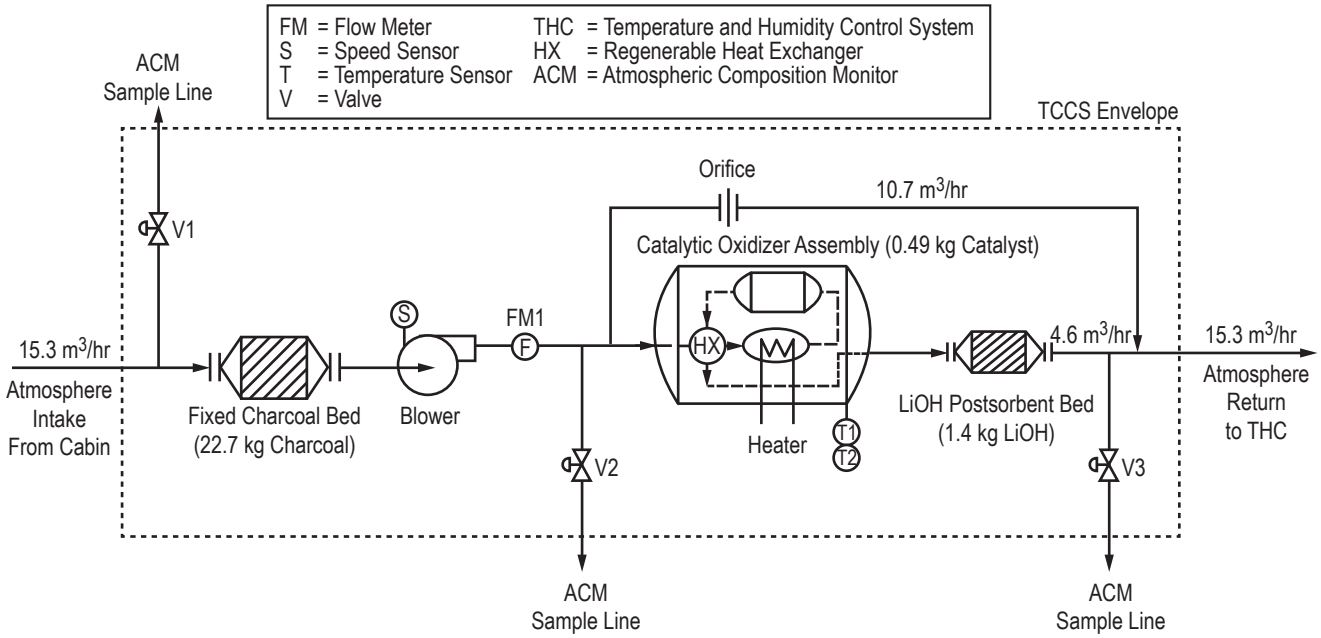


Figure 1. Baseline TCCS process flow diagram.

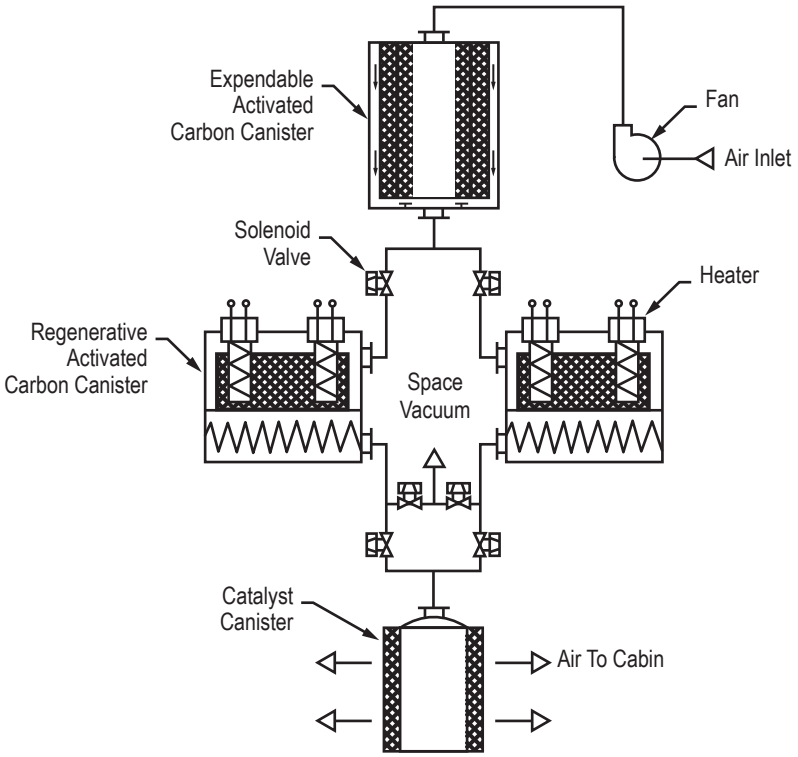


Figure 2. Mir microimpurity adsorption device schematic.

Table 6. U.S. TCCS hardware characteristic.

Characteristic	Value
Charcoal bed flow rate	15.1 m^3/hr
Catalytic oxidizer/LiOH bed flow rate	4.1 m^3/hr
Charcoal bed dimensions	0.58 m long; 0.32 m diameter
LiOH bed dimensions	0.234 m long; 0.129 m diameter
Charcoal bulk density	490 kg/m^3
LiOH bulk density	442 kg/m^3

Table 7. Russian TCCS hardware characteristics.

Characteristic	Value
System flow rate	20 m^3/hr
Expendable charcoal bed dimensions	0.225 m long; 0.2 m outside diameter; 0.161 m inside diameter
Regenerable charcoal bed dimensions	0.295 m long; 0.25 m diameter
Catalytic oxidizer dimensions	0.025 m long; 0.225 m diameter
Charcoal bulk density	513 kg/m^3

The Russian TCCS charcoal performance is assumed to be similar to that of the charcoal used for the U.S. TCCS. Information on charcoal loading provided by Alexander Raibkin of NPO Energia at a meeting in Houston, Texas, on March 30, 1994, showed that the equilibrium loading for isopropylbenzene was 0.43 cm^3 of liquid/gram of charcoal. Comparison of this loading to the characteristic curve documented in reference 2 for the Barnebey-Sutcliffe type 3032 charcoal used in the U.S. TCCS shows that the Russian TCCS charcoal behaves similarly. Therefore, this simulation should be a good estimate of Russian hardware performance. The characteristic curves for this charcoal are found in appendix B.

4. ANALYSIS RESULTS

Five cases were run using the Trace Contaminant Control Simulation Computer program documented in NASA TM-108409.[3] One case each was run with the Russian TCCS and the U.S. TCCS controlling to the U.S. 180-day SMACs and the Russian 360-day SMACs. One case was run with both the U.S. and Russian TCCS units operating simultaneously to determine whether the Russian SMACs for methanol, n-butanol, phenol, and 2-butanone could be met with both systems operating. Table 8 shows the performance of each TCCS unit with respect to the U.S. 180-day SMACs while table 9 shows the performance of the three cases run relative to the Russian 360-day SMACs. Both the Russian and U.S. TCCS units are capable of controlling trace contaminants below the U.S. 180-day SMACs with minimal contribution from the condensing heat exchangers. The Russian SMACs, on the other hand, cannot be met for methanol, n-butanol, phenol, and 2-butanone. Even running both the Russian and U.S. TCCS units simultaneously cannot meet the Russian 360-day SMACs for these compounds. To control these compounds, the trace contaminant control flow rate would have to be increased to at least 201.4 m^3/hr to control the worst case, 2-butanone. Control for methanol, n-butanol, and phenol would require 47.6, 66.6, and 66.7 m^3/hr, respectively, to meet the Russian 360-day SMACs. More detailed information on the five computer runs can be found in appendices C through G.

Table 8. Performance of U.S. and Russian TCCS units with respect to U.S. 180-day SMACs.

Contaminant	180-Day SMAC (mg/m^3)	Predicted Cabin Concentration	
		U.S. TCCS (mg/m^3)	Russian TCCS (mg/m^3)
Methanol	9	0.37	0.45
2-propanol	150	0.95	0.83
Methanal	0.05	0.00000077	0.00000079
Ethanal	4	0.13	0.28
2-propenal	0.03	0.0031	0.0024
Methylbenzene	60	0.70	0.54
Dimethylbenzene	220	2.63	2.02
2-ethoxyethanol	0.3	0.17	0.16
Chloroethene	3	0.0039	0.0015
Dichloromethane	10	7.60	5.08
Dichloroethyne	0.06	–	–
1,2-dichloroethane	1	0.046	0.035
Trichloroethene	10	0.030	0.023
1,1,2-trichloro-1,2,2-trifluoroethane	400	12.27	9.48
Methane	3,800	39.73	116
1,3-butadiene	0.13	0.0025	0.0020
2-butanone	30	0.75	0.71
Hydrazine	0.005	–	–
Methyl hydrazine	0.004	–	–
Nitromethane	13	0.12	0.065
2,3-benzopyrrole	0.25	0.004	0.0041
Hydrogen	340	1.59	0.37
Carbon monoxide	10	4.62	1.06
Ammonia	7	0.027	0.028
Octamethyltrisiloxane	40	0.19	0.15
Trimethylsilanol	40	0.10	0.078

Table 9. Performance of U.S., Russian, and combined U.S./Russian TCCS units with respect to Russian 360-day SMACs.

Contaminant	360-Day SMAC (mg/m^3)	Predicted Cabin Concentration		
		U.S. TCCS (mg/m^3)	Russian TCCS (mg/m^3)	Combined (mg/m^3)
Methanol	0.2	0.37	0.45	1.26
Ethanol	10	3.76	3.01	4.95
n-butanol	0.8	2.49	2.06	1.49
Phenol	0.1	0.44	0.33	0.19
1,2-ethanediol	10	0.0054	0.0041	0.0024
Methanal	0.05	0.00000077	0.00000079	0.0000040
Ethanal	1	0.13	0.28	0.13
Benzene	2	0.014	0.011	0.0060
Isopropylbenzene	0.5	0.0057	0.0043	0.0025
Methylbenzene	8	0.70	0.54	0.30
Dimethylbenzene	5	2.63	2.01	1.14
Vinylbenzene	0.25	0.021	0.016	0.0092
Ethyl acetate	4	0.17	0.14	0.082
n-butyl acetate	2	0.47	0.36	0.21
1,2-dichloroethane	0.5	0.046	0.035	0.020
Octafluoropropane	150	–	–	–
Cyclohexane	3	0.32	0.24	0.14
Methane	3,342	39.73	116	39.73
Heptane	10	0.025	0.019	0.011
Octane	10	0.0075	0.0057	0.0032
Total hydorcarbon	20	–	–	–
2-propanone	1	0.00035	0.00028	0.00018
2-butanone	0.25	0.75	0.71	1.18
Hydrogen sulfide	0.5	0.0038	0.013	0.0051
Nitric oxide	0.1	–	–	–
Acetic acid	1	0.0001	0.000099	0.00025
Ammonia	1	0.027	0.028	0.19
Hydrogen	1,677	1.59	0.37	0.30
Carbon monoxide	5	4.62	1.06	0.86
Hydrogen fluoride	0.05	–	–	–
Hydrogen chloride	0.05	–	–	–
Hydrogen cyanide	0.05	–	–	–

5. CONSIDERATION OF GENERATION RATE DECAY WITH TIME

It has been recognized that trace contaminant generation rates may decay significantly over time. The rates used for analysis are based on new hardware and the decay over time is not considered. Little information concerning generation rate decay has been collected; however, a good reference has been the work conducted by Olcott documented in NASA CR-2027 in May 1972.[4] In this report, a curve, shown here as figure 3, showing the generation rate-time relationship for 20 typical spacecraft materials is presented. This curve shows at least a 90% reduction in generation rate over a period of 45 days. Since most spacecraft hardware is more than 45 days old, it can be assumed that rates may decay by 95% to 99% by the time it is launched. Given this assumption, the U.S. and Russian TCCS units would easily be capable of meeting both the U.S. 180-day and Russian 360-day SMACs. The flow rate projection to meet the 2-butanone 360-day SMAC, with between a 5% and 10% safety margin is 20 m^3/hr.

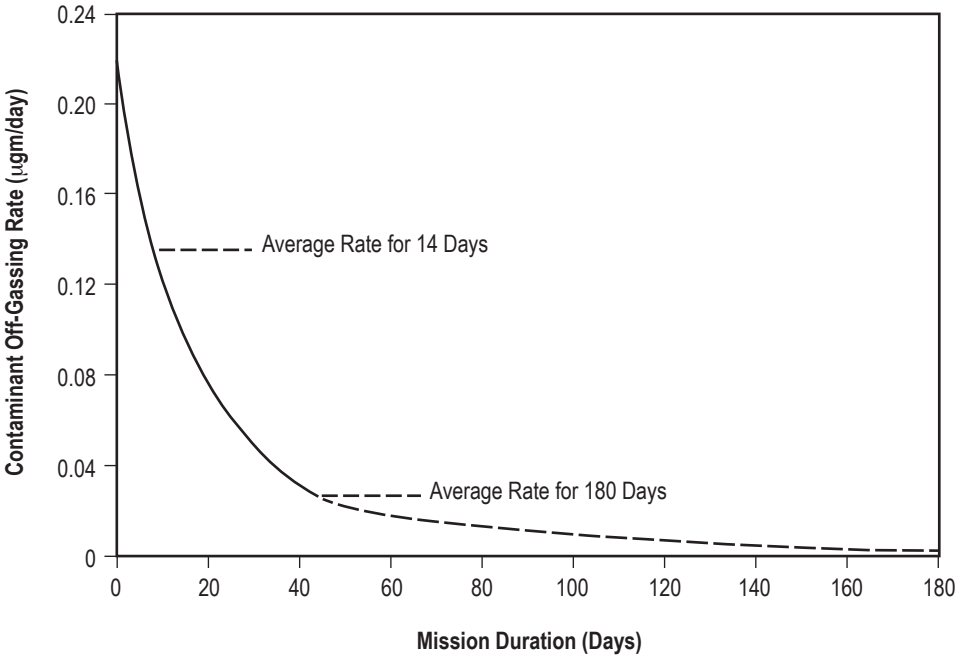


Figure 3. Nonmetallic average contaminant off-gassing rates for 20 typical spacecraft nonmetallic materials.

A second consideration for this effect is the impact on TCCS logistics and life cycle operating costs. Using the guidelines for replacing the expendable charcoal beds, both the U.S. and Russian TCCS units would have to have fresh expendable beds every 90 days. This is based on the breakthrough of dichloromethane for the U.S. TCCS unit and the breakthrough of compounds having a molecular weight greater than 80 gm/mole for the Russian TCCS unit. If generation rates decay significantly over the first 180 days, these beds may last at least 2.5 years before having to be replaced. Longer bed life may be realized by monitoring the cabin atmosphere on orbit and determining whether the beds have to be replaced based on observed cabin atmospheric quality trends. This life estimate is consistent with the Russian hardware estimate of up to a 3-year expendable bed replacement interval.

6. CONCLUSIONS

Based on the conservative assessment of U.S. and Russian TCCS capabilities, the following conclusions are made:

- Both the U.S. and Russian TCCS units operating independently can meet the U.S. 180-day SMACs using conservative generation rates and minimal assistance from condensing heat exchanger contribution.

- Both the U.S. and Russian TCCS units operating independently cannot meet the Russian 360-day SMACs for methanol, n-butanol, phenol, and 2-butanone using conservative generation rates and minimal assistance from condensing heat exchanger contribution.

- The flow rate to meet all the Russian 360-day SMACs is estimated to be 201.4 m^3/hr for the conservative generation rates.

- Consideration of equipment aging effects on contaminant generation rates results in at least a 90% to 95% net reduction in contaminant generation rates.

- The flow rate required to meet all the Russian 360-day SMACs, including 2-butanone, is at least 20 m^3/hr.

- A flow rate of 20 m^3/hr should provide up to a 10% margin of safety if contaminant generation rate decay is according to that documented in NASA CR-2027.[4]

7. RECOMMENDATIONS

The ability of the U.S. and Russian TCCS units to effectively control trace contaminants to levels below the U.S. 180-day and Russian 360-day SMACs is strongly related to the generation rates of the individual contaminants. The increase of flow rate for trace contaminant control purposes by at least a factor of 10 does not appear to be prudent given the resource constraints facing the ISSP. Since material selection and control and equipment aging can have a direct influence on contaminant generation rates and, therefore, the life cycle economics of the TCCS units used onboard the ISS, the following recommendations are made:

- A better understanding of the Russian material selection and control process needs to be obtained and a comparison made to NASA's program to determine whether Russian equipment trace contaminant generation rates can be expected to be similar to those observed from NASA spacecraft hardware.

- A better understanding of the effects of equipment aging on generation rate needs to be obtained to avoid unnecessary overdesign and life cycle maintenance costs for providing adequate trace contaminant control. Data supporting these effects need to be gathered or, if it already exists, reviewed thoroughly.

APPENDIX A—TRACE CONTAMINANT GENERATION RATES

CONT No.	COMMON NAME	IUPAC NAME	EQUIPMENT 3σ RATE mg/day*kg	METABOLIC GEN RATE mg/person*day
1	methyl alcohol	methanol	2.85E-03	1.50
2	ethyl alcohol	ethanol	2.65E-02	4.00
3	allyl alcohol	2-propen-1-ol	8.44E-06	—
4	isopropyl alcohol	2-propanol	8.52E-03	—
5	n-propyl alcohol	1-propanol	8.48E-04	—
6	ethylene glycol	1,2-ethanediol	2.57E-05	—
7	sec-butyl alcohol	2-butanol	2.03E-05	—
8	isobutyl alcohol	2-methyl-1-propanol	2.11E-03	1.20
9	n-butyl alcohol	1-butanol	1.65E-02	1.33
10	tert-butyl alcohol	2-methyl-2-propanol	1.74E-04	—
11	propylene glycol	1,2-propanediol	1.18E-06	—
12	isoamyl alcohol	3-methyl-1-butanol	6.67E-05	—
13	n-amyl alcohol	1-pentanol	4.25E-04	—
14	carbolic acid	phenol	2.08E-03	—
15	hexahydrophenol	cyclohexanol	3.13E-03	—
16	2-ethyl butyl alcohol	2-ethyl-1-butanol	5.95E-07	—
17	sec-hexyl alcohol	2-hexanol	4.99E-06	—
18	dichloro isopropyl alcohol	1,3-dichloro-2-propanol	7.13E-08	—
19	2-ethyl hexyl alcohol	2-ethylhexanol	2.72E-05	—
20	n-nonyl alcohol	nonanol	1.58E-05	—
21	n-decyl alcohol	decanol	5.37E-08	—
22	formaldehyde	methanal	1.58E-07	—
23	acetaldehyde	ethanal	2.15E-04	0.09
24	acrolein	2-propenal	1.46E-05	—
25	propionaldehyde	propanal	1.04E-03	—
26	methacrolein	2-methylpropenal	8.61E-06	—
27	n-butylaldehyde	butanal	3.55E-03	—
28	valeraldehyde	pentanal	2.61E-04	0.83
29	sorbaldehyde	2,4-hexadien-1-al	3.46E-06	—
30	caproaldehyde	hexanal	1.30E-04	—
31	benzenecarbonal	benzaldehyde	5.60E-05	—
32	enanthaldehyde	heptanal	6.42E-05	—
33	p-tolualdehyde	4-methylbenzaldehyde	1.07E-06	—
34	caprylaldehyde	octanal	9.45E-06	—
35	phene	benzene	6.55E-05	—

CONT No.	COMMON NAME	IUPAC NAME	EQUIPMENT 3σ RATE mg/day*kg	METABOLIC GEN RATE mg/person*day
36	toluene	methylbenzene	3.30E-03	—
37	styrene	ethenylbenzene	1.01E-04	—
38	o-xylene	1,2-dimethylbenzene	1.61E-03	—
39	m-xylene	1,3-dimethylbenzene	8.56E-03	—
40	p-xylene	1,4-dimethylbenzene	2.26E-03	—
41	ethylbenzene	ethylbenzene	4.32E-04	—
42	indonaphthene	indene	—	—
43	alpha-methylstyrene	alpha-methylstyrene	4.41E-07	—
44	pseudocumene	1,2,4-trimethylbenzene	1.31E-04	—
45	mesitylene	1,3,5-trimethylbenzene	6.93E-06	—
46	ethylmethylbenzene	1-ethyl-2-methylbenzene	1.41E-05	—
47	cumene	isopropylbenzene	2.71E-05	—
48	propylbenzene	propylbenzene	6.67E-04	—
50	butylbenzene	n-butylbenzene	5.43E-06	—
49	m-cymene	1-methyl-3-propylbenzene	—	—
51	p-cymene	1-isopropyl-4-methylbenzene	1.14E-06	—
52	methyl formate	methanoic acid methyl ester	1.23E-05	—
53	ethyl formate	methanoic acid ethyl ester	1.48E-05	—
54	methyl acetate	ethanoic acid methyl ester	5.26E-04	—
55	ethyl acetate	ethanoic acid ethyl ester	8.95E-04	—
56	allyl acetate	ethanoic acid allyl ester	1.19E-05	—
57	methyl methacrylate	methyl 2-methyl propenoate	3.07E-04	—
58	isopropyl acetate	ethanoic acid isopropyl ester	1.64E-05	—
59	butyl formate	methanoic acid butyl ester	3.71E-06	—
60	propyl acetate	ethanoic acid propyl ester	1.42E-03	—
61	ethyl methacrylate	ethyl 2-methyl propenoate	8.60E-05	—
62	butyl acetate	ethanoic acid butyl ester	2.28E-03	—
63	isobutyl acetate	ethanoic acid isobutyl ester	5.99E-04	—
64	ethyl lactate	lactic acid ethyl ester	1.61E-05	—
65	methyl cellosolve acetate	2-methoxy ethyl ethanoate	1.24E-05	—
66	isoamyl acetate	ethanoic acid isoamyl ester	1.12E-04	—
67	n-amyl acetate	ethanoic acid amyl ester	1.88E-04	—
68	cellosolve acetate	2-ethoxyethyl ethanoate	1.52E-03	—
69	ethyl acetylglycolate	ethyl acetylglycolate	—	—

CONT No.	COMMON NAME	IUPAC NAME	EQUIPMENT 3σ RATE mg/day*kg	METABOLIC GEN RATE mg/person*day
70	dibutyl oxalate	oxalic acid dibutyl ester	8.88E-08	—
71	furan	1,4-epoxy-1,3-butadiene	5.68E-06	—
72	tetrahydrofuran	1,4-epoxybutane	2.32E-04	—
73	allyl methyl ether	3-methoxy-1-propene	1.51E-07	—
74	ether	diethyl ether	2.45E-04	—
75	sylvan	2-methylfuran	1.02E-05	—
76	gluconal	2,3-dihydropyran	9.64E-07	—
77	p-dioxane	1,4-dioxane	2.55E-04	—
78	metaformaldehyde	1,3,5-trioxane	8.47E-06	—
79	ethyl cellosolve	2-ethoxyethanol	2.50E-03	—
80	chloropropylene oxide	epichlorohydrin	1.18E-05	—
81	tetramethyl oxirane	1,1,2,2-tetramethyl-1,2-epoxyethane	3.76E-06	—
82	N-ethyldiethyenimide oxide	4-ethylmorpholine	5.41E-04	—
83	butyl propyl ether	1-propoxybutane	1.41E-04	—
84	glycol monobutyl ether	2-butoxyethanol	8.65E-07	—
85	methyl chloride	chloromethane	1.53E-05	—
86	vinyl chloride	chloroethene	3.96E-06	—
87	ethyl chloride	chloroethane	3.86E-07	—
88	allyl chloride	3-chloropropene	3.38E-07	—
89	methylene chloride	dichloromethane	5.10E-03	—
90	butyl chloride	1-chlorobutane	—	—
91	dichloroethene	1,1-dichloroethene	2.41E-06	—
92	ethylene dichloride	1,2-dichloroethane	2.18E-04	—
93	dichloropropene	1,2-dichloropropene	1.15E-04	—
94	chlorophene	chlorobenzene	3.68E-03	—
95	propylene chloride	1,2-dichloropropane	2.47E-05	—
96	chloroform	trichloromethane	4.39E-05	—
97	isobutylene chloride	1,2-dichloro-2-methylpropane	4.68E-06	—
98	trichloroethylene	trichloroethene	4.39E-05	—
99	methyl chloroform	1,1,1-trichloroethane	1.57E-03	—
100	vinyl trichloride	1,1,2-trichloroethane	2.45E-07	—
101	dichorobenzene	1,2-dichlorobenzene	2.79E-05	—
102	chloromethylheptane	3-chloromethylheptane	7.38E-07	—
103	carbon tetrachloride	tetrachoromethane	2.24E-05	—

CONT No.	COMMON NAME	IUPAC NAME	EQUIPMENT 3σ RATE mg/day*kg	METABOLIC GEN RATE mg/person*day
104	tetrachloroethylene	tetrachloroethene	1.72E-03	—
105	Freon 22	chlorodifluoromethane	2.39E-04	—
106	Freon 21	dichlorofluoromethane	1.86E-06	—
107	chlorotrifluoroethane	1-chloro-1,2,2-trifluoroethane	5.47E-06	—
108	Freon 12	dichlorodifluoromethane	3.91E-05	—
109	dichorodifluoroethylene	1,2-dichloro-1,2-difluoroethene	3.76E-06	—
110	Freon 124	chlorotetrafluoroethane	—	—
111	Freon 11	trichlorofluoromethane	3.29E-03	—
112	Halon 1301	bromotrifluoromethane	1.15E-03	—
113	Freon 114	1,1-dichloro-1,2,2,2-tetrafluoroethane	1.16E-04	—
114	Freon 113	1,1,2-trichloro-1,2,2-trifluoroethane	5.81E-02	—
115	Freon 112	1,1,2,2-tetrachloro-1,2-difluoroethane	8.34E-05	—
116	methane	methane	8.65E-04	160.00
117	acetylene	ethyne	—	—
118	ethylene	ethene	1.00E-06	—
119	ethane	ethane	4.87E-06	—
120	allene	propadiene	—	—
121	methylacetylene	propyne	—	—
122	propylene	propene	9.96E-06	—
123	propane	propane	2.63E-06	—
124	vinylethylene	1,3-butadiene	1.18E-05	—
125	ethylethylene	1-butene	1.40E-04	—
126	isobutane	2-methylpropane	4.79E-05	—
127	butane	butane	1.27E-05	—
128	pentamethylene	cyclopentene	—	—
129	isoprene	2-methyl-1,3-butadiene	—	—
130	propylethylene	1-pentene	5.98E-08	—
131	isopentane	2-methylbutane	7.51E-06	—
132	pentane	pentane	2.94E-04	—
133	cyclohexene	3,4,5,6-tetrahydrobenzene	—	—
134	2-hexene	2-hexene	1.83E-06	—
135	hexamethylene	cyclohexane	1.50E-03	—
136	methylpentamethylene	methylcyclopentane	1.22E-04	—
137	neohexane	2,2-dimethylbutane	7.38E-06	—

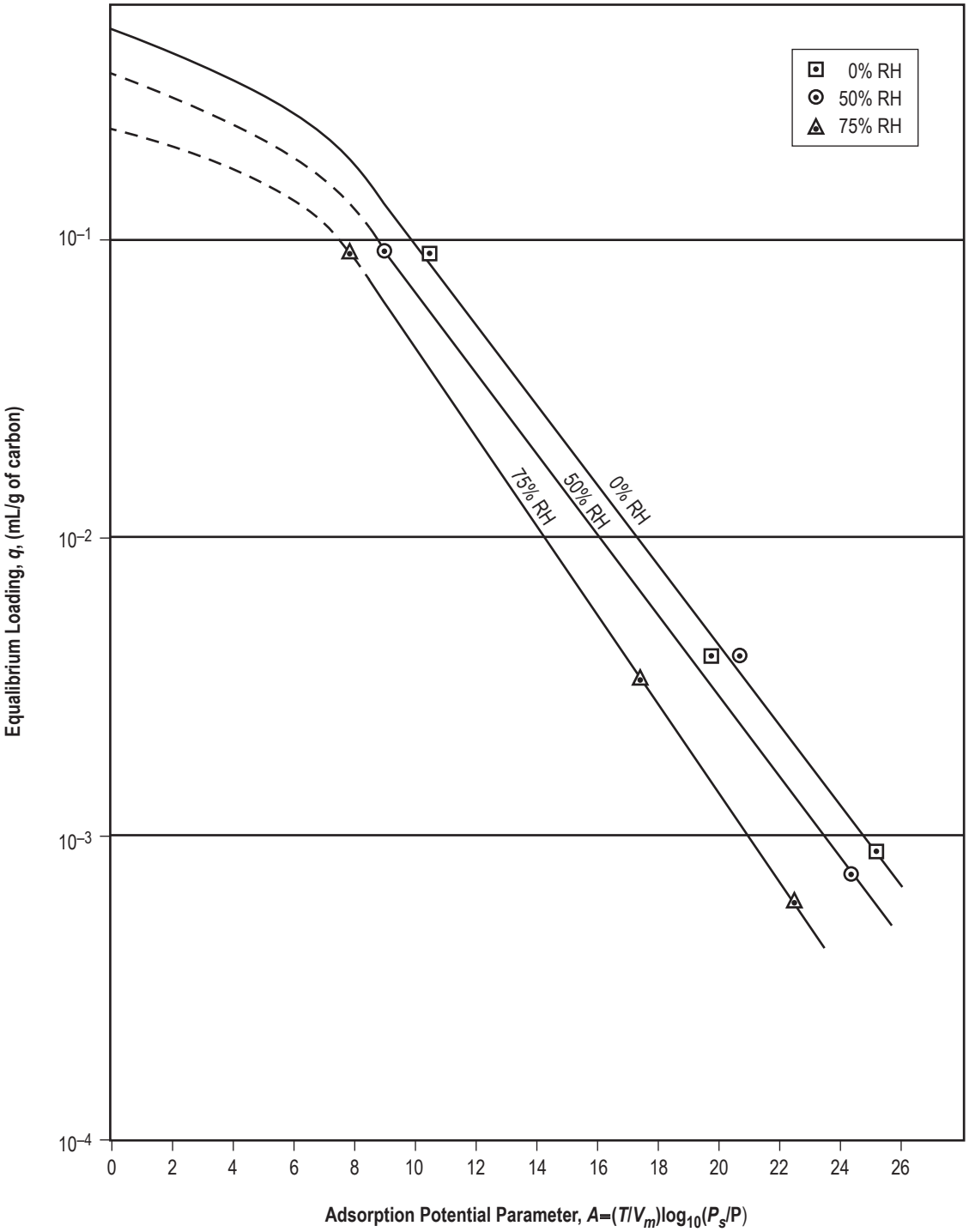
CONT No.	COMMON NAME	IUPAC NAME	EQUIPMENT 3σ RATE mg/day*kg	METABOLIC GEN RATE mg/person*day
138	diethylmethylmethane	3-methylpentane	1.32E-05	—
139	hexane	hexane	2.03E-04	—
140	methylcyclohexene	4-methylcyclohexene	—	—
141	heptylene	1-heptene	4.86E-08	—
142	hexahydrotoluene	methylcyclohexane	1.38E-04	—
143	dimethylpentane	2,2-dimethylpentane	1.03E-04	—
144	dimethylpentane	2,4-dimethylpentane	9.58E-07	—
145	triethylmethane	3-ethylpentane	1.09E-06	—
146	heptane	heptane	1.18E-04	—
147	dimethylcyclohexane	1,1-dimethylcyclohexane	1.15E-04	—
148	2-octene	2-octene	6.59E-08	—
149	methylheptylene	6-methyl-1-heptene	3.43E-08	—
150	trans-1,2-dimethylhexamethylene	trans-1,2-dimethylcyclohexane	2.25E-04	—
151	trimethylpentane	2,2,3-trimethylpentane	1.50E-06	—
152	dimethylhexane	3,3-dimethylhexane	3.61E-06	—
153	ethylhexane	3-ethylhexane	2.17E-06	—
154	octane	octane	3.54E-05	—
155	ethylheptane	4-ethylheptane	1.77E-07	—
156	nonane	nonane	1.51E-05	—
157	citrene (limonene)	4-isopropenyl-1-methylcyclohexene	1.58E-05	—
158	methylethylheptane	2-methyl-3-ethylheptane	7.36E-06	—
159	decane	decane	7.42E-05	—
160	hendecane	undecane	9.80E-05	—
161	dodecane	dodecane	2.02E-06	—
162	acetone	2-propanone	9.94E-03	0.20
163	methyl vinyl ketone	3-buten-2-one	5.84E-07	—
164	methyl ethyl ketone	2-butanone	1.57E-02	—
165	cyclopentanone (adipic ketone)	cyclopentanone	2.06E-03	—
166	methyl propenyl ketone	3-penten-2-one	1.27E-07	—
167	cyclopropyl methyl ketone	acetyl cyclopropane	2.10E-07	—
168	methyl propyl ketone	2-pentanone	1.13E-05	—
169	methyl isopropyl ketone	3-methyl-2-butanone	1.26E-04	—
170	mesityl oxide (methyl isobutenyl ketone)	4-methyl-3-penten-2-one	5.03E-04	—
171	cyclohexanone (pimelic ketone)	cyclohexanone	1.30E-03	—

CONT No.	COMMON NAME	IUPAC NAME	EQUIPMENT 3σ RATE mg/day*kg	METABOLIC GEN RATE mg/person*day
172	pinacolone	3,3-dimethyl-2-butanone	1.84E-05	—
173	methyl isobutyl ketone	4-methyl-2-pentanone	3.33E-03	—
174	diisopropyl ketone	2,4-dimethyl-3-pentanone	2.23E-07	—
175	methyl n-amyl ketone	2-heptanone	3.26E-04	—
176	methyl isoamyl ketone	5-methyl-2-hexanone	7.08E-06	—
177	phenyl methyl ketone	acetophenone	2.07E-06	—
178	methyl hexyl ketone	2-octanone	7.27E-07	—
179	methylheptanone	5-methyl-3-heptanone	7.61E-06	—
180	diisobutyl ketone	2,6-dimethyl-4-heptanone	1.48E-05	—
181	hydrogen sulfide	hydrogen sulfide	—	0.09
182	carbon oxisulfide	carbonyl sulfide	1.47E-05	—
183	ethylene sulfide	ethylene sulfide	1.33E-07	—
184	methyl sulfide	dimethyl sulfide	8.29E-07	—
185	carbon disulfide	carbon disulfide	1.07E-04	—
186	tetrahydrothiopyran	pentamethylene sulfide	3.40E-07	—
187	nitric oxide	nitric oxide	—	—
188	nitrogen dioxide	nitrogen dioxide	—	—
189	nitrogen tetroxide	nitrogen tetroxide	—	—
190	acetic acid	ethanoic acid	4.11E-06	—
191	ethylhexanoic acid	2-ethylhexanoic acid	1.69E-06	—
192	diamine	hydrazine	—	—
193	acetonitrile	methyl cyanide	5.96E-08	—
194	monomethyl hydrazine	methyl hydrazine	—	—
195	nitromethane	nitromethane	2.00E-04	—
196	dimethylformamide	N,N-dimethylformamide	7.38E-06	—
197	nitroethane	nitroethane	9.11E-08	—
198	indole	2,3-benzopyrrole	—	25.00
199	hydrogen	hydrogen	1.92E-05	26.00
200	ammonia	ammonia	2.23E-04	320.50
201	carbon monoxide	carbon monoxide	4.13E-03	23.00
203	dioxosilane	disiloxane	7.92E-05	—
204	trimethylsilanol	trimethylsilanol	4.86E-04	—
205	trioxosilane	trisiloxane	6.48E-05	—
206	hexamethyldioxosilane	hexamethyldisiloxane	2.99E-05	—
207	tetraoxosilane	tetrasiloxane	6.03E-04	—

CONT No.	COMMON NAME	IUPAC NAME	EQUIPMENT 3σ RATE mg/day*kg	METABOLIC GEN RATE mg/person*day
208	diphenylsilane	diphenylsilane	6.05E-08	—
209	hexamethylcyclotrioxosilane	hexamethylcyclotrisiloxane	3.16E-04	—
210	octamethyltrioxosilane	octamethyltrisiloxane	9.12E-04	—
211	octamethylcyclotetraoxosilane	octamethylcyclotetrasiloxane	5.25E-04	—
212	decamethylcyclopentaoxosilane	decamethylcyclopentasiloxane	1.30E-04	—
213	decamethylcyclohexaoxosilane	decamethylcyclohexasiloxane	—	—
214	tetradecamethylcycloheptaoxosilane	tetradecamethylcycloheptasilox	—	—
215	hexadecamethylcyclooctaoxosilane	hexadecamethylcyclooctasiloxan	—	—
	TOTAL GENERATION RATE	TOTAL GENERATION RATE	2.19E-01	563.74

APPENDIX B—CHARACTERISTIC CURVES FOR ACTIVATED CHARCOAL

Appendix B shows the adsorption potential plot for Barnebey Sutcliffe Type 3032 phosphoric acid-treated charcoal.


0% RH
50% RH
75% RH
10^{-1}
10^{-2}
10^{-3}
10^{-4}
0
2
4
6
8
10
12
14
16
18
20
22
24
26
Equalibrium Loading, q, (mL/g of carbon)
Adsorption Potential Parameter, $A=(T/V_m)\log_{10}(P_s/P)$

APPENDIX C—U.S. TCCS CONTROLLING TO U.S. 180-DAY SMACs

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

1

PROGRAM VERSION 8.1 Alpha March 15, 1994

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
1	Methanol	0.3701	9.000	N
2	Ethanol	3.761	94.00	N
3	2-propen-1-ol	0.6410E-03	1.000	N
4	n-propanol	0.8579E-01	98.30	N
5	2-propanol	0.9484	150.0	N
6	1,2-ethanediol	0.5437E-02	127.0	N
7	n-butanol	2.488	121.0	N
8	2-butanol	0.1407E-02	121.0	N
9	2-methyl-1-propanol	0.1328	121.0	N
10	2-methyl-2-propanol	0.3070E-01	121.0	N
11	1,2-propanediol	0.2494E-03	0.1000	N
12	n-pentanol	0.4930E-01	126.0	N
13	3-methyl-1-butanol	0.3618E-02	126.0	N
14	Phenol	0.4401	7.700	N
15	Cyclohexanol	0.6482	123.0	N
16	2-ethylbutanol	0.1076E-03	0.1000	N
17	2-hexanol	0.6868E-03	167.0	N
18	1,3-dichloro-2-propanol	0.2152E-05	0.1000	N
19	2-ethylhexanol	0.1885E-02	186.4	N
20	Nonanol	0.2692E-02	236.0	N
21	n-decanol	0.8237E-05	259.0	N
22	Methanal	0.7695E-06	0.5000E-01	N
23	Ethanal	0.1263	4.000	N
24	2-propenal	0.3083E-02	0.3000E-01	N
25	Propanal	0.2852	95.00	N
26	2-methylpropenal	0.1814E-02	0.1000	N
27	Butanal	0.7007	118.0	N
28	Pentanal	0.6567E-01	106.0	N
29	2,4-hexadien-1-al	0.7324E-03	4.700	N
30	Hexanal	0.2698E-01	4.700	N
31	Benzaldehyde	0.9668E-02	173.0	N
32	Heptanal	0.1328E-01	0.1000	N
33	4-methylbenzaldehyde	0.2263E-03	0.1000	N
34	Octanal	0.6551E-03	210.0	N
35	Benzene	0.1383E-01	0.3200	N
36	Methylbenzene	0.6983	60.00	N
37	Vinylbenzene	0.2130E-01	42.60	N
38	1,2-dimethylbenzene	0.3396	220.0	N
39	1,3-dimethylbenzene	1.812	220.0	N
40	1,4-dimethylbenzene	0.4775	220.0	N
41	Ethylbenzene	0.9159E-01	86.80	N
42	Indene	0.0000E+00	9.500	N
43	alpha-methylstyrene	0.9270E-04	145.0	N
44	1,2,4-trimethylbenzene	0.2766E-01	15.00	N
45	1,3,5-trimethylbenzene	0.1463E-02	15.00	N
46	1-ethyl-2-methylbenzene	0.2972E-02	25.00	N
47	Isopropylbenzene	0.5730E-02	73.70	N
48	Propylbenzene	0.1411	49.10	N
49	1-methyl-3-propylbenzene	0.0000E+00	11.00	N
50	n-butylbenzene	0.1147E-02	55.00	N

51	1-methyl-4-propylbenzene	0.2319E-03	0.1000	N
52	Methyl formate	0.5153E-02	12.30	N
53	Ethyl formate	0.2887E-02	90.90	N
54	Methyl acetate	0.9722E-01	121.0	N
55	Ethyl acetate	0.1738	180.0	N
56	Allyl acetate	0.2520E-02	51.20	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
57	Methyl methacrylate	0.6499E-01	102.0	N
58	Isopropyl acetate	0.3460E-02	209.0	N
59	n-butyl formate	0.7851E-03	83.50	N
60	Propyl acetate	0.3002	167.0	N
61	Ethyl methacrylate	0.1821E-01	116.7	N
62	Butyl acetate	0.4697	190.0	N
63	Isobutyl acetate	0.1267	190.0	N
64	Ethyl lactate	0.3225E-02	193.0	N
65	2-Methoxy ethyl acetate	0.9413E-03	24.20	N
66	Isoamyl acetate	0.2369E-01	159.5	N
67	n-amyl acetate	0.3978E-01	160.0	N
68	2-ethoxyethyl acetate	0.1810	162.0	N
69	ethyl acetoxyacetate	0.0000E+00	0.1000	N
70	Dibutyl oxalate	0.1880E-04	0.1000	N
71	1,4-epoxy-1,3-butadiene	0.1199E-02	0.1100	N
72	1,4-epoxybutane	0.4813E-01	118.0	N
73	3-methoxy-1-propene	0.3193E-04	0.1000	N
74	Diethyl ether	0.5186E-01	242.0	N
75	2-methylfuran	0.2148E-02	0.1300	N
76	2,3-dihydropyran	0.1376E-03	0.1000	N
77	1,4-dioxane	0.2192E-01	1.800	N
78	1,3,5-Trioxane	0.4060E-04	0.1000	N
79	2-ethoxyethanol	0.1691	0.3000	N
80	Epichlorohydrin	0.2494E-02	1.200	N
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.7975E-03	0.1000	N
82	4-ethylmorpholine	0.3054E-01	16.00	N
83	1-propoxybutane	0.2982E-01	186.8	N
84	2-butoxyethanol	0.1306E-03	24.20	N
85	Chloromethane	0.2873E-01	41.30	N
86	Chloroethene	0.3901E-02	3.000	N
87	Chloroethane	0.8169E-04	263.7	N
88	3-chloropropene	0.7125E-04	0.6300	N
89	Dichloromethane	7.604	10.00	N
90	1-chlorobutane	0.0000E+00	151.0	N
91	1,1-dichloroethene	0.5098E-03	7.900	N
92	1,2-dichloroethane	0.4575E-01	1.000	N
93	1,2-dichloropropene	0.2435E-01	42.20	N
94	Chlorobenzene	0.7768	46.00	N
95	1,2-dichloropropane	0.5186E-02	42.20	N
96	Trichloromethane	0.9280E-02	4.900	N
97	1,2-dichloro-2-methylpropane	0.9897E-03	0.1000	N
98	Trichloroethylene	0.3025E-01	10.00	N
99	1,1,1-trichloroethane	0.3323	164.0	N
100	1,1,2-trichloroethane	0.5118E-04	5.500	N
101	1,2-dichlorobenzene	0.5885E-02	30.00	N
102	3-chloromethylheptane	0.1564E-03	0.1000	N

103	Tetrachloromethane	0.4736E-02	13.00	N
104	Tetrachloroethene	0.3641	34.00	N
105	Chlorodifluoromethane	0.5524	353.6	N
106	Dichlorofluoromethane	0.3931E-03	21.00	N
107	1-chloro-1,2,2-trifluoroethane	0.1155E-02	484.5	N
108	Dichlorodifluoromethane	0.8247E-02	494.4	N
109	1,2-dichloro-1,2-difluoroethen	0.7983E-03	136.0	N
110	Chlorotetrafluoroethane	0.0000E+00	555.0	N
111	Trichlorofluoromethane	0.6995	561.8	N
112	Bromotrifluoromethane	1.783	608.8	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
113	1,1-diCl-1,2,2,2-tetraFlethane	0.2454E-01	702.9	N
114	1,1,2-triCl-1,2,2-triFlethane	12.27	400.0	N
115	1,1,2,2-tetraCl-1,2-diFlethane	0.1762E-01	834.2	N
116	Methane	39.73	3800.	N
117	Ethyne	0.0000E+00	532.4	N
118	Ethene	0.7796E-03	344.1	N
119	Ethane	0.3789E-02	1230.	N
120	Propadiene	0.0000E+00	81.90	N
121	Propyne	0.0000E+00	409.5	N
122	Propene	0.7208E-02	860.3	N
123	Propane	0.5562E-03	901.4	N
124	1,3-butadiene	0.2493E-02	0.1300	N
125	1-butene	0.2962E-01	458.0	N
126	2-methylpropane	0.1016E-01	237.6	N
127	Butane	0.2685E-02	237.6	N
128	Cyclopentene	0.0000E+00	167.0	N
129	2-methyl-1,3-butadiene	0.0000E+00	557.0	N
130	1-pentene	0.1267E-04	186.0	N
131	2-methylbutane	0.1590E-02	295.0	N
132	Pentane	0.6222E-01	590.0	N
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	86.00	N
134	2-hexene	0.3873E-03	172.0	N
135	Cyclohexane	0.3173	206.0	N
136	Methylcyclopentane	0.2580E-01	51.60	N
137	2,2-dimethylbutane	0.1564E-02	88.10	N
138	3-methylpentane	0.2791E-02	1762.	N
139	Hexane	0.4295E-01	176.0	N
140	4-methylcyclohexene	0.0000E+00	393.2	N
141	1-heptene	0.1029E-04	201.0	N
142	Methylcyclohexane	0.2923E-01	60.20	N
143	2,2-dimethylpentane	0.2177E-01	408.6	N
144	2,4-dimethylpentane	0.2026E-03	201.0	N
145	3-ethylpentane	0.2309E-03	201.0	N
146	Heptane	0.2494E-01	201.0	N
147	1,1-dimethylcyclohexane	0.2435E-01	115.0	N
148	2-octene	0.1392E-04	229.0	N
149	6-methyl-1-heptene	0.7258E-05	229.0	N
150	trans-1,2-dimethylcyclohexane	0.4764E-01	115.0	N
151	2,2,3-trimethylpentane	0.3174E-03	229.0	N
152	3,3-dimethylhexane	0.7653E-03	229.0	N
153	3-ethylhexane	0.4592E-03	229.0	N
154	Octane	0.7522E-02	350.0	N

155	4-ethylheptane	0.3748E-04	129.0	N
156	Nonane	0.3193E-02	315.0	N
157	4-isopropenyl-1-Mecyclohexene	0.3345E-02	557.0	N
158	2-methyl-3-ethylheptane	0.1557E-02	116.0	N
159	Decane	0.1570E-01	223.0	N
160	Undecane	0.2072E-01	319.0	N
161	Dodecane	0.4273E-03	278.0	N
162	2-propanone	0.3462E-03	712.5	N
163	3-buten-2-one	0.1124E-03	0.1000	N
164	2-butanone	0.7496	30.00	N
165	Cyclopentanone	0.4361	29.20	N
166	3-penten-2-one	0.2469E-04	0.1000	N
167	Acetyl cyclopropane	0.4137E-04	0.1000	N
168	2-pentanone	0.1847E-02	70.40	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
169	3-methyl-2-butanone	0.2666E-01	70.40	N
170	4-methyl-3-penten-2-one	0.9964E-01	40.10	N
171	Cyclohexanone	0.1950	60.20	N
172	3,3-dimethyl-2-butanone	0.3893E-02	81.90	N
173	4-methyl-2-pentanone	0.6064	82.00	N
174	2,4-dimethyl-3-pentanone	0.4717E-04	23.50	N
175	2-heptanone	0.6856E-01	23.50	N
176	5-methyl-2-hexanone	0.1498E-02	23.50	N
177	acetophenone	0.3262E-03	245.0	N
178	2-octanone	0.1439E-03	105.0	N
179	5-methyl-3-heptanone	0.1610E-02	0.1000	N
180	2,6-dimethyl-4-heptanone	0.3087E-02	58.10	N
181	Hydrogen sulfide	0.3847E-02	2.800	N
182	Carbonyl sulfide	0.2779E-01	12.00	N
183	Ethylene sulfide	0.2813E-04	0.1000	N
184	Dimethyl sulfide	0.1755E-03	2.500	N
185	Carbon disulfide	0.4039E-01	16.00	N
186	Pentamethylene sulfide	0.7192E-04	0.1000	N
187	Nitric oxide	0.0000E+00	6.100	N
188	Nitrogen dioxide	0.0000E+00	0.9400	N
189	Nitrogen tetroxide	0.0000E+00	1.900	N
190	Ethanoic acid	0.1004E-03	7.400	N
191	2-ethylhexanoic acid	0.3130E-03	0.1000	N
192	Hydrazine	0.0000E+00	0.5000E-02	N
193	Methyl cyanide	0.8408E-05	6.700	N
194	methyl hydrazine	0.0000E+00	0.4000E-02	N
195	Nitromethane	0.1171	13.00	N
196	N,N-dimethylformamide	0.1564E-02	6.000	N
197	Nitroethane	0.1927E-04	0.1000	N
198	1-benzo[b]pyrrole	0.4061E-02	0.2500	N
199	Hydrogen	1.594	340.0	N
200	Ammonia	0.2686E-01	7.000	N
201	Carbon monoxide	4.615	10.00	N
202	Disiloxane	0.1676E-01	52.40	N
203	Trimethylsilanol	0.1029	40.00	N
204	Trisiloxane	0.1372E-01	83.40	N
205	Hexamethyldisiloxane	0.6327E-02	96.60	N
206	Tetrasiloxane	0.1273	114.0	N

207	Diphenylsilane	0.1280E-04	0.1000	N
208	Hexamethylcyclotrisiloxane	0.6664E-01	227.0	N
209	Octamethyltrisiloxane	0.1927	40.00	N
210	Octamethylcyclotetrasiloxane	0.1108	151.7	N
211	Decamethylcyclopentasiloxane	0.2751E-01	150.7	N
212	Decamethylcyclohexasiloxane	0.0000E+00	150.7	N
213	Tetradecamethylcycloheptasilox	0.0000E+00	150.7	N
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	150.7	N

GROUP T-VALUES AS SPECIFIED IN NHB 8060.1B APPENDIX D

-01-	-02-	-03-	-04-	-05-	-06-	-07-	-08-	-09-	-10-	-11-	-12-	-13-	-14-	-15-	-16-
0.18	0.30	0.08	0.01	0.62	0.86	0.04	0.00	0.03	0.00	0.07	0.01	0.00	0.00	0.03	0.47

OVERALL T-VALUE
1.77

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	0.9537E-06	0.1351E-01	0.2752E-06	1.510	0.0000E+00	1.730	1.730	1.730
2	Ethanol	0.2094E-01	0.1373	0.0000E+00	15.35	0.0000E+00	15.25	15.25	15.25
3	2-propen-1-ol	-0.1863E-08	0.2339E-04	0.9691E-02	0.0000E+00	0.0000E+00	0.3760E-02	0.3760E-02	0.3760E-02
4	n-propanol	0.4768E-06	0.3131E-02	1.297	0.0000E+00	0.0000E+00	0.3073	0.3073	0.3073
5	2-propanol	0.3815E-05	0.3462E-01	14.34	0.0000E+00	0.0000E+00	2.798	2.798	2.798
6	1,2-ethanediol	0.1490E-07	0.1984E-03	0.8220E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	0.7629E-05	0.9080E-01	37.61	0.0000E+00	0.0000E+00	3.355	3.355	3.355
8	2-butanol	0.7451E-08	0.5137E-04	0.2128E-01	0.0000E+00	0.0000E+00	0.9465E-02	0.9465E-02	0.9465E-02
9	2-methyl-1-propanol	0.4768E-06	0.4848E-02	2.008	0.0000E+00	0.0000E+00	1.093	1.093	1.093
10	2-methyl-2-propanol	0.5960E-07	0.1121E-02	0.4642	0.0000E+00	0.0000E+00	0.2007E-01	0.2007E-01	0.2007E-01
11	1,2-propanediol	0.9313E-09	0.9103E-05	0.3771E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.0000E+00	0.1799E-02	0.7454	0.0000E+00	0.0000E+00	0.1326	0.1326	0.1326
13	3-methyl-1-butanol	0.1490E-07	0.1321E-03	0.5471E-01	0.0000E+00	0.0000E+00	0.3440E-01	0.3440E-01	0.3440E-01
14	Phenol	0.9537E-06	0.1606E-01	6.654	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.1907E-05	0.2366E-01	9.801	0.0000E+00	0.0000E+00	0.3805E-01	0.3805E-01	0.3805E-01
16	2-ethylbutanol	0.2328E-09	0.3927E-05	0.1627E-02	0.0000E+00	0.0000E+00	0.6045E-04	0.6045E-04	0.6045E-04
17	2-hexanol	0.1863E-08	0.2507E-04	0.1038E-01	0.0000E+00	0.0000E+00	0.1210E-02	0.1210E-02	0.1210E-02
18	1,3-dichloro-2-propanol	0.2910E-10	0.7854E-07	0.3254E-04	0.0000E+00	0.0000E+00	0.4235E-04	0.4235E-04	0.4235E-04
19	2-ethylhexanol	0.7451E-08	0.6881E-04	0.2850E-01	0.0000E+00	0.0000E+00	0.1268E-01	0.1268E-01	0.1268E-01
20	Nonanol	0.3725E-08	0.9826E-04	0.4070E-01	0.0000E+00	0.0000E+00	0.1450E-02	0.1450E-02	0.1450E-02
21	n-decanol	0.2910E-10	0.3006E-06	0.1245E-03	0.0000E+00	0.0000E+00	0.1021E-04	0.1021E-04	0.1021E-04
22	Methanal	-0.5821E-10	0.2809E-07	0.0000E+00	0.3140E-05	0.0000E+00	0.1053E-03	0.1053E-03	0.1053E-03
23	Ethanal	0.2027E-04	0.4609E-02	0.1644E-03	0.5152	0.0000E+00	0.4159E-01	0.4159E-01	0.4159E-01
24	2-propenal	0.1397E-03	0.1125E-03	0.4597E-01	0.1701E-03	0.0000E+00	0.8761E-04	0.8761E-04	0.8761E-04
25	Propanal	0.1262	0.1037E-01	2.177	0.5722	0.0000E+00	0.9837E-01	0.9837E-01	0.9837E-01
26	2-methylpropenal	0.5588E-08	0.6621E-04	0.2743E-01	0.0000E+00	0.0000E+00	0.2268E-04	0.2268E-04	0.2268E-04
27	Butanal	0.5722E-05	0.2558E-01	10.59	0.0000E+00	0.0000E+00	0.1688	0.1688	0.1688
28	Pentanal	0.0000E+00	0.2397E-02	0.9930	0.0000E+00	0.0000E+00	0.9667E-02	0.9667E-02	0.9667E-02
29	2,4-hexadien-1-al	0.1863E-08	0.2673E-04	0.1107E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1192E-06	0.9848E-03	0.4080	0.0000E+00	0.0000E+00	0.1743E-02	0.1743E-02	0.1743E-02
31	Benzaldehyde	0.1490E-07	0.3529E-03	0.1462	0.0000E+00	0.0000E+00	0.7247E-02	0.7247E-02	0.7247E-02
32	Heptanal	0.4470E-07	0.4847E-03	0.2008	0.0000E+00	0.0000E+00	0.1028E-02	0.1028E-02	0.1028E-02
33	4-methylbenzaldehyde	0.4657E-09	0.8260E-05	0.3422E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.0000E+00	0.2391E-04	0.9905E-02	0.0000E+00	0.0000E+00	0.4406E-02	0.4406E-02	0.4406E-02

35 Benzene	0.1043E-06	0.5046E-03	0.2090	0.0000E+00	0.0000E+00	0.9877E-04	0.9877E-04	0.9877E-04
36 Methylbenzene	0.9537E-06	0.2549E-01	10.56	0.0000E+00	0.0000E+00	0.3637E-02	0.3637E-02	0.3637E-02
37 Vinylbenzene	0.2980E-07	0.7773E-03	0.3220	0.0000E+00	0.0000E+00	0.2677E-03	0.2677E-03	0.2677E-03
38 1,2-dimethylbenzene	0.9537E-06	0.1240E-01	5.135	0.0000E+00	0.0000E+00	0.2686E-02	0.2686E-02	0.2686E-02
39 1,3-dimethylbenzene	0.1907E-05	0.6613E-01	27.39	0.0000E+00	0.0000E+00	0.9002E-02	0.9002E-02	0.9002E-02
40 1,4-dimethylbenzene	0.9537E-06	0.1743E-01	7.221	0.0000E+00	0.0000E+00	0.2607E-02	0.2607E-02	0.2607E-02
41 Ethylbenzene	0.7153E-06	0.3343E-02	1.385	0.0000E+00	0.0000E+00	0.3770E-03	0.3770E-03	0.3770E-03
42 Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43 alpha-methylstyrene	0.4657E-09	0.3384E-05	0.1402E-02	0.0000E+00	0.0000E+00	0.1084E-05	0.1084E-05	0.1084E-05
44 1,2,4-trimethylbenzene	0.5960E-07	0.1010E-02	0.4182	0.0000E+00	0.0000E+00	0.1625E-03	0.1625E-03	0.1625E-03
45 1,3,5-trimethylbenzene	0.1118E-07	0.5339E-04	0.2212E-01	0.0000E+00	0.0000E+00	0.6108E-05	0.6108E-05	0.6108E-05
46 1-ethyl-2-methylbenzene	0.1118E-07	0.1085E-03	0.4493E-01	0.0000E+00	0.0000E+00	0.3459E-04	0.3459E-04	0.3459E-04
47 Isopropylbenzene	0.3725E-07	0.2091E-03	0.8663E-01	0.0000E+00	0.0000E+00	0.1308E-04	0.1308E-04	0.1308E-04
48 Propylbenzene	0.7153E-06	0.5148E-02	2.133	0.0000E+00	0.0000E+00	0.4574E-03	0.4574E-03	0.4574E-03
49 1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50 n-butylbenzene	0.5588E-08	0.4187E-04	0.1734E-01	0.0000E+00	0.0000E+00	0.2887E-05	0.2887E-05	0.2887E-05
51 1-methyl-4-propylbenzene	0.0000E+00	0.8466E-05	0.3507E-02	0.0000E+00	0.0000E+00	0.3131E-04	0.3131E-04	0.3131E-04
52 Methyl formate	0.1749E-02	0.1876E-03	0.2249E-01	0.1490E-01	0.0000E+00	0.1499E-04	0.1499E-04	0.1499E-04
53 Ethyl formate	0.7451E-08	0.1054E-03	0.4365E-01	0.0000E+00	0.0000E+00	0.8113E-03	0.8113E-03	0.8113E-03
54 Methyl acetate	0.3576E-06	0.3548E-02	1.470	0.0000E+00	0.0000E+00	0.4688E-01	0.4688E-01	0.4688E-01
55 Ethyl acetate	-0.2384E-06	0.6344E-02	2.628	0.0000E+00	0.0000E+00	0.5103E-01	0.5103E-01	0.5103E-01
56 Allyl acetate	0.7451E-08	0.9199E-04	0.3811E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO. NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57 Methyl methacrylate	0.2384E-06	0.2372E-02	0.9826	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58 Isopropyl acetate	0.3725E-08	0.1263E-03	0.5231E-01	0.0000E+00	0.0000E+00	0.3486E-04	0.3486E-04	0.3486E-04
59 n-butyl formate	0.1863E-08	0.2866E-04	0.1187E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60 Propyl acetate	0.9537E-06	0.1096E-01	4.539	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61 Ethyl methacrylate	0.5960E-07	0.6647E-03	0.2753	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62 Butyl acetate	0.1907E-05	0.1714E-01	7.102	0.0000E+00	0.0000E+00	0.4144E-01	0.4144E-01	0.4144E-01
63 Isobutyl acetate	0.4768E-06	0.4624E-02	1.915	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64 Ethyl lactate	0.7451E-08	0.1177E-03	0.4876E-01	0.0000E+00	0.0000E+00	0.5888E-03	0.5888E-03	0.5888E-03
65 2-Methoxy ethyl acetate	-0.3725E-08	0.3436E-04	0.1423E-01	0.0000E+00	0.0000E+00	0.5523E-02	0.5523E-02	0.5523E-02
66 Isoamyl acetate	0.5960E-07	0.8645E-03	0.3581	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67 n-amyl acetate	0.5960E-07	0.1452E-02	0.6015	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68 2-ethoxyethyl acetate	0.0000E+00	0.6608E-02	2.737	0.0000E+00	0.0000E+00	0.4602	0.4602	0.4602
69 ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70 Dibutyl oxalate	0.5821E-10	0.6863E-06	0.2843E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71 1,4-epoxy-1,3-butadiene	0.2943E-06	0.4375E-04	0.1812E-01	0.4573E-06	0.0000E+00	0.7364E-05	0.7364E-05	0.7364E-05
72 1,4-epoxybutane	0.1788E-06	0.1757E-02	0.7277	0.0000E+00	0.0000E+00	0.3154E-02	0.3154E-02	0.3154E-02
73 3-methoxy-1-propene	0.8731E-10	0.1166E-05	0.4828E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74 Diethyl ether	0.1192E-06	0.1893E-02	0.7841	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75 2-methylfuran	0.3725E-08	0.7840E-04	0.3248E-01	0.0000E+00	0.0000E+00	0.3170E-04	0.3170E-04	0.3170E-04
76 2,3-dihydropyran	0.6985E-09	0.5022E-05	0.2080E-02	0.0000E+00	0.0000E+00	0.2175E-03	0.2175E-03	0.2175E-03
77 1,4-dioxane	0.1192E-06	0.7999E-03	0.3314	0.0000E+00	0.0000E+00	0.1051	0.1051	0.1051
78 1,3,5-Trioxane	0.1863E-08	0.1482E-05	0.6139E-03	0.0000E+00	0.0000E+00	0.5556E-02	0.5556E-02	0.5556E-02
79 2-ethoxyethanol	0.9537E-06	0.6171E-02	2.556	0.0000E+00	0.0000E+00	1.180	1.180	1.180
80 Epichlorohydrin	0.7451E-08	0.9103E-04	0.3771E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81 1,1,2,2-tetraMe-1,2-epoxyEt	0.3725E-08	0.2911E-04	0.1206E-01	0.0000E+00	0.0000E+00	0.2744E-05	0.2744E-05	0.2744E-05
82 4-ethylmorpholine	-0.2384E-06	0.1115E-02	0.4618	0.0000E+00	0.0000E+00	0.2761	0.2761	0.2761
83 1-propoxybutane	0.5960E-07	0.1089E-02	0.4509	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84 2-butoxyethanol	0.2328E-09	0.4767E-05	0.1975E-02	0.0000E+00	0.0000E+00	0.1711E-03	0.1711E-03	0.1711E-03
85 Chloromethane	0.5741E-03	0.1049E-02	0.6533E-04	0.4688E-01	0.0000E+00	0.1152E-03	0.1152E-03	0.1152E-03
86 Chloroethene	0.1157E-02	0.1421E-03	0.4812E-02	0.6562E-02	0.0000E+00	0.5749E-05	0.5749E-05	0.5749E-05

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

87	Chloroethane	0.3492E-09	0.2982E-05	0.1235E-02	0.0000E+00	0.0000E+00	0.3908E-06	0.3908E-06	0.3908E-06
88	3-chloropropene	0.3492E-09	0.2601E-05	0.1077E-02	0.0000E+00	0.0000E+00	0.5643E-08	0.5643E-08	0.5643E-08
89	Dichloromethane	1.586	0.2771	1.882	12.19	0.0000E+00	0.1015	0.1015	0.1015
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.2794E-08	0.1861E-04	0.7708E-02	0.0000E+00	0.0000E+00	0.7554E-06	0.7554E-06	0.7554E-06
92	1,2-dichloroethane	0.0000E+00	0.1670E-02	0.6917	0.0000E+00	0.0000E+00	0.1211E-02	0.1211E-02	0.1211E-02
93	1,2-dichloropropene	0.5960E-07	0.8886E-03	0.3681	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.1907E-05	0.2835E-01	11.75	0.0000E+00	0.0000E+00	0.5666E-02	0.5666E-02	0.5666E-02
95	1,2-dichloropropane	0.7451E-08	0.1893E-03	0.7841E-01	0.0000E+00	0.0000E+00	0.1297E-03	0.1297E-03	0.1297E-03
96	Trichloromethane	0.1490E-07	0.3387E-03	0.1403	0.0000E+00	0.0000E+00	0.7578E-04	0.7578E-04	0.7578E-04
97	1,2-dichloro-2-methylpropane	0.3725E-08	0.3612E-04	0.1496E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.8941E-07	0.1104E-02	0.4574	0.0000E+00	0.0000E+00	0.1160E-03	0.1160E-03	0.1160E-03
99	1,1,1-trichloroethane	0.0000E+00	0.1213E-01	5.024	0.0000E+00	0.0000E+00	0.7344E-03	0.7344E-03	0.7344E-03
100	1,1,2-trichloroethane	0.4075E-09	0.1868E-05	0.7738E-03	0.0000E+00	0.0000E+00	0.2229E-05	0.2229E-05	0.2229E-05
101	1,2-dichlorobenzene	0.2235E-07	0.2148E-03	0.8898E-01	0.0000E+00	0.0000E+00	0.6603E-04	0.6603E-04	0.6603E-04
102	3-chloromethylheptane	0.4657E-09	0.5707E-05	0.2364E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.2235E-07	0.1729E-03	0.7160E-01	0.0000E+00	0.0000E+00	0.5330E-05	0.5330E-05	0.5330E-05
104	Tetrachloroethene	0.1907E-05	0.1329E-01	5.505	0.0000E+00	0.0000E+00	0.4487E-03	0.4487E-03	0.4487E-03
105	Chlorodifluoromethane	0.4862E-01	0.2015E-01	0.2038E-01	0.6741	0.0000E+00	0.6054E-03	0.6054E-03	0.6054E-03
106	Dichlorofluoromethane	-0.9313E-09	0.1435E-04	0.5944E-02	0.6119E-10	0.0000E+00	0.2492E-05	0.2492E-05	0.2492E-05
107	1-chloro-1,2,2-trifluoroethane	0.1863E-08	0.4214E-04	0.1746E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.0000E+00	0.3010E-03	0.1247	0.1805E-08	0.0000E+00	0.6992E-06	0.6992E-06	0.6992E-06
109	1,2-dichloro-1,2-difluoroethen	0.1863E-08	0.2914E-04	0.1207E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.2131E-02	0.2553E-01	10.57	0.4636E-03	0.0000E+00	0.1901E-03	0.1901E-03	0.1901E-03
112	Bromotrifluoromethane	0.5144	0.6492E-01	0.8632	2.248	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	-0.2980E-07	0.8958E-03	0.3711	0.0000E+00	0.0000E+00	0.6722E-06	0.6722E-06	0.6722E-06
114	1,1,2-triCl-1,2,2-triFlethane	0.1526E-04	0.4479	185.5	0.0000E+00	0.0000E+00	0.8377E-03	0.8377E-03	0.8377E-03
115	1,1,2,2-tetraCl-1,2-diFlethane	0.2980E-07	0.6430E-03	0.2664	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	14.25	1.446	0.3560E-03	27.09	0.0000E+00	0.2059E-02	0.2059E-02	0.2059E-02
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.2817E-07	0.2846E-04	0.3245E-08	0.3181E-02	0.0000E+00	0.1243E-06	0.1243E-06	0.1243E-06
119	Ethane	0.6277E-06	0.1383E-03	0.9408E-07	0.1546E-01	0.0000E+00	0.2601E-06	0.2601E-06	0.2601E-06
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.4845E-03	0.2629E-03	0.2405E-02	0.2874E-01	0.0000E+00	0.1170E-05	0.1170E-05	0.1170E-05
123	Propane	0.4563E-07	0.2030E-04	0.8409E-02	0.7250E-07	0.0000E+00	0.2690E-07	0.2690E-07	0.2690E-07
124	1,3-butadiene	-0.7451E-08	0.9101E-04	0.3770E-01	0.0000E+00	0.0000E+00	0.1892E-05	0.1892E-05	0.1892E-05
125	1-butene	0.2384E-06	0.1081E-02	0.4479	0.0000E+00	0.0000E+00	0.4006E-05	0.4006E-05	0.4006E-05
126	2-methylpropane	-0.1490E-07	0.3709E-03	0.1536	0.0000E+00	0.0000E+00	0.2921E-06	0.2921E-06	0.2921E-06
127	Butane	0.1490E-07	0.9801E-04	0.4060E-01	0.0000E+00	0.0000E+00	0.9692E-07	0.9692E-07	0.9692E-07
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.2910E-10	0.4624E-06	0.1915E-03	0.0000E+00	0.0000E+00	0.1055E-08	0.1055E-08	0.1055E-08
131	2-methylbutane	0.1863E-08	0.5804E-04	0.2404E-01	0.0000E+00	0.0000E+00	0.3856E-07	0.3856E-07	0.3856E-07
132	Pentane	0.1788E-06	0.2271E-02	0.9407	0.0000E+00	0.0000E+00	0.1629E-05	0.1629E-05	0.1629E-05
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.1397E-08	0.1414E-04	0.5856E-02	0.0000E+00	0.0000E+00	0.4337E-07	0.4337E-07	0.4337E-07
135	Cyclohexane	0.0000E+00	0.1158E-01	4.798	0.0000E+00	0.0000E+00	0.7338E-04	0.7338E-04	0.7338E-04
136	Methylcyclopentane	0.1490E-06	0.9416E-03	0.3900	0.0000E+00	0.0000E+00	0.2391E-05	0.2391E-05	0.2391E-05
137	2,2-dimethylbutane	0.7451E-08	0.5707E-04	0.2364E-01	0.0000E+00	0.0000E+00	0.3407E-07	0.3407E-07	0.3407E-07
138	3-methylpentane	0.7451E-08	0.1019E-03	0.4220E-01	0.0000E+00	0.0000E+00	0.8235E-07	0.8235E-07	0.8235E-07

139	Hexane	0.1788E-06	0.1568E-02	0.6494	0.0000E+00	0.0000E+00	0.1571E-05	0.1571E-05	0.1571E-05
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.7276E-10	0.3757E-06	0.1556E-03	0.0000E+00	0.0000E+00	0.8503E-09	0.8503E-09	0.8503E-09
142	Methylcyclohexane	0.0000E+00	0.1067E-02	0.4419	0.0000E+00	0.0000E+00	0.2265E-05	0.2265E-05	0.2265E-05
143	2,2-dimethylpentane	0.2980E-07	0.7947E-03	0.3292	0.0000E+00	0.0000E+00	0.2285E-06	0.2285E-06	0.2285E-06
144	2,4-dimethylpentane	0.2328E-09	0.7393E-05	0.3063E-02	0.0000E+00	0.0000E+00	0.2280E-08	0.2280E-08	0.2280E-08
145	3-ethylpentane	0.4657E-09	0.8429E-05	0.3492E-02	0.0000E+00	0.0000E+00	0.3012E-08	0.3012E-08	0.3012E-08
146	Heptane	0.5960E-07	0.9103E-03	0.3771	0.0000E+00	0.0000E+00	0.3060E-06	0.3060E-06	0.3060E-06
147	1,1-dimethylcyclohexane	0.5960E-07	0.8886E-03	0.3681	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	-0.2910E-10	0.5081E-06	0.2105E-03	0.0000E+00	0.0000E+00	0.7354E-09	0.7354E-09	0.7354E-09
149	6-methyl-1-heptene	0.7276E-11	0.2649E-06	0.1097E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.0000E+00	0.1739E-02	0.7202	0.0000E+00	0.0000E+00	0.3308E-05	0.3308E-05	0.3308E-05
151	2,2,3-trimethylpentane	0.1863E-08	0.1158E-04	0.4798E-02	0.0000E+00	0.0000E+00	0.2759E-08	0.2759E-08	0.2759E-08
152	3,3-dimethylhexane	0.1863E-08	0.2794E-04	0.1157E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.4657E-09	0.1676E-04	0.6943E-02	0.0000E+00	0.0000E+00	0.4080E-08	0.4080E-08	0.4080E-08
154	Octane	0.7451E-08	0.2745E-03	0.1137	0.0000E+00	0.0000E+00	0.5050E-07	0.5050E-07	0.5050E-07
155	4-ethylheptane	0.5821E-10	0.1368E-05	0.5666E-03	0.0000E+00	0.0000E+00	0.2400E-09	0.2400E-09	0.2400E-09
156	Nonane	0.1490E-07	0.1166E-03	0.4828E-01	0.0000E+00	0.0000E+00	0.1782E-07	0.1782E-07	0.1782E-07
157	4-isopropenyl-1-Mecyclohexene	0.7451E-08	0.1221E-03	0.5058E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.3725E-08	0.5683E-04	0.2354E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.4470E-07	0.5732E-03	0.2374	0.0000E+00	0.0000E+00	0.1102E-06	0.1102E-06	0.1102E-06
160	Undecane	0.0000E+00	0.7562E-03	0.3132	0.0000E+00	0.0000E+00	0.3746E-06	0.3746E-06	0.3746E-06
161	Dodecane	0.2328E-08	0.1560E-04	0.6461E-02	0.0000E+00	0.0000E+00	0.6598E-06	0.6598E-06	0.6598E-06
162	2-propanone	0.1863E-08	0.1263E-04	0.5234E-02	0.0000E+00	0.0000E+00	0.2671E-03	0.2671E-03	0.2671E-03
163	3-buten-2-one	0.2328E-09	0.4104E-05	0.1700E-02	0.0000E+00	0.0000E+00	0.3588E-04	0.3588E-04	0.3588E-04
164	2-butanone	0.3815E-05	0.2736E-01	11.33	0.0000E+00	0.0000E+00	8.434	8.434	8.434
165	Cyclopentanone	0.4768E-06	0.1592E-01	6.594	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.2910E-10	0.9011E-06	0.3733E-03	0.0000E+00	0.0000E+00	0.7112E-05	0.7112E-05	0.7112E-05
167	Acetyl cyclopropane	0.5821E-10	0.1510E-05	0.6256E-03	0.0000E+00	0.0000E+00	0.9941E-05	0.9941E-05	0.9941E-05
168	2-pentanone	0.3725E-08	0.6743E-04	0.2793E-01	0.0000E+00	0.0000E+00	0.1775E-02	0.1775E-02	0.1775E-02

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	0.2980E-07	0.9729E-03	0.4030	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.1192E-06	0.3637E-02	1.507	0.0000E+00	0.0000E+00	0.2162E-01	0.2162E-01	0.2162E-01
171	Cyclohexanone	0.9537E-06	0.7117E-02	2.948	0.0000E+00	0.0000E+00	0.2630	0.2630	0.2630
172	3,3-dimethyl-2-butanone	0.1118E-07	0.1421E-03	0.5886E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.9537E-06	0.2213E-01	9.169	0.0000E+00	0.0000E+00	0.3267	0.3267	0.3267
174	2,4-dimethyl-3-pentanone	0.1164E-09	0.1722E-05	0.7133E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.3576E-06	0.2502E-02	1.037	0.0000E+00	0.0000E+00	0.2367E-02	0.2367E-02	0.2367E-02
176	5-methyl-2-hexanone	0.1863E-08	0.5467E-04	0.2265E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.9313E-09	0.1191E-04	0.4932E-02	0.0000E+00	0.0000E+00	0.3672E-03	0.3672E-03	0.3672E-03
178	2-octanone	0.2328E-09	0.5251E-05	0.2175E-02	0.0000E+00	0.0000E+00	0.3237E-04	0.3237E-04	0.3237E-04
179	5-methyl-3-heptanone	0.1863E-08	0.5876E-04	0.2434E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.3725E-08	0.1127E-03	0.4667E-01	0.0000E+00	0.0000E+00	0.1544E-03	0.1544E-03	0.1544E-03
181	Hydrogen sulfide	0.7451E-08	0.1404E-03	0.8423E-12	0.1570E-01	0.0000E+00	0.1443E-02	0.1443E-02	0.1443E-02
182	Carbonyl sulfide	0.5917E-03	0.1014E-02	0.7449E-04	0.4534E-01	0.0000E+00	0.1817E-04	0.1817E-04	0.1817E-04
183	Ethylene sulfide	-0.2910E-10	0.1027E-05	0.4253E-03	0.6840E-11	0.0000E+00	0.1532E-06	0.1532E-06	0.1532E-06
184	Dimethyl sulfide	0.2328E-09	0.6406E-05	0.2654E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.2021E-01	0.1468E-02	0.2993	0.2168E-01	0.0000E+00	0.6934E-04	0.6934E-04	0.6934E-04
186	Pentamethylene sulfide	0.2328E-09	0.2625E-05	0.1087E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.0000E+00	0.3666E-05	0.1519E-02	0.0000E+00	0.0000E+00	0.2515E-02	0.2515E-02	0.2515E-02

191	2-ethylhexanoic acid	0.9313E-09	0.1143E-04	0.4733E-02	0.0000E+00	0.0000E+00	0.1463E-03	0.1463E-03	0.1463E-03
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.4366E-10	0.3069E-06	0.1271E-03	0.2454E-11	0.0000E+00	0.1376E-04	0.1376E-04	0.1376E-04
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.2289E-01	0.4267E-02	0.9723E-01	0.4507	0.0000E+00	0.1427E-01	0.1427E-01	0.1427E-01
196	N,N-dimethylformamide	0.3725E-08	0.5707E-04	0.2364E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.5821E-10	0.7032E-06	0.2913E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	-0.2384E-06	0.1482E-03	0.6140E-01	0.0000E+00	0.0000E+00	0.3186	0.3186	0.3186
199	Hydrogen	0.4864E-04	0.5816E-01	0.0000E+00	6.502	0.0000E+00	0.4496E-04	0.4496E-04	0.4496E-04
200	Ammonia	0.1526E-04	0.9804E-03	0.4061	0.0000E+00	0.0000E+00	13.96	13.96	13.96
201	Carbon monoxide	0.1488E-03	0.1685	0.2983E-14	18.83	0.0000E+00	0.1338E-03	0.1338E-03	0.1338E-03
202	Disiloxane	0.5960E-07	0.6117E-03	0.2534	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.2384E-06	0.3757E-02	1.556	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.2980E-07	0.5009E-03	0.2075	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.1490E-07	0.2309E-03	0.9567E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.3576E-06	0.4648E-02	1.925	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.2910E-10	0.4672E-06	0.1935E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.2384E-06	0.2432E-02	1.008	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.4768E-06	0.7032E-02	2.913	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.1192E-06	0.4046E-02	1.676	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.5960E-07	0.1004E-02	0.4160	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	1.730	0.4023	0.4023	0.1358	0.1357	0.0000E+00	0.0000E+00
2	Ethanol	15.25	3.544	3.544	1.196	1.195	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.3760E-02	0.8761E-03	0.8761E-03	0.2959E-03	0.2954E-03	0.0000E+00	0.0000E+00
4	n-propanol	0.3073	0.7133E-01	0.7133E-01	0.2408E-01	0.2406E-01	0.0000E+00	0.0000E+00
5	2-propanol	2.798	0.6488	0.6488	0.2190	0.2188	0.0000E+00	0.0000E+00
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	3.355	0.7762	0.7762	0.2619	0.2618	0.0000E+00	0.0000E+00
8	2-butanol	0.9465E-02	0.2208E-02	0.2208E-02	0.7458E-03	0.7446E-03	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	1.093	0.2556	0.2556	0.8637E-01	0.8620E-01	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	0.2007E-01	0.4638E-02	0.4638E-02	0.1565E-02	0.1564E-02	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.1326	0.3075E-01	0.3075E-01	0.1038E-01	0.1037E-01	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	0.3440E-01	0.8060E-02	0.8060E-02	0.2724E-02	0.2717E-02	0.0000E+00	0.0000E+00
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.3805E-01	0.8787E-02	0.8787E-02	0.2964E-02	0.2964E-02	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.6045E-04	0.1397E-04	0.1397E-04	0.4712E-05	0.4711E-05	0.0000E+00	0.0000E+00
17	2-hexanol	0.1210E-02	0.2802E-03	0.2802E-03	0.9455E-04	0.9451E-04	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.4235E-04	0.1008E-04	0.1008E-04	0.3414E-05	0.3398E-05	0.0000E+00	0.0000E+00
19	2-ethylhexanol	0.1268E-01	0.2958E-02	0.2958E-02	0.9990E-03	0.9974E-03	0.0000E+00	0.0000E+00
20	Nonanol	0.1450E-02	0.3351E-03	0.3351E-03	0.1131E-03	0.1130E-03	0.0000E+00	0.0000E+00
21	n-decanol	0.1021E-04	0.2362E-05	0.2362E-05	0.7969E-06	0.7967E-06	0.0000E+00	0.0000E+00
22	Methanal	0.1053E-03	0.3079E-04	0.3079E-04	0.1074E-04	0.1030E-04	0.0000E+00	0.0000E+00
23	Ethanal	0.4159E-01	0.9607E-02	0.9607E-02	0.3241E-02	0.3240E-02	0.0000E+00	0.0000E+00
24	2-propenal	0.8761E-04	0.2023E-04	0.2023E-04	0.6824E-05	0.6824E-05	0.0000E+00	0.0000E+00
25	Propanal	0.9837E-01	0.2272E-01	0.2272E-01	0.7665E-02	0.7665E-02	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.2268E-04	0.5237E-05	0.5237E-05	0.1766E-05	0.1766E-05	0.0000E+00	0.0000E+00
27	Butanal	0.1688	0.3899E-01	0.3899E-01	0.1315E-01	0.1315E-01	0.0000E+00	0.0000E+00
28	Pentanal	0.9667E-02	0.2232E-02	0.2232E-02	0.7530E-03	0.7530E-03	0.0000E+00	0.0000E+00

29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1743E-02	0.4025E-03	0.4025E-03	0.1358E-03	0.1358E-03	0.0000E+00	0.0000E+00
31	Benzaldehyde	0.7247E-02	0.1675E-02	0.1675E-02	0.5651E-03	0.5650E-03	0.0000E+00	0.0000E+00
32	Heptanal	0.1028E-02	0.2374E-03	0.2374E-03	0.8007E-04	0.8007E-04	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4406E-02	0.1028E-02	0.1028E-02	0.3471E-03	0.3466E-03	0.0000E+00	0.0000E+00
35	Benzene	0.9877E-04	0.2280E-04	0.2280E-04	0.7692E-05	0.7692E-05	0.0000E+00	0.0000E+00
36	Methylbenzene	0.3637E-02	0.8396E-03	0.8396E-03	0.2832E-03	0.2832E-03	0.0000E+00	0.0000E+00
37	Vinylbenzene	0.2677E-03	0.6180E-04	0.6180E-04	0.2085E-04	0.2085E-04	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	0.2686E-02	0.6202E-03	0.6202E-03	0.2092E-03	0.2092E-03	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	0.9002E-02	0.2078E-02	0.2078E-02	0.7010E-03	0.7010E-03	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	0.2607E-02	0.6018E-03	0.6018E-03	0.2030E-03	0.2030E-03	0.0000E+00	0.0000E+00
41	Ethylbenzene	0.3770E-03	0.8704E-04	0.8704E-04	0.2936E-04	0.2936E-04	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.1084E-05	0.2502E-06	0.2502E-06	0.8440E-07	0.8440E-07	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	0.1625E-03	0.3752E-04	0.3752E-04	0.1266E-04	0.1266E-04	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.6108E-05	0.1410E-05	0.1410E-05	0.4757E-06	0.4757E-06	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	0.3459E-04	0.7987E-05	0.7987E-05	0.2694E-05	0.2694E-05	0.0000E+00	0.0000E+00
47	Isopropylbenzene	0.1308E-04	0.3021E-05	0.3021E-05	0.1019E-05	0.1019E-05	0.0000E+00	0.0000E+00
48	Propylbenzene	0.4574E-03	0.1056E-03	0.1056E-03	0.3562E-04	0.3562E-04	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.2887E-05	0.6665E-06	0.6665E-06	0.2248E-06	0.2248E-06	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.3131E-04	0.7230E-05	0.7230E-05	0.2439E-05	0.2439E-05	0.0000E+00	0.0000E+00
52	Methyl formate	0.1499E-04	0.3461E-05	0.3461E-05	0.1167E-05	0.1167E-05	0.0000E+00	0.0000E+00
53	Ethyl formate	0.8113E-03	0.1874E-03	0.1874E-03	0.6321E-04	0.6321E-04	0.0000E+00	0.0000E+00
54	Methyl acetate	0.4688E-01	0.1083E-01	0.1083E-01	0.3654E-02	0.3654E-02	0.0000E+00	0.0000E+00
55	Ethyl acetate	0.5103E-01	0.1179E-01	0.1179E-01	0.3976E-02	0.3976E-02	0.0000E+00	0.0000E+00
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.3486E-04	0.8049E-05	0.8049E-05	0.2715E-05	0.2715E-05	0.0000E+00	0.0000E+00
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	0.4144E-01	0.9568E-02	0.9568E-02	0.3228E-02	0.3228E-02	0.0000E+00	0.0000E+00
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.5888E-03	0.1360E-03	0.1360E-03	0.4587E-04	0.4586E-04	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	0.5523E-02	0.1287E-02	0.1287E-02	0.4345E-03	0.4339E-03	0.0000E+00	0.0000E+00
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	0.4602	0.1067	0.1067	0.3600E-01	0.3598E-01	0.0000E+00	0.0000E+00
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.7364E-05	0.1700E-05	0.1700E-05	0.5735E-06	0.5735E-06	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	0.3154E-02	0.7282E-03	0.7282E-03	0.2456E-03	0.2456E-03	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.3170E-04	0.7319E-05	0.7319E-05	0.2469E-05	0.2469E-05	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.2175E-03	0.5033E-04	0.5033E-04	0.1698E-04	0.1698E-04	0.0000E+00	0.0000E+00
77	1,4-dioxane	0.1051	0.2445E-01	0.2445E-01	0.8254E-02	0.8245E-02	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	0.5556E-02	0.1625E-02	0.1625E-02	0.5668E-03	0.5437E-03	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	1.180	0.2754	0.2754	0.9303E-01	0.9288E-01	0.0000E+00	0.0000E+00
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

81	1,1,2,2-tetraMe-1,2-epoxyEt	0.2744E-05	0.6336E-06	0.6336E-06	0.2137E-06	0.2137E-06	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	0.2761	0.6463E-01	0.6463E-01	0.2184E-01	0.2179E-01	0.0000E+00	0.0000E+00
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.1711E-03	0.3959E-04	0.3959E-04	0.1336E-04	0.1335E-04	0.0000E+00	0.0000E+00
85	Chloromethane	0.1152E-03	0.2659E-04	0.2659E-04	0.8968E-05	0.8968E-05	0.0000E+00	0.0000E+00
86	Chloroethene	0.5749E-05	0.1327E-05	0.1327E-05	0.4477E-06	0.4477E-06	0.0000E+00	0.0000E+00
87	Chloroethane	0.3908E-06	0.9023E-07	0.9023E-07	0.3044E-07	0.3044E-07	0.0000E+00	0.0000E+00
88	3-chloropropene	0.5643E-08	0.1303E-08	0.1303E-08	0.4395E-09	0.4395E-09	0.0000E+00	0.0000E+00
89	Dichloromethane	0.1015	0.2342E-01	0.2342E-01	0.7902E-02	0.7902E-02	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.7554E-06	0.1744E-06	0.1744E-06	0.5883E-07	0.5883E-07	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	0.1211E-02	0.2797E-03	0.2797E-03	0.9434E-04	0.9434E-04	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.5666E-02	0.1308E-02	0.1308E-02	0.4413E-03	0.4413E-03	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	0.1297E-03	0.2994E-04	0.2994E-04	0.1010E-04	0.1010E-04	0.0000E+00	0.0000E+00
96	Trichloromethane	0.7578E-04	0.1750E-04	0.1750E-04	0.5901E-05	0.5901E-05	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.1160E-03	0.2679E-04	0.2679E-04	0.9036E-05	0.9036E-05	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	0.7344E-03	0.1696E-03	0.1696E-03	0.5719E-04	0.5719E-04	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.2229E-05	0.5147E-06	0.5147E-06	0.1736E-06	0.1736E-06	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	0.6603E-04	0.1524E-04	0.1524E-04	0.5142E-05	0.5142E-05	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.5330E-05	0.1230E-05	0.1230E-05	0.4151E-06	0.4151E-06	0.0000E+00	0.0000E+00
104	Tetrachloroethene	0.4487E-03	0.1036E-03	0.1036E-03	0.3495E-04	0.3495E-04	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	0.6054E-03	0.1398E-03	0.1398E-03	0.4714E-04	0.4714E-04	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.2492E-05	0.5754E-06	0.5754E-06	0.1941E-06	0.1941E-06	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.6992E-06	0.1614E-06	0.1614E-06	0.5445E-07	0.5445E-07	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.1901E-03	0.4390E-04	0.4390E-04	0.1481E-04	0.1481E-04	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.6722E-06	0.1552E-06	0.1552E-06	0.5235E-07	0.5235E-07	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	0.8377E-03	0.1934E-03	0.1934E-03	0.6524E-04	0.6524E-04	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.2059E-02	0.4753E-03	0.4753E-03	0.1603E-03	0.1603E-03	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1243E-06	0.2871E-07	0.2871E-07	0.9684E-08	0.9684E-08	0.0000E+00	0.0000E+00
119	Ethane	0.2601E-06	0.6005E-07	0.6005E-07	0.2026E-07	0.2026E-07	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1170E-05	0.2702E-06	0.2702E-06	0.9114E-07	0.9114E-07	0.0000E+00	0.0000E+00
123	Propane	0.2690E-07	0.6209E-08	0.6209E-08	0.2095E-08	0.2095E-08	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.1892E-05	0.4367E-06	0.4367E-06	0.1473E-06	0.1473E-06	0.0000E+00	0.0000E+00
125	1-butene	0.4006E-05	0.9248E-06	0.9248E-06	0.3119E-06	0.3119E-06	0.0000E+00	0.0000E+00
126	2-methylpropane	0.2921E-06	0.6744E-07	0.6744E-07	0.2275E-07	0.2275E-07	0.0000E+00	0.0000E+00
127	Butane	0.9692E-07	0.2238E-07	0.2238E-07	0.7548E-08	0.7548E-08	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.1055E-08	0.2435E-09	0.2435E-09	0.8213E-10	0.8213E-10	0.0000E+00	0.0000E+00
131	2-methylbutane	0.3856E-07	0.8902E-08	0.8902E-08	0.3003E-08	0.3003E-08	0.0000E+00	0.0000E+00
132	Pentane	0.1629E-05	0.3760E-06	0.3760E-06	0.1268E-06	0.1268E-06	0.0000E+00	0.0000E+00

133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.4337E-07	0.1001E-07	0.1001E-07	0.3378E-08	0.3378E-08	0.0000E+00	0.0000E+00
135	Cyclohexane	0.7338E-04	0.1694E-04	0.1694E-04	0.5714E-05	0.5714E-05	0.0000E+00	0.0000E+00
136	Methylcyclopentane	0.2391E-05	0.5520E-06	0.5520E-06	0.1862E-06	0.1862E-06	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.3407E-07	0.7866E-08	0.7866E-08	0.2653E-08	0.2653E-08	0.0000E+00	0.0000E+00
138	3-methylpentane	0.8235E-07	0.1901E-07	0.1901E-07	0.6413E-08	0.6413E-08	0.0000E+00	0.0000E+00
139	Hexane	0.1571E-05	0.3626E-06	0.3626E-06	0.1223E-06	0.1223E-06	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.8503E-09	0.1963E-09	0.1963E-09	0.6622E-10	0.6622E-10	0.0000E+00	0.0000E+00
142	Methylcyclohexane	0.2265E-05	0.5229E-06	0.5229E-06	0.1764E-06	0.1764E-06	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	0.2285E-06	0.5276E-07	0.5276E-07	0.1780E-07	0.1780E-07	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.2280E-08	0.5263E-09	0.5263E-09	0.1775E-09	0.1775E-09	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.3012E-08	0.6953E-09	0.6953E-09	0.2345E-09	0.2345E-09	0.0000E+00	0.0000E+00
146	Heptane	0.3060E-06	0.7064E-07	0.7064E-07	0.2383E-07	0.2383E-07	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.7354E-09	0.1698E-09	0.1698E-09	0.5727E-10	0.5727E-10	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.3308E-05	0.7638E-06	0.7638E-06	0.2576E-06	0.2576E-06	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.2759E-08	0.6371E-09	0.6371E-09	0.2149E-09	0.2149E-09	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.4080E-08	0.9419E-09	0.9419E-09	0.3177E-09	0.3177E-09	0.0000E+00	0.0000E+00
154	Octane	0.5050E-07	0.1166E-07	0.1166E-07	0.3933E-08	0.3933E-08	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.2400E-09	0.5542E-10	0.5542E-10	0.1869E-10	0.1869E-10	0.0000E+00	0.0000E+00
156	Nonane	0.1782E-07	0.4115E-08	0.4115E-08	0.1388E-08	0.1388E-08	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.1102E-06	0.2544E-07	0.2544E-07	0.8580E-08	0.8580E-08	0.0000E+00	0.0000E+00
160	Undecane	0.3746E-06	0.8649E-07	0.8649E-07	0.2917E-07	0.2917E-07	0.0000E+00	0.0000E+00
161	Dodecane	0.6598E-06	0.1523E-06	0.1523E-06	0.5139E-07	0.5139E-07	0.0000E+00	0.0000E+00
162	2-propanone	0.2671E-03	0.6174E-04	0.6174E-04	0.2083E-04	0.2082E-04	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.3588E-04	0.8288E-05	0.8288E-05	0.2796E-05	0.2795E-05	0.0000E+00	0.0000E+00
164	2-butanone	8.434	1.982	1.982	0.6699	0.6681	0.0000E+00	0.0000E+00
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.7112E-05	0.1643E-05	0.1643E-05	0.5541E-06	0.5541E-06	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.9941E-05	0.2296E-05	0.2296E-05	0.7745E-06	0.7745E-06	0.0000E+00	0.0000E+00
168	2-pentanone	0.1775E-02	0.4105E-03	0.4105E-03	0.1385E-03	0.1385E-03	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.2162E-01	0.4994E-02	0.4994E-02	0.1685E-02	0.1685E-02	0.0000E+00	0.0000E+00
171	Cyclohexanone	0.2630	0.6084E-01	0.6084E-01	0.2053E-01	0.2052E-01	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.3267	0.7549E-01	0.7549E-01	0.2547E-01	0.2546E-01	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.2367E-02	0.5466E-03	0.5466E-03	0.1844E-03	0.1844E-03	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.3672E-03	0.8493E-04	0.8493E-04	0.2865E-04	0.2865E-04	0.0000E+00	0.0000E+00
178	2-octanone	0.3237E-04	0.7476E-05	0.7476E-05	0.2522E-05	0.2522E-05	0.0000E+00	0.0000E+00
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.1544E-03	0.3564E-04	0.3564E-04	0.1202E-04	0.1202E-04	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	0.1443E-02	0.3333E-03	0.3333E-03	0.1124E-03	0.1124E-03	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	0.1817E-04	0.4195E-05	0.4195E-05	0.1415E-05	0.1415E-05	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.1532E-06	0.3536E-07	0.3536E-07	0.1193E-07	0.1193E-07	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

185	Carbon disulfide	0.6934E-04	0.1601E-04	0.1601E-04	0.5400E-05	0.5400E-05	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.2515E-02	0.6040E-03	0.6040E-03	0.2048E-03	0.2035E-03	0.0000E+00	0.0000E+00
191	2-ethylhexanoic acid	0.1463E-03	0.3381E-04	0.3381E-04	0.1141E-04	0.1140E-04	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.1376E-04	0.3185E-05	0.3185E-05	0.1075E-05	0.1074E-05	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.1427E-01	0.3295E-02	0.3295E-02	0.1112E-02	0.1112E-02	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	0.3186	0.8365E-01	0.8365E-01	0.2871E-01	0.2810E-01	0.0000E+00	0.0000E+00
199	Hydrogen	0.4496E-04	0.1038E-04	0.1038E-04	0.3501E-05	0.3501E-05	0.0000E+00	0.0000E+00
200	Ammonia	13.96	9.174	9.174	3.094	3.094	0.0000E+00	0.0000E+00
201	Carbon monoxide	0.1338E-03	0.3089E-04	0.3089E-04	0.1042E-04	0.1042E-04	0.0000E+00	0.0000E+00
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	278.5	28.65	131.7	3167.	0.0000E+00	3669.	3669.	3669.
2	Ethanol	2830.	252.0	0.3627E+05	0.1838E+05	0.0000E+00	0.2800E+05	0.2800E+05	0.2800E+05
3	2-propen-1-ol	0.4822	0.5012E-01	20.76	0.0000E+00	0.0000E+00	8.056	8.056	8.056
4	n-propanol	64.54	6.689	2771.	0.0000E+00	0.0000E+00	656.4	656.4	656.4
5	2-propanol	713.5	73.87	0.3060E+05	0.0000E+00	0.0000E+00	5970.	5970.	5970.
6	1,2-ethanediol	4.090	0.4188	173.5	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	1871.	192.9	0.7992E+05	0.0000E+00	0.0000E+00	7129.	7129.	7129.
8	2-butanol	1.059	0.1101	45.62	0.0000E+00	0.0000E+00	20.29	20.29	20.29
9	2-methyl-1-propanol	99.93	10.40	4310.	0.0000E+00	0.0000E+00	2346.	2346.	2346.
10	2-methyl-2-propanol	23.10	2.374	983.5	0.0000E+00	0.0000E+00	42.52	42.52	42.52
11	1,2-propanediol	0.1876	0.1921E-01	7.958	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	37.09	3.837	1590.	0.0000E+00	0.0000E+00	282.9	282.9	282.9
13	3-methyl-1-butanol	2.722	0.2836	117.5	0.0000E+00	0.0000E+00	73.86	73.86	73.86
14	Phenol	331.1	33.90	0.1404E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	487.6	49.95	0.2069E+05	0.0000E+00	0.0000E+00	80.34	80.34	80.34
16	2-ethylbutanol	0.8095E-01	0.8317E-02	3.445	0.0000E+00	0.0000E+00	0.1280	0.1280	0.1280
17	2-hexanol	0.5167	0.5334E-01	22.09	0.0000E+00	0.0000E+00	2.575	2.575	2.575
18	1,3-dichloro-2-propanol	0.1619E-02	0.1691E-03	0.7005E-01	0.0000E+00	0.0000E+00	0.9118E-01	0.9118E-01	0.9118E-01
19	2-ethylhexanol	1.418	0.1475	61.11	0.0000E+00	0.0000E+00	27.18	27.18	27.18
20	Nonanol	2.025	0.2081	86.19	0.0000E+00	0.0000E+00	3.071	3.071	3.071
21	n-decanol	0.6197E-02	0.6386E-03	0.2645	0.0000E+00	0.0000E+00	0.2169E-01	0.2169E-01	0.2169E-01
22	Methanal	0.5788E-03	0.6064E-04	0.1507E-09	0.6778E-02	0.0000E+00	0.2273	0.2273	0.2273

23	Ethanal	95.00	8.638	148.9	925.4	0.0000E+00	77.95	77.95	77.95
24	2-propenal	2.320	0.2359	97.66	0.1976E-01	0.0000E+00	0.1837	0.1837	0.1837
25	Propanal	214.6	16.21	6111.	162.7	0.0000E+00	153.7	153.7	153.7
26	2-methylpropenal	1.365	0.1397	57.89	0.0000E+00	0.0000E+00	0.4787E-01	0.4787E-01	0.4787E-01
27	Butanal	527.2	54.06	0.2240E+05	0.0000E+00	0.0000E+00	356.8	356.8	356.8
28	Pentanal	49.41	5.064	2098.	0.0000E+00	0.0000E+00	20.42	20.42	20.42
29	2,4-hexadien-1-al	0.5510	0.5641E-01	23.37	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	20.30	2.079	861.3	0.0000E+00	0.0000E+00	3.681	3.681	3.681
31	Benzaldehyde	7.273	0.7480	309.8	0.0000E+00	0.0000E+00	15.36	15.36	15.36
32	Heptanal	9.989	1.023	423.9	0.0000E+00	0.0000E+00	2.171	2.171	2.171
33	4-methylbenzaldehyde	0.1702	0.1743E-01	7.221	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4928	0.5126E-01	21.23	0.0000E+00	0.0000E+00	9.444	9.444	9.444
35	Benzene	10.40	1.065	441.2	0.0000E+00	0.0000E+00	0.2085	0.2085	0.2085
36	Methylbenzene	525.3	53.79	0.2228E+05	0.0000E+00	0.0000E+00	7.675	7.675	7.675
37	Vinylbenzene	16.02	1.640	679.6	0.0000E+00	0.0000E+00	0.5649	0.5649	0.5649
38	1,2-dimethylbenzene	255.5	26.16	0.1084E+05	0.0000E+00	0.0000E+00	5.669	5.669	5.669
39	1,3-dimethylbenzene	1363.	139.6	0.5781E+05	0.0000E+00	0.0000E+00	19.00	19.00	19.00
40	1,4-dimethylbenzene	359.3	36.79	0.1524E+05	0.0000E+00	0.0000E+00	5.501	5.501	5.501
41	Ethylbenzene	68.91	7.056	2923.	0.0000E+00	0.0000E+00	0.7956	0.7956	0.7956
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.6974E-01	0.7141E-02	2.958	0.0000E+00	0.0000E+00	0.2287E-02	0.2287E-02	0.2287E-02
44	1,2,4-trimethylbenzene	20.81	2.131	882.7	0.0000E+00	0.0000E+00	0.3430	0.3430	0.3430
45	1,3,5-trimethylbenzene	1.101	0.1127	46.68	0.0000E+00	0.0000E+00	0.1289E-01	0.1289E-01	0.1289E-01
46	1-ethyl-2-methylbenzene	2.236	0.2289	94.83	0.0000E+00	0.0000E+00	0.7301E-01	0.7301E-01	0.7301E-01
47	Isopropylbenzene	4.310	0.4413	182.8	0.0000E+00	0.0000E+00	0.2761E-01	0.2761E-01	0.2761E-01
48	Propylbenzene	106.1	10.87	4501.	0.0000E+00	0.0000E+00	0.9653	0.9653	0.9653
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.8630	0.8836E-01	36.60	0.0000E+00	0.0000E+00	0.6093E-02	0.6093E-02	0.6093E-02
51	1-methyl-4-propylbenzene	0.1745	0.1788E-01	7.408	0.0000E+00	0.0000E+00	0.6613E-01	0.6613E-01	0.6613E-01
52	Methyl formate	3.877	0.2480	72.82	8.071	0.0000E+00	0.1982E-01	0.1982E-01	0.1982E-01
53	Ethyl formate	2.172	0.2228	92.28	0.0000E+00	0.0000E+00	1.715	1.715	1.715
54	Methyl acetate	73.14	7.511	3111.	0.0000E+00	0.0000E+00	99.24	99.24	99.24
55	Ethyl acetate	130.8	13.41	5557.	0.0000E+00	0.0000E+00	107.9	107.9	107.9
56	Allyl acetate	1.896	0.1941	80.42	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57	Methyl methacrylate	48.89	5.006	2074.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	2.603	0.2665	110.4	0.0000E+00	0.0000E+00	0.7358E-01	0.7358E-01	0.7358E-01
59	n-butyl formate	0.5907	0.6048E-01	25.05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	225.8	23.12	9579.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	13.70	1.403	581.1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	353.3	36.20	0.1500E+05	0.0000E+00	0.0000E+00	87.50	87.50	87.50
63	Isobutyl acetate	95.30	9.758	4042.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	2.426	0.2487	103.0	0.0000E+00	0.0000E+00	1.244	1.244	1.244
65	2-Methoxy ethyl acetate	0.7081	0.7360E-01	30.49	0.0000E+00	0.0000E+00	11.83	11.83	11.83
66	Isoamyl acetate	17.82	1.825	755.8	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	29.93	3.065	1269.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	136.2	14.09	5836.	0.0000E+00	0.0000E+00	981.2	981.2	981.2
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.1415E-01	0.1448E-02	0.6000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.9017	0.9233E-01	38.25	0.7372E-04	0.0000E+00	0.1554E-01	0.1554E-01	0.1554E-01
72	1,4-epoxybutane	36.21	3.709	1536.	0.0000E+00	0.0000E+00	6.659	6.659	6.659
73	3-methoxy-1-propene	0.2402E-01	0.2460E-02	1.019	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	39.01	3.995	1655.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

75	2-methylfuran	1.616	0.1655	68.54	0.0000E+00	0.0000E+00	0.6690E-01	0.6690E-01	0.6690E-01
76	2,3-dihydropyran	0.1035	0.1068E-01	4.424	0.0000E+00	0.0000E+00	0.4625	0.4625	0.4625
77	1,4-dioxane	16.49	1.712	709.1	0.0000E+00	0.0000E+00	224.9	224.9	224.9
78	1,3,5-Trioxane	0.3055E-01	0.3199E-02	1.325	0.0000E+00	0.0000E+00	12.00	12.00	12.00
79	2-ethoxyethanol	127.2	13.23	5481.	0.0000E+00	0.0000E+00	2530.	2530.	2530.
80	Epichlorohydrin	1.876	0.1921	79.58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.6000	0.6143E-01	25.45	0.0000E+00	0.0000E+00	0.5792E-02	0.5792E-02	0.5792E-02
82	4-ethylmorpholine	22.97	2.393	991.3	0.0000E+00	0.0000E+00	592.6	592.6	592.6
83	1-propoxybutane	22.44	2.297	951.6	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.9826E-01	0.1013E-01	4.195	0.0000E+00	0.0000E+00	0.3636	0.3636	0.3636
85	Chloromethane	21.62	1.768	3.039	78.73	0.0000E+00	0.1942	0.1942	0.1942
86	Chloroethene	2.935	0.1580	18.62	5.687	0.0000E+00	0.6395E-02	0.6395E-02	0.6395E-02
87	Chloroethane	0.6146E-01	0.6293E-02	2.607	0.0000E+00	0.0000E+00	0.8248E-03	0.8248E-03	0.8248E-03
88	3-chloropropene	0.5361E-01	0.5489E-02	2.274	0.0000E+00	0.0000E+00	0.1191E-04	0.1191E-04	0.1191E-04
89	Dichloromethane	5721.	340.6	0.1533E+05	0.1357E+05	0.0000E+00	124.7	124.7	124.7
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.3835	0.3927E-01	16.27	0.0000E+00	0.0000E+00	0.1594E-02	0.1594E-02	0.1594E-02
92	1,2-dichloroethane	34.42	3.525	1460.	0.0000E+00	0.0000E+00	2.557	2.557	2.557
93	1,2-dichloropropene	18.32	1.875	776.8	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	584.4	59.84	0.2479E+05	0.0000E+00	0.0000E+00	11.96	11.96	11.96
95	1,2-dichloropropane	3.901	0.3995	165.5	0.0000E+00	0.0000E+00	0.2737	0.2737	0.2737
96	Trichloromethane	6.981	0.7149	296.1	0.0000E+00	0.0000E+00	0.1599	0.1599	0.1599
97	1,2-dichloro-2-methylpropane	0.7445	0.7623E-01	31.58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	22.76	2.330	965.2	0.0000E+00	0.0000E+00	0.2449	0.2449	0.2449
99	1,1,1-trichloroethane	250.0	25.60	0.1060E+05	0.0000E+00	0.0000E+00	1.550	1.550	1.550
100	1,1,2-trichloroethane	0.3850E-01	0.3944E-02	1.634	0.0000E+00	0.0000E+00	0.4706E-02	0.4706E-02	0.4706E-02
101	1,2-dichlorobenzene	4.427	0.4533	187.8	0.0000E+00	0.0000E+00	0.1394	0.1394	0.1394
102	3-chloromethylheptane	0.1176	0.1204E-01	4.990	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	3.563	0.3648	151.1	0.0000E+00	0.0000E+00	0.1125E-01	0.1125E-01	0.1125E-01
104	Tetrachloroethene	273.9	28.04	0.1162E+05	0.0000E+00	0.0000E+00	0.9470	0.9470	0.9470
105	Chlorodifluoromethane	415.6	28.66	266.7	939.6	0.0000E+00	0.8611	0.8611	0.8611
106	Dichlorofluoromethane	0.2958	0.3028E-01	12.54	0.1689E-07	0.0000E+00	0.5259E-02	0.5259E-02	0.5259E-02
107	1-chloro-1,2,2-trifluoroethane	0.8686	0.8894E-01	36.84	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	6.204	0.6353	263.2	0.3466E-06	0.0000E+00	0.1476E-02	0.1476E-02	0.1476E-02
109	1,2-dichloro-1,2-difluoroethen	0.6006	0.6149E-01	25.47	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	526.2	53.87	0.2231E+05	0.3260E-01	0.0000E+00	0.4012	0.4012	0.4012
112	Bromotrifluoromethane	1341.	72.40	4449.	2206.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	18.46	1.891	783.2	0.0000E+00	0.0000E+00	0.1419E-02	0.1419E-02	0.1419E-02
114	1,1,2-triCl-1,2,2-triFlethane	9232.	945.3	0.3916E+06	0.0000E+00	0.0000E+00	1.768	1.768	1.768
115	1,1,2,2-tetraCl-1,2-diFlethane	13.25	1.357	562.1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.2989E+05	1542.	0.6984	0.6100E+05	0.0000E+00	2.196	2.196	2.196
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.5865	0.5616E-01	0.1623E-01	6.274	0.0000E+00	0.2454E-03	0.2454E-03	0.2454E-03
119	Ethane	2.851	0.2677	0.8898	29.69	0.0000E+00	0.5035E-03	0.5035E-03	0.5035E-03
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	5.422	0.3648	30.59	32.52	0.0000E+00	0.1623E-02	0.1623E-02	0.1623E-02
123	Propane	0.4184	0.4284E-01	17.75	0.1298E-04	0.0000E+00	0.5676E-04	0.5676E-04	0.5676E-04
124	1,3-butadiene	1.876	0.1921	79.56	0.0000E+00	0.0000E+00	0.3992E-02	0.3992E-02	0.3992E-02
125	1-butene	22.29	2.282	945.2	0.0000E+00	0.0000E+00	0.8453E-02	0.8453E-02	0.8453E-02
126	2-methylpropane	7.644	0.7827	324.2	0.0000E+00	0.0000E+00	0.6164E-03	0.6164E-03	0.6164E-03

127	Butane	2.020	0.2068	85.68	0.0000E+00	0.0000E+00	0.2045E-03	0.2045E-03	0.2045E-03
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.9530E-02	0.9758E-03	0.4042	0.0000E+00	0.0000E+00	0.2225E-05	0.2225E-05	0.2225E-05
131	2-methylbutane	1.196	0.1225	50.74	0.0000E+00	0.0000E+00	0.8137E-04	0.8137E-04	0.8137E-04
132	Pentane	46.81	4.792	1985.	0.0000E+00	0.0000E+00	0.3437E-02	0.3437E-02	0.3437E-02
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.2914	0.2983E-01	12.36	0.0000E+00	0.0000E+00	0.9153E-04	0.9153E-04	0.9153E-04
135	Cyclohexane	238.7	24.44	0.1013E+05	0.0000E+00	0.0000E+00	0.1549	0.1549	0.1549
136	Methylcyclopentane	19.41	1.987	823.1	0.0000E+00	0.0000E+00	0.5046E-02	0.5046E-02	0.5046E-02
137	2,2-dimethylbutane	1.176	0.1204	49.89	0.0000E+00	0.0000E+00	0.7190E-04	0.7190E-04	0.7190E-04
138	3-methylpentane	2.100	0.2150	89.05	0.0000E+00	0.0000E+00	0.1738E-03	0.1738E-03	0.1738E-03
139	Hexane	32.31	3.308	1371.	0.0000E+00	0.0000E+00	0.3314E-02	0.3314E-02	0.3314E-02
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.7743E-02	0.7928E-03	0.3284	0.0000E+00	0.0000E+00	0.1794E-05	0.1794E-05	0.1794E-05
142	Methylcyclohexane	21.99	2.251	932.6	0.0000E+00	0.0000E+00	0.4780E-02	0.4780E-02	0.4780E-02
143	2,2-dimethylpentane	16.38	1.677	694.7	0.0000E+00	0.0000E+00	0.4823E-03	0.4823E-03	0.4823E-03
144	2,4-dimethylpentane	0.1524	0.1560E-01	6.463	0.0000E+00	0.0000E+00	0.4811E-05	0.4811E-05	0.4811E-05
145	3-ethylpentane	0.1737	0.1779E-01	7.368	0.0000E+00	0.0000E+00	0.6356E-05	0.6356E-05	0.6356E-05
146	Heptane	18.76	1.921	795.8	0.0000E+00	0.0000E+00	0.6457E-03	0.6457E-03	0.6457E-03
147	1,1-dimethylcyclohexane	18.32	1.875	776.8	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1047E-01	0.1072E-02	0.4442	0.0000E+00	0.0000E+00	0.1552E-05	0.1552E-05	0.1552E-05
149	6-methyl-1-heptene	0.5460E-02	0.5590E-03	0.2316	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	35.84	3.669	1520.	0.0000E+00	0.0000E+00	0.6981E-02	0.6981E-02	0.6981E-02
151	2,2,3-trimethylpentane	0.2388	0.2445E-01	10.13	0.0000E+00	0.0000E+00	0.5823E-05	0.5823E-05	0.5823E-05
152	3,3-dimethylhexane	0.5758	0.5895E-01	24.42	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.3455	0.3537E-01	14.65	0.0000E+00	0.0000E+00	0.8609E-05	0.8609E-05	0.8609E-05
154	Octane	5.658	0.5794	240.0	0.0000E+00	0.0000E+00	0.1066E-03	0.1066E-03	0.1066E-03
155	4-ethylheptane	0.2819E-01	0.2887E-02	1.196	0.0000E+00	0.0000E+00	0.5066E-06	0.5066E-06	0.5066E-06
156	Nonane	2.402	0.2460	101.9	0.0000E+00	0.0000E+00	0.3761E-04	0.3761E-04	0.3761E-04
157	4-isopropenyl-1-Mecyclohexene	2.517	0.2577	106.7	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	1.171	0.1199	49.68	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	11.81	1.210	501.1	0.0000E+00	0.0000E+00	0.2325E-03	0.2325E-03	0.2325E-03
160	Undecane	15.59	1.596	661.1	0.0000E+00	0.0000E+00	0.7906E-03	0.7906E-03	0.7906E-03
161	Dodecane	0.3215	0.3292E-01	13.64	0.0000E+00	0.0000E+00	0.1392E-02	0.1392E-02	0.1392E-02
162	2-propanone	0.2604	0.2678E-01	11.09	0.0000E+00	0.0000E+00	0.5662	0.5662	0.5662
163	3-buten-2-one	0.8459E-01	0.8680E-02	3.596	0.0000E+00	0.0000E+00	0.7588E-01	0.7588E-01	0.7588E-01
164	2-butanone	563.9	58.79	0.2435E+05	0.0000E+00	0.0000E+00	0.1812E+05	0.1812E+05	0.1812E+05
165	Cyclopentanone	328.1	33.59	0.1392E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1857E-01	0.1905E-02	0.7892	0.0000E+00	0.0000E+00	0.1504E-01	0.1504E-01	0.1504E-01
167	Acetyl cyclopropane	0.3113E-01	0.3192E-02	1.322	0.0000E+00	0.0000E+00	0.2101E-01	0.2101E-01	0.2101E-01
168	2-pentanone	1.390	0.1431	59.26	0.0000E+00	0.0000E+00	3.767	3.767	3.767

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	20.05	2.053	850.5	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	74.96	7.686	3184.	0.0000E+00	0.0000E+00	45.70	45.70	45.70
171	Cyclohexanone	146.7	15.12	6264.	0.0000E+00	0.0000E+00	558.8	558.8	558.8
172	3,3-dimethyl-2-butanone	2.929	0.2998	124.2	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	456.2	46.87	0.1941E+05	0.0000E+00	0.0000E+00	691.8	691.8	691.8
174	2,4-dimethyl-3-pentanone	0.3549E-01	0.3634E-02	1.505	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	51.58	5.282	2188.	0.0000E+00	0.0000E+00	4.997	4.997	4.997
176	5-methyl-2-hexanone	1.127	0.1154	47.79	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.2454	0.2528E-01	10.47	0.0000E+00	0.0000E+00	0.7796	0.7796	0.7796
178	2-octanone	0.1082	0.1110E-01	4.598	0.0000E+00	0.0000E+00	0.6841E-01	0.6841E-01	0.6841E-01

179	5-methyl-3-heptanone	1.211	0.1240	51.37	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	2.322	0.2379	98.54	0.0000E+00	0.0000E+00	0.3259	0.3259	0.3259
181	Hydrogen sulfide	2.894	0.2853	0.3091E-03	31.89	0.0000E+00	2.931	2.931	2.931
182	Carbonyl sulfide	20.91	1.703	3.170	75.82	0.0000E+00	0.3052E-01	0.3052E-01	0.3052E-01
183	Ethylene sulfide	0.2116E-01	0.2167E-02	0.8975	0.5173E-08	0.0000E+00	0.3232E-03	0.3232E-03	0.3232E-03
184	Dimethyl sulfide	0.1320	0.1352E-01	5.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	30.39	1.982	699.6	8.520	0.0000E+00	0.9358E-01	0.9358E-01	0.9358E-01
186	Pentamethylene sulfide	0.5410E-01	0.5540E-02	2.295	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.7557E-01	0.7898E-02	3.272	0.0000E+00	0.0000E+00	5.419	5.419	5.419
191	2-ethylhexanoic acid	0.2355	0.2418E-01	10.02	0.0000E+00	0.0000E+00	0.3097	0.3097	0.3097
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.6325E-02	0.6527E-03	0.2704	0.2328E-08	0.0000E+00	0.2927E-01	0.2927E-01	0.2927E-01
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	88.08	5.858	755.9	450.8	0.0000E+00	19.59	19.59	19.59
196	N,N-dimethylformamide	1.176	0.1204	49.90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.1449E-01	0.1484E-02	0.6147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	3.054	0.3198	132.5	0.0000E+00	0.0000E+00	687.5	687.5	687.5
199	Hydrogen	1199.	115.0	0.1335E-13	0.1286E+05	0.0000E+00	0.8890E-01	0.8890E-01	0.8890E-01
200	Ammonia	59.30	2.117	876.9	0.0000E+00	0.0000E+00	0.3015E+05	0.3015E+05	0.3015E+05
201	Carbon monoxide	3472.	333.1	0.1486E-07	0.3723E+05	0.0000E+00	0.2646	0.2646	0.2646
202	Disiloxane	12.61	1.291	534.7	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	77.43	7.928	3284.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	10.32	1.057	437.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	4.760	0.4874	201.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	95.80	9.809	4063.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.9629E-02	0.9859E-03	0.4084	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	50.13	5.133	2126.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	144.9	14.84	6147.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	83.39	8.538	3537.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	20.70	2.119	877.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	3669.	853.2	853.2	288.0	287.7	0.0000E+00	0.0000E+00
2	Ethanol	0.2800E+05	6506.	6506.	2196.	2194.	0.0000E+00	0.0000E+00
3	2-propen-1-ol	8.056	1.877	1.877	0.6338	0.6329	0.0000E+00	0.0000E+00
4	n-propanol	656.4	152.4	152.4	51.44	51.39	0.0000E+00	0.0000E+00
5	2-propanol	5970.	1384.	1384.	467.3	466.9	0.0000E+00	0.0000E+00
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	7129.	1649.	1649.	556.5	556.3	0.0000E+00	0.0000E+00
8	2-butanol	20.29	4.734	4.734	1.599	1.596	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	2346.	548.6	548.6	185.3	185.0	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	42.52	9.826	9.826	3.315	3.314	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	282.9	65.58	65.58	22.13	22.12	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	73.86	17.31	17.31	5.849	5.835	0.0000E+00	0.0000E+00
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	80.34	18.55	18.55	6.257	6.257	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.1280	0.2958E-01	0.2958E-01	0.9978E-02	0.9977E-02	0.0000E+00	0.0000E+00

17	2-hexanol	2.575	0.5962	0.5962	0.2012	0.2011	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.9118E-01	0.2171E-01	0.2171E-01	0.7351E-02	0.7316E-02	0.0000E+00	0.0000E+00
19	2-ethylhexanol	27.18	6.341	6.341	2.142	2.138	0.0000E+00	0.0000E+00
20	Nonanol	3.071	0.7096	0.7096	0.2394	0.2393	0.0000E+00	0.0000E+00
21	n-decanol	0.2169E-01	0.5017E-02	0.5017E-02	0.1693E-02	0.1692E-02	0.0000E+00	0.0000E+00
22	Methanal	0.2273	0.6647E-01	0.6647E-01	0.2319E-01	0.2225E-01	0.0000E+00	0.0000E+00
23	Ethanal	77.95	18.01	18.01	6.074	6.073	0.0000E+00	0.0000E+00
24	2-propenal	0.1837	0.4242E-01	0.4242E-01	0.1431E-01	0.1431E-01	0.0000E+00	0.0000E+00
25	Propanal	153.7	35.50	35.50	11.98	11.98	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.4787E-01	0.1105E-01	0.1105E-01	0.3728E-02	0.3728E-02	0.0000E+00	0.0000E+00
27	Butanal	356.8	82.41	82.41	27.80	27.80	0.0000E+00	0.0000E+00
28	Pentanal	20.42	4.716	4.716	1.591	1.591	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	3.681	0.8498	0.8498	0.2867	0.2867	0.0000E+00	0.0000E+00
31	Benzaldehyde	15.36	3.550	3.550	1.198	1.198	0.0000E+00	0.0000E+00
32	Heptanal	2.171	0.5012	0.5012	0.1691	0.1691	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	9.444	2.203	2.203	0.7442	0.7430	0.0000E+00	0.0000E+00
35	Benzene	0.2085	0.4813E-01	0.4813E-01	0.1623E-01	0.1623E-01	0.0000E+00	0.0000E+00
36	Methylbenzene	7.675	1.772	1.772	0.5977	0.5977	0.0000E+00	0.0000E+00
37	Vinylbenzene	0.5649	0.1304	0.1304	0.4400E-01	0.4400E-01	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	5.669	1.309	1.309	0.4415	0.4415	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	19.00	4.386	4.386	1.479	1.479	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	5.501	1.270	1.270	0.4284	0.4284	0.0000E+00	0.0000E+00
41	Ethylbenzene	0.7956	0.1837	0.1837	0.6196E-01	0.6196E-01	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.2287E-02	0.5281E-03	0.5281E-03	0.1781E-03	0.1781E-03	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	0.3430	0.7919E-01	0.7919E-01	0.2671E-01	0.2671E-01	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.1289E-01	0.2976E-02	0.2976E-02	0.1004E-02	0.1004E-02	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	0.7301E-01	0.1686E-01	0.1686E-01	0.5686E-02	0.5686E-02	0.0000E+00	0.0000E+00
47	Isopropylbenzene	0.2761E-01	0.6375E-02	0.6375E-02	0.2150E-02	0.2150E-02	0.0000E+00	0.0000E+00
48	Propylbenzene	0.9653	0.2229	0.2229	0.7518E-01	0.7518E-01	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.6093E-02	0.1407E-02	0.1407E-02	0.4745E-03	0.4745E-03	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.6613E-01	0.1527E-01	0.1527E-01	0.5152E-02	0.5151E-02	0.0000E+00	0.0000E+00
52	Methyl formate	0.1982E-01	0.4575E-02	0.4575E-02	0.1543E-02	0.1543E-02	0.0000E+00	0.0000E+00
53	Ethyl formate	1.715	0.3962	0.3962	0.1336	0.1336	0.0000E+00	0.0000E+00
54	Methyl acetate	99.24	22.93	22.93	7.735	7.734	0.0000E+00	0.0000E+00
55	Ethyl acetate	107.9	24.92	24.92	8.407	8.407	0.0000E+00	0.0000E+00
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.7358E-01	0.1699E-01	0.1699E-01	0.5730E-02	0.5730E-02	0.0000E+00	0.0000E+00
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	87.50	20.21	20.21	6.816	6.815	0.0000E+00	0.0000E+00
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	1.244	0.2873	0.2873	0.9691E-01	0.9691E-01	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	11.83	2.756	2.756	0.9308	0.9295	0.0000E+00	0.0000E+00
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	981.2	227.4	227.4	76.75	76.70	0.0000E+00	0.0000E+00

69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.1554E-01	0.3588E-02	0.3588E-02	0.1210E-02	0.1210E-02	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	6.659	1.537	1.537	0.5186	0.5186	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.6690E-01	0.1545E-01	0.1545E-01	0.5210E-02	0.5210E-02	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.4625	0.1070	0.1070	0.3612E-01	0.3610E-01	0.0000E+00	0.0000E+00
77	1,4-dioxane	224.9	52.31	52.31	17.66	17.64	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	12.00	3.508	3.508	1.224	1.174	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	2530.	590.6	590.6	199.5	199.1	0.0000E+00	0.0000E+00
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.5792E-02	0.1337E-02	0.1337E-02	0.4510E-03	0.4510E-03	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	592.6	138.8	138.8	46.89	46.78	0.0000E+00	0.0000E+00
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.3636	0.8411E-01	0.8411E-01	0.2838E-01	0.2837E-01	0.0000E+00	0.0000E+00
85	Chloromethane	0.1942	0.4483E-01	0.4483E-01	0.1512E-01	0.1512E-01	0.0000E+00	0.0000E+00
86	Chloroethene	0.6395E-02	0.1476E-02	0.1476E-02	0.4980E-03	0.4980E-03	0.0000E+00	0.0000E+00
87	Chloroethane	0.8248E-03	0.1904E-03	0.1904E-03	0.6423E-04	0.6423E-04	0.0000E+00	0.0000E+00
88	3-chloropropene	0.1191E-04	0.2750E-05	0.2750E-05	0.9275E-06	0.9275E-06	0.0000E+00	0.0000E+00
89	Dichloromethane	124.7	28.79	28.79	9.711	9.711	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.1594E-02	0.3681E-03	0.3681E-03	0.1242E-03	0.1242E-03	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	2.557	0.5903	0.5903	0.1991	0.1991	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	11.96	2.761	2.761	0.9313	0.9313	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	0.2737	0.6320E-01	0.6320E-01	0.2132E-01	0.2132E-01	0.0000E+00	0.0000E+00
96	Trichloromethane	0.1599	0.3692E-01	0.3692E-01	0.1245E-01	0.1245E-01	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.2449	0.5654E-01	0.5654E-01	0.1907E-01	0.1907E-01	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	1.550	0.3578	0.3578	0.1207	0.1207	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.4706E-02	0.1086E-02	0.1086E-02	0.3665E-03	0.3665E-03	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	0.1394	0.3217E-01	0.3217E-01	0.1085E-01	0.1085E-01	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.1125E-01	0.2597E-02	0.2597E-02	0.8759E-03	0.8759E-03	0.0000E+00	0.0000E+00
104	Tetrachloroethene	0.9470	0.2186	0.2186	0.7375E-01	0.7375E-01	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	0.8611	0.1988	0.1988	0.6706E-01	0.6706E-01	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.5259E-02	0.1214E-02	0.1214E-02	0.4096E-03	0.4096E-03	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.1476E-02	0.3407E-03	0.3407E-03	0.1149E-03	0.1149E-03	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.4012	0.9262E-01	0.9262E-01	0.3124E-01	0.3124E-01	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1419E-02	0.3275E-03	0.3275E-03	0.1105E-03	0.1105E-03	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	1.768	0.4081	0.4081	0.1377	0.1377	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	2.196	0.5069	0.5069	0.1710	0.1710	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.2454E-03	0.5666E-04	0.5666E-04	0.1911E-04	0.1911E-04	0.0000E+00	0.0000E+00
119	Ethane	0.5035E-03	0.1162E-03	0.1162E-03	0.3921E-04	0.3921E-04	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1623E-02	0.3748E-03	0.3748E-03	0.1264E-03	0.1264E-03	0.0000E+00	0.0000E+00
123	Propane	0.5676E-04	0.1310E-04	0.1310E-04	0.4420E-05	0.4420E-05	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.3992E-02	0.9217E-03	0.9217E-03	0.3109E-03	0.3109E-03	0.0000E+00	0.0000E+00
125	1-butene	0.8453E-02	0.1952E-02	0.1952E-02	0.6583E-03	0.6583E-03	0.0000E+00	0.0000E+00
126	2-methylpropane	0.6164E-03	0.1423E-03	0.1423E-03	0.4800E-04	0.4800E-04	0.0000E+00	0.0000E+00
127	Butane	0.2045E-03	0.4722E-04	0.4722E-04	0.1593E-04	0.1593E-04	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.2225E-05	0.5138E-06	0.5138E-06	0.1733E-06	0.1733E-06	0.0000E+00	0.0000E+00
131	2-methylbutane	0.8137E-04	0.1879E-04	0.1879E-04	0.6337E-05	0.6337E-05	0.0000E+00	0.0000E+00
132	Pentane	0.3437E-02	0.7935E-03	0.7935E-03	0.2677E-03	0.2677E-03	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.9153E-04	0.2113E-04	0.2113E-04	0.7128E-05	0.7128E-05	0.0000E+00	0.0000E+00
135	Cyclohexane	0.1549	0.3575E-01	0.3575E-01	0.1206E-01	0.1206E-01	0.0000E+00	0.0000E+00
136	Methylcyclopentane	0.5046E-02	0.1165E-02	0.1165E-02	0.3930E-03	0.3930E-03	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.7190E-04	0.1660E-04	0.1660E-04	0.5599E-05	0.5599E-05	0.0000E+00	0.0000E+00
138	3-methylpentane	0.1738E-03	0.4013E-04	0.4013E-04	0.1353E-04	0.1353E-04	0.0000E+00	0.0000E+00
139	Hexane	0.3314E-02	0.7652E-03	0.7652E-03	0.2581E-03	0.2581E-03	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.1794E-05	0.4143E-06	0.4143E-06	0.1397E-06	0.1397E-06	0.0000E+00	0.0000E+00
142	Methylcyclohexane	0.4780E-02	0.1104E-02	0.1104E-02	0.3723E-03	0.3723E-03	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	0.4823E-03	0.1113E-03	0.1113E-03	0.3756E-04	0.3756E-04	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.4811E-05	0.1111E-05	0.1111E-05	0.3746E-06	0.3746E-06	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.6356E-05	0.1467E-05	0.1467E-05	0.4950E-06	0.4950E-06	0.0000E+00	0.0000E+00
146	Heptane	0.6457E-03	0.1491E-03	0.1491E-03	0.5028E-04	0.5028E-04	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1552E-05	0.3583E-06	0.3583E-06	0.1209E-06	0.1209E-06	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.6981E-02	0.1612E-02	0.1612E-02	0.5437E-03	0.5437E-03	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.5823E-05	0.1344E-05	0.1344E-05	0.4535E-06	0.4535E-06	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.8609E-05	0.1988E-05	0.1988E-05	0.6705E-06	0.6705E-06	0.0000E+00	0.0000E+00
154	Octane	0.1066E-03	0.2460E-04	0.2460E-04	0.8300E-05	0.8300E-05	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.5066E-06	0.1170E-06	0.1170E-06	0.3945E-07	0.3945E-07	0.0000E+00	0.0000E+00
156	Nonane	0.3761E-04	0.8684E-05	0.8684E-05	0.2929E-05	0.2929E-05	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.2325E-03	0.5368E-04	0.5368E-04	0.1811E-04	0.1811E-04	0.0000E+00	0.0000E+00
160	Undecane	0.7906E-03	0.1825E-03	0.1825E-03	0.6157E-04	0.6157E-04	0.0000E+00	0.0000E+00
161	Dodecane	0.1392E-02	0.3215E-03	0.3215E-03	0.1084E-03	0.1084E-03	0.0000E+00	0.0000E+00
162	2-propanone	0.5662	0.1309	0.1309	0.4415E-01	0.4414E-01	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.7588E-01	0.1753E-01	0.1753E-01	0.5912E-02	0.5912E-02	0.0000E+00	0.0000E+00
164	2-butanone	0.1812E+05	4258.	4258.	1439.	1436.	0.0000E+00	0.0000E+00
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1504E-01	0.3473E-02	0.3473E-02	0.1172E-02	0.1172E-02	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.2101E-01	0.4853E-02	0.4853E-02	0.1637E-02	0.1637E-02	0.0000E+00	0.0000E+00
168	2-pentanone	3.767	0.8710	0.8710	0.2938	0.2938	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	45.70	10.55	10.55	3.560	3.560	0.0000E+00	0.0000E+00
171	Cyclohexanone	558.8	129.3	129.3	43.62	43.61	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

173	4-methyl-2-pentanone	691.8	159.8	159.8	53.92	53.92	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	4.997	1.154	1.154	0.3892	0.3892	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.7796	0.1803	0.1803	0.6084E-01	0.6082E-01	0.0000E+00	0.0000E+00
178	2-octanone	0.6841E-01	0.1580E-01	0.1580E-01	0.5330E-02	0.5330E-02	0.0000E+00	0.0000E+00
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.3259	0.7525E-01	0.7525E-01	0.2538E-01	0.2538E-01	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	2.931	0.6771	0.6771	0.2284	0.2284	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	0.3052E-01	0.7046E-02	0.7046E-02	0.2377E-02	0.2377E-02	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.3232E-03	0.7463E-04	0.7463E-04	0.2517E-04	0.2517E-04	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.9358E-01	0.2161E-01	0.2161E-01	0.7288E-02	0.7288E-02	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	5.419	1.301	1.301	0.4411	0.4384	0.0000E+00	0.0000E+00
191	2-ethylhexanoic acid	0.3097	0.7156E-01	0.7156E-01	0.2414E-01	0.2414E-01	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.2927E-01	0.6775E-02	0.6775E-02	0.2286E-02	0.2285E-02	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	19.59	4.524	4.524	1.526	1.526	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	687.5	180.5	180.5	61.95	60.64	0.0000E+00	0.0000E+00
199	Hydrogen	0.8890E-01	0.2052E-01	0.2052E-01	0.6923E-02	0.6923E-02	0.0000E+00	0.0000E+00
200	Ammonia	0.3015E+05	0.1981E+05	0.1981E+05	6682.	6682.	0.0000E+00	0.0000E+00
201	Carbon monoxide	0.2646	0.6108E-01	0.6108E-01	0.2060E-01	0.2060E-01	0.0000E+00	0.0000E+00
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
1	Methanol	1.000	0.000	1.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001	0.002	0.000	0.000
2	Ethanol	1.000	0.000	1.000	0.000	0.008	0.008	0.008	0.008	0.001	0.001	0.001	0.002	0.000	0.000
3	2-propen-1-ol	1.000	1.000	1.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001	0.002	0.000	0.000
4	n-propanol	1.000	1.000	1.000	0.000	0.007	0.007	0.007	0.007	0.001	0.001	0.001	0.001	0.000	0.000
5	2-propanol	1.000	1.000	1.000	0.000	0.006	0.006	0.006	0.006	0.001	0.001	0.000	0.001	0.000	0.000
6	1,2-ethanediol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	n-butanol	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.001	0.000	0.000
8	2-butanol	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
9	2-methyl-1-propanol	1.000	1.000	1.000	0.000	0.016	0.016	0.016	0.016	0.003	0.003	0.001	0.003	0.000	0.000
10	2-methyl-2-propanol	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000

11	1,2-propanediol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	n-pentanol	1.000	1.000	1.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000	0.001	0.000	0.000
13	3-methyl-1-butanol	1.000	1.000	1.000	0.000	0.018	0.018	0.018	0.018	0.003	0.003	0.001	0.004	0.000	0.000
14	Phenol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	Cyclohexanol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	2-ethylbutanol	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
17	2-hexanol	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000	0.001	0.000	0.000
18	1,3-dichloro-2-propanol	1.000	1.000	0.450	0.000	0.038	0.038	0.038	0.038	0.007	0.007	0.003	0.008	0.000	0.000
19	2-ethylhexanol	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
20	Nonanol	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
21	n-decanol	1.000	1.000	1.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
22	Methanal	1.000	0.000	1.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026	0.067	0.000	0.000
23	Ethanal	1.000	0.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
24	2-propenal	1.000	0.986	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Propanal	1.000	0.507	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
26	2-methylpropenal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	Butanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	Pentanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	2,4-hexadien-1-al	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	Hexanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	Benzaldehyde	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
32	Heptanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	4-methylbenzaldehyde	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	Octanal	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
35	Benzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	Methylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	Vinylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	1,2-dimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	1,3-dimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	1,4-dimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	Ethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Indene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	alpha-methylstyrene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	1,2,4-trimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	1,3,5-trimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	1-ethyl-2-methylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	Isopropylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	Propylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	1-methyl-3-propylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	n-butylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	1-methyl-4-propylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	Methyl formate	1.000	0.289	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	Ethyl formate	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
54	Methyl acetate	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
55	Ethyl acetate	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
56	Allyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
57	Methyl methacrylate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	Isopropyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	n-butyl formate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	Propyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	Ethyl methacrylate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	Butyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

63	Isobutyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	Ethyl lactate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	2-Methoxy ethyl acetate	1.000	1.000	1.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001	0.002	0.000	0.000
66	Isoamyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	n-amyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	2-ethoxyethyl acetate	1.000	1.000	1.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000	0.001	0.000	0.000
69	ethyl acetoxyacetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	Dibutyl oxalate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	1,4-epoxy-1,3-butadiene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	1,4-epoxybutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	3-methoxy-1-propene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	Diethyl ether	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	2-methylfuran	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	2,3-dihydropyran	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000	0.001	0.000	0.000
77	1,4-dioxane	1.000	1.000	1.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001	0.002	0.000	0.000
78	1,3,5-Trioxane	1.000	1.000	1.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026	0.067	0.000	0.000
79	2-ethoxyethanol	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
80	Epichlorohydrin	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
81	1,1,2,2-tetraMe-1,2-epoxyEt	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	4-ethylmorpholine	1.000	1.000	1.000	0.000	0.017	0.017	0.017	0.017	0.003	0.003	0.001	0.004	0.000	0.000
83	1-propoxybutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84	2-butoxyethanol	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.001	0.000	0.000
85	Chloromethane	1.000	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	Chloroethene	1.000	0.082	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	Chloroethane	1.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	3-chloropropene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	Dichloromethane	1.000	0.016	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	1-chlorobutane	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	1,1-dichloroethene	1.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	1,2-dichloroethane	1.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	1,2-dichloropropene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	Chlorobenzene	1.000	1.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	1,2-dichloropropane	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	Trichloromethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	1,2-dichloro-2-methylpropane	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	Trichloroethylene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99	1,1,1-trichloroethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	1,1,2-trichloroethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101	1,2-dichlorobenzene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102	3-chloromethylheptane	1.000	1.000	0.470	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
103	Tetrachloromethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104	Tetrachloroethene	1.000	1.000	0.430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	Chlorodifluoromethane	1.000	0.002	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
106	Dichlorofluoromethane	1.000	1.000	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107	1-chloro-1,2,2-trifluoroethane	1.000	1.000	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108	Dichlorodifluoromethane	1.000	1.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109	1,2-dichloro-1,2-difluoroethen	1.000	1.000	0.350	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	Chlorotetrafluoroethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
111	Trichlorofluoromethane	1.000	0.999	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112	Bromotrifluoromethane	1.000	0.032	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
113	1,1-diCl-1,2,2,2-tetraFlethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
114	1,1,2-triCl-1,2,2-triFlethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

115	1,1,2,2-tetraCl-1,2-diFlethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
116	Methane	1.000	0.000	0.168	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117	Ethyne	1.000	0.024	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
118	Ethene	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
119	Ethane	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	Propadiene	1.000	0.999	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
121	Propyne	1.000	0.999	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122	Propene	1.000	0.022	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
123	Propane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
124	1,3-butadiene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	1-butene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
126	2-methylpropane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127	Butane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
128	Cyclopentene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
129	2-methyl-1,3-butadiene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	1-pentene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
131	2-methylbutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132	Pentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
133	3,4,5,6-tetrahydrobenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
134	2-hexene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	Cyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
136	Methylcyclopentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137	2,2-dimethylbutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
138	3-methylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
139	Hexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	4-methylcyclohexene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
141	1-heptene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142	Methylcyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
143	2,2-dimethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
144	2,4-dimethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	3-ethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
146	Heptane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147	1,1-dimethylcyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
148	2-octene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
149	6-methyl-1-heptene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	trans-1,2-dimethylcyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
151	2,2,3-trimethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152	3,3-dimethylhexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
153	3-ethylhexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
154	Octane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	4-ethylheptane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
156	Nonane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157	4-isopropenyl-1-Mecyclohexene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
158	2-methyl-3-ethylheptane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
159	Decane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	Undecane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
161	Dodecane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162	2-propanone	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
163	3-buten-2-one	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
164	2-butanone	1.000	1.000	1.000	0.000	0.022	0.022	0.022	0.022	0.004	0.004	0.002	0.004	0.000	0.000
165	Cyclopentanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166	3-penten-2-one	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
167	Acetyl cyclopropane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
168	2-pentanone	1.000	1.000	1.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
169	3-methyl-2-butanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	4-methyl-3-penten-2-one	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
171	Cyclohexanone	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.001	0.000	0.000
172	3,3-dimethyl-2-butanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
173	4-methyl-2-pentanone	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
174	2,4-dimethyl-3-pentanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	2-heptanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
176	5-methyl-2-hexanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177	acetophenone	1.000	1.000	1.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
178	2-octanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
179	5-methyl-3-heptanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	2,6-dimethyl-4-heptanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
181	Hydrogen sulfide	1.000	0.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
182	Carbonyl sulfide	1.000	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
183	Ethylene sulfide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
184	Dimethyl sulfide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
185	Carbon disulfide	1.000	0.492	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
186	Pentamethylene sulfide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
187	Nitric oxide	1.000	0.926	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
188	Nitrogen dioxide	1.000	0.979	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
189	Nitrogen tetroxide	1.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
190	Ethanoic acid	1.000	1.000	1.000	1.000	0.048	0.048	0.048	0.048	0.009	0.009	0.004	0.010	0.000	0.000
191	2-ethylhexanoic acid	1.000	1.000	1.000	1.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
192	Hydrazine	1.000	0.995	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
193	Methyl cyanide	1.000	1.000	0.300	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000	0.001	0.000	0.000
194	methyl hydrazine	1.000	1.000	1.000	0.000	0.106	0.106	0.106	0.106	0.021	0.021	0.009	0.023	0.000	0.000
195	Nitromethane	1.000	0.055	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
196	N,N-dimethylformamide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
197	Nitroethane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
198	1-benzo[b]pyrrole	1.000	1.000	1.000	0.000	0.151	0.151	0.151	0.151	0.030	0.030	0.013	0.035	0.000	0.000
199	Hydrogen	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200	Ammonia	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	0.505	0.505	0.214	0.575	0.000	0.000
201	Carbon monoxide	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
202	Disiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
203	Trimethylsilanol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
204	Trisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
205	Hexamethyldisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
206	Tetrasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
207	Diphenylsilane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
208	Hexamethylcyclotrisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
209	Octamethyltrisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
210	Octamethylcyclotetrasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
211	Decamethylcyclopentasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
212	Decamethylcyclohexasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
213	Tetradecamethylcycloheptasilox	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
214	Hexadecamethylcyclooctasiloxan	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

APPENDIX D—U.S. TCCS CONTROLLING TO RUSSIAN 360-DAY SMACs

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
1	Methanol	0.3701	0.2000	Y
2	Ethanol	3.761	10.00	N
3	2-propen-1-ol	0.6410E-03	1.000	N
4	n-propanol	0.8579E-01	98.30	N
5	2-propanol	0.9484	98.30	N
6	1,2-ethanediol	0.5437E-02	10.00	N
7	n-butanol	2.488	0.8000	Y
8	2-butanol	0.1407E-02	121.0	N
9	2-methyl-1-propanol	0.1328	121.0	N
10	2-methyl-2-propanol	0.3070E-01	121.0	N
11	1,2-propanediol	0.2494E-03	0.1000	N
12	n-pentanol	0.4930E-01	126.0	N
13	3-methyl-1-butanol	0.3618E-02	126.0	N
14	Phenol	0.4401	0.1000	Y
15	Cyclohexanol	0.6482	123.0	N
16	2-ethylbutanol	0.1076E-03	0.1000	N
17	2-hexanol	0.6868E-03	167.0	N
18	1,3-dichloro-2-propanol	0.2152E-05	0.1000	N
19	2-ethylhexanol	0.1885E-02	186.4	N
20	Nonanol	0.2692E-02	236.0	N
21	n-decanol	0.8237E-05	259.0	N
22	Methanal	0.7695E-06	0.5000E-01	N
23	Ethanal	0.1263	1.000	N
24	2-propenal	0.3083E-02	0.1100	N
25	Propanal	0.2852	95.00	N
26	2-methylpropenal	0.1814E-02	0.1000	N
27	Butanal	0.7007	118.0	N
28	Pentanal	0.6567E-01	106.0	N
29	2,4-hexadien-1-al	0.7324E-03	4.700	N
30	Hexanal	0.2698E-01	4.700	N
31	Benzaldehyde	0.9668E-02	173.0	N
32	Heptanal	0.1328E-01	0.1000	N
33	4-methylbenzaldehyde	0.2263E-03	0.1000	N
34	Octanal	0.6551E-03	210.0	N
35	Benzene	0.1383E-01	2.000	N
36	Methylbenzene	0.6983	8.000	N
37	Vinylbenzene	0.2130E-01	4.000	N
38	1,2-dimethylbenzene	0.3396	5.000	N
39	1,3-dimethylbenzene	1.812	5.000	N
40	1,4-dimethylbenzene	0.4775	5.000	N
41	Ethylbenzene	0.9159E-01	86.80	N
42	Indene	0.0000E+00	9.500	N
43	alpha-methylstyrene	0.9270E-04	145.0	N
44	1,2,4-trimethylbenzene	0.2766E-01	15.00	N
45	1,3,5-trimethylbenzene	0.1463E-02	15.00	N
46	1-ethyl-2-methylbenzene	0.2972E-02	25.00	N
47	Isopropylbenzene	0.5730E-02	0.5000	N
48	Propylbenzene	0.1411	49.10	N
49	1-methyl-3-propylbenzene	0.0000E+00	11.00	N
50	n-butylbenzene	0.1147E-02	55.00	N

51	1-methyl-4-propylbenzene	0.2319E-03	0.1000	N
52	Methyl formate	0.5153E-02	12.30	N
53	Ethyl formate	0.2887E-02	90.90	N
54	Methyl acetate	0.9722E-01	121.0	N
55	Ethyl acetate	0.1738	4.000	N
56	Allyl acetate	0.2520E-02	51.20	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
57	Methyl methacrylate	0.6499E-01	102.0	N
58	Isopropyl acetate	0.3460E-02	209.0	N
59	n-butyl formate	0.7851E-03	83.50	N
60	Propyl acetate	0.3002	167.0	N
61	Ethyl methacrylate	0.1821E-01	116.7	N
62	Butyl acetate	0.4697	2.000	N
63	Isobutyl acetate	0.1267	190.0	N
64	Ethyl lactate	0.3225E-02	193.0	N
65	2-Methoxy ethyl acetate	0.9413E-03	24.20	N
66	Isoamyl acetate	0.2369E-01	159.5	N
67	n-amyl acetate	0.3978E-01	160.0	N
68	2-ethoxyethyl acetate	0.1810	162.0	N
69	ethyl acetoxyacetate	0.0000E+00	0.1000	N
70	Dibutyl oxalate	0.1880E-04	0.1000	N
71	1,4-epoxy-1,3-butadiene	0.1199E-02	0.1100	N
72	1,4-epoxybutane	0.4813E-01	118.0	N
73	3-methoxy-1-propene	0.3193E-04	0.1000	N
74	Diethyl ether	0.5186E-01	242.0	N
75	2-methylfuran	0.2148E-02	0.1300	N
76	2,3-dihydropyran	0.1376E-03	0.1000	N
77	1,4-dioxane	0.2192E-01	1.800	N
78	1,3,5-Trioxane	0.4060E-04	0.1000	N
79	2-ethoxyethanol	0.1691	73.70	N
80	Epichlorohydrin	0.2494E-02	1.200	N
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.7975E-03	0.1000	N
82	4-ethylmorpholine	0.3054E-01	16.00	N
83	1-propoxybutane	0.2982E-01	186.8	N
84	2-butoxyethanol	0.1306E-03	24.20	N
85	Chloromethane	0.2873E-01	41.30	N
86	Chloroethene	0.3901E-02	0.2600	N
87	Chloroethane	0.8169E-04	263.7	N
88	3-chloropropene	0.7125E-04	0.6300	N
89	Dichloromethane	7.604	86.80	N
90	1-chlorobutane	0.0000E+00	151.0	N
91	1,1-dichloroethene	0.5098E-03	7.900	N
92	1,2-dichloroethane	0.4575E-01	0.5000	N
93	1,2-dichloropropene	0.2435E-01	42.20	N
94	Chlorobenzene	0.7768	46.00	N
95	1,2-dichloropropane	0.5186E-02	42.20	N
96	Trichloromethane	0.9280E-02	4.900	N
97	1,2-dichloro-2-methylpropane	0.9897E-03	0.1000	N
98	Trichloroethylene	0.3025E-01	0.5400	N
99	1,1,1-trichloroethane	0.3323	164.0	N
100	1,1,2-trichloroethane	0.5118E-04	5.500	N
101	1,2-dichlorobenzene	0.5885E-02	30.00	N
102	3-chloromethylheptane	0.1564E-03	0.1000	N

103	Tetrachloromethane	0.4736E-02	13.00	N
104	Tetrachloroethene	0.3641	34.00	N
105	Chlorodifluoromethane	0.5524	353.6	N
106	Dichlorofluoromethane	0.3931E-03	21.00	N
107	1-chloro-1,2,2-trifluoroethane	0.1155E-02	484.5	N
108	Dichlorodifluoromethane	0.8247E-02	494.4	N
109	1,2-dichloro-1,2-difluoroethen	0.7983E-03	136.0	N
110	Chlorotetrafluoroethane	0.0000E+00	555.0	N
111	Trichlorofluoromethane	0.6995	561.8	N
112	Bromotrifluoromethane	1.783	608.8	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
113	1,1-diCl-1,2,2,2-tetraFlethane	0.2454E-01	702.9	N
114	1,1,2-triCl-1,2,2-triFlethane	12.27	383.0	N
115	1,1,2,2-tetraCl-1,2-diFlethane	0.1762E-01	834.2	N
116	Methane	39.73	3342.	N
117	Ethyne	0.0000E+00	532.4	N
118	Ethene	0.7796E-03	344.1	N
119	Ethane	0.3789E-02	1230.	N
120	Propadiene	0.0000E+00	81.90	N
121	Propyne	0.0000E+00	409.5	N
122	Propene	0.7208E-02	860.3	N
123	Propane	0.5562E-03	901.4	N
124	1,3-butadiene	0.2493E-02	221.2	N
125	1-butene	0.2962E-01	458.0	N
126	2-methylpropane	0.1016E-01	237.6	N
127	Butane	0.2685E-02	237.6	N
128	Cyclopentene	0.0000E+00	167.0	N
129	2-methyl-1,3-butadiene	0.0000E+00	557.0	N
130	1-pentene	0.1267E-04	186.0	N
131	2-methylbutane	0.1590E-02	295.0	N
132	Pentane	0.6222E-01	590.0	N
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	86.00	N
134	2-hexene	0.3873E-03	172.0	N
135	Cyclohexane	0.3173	206.0	N
136	Methylcyclopentane	0.2580E-01	51.60	N
137	2,2-dimethylbutane	0.1564E-02	88.10	N
138	3-methylpentane	0.2791E-02	1762.	N
139	Hexane	0.4295E-01	176.0	N
140	4-methylcyclohexene	0.0000E+00	393.2	N
141	1-heptene	0.1029E-04	201.0	N
142	Methylcyclohexane	0.2923E-01	60.20	N
143	2,2-dimethylpentane	0.2177E-01	408.6	N
144	2,4-dimethylpentane	0.2026E-03	201.0	N
145	3-ethylpentane	0.2309E-03	201.0	N
146	Heptane	0.2494E-01	10.00	N
147	1,1-dimethylcyclohexane	0.2435E-01	115.0	N
148	2-octene	0.1392E-04	229.0	N
149	6-methyl-1-heptene	0.7258E-05	229.0	N
150	trans-1,2-dimethylcyclohexane	0.4764E-01	115.0	N
151	2,2,3-trimethylpentane	0.3174E-03	229.0	N
152	3,3-dimethylhexane	0.7653E-03	229.0	N
153	3-ethylhexane	0.4592E-03	229.0	N
154	Octane	0.7522E-02	10.00	N

155	4-ethylheptane	0.3748E-04	129.0	N
156	Nonane	0.3193E-02	315.0	N
157	4-isopropenyl-1-Mecyclohexene	0.3345E-02	557.0	N
158	2-methyl-3-ethylheptane	0.1557E-02	116.0	N
159	Decane	0.1570E-01	223.0	N
160	Undecane	0.2072E-01	319.0	N
161	Dodecane	0.4273E-03	278.0	N
162	2-propanone	0.3462E-03	1.000	N
163	3-buten-2-one	0.1124E-03	0.1000	N
164	2-butanone	0.7496	0.2500	Y
165	Cyclopentanone	0.4361	29.20	N
166	3-penten-2-one	0.2469E-04	0.1000	N
167	Acetyl cyclopropane	0.4137E-04	0.1000	N
168	2-pentanone	0.1847E-02	70.40	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
169	3-methyl-2-butanone	0.2666E-01	70.40	N
170	4-methyl-3-penten-2-one	0.9964E-01	40.10	N
171	Cyclohexanone	0.1950	60.20	N
172	3,3-dimethyl-2-butanone	0.3893E-02	81.90	N
173	4-methyl-2-pentanone	0.6064	82.00	N
174	2,4-dimethyl-3-pentanone	0.4717E-04	23.50	N
175	2-heptanone	0.6856E-01	23.50	N
176	5-methyl-2-hexanone	0.1498E-02	23.50	N
177	acetophenone	0.3262E-03	245.0	N
178	2-octanone	0.1439E-03	105.0	N
179	5-methyl-3-heptanone	0.1610E-02	0.1000	N
180	2,6-dimethyl-4-heptanone	0.3087E-02	58.10	N
181	Hydrogen sulfide	0.3847E-02	0.5000	N
182	Carbonyl sulfide	0.2779E-01	12.00	N
183	Ethylene sulfide	0.2813E-04	0.1000	N
184	Dimethyl sulfide	0.1755E-03	2.500	N
185	Carbon disulfide	0.4039E-01	16.00	N
186	Pentamethylene sulfide	0.7192E-04	0.1000	N
187	Nitric oxide	0.0000E+00	0.1000	N
188	Nitrogen dioxide	0.0000E+00	0.9400	N
189	Nitrogen tetroxide	0.0000E+00	1.900	N
190	Ethanoic acid	0.1004E-03	1.000	N
191	2-ethylhexanoic acid	0.3130E-03	0.1000	N
192	Hydrazine	0.0000E+00	0.5000E-01	N
193	Methyl cyanide	0.8408E-05	6.700	N
194	methyl hydrazine	0.0000E+00	0.8000E-01	N
195	Nitromethane	0.1171	0.1000	Y
196	N,N-dimethylformamide	0.1564E-02	6.000	N
197	Nitroethane	0.1927E-04	0.1000	N
198	1-benzo[b]pyrrole	0.4061E-02	0.4800	N
199	Hydrogen	1.594	1677.	N
200	Ammonia	0.2686E-01	1.000	N
201	Carbon monoxide	4.615	5.000	N
202	Disiloxane	0.1676E-01	52.40	N
203	Trimethylsilanol	0.1029	1.800	N
204	Trisiloxane	0.1372E-01	83.40	N
205	Hexamethyldisiloxane	0.6327E-02	96.60	N
206	Tetrasiloxane	0.1273	114.0	N

207	Diphenylsilane	0.1280E-04	0.1000	N
208	Hexamethylcyclotrisiloxane	0.6664E-01	227.0	N
209	Octamethyltrisiloxane	0.1927	114.0	N
210	Octamethylcyclotetrasiloxane	0.1108	151.7	N
211	Decamethylcyclopentasiloxane	0.2751E-01	150.7	N
212	Decamethylcyclohexasiloxane	0.0000E+00	150.7	N
213	Tetradecamethylcycloheptasilox	0.0000E+00	150.7	N
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	150.7	N

GROUP T-VALUES AS SPECIFIED IN NHB 8060.1B APPENDIX D

-01-	-02-	-03-	-04-	-05-	-06-	-07-	-08-	-09-	-10-	-11-	-12-	-13-	-14-	-15-	-16-
9.76	0.32	0.65	0.28	0.06	0.30	0.04	0.00	0.02	0.00	3.05	0.01	0.00	0.00	1.18	0.95

OVERALL T-VALUE
15.09

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	0.9537E-06	0.1351E-01	0.2752E-06	1.510	0.0000E+00	1.730	1.730	1.730
2	Ethanol	0.2094E-01	0.1373	0.0000E+00	15.35	0.0000E+00	15.25	15.25	15.25
3	2-propen-1-ol	-0.1863E-08	0.2339E-04	0.9691E-02	0.0000E+00	0.0000E+00	0.3760E-02	0.3760E-02	0.3760E-02
4	n-propanol	0.4768E-06	0.3131E-02	1.297	0.0000E+00	0.0000E+00	0.3073	0.3073	0.3073
5	2-propanol	0.3815E-05	0.3462E-01	14.34	0.0000E+00	0.0000E+00	2.798	2.798	2.798
6	1,2-ethanediol	0.1490E-07	0.1984E-03	0.8220E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	0.7629E-05	0.9080E-01	37.61	0.0000E+00	0.0000E+00	3.355	3.355	3.355
8	2-butanol	0.7451E-08	0.5137E-04	0.2128E-01	0.0000E+00	0.0000E+00	0.9465E-02	0.9465E-02	0.9465E-02
9	2-methyl-1-propanol	0.4768E-06	0.4848E-02	2.008	0.0000E+00	0.0000E+00	1.093	1.093	1.093
10	2-methyl-2-propanol	0.5960E-07	0.1121E-02	0.4642	0.0000E+00	0.0000E+00	0.2007E-01	0.2007E-01	0.2007E-01
11	1,2-propanediol	0.9313E-09	0.9103E-05	0.3771E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.0000E+00	0.1799E-02	0.7454	0.0000E+00	0.0000E+00	0.1326	0.1326	0.1326
13	3-methyl-1-butanol	0.1490E-07	0.1321E-03	0.5471E-01	0.0000E+00	0.0000E+00	0.3440E-01	0.3440E-01	0.3440E-01
14	Phenol	0.9537E-06	0.1606E-01	6.654	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.1907E-05	0.2366E-01	9.801	0.0000E+00	0.0000E+00	0.3805E-01	0.3805E-01	0.3805E-01
16	2-ethylbutanol	0.2328E-09	0.3927E-05	0.1627E-02	0.0000E+00	0.0000E+00	0.6045E-04	0.6045E-04	0.6045E-04
17	2-hexanol	0.1863E-08	0.2507E-04	0.1038E-01	0.0000E+00	0.0000E+00	0.1210E-02	0.1210E-02	0.1210E-02
18	1,3-dichloro-2-propanol	0.2910E-10	0.7854E-07	0.3254E-04	0.0000E+00	0.0000E+00	0.4235E-04	0.4235E-04	0.4235E-04
19	2-ethylhexanol	0.7451E-08	0.6881E-04	0.2850E-01	0.0000E+00	0.0000E+00	0.1268E-01	0.1268E-01	0.1268E-01
20	Nonanol	0.3725E-08	0.9826E-04	0.4070E-01	0.0000E+00	0.0000E+00	0.1450E-02	0.1450E-02	0.1450E-02
21	n-decanol	0.2910E-10	0.3006E-06	0.1245E-03	0.0000E+00	0.0000E+00	0.1021E-04	0.1021E-04	0.1021E-04
22	Methanal	-0.5821E-10	0.2809E-07	0.0000E+00	0.3140E-05	0.0000E+00	0.1053E-03	0.1053E-03	0.1053E-03
23	Ethanal	0.2027E-04	0.4609E-02	0.1644E-03	0.5152	0.0000E+00	0.4159E-01	0.4159E-01	0.4159E-01
24	2-propenal	0.1397E-03	0.1125E-03	0.4597E-01	0.1701E-03	0.0000E+00	0.8761E-04	0.8761E-04	0.8761E-04
25	Propanal	0.1262	0.1037E-01	2.177	0.5722	0.0000E+00	0.9837E-01	0.9837E-01	0.9837E-01
26	2-methylpropenal	0.5588E-08	0.6621E-04	0.2743E-01	0.0000E+00	0.0000E+00	0.2268E-04	0.2268E-04	0.2268E-04
27	Butanal	0.5722E-05	0.2558E-01	10.59	0.0000E+00	0.0000E+00	0.1688	0.1688	0.1688
28	Pentanal	0.0000E+00	0.2397E-02	0.9930	0.0000E+00	0.0000E+00	0.9667E-02	0.9667E-02	0.9667E-02
29	2,4-hexadien-1-al	0.1863E-08	0.2673E-04	0.1107E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1192E-06	0.9848E-03	0.4080	0.0000E+00	0.0000E+00	0.1743E-02	0.1743E-02	0.1743E-02
31	Benzaldehyde	0.1490E-07	0.3529E-03	0.1462	0.0000E+00	0.0000E+00	0.7247E-02	0.7247E-02	0.7247E-02
32	Heptanal	0.4470E-07	0.4847E-03	0.2008	0.0000E+00	0.0000E+00	0.1028E-02	0.1028E-02	0.1028E-02
33	4-methylbenzaldehyde	0.4657E-09	0.8260E-05	0.3422E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.0000E+00	0.2391E-04	0.9905E-02	0.0000E+00	0.0000E+00	0.4406E-02	0.4406E-02	0.4406E-02

35 Benzene	0.1043E-06	0.5046E-03	0.2090	0.0000E+00	0.0000E+00	0.9877E-04	0.9877E-04	0.9877E-04
36 Methylbenzene	0.9537E-06	0.2549E-01	10.56	0.0000E+00	0.0000E+00	0.3637E-02	0.3637E-02	0.3637E-02
37 Vinylbenzene	0.2980E-07	0.7773E-03	0.3220	0.0000E+00	0.0000E+00	0.2677E-03	0.2677E-03	0.2677E-03
38 1,2-dimethylbenzene	0.9537E-06	0.1240E-01	5.135	0.0000E+00	0.0000E+00	0.2686E-02	0.2686E-02	0.2686E-02
39 1,3-dimethylbenzene	0.1907E-05	0.6613E-01	27.39	0.0000E+00	0.0000E+00	0.9002E-02	0.9002E-02	0.9002E-02
40 1,4-dimethylbenzene	0.9537E-06	0.1743E-01	7.221	0.0000E+00	0.0000E+00	0.2607E-02	0.2607E-02	0.2607E-02
41 Ethylbenzene	0.7153E-06	0.3343E-02	1.385	0.0000E+00	0.0000E+00	0.3770E-03	0.3770E-03	0.3770E-03
42 Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43 alpha-methylstyrene	0.4657E-09	0.3384E-05	0.1402E-02	0.0000E+00	0.0000E+00	0.1084E-05	0.1084E-05	0.1084E-05
44 1,2,4-trimethylbenzene	0.5960E-07	0.1010E-02	0.4182	0.0000E+00	0.0000E+00	0.1625E-03	0.1625E-03	0.1625E-03
45 1,3,5-trimethylbenzene	0.1118E-07	0.5339E-04	0.2212E-01	0.0000E+00	0.0000E+00	0.6108E-05	0.6108E-05	0.6108E-05
46 1-ethyl-2-methylbenzene	0.1118E-07	0.1085E-03	0.4493E-01	0.0000E+00	0.0000E+00	0.3459E-04	0.3459E-04	0.3459E-04
47 Isopropylbenzene	0.3725E-07	0.2091E-03	0.8663E-01	0.0000E+00	0.0000E+00	0.1308E-04	0.1308E-04	0.1308E-04
48 Propylbenzene	0.7153E-06	0.5148E-02	2.133	0.0000E+00	0.0000E+00	0.4574E-03	0.4574E-03	0.4574E-03
49 1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50 n-butylbenzene	0.5588E-08	0.4187E-04	0.1734E-01	0.0000E+00	0.0000E+00	0.2887E-05	0.2887E-05	0.2887E-05
51 1-methyl-4-propylbenzene	0.0000E+00	0.8466E-05	0.3507E-02	0.0000E+00	0.0000E+00	0.3131E-04	0.3131E-04	0.3131E-04
52 Methyl formate	0.1749E-02	0.1876E-03	0.2249E-01	0.1490E-01	0.0000E+00	0.1499E-04	0.1499E-04	0.1499E-04
53 Ethyl formate	0.7451E-08	0.1054E-03	0.4365E-01	0.0000E+00	0.0000E+00	0.8113E-03	0.8113E-03	0.8113E-03
54 Methyl acetate	0.3576E-06	0.3548E-02	1.470	0.0000E+00	0.0000E+00	0.4688E-01	0.4688E-01	0.4688E-01
55 Ethyl acetate	-0.2384E-06	0.6344E-02	2.628	0.0000E+00	0.0000E+00	0.5103E-01	0.5103E-01	0.5103E-01
56 Allyl acetate	0.7451E-08	0.9199E-04	0.3811E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO. NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57 Methyl methacrylate	0.2384E-06	0.2372E-02	0.9826	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58 Isopropyl acetate	0.3725E-08	0.1263E-03	0.5231E-01	0.0000E+00	0.0000E+00	0.3486E-04	0.3486E-04	0.3486E-04
59 n-butyl formate	0.1863E-08	0.2866E-04	0.1187E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60 Propyl acetate	0.9537E-06	0.1096E-01	4.539	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61 Ethyl methacrylate	0.5960E-07	0.6647E-03	0.2753	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62 Butyl acetate	0.1907E-05	0.1714E-01	7.102	0.0000E+00	0.0000E+00	0.4144E-01	0.4144E-01	0.4144E-01
63 Isobutyl acetate	0.4768E-06	0.4624E-02	1.915	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64 Ethyl lactate	0.7451E-08	0.1177E-03	0.4876E-01	0.0000E+00	0.0000E+00	0.5888E-03	0.5888E-03	0.5888E-03
65 2-Methoxy ethyl acetate	-0.3725E-08	0.3436E-04	0.1423E-01	0.0000E+00	0.0000E+00	0.5523E-02	0.5523E-02	0.5523E-02
66 Isoamyl acetate	0.5960E-07	0.8645E-03	0.3581	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67 n-amyl acetate	0.5960E-07	0.1452E-02	0.6015	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68 2-ethoxyethyl acetate	0.0000E+00	0.6608E-02	2.737	0.0000E+00	0.0000E+00	0.4602	0.4602	0.4602
69 ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70 Dibutyl oxalate	0.5821E-10	0.6863E-06	0.2843E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71 1,4-epoxy-1,3-butadiene	0.2943E-06	0.4375E-04	0.1812E-01	0.4573E-06	0.0000E+00	0.7364E-05	0.7364E-05	0.7364E-05
72 1,4-epoxybutane	0.1788E-06	0.1757E-02	0.7277	0.0000E+00	0.0000E+00	0.3154E-02	0.3154E-02	0.3154E-02
73 3-methoxy-1-propene	0.8731E-10	0.1166E-05	0.4828E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74 Diethyl ether	0.1192E-06	0.1893E-02	0.7841	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75 2-methylfuran	0.3725E-08	0.7840E-04	0.3248E-01	0.0000E+00	0.0000E+00	0.3170E-04	0.3170E-04	0.3170E-04
76 2,3-dihydropyran	0.6985E-09	0.5022E-05	0.2080E-02	0.0000E+00	0.0000E+00	0.2175E-03	0.2175E-03	0.2175E-03
77 1,4-dioxane	0.1192E-06	0.7999E-03	0.3314	0.0000E+00	0.0000E+00	0.1051	0.1051	0.1051
78 1,3,5-Trioxane	0.1863E-08	0.1482E-05	0.6139E-03	0.0000E+00	0.0000E+00	0.5556E-02	0.5556E-02	0.5556E-02
79 2-ethoxyethanol	0.9537E-06	0.6171E-02	2.556	0.0000E+00	0.0000E+00	1.180	1.180	1.180
80 Epichlorohydrin	0.7451E-08	0.9103E-04	0.3771E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81 1,1,2,2-tetraMe-1,2-epoxyEt	0.3725E-08	0.2911E-04	0.1206E-01	0.0000E+00	0.0000E+00	0.2744E-05	0.2744E-05	0.2744E-05
82 4-ethylmorpholine	-0.2384E-06	0.1115E-02	0.4618	0.0000E+00	0.0000E+00	0.2761	0.2761	0.2761
83 1-propoxybutane	0.5960E-07	0.1089E-02	0.4509	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84 2-butoxyethanol	0.2328E-09	0.4767E-05	0.1975E-02	0.0000E+00	0.0000E+00	0.1711E-03	0.1711E-03	0.1711E-03
85 Chloromethane	0.5741E-03	0.1049E-02	0.6533E-04	0.4688E-01	0.0000E+00	0.1152E-03	0.1152E-03	0.1152E-03
86 Chloroethene	0.1157E-02	0.1421E-03	0.4812E-02	0.6562E-02	0.0000E+00	0.5749E-05	0.5749E-05	0.5749E-05

87	Chloroethane	0.3492E-09	0.2982E-05	0.1235E-02	0.0000E+00	0.0000E+00	0.3908E-06	0.3908E-06	0.3908E-06
88	3-chloropropene	0.3492E-09	0.2601E-05	0.1077E-02	0.0000E+00	0.0000E+00	0.5643E-08	0.5643E-08	0.5643E-08
89	Dichloromethane	1.586	0.2771	1.882	12.19	0.0000E+00	0.1015	0.1015	0.1015
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.2794E-08	0.1861E-04	0.7708E-02	0.0000E+00	0.0000E+00	0.7554E-06	0.7554E-06	0.7554E-06
92	1,2-dichloroethane	0.0000E+00	0.1670E-02	0.6917	0.0000E+00	0.0000E+00	0.1211E-02	0.1211E-02	0.1211E-02
93	1,2-dichloropropene	0.5960E-07	0.8886E-03	0.3681	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.1907E-05	0.2835E-01	11.75	0.0000E+00	0.0000E+00	0.5666E-02	0.5666E-02	0.5666E-02
95	1,2-dichloropropane	0.7451E-08	0.1893E-03	0.7841E-01	0.0000E+00	0.0000E+00	0.1297E-03	0.1297E-03	0.1297E-03
96	Trichloromethane	0.1490E-07	0.3387E-03	0.1403	0.0000E+00	0.0000E+00	0.7578E-04	0.7578E-04	0.7578E-04
97	1,2-dichloro-2-methylpropane	0.3725E-08	0.3612E-04	0.1496E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.8941E-07	0.1104E-02	0.4574	0.0000E+00	0.0000E+00	0.1160E-03	0.1160E-03	0.1160E-03
99	1,1,1-trichloroethane	0.0000E+00	0.1213E-01	5.024	0.0000E+00	0.0000E+00	0.7344E-03	0.7344E-03	0.7344E-03
100	1,1,2-trichloroethane	0.4075E-09	0.1868E-05	0.7738E-03	0.0000E+00	0.0000E+00	0.2229E-05	0.2229E-05	0.2229E-05
101	1,2-dichlorobenzene	0.2235E-07	0.2148E-03	0.8898E-01	0.0000E+00	0.0000E+00	0.6603E-04	0.6603E-04	0.6603E-04
102	3-chloromethylheptane	0.4657E-09	0.5707E-05	0.2364E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.2235E-07	0.1729E-03	0.7160E-01	0.0000E+00	0.0000E+00	0.5330E-05	0.5330E-05	0.5330E-05
104	Tetrachloroethene	0.1907E-05	0.1329E-01	5.505	0.0000E+00	0.0000E+00	0.4487E-03	0.4487E-03	0.4487E-03
105	Chlorodifluoromethane	0.4862E-01	0.2015E-01	0.2038E-01	0.6741	0.0000E+00	0.6054E-03	0.6054E-03	0.6054E-03
106	Dichlorofluoromethane	-0.9313E-09	0.1435E-04	0.5944E-02	0.6119E-10	0.0000E+00	0.2492E-05	0.2492E-05	0.2492E-05
107	1-chloro-1,2,2-trifluoroethane	0.1863E-08	0.4214E-04	0.1746E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.0000E+00	0.3010E-03	0.1247	0.1805E-08	0.0000E+00	0.6992E-06	0.6992E-06	0.6992E-06
109	1,2-dichloro-1,2-difluoroethen	0.1863E-08	0.2914E-04	0.1207E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.2131E-02	0.2553E-01	10.57	0.4636E-03	0.0000E+00	0.1901E-03	0.1901E-03	0.1901E-03
112	Bromotrifluoromethane	0.5144	0.6492E-01	0.8632	2.248	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	-0.2980E-07	0.8958E-03	0.3711	0.0000E+00	0.0000E+00	0.6722E-06	0.6722E-06	0.6722E-06
114	1,1,2-triCl-1,2,2-triFlethane	0.1526E-04	0.4479	185.5	0.0000E+00	0.0000E+00	0.8377E-03	0.8377E-03	0.8377E-03
115	1,1,2,2-tetraCl-1,2-diFlethane	0.2980E-07	0.6430E-03	0.2664	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	14.25	1.446	0.3567E-03	27.09	0.0000E+00	0.2059E-02	0.2059E-02	0.2059E-02
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.2817E-07	0.2846E-04	0.3245E-08	0.3181E-02	0.0000E+00	0.1243E-06	0.1243E-06	0.1243E-06
119	Ethane	0.6277E-06	0.1383E-03	0.9408E-07	0.1546E-01	0.0000E+00	0.2601E-06	0.2601E-06	0.2601E-06
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.4845E-03	0.2629E-03	0.2405E-02	0.2874E-01	0.0000E+00	0.1170E-05	0.1170E-05	0.1170E-05
123	Propane	0.4563E-07	0.2030E-04	0.8409E-02	0.7250E-07	0.0000E+00	0.2690E-07	0.2690E-07	0.2690E-07
124	1,3-butadiene	-0.7451E-08	0.9101E-04	0.3770E-01	0.0000E+00	0.0000E+00	0.1892E-05	0.1892E-05	0.1892E-05
125	1-butene	0.2384E-06	0.1081E-02	0.4479	0.0000E+00	0.0000E+00	0.4006E-05	0.4006E-05	0.4006E-05
126	2-methylpropane	-0.1490E-07	0.3709E-03	0.1536	0.0000E+00	0.0000E+00	0.2921E-06	0.2921E-06	0.2921E-06
127	Butane	0.1490E-07	0.9801E-04	0.4060E-01	0.0000E+00	0.0000E+00	0.9692E-07	0.9692E-07	0.9692E-07
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.2910E-10	0.4624E-06	0.1915E-03	0.0000E+00	0.0000E+00	0.1055E-08	0.1055E-08	0.1055E-08
131	2-methylbutane	0.1863E-08	0.5804E-04	0.2404E-01	0.0000E+00	0.0000E+00	0.3856E-07	0.3856E-07	0.3856E-07
132	Pentane	0.1788E-06	0.2271E-02	0.9407	0.0000E+00	0.0000E+00	0.1629E-05	0.1629E-05	0.1629E-05
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.1397E-08	0.1414E-04	0.5856E-02	0.0000E+00	0.0000E+00	0.4337E-07	0.4337E-07	0.4337E-07
135	Cyclohexane	0.0000E+00	0.1158E-01	4.798	0.0000E+00	0.0000E+00	0.7338E-04	0.7338E-04	0.7338E-04
136	Methylcyclopentane	0.1490E-06	0.9416E-03	0.3900	0.0000E+00	0.0000E+00	0.2391E-05	0.2391E-05	0.2391E-05
137	2,2-dimethylbutane	0.7451E-08	0.5707E-04	0.2364E-01	0.0000E+00	0.0000E+00	0.3407E-07	0.3407E-07	0.3407E-07
138	3-methylpentane	0.7451E-08	0.1019E-03	0.4220E-01	0.0000E+00	0.0000E+00	0.8235E-07	0.8235E-07	0.8235E-07

139	Hexane	0.1788E-06	0.1568E-02	0.6494	0.0000E+00	0.0000E+00	0.1571E-05	0.1571E-05	0.1571E-05
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.7276E-10	0.3757E-06	0.1556E-03	0.0000E+00	0.0000E+00	0.8503E-09	0.8503E-09	0.8503E-09
142	Methylcyclohexane	0.0000E+00	0.1067E-02	0.4419	0.0000E+00	0.0000E+00	0.2265E-05	0.2265E-05	0.2265E-05
143	2,2-dimethylpentane	0.2980E-07	0.7947E-03	0.3292	0.0000E+00	0.0000E+00	0.2285E-06	0.2285E-06	0.2285E-06
144	2,4-dimethylpentane	0.2328E-09	0.7393E-05	0.3063E-02	0.0000E+00	0.0000E+00	0.2280E-08	0.2280E-08	0.2280E-08
145	3-ethylpentane	0.4657E-09	0.8429E-05	0.3492E-02	0.0000E+00	0.0000E+00	0.3012E-08	0.3012E-08	0.3012E-08
146	Heptane	0.5960E-07	0.9103E-03	0.3771	0.0000E+00	0.0000E+00	0.3060E-06	0.3060E-06	0.3060E-06
147	1,1-dimethylcyclohexane	0.5960E-07	0.8886E-03	0.3681	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	-0.2910E-10	0.5081E-06	0.2105E-03	0.0000E+00	0.0000E+00	0.7354E-09	0.7354E-09	0.7354E-09
149	6-methyl-1-heptene	0.7276E-11	0.2649E-06	0.1097E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.0000E+00	0.1739E-02	0.7202	0.0000E+00	0.0000E+00	0.3308E-05	0.3308E-05	0.3308E-05
151	2,2,3-trimethylpentane	0.1863E-08	0.1158E-04	0.4798E-02	0.0000E+00	0.0000E+00	0.2759E-08	0.2759E-08	0.2759E-08
152	3,3-dimethylhexane	0.1863E-08	0.2794E-04	0.1157E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.4657E-09	0.1676E-04	0.6943E-02	0.0000E+00	0.0000E+00	0.4080E-08	0.4080E-08	0.4080E-08
154	Octane	0.7451E-08	0.2745E-03	0.1137	0.0000E+00	0.0000E+00	0.5050E-07	0.5050E-07	0.5050E-07
155	4-ethylheptane	0.5821E-10	0.1368E-05	0.5666E-03	0.0000E+00	0.0000E+00	0.2400E-09	0.2400E-09	0.2400E-09
156	Nonane	0.1490E-07	0.1166E-03	0.4828E-01	0.0000E+00	0.0000E+00	0.1782E-07	0.1782E-07	0.1782E-07
157	4-isopropenyl-1-Mecyclohexene	0.7451E-08	0.1221E-03	0.5058E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.3725E-08	0.5683E-04	0.2354E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.4470E-07	0.5732E-03	0.2374	0.0000E+00	0.0000E+00	0.1102E-06	0.1102E-06	0.1102E-06
160	Undecane	0.0000E+00	0.7562E-03	0.3132	0.0000E+00	0.0000E+00	0.3746E-06	0.3746E-06	0.3746E-06
161	Dodecane	0.2328E-08	0.1560E-04	0.6461E-02	0.0000E+00	0.0000E+00	0.6598E-06	0.6598E-06	0.6598E-06
162	2-propanone	0.1863E-08	0.1263E-04	0.5234E-02	0.0000E+00	0.0000E+00	0.2671E-03	0.2671E-03	0.2671E-03
163	3-buten-2-one	0.2328E-09	0.4104E-05	0.1700E-02	0.0000E+00	0.0000E+00	0.3588E-04	0.3588E-04	0.3588E-04
164	2-butanone	0.3815E-05	0.2736E-01	11.33	0.0000E+00	0.0000E+00	8.434	8.434	8.434
165	Cyclopentanone	0.4768E-06	0.1592E-01	6.594	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.2910E-10	0.9011E-06	0.3733E-03	0.0000E+00	0.0000E+00	0.7112E-05	0.7112E-05	0.7112E-05
167	Acetyl cyclopropane	0.5821E-10	0.1510E-05	0.6256E-03	0.0000E+00	0.0000E+00	0.9941E-05	0.9941E-05	0.9941E-05
168	2-pentanone	0.3725E-08	0.6743E-04	0.2793E-01	0.0000E+00	0.0000E+00	0.1775E-02	0.1775E-02	0.1775E-02

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	0.2980E-07	0.9729E-03	0.4030	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.1192E-06	0.3637E-02	1.507	0.0000E+00	0.0000E+00	0.2162E-01	0.2162E-01	0.2162E-01
171	Cyclohexanone	0.9537E-06	0.7117E-02	2.948	0.0000E+00	0.0000E+00	0.2630	0.2630	0.2630
172	3,3-dimethyl-2-butanone	0.1118E-07	0.1421E-03	0.5886E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.9537E-06	0.2213E-01	9.169	0.0000E+00	0.0000E+00	0.3267	0.3267	0.3267
174	2,4-dimethyl-3-pentanone	0.1164E-09	0.1722E-05	0.7133E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.3576E-06	0.2502E-02	1.037	0.0000E+00	0.0000E+00	0.2367E-02	0.2367E-02	0.2367E-02
176	5-methyl-2-hexanone	0.1863E-08	0.5467E-04	0.2265E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.9313E-09	0.1191E-04	0.4932E-02	0.0000E+00	0.0000E+00	0.3672E-03	0.3672E-03	0.3672E-03
178	2-octanone	0.2328E-09	0.5251E-05	0.2175E-02	0.0000E+00	0.0000E+00	0.3237E-04	0.3237E-04	0.3237E-04
179	5-methyl-3-heptanone	0.1863E-08	0.5876E-04	0.2434E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.3725E-08	0.1127E-03	0.4667E-01	0.0000E+00	0.0000E+00	0.1544E-03	0.1544E-03	0.1544E-03
181	Hydrogen sulfide	0.7451E-08	0.1404E-03	0.8423E-12	0.1570E-01	0.0000E+00	0.1443E-02	0.1443E-02	0.1443E-02
182	Carbonyl sulfide	0.5917E-03	0.1014E-02	0.7449E-04	0.4534E-01	0.0000E+00	0.1817E-04	0.1817E-04	0.1817E-04
183	Ethylene sulfide	-0.2910E-10	0.1027E-05	0.4253E-03	0.6840E-11	0.0000E+00	0.1532E-06	0.1532E-06	0.1532E-06
184	Dimethyl sulfide	0.2328E-09	0.6406E-05	0.2654E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.2021E-01	0.1468E-02	0.2993	0.2168E-01	0.0000E+00	0.6934E-04	0.6934E-04	0.6934E-04
186	Pentamethylene sulfide	0.2328E-09	0.2625E-05	0.1087E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.0000E+00	0.3666E-05	0.1519E-02	0.0000E+00	0.0000E+00	0.2515E-02	0.2515E-02	0.2515E-02

191	2-ethylhexanoic acid	0.9313E-09	0.1143E-04	0.4733E-02	0.0000E+00	0.0000E+00	0.1463E-03	0.1463E-03	0.1463E-03
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.4366E-10	0.3069E-06	0.1271E-03	0.2454E-11	0.0000E+00	0.1376E-04	0.1376E-04	0.1376E-04
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.2289E-01	0.4267E-02	0.9723E-01	0.4507	0.0000E+00	0.1427E-01	0.1427E-01	0.1427E-01
196	N,N-dimethylformamide	0.3725E-08	0.5707E-04	0.2364E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.5821E-10	0.7032E-06	0.2913E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	-0.2384E-06	0.1482E-03	0.6140E-01	0.0000E+00	0.0000E+00	0.3186	0.3186	0.3186
199	Hydrogen	0.4864E-04	0.5816E-01	0.0000E+00	6.502	0.0000E+00	0.4496E-04	0.4496E-04	0.4496E-04
200	Ammonia	0.1526E-04	0.9804E-03	0.4061	0.0000E+00	0.0000E+00	13.96	13.96	13.96
201	Carbon monoxide	0.1488E-03	0.1685	0.3464E-16	18.83	0.0000E+00	0.1338E-03	0.1338E-03	0.1338E-03
202	Disiloxane	0.5960E-07	0.6117E-03	0.2534	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.2384E-06	0.3757E-02	1.556	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.2980E-07	0.5009E-03	0.2075	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.1490E-07	0.2309E-03	0.9567E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.3576E-06	0.4648E-02	1.925	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.2910E-10	0.4672E-06	0.1935E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.2384E-06	0.2432E-02	1.008	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.4768E-06	0.7032E-02	2.913	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.1192E-06	0.4046E-02	1.676	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.5960E-07	0.1004E-02	0.4160	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	1.730	0.4023	0.4023	0.1358	0.1357	0.0000E+00	0.0000E+00
2	Ethanol	15.25	3.544	3.544	1.196	1.195	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.3760E-02	0.8761E-03	0.8761E-03	0.2959E-03	0.2954E-03	0.0000E+00	0.0000E+00
4	n-propanol	0.3073	0.7133E-01	0.7133E-01	0.2408E-01	0.2406E-01	0.0000E+00	0.0000E+00
5	2-propanol	2.798	0.6488	0.6488	0.2190	0.2188	0.0000E+00	0.0000E+00
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	3.355	0.7762	0.7762	0.2619	0.2618	0.0000E+00	0.0000E+00
8	2-butanol	0.9465E-02	0.2208E-02	0.2208E-02	0.7458E-03	0.7446E-03	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	1.093	0.2556	0.2556	0.8637E-01	0.8620E-01	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	0.2007E-01	0.4638E-02	0.4638E-02	0.1565E-02	0.1564E-02	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.1326	0.3075E-01	0.3075E-01	0.1038E-01	0.1037E-01	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	0.3440E-01	0.8060E-02	0.8060E-02	0.2724E-02	0.2717E-02	0.0000E+00	0.0000E+00
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.3805E-01	0.8787E-02	0.8787E-02	0.2964E-02	0.2964E-02	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.6045E-04	0.1397E-04	0.1397E-04	0.4712E-05	0.4711E-05	0.0000E+00	0.0000E+00
17	2-hexanol	0.1210E-02	0.2802E-03	0.2802E-03	0.9455E-04	0.9451E-04	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.4235E-04	0.1008E-04	0.1008E-04	0.3414E-05	0.3398E-05	0.0000E+00	0.0000E+00
19	2-ethylhexanol	0.1268E-01	0.2958E-02	0.2958E-02	0.9990E-03	0.9974E-03	0.0000E+00	0.0000E+00
20	Nonanol	0.1450E-02	0.3351E-03	0.3351E-03	0.1131E-03	0.1130E-03	0.0000E+00	0.0000E+00
21	n-decanol	0.1021E-04	0.2362E-05	0.2362E-05	0.7969E-06	0.7967E-06	0.0000E+00	0.0000E+00
22	Methanal	0.1053E-03	0.3079E-04	0.3079E-04	0.1074E-04	0.1030E-04	0.0000E+00	0.0000E+00
23	Ethanal	0.4159E-01	0.9607E-02	0.9607E-02	0.3241E-02	0.3240E-02	0.0000E+00	0.0000E+00
24	2-propenal	0.8761E-04	0.2023E-04	0.2023E-04	0.6824E-05	0.6824E-05	0.0000E+00	0.0000E+00
25	Propanal	0.9837E-01	0.2272E-01	0.2272E-01	0.7665E-02	0.7665E-02	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.2268E-04	0.5237E-05	0.5237E-05	0.1766E-05	0.1766E-05	0.0000E+00	0.0000E+00
27	Butanal	0.1688	0.3899E-01	0.3899E-01	0.1315E-01	0.1315E-01	0.0000E+00	0.0000E+00
28	Pentanal	0.9667E-02	0.2232E-02	0.2232E-02	0.7530E-03	0.7530E-03	0.0000E+00	0.0000E+00

29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1743E-02	0.4025E-03	0.4025E-03	0.1358E-03	0.1358E-03	0.0000E+00	0.0000E+00
31	Benzaldehyde	0.7247E-02	0.1675E-02	0.1675E-02	0.5651E-03	0.5650E-03	0.0000E+00	0.0000E+00
32	Heptanal	0.1028E-02	0.2374E-03	0.2374E-03	0.8007E-04	0.8007E-04	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4406E-02	0.1028E-02	0.1028E-02	0.3471E-03	0.3466E-03	0.0000E+00	0.0000E+00
35	Benzene	0.9877E-04	0.2280E-04	0.2280E-04	0.7692E-05	0.7692E-05	0.0000E+00	0.0000E+00
36	Methylbenzene	0.3637E-02	0.8396E-03	0.8396E-03	0.2832E-03	0.2832E-03	0.0000E+00	0.0000E+00
37	Vinylbenzene	0.2677E-03	0.6180E-04	0.6180E-04	0.2085E-04	0.2085E-04	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	0.2686E-02	0.6202E-03	0.6202E-03	0.2092E-03	0.2092E-03	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	0.9002E-02	0.2078E-02	0.2078E-02	0.7010E-03	0.7010E-03	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	0.2607E-02	0.6018E-03	0.6018E-03	0.2030E-03	0.2030E-03	0.0000E+00	0.0000E+00
41	Ethylbenzene	0.3770E-03	0.8704E-04	0.8704E-04	0.2936E-04	0.2936E-04	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.1084E-05	0.2502E-06	0.2502E-06	0.8440E-07	0.8440E-07	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	0.1625E-03	0.3752E-04	0.3752E-04	0.1266E-04	0.1266E-04	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.6108E-05	0.1410E-05	0.1410E-05	0.4757E-06	0.4757E-06	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	0.3459E-04	0.7987E-05	0.7987E-05	0.2694E-05	0.2694E-05	0.0000E+00	0.0000E+00
47	Isopropylbenzene	0.1308E-04	0.3021E-05	0.3021E-05	0.1019E-05	0.1019E-05	0.0000E+00	0.0000E+00
48	Propylbenzene	0.4574E-03	0.1056E-03	0.1056E-03	0.3562E-04	0.3562E-04	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.2887E-05	0.6665E-06	0.6665E-06	0.2248E-06	0.2248E-06	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.3131E-04	0.7230E-05	0.7230E-05	0.2439E-05	0.2439E-05	0.0000E+00	0.0000E+00
52	Methyl formate	0.1499E-04	0.3461E-05	0.3461E-05	0.1167E-05	0.1167E-05	0.0000E+00	0.0000E+00
53	Ethyl formate	0.8113E-03	0.1874E-03	0.1874E-03	0.6321E-04	0.6321E-04	0.0000E+00	0.0000E+00
54	Methyl acetate	0.4688E-01	0.1083E-01	0.1083E-01	0.3654E-02	0.3654E-02	0.0000E+00	0.0000E+00
55	Ethyl acetate	0.5103E-01	0.1179E-01	0.1179E-01	0.3976E-02	0.3976E-02	0.0000E+00	0.0000E+00
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.3486E-04	0.8049E-05	0.8049E-05	0.2715E-05	0.2715E-05	0.0000E+00	0.0000E+00
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	0.4144E-01	0.9568E-02	0.9568E-02	0.3228E-02	0.3228E-02	0.0000E+00	0.0000E+00
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.5888E-03	0.1360E-03	0.1360E-03	0.4587E-04	0.4586E-04	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	0.5523E-02	0.1287E-02	0.1287E-02	0.4345E-03	0.4339E-03	0.0000E+00	0.0000E+00
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	0.4602	0.1067	0.1067	0.3600E-01	0.3598E-01	0.0000E+00	0.0000E+00
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.7364E-05	0.1700E-05	0.1700E-05	0.5735E-06	0.5735E-06	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	0.3154E-02	0.7282E-03	0.7282E-03	0.2456E-03	0.2456E-03	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.3170E-04	0.7319E-05	0.7319E-05	0.2469E-05	0.2469E-05	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.2175E-03	0.5033E-04	0.5033E-04	0.1698E-04	0.1698E-04	0.0000E+00	0.0000E+00
77	1,4-dioxane	0.1051	0.2445E-01	0.2445E-01	0.8254E-02	0.8245E-02	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	0.5556E-02	0.1625E-02	0.1625E-02	0.5668E-03	0.5437E-03	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	1.180	0.2754	0.2754	0.9303E-01	0.9288E-01	0.0000E+00	0.0000E+00
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

81	1,1,2,2-tetraMe-1,2-epoxyEt	0.2744E-05	0.6336E-06	0.6336E-06	0.2137E-06	0.2137E-06	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	0.2761	0.6463E-01	0.6463E-01	0.2184E-01	0.2179E-01	0.0000E+00	0.0000E+00
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.1711E-03	0.3959E-04	0.3959E-04	0.1336E-04	0.1335E-04	0.0000E+00	0.0000E+00
85	Chloromethane	0.1152E-03	0.2659E-04	0.2659E-04	0.8968E-05	0.8968E-05	0.0000E+00	0.0000E+00
86	Chloroethene	0.5749E-05	0.1327E-05	0.1327E-05	0.4477E-06	0.4477E-06	0.0000E+00	0.0000E+00
87	Chloroethane	0.3908E-06	0.9023E-07	0.9023E-07	0.3044E-07	0.3044E-07	0.0000E+00	0.0000E+00
88	3-chloropropene	0.5643E-08	0.1303E-08	0.1303E-08	0.4395E-09	0.4395E-09	0.0000E+00	0.0000E+00
89	Dichloromethane	0.1015	0.2342E-01	0.2342E-01	0.7902E-02	0.7902E-02	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.7554E-06	0.1744E-06	0.1744E-06	0.5883E-07	0.5883E-07	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	0.1211E-02	0.2797E-03	0.2797E-03	0.9434E-04	0.9434E-04	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.5666E-02	0.1308E-02	0.1308E-02	0.4413E-03	0.4413E-03	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	0.1297E-03	0.2994E-04	0.2994E-04	0.1010E-04	0.1010E-04	0.0000E+00	0.0000E+00
96	Trichloromethane	0.7578E-04	0.1750E-04	0.1750E-04	0.5901E-05	0.5901E-05	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.1160E-03	0.2679E-04	0.2679E-04	0.9036E-05	0.9036E-05	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	0.7344E-03	0.1696E-03	0.1696E-03	0.5719E-04	0.5719E-04	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.2229E-05	0.5147E-06	0.5147E-06	0.1736E-06	0.1736E-06	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	0.6603E-04	0.1524E-04	0.1524E-04	0.5142E-05	0.5142E-05	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.5330E-05	0.1230E-05	0.1230E-05	0.4151E-06	0.4151E-06	0.0000E+00	0.0000E+00
104	Tetrachloroethene	0.4487E-03	0.1036E-03	0.1036E-03	0.3495E-04	0.3495E-04	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	0.6054E-03	0.1398E-03	0.1398E-03	0.4714E-04	0.4714E-04	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.2492E-05	0.5754E-06	0.5754E-06	0.1941E-06	0.1941E-06	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.6992E-06	0.1614E-06	0.1614E-06	0.5445E-07	0.5445E-07	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.1901E-03	0.4390E-04	0.4390E-04	0.1481E-04	0.1481E-04	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.6722E-06	0.1552E-06	0.1552E-06	0.5235E-07	0.5235E-07	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	0.8377E-03	0.1934E-03	0.1934E-03	0.6524E-04	0.6524E-04	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.2059E-02	0.4753E-03	0.4753E-03	0.1603E-03	0.1603E-03	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1243E-06	0.2871E-07	0.2871E-07	0.9684E-08	0.9684E-08	0.0000E+00	0.0000E+00
119	Ethane	0.2601E-06	0.6005E-07	0.6005E-07	0.2026E-07	0.2026E-07	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1170E-05	0.2702E-06	0.2702E-06	0.9114E-07	0.9114E-07	0.0000E+00	0.0000E+00
123	Propane	0.2690E-07	0.6209E-08	0.6209E-08	0.2095E-08	0.2095E-08	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.1892E-05	0.4367E-06	0.4367E-06	0.1473E-06	0.1473E-06	0.0000E+00	0.0000E+00
125	1-butene	0.4006E-05	0.9248E-06	0.9248E-06	0.3119E-06	0.3119E-06	0.0000E+00	0.0000E+00
126	2-methylpropane	0.2921E-06	0.6744E-07	0.6744E-07	0.2275E-07	0.2275E-07	0.0000E+00	0.0000E+00
127	Butane	0.9692E-07	0.2238E-07	0.2238E-07	0.7548E-08	0.7548E-08	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.1055E-08	0.2435E-09	0.2435E-09	0.8213E-10	0.8213E-10	0.0000E+00	0.0000E+00
131	2-methylbutane	0.3856E-07	0.8902E-08	0.8902E-08	0.3003E-08	0.3003E-08	0.0000E+00	0.0000E+00
132	Pentane	0.1629E-05	0.3760E-06	0.3760E-06	0.1268E-06	0.1268E-06	0.0000E+00	0.0000E+00

133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.4337E-07	0.1001E-07	0.1001E-07	0.3378E-08	0.3378E-08	0.0000E+00	0.0000E+00
135	Cyclohexane	0.7338E-04	0.1694E-04	0.1694E-04	0.5714E-05	0.5714E-05	0.0000E+00	0.0000E+00
136	Methylcyclopentane	0.2391E-05	0.5520E-06	0.5520E-06	0.1862E-06	0.1862E-06	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.3407E-07	0.7866E-08	0.7866E-08	0.2653E-08	0.2653E-08	0.0000E+00	0.0000E+00
138	3-methylpentane	0.8235E-07	0.1901E-07	0.1901E-07	0.6413E-08	0.6413E-08	0.0000E+00	0.0000E+00
139	Hexane	0.1571E-05	0.3626E-06	0.3626E-06	0.1223E-06	0.1223E-06	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.8503E-09	0.1963E-09	0.1963E-09	0.6622E-10	0.6622E-10	0.0000E+00	0.0000E+00
142	Methylcyclohexane	0.2265E-05	0.5229E-06	0.5229E-06	0.1764E-06	0.1764E-06	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	0.2285E-06	0.5276E-07	0.5276E-07	0.1780E-07	0.1780E-07	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.2280E-08	0.5263E-09	0.5263E-09	0.1775E-09	0.1775E-09	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.3012E-08	0.6953E-09	0.6953E-09	0.2345E-09	0.2345E-09	0.0000E+00	0.0000E+00
146	Heptane	0.3060E-06	0.7064E-07	0.7064E-07	0.2383E-07	0.2383E-07	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.7354E-09	0.1698E-09	0.1698E-09	0.5727E-10	0.5727E-10	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.3308E-05	0.7638E-06	0.7638E-06	0.2576E-06	0.2576E-06	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.2759E-08	0.6371E-09	0.6371E-09	0.2149E-09	0.2149E-09	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.4080E-08	0.9419E-09	0.9419E-09	0.3177E-09	0.3177E-09	0.0000E+00	0.0000E+00
154	Octane	0.5050E-07	0.1166E-07	0.1166E-07	0.3933E-08	0.3933E-08	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.2400E-09	0.5542E-10	0.5542E-10	0.1869E-10	0.1869E-10	0.0000E+00	0.0000E+00
156	Nonane	0.1782E-07	0.4115E-08	0.4115E-08	0.1388E-08	0.1388E-08	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.1102E-06	0.2544E-07	0.2544E-07	0.8580E-08	0.8580E-08	0.0000E+00	0.0000E+00
160	Undecane	0.3746E-06	0.8649E-07	0.8649E-07	0.2917E-07	0.2917E-07	0.0000E+00	0.0000E+00
161	Dodecane	0.6598E-06	0.1523E-06	0.1523E-06	0.5139E-07	0.5139E-07	0.0000E+00	0.0000E+00
162	2-propanone	0.2671E-03	0.6174E-04	0.6174E-04	0.2083E-04	0.2082E-04	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.3588E-04	0.8288E-05	0.8288E-05	0.2796E-05	0.2795E-05	0.0000E+00	0.0000E+00
164	2-butanone	8.434	1.982	1.982	0.6699	0.6681	0.0000E+00	0.0000E+00
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.7112E-05	0.1643E-05	0.1643E-05	0.5541E-06	0.5541E-06	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.9941E-05	0.2296E-05	0.2296E-05	0.7745E-06	0.7745E-06	0.0000E+00	0.0000E+00
168	2-pentanone	0.1775E-02	0.4105E-03	0.4105E-03	0.1385E-03	0.1385E-03	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.2162E-01	0.4994E-02	0.4994E-02	0.1685E-02	0.1685E-02	0.0000E+00	0.0000E+00
171	Cyclohexanone	0.2630	0.6084E-01	0.6084E-01	0.2053E-01	0.2052E-01	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.3267	0.7549E-01	0.7549E-01	0.2547E-01	0.2546E-01	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.2367E-02	0.5466E-03	0.5466E-03	0.1844E-03	0.1844E-03	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.3672E-03	0.8493E-04	0.8493E-04	0.2865E-04	0.2865E-04	0.0000E+00	0.0000E+00
178	2-octanone	0.3237E-04	0.7476E-05	0.7476E-05	0.2522E-05	0.2522E-05	0.0000E+00	0.0000E+00
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.1544E-03	0.3564E-04	0.3564E-04	0.1202E-04	0.1202E-04	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	0.1443E-02	0.3333E-03	0.3333E-03	0.1124E-03	0.1124E-03	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	0.1817E-04	0.4195E-05	0.4195E-05	0.1415E-05	0.1415E-05	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.1532E-06	0.3536E-07	0.3536E-07	0.1193E-07	0.1193E-07	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

185	Carbon disulfide	0.6934E-04	0.1601E-04	0.1601E-04	0.5400E-05	0.5400E-05	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.2515E-02	0.6040E-03	0.6040E-03	0.2048E-03	0.2035E-03	0.0000E+00	0.0000E+00
191	2-ethylhexanoic acid	0.1463E-03	0.3381E-04	0.3381E-04	0.1141E-04	0.1140E-04	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.1376E-04	0.3185E-05	0.3185E-05	0.1075E-05	0.1074E-05	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.1427E-01	0.3295E-02	0.3295E-02	0.1112E-02	0.1112E-02	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	0.3186	0.8365E-01	0.8365E-01	0.2871E-01	0.2810E-01	0.0000E+00	0.0000E+00
199	Hydrogen	0.4496E-04	0.1038E-04	0.1038E-04	0.3501E-05	0.3501E-05	0.0000E+00	0.0000E+00
200	Ammonia	13.96	9.174	9.174	3.094	3.094	0.0000E+00	0.0000E+00
201	Carbon monoxide	0.1338E-03	0.3089E-04	0.3089E-04	0.1042E-04	0.1042E-04	0.0000E+00	0.0000E+00
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	278.5	28.65	131.7	3167.	0.0000E+00	3669.	3669.	3669.
2	Ethanol	2830.	252.0	0.3627E+05	0.1838E+05	0.0000E+00	0.2800E+05	0.2800E+05	0.2800E+05
3	2-propen-1-ol	0.4822	0.5012E-01	20.76	0.0000E+00	0.0000E+00	8.056	8.056	8.056
4	n-propanol	64.54	6.689	2771.	0.0000E+00	0.0000E+00	656.4	656.4	656.4
5	2-propanol	713.5	73.87	0.3060E+05	0.0000E+00	0.0000E+00	5970.	5970.	5970.
6	1,2-ethanediol	4.090	0.4188	173.5	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	1871.	192.9	0.7992E+05	0.0000E+00	0.0000E+00	7129.	7129.	7129.
8	2-butanol	1.059	0.1101	45.62	0.0000E+00	0.0000E+00	20.29	20.29	20.29
9	2-methyl-1-propanol	99.93	10.40	4310.	0.0000E+00	0.0000E+00	2346.	2346.	2346.
10	2-methyl-2-propanol	23.10	2.374	983.5	0.0000E+00	0.0000E+00	42.52	42.52	42.52
11	1,2-propanediol	0.1876	0.1921E-01	7.958	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	37.09	3.837	1590.	0.0000E+00	0.0000E+00	282.9	282.9	282.9
13	3-methyl-1-butanol	2.722	0.2836	117.5	0.0000E+00	0.0000E+00	73.86	73.86	73.86
14	Phenol	331.1	33.90	0.1404E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	487.6	49.95	0.2069E+05	0.0000E+00	0.0000E+00	80.34	80.34	80.34
16	2-ethylbutanol	0.8095E-01	0.8317E-02	3.445	0.0000E+00	0.0000E+00	0.1280	0.1280	0.1280
17	2-hexanol	0.5167	0.5334E-01	22.09	0.0000E+00	0.0000E+00	2.575	2.575	2.575
18	1,3-dichloro-2-propanol	0.1619E-02	0.1691E-03	0.7005E-01	0.0000E+00	0.0000E+00	0.9118E-01	0.9118E-01	0.9118E-01
19	2-ethylhexanol	1.418	0.1475	61.11	0.0000E+00	0.0000E+00	27.18	27.18	27.18
20	Nonanol	2.025	0.2081	86.19	0.0000E+00	0.0000E+00	3.071	3.071	3.071
21	n-decanol	0.6197E-02	0.6386E-03	0.2645	0.0000E+00	0.0000E+00	0.2169E-01	0.2169E-01	0.2169E-01
22	Methanal	0.5788E-03	0.6064E-04	0.1507E-09	0.6778E-02	0.0000E+00	0.2273	0.2273	0.2273

23	Ethanal	95.00	8.638	148.9	925.4	0.0000E+00	77.95	77.95	77.95
24	2-propenal	2.320	0.2359	97.66	0.1976E-01	0.0000E+00	0.1837	0.1837	0.1837
25	Propanal	214.6	16.21	6111.	162.7	0.0000E+00	153.7	153.7	153.7
26	2-methylpropenal	1.365	0.1397	57.89	0.0000E+00	0.0000E+00	0.4787E-01	0.4787E-01	0.4787E-01
27	Butanal	527.2	54.06	0.2240E+05	0.0000E+00	0.0000E+00	356.8	356.8	356.8
28	Pentanal	49.41	5.064	2098.	0.0000E+00	0.0000E+00	20.42	20.42	20.42
29	2,4-hexadien-1-al	0.5510	0.5641E-01	23.37	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	20.30	2.079	861.3	0.0000E+00	0.0000E+00	3.681	3.681	3.681
31	Benzaldehyde	7.273	0.7480	309.8	0.0000E+00	0.0000E+00	15.36	15.36	15.36
32	Heptanal	9.989	1.023	423.9	0.0000E+00	0.0000E+00	2.171	2.171	2.171
33	4-methylbenzaldehyde	0.1702	0.1743E-01	7.221	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4928	0.5126E-01	21.23	0.0000E+00	0.0000E+00	9.444	9.444	9.444
35	Benzene	10.40	1.065	441.2	0.0000E+00	0.0000E+00	0.2085	0.2085	0.2085
36	Methylbenzene	525.3	53.79	0.2228E+05	0.0000E+00	0.0000E+00	7.675	7.675	7.675
37	Vinylbenzene	16.02	1.640	679.6	0.0000E+00	0.0000E+00	0.5649	0.5649	0.5649
38	1,2-dimethylbenzene	255.5	26.16	0.1084E+05	0.0000E+00	0.0000E+00	5.669	5.669	5.669
39	1,3-dimethylbenzene	1363.	139.6	0.5781E+05	0.0000E+00	0.0000E+00	19.00	19.00	19.00
40	1,4-dimethylbenzene	359.3	36.79	0.1524E+05	0.0000E+00	0.0000E+00	5.501	5.501	5.501
41	Ethylbenzene	68.91	7.056	2923.	0.0000E+00	0.0000E+00	0.7956	0.7956	0.7956
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.6974E-01	0.7141E-02	2.958	0.0000E+00	0.0000E+00	0.2287E-02	0.2287E-02	0.2287E-02
44	1,2,4-trimethylbenzene	20.81	2.131	882.7	0.0000E+00	0.0000E+00	0.3430	0.3430	0.3430
45	1,3,5-trimethylbenzene	1.101	0.1127	46.68	0.0000E+00	0.0000E+00	0.1289E-01	0.1289E-01	0.1289E-01
46	1-ethyl-2-methylbenzene	2.236	0.2289	94.83	0.0000E+00	0.0000E+00	0.7301E-01	0.7301E-01	0.7301E-01
47	Isopropylbenzene	4.310	0.4413	182.8	0.0000E+00	0.0000E+00	0.2761E-01	0.2761E-01	0.2761E-01
48	Propylbenzene	106.1	10.87	4501.	0.0000E+00	0.0000E+00	0.9653	0.9653	0.9653
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.8630	0.8836E-01	36.60	0.0000E+00	0.0000E+00	0.6093E-02	0.6093E-02	0.6093E-02
51	1-methyl-4-propylbenzene	0.1745	0.1788E-01	7.408	0.0000E+00	0.0000E+00	0.6613E-01	0.6613E-01	0.6613E-01
52	Methyl formate	3.877	0.2480	72.82	8.071	0.0000E+00	0.1982E-01	0.1982E-01	0.1982E-01
53	Ethyl formate	2.172	0.2228	92.28	0.0000E+00	0.0000E+00	1.715	1.715	1.715
54	Methyl acetate	73.14	7.511	3111.	0.0000E+00	0.0000E+00	99.24	99.24	99.24
55	Ethyl acetate	130.8	13.41	5557.	0.0000E+00	0.0000E+00	107.9	107.9	107.9
56	Allyl acetate	1.896	0.1941	80.42	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57	Methyl methacrylate	48.89	5.006	2074.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	2.603	0.2665	110.4	0.0000E+00	0.0000E+00	0.7358E-01	0.7358E-01	0.7358E-01
59	n-butyl formate	0.5907	0.6048E-01	25.05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	225.8	23.12	9579.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	13.70	1.403	581.1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	353.3	36.20	0.1500E+05	0.0000E+00	0.0000E+00	87.50	87.50	87.50
63	Isobutyl acetate	95.30	9.758	4042.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	2.426	0.2487	103.0	0.0000E+00	0.0000E+00	1.244	1.244	1.244
65	2-Methoxy ethyl acetate	0.7081	0.7360E-01	30.49	0.0000E+00	0.0000E+00	11.83	11.83	11.83
66	Isoamyl acetate	17.82	1.825	755.8	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	29.93	3.065	1269.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	136.2	14.09	5836.	0.0000E+00	0.0000E+00	981.2	981.2	981.2
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.1415E-01	0.1448E-02	0.6000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.9017	0.9233E-01	38.25	0.7372E-04	0.0000E+00	0.1554E-01	0.1554E-01	0.1554E-01
72	1,4-epoxybutane	36.21	3.709	1536.	0.0000E+00	0.0000E+00	6.659	6.659	6.659
73	3-methoxy-1-propene	0.2402E-01	0.2460E-02	1.019	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	39.01	3.995	1655.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

75	2-methylfuran	1.616	0.1655	68.54	0.0000E+00	0.0000E+00	0.6690E-01	0.6690E-01	0.6690E-01
76	2,3-dihydropyran	0.1035	0.1068E-01	4.424	0.0000E+00	0.0000E+00	0.4625	0.4625	0.4625
77	1,4-dioxane	16.49	1.712	709.1	0.0000E+00	0.0000E+00	224.9	224.9	224.9
78	1,3,5-Trioxane	0.3055E-01	0.3199E-02	1.325	0.0000E+00	0.0000E+00	12.00	12.00	12.00
79	2-ethoxyethanol	127.2	13.23	5481.	0.0000E+00	0.0000E+00	2530.	2530.	2530.
80	Epichlorohydrin	1.876	0.1921	79.58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.6000	0.6143E-01	25.45	0.0000E+00	0.0000E+00	0.5792E-02	0.5792E-02	0.5792E-02
82	4-ethylmorpholine	22.97	2.393	991.3	0.0000E+00	0.0000E+00	592.6	592.6	592.6
83	1-propoxybutane	22.44	2.297	951.6	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.9826E-01	0.1013E-01	4.195	0.0000E+00	0.0000E+00	0.3636	0.3636	0.3636
85	Chloromethane	21.62	1.768	3.039	78.73	0.0000E+00	0.1942	0.1942	0.1942
86	Chloroethene	2.935	0.1580	18.62	5.687	0.0000E+00	0.6395E-02	0.6395E-02	0.6395E-02
87	Chloroethane	0.6146E-01	0.6293E-02	2.607	0.0000E+00	0.0000E+00	0.8248E-03	0.8248E-03	0.8248E-03
88	3-chloropropene	0.5361E-01	0.5489E-02	2.274	0.0000E+00	0.0000E+00	0.1191E-04	0.1191E-04	0.1191E-04
89	Dichloromethane	5721.	340.6	0.1533E+05	0.1357E+05	0.0000E+00	124.7	124.7	124.7
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.3835	0.3927E-01	16.27	0.0000E+00	0.0000E+00	0.1594E-02	0.1594E-02	0.1594E-02
92	1,2-dichloroethane	34.42	3.525	1460.	0.0000E+00	0.0000E+00	2.557	2.557	2.557
93	1,2-dichloropropene	18.32	1.875	776.8	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	584.4	59.84	0.2479E+05	0.0000E+00	0.0000E+00	11.96	11.96	11.96
95	1,2-dichloropropane	3.901	0.3995	165.5	0.0000E+00	0.0000E+00	0.2737	0.2737	0.2737
96	Trichloromethane	6.981	0.7149	296.1	0.0000E+00	0.0000E+00	0.1599	0.1599	0.1599
97	1,2-dichloro-2-methylpropane	0.7445	0.7623E-01	31.58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	22.76	2.330	965.2	0.0000E+00	0.0000E+00	0.2449	0.2449	0.2449
99	1,1,1-trichloroethane	250.0	25.60	0.1060E+05	0.0000E+00	0.0000E+00	1.550	1.550	1.550
100	1,1,2-trichloroethane	0.3850E-01	0.3944E-02	1.634	0.0000E+00	0.0000E+00	0.4706E-02	0.4706E-02	0.4706E-02
101	1,2-dichlorobenzene	4.427	0.4533	187.8	0.0000E+00	0.0000E+00	0.1394	0.1394	0.1394
102	3-chloromethylheptane	0.1176	0.1204E-01	4.990	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	3.563	0.3648	151.1	0.0000E+00	0.0000E+00	0.1125E-01	0.1125E-01	0.1125E-01
104	Tetrachloroethene	273.9	28.04	0.1162E+05	0.0000E+00	0.0000E+00	0.9470	0.9470	0.9470
105	Chlorodifluoromethane	415.6	28.66	266.7	939.6	0.0000E+00	0.8611	0.8611	0.8611
106	Dichlorofluoromethane	0.2958	0.3028E-01	12.54	0.1689E-07	0.0000E+00	0.5259E-02	0.5259E-02	0.5259E-02
107	1-chloro-1,2,2-trifluoroethane	0.8686	0.8894E-01	36.84	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	6.204	0.6353	263.2	0.3466E-06	0.0000E+00	0.1476E-02	0.1476E-02	0.1476E-02
109	1,2-dichloro-1,2-difluoroethen	0.6006	0.6149E-01	25.47	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	526.2	53.87	0.2231E+05	0.3260E-01	0.0000E+00	0.4012	0.4012	0.4012
112	Bromotrifluoromethane	1341.	72.40	4449.	2206.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	18.46	1.891	783.2	0.0000E+00	0.0000E+00	0.1419E-02	0.1419E-02	0.1419E-02
114	1,1,2-triCl-1,2,2-triFlethane	9232.	945.3	0.3916E+06	0.0000E+00	0.0000E+00	1.768	1.768	1.768
115	1,1,2,2-tetraCl-1,2-diFlethane	13.25	1.357	562.1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.2989E+05	1542.	0.6997	0.6100E+05	0.0000E+00	2.196	2.196	2.196
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.5865	0.5616E-01	0.1623E-01	6.274	0.0000E+00	0.2454E-03	0.2454E-03	0.2454E-03
119	Ethane	2.851	0.2677	0.8898	29.69	0.0000E+00	0.5035E-03	0.5035E-03	0.5035E-03
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	5.422	0.3648	30.59	32.52	0.0000E+00	0.1623E-02	0.1623E-02	0.1623E-02
123	Propane	0.4184	0.4284E-01	17.75	0.1298E-04	0.0000E+00	0.5676E-04	0.5676E-04	0.5676E-04
124	1,3-butadiene	1.876	0.1921	79.56	0.0000E+00	0.0000E+00	0.3992E-02	0.3992E-02	0.3992E-02
125	1-butene	22.29	2.282	945.2	0.0000E+00	0.0000E+00	0.8453E-02	0.8453E-02	0.8453E-02
126	2-methylpropane	7.644	0.7827	324.2	0.0000E+00	0.0000E+00	0.6164E-03	0.6164E-03	0.6164E-03

127	Butane	2.020	0.2068	85.68	0.0000E+00	0.0000E+00	0.2045E-03	0.2045E-03	0.2045E-03
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.9530E-02	0.9758E-03	0.4042	0.0000E+00	0.0000E+00	0.2225E-05	0.2225E-05	0.2225E-05
131	2-methylbutane	1.196	0.1225	50.74	0.0000E+00	0.0000E+00	0.8137E-04	0.8137E-04	0.8137E-04
132	Pentane	46.81	4.792	1985.	0.0000E+00	0.0000E+00	0.3437E-02	0.3437E-02	0.3437E-02
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.2914	0.2983E-01	12.36	0.0000E+00	0.0000E+00	0.9153E-04	0.9153E-04	0.9153E-04
135	Cyclohexane	238.7	24.44	0.1013E+05	0.0000E+00	0.0000E+00	0.1549	0.1549	0.1549
136	Methylcyclopentane	19.41	1.987	823.1	0.0000E+00	0.0000E+00	0.5046E-02	0.5046E-02	0.5046E-02
137	2,2-dimethylbutane	1.176	0.1204	49.89	0.0000E+00	0.0000E+00	0.7190E-04	0.7190E-04	0.7190E-04
138	3-methylpentane	2.100	0.2150	89.05	0.0000E+00	0.0000E+00	0.1738E-03	0.1738E-03	0.1738E-03
139	Hexane	32.31	3.308	1371.	0.0000E+00	0.0000E+00	0.3314E-02	0.3314E-02	0.3314E-02
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.7743E-02	0.7928E-03	0.3284	0.0000E+00	0.0000E+00	0.1794E-05	0.1794E-05	0.1794E-05
142	Methylcyclohexane	21.99	2.251	932.6	0.0000E+00	0.0000E+00	0.4780E-02	0.4780E-02	0.4780E-02
143	2,2-dimethylpentane	16.38	1.677	694.7	0.0000E+00	0.0000E+00	0.4823E-03	0.4823E-03	0.4823E-03
144	2,4-dimethylpentane	0.1524	0.1560E-01	6.463	0.0000E+00	0.0000E+00	0.4811E-05	0.4811E-05	0.4811E-05
145	3-ethylpentane	0.1737	0.1779E-01	7.368	0.0000E+00	0.0000E+00	0.6356E-05	0.6356E-05	0.6356E-05
146	Heptane	18.76	1.921	795.8	0.0000E+00	0.0000E+00	0.6457E-03	0.6457E-03	0.6457E-03
147	1,1-dimethylcyclohexane	18.32	1.875	776.8	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1047E-01	0.1072E-02	0.4442	0.0000E+00	0.0000E+00	0.1552E-05	0.1552E-05	0.1552E-05
149	6-methyl-1-heptene	0.5460E-02	0.5590E-03	0.2316	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	35.84	3.669	1520.	0.0000E+00	0.0000E+00	0.6981E-02	0.6981E-02	0.6981E-02
151	2,2,3-trimethylpentane	0.2388	0.2445E-01	10.13	0.0000E+00	0.0000E+00	0.5823E-05	0.5823E-05	0.5823E-05
152	3,3-dimethylhexane	0.5758	0.5895E-01	24.42	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.3455	0.3537E-01	14.65	0.0000E+00	0.0000E+00	0.8609E-05	0.8609E-05	0.8609E-05
154	Octane	5.658	0.5794	240.0	0.0000E+00	0.0000E+00	0.1066E-03	0.1066E-03	0.1066E-03
155	4-ethylheptane	0.2819E-01	0.2887E-02	1.196	0.0000E+00	0.0000E+00	0.5066E-06	0.5066E-06	0.5066E-06
156	Nonane	2.402	0.2460	101.9	0.0000E+00	0.0000E+00	0.3761E-04	0.3761E-04	0.3761E-04
157	4-isopropenyl-1-Mecyclohexene	2.517	0.2577	106.7	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	1.171	0.1199	49.68	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	11.81	1.210	501.1	0.0000E+00	0.0000E+00	0.2325E-03	0.2325E-03	0.2325E-03
160	Undecane	15.59	1.596	661.1	0.0000E+00	0.0000E+00	0.7906E-03	0.7906E-03	0.7906E-03
161	Dodecane	0.3215	0.3292E-01	13.64	0.0000E+00	0.0000E+00	0.1392E-02	0.1392E-02	0.1392E-02
162	2-propanone	0.2604	0.2678E-01	11.09	0.0000E+00	0.0000E+00	0.5662	0.5662	0.5662
163	3-buten-2-one	0.8459E-01	0.8680E-02	3.596	0.0000E+00	0.0000E+00	0.7588E-01	0.7588E-01	0.7588E-01
164	2-butanone	563.9	58.79	0.2435E+05	0.0000E+00	0.0000E+00	0.1812E+05	0.1812E+05	0.1812E+05
165	Cyclopentanone	328.1	33.59	0.1392E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1857E-01	0.1905E-02	0.7892	0.0000E+00	0.0000E+00	0.1504E-01	0.1504E-01	0.1504E-01
167	Acetyl cyclopropane	0.3113E-01	0.3192E-02	1.322	0.0000E+00	0.0000E+00	0.2101E-01	0.2101E-01	0.2101E-01
168	2-pentanone	1.390	0.1431	59.26	0.0000E+00	0.0000E+00	3.767	3.767	3.767

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	20.05	2.053	850.5	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	74.96	7.686	3184.	0.0000E+00	0.0000E+00	45.70	45.70	45.70
171	Cyclohexanone	146.7	15.12	6264.	0.0000E+00	0.0000E+00	558.8	558.8	558.8
172	3,3-dimethyl-2-butanone	2.929	0.2998	124.2	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	456.2	46.87	0.1941E+05	0.0000E+00	0.0000E+00	691.8	691.8	691.8
174	2,4-dimethyl-3-pentanone	0.3549E-01	0.3634E-02	1.505	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	51.58	5.282	2188.	0.0000E+00	0.0000E+00	4.997	4.997	4.997
176	5-methyl-2-hexanone	1.127	0.1154	47.79	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.2454	0.2528E-01	10.47	0.0000E+00	0.0000E+00	0.7796	0.7796	0.7796
178	2-octanone	0.1082	0.1110E-01	4.598	0.0000E+00	0.0000E+00	0.6841E-01	0.6841E-01	0.6841E-01

179	5-methyl-3-heptanone	1.211	0.1240	51.37	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	2.322	0.2379	98.54	0.0000E+00	0.0000E+00	0.3259	0.3259	0.3259
181	Hydrogen sulfide	2.894	0.2853	0.3091E-03	31.89	0.0000E+00	2.931	2.931	2.931
182	Carbonyl sulfide	20.91	1.703	3.170	75.82	0.0000E+00	0.3052E-01	0.3052E-01	0.3052E-01
183	Ethylene sulfide	0.2116E-01	0.2167E-02	0.8975	0.5173E-08	0.0000E+00	0.3232E-03	0.3232E-03	0.3232E-03
184	Dimethyl sulfide	0.1320	0.1352E-01	5.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	30.39	1.982	699.6	8.520	0.0000E+00	0.9358E-01	0.9358E-01	0.9358E-01
186	Pentamethylene sulfide	0.5410E-01	0.5540E-02	2.295	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.7557E-01	0.7898E-02	3.272	0.0000E+00	0.0000E+00	5.419	5.419	5.419
191	2-ethylhexanoic acid	0.2355	0.2418E-01	10.02	0.0000E+00	0.0000E+00	0.3097	0.3097	0.3097
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.6325E-02	0.6527E-03	0.2704	0.2328E-08	0.0000E+00	0.2927E-01	0.2927E-01	0.2927E-01
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	88.08	5.858	755.9	450.8	0.0000E+00	19.59	19.59	19.59
196	N,N-dimethylformamide	1.176	0.1204	49.90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.1449E-01	0.1484E-02	0.6147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	3.054	0.3198	132.5	0.0000E+00	0.0000E+00	687.5	687.5	687.5
199	Hydrogen	1199.	115.0	0.1335E-13	0.1286E+05	0.0000E+00	0.8890E-01	0.8890E-01	0.8890E-01
200	Ammonia	59.30	2.117	876.9	0.0000E+00	0.0000E+00	0.3015E+05	0.3015E+05	0.3015E+05
201	Carbon monoxide	3472.	333.1	0.1485E-07	0.3723E+05	0.0000E+00	0.2646	0.2646	0.2646
202	Disiloxane	12.61	1.291	534.7	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	77.43	7.928	3284.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	10.32	1.057	437.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	4.760	0.4874	201.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	95.80	9.809	4063.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.9629E-02	0.9859E-03	0.4084	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	50.13	5.133	2126.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	144.9	14.84	6147.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	83.39	8.538	3537.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	20.70	2.119	877.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	3669.	853.2	853.2	288.0	287.7	0.0000E+00	0.0000E+00
2	Ethanol	0.2800E+05	6506.	6506.	2196.	2194.	0.0000E+00	0.0000E+00
3	2-propen-1-ol	8.056	1.877	1.877	0.6338	0.6329	0.0000E+00	0.0000E+00
4	n-propanol	656.4	152.4	152.4	51.44	51.39	0.0000E+00	0.0000E+00
5	2-propanol	5970.	1384.	1384.	467.3	466.9	0.0000E+00	0.0000E+00
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	7129.	1649.	1649.	556.5	556.3	0.0000E+00	0.0000E+00
8	2-butanol	20.29	4.734	4.734	1.599	1.596	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	2346.	548.6	548.6	185.3	185.0	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	42.52	9.826	9.826	3.315	3.314	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	282.9	65.58	65.58	22.13	22.12	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	73.86	17.31	17.31	5.849	5.835	0.0000E+00	0.0000E+00
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	80.34	18.55	18.55	6.257	6.257	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.1280	0.2958E-01	0.2958E-01	0.9978E-02	0.9977E-02	0.0000E+00	0.0000E+00

17	2-hexanol	2.575	0.5962	0.5962	0.2012	0.2011	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.9118E-01	0.2171E-01	0.2171E-01	0.7351E-02	0.7316E-02	0.0000E+00	0.0000E+00
19	2-ethylhexanol	27.18	6.341	6.341	2.142	2.138	0.0000E+00	0.0000E+00
20	Nonanol	3.071	0.7096	0.7096	0.2394	0.2393	0.0000E+00	0.0000E+00
21	n-decanol	0.2169E-01	0.5017E-02	0.5017E-02	0.1693E-02	0.1692E-02	0.0000E+00	0.0000E+00
22	Methanal	0.2273	0.6647E-01	0.6647E-01	0.2319E-01	0.2225E-01	0.0000E+00	0.0000E+00
23	Ethanal	77.95	18.01	18.01	6.074	6.073	0.0000E+00	0.0000E+00
24	2-propenal	0.1837	0.4242E-01	0.4242E-01	0.1431E-01	0.1431E-01	0.0000E+00	0.0000E+00
25	Propanal	153.7	35.50	35.50	11.98	11.98	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.4787E-01	0.1105E-01	0.1105E-01	0.3728E-02	0.3728E-02	0.0000E+00	0.0000E+00
27	Butanal	356.8	82.41	82.41	27.80	27.80	0.0000E+00	0.0000E+00
28	Pentanal	20.42	4.716	4.716	1.591	1.591	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	3.681	0.8498	0.8498	0.2867	0.2867	0.0000E+00	0.0000E+00
31	Benzaldehyde	15.36	3.550	3.550	1.198	1.198	0.0000E+00	0.0000E+00
32	Heptanal	2.171	0.5012	0.5012	0.1691	0.1691	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	9.444	2.203	2.203	0.7442	0.7430	0.0000E+00	0.0000E+00
35	Benzene	0.2085	0.4813E-01	0.4813E-01	0.1623E-01	0.1623E-01	0.0000E+00	0.0000E+00
36	Methylbenzene	7.675	1.772	1.772	0.5977	0.5977	0.0000E+00	0.0000E+00
37	Vinylbenzene	0.5649	0.1304	0.1304	0.4400E-01	0.4400E-01	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	5.669	1.309	1.309	0.4415	0.4415	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	19.00	4.386	4.386	1.479	1.479	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	5.501	1.270	1.270	0.4284	0.4284	0.0000E+00	0.0000E+00
41	Ethylbenzene	0.7956	0.1837	0.1837	0.6196E-01	0.6196E-01	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.2287E-02	0.5281E-03	0.5281E-03	0.1781E-03	0.1781E-03	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	0.3430	0.7919E-01	0.7919E-01	0.2671E-01	0.2671E-01	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.1289E-01	0.2976E-02	0.2976E-02	0.1004E-02	0.1004E-02	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	0.7301E-01	0.1686E-01	0.1686E-01	0.5686E-02	0.5686E-02	0.0000E+00	0.0000E+00
47	Isopropylbenzene	0.2761E-01	0.6375E-02	0.6375E-02	0.2150E-02	0.2150E-02	0.0000E+00	0.0000E+00
48	Propylbenzene	0.9653	0.2229	0.2229	0.7518E-01	0.7518E-01	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.6093E-02	0.1407E-02	0.1407E-02	0.4745E-03	0.4745E-03	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.6613E-01	0.1527E-01	0.1527E-01	0.5152E-02	0.5151E-02	0.0000E+00	0.0000E+00
52	Methyl formate	0.1982E-01	0.4575E-02	0.4575E-02	0.1543E-02	0.1543E-02	0.0000E+00	0.0000E+00
53	Ethyl formate	1.715	0.3962	0.3962	0.1336	0.1336	0.0000E+00	0.0000E+00
54	Methyl acetate	99.24	22.93	22.93	7.735	7.734	0.0000E+00	0.0000E+00
55	Ethyl acetate	107.9	24.92	24.92	8.407	8.407	0.0000E+00	0.0000E+00
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.7358E-01	0.1699E-01	0.1699E-01	0.5730E-02	0.5730E-02	0.0000E+00	0.0000E+00
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	87.50	20.21	20.21	6.816	6.815	0.0000E+00	0.0000E+00
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	1.244	0.2873	0.2873	0.9691E-01	0.9691E-01	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	11.83	2.756	2.756	0.9308	0.9295	0.0000E+00	0.0000E+00
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	981.2	227.4	227.4	76.75	76.70	0.0000E+00	0.0000E+00

69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.1554E-01	0.3588E-02	0.3588E-02	0.1210E-02	0.1210E-02	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	6.659	1.537	1.537	0.5186	0.5186	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.6690E-01	0.1545E-01	0.1545E-01	0.5210E-02	0.5210E-02	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.4625	0.1070	0.1070	0.3612E-01	0.3610E-01	0.0000E+00	0.0000E+00
77	1,4-dioxane	224.9	52.31	52.31	17.66	17.64	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	12.00	3.508	3.508	1.224	1.174	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	2530.	590.6	590.6	199.5	199.1	0.0000E+00	0.0000E+00
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.5792E-02	0.1337E-02	0.1337E-02	0.4510E-03	0.4510E-03	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	592.6	138.8	138.8	46.89	46.78	0.0000E+00	0.0000E+00
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.3636	0.8411E-01	0.8411E-01	0.2838E-01	0.2837E-01	0.0000E+00	0.0000E+00
85	Chloromethane	0.1942	0.4483E-01	0.4483E-01	0.1512E-01	0.1512E-01	0.0000E+00	0.0000E+00
86	Chloroethene	0.6395E-02	0.1476E-02	0.1476E-02	0.4980E-03	0.4980E-03	0.0000E+00	0.0000E+00
87	Chloroethane	0.8248E-03	0.1904E-03	0.1904E-03	0.6423E-04	0.6423E-04	0.0000E+00	0.0000E+00
88	3-chloropropene	0.1191E-04	0.2750E-05	0.2750E-05	0.9275E-06	0.9275E-06	0.0000E+00	0.0000E+00
89	Dichloromethane	124.7	28.79	28.79	9.711	9.711	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.1594E-02	0.3681E-03	0.3681E-03	0.1242E-03	0.1242E-03	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	2.557	0.5903	0.5903	0.1991	0.1991	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	11.96	2.761	2.761	0.9313	0.9313	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	0.2737	0.6320E-01	0.6320E-01	0.2132E-01	0.2132E-01	0.0000E+00	0.0000E+00
96	Trichloromethane	0.1599	0.3692E-01	0.3692E-01	0.1245E-01	0.1245E-01	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.2449	0.5654E-01	0.5654E-01	0.1907E-01	0.1907E-01	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	1.550	0.3578	0.3578	0.1207	0.1207	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.4706E-02	0.1086E-02	0.1086E-02	0.3665E-03	0.3665E-03	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	0.1394	0.3217E-01	0.3217E-01	0.1085E-01	0.1085E-01	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.1125E-01	0.2597E-02	0.2597E-02	0.8759E-03	0.8759E-03	0.0000E+00	0.0000E+00
104	Tetrachloroethene	0.9470	0.2186	0.2186	0.7375E-01	0.7375E-01	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	0.8611	0.1988	0.1988	0.6706E-01	0.6706E-01	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.5259E-02	0.1214E-02	0.1214E-02	0.4096E-03	0.4096E-03	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.1476E-02	0.3407E-03	0.3407E-03	0.1149E-03	0.1149E-03	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.4012	0.9262E-01	0.9262E-01	0.3124E-01	0.3124E-01	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1419E-02	0.3275E-03	0.3275E-03	0.1105E-03	0.1105E-03	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	1.768	0.4081	0.4081	0.1377	0.1377	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	2.196	0.5069	0.5069	0.1710	0.1710	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.2454E-03	0.5666E-04	0.5666E-04	0.1911E-04	0.1911E-04	0.0000E+00	0.0000E+00
119	Ethane	0.5035E-03	0.1162E-03	0.1162E-03	0.3921E-04	0.3921E-04	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1623E-02	0.3748E-03	0.3748E-03	0.1264E-03	0.1264E-03	0.0000E+00	0.0000E+00
123	Propane	0.5676E-04	0.1310E-04	0.1310E-04	0.4420E-05	0.4420E-05	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.3992E-02	0.9217E-03	0.9217E-03	0.3109E-03	0.3109E-03	0.0000E+00	0.0000E+00
125	1-butene	0.8453E-02	0.1952E-02	0.1952E-02	0.6583E-03	0.6583E-03	0.0000E+00	0.0000E+00
126	2-methylpropane	0.6164E-03	0.1423E-03	0.1423E-03	0.4800E-04	0.4800E-04	0.0000E+00	0.0000E+00
127	Butane	0.2045E-03	0.4722E-04	0.4722E-04	0.1593E-04	0.1593E-04	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.2225E-05	0.5138E-06	0.5138E-06	0.1733E-06	0.1733E-06	0.0000E+00	0.0000E+00
131	2-methylbutane	0.8137E-04	0.1879E-04	0.1879E-04	0.6337E-05	0.6337E-05	0.0000E+00	0.0000E+00
132	Pentane	0.3437E-02	0.7935E-03	0.7935E-03	0.2677E-03	0.2677E-03	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.9153E-04	0.2113E-04	0.2113E-04	0.7128E-05	0.7128E-05	0.0000E+00	0.0000E+00
135	Cyclohexane	0.1549	0.3575E-01	0.3575E-01	0.1206E-01	0.1206E-01	0.0000E+00	0.0000E+00
136	Methylcyclopentane	0.5046E-02	0.1165E-02	0.1165E-02	0.3930E-03	0.3930E-03	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.7190E-04	0.1660E-04	0.1660E-04	0.5599E-05	0.5599E-05	0.0000E+00	0.0000E+00
138	3-methylpentane	0.1738E-03	0.4013E-04	0.4013E-04	0.1353E-04	0.1353E-04	0.0000E+00	0.0000E+00
139	Hexane	0.3314E-02	0.7652E-03	0.7652E-03	0.2581E-03	0.2581E-03	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.1794E-05	0.4143E-06	0.4143E-06	0.1397E-06	0.1397E-06	0.0000E+00	0.0000E+00
142	Methylcyclohexane	0.4780E-02	0.1104E-02	0.1104E-02	0.3723E-03	0.3723E-03	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	0.4823E-03	0.1113E-03	0.1113E-03	0.3756E-04	0.3756E-04	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.4811E-05	0.1111E-05	0.1111E-05	0.3746E-06	0.3746E-06	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.6356E-05	0.1467E-05	0.1467E-05	0.4950E-06	0.4950E-06	0.0000E+00	0.0000E+00
146	Heptane	0.6457E-03	0.1491E-03	0.1491E-03	0.5028E-04	0.5028E-04	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1552E-05	0.3583E-06	0.3583E-06	0.1209E-06	0.1209E-06	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.6981E-02	0.1612E-02	0.1612E-02	0.5437E-03	0.5437E-03	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.5823E-05	0.1344E-05	0.1344E-05	0.4535E-06	0.4535E-06	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.8609E-05	0.1988E-05	0.1988E-05	0.6705E-06	0.6705E-06	0.0000E+00	0.0000E+00
154	Octane	0.1066E-03	0.2460E-04	0.2460E-04	0.8300E-05	0.8300E-05	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.5066E-06	0.1170E-06	0.1170E-06	0.3945E-07	0.3945E-07	0.0000E+00	0.0000E+00
156	Nonane	0.3761E-04	0.8684E-05	0.8684E-05	0.2929E-05	0.2929E-05	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.2325E-03	0.5368E-04	0.5368E-04	0.1811E-04	0.1811E-04	0.0000E+00	0.0000E+00
160	Undecane	0.7906E-03	0.1825E-03	0.1825E-03	0.6157E-04	0.6157E-04	0.0000E+00	0.0000E+00
161	Dodecane	0.1392E-02	0.3215E-03	0.3215E-03	0.1084E-03	0.1084E-03	0.0000E+00	0.0000E+00
162	2-propanone	0.5662	0.1309	0.1309	0.4415E-01	0.4414E-01	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.7588E-01	0.1753E-01	0.1753E-01	0.5912E-02	0.5912E-02	0.0000E+00	0.0000E+00
164	2-butanone	0.1812E+05	4258.	4258.	1439.	1436.	0.0000E+00	0.0000E+00
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1504E-01	0.3473E-02	0.3473E-02	0.1172E-02	0.1172E-02	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.2101E-01	0.4853E-02	0.4853E-02	0.1637E-02	0.1637E-02	0.0000E+00	0.0000E+00
168	2-pentanone	3.767	0.8710	0.8710	0.2938	0.2938	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	45.70	10.55	10.55	3.560	3.560	0.0000E+00	0.0000E+00
171	Cyclohexanone	558.8	129.3	129.3	43.62	43.61	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

173	4-methyl-2-pentanone	691.8	159.8	159.8	53.92	53.92	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	4.997	1.154	1.154	0.3892	0.3892	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.7796	0.1803	0.1803	0.6084E-01	0.6082E-01	0.0000E+00	0.0000E+00
178	2-octanone	0.6841E-01	0.1580E-01	0.1580E-01	0.5330E-02	0.5330E-02	0.0000E+00	0.0000E+00
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.3259	0.7525E-01	0.7525E-01	0.2538E-01	0.2538E-01	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	2.931	0.6771	0.6771	0.2284	0.2284	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	0.3052E-01	0.7046E-02	0.7046E-02	0.2377E-02	0.2377E-02	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.3232E-03	0.7463E-04	0.7463E-04	0.2517E-04	0.2517E-04	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.9358E-01	0.2161E-01	0.2161E-01	0.7288E-02	0.7288E-02	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	5.419	1.301	1.301	0.4411	0.4384	0.0000E+00	0.0000E+00
191	2-ethylhexanoic acid	0.3097	0.7156E-01	0.7156E-01	0.2414E-01	0.2414E-01	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.2927E-01	0.6775E-02	0.6775E-02	0.2286E-02	0.2285E-02	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	19.59	4.524	4.524	1.526	1.526	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	687.5	180.5	180.5	61.95	60.64	0.0000E+00	0.0000E+00
199	Hydrogen	0.8890E-01	0.2052E-01	0.2052E-01	0.6923E-02	0.6923E-02	0.0000E+00	0.0000E+00
200	Ammonia	0.3015E+05	0.1981E+05	0.1981E+05	6682.	6682.	0.0000E+00	0.0000E+00
201	Carbon monoxide	0.2646	0.6108E-01	0.6108E-01	0.2060E-01	0.2060E-01	0.0000E+00	0.0000E+00
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
1	Methanol	1.000	0.000	1.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001	0.002	0.000	0.000
2	Ethanol	1.000	0.000	1.000	0.000	0.008	0.008	0.008	0.008	0.001	0.001	0.001	0.002	0.000	0.000
3	2-propen-1-ol	1.000	1.000	1.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001	0.002	0.000	0.000
4	n-propanol	1.000	1.000	1.000	0.000	0.007	0.007	0.007	0.007	0.001	0.001	0.001	0.001	0.000	0.000
5	2-propanol	1.000	1.000	1.000	0.000	0.006	0.006	0.006	0.006	0.001	0.001	0.000	0.001	0.000	0.000
6	1,2-ethanediol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	n-butanol	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.001	0.000	0.000
8	2-butanol	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
9	2-methyl-1-propanol	1.000	1.000	1.000	0.000	0.016	0.016	0.016	0.016	0.003	0.003	0.001	0.003	0.000	0.000
10	2-methyl-2-propanol	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000

11	1,2-propanediol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	n-pentanol	1.000	1.000	1.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000	0.001	0.000	0.000
13	3-methyl-1-butanol	1.000	1.000	1.000	0.000	0.018	0.018	0.018	0.018	0.003	0.003	0.001	0.004	0.000	0.000
14	Phenol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	Cyclohexanol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	2-ethylbutanol	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
17	2-hexanol	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000	0.001	0.000	0.000
18	1,3-dichloro-2-propanol	1.000	1.000	0.450	0.000	0.038	0.038	0.038	0.038	0.007	0.007	0.003	0.008	0.000	0.000
19	2-ethylhexanol	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
20	Nonanol	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
21	n-decanol	1.000	1.000	1.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
22	Methanal	1.000	0.000	1.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026	0.067	0.000	0.000
23	Ethanal	1.000	0.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
24	2-propenal	1.000	0.986	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Propanal	1.000	0.507	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
26	2-methylpropenal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	Butanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	Pentanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	2,4-hexadien-1-al	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	Hexanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	Benzaldehyde	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
32	Heptanal	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	4-methylbenzaldehyde	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	Octanal	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
35	Benzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	Methylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	Vinylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	1,2-dimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	1,3-dimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	1,4-dimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	Ethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Indene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	alpha-methylstyrene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	1,2,4-trimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	1,3,5-trimethylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	1-ethyl-2-methylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	Isopropylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	Propylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	1-methyl-3-propylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	n-butylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	1-methyl-4-propylbenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	Methyl formate	1.000	0.289	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	Ethyl formate	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
54	Methyl acetate	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
55	Ethyl acetate	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
56	Allyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
57	Methyl methacrylate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	Isopropyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	n-butyl formate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	Propyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	Ethyl methacrylate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	Butyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

63	Isobutyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	Ethyl lactate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	2-Methoxy ethyl acetate	1.000	1.000	1.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001	0.002	0.000	0.000
66	Isoamyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	n-amyl acetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	2-ethoxyethyl acetate	1.000	1.000	1.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000	0.001	0.000	0.000
69	ethyl acetoxyacetate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	Dibutyl oxalate	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	1,4-epoxy-1,3-butadiene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	1,4-epoxybutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	3-methoxy-1-propene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	Diethyl ether	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	2-methylfuran	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	2,3-dihydropyran	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000	0.001	0.000	0.000
77	1,4-dioxane	1.000	1.000	1.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001	0.002	0.000	0.000
78	1,3,5-Trioxane	1.000	1.000	1.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026	0.067	0.000	0.000
79	2-ethoxyethanol	1.000	1.000	1.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001	0.003	0.000	0.000
80	Epichlorohydrin	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
81	1,1,2,2-tetraMe-1,2-epoxyEt	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	4-ethylmorpholine	1.000	1.000	1.000	0.000	0.017	0.017	0.017	0.017	0.003	0.003	0.001	0.004	0.000	0.000
83	1-propoxybutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84	2-butoxyethanol	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.001	0.000	0.000
85	Chloromethane	1.000	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	Chloroethene	1.000	0.082	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	Chloroethane	1.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	3-chloropropene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	Dichloromethane	1.000	0.016	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	1-chlorobutane	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	1,1-dichloroethene	1.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	1,2-dichloroethane	1.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	1,2-dichloropropene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	Chlorobenzene	1.000	1.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	1,2-dichloropropane	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	Trichloromethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	1,2-dichloro-2-methylpropane	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	Trichloroethylene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99	1,1,1-trichloroethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	1,1,2-trichloroethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101	1,2-dichlorobenzene	1.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102	3-chloromethylheptane	1.000	1.000	0.470	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
103	Tetrachloromethane	1.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104	Tetrachloroethene	1.000	1.000	0.430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	Chlorodifluoromethane	1.000	0.002	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
106	Dichlorofluoromethane	1.000	1.000	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107	1-chloro-1,2,2-trifluoroethane	1.000	1.000	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108	Dichlorodifluoromethane	1.000	1.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109	1,2-dichloro-1,2-difluoroethen	1.000	1.000	0.350	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	Chlorotetrafluoroethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
111	Trichlorofluoromethane	1.000	0.999	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112	Bromotrifluoromethane	1.000	0.032	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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4/13/1994 14:41 RSMAC1.DAT PAGE 23

TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
113	1,1-diCl-1,2,2,2-tetraFlethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
114	1,1,2-triCl-1,2,2-triFlethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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115	1,1,2,2-tetraCl-1,2-diFlethane	1.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
116	Methane	1.000	0.000	0.168	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117	Ethyne	1.000	0.024	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
118	Ethene	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
119	Ethane	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	Propadiene	1.000	0.999	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
121	Propyne	1.000	0.999	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122	Propene	1.000	0.022	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
123	Propane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
124	1,3-butadiene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	1-butene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
126	2-methylpropane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127	Butane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
128	Cyclopentene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
129	2-methyl-1,3-butadiene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	1-pentene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
131	2-methylbutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132	Pentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
133	3,4,5,6-tetrahydrobenzene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
134	2-hexene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	Cyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
136	Methylcyclopentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137	2,2-dimethylbutane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
138	3-methylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
139	Hexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	4-methylcyclohexene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
141	1-heptene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142	Methylcyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
143	2,2-dimethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
144	2,4-dimethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	3-ethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
146	Heptane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147	1,1-dimethylcyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
148	2-octene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
149	6-methyl-1-heptene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	trans-1,2-dimethylcyclohexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
151	2,2,3-trimethylpentane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152	3,3-dimethylhexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
153	3-ethylhexane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
154	Octane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	4-ethylheptane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
156	Nonane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157	4-isopropenyl-1-Mecyclohexene	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
158	2-methyl-3-ethylheptane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
159	Decane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	Undecane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
161	Dodecane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162	2-propanone	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
163	3-buten-2-one	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
164	2-butanone	1.000	1.000	1.000	0.000	0.022	0.022	0.022	0.022	0.004	0.004	0.002	0.004	0.000	0.000
165	Cyclopentanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166	3-penten-2-one	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
167	Acetyl cyclopropane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
168	2-pentanone	1.000	1.000	1.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2148.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

U.S. TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
169	3-methyl-2-butanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	4-methyl-3-penten-2-one	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
171	Cyclohexanone	1.000	1.000	1.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.001	0.000	0.000
172	3,3-dimethyl-2-butanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
173	4-methyl-2-pentanone	1.000	1.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
174	2,4-dimethyl-3-pentanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	2-heptanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
176	5-methyl-2-hexanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177	acetophenone	1.000	1.000	1.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
178	2-octanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
179	5-methyl-3-heptanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	2,6-dimethyl-4-heptanone	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
181	Hydrogen sulfide	1.000	0.000	1.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
182	Carbonyl sulfide	1.000	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
183	Ethylene sulfide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
184	Dimethyl sulfide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
185	Carbon disulfide	1.000	0.492	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
186	Pentamethylene sulfide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
187	Nitric oxide	1.000	0.926	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
188	Nitrogen dioxide	1.000	0.979	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
189	Nitrogen tetroxide	1.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
190	Ethanoic acid	1.000	1.000	1.000	1.000	0.048	0.048	0.048	0.048	0.009	0.009	0.004	0.010	0.000	0.000
191	2-ethylhexanoic acid	1.000	1.000	1.000	1.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
192	Hydrazine	1.000	0.995	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
193	Methyl cyanide	1.000	1.000	0.300	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000	0.001	0.000	0.000
194	methyl hydrazine	1.000	1.000	1.000	0.000	0.106	0.106	0.106	0.106	0.021	0.021	0.009	0.023	0.000	0.000
195	Nitromethane	1.000	0.055	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
196	N,N-dimethylformamide	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
197	Nitroethane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
198	1-benzo[b]pyrrole	1.000	1.000	1.000	0.000	0.151	0.151	0.151	0.151	0.030	0.030	0.013	0.035	0.000	0.000
199	Hydrogen	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200	Ammonia	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	0.505	0.505	0.214	0.575	0.000	0.000
201	Carbon monoxide	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
202	Disiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
203	Trimethylsilanol	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
204	Trisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
205	Hexamethyldisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
206	Tetrasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
207	Diphenylsilane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
208	Hexamethylcyclotrisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
209	Octamethyltrisiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
210	Octamethylcyclotetrasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
211	Decamethylcyclopentasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
212	Decamethylcyclohexasiloxane	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
213	Tetradecamethylcycloheptasilox	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
214	Hexadecamethylcyclooctasiloxan	1.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

APPENDIX E—RUSSIAN TCCS CONTROLLING TO U.S. 180-DAY SMACs

Russian TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

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PROGRAM VERSION 8.1 Alpha March 15, 1994

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
1	Methanol	0.4472	9.000	N
2	Ethanol	3.014	94.00	N
3	2-propen-1-ol	0.5824E-03	1.000	N
4	n-propanol	0.7556E-01	98.30	N
5	2-propanol	0.8268	150.0	N
6	1,2-ethanediol	0.4131E-02	127.0	N
7	n-butanol	2.065	121.0	N
8	2-butanol	0.1289E-02	121.0	N
9	2-methyl-1-propanol	0.1233	121.0	N
10	2-methyl-2-propanol	0.2432E-01	121.0	N
11	1,2-propanediol	0.1894E-03	0.1000	N
12	n-pentanol	0.4220E-01	126.0	N
13	3-methyl-1-butanol	0.3385E-02	126.0	N
14	Phenol	0.3331	7.700	N
15	Cyclohexanol	0.4936	123.0	N
16	2-ethylbutanol	0.8474E-04	0.1000	N
17	2-hexanol	0.5714E-03	167.0	N
18	1,3-dichloro-2-propanol	0.2089E-05	0.1000	N
19	2-ethylhexanol	0.1723E-02	186.4	N
20	Nonanol	0.2113E-02	236.0	N
21	n-decanol	0.6704E-05	259.0	N
22	Methanal	0.7905E-06	0.5000E-01	N
23	Ethanal	0.2750	4.000	N
24	2-propenal	0.2391E-02	0.3000E-01	N
25	Propanal	0.1583	95.00	N
26	2-methylpropenal	0.1386E-02	0.1000	N
27	Butanal	0.5493	118.0	N
28	Pentanal	0.5042E-01	106.0	N
29	2,4-hexadien-1-al	0.5553E-03	4.700	N
30	Hexanal	0.2055E-01	4.700	N
31	Benzaldehyde	0.7689E-02	173.0	N
32	Heptanal	0.1011E-01	0.1000	N
33	4-methylbenzaldehyde	0.1713E-03	0.1000	N
34	Octanal	0.5988E-03	210.0	N
35	Benzene	0.1054E-01	0.3200	N
36	Methylbenzene	0.5360	60.00	N
37	Vinylbenzene	0.1615E-01	42.60	N
38	1,2-dimethylbenzene	0.2575	220.0	N
39	1,3-dimethylbenzene	1.386	220.0	N
40	1,4-dimethylbenzene	0.3622	220.0	N
41	Ethylbenzene	0.6941E-01	86.80	N
42	Indene	0.0000E+00	9.500	N
43	alpha-methylstyrene	0.7034E-04	145.0	N
44	1,2,4-trimethylbenzene	0.2095E-01	15.00	N
45	1,3,5-trimethylbenzene	0.1108E-02	15.00	N
46	1-ethyl-2-methylbenzene	0.2252E-02	25.00	N
47	Isopropylbenzene	0.4339E-02	73.70	N
48	Propylbenzene	0.1068	49.10	N
49	1-methyl-3-propylbenzene	0.0000E+00	11.00	N
50	n-butylbenzene	0.8685E-03	55.00	N

51	1-methyl-4-propylbenzene	0.1774E-03	0.1000	N
52	Methyl formate	0.2195E-02	12.30	N
53	Ethyl formate	0.2254E-02	90.90	N
54	Methyl acetate	0.7745E-01	121.0	N
55	Ethyl acetate	0.1361	180.0	N
56	Allyl acetate	0.1913E-02	51.20	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
57	Methyl methacrylate	0.4934E-01	102.0	N
58	Isopropyl acetate	0.2627E-02	209.0	N
59	n-butyl formate	0.5958E-03	83.50	N
60	Propyl acetate	0.2281	167.0	N
61	Ethyl methacrylate	0.1380E-01	116.7	N
62	Butyl acetate	0.3584	190.0	N
63	Isobutyl acetate	0.9595E-01	190.0	N
64	Ethyl lactate	0.2477E-02	193.0	N
65	2-Methoxy ethyl acetate	0.8531E-03	24.20	N
66	Isoamyl acetate	0.1793E-01	159.5	N
67	n-amyl acetate	0.3011E-01	160.0	N
68	2-ethoxyethyl acetate	0.1542	162.0	N
69	ethyl acetoxyacetate	0.0000E+00	0.1000	N
70	Dibutyl oxalate	0.1423E-04	0.1000	N
71	1,4-epoxy-1,3-butadiene	0.9326E-03	0.1100	N
72	1,4-epoxybutane	0.3729E-01	118.0	N
73	3-methoxy-1-propene	0.2432E-04	0.1000	N
74	Diethyl ether	0.3981E-01	242.0	N
75	2-methylfuran	0.1641E-02	0.1300	N
76	2,3-dihydropyran	0.1141E-03	0.1000	N
77	1,4-dioxane	0.1961E-01	1.800	N
78	1,3,5-Trioxane	0.4113E-04	0.1000	N
79	2-ethoxyethanol	0.1550	0.3000	N
80	Epichlorohydrin	0.1898E-02	1.200	N
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.6052E-03	0.1000	N
82	4-ethylmorpholine	0.2847E-01	16.00	N
83	1-propoxybutane	0.2258E-01	186.8	N
84	2-butoxyethanol	0.1067E-03	24.20	N
85	Chloromethane	0.1089	41.30	N
86	Chloroethene	0.1462E-02	3.000	N
87	Chloroethane	0.6315E-04	263.7	N
88	3-chloropropene	0.5438E-04	0.6300	N
89	Dichloromethane	5.084	10.00	N
90	1-chlorobutane	0.0000E+00	151.0	N
91	1,1-dichloroethene	0.3907E-03	7.900	N
92	1,2-dichloroethane	0.3518E-01	1.000	N
93	1,2-dichloropropene	0.1863E-01	42.20	N
94	Chlorobenzene	0.5940	46.00	N
95	1,2-dichloropropane	0.3954E-02	42.20	N
96	Trichloromethane	0.7124E-02	4.900	N
97	1,2-dichloro-2-methylpropane	0.7509E-03	0.1000	N
98	Trichloroethylene	0.2305E-01	10.00	N
99	1,1,1-trichloroethane	0.2555	164.0	N
100	1,1,2-trichloroethane	0.3907E-04	5.500	N
101	1,2-dichlorobenzene	0.4463E-02	30.00	N
102	3-chloromethylheptane	0.1184E-03	0.1000	N

103	Tetrachloromethane	0.3601E-02	13.00	N
104	Tetrachloroethene	0.2787	34.00	N
105	Chlorodifluoromethane	0.9914	353.6	N
106	Dichlorofluoromethane	0.3050E-03	21.00	N
107	1-chloro-1,2,2-trifluoroethane	0.8852E-03	484.5	N
108	Dichlorodifluoromethane	0.6383E-02	494.4	N
109	1,2-dichloro-1,2-difluoroethen	0.6093E-03	136.0	N
110	Chlorotetrafluoroethane	0.0000E+00	555.0	N
111	Trichlorofluoromethane	0.5404	561.8	N
112	Bromotrifluoromethane	0.7956	608.8	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1875E-01	702.9	N
114	1,1,2-triCl-1,2,2-triFlethane	9.480	400.0	N
115	1,1,2,2-tetraCl-1,2-diFlethane	0.1336E-01	834.2	N
116	Methane	116.0	3800.	N
117	Ethyne	0.0000E+00	532.4	N
118	Ethene	0.8434E-02	344.1	N
119	Ethane	0.3201E-01	1230.	N
120	Propadiene	0.0000E+00	81.90	N
121	Propyne	0.0000E+00	409.5	N
122	Propene	0.4814E-02	860.3	N
123	Propane	0.4324E-03	901.4	N
124	1,3-butadiene	0.1927E-02	0.1300	N
125	1-butene	0.2289E-01	458.0	N
126	2-methylpropane	0.7836E-02	237.6	N
127	Butane	0.2055E-02	237.6	N
128	Cyclopentene	0.0000E+00	167.0	N
129	2-methyl-1,3-butadiene	0.0000E+00	557.0	N
130	1-pentene	0.9644E-05	186.0	N
131	2-methylbutane	0.1209E-02	295.0	N
132	Pentane	0.4754E-01	590.0	N
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	86.00	N
134	2-hexene	0.2940E-03	172.0	N
135	Cyclohexane	0.2435	206.0	N
136	Methylcyclopentane	0.1959E-01	51.60	N
137	2,2-dimethylbutane	0.1187E-02	88.10	N
138	3-methylpentane	0.2117E-02	1762.	N
139	Hexane	0.3258E-01	176.0	N
140	4-methylcyclohexene	0.0000E+00	393.2	N
141	1-heptene	0.7811E-05	201.0	N
142	Methylcyclohexane	0.2215E-01	60.20	N
143	2,2-dimethylpentane	0.1649E-01	408.6	N
144	2,4-dimethylpentane	0.1536E-03	201.0	N
145	3-ethylpentane	0.1751E-03	201.0	N
146	Heptane	0.1889E-01	201.0	N
147	1,1-dimethylcyclohexane	0.1844E-01	115.0	N
148	2-octene	0.1055E-04	229.0	N
149	6-methyl-1-heptene	0.5503E-05	229.0	N
150	trans-1,2-dimethylcyclohexane	0.3607E-01	115.0	N
151	2,2,3-trimethylpentane	0.2404E-03	229.0	N
152	3,3-dimethylhexane	0.5797E-03	229.0	N
153	3-ethylhexane	0.3478E-03	229.0	N
154	Octane	0.5694E-02	350.0	N

155	4-ethylheptane	0.2838E-04	129.0	N
156	Nonane	0.2417E-02	315.0	N
157	4-isopropenyl-1-Mecyclohexene	0.2531E-02	557.0	N
158	2-methyl-3-ethylheptane	0.1178E-02	116.0	N
159	Decane	0.1188E-01	223.0	N
160	Undecane	0.1567E-01	319.0	N
161	Dodecane	0.3233E-03	278.0	N
162	2-propanone	0.2777E-03	712.5	N
163	3-buten-2-one	0.8764E-04	0.1000	N
164	2-butanone	0.7118	30.00	N
165	Cyclopentanone	0.3350	29.20	N
166	3-penten-2-one	0.1916E-04	0.1000	N
167	Acetyl cyclopropane	0.3203E-04	0.1000	N
168	2-pentanone	0.1488E-02	70.40	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
169	3-methyl-2-butanone	0.2024E-01	70.40	N
170	4-methyl-3-penten-2-one	0.7673E-01	40.10	N
171	Cyclohexanone	0.1595	60.20	N
172	3,3-dimethyl-2-butanone	0.2951E-02	81.90	N
173	4-methyl-2-pentanone	0.4768	82.00	N
174	2,4-dimethyl-3-pentanone	0.3576E-04	23.50	N
175	2-heptanone	0.5203E-01	23.50	N
176	5-methyl-2-hexanone	0.1134E-02	23.50	N
177	acetophenone	0.2644E-03	245.0	N
178	2-octanone	0.1108E-03	105.0	N
179	5-methyl-3-heptanone	0.1219E-02	0.1000	N
180	2,6-dimethyl-4-heptanone	0.2345E-02	58.10	N
181	Hydrogen sulfide	0.1282E-01	2.800	N
182	Carbonyl sulfide	0.1047	12.00	N
183	Ethylene sulfide	0.2182E-04	0.1000	N
184	Dimethyl sulfide	0.1350E-03	2.500	N
185	Carbon disulfide	0.1796E-01	16.00	N
186	Pentamethylene sulfide	0.5460E-04	0.1000	N
187	Nitric oxide	0.0000E+00	6.100	N
188	Nitrogen dioxide	0.0000E+00	0.9400	N
189	Nitrogen tetroxide	0.0000E+00	1.900	N
190	Ethanoic acid	0.9863E-04	7.400	N
191	2-ethylhexanoic acid	0.2447E-03	0.1000	N
192	Hydrazine	0.0000E+00	0.5000E-02	N
193	Methyl cyanide	0.7093E-05	6.700	N
194	methyl hydrazine	0.0000E+00	0.4000E-02	N
195	Nitromethane	0.6461E-01	13.00	N
196	N,N-dimethylformamide	0.1188E-02	6.000	N
197	Nitroethane	0.1471E-04	0.1000	N
198	1-benzo[b]pyrrole	0.4082E-02	0.2500	N
199	Hydrogen	0.3658	340.0	N
200	Ammonia	0.2826E-01	7.000	N
201	Carbon monoxide	1.060	10.00	N
202	Disiloxane	0.1281E-01	52.40	N
203	Trimethylsilanol	0.7822E-01	40.00	N
204	Trisiloxane	0.1040E-01	83.40	N
205	Hexamethyldisiloxane	0.4788E-02	96.60	N
206	Tetrasiloxane	0.9636E-01	114.0	N

207	Diphenylsilane	0.9682E-05	0.1000	N
208	Hexamethylcyclotrisiloxane	0.5042E-01	227.0	N
209	Octamethyltrisiloxane	0.1457	40.00	N
210	Octamethylcyclotetrasiloxane	0.8383E-01	151.7	N
211	Decamethylcyclopentasiloxane	0.2081E-01	150.7	N
212	Decamethylcyclohexasiloxane	0.0000E+00	150.7	N
213	Tetradecamethylcycloheptasilox	0.0000E+00	150.7	N
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	150.7	N

GROUP T-VALUES AS SPECIFIED IN NHB 8060.1B APPENDIX D

-01-	-02-	-03-	-04-	-05-	-06-	-07-	-08-	-09-	-10-	-11-	-12-	-13-	-14-	-15-	-16-
0.16	0.28	0.06	0.01	0.56	0.58	0.03	0.00	0.05	0.00	0.06	0.02	0.00	0.00	0.02	0.11

OVERALL T-VALUE
1.28

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	0.5826E-02	0.1788E-01	0.0000E+00	0.0000E+00	0.1138E-02	0.0000E+00	0.0000E+00	0.0000E+00
2	Ethanol	7.710	0.1203	0.5430	0.0000E+00	22.20	0.0000E+00	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.1527E-06	0.2330E-04	0.6923E-02	0.0000E+00	0.4624E-02	0.0000E+00	0.0000E+00	0.0000E+00
4	n-propanol	0.1509E-03	0.3023E-02	0.3764	0.0000E+00	1.111	0.0000E+00	0.0000E+00	0.0000E+00
5	2-propanol	0.1717E-04	0.3307E-01	0.1331E-03	0.0000E+00	16.19	0.0000E+00	0.0000E+00	0.0000E+00
6	1,2-ethanediol	0.9835E-06	0.1652E-03	0.6420E-01	0.0000E+00	0.1803E-01	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	0.3319E-02	0.8259E-01	1.861	0.0000E+00	38.61	0.0000E+00	0.0000E+00	0.0000E+00
8	2-butanol	0.3725E-07	0.5154E-04	0.2049E-01	0.0000E+00	0.5166E-02	0.0000E+00	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	0.5770E-04	0.4930E-02	1.862	0.0000E+00	0.5904	0.0000E+00	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	0.4351E-05	0.9726E-03	0.4178	0.0000E+00	0.6707E-01	0.0000E+00	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.1863E-08	0.7575E-05	0.3068E-02	0.0000E+00	0.7041E-03	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.2384E-05	0.1688E-02	0.7744	0.0000E+00	0.6816E-01	0.0000E+00	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	0.4470E-07	0.1354E-03	0.6003E-01	0.0000E+00	0.7502E-02	0.0000E+00	0.0000E+00	0.0000E+00
14	Phenol	0.6008E-04	0.1332E-01	6.406	0.0000E+00	0.2503	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.5083E-03	0.1974E-01	8.732	0.0000E+00	1.116	0.0000E+00	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.0000E+00	0.3390E-05	0.1490E-02	0.0000E+00	0.2003E-03	0.0000E+00	0.0000E+00	0.0000E+00
17	2-hexanol	0.3725E-08	0.2285E-04	0.1035E-01	0.0000E+00	0.1055E-02	0.0000E+00	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.4366E-10	0.8355E-07	0.3315E-04	0.0000E+00	0.8441E-05	0.0000E+00	0.0000E+00	0.0000E+00
19	2-ethylhexanol	0.0000E+00	0.6894E-04	0.3353E-01	0.0000E+00	0.9177E-03	0.0000E+00	0.0000E+00	0.0000E+00
20	Nonanol	0.3725E-08	0.8451E-04	0.4190E-01	0.0000E+00	0.3454E-03	0.0000E+00	0.0000E+00	0.0000E+00
21	n-decanol	0.5821E-10	0.2681E-06	0.1305E-03	0.0000E+00	0.3475E-05	0.0000E+00	0.0000E+00	0.0000E+00
22	Methanal	-0.5821E-10	0.3162E-07	0.3839E-20	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
23	Ethanal	0.2269	0.1086E-01	0.1581E-02	0.0000E+00	0.6688E-01	0.0000E+00	0.0000E+00	0.0000E+00
24	2-propenal	0.1319E-03	0.9556E-04	0.2303E-04	0.0000E+00	0.4624E-01	0.0000E+00	0.0000E+00	0.0000E+00
25	Propanal	0.7915E-02	0.6326E-02	0.0000E+00	0.0000E+00	3.077	0.0000E+00	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.1680E-05	0.5545E-04	0.1549E-01	0.0000E+00	0.1197E-01	0.0000E+00	0.0000E+00	0.0000E+00
27	Butanal	0.1679E-02	0.2197E-01	1.031	0.0000E+00	9.745	0.0000E+00	0.0000E+00	0.0000E+00
28	Pentanal	0.4089E-04	0.2017E-02	0.8068	0.0000E+00	0.1974	0.0000E+00	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.2794E-08	0.2221E-04	0.9780E-02	0.0000E+00	0.1298E-02	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1997E-05	0.8218E-03	0.3745	0.0000E+00	0.3563E-01	0.0000E+00	0.0000E+00	0.0000E+00
31	Benzaldehyde	0.4470E-07	0.3076E-03	0.1413	0.0000E+00	0.1224E-01	0.0000E+00	0.0000E+00	0.0000E+00
32	Heptanal	0.7451E-07	0.4045E-03	0.1929	0.0000E+00	0.9101E-02	0.0000E+00	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.2328E-09	0.6852E-05	0.3301E-02	0.0000E+00	0.1225E-03	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.0000E+00	0.2395E-04	0.1172E-01	0.0000E+00	0.2484E-03	0.0000E+00	0.0000E+00	0.0000E+00

35	Benzene	0.1489E-04	0.4217E-03	0.1324	0.0000E+00	0.7678E-01	0.0000E+00	0.0000E+00	0.0000E+00
36	Methylbenzene	0.2995E-02	0.2144E-01	3.233	0.0000E+00	7.330	0.0000E+00	0.0000E+00	0.0000E+00
37	Vinylbenzene	0.1222E-05	0.6461E-03	0.2939	0.0000E+00	0.2848E-01	0.0000E+00	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	0.1383E-03	0.1030E-01	4.693	0.0000E+00	0.4472	0.0000E+00	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	0.9947E-02	0.5545E-01	12.51	0.0000E+00	14.90	0.0000E+00	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	0.3304E-03	0.1449E-01	6.428	0.0000E+00	0.7981	0.0000E+00	0.0000E+00	0.0000E+00
41	Ethylbenzene	0.1287E-04	0.2776E-02	1.282	0.0000E+00	0.1041	0.0000E+00	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.1164E-09	0.2813E-05	0.1250E-02	0.0000E+00	0.1530E-03	0.0000E+00	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	0.3576E-06	0.8379E-03	0.4023	0.0000E+00	0.1635E-01	0.0000E+00	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.9313E-08	0.4433E-04	0.2072E-01	0.0000E+00	0.1419E-02	0.0000E+00	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	0.1490E-07	0.9010E-04	0.4234E-01	0.0000E+00	0.2655E-02	0.0000E+00	0.0000E+00	0.0000E+00
47	Isopropylbenzene	0.4470E-07	0.1736E-03	0.8170E-01	0.0000E+00	0.4984E-02	0.0000E+00	0.0000E+00	0.0000E+00
48	Propylbenzene	0.9298E-05	0.4272E-02	2.057	0.0000E+00	0.7760E-01	0.0000E+00	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.7451E-08	0.3474E-04	0.1666E-01	0.0000E+00	0.7002E-03	0.0000E+00	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.2328E-09	0.7097E-05	0.3337E-02	0.0000E+00	0.2075E-03	0.0000E+00	0.0000E+00	0.0000E+00
52	Methyl formate	0.1863E-02	0.8671E-04	0.4338E-04	0.0000E+00	0.3738E-01	0.0000E+00	0.0000E+00	0.0000E+00
53	Ethyl formate	0.4627E-05	0.9016E-04	0.1913E-01	0.0000E+00	0.2540E-01	0.0000E+00	0.0000E+00	0.0000E+00
54	Methyl acetate	0.7570E-04	0.3098E-02	0.3941E-01	0.0000E+00	1.478	0.0000E+00	0.0000E+00	0.0000E+00
55	Ethyl acetate	0.5550E-03	0.5444E-02	0.8465	0.0000E+00	1.836	0.0000E+00	0.0000E+00	0.0000E+00
56	Allyl acetate	0.9313E-07	0.7650E-04	0.3212E-01	0.0000E+00	0.6007E-02	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57	Methyl methacrylate	0.3177E-04	0.1973E-02	0.8086	0.0000E+00	0.1744	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.1378E-06	0.1051E-03	0.4461E-01	0.0000E+00	0.7769E-02	0.0000E+00	0.0000E+00	0.0000E+00
59	n-butyl formate	0.9313E-08	0.2383E-04	0.1005E-01	0.0000E+00	0.1831E-02	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.4234E-03	0.9125E-02	3.507	0.0000E+00	1.034	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.7749E-06	0.5519E-03	0.2525	0.0000E+00	0.2293E-01	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	0.3023E-03	0.1434E-01	6.387	0.0000E+00	0.7648	0.0000E+00	0.0000E+00	0.0000E+00
63	Isobutyl acetate	0.1991E-04	0.3838E-02	1.781	0.0000E+00	0.1348	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.1118E-07	0.9908E-04	0.4523E-01	0.0000E+00	0.4215E-02	0.0000E+00	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	-0.7451E-08	0.3412E-04	0.1511E-01	0.0000E+00	0.1906E-02	0.0000E+00	0.0000E+00	0.0000E+00
66	Isoamyl acetate	0.2980E-06	0.7171E-03	0.3448	0.0000E+00	0.1348E-01	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.5364E-06	0.1204E-02	0.5848	0.0000E+00	0.1698E-01	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	0.3338E-05	0.6169E-02	3.012	0.0000E+00	0.7140E-01	0.0000E+00	0.0000E+00	0.0000E+00
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.5690E-06	0.2805E-03	0.0000E+00	0.3972E-05	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.2754E-04	0.3729E-04	0.1278E-04	0.0000E+00	0.1810E-01	0.0000E+00	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	0.8059E-04	0.1492E-02	0.5784E-01	0.0000E+00	0.6735	0.0000E+00	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.1135E-08	0.9730E-06	0.3256E-03	0.0000E+00	0.1574E-03	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.1504E-03	0.1592E-02	0.2313	0.0000E+00	0.5530	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.1829E-05	0.6563E-04	0.1897E-01	0.0000E+00	0.1356E-01	0.0000E+00	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.2328E-08	0.4562E-05	0.1610E-02	0.0000E+00	0.6567E-03	0.0000E+00	0.0000E+00	0.0000E+00
77	1,4-dioxane	0.7033E-05	0.7844E-03	0.2823	0.0000E+00	0.1076	0.0000E+00	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	-0.1863E-08	0.1645E-05	0.5201E-03	0.0000E+00	0.2959E-03	0.0000E+00	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	0.2098E-04	0.6201E-02	2.810	0.0000E+00	0.2848	0.0000E+00	0.0000E+00	0.0000E+00
80	Epichlorohydrin	0.8047E-06	0.7594E-04	0.2633E-01	0.0000E+00	0.1140E-01	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.1024E-07	0.2421E-04	0.1030E-01	0.0000E+00	0.1765E-02	0.0000E+00	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	0.1192E-06	0.1139E-02	0.5422	0.0000E+00	0.2659E-01	0.0000E+00	0.0000E+00	0.0000E+00
83	1-propoxybutane	0.6855E-06	0.9030E-03	0.4315	0.0000E+00	0.1961E-01	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.2328E-09	0.4269E-05	0.1947E-02	0.0000E+00	0.1841E-03	0.0000E+00	0.0000E+00	0.0000E+00
85	Chloromethane	0.4144E-01	0.4329E-02	0.1989E-03	0.0000E+00	0.1158E-02	0.0000E+00	0.0000E+00	0.0000E+00
86	Chloroethene	0.3914E-02	0.5605E-04	0.3133E-05	0.0000E+00	0.8717E-02	0.0000E+00	0.0000E+00	0.0000E+00

87	Chloroethane	0.2987E-06	0.2526E-05	0.1739E-03	0.0000E+00	0.1062E-02	0.0000E+00	0.0000E+00	0.0000E+00
88	3-chloropropene	0.1723E-07	0.2175E-05	0.6440E-03	0.0000E+00	0.4338E-03	0.0000E+00	0.0000E+00	0.0000E+00
89	Dichloromethane	9.697	0.1972	0.1415	0.0000E+00	6.066	0.0000E+00	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.7516E-06	0.1563E-04	0.3141E-02	0.0000E+00	0.4570E-02	0.0000E+00	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	0.1209E-03	0.1407E-02	0.2147	0.0000E+00	0.4785	0.0000E+00	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	0.5004E-04	0.7450E-03	0.1686	0.0000E+00	0.1996	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.3026E-02	0.2376E-01	5.855	0.0000E+00	5.899	0.0000E+00	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	0.2116E-05	0.1582E-03	0.5563E-01	0.0000E+00	0.2297E-01	0.0000E+00	0.0000E+00	0.0000E+00
96	Trichloromethane	0.2012E-04	0.2849E-03	0.4602E-01	0.0000E+00	0.9441E-01	0.0000E+00	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.1118E-07	0.3004E-04	0.1274E-01	0.0000E+00	0.2234E-02	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.3183E-04	0.9221E-03	0.2987	0.0000E+00	0.1590	0.0000E+00	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	0.1087E-02	0.1022E-01	1.154	0.0000E+00	3.872	0.0000E+00	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.7567E-09	0.1563E-05	0.5613E-03	0.0000E+00	0.2154E-03	0.0000E+00	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	0.5960E-07	0.1785E-03	0.8128E-01	0.0000E+00	0.7816E-02	0.0000E+00	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.0000E+00	0.4735E-05	0.2250E-02	0.0000E+00	0.1156E-03	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.9835E-06	0.1440E-03	0.5362E-01	0.0000E+00	0.1802E-01	0.0000E+00	0.0000E+00	0.0000E+00
104	Tetrachloroethene	0.1206E-02	0.1115E-01	2.355	0.0000E+00	3.151	0.0000E+00	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	0.6382	0.3925E-01	0.1225E-01	0.0000E+00	0.7144E-01	0.0000E+00	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.2573E-05	0.1220E-04	0.8080E-04	0.0000E+00	0.5866E-02	0.0000E+00	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.1954E-05	0.3541E-04	0.6610E-02	0.0000E+00	0.1085E-01	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.4189E-04	0.2553E-03	0.5732E-04	0.0000E+00	0.1246	0.0000E+00	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.4498E-06	0.2437E-04	0.7067E-02	0.0000E+00	0.5008E-02	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.1674E-02	0.2162E-01	0.7899E-04	0.0000E+00	10.58	0.0000E+00	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	1.919	0.3061E-01	0.7267E-02	0.0000E+00	1.734	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	0.4154E-04	0.7501E-03	0.1934	0.0000E+00	0.1778	0.0000E+00	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	0.7629E-04	0.3792	0.2891E-04	0.0000E+00	185.6	0.0000E+00	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	0.1222E-05	0.5344E-03	0.2322	0.0000E+00	0.3423E-01	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	38.15	4.618	0.5715E-04	0.0000E+00	0.3329E-03	0.0000E+00	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.2853E-02	0.3356E-03	0.2308E-05	0.0000E+00	0.1344E-04	0.0000E+00	0.0000E+00	0.0000E+00
119	Ethane	0.1369E-01	0.1272E-02	0.9136E-04	0.0000E+00	0.5322E-03	0.0000E+00	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1294E-01	0.1845E-03	0.5086E-05	0.0000E+00	0.1877E-01	0.0000E+00	0.0000E+00	0.0000E+00
123	Propane	0.1064E-04	0.1729E-04	0.6279E-05	0.0000E+00	0.8396E-02	0.0000E+00	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.4455E-05	0.7706E-04	0.1043E-02	0.0000E+00	0.3667E-01	0.0000E+00	0.0000E+00	0.0000E+00
125	1-butene	0.1958E-04	0.9156E-03	0.2175E-03	0.0000E+00	0.4478	0.0000E+00	0.0000E+00	0.0000E+00
126	2-methylpropane	0.1737E-04	0.3134E-03	0.1276E-01	0.0000E+00	0.1409	0.0000E+00	0.0000E+00	0.0000E+00
127	Butane	0.4563E-05	0.8221E-04	0.1798E-01	0.0000E+00	0.2264E-01	0.0000E+00	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.1455E-09	0.3857E-06	0.1336E-03	0.0000E+00	0.5805E-04	0.0000E+00	0.0000E+00	0.0000E+00
131	2-methylbutane	0.2328E-06	0.4834E-04	0.1842E-01	0.0000E+00	0.5635E-02	0.0000E+00	0.0000E+00	0.0000E+00
132	Pentane	0.1515E-03	0.1901E-02	0.4855	0.0000E+00	0.4554	0.0000E+00	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.5122E-08	0.1176E-04	0.4812E-02	0.0000E+00	0.1046E-02	0.0000E+00	0.0000E+00	0.0000E+00
135	Cyclohexane	0.1198E-02	0.9740E-02	1.475	0.0000E+00	3.324	0.0000E+00	0.0000E+00	0.0000E+00
136	Methylcyclopentane	0.1109E-04	0.7837E-03	0.3127	0.0000E+00	0.7752E-01	0.0000E+00	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.5402E-07	0.4746E-04	0.1994E-01	0.0000E+00	0.3716E-02	0.0000E+00	0.0000E+00	0.0000E+00
138	3-methylpentane	0.1080E-06	0.8468E-04	0.3631E-01	0.0000E+00	0.5907E-02	0.0000E+00	0.0000E+00	0.0000E+00

139 Hexane	0.1311E-04	0.1303E-02	0.5584	0.0000E+00	0.9125E-01	0.0000E+00	0.0000E+00	0.0000E+00
140 4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141 1-heptene	0.7276E-10	0.3124E-06	0.1305E-03	0.0000E+00	0.2516E-04	0.0000E+00	0.0000E+00	0.0000E+00
142 Methylcyclohexane	0.2891E-05	0.8860E-03	0.3993	0.0000E+00	0.4282E-01	0.0000E+00	0.0000E+00	0.0000E+00
143 2,2-dimethylpentane	0.1341E-05	0.6598E-03	0.3033	0.0000E+00	0.2608E-01	0.0000E+00	0.0000E+00	0.0000E+00
144 2,4-dimethylpentane	0.2328E-09	0.6144E-05	0.2694E-02	0.0000E+00	0.3701E-03	0.0000E+00	0.0000E+00	0.0000E+00
145 3-ethylpentane	0.4657E-09	0.7003E-05	0.3094E-02	0.0000E+00	0.3987E-03	0.0000E+00	0.0000E+00	0.0000E+00
146 Heptane	0.1192E-05	0.7556E-03	0.3516	0.0000E+00	0.2569E-01	0.0000E+00	0.0000E+00	0.0000E+00
147 1,1-dimethylcyclohexane	0.8047E-06	0.7375E-03	0.3460	0.0000E+00	0.2226E-01	0.0000E+00	0.0000E+00	0.0000E+00
148 2-octene	0.1455E-10	0.4221E-06	0.1878E-03	0.0000E+00	0.2274E-04	0.0000E+00	0.0000E+00	0.0000E+00
149 6-methyl-1-heptene	0.7276E-11	0.2201E-06	0.9642E-04	0.0000E+00	0.1336E-04	0.0000E+00	0.0000E+00	0.0000E+00
150 trans-1,2-dimethylcyclohexane	0.2205E-05	0.1443E-02	0.6828	0.0000E+00	0.3779E-01	0.0000E+00	0.0000E+00	0.0000E+00
151 2,2,3-trimethylpentane	0.1397E-08	0.9617E-05	0.4429E-02	0.0000E+00	0.3710E-03	0.0000E+00	0.0000E+00	0.0000E+00
152 3,3-dimethylhexane	0.0000E+00	0.2319E-04	0.1078E-01	0.0000E+00	0.7966E-03	0.0000E+00	0.0000E+00	0.0000E+00
153 3-ethylhexane	-0.9313E-09	0.1391E-04	0.6453E-02	0.0000E+00	0.4930E-03	0.0000E+00	0.0000E+00	0.0000E+00
154 Octane	0.6706E-07	0.2278E-03	0.1089	0.0000E+00	0.4914E-02	0.0000E+00	0.0000E+00	0.0000E+00
155 4-ethylheptane	0.0000E+00	0.1135E-05	0.5314E-03	0.0000E+00	0.3542E-04	0.0000E+00	0.0000E+00	0.0000E+00
156 Nonane	0.3725E-08	0.9667E-04	0.4685E-01	0.0000E+00	0.1455E-02	0.0000E+00	0.0000E+00	0.0000E+00
157 4-isopropenyl-1-Mecyclohexene	0.1118E-07	0.1013E-03	0.4927E-01	0.0000E+00	0.1332E-02	0.0000E+00	0.0000E+00	0.0000E+00
158 2-methyl-3-ethylheptane	0.1863E-08	0.4712E-04	0.2311E-01	0.0000E+00	0.4467E-03	0.0000E+00	0.0000E+00	0.0000E+00
159 Decane	0.1490E-07	0.4752E-03	0.2348	0.0000E+00	0.2738E-02	0.0000E+00	0.0000E+00	0.0000E+00
160 Undecane	0.0000E+00	0.6268E-03	0.3121	0.0000E+00	0.1264E-02	0.0000E+00	0.0000E+00	0.0000E+00
161 Dodecane	0.1397E-08	0.1293E-04	0.6422E-02	0.0000E+00	0.4312E-04	0.0000E+00	0.0000E+00	0.0000E+00
162 2-propanone	0.2091E-06	0.1111E-04	0.2950E-02	0.0000E+00	0.2546E-02	0.0000E+00	0.0000E+00	0.0000E+00
163 3-buten-2-one	0.1455E-07	0.3506E-05	0.1132E-02	0.0000E+00	0.6075E-03	0.0000E+00	0.0000E+00	0.0000E+00
164 2-butanone	0.3433E-04	0.2847E-01	0.4321E-01	0.0000E+00	13.89	0.0000E+00	0.0000E+00	0.0000E+00
165 Cyclopentanone	0.1623E-02	0.1340E-01	1.711	0.0000E+00	4.884	0.0000E+00	0.0000E+00	0.0000E+00
166 3-penten-2-one	0.2910E-10	0.7665E-06	0.2851E-03	0.0000E+00	0.9609E-04	0.0000E+00	0.0000E+00	0.0000E+00
167 Acetyl cyclopropane	0.4075E-09	0.1281E-05	0.4634E-03	0.0000E+00	0.1733E-03	0.0000E+00	0.0000E+00	0.0000E+00
168 2-pentanone	0.4098E-07	0.5950E-04	0.2488E-01	0.0000E+00	0.4772E-02	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO. NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169 3-methyl-2-butanone	0.9149E-05	0.8095E-03	0.3304	0.0000E+00	0.7282E-01	0.0000E+00	0.0000E+00	0.0000E+00
170 4-methyl-3-penten-2-one	0.2396E-04	0.3069E-02	1.377	0.0000E+00	0.1539	0.0000E+00	0.0000E+00	0.0000E+00
171 Cyclohexanone	0.1144E-04	0.6380E-02	3.044	0.0000E+00	0.1428	0.0000E+00	0.0000E+00	0.0000E+00
172 3,3-dimethyl-2-butanone	0.9686E-07	0.1180E-03	0.5229E-01	0.0000E+00	0.6594E-02	0.0000E+00	0.0000E+00	0.0000E+00
173 4-methyl-2-pentanone	0.3376E-03	0.1907E-01	8.515	0.0000E+00	0.9997	0.0000E+00	0.0000E+00	0.0000E+00
174 2,4-dimethyl-3-pentanone	0.5821E-10	0.1430E-05	0.6356E-03	0.0000E+00	0.7797E-04	0.0000E+00	0.0000E+00	0.0000E+00
175 2-heptanone	0.1788E-05	0.2081E-02	1.005	0.0000E+00	0.3482E-01	0.0000E+00	0.0000E+00	0.0000E+00
176 5-methyl-2-hexanone	0.1863E-08	0.4538E-04	0.2103E-01	0.0000E+00	0.1625E-02	0.0000E+00	0.0000E+00	0.0000E+00
177 acetophenone	-0.1397E-08	0.1058E-04	0.4824E-02	0.0000E+00	0.4536E-03	0.0000E+00	0.0000E+00	0.0000E+00
178 2-octanone	0.6985E-09	0.4431E-05	0.2071E-02	0.0000E+00	0.1414E-03	0.0000E+00	0.0000E+00	0.0000E+00
179 5-methyl-3-heptanone	0.1863E-08	0.4874E-04	0.2340E-01	0.0000E+00	0.9507E-03	0.0000E+00	0.0000E+00	0.0000E+00
180 2,6-dimethyl-4-heptanone	0.1118E-07	0.9378E-04	0.4605E-01	0.0000E+00	0.8275E-03	0.0000E+00	0.0000E+00	0.0000E+00
181 Hydrogen sulfide	0.1566E-03	0.5129E-03	0.1261E-08	0.0000E+00	0.7342E-08	0.0000E+00	0.0000E+00	0.0000E+00
182 Carbonyl sulfide	0.4109E-01	0.4160E-02	0.2256E-03	0.0000E+00	0.1314E-02	0.0000E+00	0.0000E+00	0.0000E+00
183 Ethylene sulfide	0.1655E-06	0.8728E-06	0.4019E-04	0.0000E+00	0.3852E-03	0.0000E+00	0.0000E+00	0.0000E+00
184 Dimethyl sulfide	0.3914E-06	0.5399E-05	0.7317E-03	0.0000E+00	0.1923E-02	0.0000E+00	0.0000E+00	0.0000E+00
185 Carbon disulfide	0.5067E-02	0.7154E-03	0.1690E-03	0.0000E+00	0.3369	0.0000E+00	0.0000E+00	0.0000E+00
186 Pentamethylene sulfide	0.2328E-09	0.2184E-05	0.8907E-03	0.0000E+00	0.1972E-03	0.0000E+00	0.0000E+00	0.0000E+00
187 Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188 Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189 Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190 Ethanoic acid	0.7264E-07	0.3945E-05	0.2824E-03	0.0000E+00	0.1647E-02	0.0000E+00	0.0000E+00	0.0000E+00

Russian TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

191	2-ethylhexanoic acid	0.9313E-09	0.9786E-05	0.4783E-02	0.0000E+00	0.1078E-03	0.0000E+00	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.4635E-07	0.2837E-06	0.1743E-04	0.0000E+00	0.1205E-03	0.0000E+00	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.1908	0.2578E-02	0.1474E-01	0.0000E+00	0.3972	0.0000E+00	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.1565E-06	0.4754E-04	0.1824E-01	0.0000E+00	0.5417E-02	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.2299E-08	0.5883E-06	0.1736E-03	0.0000E+00	0.1178E-03	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	-0.1192E-06	0.1633E-03	0.8021E-01	0.0000E+00	0.1402E-02	0.0000E+00	0.0000E+00	0.0000E+00
199	Hydrogen	-0.9537E-06	0.1463E-01	0.0000E+00	0.0000E+00	0.5849E-23	0.0000E+00	0.0000E+00	6.545
200	Ammonia	0.0000E+00	0.1130E-02	0.1007E-15	0.0000E+00	0.2459E-15	0.0000E+00	0.0000E+00	0.0000E+00
201	Carbon monoxide	0.1907E-05	0.4238E-01	0.0000E+00	0.0000E+00	0.2804E-18	0.0000E+00	0.0000E+00	18.96
202	Disiloxane	0.2947E-04	0.5123E-03	0.1289	0.0000E+00	0.1245	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.1009E-03	0.3129E-02	1.200	0.0000E+00	0.3571	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.5811E-06	0.4160E-03	0.1886	0.0000E+00	0.1902E-01	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.2235E-07	0.1915E-03	0.9298E-01	0.0000E+00	0.2729E-02	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.4053E-05	0.3854E-02	1.875	0.0000E+00	0.5073E-01	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	-0.1455E-10	0.3873E-06	0.1922E-03	0.0000E+00	0.1376E-05	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.9537E-06	0.2017E-02	0.9849	0.0000E+00	0.2304E-01	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.2384E-06	0.5829E-02	2.910	0.0000E+00	0.3908E-02	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.1192E-06	0.3353E-02	1.676	0.0000E+00	0.9445E-03	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.8323E-03	0.4161	0.0000E+00	0.7259E-04	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	2.090	2.090	2.090	2.090	0.4860	0.4860	0.1641
2	Ethanol	12.20	12.20	12.20	12.20	2.834	2.834	0.9568
3	2-propen-1-ol	0.3417E-02	0.3417E-02	0.3417E-02	0.3417E-02	0.7961E-03	0.7961E-03	0.2688E-03
4	n-propanol	0.2706	0.2706	0.2706	0.2706	0.6283E-01	0.6283E-01	0.2121E-01
5	2-propanol	2.439	2.439	2.439	2.439	0.5656	0.5656	0.1909
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	2.785	2.785	2.785	2.785	0.6443	0.6443	0.2174
8	2-butanol	0.8666E-02	0.8666E-02	0.8666E-02	0.8666E-02	0.2022E-02	0.2022E-02	0.6828E-03
9	2-methyl-1-propanol	1.014	1.014	1.014	1.014	0.2372	0.2372	0.8014E-01
10	2-methyl-2-propanol	0.1589E-01	0.1589E-01	0.1589E-01	0.1589E-01	0.3673E-02	0.3673E-02	0.1239E-02
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.1136	0.1136	0.1136	0.1136	0.2633E-01	0.2633E-01	0.8885E-02
13	3-methyl-1-butanol	0.3218E-01	0.3218E-01	0.3218E-01	0.3218E-01	0.7539E-02	0.7539E-02	0.2548E-02
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.2898E-01	0.2898E-01	0.2898E-01	0.2898E-01	0.6691E-02	0.6691E-02	0.2257E-02
16	2-ethylbutanol	0.4760E-04	0.4760E-04	0.4760E-04	0.4760E-04	0.1100E-04	0.1100E-04	0.3711E-05
17	2-hexanol	0.1007E-02	0.1007E-02	0.1007E-02	0.1007E-02	0.2331E-03	0.2331E-03	0.7866E-04
18	1,3-dichloro-2-propanol	0.4111E-04	0.4111E-04	0.4111E-04	0.4111E-04	0.9787E-05	0.9787E-05	0.3314E-05
19	2-ethylhexanol	0.1159E-01	0.1159E-01	0.1159E-01	0.1159E-01	0.2704E-02	0.2704E-02	0.9133E-03
20	Nonanol	0.1138E-02	0.1138E-02	0.1138E-02	0.1138E-02	0.2630E-03	0.2630E-03	0.8872E-04
21	n-decanol	0.8310E-05	0.8310E-05	0.8310E-05	0.8310E-05	0.1922E-05	0.1922E-05	0.6486E-06
22	Methanal	0.1082E-03	0.1082E-03	0.1082E-03	0.1082E-03	0.3163E-04	0.3163E-04	0.1104E-04
23	Ethanal	0.8938E-01	0.8938E-01	0.8938E-01	0.8938E-01	0.2065E-01	0.2065E-01	0.6965E-02
24	2-propenal	0.6791E-04	0.6791E-04	0.6791E-04	0.6791E-04	0.1568E-04	0.1568E-04	0.5289E-05
25	Propanal	0.5474E-01	0.5474E-01	0.5474E-01	0.5474E-01	0.1264E-01	0.1264E-01	0.4265E-02
26	2-methylpropenal	0.1733E-04	0.1733E-04	0.1733E-04	0.1733E-04	0.4001E-05	0.4001E-05	0.1350E-05
27	Butanal	0.1323	0.1323	0.1323	0.1323	0.3056E-01	0.3056E-01	0.1031E-01
28	Pentanal	0.7422E-02	0.7422E-02	0.7422E-02	0.7422E-02	0.1714E-02	0.1714E-02	0.5782E-03

29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1327E-02	0.1327E-02	0.1327E-02	0.1327E-02	0.3065E-03	0.3065E-03	0.1034E-03
31	Benzaldehyde	0.5763E-02	0.5763E-02	0.5763E-02	0.5763E-02	0.1332E-02	0.1332E-02	0.4494E-03
32	Heptanal	0.7828E-03	0.7828E-03	0.7828E-03	0.7828E-03	0.1808E-03	0.1808E-03	0.6097E-04
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4027E-02	0.4027E-02	0.4027E-02	0.4027E-02	0.9395E-03	0.9395E-03	0.3173E-03
35	Benzene	0.7533E-04	0.7533E-04	0.7533E-04	0.7533E-04	0.1739E-04	0.1739E-04	0.5866E-05
36	Methylbenzene	0.2792E-02	0.2792E-02	0.2792E-02	0.2792E-02	0.6445E-03	0.6445E-03	0.2174E-03
37	Vinylbenzene	0.2030E-03	0.2030E-03	0.2030E-03	0.2030E-03	0.4687E-04	0.4687E-04	0.1581E-04
38	1,2-dimethylbenzene	0.2037E-02	0.2037E-02	0.2037E-02	0.2037E-02	0.4702E-03	0.4702E-03	0.1586E-03
39	1,3-dimethylbenzene	0.6887E-02	0.6887E-02	0.6887E-02	0.6887E-02	0.1590E-02	0.1590E-02	0.5364E-03
40	1,4-dimethylbenzene	0.1977E-02	0.1977E-02	0.1977E-02	0.1977E-02	0.4564E-03	0.4564E-03	0.1540E-03
41	Ethylbenzene	0.2857E-03	0.2857E-03	0.2857E-03	0.2857E-03	0.6595E-04	0.6595E-04	0.2225E-04
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.8223E-06	0.8223E-06	0.8223E-06	0.8223E-06	0.1898E-06	0.1898E-06	0.6404E-07
44	1,2,4-trimethylbenzene	0.1231E-03	0.1231E-03	0.1231E-03	0.1231E-03	0.2841E-04	0.2841E-04	0.9585E-05
45	1,3,5-trimethylbenzene	0.4628E-05	0.4628E-05	0.4628E-05	0.4628E-05	0.1068E-05	0.1068E-05	0.3604E-06
46	1-ethyl-2-methylbenzene	0.2622E-04	0.2622E-04	0.2622E-04	0.2622E-04	0.6054E-05	0.6054E-05	0.2042E-05
47	Isopropylbenzene	0.9909E-05	0.9909E-05	0.9909E-05	0.9909E-05	0.2288E-05	0.2288E-05	0.7717E-06
48	Propylbenzene	0.3463E-03	0.3463E-03	0.3463E-03	0.3463E-03	0.7995E-04	0.7995E-04	0.2697E-04
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.2186E-05	0.2186E-05	0.2186E-05	0.2186E-05	0.5046E-06	0.5046E-06	0.1702E-06
51	1-methyl-4-propylbenzene	0.2395E-04	0.2395E-04	0.2395E-04	0.2395E-04	0.5531E-05	0.5531E-05	0.1866E-05
52	Methyl formate	0.6323E-05	0.6323E-05	0.6323E-05	0.6323E-05	0.1460E-05	0.1460E-05	0.4924E-06
53	Ethyl formate	0.6335E-03	0.6335E-03	0.6335E-03	0.6335E-03	0.1463E-03	0.1463E-03	0.4936E-04
54	Methyl acetate	0.3735E-01	0.3735E-01	0.3735E-01	0.3735E-01	0.8630E-02	0.8630E-02	0.2911E-02
55	Ethyl acetate	0.3996E-01	0.3996E-01	0.3996E-01	0.3996E-01	0.9230E-02	0.9230E-02	0.3113E-02
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.2647E-04	0.2647E-04	0.2647E-04	0.2647E-04	0.6112E-05	0.6112E-05	0.2062E-05
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	0.3162E-01	0.3162E-01	0.3162E-01	0.3162E-01	0.7302E-02	0.7302E-02	0.2463E-02
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.4522E-03	0.4522E-03	0.4522E-03	0.4522E-03	0.1044E-03	0.1044E-03	0.3523E-04
65	2-Methoxy ethyl acetate	0.5005E-02	0.5005E-02	0.5005E-02	0.5005E-02	0.1166E-02	0.1166E-02	0.3938E-03
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	0.3921	0.3921	0.3921	0.3921	0.9087E-01	0.9087E-01	0.3067E-01
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.5728E-05	0.5728E-05	0.5728E-05	0.5728E-05	0.1322E-05	0.1322E-05	0.4461E-06
72	1,4-epoxybutane	0.2444E-02	0.2444E-02	0.2444E-02	0.2444E-02	0.5642E-03	0.5642E-03	0.1903E-03
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.2422E-04	0.2422E-04	0.2422E-04	0.2422E-04	0.5591E-05	0.5591E-05	0.1886E-05
76	2,3-dihydropyran	0.1803E-03	0.1803E-03	0.1803E-03	0.1803E-03	0.4172E-04	0.4172E-04	0.1408E-04
77	1,4-dioxane	0.9405E-01	0.9405E-01	0.9405E-01	0.9405E-01	0.2187E-01	0.2187E-01	0.7385E-02
78	1,3,5-Trioxane	0.5629E-02	0.5629E-02	0.5629E-02	0.5629E-02	0.1646E-02	0.1646E-02	0.5743E-03
79	2-ethoxyethanol	1.082	1.082	1.082	1.082	0.2526	0.2526	0.8531E-01
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

81	1,1,2,2-tetraMe-1,2-epoxyEt	0.2083E-05	0.2083E-05	0.2083E-05	0.2083E-05	0.4808E-06	0.4808E-06	0.1622E-06
82	4-ethylmorpholine	0.2573	0.2573	0.2573	0.2573	0.6025E-01	0.6025E-01	0.2036E-01
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.1399E-03	0.1399E-03	0.1399E-03	0.1399E-03	0.3235E-04	0.3235E-04	0.1092E-04
85	Chloromethane	0.4338E-03	0.4338E-03	0.4338E-03	0.4338E-03	0.1002E-03	0.1002E-03	0.3378E-04
86	Chloroethene	0.2070E-05	0.2070E-05	0.2070E-05	0.2070E-05	0.4779E-06	0.4779E-06	0.1612E-06
87	Chloroethane	0.3021E-06	0.3021E-06	0.3021E-06	0.3021E-06	0.6974E-07	0.6974E-07	0.2352E-07
88	3-chloropropene	0.4307E-08	0.4307E-08	0.4307E-08	0.4307E-08	0.9943E-09	0.9943E-09	0.3354E-09
89	Dichloromethane	0.6589E-01	0.6589E-01	0.6589E-01	0.6589E-01	0.1521E-01	0.1521E-01	0.5131E-02
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.5789E-06	0.5789E-06	0.5789E-06	0.5789E-06	0.1337E-06	0.1337E-06	0.4509E-07
92	1,2-dichloroethane	0.9314E-03	0.9314E-03	0.9314E-03	0.9314E-03	0.2150E-03	0.2150E-03	0.7254E-04
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.4333E-02	0.4333E-02	0.4333E-02	0.4333E-02	0.1000E-02	0.1000E-02	0.3374E-03
95	1,2-dichloropropane	0.9888E-04	0.9888E-04	0.9888E-04	0.9888E-04	0.2283E-04	0.2283E-04	0.7701E-05
96	Trichloromethane	0.5817E-04	0.5817E-04	0.5817E-04	0.5817E-04	0.1343E-04	0.1343E-04	0.4530E-05
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.8843E-04	0.8843E-04	0.8843E-04	0.8843E-04	0.2042E-04	0.2042E-04	0.6887E-05
99	1,1,1-trichloroethane	0.5646E-03	0.5646E-03	0.5646E-03	0.5646E-03	0.1303E-03	0.1303E-03	0.4397E-04
100	1,1,2-trichloroethane	0.1702E-05	0.1702E-05	0.1702E-05	0.1702E-05	0.3929E-06	0.3929E-06	0.1325E-06
101	1,2-dichlorobenzene	0.5007E-04	0.5007E-04	0.5007E-04	0.5007E-04	0.1156E-04	0.1156E-04	0.3900E-05
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.4053E-05	0.4053E-05	0.4053E-05	0.4053E-05	0.9357E-06	0.9357E-06	0.3156E-06
104	Tetrachloroethene	0.3435E-03	0.3435E-03	0.3435E-03	0.3435E-03	0.7930E-04	0.7930E-04	0.2675E-04
105	Chlorodifluoromethane	0.1076E-02	0.1076E-02	0.1076E-02	0.1076E-02	0.2484E-03	0.2484E-03	0.8380E-04
106	Dichlorofluoromethane	0.1933E-05	0.1933E-05	0.1933E-05	0.1933E-05	0.4464E-06	0.4464E-06	0.1506E-06
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.5411E-06	0.5411E-06	0.5411E-06	0.5411E-06	0.1249E-06	0.1249E-06	0.4214E-07
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.1469E-03	0.1469E-03	0.1469E-03	0.1469E-03	0.3391E-04	0.3391E-04	0.1144E-04
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.5136E-06	0.5136E-06	0.5136E-06	0.5136E-06	0.1186E-06	0.1186E-06	0.4000E-07
114	1,1,2-triCl-1,2,2-triFlethane	0.6471E-03	0.6471E-03	0.6471E-03	0.6471E-03	0.1494E-03	0.1494E-03	0.5040E-04
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.5999E-02	0.5999E-02	0.5999E-02	0.5999E-02	0.1385E-02	0.1385E-02	0.4672E-03
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1338E-05	0.1338E-05	0.1338E-05	0.1338E-05	0.3089E-06	0.3089E-06	0.1042E-06
119	Ethane	0.2183E-05	0.2183E-05	0.2183E-05	0.2183E-05	0.5039E-06	0.5039E-06	0.1700E-06
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.7493E-06	0.7493E-06	0.7493E-06	0.7493E-06	0.1730E-06	0.1730E-06	0.5836E-07
123	Propane	0.2090E-07	0.2090E-07	0.2090E-07	0.2090E-07	0.4826E-08	0.4826E-08	0.1628E-08
124	1,3-butadiene	0.1462E-05	0.1462E-05	0.1462E-05	0.1462E-05	0.3374E-06	0.3374E-06	0.1138E-06
125	1-butene	0.3095E-05	0.3095E-05	0.3095E-05	0.3095E-05	0.7146E-06	0.7146E-06	0.2410E-06
126	2-methylpropane	0.2252E-06	0.2252E-06	0.2252E-06	0.2252E-06	0.5200E-07	0.5200E-07	0.1754E-07
127	Butane	0.7418E-07	0.7418E-07	0.7418E-07	0.7418E-07	0.1713E-07	0.1713E-07	0.5777E-08
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.8028E-09	0.8028E-09	0.8028E-09	0.8028E-09	0.1854E-09	0.1854E-09	0.6252E-10
131	2-methylbutane	0.2931E-07	0.2931E-07	0.2931E-07	0.2931E-07	0.6766E-08	0.6766E-08	0.2282E-08
132	Pentane	0.1244E-05	0.1244E-05	0.1244E-05	0.1244E-05	0.2873E-06	0.2873E-06	0.9691E-07

133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.3293E-07	0.3293E-07	0.3293E-07	0.3293E-07	0.7603E-08	0.7603E-08	0.2564E-08
135	Cyclohexane	0.5631E-04	0.5631E-04	0.5631E-04	0.5631E-04	0.1300E-04	0.1300E-04	0.4385E-05
136	Methylcyclopentane	0.1816E-05	0.1816E-05	0.1816E-05	0.1816E-05	0.4193E-06	0.4193E-06	0.1414E-06
137	2,2-dimethylbutane	0.2585E-07	0.2585E-07	0.2585E-07	0.2585E-07	0.5969E-08	0.5969E-08	0.2013E-08
138	3-methylpentane	0.6247E-07	0.6247E-07	0.6247E-07	0.6247E-07	0.1442E-07	0.1442E-07	0.4865E-08
139	Hexane	0.1191E-05	0.1191E-05	0.1191E-05	0.1191E-05	0.2751E-06	0.2751E-06	0.9278E-07
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.6453E-09	0.6453E-09	0.6453E-09	0.6453E-09	0.1490E-09	0.1490E-09	0.5025E-10
142	Methylcyclohexane	0.1717E-05	0.1717E-05	0.1717E-05	0.1717E-05	0.3963E-06	0.3963E-06	0.1337E-06
143	2,2-dimethylpentane	0.1731E-06	0.1731E-06	0.1731E-06	0.1731E-06	0.3997E-07	0.3997E-07	0.1348E-07
144	2,4-dimethylpentane	0.1729E-08	0.1729E-08	0.1729E-08	0.1729E-08	0.3991E-09	0.3991E-09	0.1346E-09
145	3-ethylpentane	0.2283E-08	0.2283E-08	0.2283E-08	0.2283E-08	0.5272E-09	0.5272E-09	0.1778E-09
146	Heptane	0.2317E-06	0.2317E-06	0.2317E-06	0.2317E-06	0.5350E-07	0.5350E-07	0.1805E-07
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.5575E-09	0.5575E-09	0.5575E-09	0.5575E-09	0.1287E-09	0.1287E-09	0.4342E-10
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.2505E-05	0.2505E-05	0.2505E-05	0.2505E-05	0.5783E-06	0.5783E-06	0.1951E-06
151	2,2,3-trimethylpentane	0.2090E-08	0.2090E-08	0.2090E-08	0.2090E-08	0.4826E-09	0.4826E-09	0.1628E-09
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.3090E-08	0.3090E-08	0.3090E-08	0.3090E-08	0.7134E-09	0.7134E-09	0.2406E-09
154	Octane	0.3823E-07	0.3823E-07	0.3823E-07	0.3823E-07	0.8826E-08	0.8826E-08	0.2977E-08
155	4-ethylheptane	0.1818E-09	0.1818E-09	0.1818E-09	0.1818E-09	0.4197E-10	0.4197E-10	0.1416E-10
156	Nonane	0.1349E-07	0.1349E-07	0.1349E-07	0.1349E-07	0.3114E-08	0.3114E-08	0.1050E-08
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.8335E-07	0.8335E-07	0.8335E-07	0.8335E-07	0.1924E-07	0.1924E-07	0.6491E-08
160	Undecane	0.2833E-06	0.2833E-06	0.2833E-06	0.2833E-06	0.6542E-07	0.6542E-07	0.2207E-07
161	Dodecane	0.4992E-06	0.4992E-06	0.4992E-06	0.4992E-06	0.1152E-06	0.1152E-06	0.3887E-07
162	2-propanone	0.2142E-03	0.2142E-03	0.2142E-03	0.2142E-03	0.4952E-04	0.4952E-04	0.1671E-04
163	3-buten-2-one	0.2796E-04	0.2796E-04	0.2796E-04	0.2796E-04	0.6460E-05	0.6460E-05	0.2179E-05
164	2-butanone	8.009	8.009	8.009	8.009	1.882	1.882	0.6361
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.5520E-05	0.5520E-05	0.5520E-05	0.5520E-05	0.1275E-05	0.1275E-05	0.4301E-06
167	Acetyl cyclopropane	0.7695E-05	0.7695E-05	0.7695E-05	0.7695E-05	0.1777E-05	0.1777E-05	0.5995E-06
168	2-pentanone	0.1430E-02	0.1430E-02	0.1430E-02	0.1430E-02	0.3306E-03	0.3306E-03	0.1115E-03

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.1665E-01	0.1665E-01	0.1665E-01	0.1665E-01	0.3846E-02	0.3846E-02	0.1297E-02
171	Cyclohexanone	0.2151	0.2151	0.2151	0.2151	0.4977E-01	0.4977E-01	0.1679E-01
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.2569	0.2569	0.2569	0.2569	0.5935E-01	0.5935E-01	0.2002E-01
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.1797E-02	0.1797E-02	0.1797E-02	0.1797E-02	0.4148E-03	0.4148E-03	0.1399E-03
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.2976E-03	0.2976E-03	0.2976E-03	0.2976E-03	0.6884E-04	0.6884E-04	0.2323E-04
178	2-octanone	0.2492E-04	0.2492E-04	0.2492E-04	0.2492E-04	0.5756E-05	0.5756E-05	0.1942E-05
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.1172E-03	0.1172E-03	0.1172E-03	0.1172E-03	0.2707E-04	0.2707E-04	0.9132E-05
181	Hydrogen sulfide	0.4809E-02	0.4809E-02	0.4809E-02	0.4809E-02	0.1111E-02	0.1111E-02	0.3747E-03
182	Carbonyl sulfide	0.6801E-04	0.6801E-04	0.6801E-04	0.6801E-04	0.1570E-04	0.1570E-04	0.5296E-05
183	Ethylene sulfide	0.1188E-06	0.1188E-06	0.1188E-06	0.1188E-06	0.2743E-07	0.2743E-07	0.9254E-08
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

185	Carbon disulfide	0.3082E-04	0.3082E-04	0.3082E-04	0.3082E-04	0.7116E-05	0.7116E-05	0.2400E-05
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.2470E-02	0.2470E-02	0.2470E-02	0.2470E-02	0.5931E-03	0.5931E-03	0.2010E-03
191	2-ethylhexanoic acid	0.1144E-03	0.1144E-03	0.1144E-03	0.1144E-03	0.2643E-04	0.2643E-04	0.8915E-05
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.1161E-04	0.1161E-04	0.1161E-04	0.1161E-04	0.2687E-05	0.2687E-05	0.9066E-06
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.7869E-02	0.7869E-02	0.7869E-02	0.7869E-02	0.1817E-02	0.1817E-02	0.6130E-03
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	0.3203	0.3203	0.3203	0.3203	0.8409E-01	0.8409E-01	0.2886E-01
199	Hydrogen	0.1032E-04	0.1032E-04	0.1032E-04	0.1032E-04	0.2383E-05	0.2383E-05	0.8038E-06
200	Ammonia	14.69	14.69	14.69	14.69	9.426	9.426	3.180
201	Carbon monoxide	0.3072E-04	0.3072E-04	0.3072E-04	0.3072E-04	0.7092E-05	0.7092E-05	0.2392E-05
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	336.4	37.15	8.754	0.0000E+00	50.99	0.0000E+00	0.0000E+00	0.0000E+00
2	Ethanol	2268.	208.7	1748.	0.0000E+00	9794.	0.0000E+00	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.4382	0.4993E-01	15.81	0.0000E+00	1.098	0.0000E+00	0.0000E+00	0.0000E+00
4	n-propanol	56.85	6.444	1725.	0.0000E+00	257.6	0.0000E+00	0.0000E+00	0.0000E+00
5	2-propanol	622.0	70.56	4878.	0.0000E+00	3885.	0.0000E+00	0.0000E+00	0.0000E+00
6	1,2-ethanediol	3.108	0.3506	138.8	0.0000E+00	4.296	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	1553.	174.7	0.4250E+05	0.0000E+00	9108.	0.0000E+00	0.0000E+00	0.0000E+00
8	2-butanol	0.9694	0.1106	44.17	0.0000E+00	1.237	0.0000E+00	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	92.73	10.58	4395.	0.0000E+00	136.4	0.0000E+00	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	18.29	2.068	901.7	0.0000E+00	15.94	0.0000E+00	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.1425	0.1608E-01	6.515	0.0000E+00	0.1689	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	31.75	3.606	1666.	0.0000E+00	16.22	0.0000E+00	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	2.546	0.2908	129.1	0.0000E+00	1.798	0.0000E+00	0.0000E+00	0.0000E+00
14	Phenol	250.6	28.27	0.1373E+05	0.0000E+00	58.16	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	371.3	41.87	0.1956E+05	0.0000E+00	251.5	0.0000E+00	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.6375E-01	0.7208E-02	3.169	0.0000E+00	0.4806E-01	0.0000E+00	0.0000E+00	0.0000E+00
17	2-hexanol	0.4298	0.4875E-01	22.08	0.0000E+00	0.2531	0.0000E+00	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.1571E-02	0.1799E-03	0.7138E-01	0.0000E+00	0.2026E-02	0.0000E+00	0.0000E+00	0.0000E+00
19	2-ethylhexanol	1.297	0.1479	71.93	0.0000E+00	0.2202	0.0000E+00	0.0000E+00	0.0000E+00
20	Nonanol	1.589	0.1797	89.10	0.0000E+00	0.8289E-01	0.0000E+00	0.0000E+00	0.0000E+00
21	n-decanol	0.5043E-02	0.5713E-03	0.2781	0.0000E+00	0.8340E-03	0.0000E+00	0.0000E+00	0.0000E+00
22	Methanal	0.5946E-03	0.6826E-04	0.8717E-11	0.0000E+00	0.5077E-10	0.0000E+00	0.0000E+00	0.0000E+00

23	Ethanal	206.9	16.82	14.27	0.0000E+00	83.09	0.0000E+00	0.0000E+00	0.0000E+00
24	2-propenal	1.799	0.2018	5.642	0.0000E+00	11.13	0.0000E+00	0.0000E+00	0.0000E+00
25	Propanal	119.1	13.40	253.3	0.0000E+00	740.6	0.0000E+00	0.0000E+00	0.0000E+00
26	2-methylpropenal	1.043	0.1175	37.26	0.0000E+00	2.820	0.0000E+00	0.0000E+00	0.0000E+00
27	Butanal	413.2	46.28	0.1174E+05	0.0000E+00	2278.	0.0000E+00	0.0000E+00	0.0000E+00
28	Pentanal	37.93	4.279	1815.	0.0000E+00	46.03	0.0000E+00	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.4177	0.4714E-01	20.76	0.0000E+00	0.3115	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	15.46	1.744	800.2	0.0000E+00	8.488	0.0000E+00	0.0000E+00	0.0000E+00
31	Benzaldehyde	5.785	0.6545	300.9	0.0000E+00	2.933	0.0000E+00	0.0000E+00	0.0000E+00
32	Heptanal	7.607	0.8587	410.0	0.0000E+00	2.180	0.0000E+00	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.1289	0.1454E-01	7.005	0.0000E+00	0.2940E-01	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4505	0.5138E-01	25.15	0.0000E+00	0.5962E-01	0.0000E+00	0.0000E+00	0.0000E+00
35	Benzene	7.932	0.8935	318.6	0.0000E+00	17.95	0.0000E+00	0.0000E+00	0.0000E+00
36	Methylbenzene	403.3	45.16	0.1509E+05	0.0000E+00	1661.	0.0000E+00	0.0000E+00	0.0000E+00
37	Vinylbenzene	12.15	1.371	627.0	0.0000E+00	6.798	0.0000E+00	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	193.7	21.85	0.1027E+05	0.0000E+00	102.9	0.0000E+00	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	1043.	116.8	0.4653E+05	0.0000E+00	3254.	0.0000E+00	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	272.5	30.72	0.1432E+05	0.0000E+00	181.1	0.0000E+00	0.0000E+00	0.0000E+00
41	Ethylbenzene	52.22	5.891	2752.	0.0000E+00	24.58	0.0000E+00	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.5291E-01	0.5972E-02	2.654	0.0000E+00	0.3671E-01	0.0000E+00	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	15.76	1.778	854.9	0.0000E+00	3.910	0.0000E+00	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.8337	0.9409E-01	43.97	0.0000E+00	0.3405	0.0000E+00	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	1.694	0.1912	89.88	0.0000E+00	0.6369	0.0000E+00	0.0000E+00	0.0000E+00
47	Isopropylbenzene	3.265	0.3684	173.5	0.0000E+00	1.195	0.0000E+00	0.0000E+00	0.0000E+00
48	Propylbenzene	80.34	9.065	4387.	0.0000E+00	18.34	0.0000E+00	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.6534	0.7374E-01	35.35	0.0000E+00	0.1680	0.0000E+00	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.1335	0.1507E-01	7.085	0.0000E+00	0.4980E-01	0.0000E+00	0.0000E+00	0.0000E+00
52	Methyl formate	1.651	0.1759	2.360	0.0000E+00	9.428	0.0000E+00	0.0000E+00	0.0000E+00
53	Ethyl formate	1.696	0.1910	53.88	0.0000E+00	5.941	0.0000E+00	0.0000E+00	0.0000E+00
54	Methyl acetate	58.27	6.551	960.4	0.0000E+00	352.0	0.0000E+00	0.0000E+00	0.0000E+00
55	Ethyl acetate	102.4	11.50	3514.	0.0000E+00	421.3	0.0000E+00	0.0000E+00	0.0000E+00
56	Allyl acetate	1.439	0.1624	68.41	0.0000E+00	1.439	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57	Methyl methacrylate	37.12	4.185	1794.	0.0000E+00	40.84	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	1.976	0.2230	95.07	0.0000E+00	1.860	0.0000E+00	0.0000E+00	0.0000E+00
59	n-butyl formate	0.4482	0.5058E-01	21.34	0.0000E+00	0.4390	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	171.6	19.33	8339.	0.0000E+00	234.7	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	10.38	1.171	538.0	0.0000E+00	5.479	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	269.6	30.41	0.1420E+05	0.0000E+00	173.8	0.0000E+00	0.0000E+00	0.0000E+00
63	Isobutyl acetate	72.18	8.144	3830.	0.0000E+00	31.71	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	1.863	0.2104	96.13	0.0000E+00	1.011	0.0000E+00	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	0.6417	0.7315E-01	32.41	0.0000E+00	0.4574	0.0000E+00	0.0000E+00	0.0000E+00
66	Isoamyl acetate	13.49	1.522	732.6	0.0000E+00	3.226	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	22.65	2.556	1243.	0.0000E+00	4.059	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	116.0	13.18	6447.	0.0000E+00	16.96	0.0000E+00	0.0000E+00	0.0000E+00
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.1070E-01	0.1208E-02	0.5952	0.0000E+00	0.9532E-03	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.7016	0.7878E-01	3.079	0.0000E+00	4.352	0.0000E+00	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	28.05	3.146	593.4	0.0000E+00	158.9	0.0000E+00	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.1830E-01	0.2065E-02	0.6937	0.0000E+00	0.3775E-01	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	29.95	3.360	946.1	0.0000E+00	127.8	0.0000E+00	0.0000E+00	0.0000E+00

75	2-methylfuran	1.234	0.1391	45.01	0.0000E+00	3.196	0.0000E+00	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.8580E-01	0.9727E-02	3.444	0.0000E+00	0.1575	0.0000E+00	0.0000E+00	0.0000E+00
77	1,4-dioxane	14.75	1.679	643.8	0.0000E+00	25.34	0.0000E+00	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	0.3095E-01	0.3552E-02	1.131	0.0000E+00	0.7094E-01	0.0000E+00	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	116.6	13.30	6146.	0.0000E+00	66.85	0.0000E+00	0.0000E+00	0.0000E+00
80	Epichlorohydrin	1.428	0.1611	57.98	0.0000E+00	2.709	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.4553	0.5138E-01	21.88	0.0000E+00	0.4234	0.0000E+00	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	21.41	2.445	1166.	0.0000E+00	6.359	0.0000E+00	0.0000E+00	0.0000E+00
83	1-propoxybutane	16.98	1.917	917.5	0.0000E+00	4.685	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.8030E-01	0.9098E-02	4.148	0.0000E+00	0.4418E-01	0.0000E+00	0.0000E+00	0.0000E+00
85	Chloromethane	81.92	4.968	0.4886	0.0000E+00	2.846	0.0000E+00	0.0000E+00	0.0000E+00
86	Chloroethene	1.100	0.8423E-01	0.5406	0.0000E+00	3.036	0.0000E+00	0.0000E+00	0.0000E+00
87	Chloroethane	0.4751E-01	0.5334E-02	0.8555	0.0000E+00	0.2509	0.0000E+00	0.0000E+00	0.0000E+00
88	3-chloropropene	0.4091E-01	0.4614E-02	1.410	0.0000E+00	0.1036	0.0000E+00	0.0000E+00	0.0000E+00
89	Dichloromethane	3824.	259.0	655.0	0.0000E+00	3812.	0.0000E+00	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.2939	0.3308E-01	8.517	0.0000E+00	1.076	0.0000E+00	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	26.46	2.971	819.4	0.0000E+00	110.9	0.0000E+00	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	14.01	1.575	489.8	0.0000E+00	46.30	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	446.9	50.15	0.1908E+05	0.0000E+00	1318.	0.0000E+00	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	2.975	0.3355	123.6	0.0000E+00	5.443	0.0000E+00	0.0000E+00	0.0000E+00
96	Trichloromethane	5.359	0.6022	156.0	0.0000E+00	22.02	0.0000E+00	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.5649	0.6375E-01	27.06	0.0000E+00	0.5359	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	17.34	1.954	713.5	0.0000E+00	37.13	0.0000E+00	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	192.2	21.53	6079.	0.0000E+00	893.3	0.0000E+00	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.2939E-01	0.3317E-02	1.192	0.0000E+00	0.5168E-01	0.0000E+00	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	3.358	0.3789	172.7	0.0000E+00	1.874	0.0000E+00	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.8906E-01	0.1005E-01	4.774	0.0000E+00	0.2775E-01	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	2.709	0.3056	116.4	0.0000E+00	4.293	0.0000E+00	0.0000E+00	0.0000E+00
104	Tetrachloroethene	209.7	23.53	8021.	0.0000E+00	717.4	0.0000E+00	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	745.8	47.33	21.60	0.0000E+00	125.8	0.0000E+00	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.2295	0.2576E-01	2.276	0.0000E+00	1.404	0.0000E+00	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.6659	0.7492E-01	19.08	0.0000E+00	2.548	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	4.802	0.5400	30.47	0.0000E+00	29.93	0.0000E+00	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.4583	0.5167E-01	16.15	0.0000E+00	1.188	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	406.6	45.79	1359.	0.0000E+00	2539.	0.0000E+00	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	598.5	40.48	150.9	0.0000E+00	878.7	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	14.11	1.587	517.3	0.0000E+00	41.34	0.0000E+00	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	7132.	803.2	0.3156E+05	0.0000E+00	0.4455E+05	0.0000E+00	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	10.05	1.134	496.1	0.0000E+00	8.176	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.8730E+05	5110.	0.1219	0.0000E+00	0.7102	0.0000E+00	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	6.345	0.3733	0.6262E-02	0.0000E+00	0.3647E-01	0.0000E+00	0.0000E+00	0.0000E+00
119	Ethane	24.08	1.462	0.2244	0.0000E+00	1.307	0.0000E+00	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	3.622	0.2588	1.309	0.0000E+00	7.622	0.0000E+00	0.0000E+00	0.0000E+00
123	Propane	0.3253	0.3653E-01	1.594	0.0000E+00	2.019	0.0000E+00	0.0000E+00	0.0000E+00
124	1,3-butadiene	1.449	0.1627	19.68	0.0000E+00	8.741	0.0000E+00	0.0000E+00	0.0000E+00
125	1-butene	17.22	1.936	143.2	0.0000E+00	107.5	0.0000E+00	0.0000E+00	0.0000E+00
126	2-methylpropane	5.895	0.6612	117.2	0.0000E+00	33.28	0.0000E+00	0.0000E+00	0.0000E+00

127	Butane	1.546	0.1739	50.34	0.0000E+00	5.289	0.0000E+00	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.7255E-02	0.8186E-03	0.2837	0.0000E+00	0.1393E-01	0.0000E+00	0.0000E+00	0.0000E+00
131	2-methylbutane	0.9092	0.1026	39.70	0.0000E+00	1.345	0.0000E+00	0.0000E+00	0.0000E+00
132	Pentane	35.76	4.020	1402.	0.0000E+00	104.4	0.0000E+00	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.2212	0.2496E-01	10.22	0.0000E+00	0.2510	0.0000E+00	0.0000E+00	0.0000E+00
135	Cyclohexane	183.2	20.53	6532.	0.0000E+00	758.4	0.0000E+00	0.0000E+00	0.0000E+00
136	Methylcyclopentane	14.74	1.662	691.3	0.0000E+00	18.25	0.0000E+00	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.8927	0.1007	42.45	0.0000E+00	0.8901	0.0000E+00	0.0000E+00	0.0000E+00
138	3-methylpentane	1.593	0.1797	77.34	0.0000E+00	1.414	0.0000E+00	0.0000E+00	0.0000E+00
139	Hexane	24.51	2.765	1218.	0.0000E+00	21.48	0.0000E+00	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.5877E-02	0.6631E-03	0.2770	0.0000E+00	0.6039E-02	0.0000E+00	0.0000E+00	0.0000E+00
142	Methylcyclohexane	16.66	1.880	855.1	0.0000E+00	10.18	0.0000E+00	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	12.41	1.400	647.0	0.0000E+00	6.218	0.0000E+00	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.1155	0.1304E-01	5.717	0.0000E+00	0.8881E-01	0.0000E+00	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.1317	0.1486E-01	6.567	0.0000E+00	0.9568E-01	0.0000E+00	0.0000E+00	0.0000E+00
146	Heptane	14.21	1.604	749.3	0.0000E+00	6.125	0.0000E+00	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	13.87	1.565	736.5	0.0000E+00	5.316	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.7939E-02	0.8959E-03	0.3986	0.0000E+00	0.5459E-02	0.0000E+00	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.4140E-02	0.4672E-03	0.2046	0.0000E+00	0.3205E-02	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	27.13	3.062	1455.	0.0000E+00	8.996	0.0000E+00	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.1809	0.2041E-01	9.401	0.0000E+00	0.8902E-01	0.0000E+00	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.4361	0.4921E-01	22.88	0.0000E+00	0.1911	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.2617	0.2953E-01	13.70	0.0000E+00	0.1183	0.0000E+00	0.0000E+00	0.0000E+00
154	Octane	4.284	0.4834	231.2	0.0000E+00	1.178	0.0000E+00	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.2135E-01	0.2409E-02	1.128	0.0000E+00	0.8501E-02	0.0000E+00	0.0000E+00	0.0000E+00
156	Nonane	1.818	0.2052	99.44	0.0000E+00	0.3490	0.0000E+00	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	1.904	0.2149	104.6	0.0000E+00	0.3197	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.8863	0.1000	49.04	0.0000E+00	0.1072	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	8.937	1.009	498.4	0.0000E+00	0.6561	0.0000E+00	0.0000E+00	0.0000E+00
160	Undecane	11.79	1.330	662.5	0.0000E+00	0.3029	0.0000E+00	0.0000E+00	0.0000E+00
161	Dodecane	0.2432	0.2745E-01	13.63	0.0000E+00	0.1035E-01	0.0000E+00	0.0000E+00	0.0000E+00
162	2-propanone	0.2089	0.2361E-01	6.892	0.0000E+00	0.6038	0.0000E+00	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.6593E-01	0.7447E-02	2.446	0.0000E+00	0.1453	0.0000E+00	0.0000E+00	0.0000E+00
164	2-butanone	535.5	61.10	8106.	0.0000E+00	3329.	0.0000E+00	0.0000E+00	0.0000E+00
165	Cyclopentanone	252.0	28.22	8632.	0.0000E+00	1119.	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1442E-01	0.1628E-02	0.6058	0.0000E+00	0.2306E-01	0.0000E+00	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.2409E-01	0.2721E-02	0.9854	0.0000E+00	0.4159E-01	0.0000E+00	0.0000E+00	0.0000E+00
168	2-pentanone	1.119	0.1267	53.08	0.0000E+00	1.144	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	15.22	1.717	724.2	0.0000E+00	17.18	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	57.72	6.517	2986.	0.0000E+00	36.15	0.0000E+00	0.0000E+00	0.0000E+00
171	Cyclohexanone	120.0	13.60	6526.	0.0000E+00	33.77	0.0000E+00	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	2.220	0.2505	111.2	0.0000E+00	1.580	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	358.7	40.53	0.1890E+05	0.0000E+00	228.0	0.0000E+00	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.2690E-01	0.3036E-02	1.349	0.0000E+00	0.1871E-01	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	39.14	4.417	2139.	0.0000E+00	8.289	0.0000E+00	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.8535	0.9631E-01	44.64	0.0000E+00	0.3899	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.1989	0.2253E-01	10.28	0.0000E+00	0.1088	0.0000E+00	0.0000E+00	0.0000E+00
178	2-octanone	0.8334E-01	0.9412E-02	4.399	0.0000E+00	0.3394E-01	0.0000E+00	0.0000E+00	0.0000E+00

179	5-methyl-3-heptanone	0.9167	0.1035	49.67	0.0000E+00	0.2281	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	1.764	0.1991	97.75	0.0000E+00	0.1985	0.0000E+00	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	9.648	0.8940	0.6699E-04	0.0000E+00	0.3902E-03	0.0000E+00	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	78.73	4.762	0.5226	0.0000E+00	3.043	0.0000E+00	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.1642E-01	0.1842E-02	0.2469	0.0000E+00	0.9137E-01	0.0000E+00	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.1015	0.1142E-01	2.427	0.0000E+00	0.4524	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	13.51	1.496	24.33	0.0000E+00	82.11	0.0000E+00	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.4108E-01	0.4635E-02	1.890	0.0000E+00	0.4731E-01	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.7420E-01	0.8494E-02	1.364	0.0000E+00	0.3895	0.0000E+00	0.0000E+00	0.0000E+00
191	2-ethylhexanoic acid	0.1841	0.2081E-01	10.17	0.0000E+00	0.2587E-01	0.0000E+00	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.5336E-02	0.6025E-03	0.8434E-01	0.0000E+00	0.2858E-01	0.0000E+00	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	48.61	3.837	26.61	0.0000E+00	147.8	0.0000E+00	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.8941	0.1009	39.11	0.0000E+00	1.295	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.1106E-01	0.1248E-02	0.3738	0.0000E+00	0.2821E-01	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	3.071	0.3524	173.1	0.0000E+00	0.3365	0.0000E+00	0.0000E+00	0.0000E+00
199	Hydrogen	275.2	30.99	0.7442E-15	0.0000E+00	0.4334E-14	0.0000E+00	0.0000E+00	0.1386E+05
200	Ammonia	45.63	2.441	0.7262E-07	0.0000E+00	0.4230E-06	0.0000E+00	0.0000E+00	0.0000E+00
201	Carbon monoxide	797.1	89.77	0.5700E-10	0.0000E+00	0.3320E-09	0.0000E+00	0.0000E+00	0.4015E+05
202	Disiloxane	9.635	1.084	349.7	0.0000E+00	28.94	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	58.85	6.631	2779.	0.0000E+00	82.50	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	7.824	0.8828	401.7	0.0000E+00	4.547	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	3.602	0.4065	197.4	0.0000E+00	0.6545	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	72.49	8.180	3991.	0.0000E+00	12.04	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.7284E-02	0.8220E-03	0.4080	0.0000E+00	0.3301E-03	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	37.93	4.281	2093.	0.0000E+00	5.500	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	109.6	12.37	6178.	0.0000E+00	0.9253	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	63.07	7.117	3557.	0.0000E+00	0.2251	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	15.65	1.767	883.1	0.0000E+00	0.1739E-01	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	4341.	4341.	4341.	4341.	1009.	1009.	340.8
2	Ethanol	0.2116E+05	0.2116E+05	0.2116E+05	0.2116E+05	4917.	4917.	1660.
3	2-propen-1-ol	7.323	7.323	7.323	7.323	1.706	1.706	0.5762
4	n-propanol	577.0	577.0	577.0	577.0	134.0	134.0	45.22
5	2-propanol	5203.	5203.	5203.	5203.	1207.	1207.	407.3
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	5892.	5892.	5892.	5892.	1363.	1363.	459.9
8	2-butanol	18.59	18.59	18.59	18.59	4.336	4.336	1.465
9	2-methyl-1-propanol	2177.	2177.	2177.	2177.	509.0	509.0	172.0
10	2-methyl-2-propanol	33.80	33.80	33.80	33.80	7.812	7.812	2.635
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	242.6	242.6	242.6	242.6	56.24	56.24	18.98
13	3-methyl-1-butanol	69.12	69.12	69.12	69.12	16.19	16.19	5.473
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	61.46	61.46	61.46	61.46	14.19	14.19	4.787
16	2-ethylbutanol	0.1012	0.1012	0.1012	0.1012	0.2339E-01	0.2339E-01	0.7892E-02

Russian TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

17	2-hexanol	2.148	2.148	2.148	2.148	0.4973	0.4973	0.1678
18	1,3-dichloro-2-propanol	0.8851E-01	0.8851E-01	0.8851E-01	0.8851E-01	0.2107E-01	0.2107E-01	0.7136E-02
19	2-ethylhexanol	24.86	24.86	24.86	24.86	5.800	5.800	1.959
20	Nonanol	2.420	2.420	2.420	2.420	0.5593	0.5593	0.1887
21	n-decanol	0.1771E-01	0.1771E-01	0.1771E-01	0.1771E-01	0.4096E-02	0.4096E-02	0.1382E-02
22	Methanal	0.2335	0.2335	0.2335	0.2335	0.6828E-01	0.6828E-01	0.2382E-01
23	Ethanal	138.5	138.5	138.5	138.5	31.99	31.99	10.79
24	2-propenal	0.1434	0.1434	0.1434	0.1434	0.3310E-01	0.3310E-01	0.1117E-01
25	Propanal	116.0	116.0	116.0	116.0	26.78	26.78	9.036
26	2-methylpropenal	0.3672E-01	0.3672E-01	0.3672E-01	0.3672E-01	0.8479E-02	0.8479E-02	0.2860E-02
27	Butanal	278.7	278.7	278.7	278.7	64.37	64.37	21.71
28	Pentanal	15.75	15.75	15.75	15.75	3.636	3.636	1.227
29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	2.818	2.818	2.818	2.818	0.6506	0.6506	0.2195
31	Benzaldehyde	12.26	12.26	12.26	12.26	2.835	2.835	0.9563
32	Heptanal	1.662	1.662	1.662	1.662	0.3838	0.3838	0.1294
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	8.639	8.639	8.639	8.639	2.015	2.015	0.6807
35	Benzene	0.1596	0.1596	0.1596	0.1596	0.3684E-01	0.3684E-01	0.1243E-01
36	Methylbenzene	5.879	5.879	5.879	5.879	1.357	1.357	0.4579
37	Vinylbenzene	0.4309	0.4309	0.4309	0.4309	0.9948E-01	0.9948E-01	0.3356E-01
38	1,2-dimethylbenzene	4.320	4.320	4.320	4.320	0.9974	0.9974	0.3365
39	1,3-dimethylbenzene	14.51	14.51	14.51	14.51	3.351	3.351	1.130
40	1,4-dimethylbenzene	4.192	4.192	4.192	4.192	0.9678	0.9678	0.3265
41	Ethylbenzene	0.6062	0.6062	0.6062	0.6062	0.1400	0.1400	0.4721E-01
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.1745E-02	0.1745E-02	0.1745E-02	0.1745E-02	0.4029E-03	0.4029E-03	0.1359E-03
44	1,2,4-trimethylbenzene	0.2612	0.2612	0.2612	0.2612	0.6031E-01	0.6031E-01	0.2034E-01
45	1,3,5-trimethylbenzene	0.9822E-02	0.9822E-02	0.9822E-02	0.9822E-02	0.2268E-02	0.2268E-02	0.7649E-03
46	1-ethyl-2-methylbenzene	0.5565E-01	0.5565E-01	0.5565E-01	0.5565E-01	0.1285E-01	0.1285E-01	0.4334E-02
47	Isopropylbenzene	0.2103E-01	0.2103E-01	0.2103E-01	0.2103E-01	0.4856E-02	0.4856E-02	0.1638E-02
48	Propylbenzene	0.7349	0.7349	0.7349	0.7349	0.1697	0.1697	0.5723E-01
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.4639E-02	0.4639E-02	0.4639E-02	0.4639E-02	0.1071E-02	0.1071E-02	0.3613E-03
51	1-methyl-4-propylbenzene	0.5086E-01	0.5086E-01	0.5086E-01	0.5086E-01	0.1174E-01	0.1174E-01	0.3962E-02
52	Methyl formate	0.1283E-01	0.1283E-01	0.1283E-01	0.1283E-01	0.2961E-02	0.2961E-02	0.9988E-03
53	Ethyl formate	1.342	1.342	1.342	1.342	0.3100	0.3100	0.1046
54	Methyl acetate	78.98	78.98	78.98	78.98	18.25	18.25	6.156
55	Ethyl acetate	84.40	84.40	84.40	84.40	19.49	19.49	6.576
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.5618E-01	0.5618E-01	0.5618E-01	0.5618E-01	0.1297E-01	0.1297E-01	0.4375E-02
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	67.08	67.08	67.08	67.08	15.49	15.49	5.225
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.9604	0.9604	0.9604	0.9604	0.2218	0.2218	0.7481E-01
65	2-Methoxy ethyl acetate	10.73	10.73	10.73	10.73	2.500	2.500	0.8442
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	837.5	837.5	837.5	837.5	194.1	194.1	65.51

69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.1210E-01	0.1210E-01	0.1210E-01	0.1210E-01	0.2794E-02	0.2794E-02	0.9424E-03
72	1,4-epoxybutane	5.154	5.154	5.154	5.154	1.190	1.190	0.4014
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.5132E-01	0.5132E-01	0.5132E-01	0.5132E-01	0.1185E-01	0.1185E-01	0.3997E-02
76	2,3-dihydropyran	0.3844	0.3844	0.3844	0.3844	0.8896E-01	0.8896E-01	0.3002E-01
77	1,4-dioxane	201.4	201.4	201.4	201.4	46.83	46.83	15.81
78	1,3,5-Trioxane	12.15	12.15	12.15	12.15	3.553	3.553	1.240
79	2-ethoxyethanol	2321.	2321.	2321.	2321.	541.8	541.8	183.0
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.4420E-02	0.4420E-02	0.4420E-02	0.4420E-02	0.1020E-02	0.1020E-02	0.3442E-03
82	4-ethylmorpholine	552.6	552.6	552.6	552.6	129.4	129.4	43.72
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.2980	0.2980	0.2980	0.2980	0.6895E-01	0.6895E-01	0.2326E-01
85	Chloromethane	0.4978	0.4978	0.4978	0.4978	0.1149	0.1149	0.3877E-01
86	Chloroethene	0.3110E-02	0.3110E-02	0.3110E-02	0.3110E-02	0.7181E-03	0.7181E-03	0.2422E-03
87	Chloroethane	0.6380E-03	0.6380E-03	0.6380E-03	0.6380E-03	0.1473E-03	0.1473E-03	0.4968E-04
88	3-chloropropene	0.9136E-05	0.9136E-05	0.9136E-05	0.9136E-05	0.2109E-05	0.2109E-05	0.7115E-06
89	Dichloromethane	86.53	86.53	86.53	86.53	19.98	19.98	6.739
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.1226E-02	0.1226E-02	0.1226E-02	0.1226E-02	0.2830E-03	0.2830E-03	0.9544E-04
92	1,2-dichloroethane	1.967	1.967	1.967	1.967	0.4541	0.4541	0.1532
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	9.146	9.146	9.146	9.146	2.111	2.111	0.7122
95	1,2-dichloropropane	0.2097	0.2097	0.2097	0.2097	0.4842E-01	0.4842E-01	0.1633E-01
96	Trichloromethane	0.1229	0.1229	0.1229	0.1229	0.2838E-01	0.2838E-01	0.9575E-02
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.1874	0.1874	0.1874	0.1874	0.4326E-01	0.4326E-01	0.1459E-01
99	1,1,1-trichloroethane	1.190	1.190	1.190	1.190	0.2747	0.2747	0.9264E-01
100	1,1,2-trichloroethane	0.3612E-02	0.3612E-02	0.3612E-02	0.3612E-02	0.8339E-03	0.8339E-03	0.2813E-03
101	1,2-dichlorobenzene	0.1063	0.1063	0.1063	0.1063	0.2454E-01	0.2454E-01	0.8277E-02
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.8598E-02	0.8598E-02	0.8598E-02	0.8598E-02	0.1985E-02	0.1985E-02	0.6696E-03
104	Tetrachloroethene	0.7251	0.7251	0.7251	0.7251	0.1674	0.1674	0.5647E-01
105	Chlorodifluoromethane	1.298	1.298	1.298	1.298	0.2996	0.2996	0.1011
106	Dichlorofluoromethane	0.4083E-02	0.4083E-02	0.4083E-02	0.4083E-02	0.9426E-03	0.9426E-03	0.3180E-03
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.1144E-02	0.1144E-02	0.1144E-02	0.1144E-02	0.2642E-03	0.2642E-03	0.8913E-04
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.3112	0.3112	0.3112	0.3112	0.7185E-01	0.7185E-01	0.2424E-01
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1087E-02	0.1087E-02	0.1087E-02	0.1087E-02	0.2509E-03	0.2509E-03	0.8464E-04
114	1,1,2-triCl-1,2,2-triFlethane	1.371	1.371	1.371	1.371	0.3164	0.3164	0.1067
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	6.638	6.638	6.638	6.638	1.533	1.533	0.5170
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1489E-02	0.1489E-02	0.1489E-02	0.1489E-02	0.3437E-03	0.3437E-03	0.1159E-03
119	Ethane	0.2509E-02	0.2509E-02	0.2509E-02	0.2509E-02	0.5793E-03	0.5793E-03	0.1954E-03
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1051E-02	0.1051E-02	0.1051E-02	0.1051E-02	0.2427E-03	0.2427E-03	0.8186E-04
123	Propane	0.4416E-04	0.4416E-04	0.4416E-04	0.4416E-04	0.1020E-04	0.1020E-04	0.3439E-05
124	1,3-butadiene	0.3086E-02	0.3086E-02	0.3086E-02	0.3086E-02	0.7125E-03	0.7125E-03	0.2403E-03
125	1-butene	0.6545E-02	0.6545E-02	0.6545E-02	0.6545E-02	0.1511E-02	0.1511E-02	0.5097E-03
126	2-methylpropane	0.4752E-03	0.4752E-03	0.4752E-03	0.4752E-03	0.1097E-03	0.1097E-03	0.3701E-04
127	Butane	0.1569E-03	0.1569E-03	0.1569E-03	0.1569E-03	0.3624E-04	0.3624E-04	0.1222E-04
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.1704E-05	0.1704E-05	0.1704E-05	0.1704E-05	0.3933E-06	0.3933E-06	0.1327E-06
131	2-methylbutane	0.6218E-04	0.6218E-04	0.6218E-04	0.6218E-04	0.1436E-04	0.1436E-04	0.4842E-05
132	Pentane	0.2631E-02	0.2631E-02	0.2631E-02	0.2631E-02	0.6073E-03	0.6073E-03	0.2049E-03
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.6989E-04	0.6989E-04	0.6989E-04	0.6989E-04	0.1613E-04	0.1613E-04	0.5442E-05
135	Cyclohexane	0.1187	0.1187	0.1187	0.1187	0.2740E-01	0.2740E-01	0.9241E-02
136	Methylcyclopentane	0.3852E-02	0.3852E-02	0.3852E-02	0.3852E-02	0.8892E-03	0.8892E-03	0.3000E-03
137	2,2-dimethylbutane	0.5487E-04	0.5487E-04	0.5487E-04	0.5487E-04	0.1267E-04	0.1267E-04	0.4273E-05
138	3-methylpentane	0.1326E-03	0.1326E-03	0.1326E-03	0.1326E-03	0.3061E-04	0.3061E-04	0.1032E-04
139	Hexane	0.2527E-02	0.2527E-02	0.2527E-02	0.2527E-02	0.5835E-03	0.5835E-03	0.1968E-03
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.1370E-05	0.1370E-05	0.1370E-05	0.1370E-05	0.3162E-06	0.3162E-06	0.1067E-06
142	Methylcyclohexane	0.3643E-02	0.3643E-02	0.3643E-02	0.3643E-02	0.8410E-03	0.8410E-03	0.2837E-03
143	2,2-dimethylpentane	0.3674E-03	0.3674E-03	0.3674E-03	0.3674E-03	0.8483E-04	0.8483E-04	0.2861E-04
144	2,4-dimethylpentane	0.3669E-05	0.3669E-05	0.3669E-05	0.3669E-05	0.8470E-06	0.8470E-06	0.2857E-06
145	3-ethylpentane	0.4846E-05	0.4846E-05	0.4846E-05	0.4846E-05	0.1119E-05	0.1119E-05	0.3774E-06
146	Heptane	0.4918E-03	0.4918E-03	0.4918E-03	0.4918E-03	0.1135E-03	0.1135E-03	0.3830E-04
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1183E-05	0.1183E-05	0.1183E-05	0.1183E-05	0.2732E-06	0.2732E-06	0.9215E-07
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.5316E-02	0.5316E-02	0.5316E-02	0.5316E-02	0.1227E-02	0.1227E-02	0.4140E-03
151	2,2,3-trimethylpentane	0.4437E-05	0.4437E-05	0.4437E-05	0.4437E-05	0.1024E-05	0.1024E-05	0.3455E-06
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.6558E-05	0.6558E-05	0.6558E-05	0.6558E-05	0.1514E-05	0.1514E-05	0.5108E-06
154	Octane	0.8114E-04	0.8114E-04	0.8114E-04	0.8114E-04	0.1873E-04	0.1873E-04	0.6319E-05
155	4-ethylheptane	0.3858E-06	0.3858E-06	0.3858E-06	0.3858E-06	0.8908E-07	0.8908E-07	0.3005E-07
156	Nonane	0.2863E-04	0.2863E-04	0.2863E-04	0.2863E-04	0.6609E-05	0.6609E-05	0.2229E-05
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.1769E-03	0.1769E-03	0.1769E-03	0.1769E-03	0.4084E-04	0.4084E-04	0.1378E-04
160	Undecane	0.6014E-03	0.6014E-03	0.6014E-03	0.6014E-03	0.1388E-03	0.1388E-03	0.4683E-04
161	Dodecane	0.1059E-02	0.1059E-02	0.1059E-02	0.1059E-02	0.2446E-03	0.2446E-03	0.8251E-04
162	2-propanone	0.4554	0.4554	0.4554	0.4554	0.1053	0.1053	0.3551E-01
163	3-buten-2-one	0.5941E-01	0.5941E-01	0.5941E-01	0.5941E-01	0.1372E-01	0.1372E-01	0.4629E-02
164	2-butanone	0.1719E+05	0.1719E+05	0.1719E+05	0.1719E+05	4038.	4038.	1365.
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1173E-01	0.1173E-01	0.1173E-01	0.1173E-01	0.2709E-02	0.2709E-02	0.9138E-03
167	Acetyl cyclopropane	0.1635E-01	0.1635E-01	0.1635E-01	0.1635E-01	0.3775E-02	0.3775E-02	0.1274E-02
168	2-pentanone	3.044	3.044	3.044	3.044	0.7038	0.7038	0.2374

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TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	35.36	35.36	35.36	35.36	8.166	8.166	2.755
171	Cyclohexanone	458.4	458.4	458.4	458.4	106.1	106.1	35.78
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

173	4-methyl-2-pentanone	545.8	545.8	545.8	545.8	126.1	126.1	42.55
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	3.813	3.813	3.813	3.813	0.8805	0.8805	0.2970
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.6340	0.6340	0.6340	0.6340	0.1466	0.1466	0.4947E-01
178	2-octanone	0.5294E-01	0.5294E-01	0.5294E-01	0.5294E-01	0.1223E-01	0.1223E-01	0.4125E-02
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.2489	0.2489	0.2489	0.2489	0.5747E-01	0.5747E-01	0.1939E-01
181	Hydrogen sulfide	8.382	8.382	8.382	8.382	1.936	1.936	0.6532
182	Carbonyl sulfide	0.7785E-01	0.7785E-01	0.7785E-01	0.7785E-01	0.1797E-01	0.1797E-01	0.6063E-02
183	Ethylene sulfide	0.2508E-03	0.2508E-03	0.2508E-03	0.2508E-03	0.5791E-04	0.5791E-04	0.1953E-04
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.6447E-01	0.6447E-01	0.6447E-01	0.6447E-01	0.1488E-01	0.1488E-01	0.5021E-02
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	5.317	5.317	5.317	5.317	1.277	1.277	0.4328
191	2-ethylhexanoic acid	0.2432	0.2432	0.2432	0.2432	0.5619E-01	0.5619E-01	0.1895E-01
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.2466E-01	0.2466E-01	0.2466E-01	0.2466E-01	0.5707E-02	0.5707E-02	0.1926E-02
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	11.71	11.71	11.71	11.71	2.704	2.704	0.9121
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	691.2	691.2	691.2	691.2	181.5	181.5	62.28
199	Hydrogen	0.2186E-01	0.2186E-01	0.2186E-01	0.2186E-01	0.5047E-02	0.5047E-02	0.1702E-02
200	Ammonia	0.3172E+05	0.3172E+05	0.3172E+05	0.3172E+05	0.2036E+05	0.2036E+05	6867.
201	Carbon monoxide	0.6506E-01	0.6506E-01	0.6506E-01	0.6506E-01	0.1502E-01	0.1502E-01	0.5067E-02
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
1	Methanol	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001
2	Ethanol	1.000	0.009	0.000	0.380	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.001	0.001	0.001
3	2-propen-1-ol	1.000	0.594	0.000	0.999	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001
4	n-propanol	1.000	0.249	0.000	1.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.001	0.001	0.001
5	2-propanol	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.001	0.001	0.000
6	1,2-ethanediol	1.000	0.777	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	n-butanol	1.000	0.045	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000
8	2-butanol	1.000	0.795	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
9	2-methyl-1-propanol	1.000	0.755	0.000	1.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.003	0.003	0.001
10	2-methyl-2-propanol	1.000	0.859	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000

11	1,2-propanediol	1.000	0.810	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	n-pentanol	1.000	0.918	0.000	1.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000
13	3-methyl-1-butanol	1.000	0.887	0.000	1.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.003	0.003	0.001
14	Phenol	1.000	0.962	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	Cyclohexanol	1.000	0.885	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	2-ethylbutanol	1.000	0.879	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
17	2-hexanol	1.000	0.906	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000
18	1,3-dichloro-2-propanol	1.000	0.794	0.000	1.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.007	0.007	0.003
19	2-ethylhexanol	1.000	0.973	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
20	Nonanol	1.000	0.992	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
21	n-decanol	1.000	0.974	0.000	1.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000
22	Methanal	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026
23	Ethanal	1.000	0.000	0.000	0.013	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
24	2-propenal	1.000	0.000	0.000	0.989	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Propanal	1.000	0.000	0.000	0.994	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
26	2-methylpropenal	1.000	0.559	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	Butanal	1.000	0.094	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	Pentanal	1.000	0.800	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	2,4-hexadien-1-al	1.000	0.881	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	Hexanal	1.000	0.911	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	Benzaldehyde	1.000	0.919	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
32	Heptanal	1.000	0.954	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	4-methylbenzaldehyde	1.000	0.963	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	Octanal	1.000	0.979	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
35	Benzene	1.000	0.628	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	Methylbenzene	1.000	0.302	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	Vinylbenzene	1.000	0.910	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	1,2-dimethylbenzene	1.000	0.911	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	1,3-dimethylbenzene	1.000	0.451	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	1,4-dimethylbenzene	1.000	0.887	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	Ethylbenzene	1.000	0.923	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Indene	1.000	0.499	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	alpha-methylstyrene	1.000	0.889	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	1,2,4-trimethylbenzene	1.000	0.960	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	1,3,5-trimethylbenzene	1.000	0.935	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	1-ethyl-2-methylbenzene	1.000	0.940	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	Isopropylbenzene	1.000	0.941	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	Propylbenzene	1.000	0.963	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	1-methyl-3-propylbenzene	1.000	0.612	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	n-butylbenzene	1.000	0.959	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	1-methyl-4-propylbenzene	1.000	0.940	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	Methyl formate	1.000	0.001	0.000	0.882	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	Ethyl formate	1.000	0.424	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
54	Methyl acetate	1.000	0.025	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
55	Ethyl acetate	1.000	0.311	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
56	Allyl acetate	1.000	0.840	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
57	Methyl methacrylate	1.000	0.819	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	Isopropyl acetate	1.000	0.849	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	n-butyl formate	1.000	0.843	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	Propyl acetate	1.000	0.769	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	Ethyl methacrylate	1.000	0.915	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	Butyl acetate	1.000	0.891	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

63	Isobutyl acetate	1.000	0.928	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	Ethyl lactate	1.000	0.913	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	2-Methoxy ethyl acetate	1.000	0.886	0.000	1.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001
66	Isoamyl acetate	1.000	0.962	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	n-amyl acetate	1.000	0.971	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	2-ethoxyethyl acetate	1.000	0.976	0.000	1.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000
69	ethyl acetoxyacetate	1.000	0.553	0.000	0.997	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	Dibutyl oxalate	1.000	0.986	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	1,4-epoxy-1,3-butadiene	1.000	0.001	0.000	0.992	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	1,4-epoxybutane	1.000	0.078	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	3-methoxy-1-propene	1.000	0.669	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	Diethyl ether	1.000	0.290	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	2-methylfuran	1.000	0.578	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	2,3-dihydropyran	1.000	0.706	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000
77	1,4-dioxane	1.000	0.720	0.000	1.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001
78	1,3,5-Trioxane	1.000	0.632	0.000	0.999	0.000	0.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026
79	2-ethoxyethanol	1.000	0.906	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
80	Epichlorohydrin	1.000	0.693	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
81	1,1,2,2-tetraMe-1,2-epoxyEt	1.000	0.851	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	4-ethylmorpholine	1.000	0.952	0.000	1.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.003	0.003	0.001
83	1-propoxybutane	1.000	0.956	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84	2-butoxyethanol	1.000	0.912	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000
85	Chloromethane	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	Chloroethene	1.000	0.000	0.000	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	Chloroethane	1.000	0.138	0.000	0.996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	3-chloropropene	1.000	0.592	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	Dichloromethane	1.000	0.001	0.000	0.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	1-chlorobutane	1.000	0.419	0.000	0.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	1,1-dichloroethene	1.000	0.402	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	1,2-dichloroethane	1.000	0.305	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	1,2-dichloropropene	1.000	0.453	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	Chlorobenzene	1.000	0.493	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	1,2-dichloropropane	1.000	0.703	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	Trichloromethane	1.000	0.323	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	1,2-dichloro-2-methylpropane	1.000	0.848	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	Trichloroethylene	1.000	0.648	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99	1,1,1-trichloroethane	1.000	0.226	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	1,1,2-trichloroethane	1.000	0.718	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101	1,2-dichlorobenzene	1.000	0.911	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102	3-chloromethylheptane	1.000	0.950	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
103	Tetrachloromethane	1.000	0.744	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104	Tetrachloroethene	1.000	0.422	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	Chlorodifluoromethane	1.000	0.001	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
106	Dichlorofluoromethane	1.000	0.013	0.000	0.995	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107	1-chloro-1,2,2-trifluoroethane	1.000	0.373	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108	Dichlorodifluoromethane	1.000	0.000	0.000	0.998	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109	1,2-dichloro-1,2-difluoroethen	1.000	0.580	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	Chlorotetrafluoroethane	1.000	0.339	0.000	0.949	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
111	Trichlorofluoromethane	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112	Bromotrifluoromethane	1.000	0.000	0.000	0.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
113	1,1-diCl-1,2,2,2-tetraFlethane	1.000	0.516	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
114	1,1,2-triCl-1,2,2-triFlethane	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

115	1,1,2,2-tetraCl-1,2-diFlethane	1.000	0.869	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
116	Methane	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117	Ethyne	1.000	0.001	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
118	Ethene	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
119	Ethane	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	Propadiene	1.000	0.249	0.000	0.871	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
121	Propyne	1.000	0.239	0.000	0.859	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122	Propene	1.000	0.000	0.000	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
123	Propane	1.000	0.001	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
124	1,3-butadiene	1.000	0.027	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	1-butene	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
126	2-methylpropane	1.000	0.081	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127	Butane	1.000	0.437	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
128	Cyclopentene	1.000	0.358	0.000	0.958	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
129	2-methyl-1,3-butadiene	1.000	0.384	0.000	0.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	1-pentene	1.000	0.692	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
131	2-methylbutane	1.000	0.762	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132	Pentane	1.000	0.511	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
133	3,4,5,6-tetrahydrobenzene	1.000	0.422	0.000	0.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
134	2-hexene	1.000	0.818	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	Cyclohexane	1.000	0.303	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
136	Methylcyclopentane	1.000	0.798	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137	2,2-dimethylbutane	1.000	0.840	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
138	3-methylpentane	1.000	0.857	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
139	Hexane	1.000	0.857	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	4-methylcyclohexene	1.000	0.498	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
141	1-heptene	1.000	0.835	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142	Methylcyclohexane	1.000	0.901	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
143	2,2-dimethylpentane	1.000	0.919	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
144	2,4-dimethylpentane	1.000	0.877	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	3-ethylpentane	1.000	0.884	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
146	Heptane	1.000	0.931	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147	1,1-dimethylcyclohexane	1.000	0.938	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
148	2-octene	1.000	0.890	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
149	6-methyl-1-heptene	1.000	0.876	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	trans-1,2-dimethylcyclohexane	1.000	0.946	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
151	2,2,3-trimethylpentane	1.000	0.921	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152	3,3-dimethylhexane	1.000	0.930	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
153	3-ethylhexane	1.000	0.928	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
154	Octane	1.000	0.956	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	4-ethylheptane	1.000	0.936	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
156	Nonane	1.000	0.969	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157	4-isopropenyl-1-Mecyclohexene	1.000	0.973	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
158	2-methyl-3-ethylheptane	1.000	0.981	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
159	Decane	1.000	0.988	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	Undecane	1.000	0.996	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
161	Dodecane	1.000	0.993	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162	2-propanone	1.000	0.531	0.000	0.999	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
163	3-buten-2-one	1.000	0.646	0.000	0.999	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
164	2-butanone	1.000	0.003	0.000	1.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.004	0.004	0.002
165	Cyclopentanone	1.000	0.255	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166	3-penten-2-one	1.000	0.744	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
167	Acetyl cyclopropane	1.000	0.724	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
168	2-pentanone	1.000	0.836	0.000	1.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

Russian TCCS with Condensing Heat Exchanger Contribution Controlling to U.S. 180-day SMACs

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
169	3-methyl-2-butanone	1.000	0.816	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	4-methyl-3-penten-2-one	1.000	0.898	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
171	Cyclohexanone	1.000	0.954	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000
172	3,3-dimethyl-2-butanone	1.000	0.886	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
173	4-methyl-2-pentanone	1.000	0.893	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
174	2,4-dimethyl-3-pentanone	1.000	0.889	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	2-heptanone	1.000	0.966	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
176	5-methyl-2-hexanone	1.000	0.927	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177	acetophenone	1.000	0.912	0.000	1.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000
178	2-octanone	1.000	0.935	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
179	5-methyl-3-heptanone	1.000	0.960	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	2,6-dimethyl-4-heptanone	1.000	0.982	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
181	Hydrogen sulfide	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
182	Carbonyl sulfide	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
183	Ethylene sulfide	1.000	0.092	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
184	Dimethyl sulfide	1.000	0.271	0.000	0.998	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
185	Carbon disulfide	1.000	0.000	0.000	0.963	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
186	Pentamethylene sulfide	1.000	0.816	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
187	Nitric oxide	1.000	0.096	0.000	0.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
188	Nitrogen dioxide	1.000	0.139	0.000	0.658	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
189	Nitrogen tetroxide	1.000	0.256	0.000	0.880	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
190	Ethanoic acid	1.000	0.143	0.000	0.995	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.009	0.009	0.004
191	2-ethylhexanoic acid	1.000	0.977	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
192	Hydrazine	1.000	0.177	0.000	0.761	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
193	Methyl cyanide	1.000	0.123	0.000	0.990	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000
194	methyl hydrazine	1.000	0.257	0.000	0.882	0.000	0.000	0.000	0.106	0.106	0.106	0.106	0.021	0.021	0.009
195	Nitromethane	1.000	0.011	0.000	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
196	N,N-dimethylformamide	1.000	0.767	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
197	Nitroethane	1.000	0.590	0.000	0.998	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
198	1-benzo[b]pyrrole	1.000	0.982	0.000	1.000	0.000	0.000	0.000	0.151	0.151	0.151	0.151	0.030	0.030	0.013
199	Hydrogen	1.000	0.000	0.000	0.000	0.000	0.000	0.895	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200	Ammonia	1.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.000	0.493	0.493	0.209
201	Carbon monoxide	1.000	0.000	0.000	0.000	0.000	0.000	0.895	0.000	0.000	0.000	0.000	0.000	0.000	0.000
202	Disiloxane	1.000	0.503	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
203	Trimethylsilanol	1.000	0.767	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
204	Trisiloxane	1.000	0.907	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
205	Hexamethyldisiloxane	1.000	0.971	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
206	Tetrasiloxane	1.000	0.973	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
207	Diphenylsilane	1.000	0.993	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
208	Hexamethylcyclotrisiloxane	1.000	0.977	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
209	Octamethyltrisiloxane	1.000	0.999	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
210	Octamethylcyclotetrasiloxane	1.000	0.999	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
211	Decamethylcyclopentasiloxane	1.000	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
212	Decamethylcyclohexasiloxane	1.000	0.938	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
213	Tetradecamethylcycloheptasilox	1.000	0.963	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
214	Hexadecamethylcyclooctasiloxan	1.000	0.978	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

APPENDIX F—RUSSIAN TCCS CONTROLLING TO RUSSIAN 360-DAY SMACs

Russian TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

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PROGRAM VERSION 8.1 Alpha March 15, 1994

4/14/1994 7:16 RSMAC2.DAT PAGE 1

TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
1	Methanol	0.4472	0.2000	Y
2	Ethanol	3.014	10.00	N
3	2-propen-1-ol	0.5824E-03	1.000	N
4	n-propanol	0.7556E-01	98.30	N
5	2-propanol	0.8268	98.30	N
6	1,2-ethanediol	0.4131E-02	10.00	N
7	n-butanol	2.065	0.8000	Y
8	2-butanol	0.1289E-02	121.0	N
9	2-methyl-1-propanol	0.1233	121.0	N
10	2-methyl-2-propanol	0.2432E-01	121.0	N
11	1,2-propanediol	0.1894E-03	0.1000	N
12	n-pentanol	0.4220E-01	126.0	N
13	3-methyl-1-butanol	0.3385E-02	126.0	N
14	Phenol	0.3331	0.1000	Y
15	Cyclohexanol	0.4936	123.0	N
16	2-ethylbutanol	0.8474E-04	0.1000	N
17	2-hexanol	0.5714E-03	167.0	N
18	1,3-dichloro-2-propanol	0.2089E-05	0.1000	N
19	2-ethylhexanol	0.1723E-02	186.4	N
20	Nonanol	0.2113E-02	236.0	N
21	n-decanol	0.6704E-05	259.0	N
22	Methanal	0.7905E-06	0.5000E-01	N
23	Ethanal	0.2750	1.000	N
24	2-propenal	0.2391E-02	0.1100	N
25	Propanal	0.1583	95.00	N
26	2-methylpropenal	0.1386E-02	0.1000	N
27	Butanal	0.5493	118.0	N
28	Pentanal	0.5042E-01	106.0	N
29	2,4-hexadien-1-al	0.5553E-03	4.700	N
30	Hexanal	0.2055E-01	4.700	N
31	Benzaldehyde	0.7689E-02	173.0	N
32	Heptanal	0.1011E-01	0.1000	N
33	4-methylbenzaldehyde	0.1713E-03	0.1000	N
34	Octanal	0.5988E-03	210.0	N
35	Benzene	0.1054E-01	2.000	N
36	Methylbenzene	0.5360	8.000	N
37	Vinylbenzene	0.1615E-01	4.000	N
38	1,2-dimethylbenzene	0.2575	5.000	N
39	1,3-dimethylbenzene	1.386	5.000	N
40	1,4-dimethylbenzene	0.3622	5.000	N
41	Ethylbenzene	0.6941E-01	86.80	N
42	Indene	0.0000E+00	9.500	N
43	alpha-methylstyrene	0.7034E-04	145.0	N
44	1,2,4-trimethylbenzene	0.2095E-01	15.00	N
45	1,3,5-trimethylbenzene	0.1108E-02	15.00	N
46	1-ethyl-2-methylbenzene	0.2252E-02	25.00	N
47	Isopropylbenzene	0.4339E-02	0.5000	N
48	Propylbenzene	0.1068	49.10	N
49	1-methyl-3-propylbenzene	0.0000E+00	11.00	N
50	n-butylbenzene	0.8685E-03	55.00	N

51	1-methyl-4-propylbenzene	0.1774E-03	0.1000	N
52	Methyl formate	0.2195E-02	12.30	N
53	Ethyl formate	0.2254E-02	90.90	N
54	Methyl acetate	0.7745E-01	121.0	N
55	Ethyl acetate	0.1361	4.000	N
56	Allyl acetate	0.1913E-02	51.20	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
57	Methyl methacrylate	0.4934E-01	102.0	N
58	Isopropyl acetate	0.2627E-02	209.0	N
59	n-butyl formate	0.5958E-03	83.50	N
60	Propyl acetate	0.2281	167.0	N
61	Ethyl methacrylate	0.1380E-01	116.7	N
62	Butyl acetate	0.3584	2.000	N
63	Isobutyl acetate	0.9595E-01	190.0	N
64	Ethyl lactate	0.2477E-02	193.0	N
65	2-Methoxy ethyl acetate	0.8531E-03	24.20	N
66	Isoamyl acetate	0.1793E-01	159.5	N
67	n-amyl acetate	0.3011E-01	160.0	N
68	2-ethoxyethyl acetate	0.1542	162.0	N
69	ethyl acetoxyacetate	0.0000E+00	0.1000	N
70	Dibutyl oxalate	0.1423E-04	0.1000	N
71	1,4-epoxy-1,3-butadiene	0.9326E-03	0.1100	N
72	1,4-epoxybutane	0.3729E-01	118.0	N
73	3-methoxy-1-propene	0.2432E-04	0.1000	N
74	Diethyl ether	0.3981E-01	242.0	N
75	2-methylfuran	0.1641E-02	0.1300	N
76	2,3-dihydropyran	0.1141E-03	0.1000	N
77	1,4-dioxane	0.1961E-01	1.800	N
78	1,3,5-Trioxane	0.4113E-04	0.1000	N
79	2-ethoxyethanol	0.1550	73.70	N
80	Epichlorohydrin	0.1898E-02	1.200	N
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.6052E-03	0.1000	N
82	4-ethylmorpholine	0.2847E-01	16.00	N
83	1-propoxybutane	0.2258E-01	186.8	N
84	2-butoxyethanol	0.1067E-03	24.20	N
85	Chloromethane	0.1089	41.30	N
86	Chloroethene	0.1462E-02	0.2600	N
87	Chloroethane	0.6315E-04	263.7	N
88	3-chloropropene	0.5438E-04	0.6300	N
89	Dichloromethane	5.084	86.80	N
90	1-chlorobutane	0.0000E+00	151.0	N
91	1,1-dichloroethene	0.3907E-03	7.900	N
92	1,2-dichloroethane	0.3518E-01	0.5000	N
93	1,2-dichloropropene	0.1863E-01	42.20	N
94	Chlorobenzene	0.5940	46.00	N
95	1,2-dichloropropane	0.3954E-02	42.20	N
96	Trichloromethane	0.7124E-02	4.900	N
97	1,2-dichloro-2-methylpropane	0.7509E-03	0.1000	N
98	Trichloroethylene	0.2305E-01	0.5400	N
99	1,1,1-trichloroethane	0.2555	164.0	N
100	1,1,2-trichloroethane	0.3907E-04	5.500	N
101	1,2-dichlorobenzene	0.4463E-02	30.00	N
102	3-chloromethylheptane	0.1184E-03	0.1000	N

103	Tetrachloromethane	0.3601E-02	13.00	N
104	Tetrachloroethene	0.2787	34.00	N
105	Chlorodifluoromethane	0.9914	353.6	N
106	Dichlorofluoromethane	0.3050E-03	21.00	N
107	1-chloro-1,2,2-trifluoroethane	0.8852E-03	484.5	N
108	Dichlorodifluoromethane	0.6383E-02	494.4	N
109	1,2-dichloro-1,2-difluoroethen	0.6093E-03	136.0	N
110	Chlorotetrafluoroethane	0.0000E+00	555.0	N
111	Trichlorofluoromethane	0.5404	561.8	N
112	Bromotrifluoromethane	0.7956	608.8	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1875E-01	702.9	N
114	1,1,2-triCl-1,2,2-triFlethane	9.480	383.0	N
115	1,1,2,2-tetraCl-1,2-diFlethane	0.1336E-01	834.2	N
116	Methane	116.0	3342.	N
117	Ethyne	0.0000E+00	532.4	N
118	Ethene	0.8434E-02	344.1	N
119	Ethane	0.3201E-01	1230.	N
120	Propadiene	0.0000E+00	81.90	N
121	Propyne	0.0000E+00	409.5	N
122	Propene	0.4814E-02	860.3	N
123	Propane	0.4324E-03	901.4	N
124	1,3-butadiene	0.1927E-02	221.2	N
125	1-butene	0.2289E-01	458.0	N
126	2-methylpropane	0.7836E-02	237.6	N
127	Butane	0.2055E-02	237.6	N
128	Cyclopentene	0.0000E+00	167.0	N
129	2-methyl-1,3-butadiene	0.0000E+00	557.0	N
130	1-pentene	0.9644E-05	186.0	N
131	2-methylbutane	0.1209E-02	295.0	N
132	Pentane	0.4754E-01	590.0	N
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	86.00	N
134	2-hexene	0.2940E-03	172.0	N
135	Cyclohexane	0.2435	206.0	N
136	Methylcyclopentane	0.1959E-01	51.60	N
137	2,2-dimethylbutane	0.1187E-02	88.10	N
138	3-methylpentane	0.2117E-02	1762.	N
139	Hexane	0.3258E-01	176.0	N
140	4-methylcyclohexene	0.0000E+00	393.2	N
141	1-heptene	0.7811E-05	201.0	N
142	Methylcyclohexane	0.2215E-01	60.20	N
143	2,2-dimethylpentane	0.1649E-01	408.6	N
144	2,4-dimethylpentane	0.1536E-03	201.0	N
145	3-ethylpentane	0.1751E-03	201.0	N
146	Heptane	0.1889E-01	10.00	N
147	1,1-dimethylcyclohexane	0.1844E-01	115.0	N
148	2-octene	0.1055E-04	229.0	N
149	6-methyl-1-heptene	0.5503E-05	229.0	N
150	trans-1,2-dimethylcyclohexane	0.3607E-01	115.0	N
151	2,2,3-trimethylpentane	0.2404E-03	229.0	N
152	3,3-dimethylhexane	0.5797E-03	229.0	N
153	3-ethylhexane	0.3478E-03	229.0	N
154	Octane	0.5694E-02	10.00	N

155	4-ethylheptane	0.2838E-04	129.0	N
156	Nonane	0.2417E-02	315.0	N
157	4-isopropenyl-1-Mecyclohexene	0.2531E-02	557.0	N
158	2-methyl-3-ethylheptane	0.1178E-02	116.0	N
159	Decane	0.1188E-01	223.0	N
160	Undecane	0.1567E-01	319.0	N
161	Dodecane	0.3233E-03	278.0	N
162	2-propanone	0.2777E-03	1.000	N
163	3-buten-2-one	0.8764E-04	0.1000	N
164	2-butanone	0.7118	0.2500	Y
165	Cyclopentanone	0.3350	29.20	N
166	3-penten-2-one	0.1916E-04	0.1000	N
167	Acetyl cyclopropane	0.3203E-04	0.1000	N
168	2-pentanone	0.1488E-02	70.40	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
169	3-methyl-2-butanone	0.2024E-01	70.40	N
170	4-methyl-3-penten-2-one	0.7673E-01	40.10	N
171	Cyclohexanone	0.1595	60.20	N
172	3,3-dimethyl-2-butanone	0.2951E-02	81.90	N
173	4-methyl-2-pentanone	0.4768	82.00	N
174	2,4-dimethyl-3-pentanone	0.3576E-04	23.50	N
175	2-heptanone	0.5203E-01	23.50	N
176	5-methyl-2-hexanone	0.1134E-02	23.50	N
177	acetophenone	0.2644E-03	245.0	N
178	2-octanone	0.1108E-03	105.0	N
179	5-methyl-3-heptanone	0.1219E-02	0.1000	N
180	2,6-dimethyl-4-heptanone	0.2345E-02	58.10	N
181	Hydrogen sulfide	0.1282E-01	0.5000	N
182	Carbonyl sulfide	0.1047	12.00	N
183	Ethylene sulfide	0.2182E-04	0.1000	N
184	Dimethyl sulfide	0.1350E-03	2.500	N
185	Carbon disulfide	0.1796E-01	16.00	N
186	Pentamethylene sulfide	0.5460E-04	0.1000	N
187	Nitric oxide	0.0000E+00	0.1000	N
188	Nitrogen dioxide	0.0000E+00	0.9400	N
189	Nitrogen tetroxide	0.0000E+00	1.900	N
190	Ethanoic acid	0.9863E-04	1.000	N
191	2-ethylhexanoic acid	0.2447E-03	0.1000	N
192	Hydrazine	0.0000E+00	0.5000E-01	N
193	Methyl cyanide	0.7093E-05	6.700	N
194	methyl hydrazine	0.0000E+00	0.8000E-01	N
195	Nitromethane	0.6461E-01	0.1000	N
196	N,N-dimethylformamide	0.1188E-02	6.000	N
197	Nitroethane	0.1471E-04	0.1000	N
198	1-benzo[b]pyrrole	0.4082E-02	0.4800	N
199	Hydrogen	0.3658	1677.	N
200	Ammonia	0.2826E-01	1.000	N
201	Carbon monoxide	1.060	5.000	N
202	Disiloxane	0.1281E-01	52.40	N
203	Trimethylsilanol	0.7822E-01	1.800	N
204	Trisiloxane	0.1040E-01	83.40	N
205	Hexamethyldisiloxane	0.4788E-02	96.60	N
206	Tetrasiloxane	0.9636E-01	114.0	N

207	Diphenylsilane	0.9682E-05	0.1000	N
208	Hexamethylcyclotrisiloxane	0.5042E-01	227.0	N
209	Octamethyltrisiloxane	0.1457	114.0	N
210	Octamethylcyclotetrasiloxane	0.8383E-01	151.7	N
211	Decamethylcyclopentasiloxane	0.2081E-01	150.7	N
212	Decamethylcyclohexasiloxane	0.0000E+00	150.7	N
213	Tetradecamethylcycloheptasilox	0.0000E+00	150.7	N
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	150.7	N

GROUP T-VALUES AS SPECIFIED IN NHB 8060.1B APPENDIX D

-01-	-02-	-03-	-04-	-05-	-06-	-07-	-08-	-09-	-10-	-11-	-12-	-13-	-14-	-15-	-16-
8.47	0.42	0.49	0.22	0.05	0.21	0.03	0.00	0.04	0.00	2.89	0.04	0.00	0.00	0.65	0.24

OVERALL T-VALUE
12.82

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	0.5826E-02	0.1788E-01	0.0000E+00	0.0000E+00	0.1138E-02	0.0000E+00	0.0000E+00	0.0000E+00
2	Ethanol	7.710	0.1203	0.5430	0.0000E+00	22.20	0.0000E+00	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.1527E-06	0.2330E-04	0.6923E-02	0.0000E+00	0.4624E-02	0.0000E+00	0.0000E+00	0.0000E+00
4	n-propanol	0.1509E-03	0.3023E-02	0.3764	0.0000E+00	1.111	0.0000E+00	0.0000E+00	0.0000E+00
5	2-propanol	0.1717E-04	0.3307E-01	0.1331E-03	0.0000E+00	16.19	0.0000E+00	0.0000E+00	0.0000E+00
6	1,2-ethanediol	0.9835E-06	0.1652E-03	0.6420E-01	0.0000E+00	0.1803E-01	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	0.3319E-02	0.8259E-01	1.861	0.0000E+00	38.61	0.0000E+00	0.0000E+00	0.0000E+00
8	2-butanol	0.3725E-07	0.5154E-04	0.2049E-01	0.0000E+00	0.5166E-02	0.0000E+00	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	0.5770E-04	0.4930E-02	1.862	0.0000E+00	0.5904	0.0000E+00	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	0.4351E-05	0.9726E-03	0.4178	0.0000E+00	0.6707E-01	0.0000E+00	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.1863E-08	0.7575E-05	0.3068E-02	0.0000E+00	0.7041E-03	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.2384E-05	0.1688E-02	0.7744	0.0000E+00	0.6816E-01	0.0000E+00	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	0.4470E-07	0.1354E-03	0.6003E-01	0.0000E+00	0.7502E-02	0.0000E+00	0.0000E+00	0.0000E+00
14	Phenol	0.6008E-04	0.1332E-01	6.406	0.0000E+00	0.2503	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.5083E-03	0.1974E-01	8.732	0.0000E+00	1.116	0.0000E+00	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.0000E+00	0.3390E-05	0.1490E-02	0.0000E+00	0.2003E-03	0.0000E+00	0.0000E+00	0.0000E+00
17	2-hexanol	0.3725E-08	0.2285E-04	0.1035E-01	0.0000E+00	0.1055E-02	0.0000E+00	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.4366E-10	0.8355E-07	0.3315E-04	0.0000E+00	0.8441E-05	0.0000E+00	0.0000E+00	0.0000E+00
19	2-ethylhexanol	0.0000E+00	0.6894E-04	0.3353E-01	0.0000E+00	0.9177E-03	0.0000E+00	0.0000E+00	0.0000E+00
20	Nonanol	0.3725E-08	0.8451E-04	0.4190E-01	0.0000E+00	0.3454E-03	0.0000E+00	0.0000E+00	0.0000E+00
21	n-decanol	0.5821E-10	0.2681E-06	0.1305E-03	0.0000E+00	0.3475E-05	0.0000E+00	0.0000E+00	0.0000E+00
22	Methanal	-0.5821E-10	0.3162E-07	0.3839E-20	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
23	Ethanal	0.2269	0.1086E-01	0.1581E-02	0.0000E+00	0.6688E-01	0.0000E+00	0.0000E+00	0.0000E+00
24	2-propenal	0.1319E-03	0.9556E-04	0.2303E-04	0.0000E+00	0.4624E-01	0.0000E+00	0.0000E+00	0.0000E+00
25	Propanal	0.7915E-02	0.6326E-02	0.0000E+00	0.0000E+00	3.077	0.0000E+00	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.1680E-05	0.5545E-04	0.1549E-01	0.0000E+00	0.1197E-01	0.0000E+00	0.0000E+00	0.0000E+00
27	Butanal	0.1679E-02	0.2197E-01	1.031	0.0000E+00	9.745	0.0000E+00	0.0000E+00	0.0000E+00
28	Pentanal	0.4089E-04	0.2017E-02	0.8068	0.0000E+00	0.1974	0.0000E+00	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.2794E-08	0.2221E-04	0.9780E-02	0.0000E+00	0.1298E-02	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1997E-05	0.8218E-03	0.3745	0.0000E+00	0.3563E-01	0.0000E+00	0.0000E+00	0.0000E+00
31	Benzaldehyde	0.4470E-07	0.3076E-03	0.1413	0.0000E+00	0.1224E-01	0.0000E+00	0.0000E+00	0.0000E+00
32	Heptanal	0.7451E-07	0.4045E-03	0.1929	0.0000E+00	0.9101E-02	0.0000E+00	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.2328E-09	0.6852E-05	0.3301E-02	0.0000E+00	0.1225E-03	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.0000E+00	0.2395E-04	0.1172E-01	0.0000E+00	0.2484E-03	0.0000E+00	0.0000E+00	0.0000E+00

35	Benzene	0.1489E-04	0.4217E-03	0.1324	0.0000E+00	0.7678E-01	0.0000E+00	0.0000E+00	0.0000E+00
36	Methylbenzene	0.2995E-02	0.2144E-01	3.233	0.0000E+00	7.330	0.0000E+00	0.0000E+00	0.0000E+00
37	Vinylbenzene	0.1222E-05	0.6461E-03	0.2939	0.0000E+00	0.2848E-01	0.0000E+00	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	0.1383E-03	0.1030E-01	4.693	0.0000E+00	0.4472	0.0000E+00	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	0.9947E-02	0.5545E-01	12.51	0.0000E+00	14.90	0.0000E+00	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	0.3304E-03	0.1449E-01	6.428	0.0000E+00	0.7981	0.0000E+00	0.0000E+00	0.0000E+00
41	Ethylbenzene	0.1287E-04	0.2776E-02	1.282	0.0000E+00	0.1041	0.0000E+00	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.1164E-09	0.2813E-05	0.1250E-02	0.0000E+00	0.1530E-03	0.0000E+00	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	0.3576E-06	0.8379E-03	0.4023	0.0000E+00	0.1635E-01	0.0000E+00	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.9313E-08	0.4433E-04	0.2072E-01	0.0000E+00	0.1419E-02	0.0000E+00	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	0.1490E-07	0.9010E-04	0.4234E-01	0.0000E+00	0.2655E-02	0.0000E+00	0.0000E+00	0.0000E+00
47	Isopropylbenzene	0.4470E-07	0.1736E-03	0.8170E-01	0.0000E+00	0.4984E-02	0.0000E+00	0.0000E+00	0.0000E+00
48	Propylbenzene	0.9298E-05	0.4272E-02	2.057	0.0000E+00	0.7760E-01	0.0000E+00	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.7451E-08	0.3474E-04	0.1666E-01	0.0000E+00	0.7002E-03	0.0000E+00	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.2328E-09	0.7097E-05	0.3337E-02	0.0000E+00	0.2075E-03	0.0000E+00	0.0000E+00	0.0000E+00
52	Methyl formate	0.1863E-02	0.8671E-04	0.4338E-04	0.0000E+00	0.3738E-01	0.0000E+00	0.0000E+00	0.0000E+00
53	Ethyl formate	0.4627E-05	0.9016E-04	0.1913E-01	0.0000E+00	0.2540E-01	0.0000E+00	0.0000E+00	0.0000E+00
54	Methyl acetate	0.7570E-04	0.3098E-02	0.3941E-01	0.0000E+00	1.478	0.0000E+00	0.0000E+00	0.0000E+00
55	Ethyl acetate	0.5550E-03	0.5444E-02	0.8465	0.0000E+00	1.836	0.0000E+00	0.0000E+00	0.0000E+00
56	Allyl acetate	0.9313E-07	0.7650E-04	0.3212E-01	0.0000E+00	0.6007E-02	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57	Methyl methacrylate	0.3177E-04	0.1973E-02	0.8086	0.0000E+00	0.1744	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.1378E-06	0.1051E-03	0.4461E-01	0.0000E+00	0.7769E-02	0.0000E+00	0.0000E+00	0.0000E+00
59	n-butyl formate	0.9313E-08	0.2383E-04	0.1005E-01	0.0000E+00	0.1831E-02	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.4234E-03	0.9125E-02	3.507	0.0000E+00	1.034	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.7749E-06	0.5519E-03	0.2525	0.0000E+00	0.2293E-01	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	0.3023E-03	0.1434E-01	6.387	0.0000E+00	0.7648	0.0000E+00	0.0000E+00	0.0000E+00
63	Isobutyl acetate	0.1991E-04	0.3838E-02	1.781	0.0000E+00	0.1348	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.1118E-07	0.9908E-04	0.4523E-01	0.0000E+00	0.4215E-02	0.0000E+00	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	-0.7451E-08	0.3412E-04	0.1511E-01	0.0000E+00	0.1906E-02	0.0000E+00	0.0000E+00	0.0000E+00
66	Isoamyl acetate	0.2980E-06	0.7171E-03	0.3448	0.0000E+00	0.1348E-01	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.5364E-06	0.1204E-02	0.5848	0.0000E+00	0.1698E-01	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	0.3338E-05	0.6169E-02	3.012	0.0000E+00	0.7140E-01	0.0000E+00	0.0000E+00	0.0000E+00
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.5690E-06	0.2805E-03	0.0000E+00	0.3972E-05	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.2754E-04	0.3729E-04	0.1278E-04	0.0000E+00	0.1810E-01	0.0000E+00	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	0.8059E-04	0.1492E-02	0.5784E-01	0.0000E+00	0.6735	0.0000E+00	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.1135E-08	0.9730E-06	0.3256E-03	0.0000E+00	0.1574E-03	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.1504E-03	0.1592E-02	0.2313	0.0000E+00	0.5530	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.1829E-05	0.6563E-04	0.1897E-01	0.0000E+00	0.1356E-01	0.0000E+00	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.2328E-08	0.4562E-05	0.1610E-02	0.0000E+00	0.6567E-03	0.0000E+00	0.0000E+00	0.0000E+00
77	1,4-dioxane	0.7033E-05	0.7844E-03	0.2823	0.0000E+00	0.1076	0.0000E+00	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	-0.1863E-08	0.1645E-05	0.5201E-03	0.0000E+00	0.2959E-03	0.0000E+00	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	0.2098E-04	0.6201E-02	2.810	0.0000E+00	0.2848	0.0000E+00	0.0000E+00	0.0000E+00
80	Epichlorohydrin	0.8047E-06	0.7594E-04	0.2633E-01	0.0000E+00	0.1140E-01	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.1024E-07	0.2421E-04	0.1030E-01	0.0000E+00	0.1765E-02	0.0000E+00	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	0.1192E-06	0.1139E-02	0.5422	0.0000E+00	0.2659E-01	0.0000E+00	0.0000E+00	0.0000E+00
83	1-propoxybutane	0.6855E-06	0.9030E-03	0.4315	0.0000E+00	0.1961E-01	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.2328E-09	0.4269E-05	0.1947E-02	0.0000E+00	0.1841E-03	0.0000E+00	0.0000E+00	0.0000E+00
85	Chloromethane	0.4144E-01	0.4329E-02	0.1989E-03	0.0000E+00	0.1158E-02	0.0000E+00	0.0000E+00	0.0000E+00
86	Chloroethene	0.3914E-02	0.5605E-04	0.3133E-05	0.0000E+00	0.8717E-02	0.0000E+00	0.0000E+00	0.0000E+00

87	Chloroethane	0.2987E-06	0.2526E-05	0.1739E-03	0.0000E+00	0.1062E-02	0.0000E+00	0.0000E+00	0.0000E+00
88	3-chloropropene	0.1723E-07	0.2175E-05	0.6440E-03	0.0000E+00	0.4338E-03	0.0000E+00	0.0000E+00	0.0000E+00
89	Dichloromethane	9.697	0.1972	0.1415	0.0000E+00	6.066	0.0000E+00	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.7516E-06	0.1563E-04	0.3141E-02	0.0000E+00	0.4570E-02	0.0000E+00	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	0.1209E-03	0.1407E-02	0.2147	0.0000E+00	0.4785	0.0000E+00	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	0.5004E-04	0.7450E-03	0.1686	0.0000E+00	0.1996	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.3026E-02	0.2376E-01	5.855	0.0000E+00	5.899	0.0000E+00	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	0.2116E-05	0.1582E-03	0.5563E-01	0.0000E+00	0.2297E-01	0.0000E+00	0.0000E+00	0.0000E+00
96	Trichloromethane	0.2012E-04	0.2849E-03	0.4602E-01	0.0000E+00	0.9441E-01	0.0000E+00	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.1118E-07	0.3004E-04	0.1274E-01	0.0000E+00	0.2234E-02	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.3183E-04	0.9221E-03	0.2987	0.0000E+00	0.1590	0.0000E+00	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	0.1087E-02	0.1022E-01	1.154	0.0000E+00	3.872	0.0000E+00	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.7567E-09	0.1563E-05	0.5613E-03	0.0000E+00	0.2154E-03	0.0000E+00	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	0.5960E-07	0.1785E-03	0.8128E-01	0.0000E+00	0.7816E-02	0.0000E+00	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.0000E+00	0.4735E-05	0.2250E-02	0.0000E+00	0.1156E-03	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.9835E-06	0.1440E-03	0.5362E-01	0.0000E+00	0.1802E-01	0.0000E+00	0.0000E+00	0.0000E+00
104	Tetrachloroethene	0.1206E-02	0.1115E-01	2.355	0.0000E+00	3.151	0.0000E+00	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	0.6382	0.3925E-01	0.1225E-01	0.0000E+00	0.7144E-01	0.0000E+00	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.2573E-05	0.1220E-04	0.8080E-04	0.0000E+00	0.5866E-02	0.0000E+00	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.1954E-05	0.3541E-04	0.6610E-02	0.0000E+00	0.1085E-01	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.4189E-04	0.2553E-03	0.5732E-04	0.0000E+00	0.1246	0.0000E+00	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.4498E-06	0.2437E-04	0.7067E-02	0.0000E+00	0.5008E-02	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.1674E-02	0.2162E-01	0.7899E-04	0.0000E+00	10.58	0.0000E+00	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	1.919	0.3061E-01	0.7267E-02	0.0000E+00	1.734	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	0.4154E-04	0.7501E-03	0.1934	0.0000E+00	0.1778	0.0000E+00	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	0.7629E-04	0.3792	0.2891E-04	0.0000E+00	185.6	0.0000E+00	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	0.1222E-05	0.5344E-03	0.2322	0.0000E+00	0.3423E-01	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	38.15	4.618	0.5726E-04	0.0000E+00	0.3335E-03	0.0000E+00	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.2853E-02	0.3356E-03	0.2308E-05	0.0000E+00	0.1344E-04	0.0000E+00	0.0000E+00	0.0000E+00
119	Ethane	0.1369E-01	0.1272E-02	0.9136E-04	0.0000E+00	0.5322E-03	0.0000E+00	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1294E-01	0.1845E-03	0.5086E-05	0.0000E+00	0.1877E-01	0.0000E+00	0.0000E+00	0.0000E+00
123	Propane	0.1064E-04	0.1729E-04	0.6279E-05	0.0000E+00	0.8396E-02	0.0000E+00	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.4455E-05	0.7706E-04	0.1043E-02	0.0000E+00	0.3667E-01	0.0000E+00	0.0000E+00	0.0000E+00
125	1-butene	0.1958E-04	0.9156E-03	0.2175E-03	0.0000E+00	0.4478	0.0000E+00	0.0000E+00	0.0000E+00
126	2-methylpropane	0.1737E-04	0.3134E-03	0.1276E-01	0.0000E+00	0.1409	0.0000E+00	0.0000E+00	0.0000E+00
127	Butane	0.4563E-05	0.8221E-04	0.1798E-01	0.0000E+00	0.2264E-01	0.0000E+00	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.1455E-09	0.3857E-06	0.1336E-03	0.0000E+00	0.5805E-04	0.0000E+00	0.0000E+00	0.0000E+00
131	2-methylbutane	0.2328E-06	0.4834E-04	0.1842E-01	0.0000E+00	0.5635E-02	0.0000E+00	0.0000E+00	0.0000E+00
132	Pentane	0.1515E-03	0.1901E-02	0.4855	0.0000E+00	0.4554	0.0000E+00	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.5122E-08	0.1176E-04	0.4812E-02	0.0000E+00	0.1046E-02	0.0000E+00	0.0000E+00	0.0000E+00
135	Cyclohexane	0.1198E-02	0.9740E-02	1.475	0.0000E+00	3.324	0.0000E+00	0.0000E+00	0.0000E+00
136	Methylcyclopentane	0.1109E-04	0.7837E-03	0.3127	0.0000E+00	0.7752E-01	0.0000E+00	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.5402E-07	0.4746E-04	0.1994E-01	0.0000E+00	0.3716E-02	0.0000E+00	0.0000E+00	0.0000E+00
138	3-methylpentane	0.1080E-06	0.8468E-04	0.3631E-01	0.0000E+00	0.5907E-02	0.0000E+00	0.0000E+00	0.0000E+00

139	Hexane	0.1311E-04	0.1303E-02	0.5584	0.0000E+00	0.9125E-01	0.0000E+00	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.7276E-10	0.3124E-06	0.1305E-03	0.0000E+00	0.2516E-04	0.0000E+00	0.0000E+00	0.0000E+00
142	Methylcyclohexane	0.2891E-05	0.8860E-03	0.3993	0.0000E+00	0.4282E-01	0.0000E+00	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	0.1341E-05	0.6598E-03	0.3033	0.0000E+00	0.2608E-01	0.0000E+00	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.2328E-09	0.6144E-05	0.2694E-02	0.0000E+00	0.3701E-03	0.0000E+00	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.4657E-09	0.7003E-05	0.3094E-02	0.0000E+00	0.3987E-03	0.0000E+00	0.0000E+00	0.0000E+00
146	Heptane	0.1192E-05	0.7556E-03	0.3516	0.0000E+00	0.2569E-01	0.0000E+00	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	0.8047E-06	0.7375E-03	0.3460	0.0000E+00	0.2226E-01	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1455E-10	0.4221E-06	0.1878E-03	0.0000E+00	0.2274E-04	0.0000E+00	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.7276E-11	0.2201E-06	0.9642E-04	0.0000E+00	0.1336E-04	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.2205E-05	0.1443E-02	0.6828	0.0000E+00	0.3779E-01	0.0000E+00	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.1397E-08	0.9617E-05	0.4429E-02	0.0000E+00	0.3710E-03	0.0000E+00	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.0000E+00	0.2319E-04	0.1078E-01	0.0000E+00	0.7966E-03	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	-0.9313E-09	0.1391E-04	0.6453E-02	0.0000E+00	0.4930E-03	0.0000E+00	0.0000E+00	0.0000E+00
154	Octane	0.6706E-07	0.2278E-03	0.1089	0.0000E+00	0.4914E-02	0.0000E+00	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.0000E+00	0.1135E-05	0.5314E-03	0.0000E+00	0.3542E-04	0.0000E+00	0.0000E+00	0.0000E+00
156	Nonane	0.3725E-08	0.9667E-04	0.4685E-01	0.0000E+00	0.1455E-02	0.0000E+00	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	0.1118E-07	0.1013E-03	0.4927E-01	0.0000E+00	0.1332E-02	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.1863E-08	0.4712E-04	0.2311E-01	0.0000E+00	0.4467E-03	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.1490E-07	0.4752E-03	0.2348	0.0000E+00	0.2738E-02	0.0000E+00	0.0000E+00	0.0000E+00
160	Undecane	0.0000E+00	0.6268E-03	0.3121	0.0000E+00	0.1264E-02	0.0000E+00	0.0000E+00	0.0000E+00
161	Dodecane	0.1397E-08	0.1293E-04	0.6422E-02	0.0000E+00	0.4312E-04	0.0000E+00	0.0000E+00	0.0000E+00
162	2-propanone	0.2091E-06	0.1111E-04	0.2950E-02	0.0000E+00	0.2546E-02	0.0000E+00	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.1455E-07	0.3506E-05	0.1132E-02	0.0000E+00	0.6075E-03	0.0000E+00	0.0000E+00	0.0000E+00
164	2-butanone	0.3433E-04	0.2847E-01	0.4321E-01	0.0000E+00	13.89	0.0000E+00	0.0000E+00	0.0000E+00
165	Cyclopentanone	0.1623E-02	0.1340E-01	1.711	0.0000E+00	4.884	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.2910E-10	0.7665E-06	0.2851E-03	0.0000E+00	0.9609E-04	0.0000E+00	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.4075E-09	0.1281E-05	0.4634E-03	0.0000E+00	0.1733E-03	0.0000E+00	0.0000E+00	0.0000E+00
168	2-pentanone	0.4098E-07	0.5950E-04	0.2488E-01	0.0000E+00	0.4772E-02	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	0.9149E-05	0.8095E-03	0.3304	0.0000E+00	0.7282E-01	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.2396E-04	0.3069E-02	1.377	0.0000E+00	0.1539	0.0000E+00	0.0000E+00	0.0000E+00
171	Cyclohexanone	0.1144E-04	0.6380E-02	3.044	0.0000E+00	0.1428	0.0000E+00	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	0.9686E-07	0.1180E-03	0.5229E-01	0.0000E+00	0.6594E-02	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.3376E-03	0.1907E-01	8.515	0.0000E+00	0.9997	0.0000E+00	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.5821E-10	0.1430E-05	0.6356E-03	0.0000E+00	0.7797E-04	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.1788E-05	0.2081E-02	1.005	0.0000E+00	0.3482E-01	0.0000E+00	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.1863E-08	0.4538E-04	0.2103E-01	0.0000E+00	0.1625E-02	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	-0.1397E-08	0.1058E-04	0.4824E-02	0.0000E+00	0.4536E-03	0.0000E+00	0.0000E+00	0.0000E+00
178	2-octanone	0.6985E-09	0.4431E-05	0.2071E-02	0.0000E+00	0.1414E-03	0.0000E+00	0.0000E+00	0.0000E+00
179	5-methyl-3-heptanone	0.1863E-08	0.4874E-04	0.2340E-01	0.0000E+00	0.9507E-03	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.1118E-07	0.9378E-04	0.4605E-01	0.0000E+00	0.8275E-03	0.0000E+00	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	0.1566E-03	0.5129E-03	0.1261E-08	0.0000E+00	0.7342E-08	0.0000E+00	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	0.4109E-01	0.4160E-02	0.2256E-03	0.0000E+00	0.1314E-02	0.0000E+00	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.1655E-06	0.8728E-06	0.4019E-04	0.0000E+00	0.3852E-03	0.0000E+00	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.3914E-06	0.5399E-05	0.7317E-03	0.0000E+00	0.1923E-02	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.5067E-02	0.7154E-03	0.1690E-03	0.0000E+00	0.3369	0.0000E+00	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.2328E-09	0.2184E-05	0.8907E-03	0.0000E+00	0.1972E-03	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.7264E-07	0.3945E-05	0.2824E-03	0.0000E+00	0.1647E-02	0.0000E+00	0.0000E+00	0.0000E+00

191	2-ethylhexanoic acid	0.9313E-09	0.9786E-05	0.4783E-02	0.0000E+00	0.1078E-03	0.0000E+00	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.4635E-07	0.2837E-06	0.1743E-04	0.0000E+00	0.1205E-03	0.0000E+00	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.1908	0.2578E-02	0.1474E-01	0.0000E+00	0.3972	0.0000E+00	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.1565E-06	0.4754E-04	0.1824E-01	0.0000E+00	0.5417E-02	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.2299E-08	0.5883E-06	0.1736E-03	0.0000E+00	0.1178E-03	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	-0.1192E-06	0.1633E-03	0.8021E-01	0.0000E+00	0.1402E-02	0.0000E+00	0.0000E+00	0.0000E+00
199	Hydrogen	-0.9537E-06	0.1463E-01	0.0000E+00	0.0000E+00	0.5849E-23	0.0000E+00	0.0000E+00	6.545
200	Ammonia	0.0000E+00	0.1130E-02	0.1007E-15	0.0000E+00	0.2459E-15	0.0000E+00	0.0000E+00	0.0000E+00
201	Carbon monoxide	0.1907E-05	0.4238E-01	0.1950E-19	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	18.96
202	Disiloxane	0.2947E-04	0.5123E-03	0.1289	0.0000E+00	0.1245	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.1009E-03	0.3129E-02	1.200	0.0000E+00	0.3571	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.5811E-06	0.4160E-03	0.1886	0.0000E+00	0.1902E-01	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.2235E-07	0.1915E-03	0.9298E-01	0.0000E+00	0.2729E-02	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.4053E-05	0.3854E-02	1.875	0.0000E+00	0.5073E-01	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	-0.1455E-10	0.3873E-06	0.1922E-03	0.0000E+00	0.1376E-05	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.9537E-06	0.2017E-02	0.9849	0.0000E+00	0.2304E-01	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.2384E-06	0.5829E-02	2.910	0.0000E+00	0.3908E-02	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.1192E-06	0.3353E-02	1.676	0.0000E+00	0.9445E-03	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.8323E-03	0.4161	0.0000E+00	0.7259E-04	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	2.090	2.090	2.090	2.090	0.4860	0.4860	0.1641
2	Ethanol	12.20	12.20	12.20	12.20	2.834	2.834	0.9568
3	2-propen-1-ol	0.3417E-02	0.3417E-02	0.3417E-02	0.3417E-02	0.7961E-03	0.7961E-03	0.2688E-03
4	n-propanol	0.2706	0.2706	0.2706	0.2706	0.6283E-01	0.6283E-01	0.2121E-01
5	2-propanol	2.439	2.439	2.439	2.439	0.5656	0.5656	0.1909
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	2.785	2.785	2.785	2.785	0.6443	0.6443	0.2174
8	2-butanol	0.8666E-02	0.8666E-02	0.8666E-02	0.8666E-02	0.2022E-02	0.2022E-02	0.6828E-03
9	2-methyl-1-propanol	1.014	1.014	1.014	1.014	0.2372	0.2372	0.8014E-01
10	2-methyl-2-propanol	0.1589E-01	0.1589E-01	0.1589E-01	0.1589E-01	0.3673E-02	0.3673E-02	0.1239E-02
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.1136	0.1136	0.1136	0.1136	0.2633E-01	0.2633E-01	0.8885E-02
13	3-methyl-1-butanol	0.3218E-01	0.3218E-01	0.3218E-01	0.3218E-01	0.7539E-02	0.7539E-02	0.2548E-02
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.2898E-01	0.2898E-01	0.2898E-01	0.2898E-01	0.6691E-02	0.6691E-02	0.2257E-02
16	2-ethylbutanol	0.4760E-04	0.4760E-04	0.4760E-04	0.4760E-04	0.1100E-04	0.1100E-04	0.3711E-05
17	2-hexanol	0.1007E-02	0.1007E-02	0.1007E-02	0.1007E-02	0.2331E-03	0.2331E-03	0.7866E-04
18	1,3-dichloro-2-propanol	0.4111E-04	0.4111E-04	0.4111E-04	0.4111E-04	0.9787E-05	0.9787E-05	0.3314E-05
19	2-ethylhexanol	0.1159E-01	0.1159E-01	0.1159E-01	0.1159E-01	0.2704E-02	0.2704E-02	0.9133E-03
20	Nonanol	0.1138E-02	0.1138E-02	0.1138E-02	0.1138E-02	0.2630E-03	0.2630E-03	0.8872E-04
21	n-decanol	0.8310E-05	0.8310E-05	0.8310E-05	0.8310E-05	0.1922E-05	0.1922E-05	0.6486E-06
22	Methanal	0.1082E-03	0.1082E-03	0.1082E-03	0.1082E-03	0.3163E-04	0.3163E-04	0.1104E-04
23	Ethanal	0.8938E-01	0.8938E-01	0.8938E-01	0.8938E-01	0.2065E-01	0.2065E-01	0.6965E-02
24	2-propenal	0.6791E-04	0.6791E-04	0.6791E-04	0.6791E-04	0.1568E-04	0.1568E-04	0.5289E-05
25	Propanal	0.5474E-01	0.5474E-01	0.5474E-01	0.5474E-01	0.1264E-01	0.1264E-01	0.4265E-02
26	2-methylpropenal	0.1733E-04	0.1733E-04	0.1733E-04	0.1733E-04	0.4001E-05	0.4001E-05	0.1350E-05
27	Butanal	0.1323	0.1323	0.1323	0.1323	0.3056E-01	0.3056E-01	0.1031E-01
28	Pentanal	0.7422E-02	0.7422E-02	0.7422E-02	0.7422E-02	0.1714E-02	0.1714E-02	0.5782E-03

29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1327E-02	0.1327E-02	0.1327E-02	0.1327E-02	0.3065E-03	0.3065E-03	0.1034E-03
31	Benzaldehyde	0.5763E-02	0.5763E-02	0.5763E-02	0.5763E-02	0.1332E-02	0.1332E-02	0.4494E-03
32	Heptanal	0.7828E-03	0.7828E-03	0.7828E-03	0.7828E-03	0.1808E-03	0.1808E-03	0.6097E-04
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4027E-02	0.4027E-02	0.4027E-02	0.4027E-02	0.9395E-03	0.9395E-03	0.3173E-03
35	Benzene	0.7533E-04	0.7533E-04	0.7533E-04	0.7533E-04	0.1739E-04	0.1739E-04	0.5866E-05
36	Methylbenzene	0.2792E-02	0.2792E-02	0.2792E-02	0.2792E-02	0.6445E-03	0.6445E-03	0.2174E-03
37	Vinylbenzene	0.2030E-03	0.2030E-03	0.2030E-03	0.2030E-03	0.4687E-04	0.4687E-04	0.1581E-04
38	1,2-dimethylbenzene	0.2037E-02	0.2037E-02	0.2037E-02	0.2037E-02	0.4702E-03	0.4702E-03	0.1586E-03
39	1,3-dimethylbenzene	0.6887E-02	0.6887E-02	0.6887E-02	0.6887E-02	0.1590E-02	0.1590E-02	0.5364E-03
40	1,4-dimethylbenzene	0.1977E-02	0.1977E-02	0.1977E-02	0.1977E-02	0.4564E-03	0.4564E-03	0.1540E-03
41	Ethylbenzene	0.2857E-03	0.2857E-03	0.2857E-03	0.2857E-03	0.6595E-04	0.6595E-04	0.2225E-04
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.8223E-06	0.8223E-06	0.8223E-06	0.8223E-06	0.1898E-06	0.1898E-06	0.6404E-07
44	1,2,4-trimethylbenzene	0.1231E-03	0.1231E-03	0.1231E-03	0.1231E-03	0.2841E-04	0.2841E-04	0.9585E-05
45	1,3,5-trimethylbenzene	0.4628E-05	0.4628E-05	0.4628E-05	0.4628E-05	0.1068E-05	0.1068E-05	0.3604E-06
46	1-ethyl-2-methylbenzene	0.2622E-04	0.2622E-04	0.2622E-04	0.2622E-04	0.6054E-05	0.6054E-05	0.2042E-05
47	Isopropylbenzene	0.9909E-05	0.9909E-05	0.9909E-05	0.9909E-05	0.2288E-05	0.2288E-05	0.7717E-06
48	Propylbenzene	0.3463E-03	0.3463E-03	0.3463E-03	0.3463E-03	0.7995E-04	0.7995E-04	0.2697E-04
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.2186E-05	0.2186E-05	0.2186E-05	0.2186E-05	0.5046E-06	0.5046E-06	0.1702E-06
51	1-methyl-4-propylbenzene	0.2395E-04	0.2395E-04	0.2395E-04	0.2395E-04	0.5531E-05	0.5531E-05	0.1866E-05
52	Methyl formate	0.6323E-05	0.6323E-05	0.6323E-05	0.6323E-05	0.1460E-05	0.1460E-05	0.4924E-06
53	Ethyl formate	0.6335E-03	0.6335E-03	0.6335E-03	0.6335E-03	0.1463E-03	0.1463E-03	0.4936E-04
54	Methyl acetate	0.3735E-01	0.3735E-01	0.3735E-01	0.3735E-01	0.8630E-02	0.8630E-02	0.2911E-02
55	Ethyl acetate	0.3996E-01	0.3996E-01	0.3996E-01	0.3996E-01	0.9230E-02	0.9230E-02	0.3113E-02
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.2647E-04	0.2647E-04	0.2647E-04	0.2647E-04	0.6112E-05	0.6112E-05	0.2062E-05
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	0.3162E-01	0.3162E-01	0.3162E-01	0.3162E-01	0.7302E-02	0.7302E-02	0.2463E-02
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.4522E-03	0.4522E-03	0.4522E-03	0.4522E-03	0.1044E-03	0.1044E-03	0.3523E-04
65	2-Methoxy ethyl acetate	0.5005E-02	0.5005E-02	0.5005E-02	0.5005E-02	0.1166E-02	0.1166E-02	0.3938E-03
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	0.3921	0.3921	0.3921	0.3921	0.9087E-01	0.9087E-01	0.3067E-01
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.5728E-05	0.5728E-05	0.5728E-05	0.5728E-05	0.1322E-05	0.1322E-05	0.4461E-06
72	1,4-epoxybutane	0.2444E-02	0.2444E-02	0.2444E-02	0.2444E-02	0.5642E-03	0.5642E-03	0.1903E-03
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.2422E-04	0.2422E-04	0.2422E-04	0.2422E-04	0.5591E-05	0.5591E-05	0.1886E-05
76	2,3-dihydropyran	0.1803E-03	0.1803E-03	0.1803E-03	0.1803E-03	0.4172E-04	0.4172E-04	0.1408E-04
77	1,4-dioxane	0.9405E-01	0.9405E-01	0.9405E-01	0.9405E-01	0.2187E-01	0.2187E-01	0.7385E-02
78	1,3,5-Trioxane	0.5629E-02	0.5629E-02	0.5629E-02	0.5629E-02	0.1646E-02	0.1646E-02	0.5743E-03
79	2-ethoxyethanol	1.082	1.082	1.082	1.082	0.2526	0.2526	0.8531E-01
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

81	1,1,2,2-tetraMe-1,2-epoxyEt	0.2083E-05	0.2083E-05	0.2083E-05	0.2083E-05	0.4808E-06	0.4808E-06	0.1622E-06
82	4-ethylmorpholine	0.2573	0.2573	0.2573	0.2573	0.6025E-01	0.6025E-01	0.2036E-01
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.1399E-03	0.1399E-03	0.1399E-03	0.1399E-03	0.3235E-04	0.3235E-04	0.1092E-04
85	Chloromethane	0.4338E-03	0.4338E-03	0.4338E-03	0.4338E-03	0.1002E-03	0.1002E-03	0.3378E-04
86	Chloroethene	0.2070E-05	0.2070E-05	0.2070E-05	0.2070E-05	0.4779E-06	0.4779E-06	0.1612E-06
87	Chloroethane	0.3021E-06	0.3021E-06	0.3021E-06	0.3021E-06	0.6974E-07	0.6974E-07	0.2352E-07
88	3-chloropropene	0.4307E-08	0.4307E-08	0.4307E-08	0.4307E-08	0.9943E-09	0.9943E-09	0.3354E-09
89	Dichloromethane	0.6589E-01	0.6589E-01	0.6589E-01	0.6589E-01	0.1521E-01	0.1521E-01	0.5131E-02
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.5789E-06	0.5789E-06	0.5789E-06	0.5789E-06	0.1337E-06	0.1337E-06	0.4509E-07
92	1,2-dichloroethane	0.9314E-03	0.9314E-03	0.9314E-03	0.9314E-03	0.2150E-03	0.2150E-03	0.7254E-04
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.4333E-02	0.4333E-02	0.4333E-02	0.4333E-02	0.1000E-02	0.1000E-02	0.3374E-03
95	1,2-dichloropropane	0.9888E-04	0.9888E-04	0.9888E-04	0.9888E-04	0.2283E-04	0.2283E-04	0.7701E-05
96	Trichloromethane	0.5817E-04	0.5817E-04	0.5817E-04	0.5817E-04	0.1343E-04	0.1343E-04	0.4530E-05
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.8843E-04	0.8843E-04	0.8843E-04	0.8843E-04	0.2042E-04	0.2042E-04	0.6887E-05
99	1,1,1-trichloroethane	0.5646E-03	0.5646E-03	0.5646E-03	0.5646E-03	0.1303E-03	0.1303E-03	0.4397E-04
100	1,1,2-trichloroethane	0.1702E-05	0.1702E-05	0.1702E-05	0.1702E-05	0.3929E-06	0.3929E-06	0.1325E-06
101	1,2-dichlorobenzene	0.5007E-04	0.5007E-04	0.5007E-04	0.5007E-04	0.1156E-04	0.1156E-04	0.3900E-05
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.4053E-05	0.4053E-05	0.4053E-05	0.4053E-05	0.9357E-06	0.9357E-06	0.3156E-06
104	Tetrachloroethene	0.3435E-03	0.3435E-03	0.3435E-03	0.3435E-03	0.7930E-04	0.7930E-04	0.2675E-04
105	Chlorodifluoromethane	0.1076E-02	0.1076E-02	0.1076E-02	0.1076E-02	0.2484E-03	0.2484E-03	0.8380E-04
106	Dichlorofluoromethane	0.1933E-05	0.1933E-05	0.1933E-05	0.1933E-05	0.4464E-06	0.4464E-06	0.1506E-06
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.5411E-06	0.5411E-06	0.5411E-06	0.5411E-06	0.1249E-06	0.1249E-06	0.4214E-07
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.1469E-03	0.1469E-03	0.1469E-03	0.1469E-03	0.3391E-04	0.3391E-04	0.1144E-04
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.5136E-06	0.5136E-06	0.5136E-06	0.5136E-06	0.1186E-06	0.1186E-06	0.4000E-07
114	1,1,2-triCl-1,2,2-triFlethane	0.6471E-03	0.6471E-03	0.6471E-03	0.6471E-03	0.1494E-03	0.1494E-03	0.5040E-04
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.5999E-02	0.5999E-02	0.5999E-02	0.5999E-02	0.1385E-02	0.1385E-02	0.4672E-03
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1338E-05	0.1338E-05	0.1338E-05	0.1338E-05	0.3089E-06	0.3089E-06	0.1042E-06
119	Ethane	0.2183E-05	0.2183E-05	0.2183E-05	0.2183E-05	0.5039E-06	0.5039E-06	0.1700E-06
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.7493E-06	0.7493E-06	0.7493E-06	0.7493E-06	0.1730E-06	0.1730E-06	0.5836E-07
123	Propane	0.2090E-07	0.2090E-07	0.2090E-07	0.2090E-07	0.4826E-08	0.4826E-08	0.1628E-08
124	1,3-butadiene	0.1462E-05	0.1462E-05	0.1462E-05	0.1462E-05	0.3374E-06	0.3374E-06	0.1138E-06
125	1-butene	0.3095E-05	0.3095E-05	0.3095E-05	0.3095E-05	0.7146E-06	0.7146E-06	0.2410E-06
126	2-methylpropane	0.2252E-06	0.2252E-06	0.2252E-06	0.2252E-06	0.5200E-07	0.5200E-07	0.1754E-07
127	Butane	0.7418E-07	0.7418E-07	0.7418E-07	0.7418E-07	0.1713E-07	0.1713E-07	0.5777E-08
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.8028E-09	0.8028E-09	0.8028E-09	0.8028E-09	0.1854E-09	0.1854E-09	0.6252E-10
131	2-methylbutane	0.2931E-07	0.2931E-07	0.2931E-07	0.2931E-07	0.6766E-08	0.6766E-08	0.2282E-08
132	Pentane	0.1244E-05	0.1244E-05	0.1244E-05	0.1244E-05	0.2873E-06	0.2873E-06	0.9691E-07

133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.3293E-07	0.3293E-07	0.3293E-07	0.3293E-07	0.7603E-08	0.7603E-08	0.2564E-08
135	Cyclohexane	0.5631E-04	0.5631E-04	0.5631E-04	0.5631E-04	0.1300E-04	0.1300E-04	0.4385E-05
136	Methylcyclopentane	0.1816E-05	0.1816E-05	0.1816E-05	0.1816E-05	0.4193E-06	0.4193E-06	0.1414E-06
137	2,2-dimethylbutane	0.2585E-07	0.2585E-07	0.2585E-07	0.2585E-07	0.5969E-08	0.5969E-08	0.2013E-08
138	3-methylpentane	0.6247E-07	0.6247E-07	0.6247E-07	0.6247E-07	0.1442E-07	0.1442E-07	0.4865E-08
139	Hexane	0.1191E-05	0.1191E-05	0.1191E-05	0.1191E-05	0.2751E-06	0.2751E-06	0.9278E-07
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.6453E-09	0.6453E-09	0.6453E-09	0.6453E-09	0.1490E-09	0.1490E-09	0.5025E-10
142	Methylcyclohexane	0.1717E-05	0.1717E-05	0.1717E-05	0.1717E-05	0.3963E-06	0.3963E-06	0.1337E-06
143	2,2-dimethylpentane	0.1731E-06	0.1731E-06	0.1731E-06	0.1731E-06	0.3997E-07	0.3997E-07	0.1348E-07
144	2,4-dimethylpentane	0.1729E-08	0.1729E-08	0.1729E-08	0.1729E-08	0.3991E-09	0.3991E-09	0.1346E-09
145	3-ethylpentane	0.2283E-08	0.2283E-08	0.2283E-08	0.2283E-08	0.5272E-09	0.5272E-09	0.1778E-09
146	Heptane	0.2317E-06	0.2317E-06	0.2317E-06	0.2317E-06	0.5350E-07	0.5350E-07	0.1805E-07
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.5575E-09	0.5575E-09	0.5575E-09	0.5575E-09	0.1287E-09	0.1287E-09	0.4342E-10
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.2505E-05	0.2505E-05	0.2505E-05	0.2505E-05	0.5783E-06	0.5783E-06	0.1951E-06
151	2,2,3-trimethylpentane	0.2090E-08	0.2090E-08	0.2090E-08	0.2090E-08	0.4826E-09	0.4826E-09	0.1628E-09
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.3090E-08	0.3090E-08	0.3090E-08	0.3090E-08	0.7134E-09	0.7134E-09	0.2406E-09
154	Octane	0.3823E-07	0.3823E-07	0.3823E-07	0.3823E-07	0.8826E-08	0.8826E-08	0.2977E-08
155	4-ethylheptane	0.1818E-09	0.1818E-09	0.1818E-09	0.1818E-09	0.4197E-10	0.4197E-10	0.1416E-10
156	Nonane	0.1349E-07	0.1349E-07	0.1349E-07	0.1349E-07	0.3114E-08	0.3114E-08	0.1050E-08
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.8335E-07	0.8335E-07	0.8335E-07	0.8335E-07	0.1924E-07	0.1924E-07	0.6491E-08
160	Undecane	0.2833E-06	0.2833E-06	0.2833E-06	0.2833E-06	0.6542E-07	0.6542E-07	0.2207E-07
161	Dodecane	0.4992E-06	0.4992E-06	0.4992E-06	0.4992E-06	0.1152E-06	0.1152E-06	0.3887E-07
162	2-propanone	0.2142E-03	0.2142E-03	0.2142E-03	0.2142E-03	0.4952E-04	0.4952E-04	0.1671E-04
163	3-buten-2-one	0.2796E-04	0.2796E-04	0.2796E-04	0.2796E-04	0.6460E-05	0.6460E-05	0.2179E-05
164	2-butanone	8.009	8.009	8.009	8.009	1.882	1.882	0.6361
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.5520E-05	0.5520E-05	0.5520E-05	0.5520E-05	0.1275E-05	0.1275E-05	0.4301E-06
167	Acetyl cyclopropane	0.7695E-05	0.7695E-05	0.7695E-05	0.7695E-05	0.1777E-05	0.1777E-05	0.5995E-06
168	2-pentanone	0.1430E-02	0.1430E-02	0.1430E-02	0.1430E-02	0.3306E-03	0.3306E-03	0.1115E-03

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.1665E-01	0.1665E-01	0.1665E-01	0.1665E-01	0.3846E-02	0.3846E-02	0.1297E-02
171	Cyclohexanone	0.2151	0.2151	0.2151	0.2151	0.4977E-01	0.4977E-01	0.1679E-01
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.2569	0.2569	0.2569	0.2569	0.5935E-01	0.5935E-01	0.2002E-01
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.1797E-02	0.1797E-02	0.1797E-02	0.1797E-02	0.4148E-03	0.4148E-03	0.1399E-03
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.2976E-03	0.2976E-03	0.2976E-03	0.2976E-03	0.6884E-04	0.6884E-04	0.2323E-04
178	2-octanone	0.2492E-04	0.2492E-04	0.2492E-04	0.2492E-04	0.5756E-05	0.5756E-05	0.1942E-05
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.1172E-03	0.1172E-03	0.1172E-03	0.1172E-03	0.2707E-04	0.2707E-04	0.9132E-05
181	Hydrogen sulfide	0.4809E-02	0.4809E-02	0.4809E-02	0.4809E-02	0.1111E-02	0.1111E-02	0.3747E-03
182	Carbonyl sulfide	0.6801E-04	0.6801E-04	0.6801E-04	0.6801E-04	0.1570E-04	0.1570E-04	0.5296E-05
183	Ethylene sulfide	0.1188E-06	0.1188E-06	0.1188E-06	0.1188E-06	0.2743E-07	0.2743E-07	0.9254E-08
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

185	Carbon disulfide	0.3082E-04	0.3082E-04	0.3082E-04	0.3082E-04	0.7116E-05	0.7116E-05	0.2400E-05
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.2470E-02	0.2470E-02	0.2470E-02	0.2470E-02	0.5931E-03	0.5931E-03	0.2010E-03
191	2-ethylhexanoic acid	0.1144E-03	0.1144E-03	0.1144E-03	0.1144E-03	0.2643E-04	0.2643E-04	0.8915E-05
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.1161E-04	0.1161E-04	0.1161E-04	0.1161E-04	0.2687E-05	0.2687E-05	0.9066E-06
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.7869E-02	0.7869E-02	0.7869E-02	0.7869E-02	0.1817E-02	0.1817E-02	0.6130E-03
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	0.3203	0.3203	0.3203	0.3203	0.8409E-01	0.8409E-01	0.2886E-01
199	Hydrogen	0.1032E-04	0.1032E-04	0.1032E-04	0.1032E-04	0.2383E-05	0.2383E-05	0.8038E-06
200	Ammonia	14.69	14.69	14.69	14.69	9.426	9.426	3.180
201	Carbon monoxide	0.3072E-04	0.3072E-04	0.3072E-04	0.3072E-04	0.7092E-05	0.7092E-05	0.2392E-05
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	336.4	37.15	8.754	0.0000E+00	50.99	0.0000E+00	0.0000E+00	0.0000E+00
2	Ethanol	2268.	208.7	1748.	0.0000E+00	9794.	0.0000E+00	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.4382	0.4993E-01	15.81	0.0000E+00	1.098	0.0000E+00	0.0000E+00	0.0000E+00
4	n-propanol	56.85	6.444	1725.	0.0000E+00	257.6	0.0000E+00	0.0000E+00	0.0000E+00
5	2-propanol	622.0	70.56	4878.	0.0000E+00	3885.	0.0000E+00	0.0000E+00	0.0000E+00
6	1,2-ethanediol	3.108	0.3506	138.8	0.0000E+00	4.296	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	1553.	174.7	0.4250E+05	0.0000E+00	9108.	0.0000E+00	0.0000E+00	0.0000E+00
8	2-butanol	0.9694	0.1106	44.17	0.0000E+00	1.237	0.0000E+00	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	92.73	10.58	4395.	0.0000E+00	136.4	0.0000E+00	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	18.29	2.068	901.7	0.0000E+00	15.94	0.0000E+00	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.1425	0.1608E-01	6.515	0.0000E+00	0.1689	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	31.75	3.606	1666.	0.0000E+00	16.22	0.0000E+00	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	2.546	0.2908	129.1	0.0000E+00	1.798	0.0000E+00	0.0000E+00	0.0000E+00
14	Phenol	250.6	28.27	0.1373E+05	0.0000E+00	58.16	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	371.3	41.87	0.1956E+05	0.0000E+00	251.5	0.0000E+00	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.6375E-01	0.7208E-02	3.169	0.0000E+00	0.4806E-01	0.0000E+00	0.0000E+00	0.0000E+00
17	2-hexanol	0.4298	0.4875E-01	22.08	0.0000E+00	0.2531	0.0000E+00	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.1571E-02	0.1799E-03	0.7138E-01	0.0000E+00	0.2026E-02	0.0000E+00	0.0000E+00	0.0000E+00
19	2-ethylhexanol	1.297	0.1479	71.93	0.0000E+00	0.2202	0.0000E+00	0.0000E+00	0.0000E+00
20	Nonanol	1.589	0.1797	89.10	0.0000E+00	0.8289E-01	0.0000E+00	0.0000E+00	0.0000E+00
21	n-decanol	0.5043E-02	0.5713E-03	0.2781	0.0000E+00	0.8340E-03	0.0000E+00	0.0000E+00	0.0000E+00
22	Methanal	0.5946E-03	0.6826E-04	0.8717E-11	0.0000E+00	0.5077E-10	0.0000E+00	0.0000E+00	0.0000E+00

23	Ethanal	206.9	16.82	14.27	0.0000E+00	83.09	0.0000E+00	0.0000E+00	0.0000E+00
24	2-propenal	1.799	0.2018	5.642	0.0000E+00	11.13	0.0000E+00	0.0000E+00	0.0000E+00
25	Propanal	119.1	13.40	253.3	0.0000E+00	740.6	0.0000E+00	0.0000E+00	0.0000E+00
26	2-methylpropenal	1.043	0.1175	37.26	0.0000E+00	2.820	0.0000E+00	0.0000E+00	0.0000E+00
27	Butanal	413.2	46.28	0.1174E+05	0.0000E+00	2278.	0.0000E+00	0.0000E+00	0.0000E+00
28	Pentanal	37.93	4.279	1815.	0.0000E+00	46.03	0.0000E+00	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.4177	0.4714E-01	20.76	0.0000E+00	0.3115	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	15.46	1.744	800.2	0.0000E+00	8.488	0.0000E+00	0.0000E+00	0.0000E+00
31	Benzaldehyde	5.785	0.6545	300.9	0.0000E+00	2.933	0.0000E+00	0.0000E+00	0.0000E+00
32	Heptanal	7.607	0.8587	410.0	0.0000E+00	2.180	0.0000E+00	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.1289	0.1454E-01	7.005	0.0000E+00	0.2940E-01	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.4505	0.5138E-01	25.15	0.0000E+00	0.5962E-01	0.0000E+00	0.0000E+00	0.0000E+00
35	Benzene	7.932	0.8935	318.6	0.0000E+00	17.95	0.0000E+00	0.0000E+00	0.0000E+00
36	Methylbenzene	403.3	45.16	0.1509E+05	0.0000E+00	1661.	0.0000E+00	0.0000E+00	0.0000E+00
37	Vinylbenzene	12.15	1.371	627.0	0.0000E+00	6.798	0.0000E+00	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	193.7	21.85	0.1027E+05	0.0000E+00	102.9	0.0000E+00	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	1043.	116.8	0.4653E+05	0.0000E+00	3254.	0.0000E+00	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	272.5	30.72	0.1432E+05	0.0000E+00	181.1	0.0000E+00	0.0000E+00	0.0000E+00
41	Ethylbenzene	52.22	5.891	2752.	0.0000E+00	24.58	0.0000E+00	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.5291E-01	0.5972E-02	2.654	0.0000E+00	0.3671E-01	0.0000E+00	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	15.76	1.778	854.9	0.0000E+00	3.910	0.0000E+00	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.8337	0.9409E-01	43.97	0.0000E+00	0.3405	0.0000E+00	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	1.694	0.1912	89.88	0.0000E+00	0.6369	0.0000E+00	0.0000E+00	0.0000E+00
47	Isopropylbenzene	3.265	0.3684	173.5	0.0000E+00	1.195	0.0000E+00	0.0000E+00	0.0000E+00
48	Propylbenzene	80.34	9.065	4387.	0.0000E+00	18.34	0.0000E+00	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.6534	0.7374E-01	35.35	0.0000E+00	0.1680	0.0000E+00	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.1335	0.1507E-01	7.085	0.0000E+00	0.4980E-01	0.0000E+00	0.0000E+00	0.0000E+00
52	Methyl formate	1.651	0.1759	2.360	0.0000E+00	9.428	0.0000E+00	0.0000E+00	0.0000E+00
53	Ethyl formate	1.696	0.1910	53.88	0.0000E+00	5.941	0.0000E+00	0.0000E+00	0.0000E+00
54	Methyl acetate	58.27	6.551	960.4	0.0000E+00	352.0	0.0000E+00	0.0000E+00	0.0000E+00
55	Ethyl acetate	102.4	11.50	3514.	0.0000E+00	421.3	0.0000E+00	0.0000E+00	0.0000E+00
56	Allyl acetate	1.439	0.1624	68.41	0.0000E+00	1.439	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57	Methyl methacrylate	37.12	4.185	1794.	0.0000E+00	40.84	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	1.976	0.2230	95.07	0.0000E+00	1.860	0.0000E+00	0.0000E+00	0.0000E+00
59	n-butyl formate	0.4482	0.5058E-01	21.34	0.0000E+00	0.4390	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	171.6	19.33	8339.	0.0000E+00	234.7	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	10.38	1.171	538.0	0.0000E+00	5.479	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	269.6	30.41	0.1420E+05	0.0000E+00	173.8	0.0000E+00	0.0000E+00	0.0000E+00
63	Isobutyl acetate	72.18	8.144	3830.	0.0000E+00	31.71	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	1.863	0.2104	96.13	0.0000E+00	1.011	0.0000E+00	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	0.6417	0.7315E-01	32.41	0.0000E+00	0.4574	0.0000E+00	0.0000E+00	0.0000E+00
66	Isoamyl acetate	13.49	1.522	732.6	0.0000E+00	3.226	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	22.65	2.556	1243.	0.0000E+00	4.059	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	116.0	13.18	6447.	0.0000E+00	16.96	0.0000E+00	0.0000E+00	0.0000E+00
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.1070E-01	0.1208E-02	0.5952	0.0000E+00	0.9532E-03	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.7016	0.7878E-01	3.079	0.0000E+00	4.352	0.0000E+00	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	28.05	3.146	593.4	0.0000E+00	158.9	0.0000E+00	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.1830E-01	0.2065E-02	0.6937	0.0000E+00	0.3775E-01	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	29.95	3.360	946.1	0.0000E+00	127.8	0.0000E+00	0.0000E+00	0.0000E+00

75	2-methylfuran	1.234	0.1391	45.01	0.0000E+00	3.196	0.0000E+00	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.8580E-01	0.9727E-02	3.444	0.0000E+00	0.1575	0.0000E+00	0.0000E+00	0.0000E+00
77	1,4-dioxane	14.75	1.679	643.8	0.0000E+00	25.34	0.0000E+00	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	0.3095E-01	0.3552E-02	1.131	0.0000E+00	0.7094E-01	0.0000E+00	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	116.6	13.30	6146.	0.0000E+00	66.85	0.0000E+00	0.0000E+00	0.0000E+00
80	Epichlorohydrin	1.428	0.1611	57.98	0.0000E+00	2.709	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.4553	0.5138E-01	21.88	0.0000E+00	0.4234	0.0000E+00	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	21.41	2.445	1166.	0.0000E+00	6.359	0.0000E+00	0.0000E+00	0.0000E+00
83	1-propoxybutane	16.98	1.917	917.5	0.0000E+00	4.685	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.8030E-01	0.9098E-02	4.148	0.0000E+00	0.4418E-01	0.0000E+00	0.0000E+00	0.0000E+00
85	Chloromethane	81.92	4.968	0.4886	0.0000E+00	2.846	0.0000E+00	0.0000E+00	0.0000E+00
86	Chloroethene	1.100	0.8423E-01	0.5406	0.0000E+00	3.036	0.0000E+00	0.0000E+00	0.0000E+00
87	Chloroethane	0.4751E-01	0.5334E-02	0.8555	0.0000E+00	0.2509	0.0000E+00	0.0000E+00	0.0000E+00
88	3-chloropropene	0.4091E-01	0.4614E-02	1.410	0.0000E+00	0.1036	0.0000E+00	0.0000E+00	0.0000E+00
89	Dichloromethane	3824.	259.0	655.0	0.0000E+00	3812.	0.0000E+00	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.2939	0.3308E-01	8.517	0.0000E+00	1.076	0.0000E+00	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	26.46	2.971	819.4	0.0000E+00	110.9	0.0000E+00	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	14.01	1.575	489.8	0.0000E+00	46.30	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	446.9	50.15	0.1908E+05	0.0000E+00	1318.	0.0000E+00	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	2.975	0.3355	123.6	0.0000E+00	5.443	0.0000E+00	0.0000E+00	0.0000E+00
96	Trichloromethane	5.359	0.6022	156.0	0.0000E+00	22.02	0.0000E+00	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.5649	0.6375E-01	27.06	0.0000E+00	0.5359	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	17.34	1.954	713.5	0.0000E+00	37.13	0.0000E+00	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	192.2	21.53	6079.	0.0000E+00	893.3	0.0000E+00	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.2939E-01	0.3317E-02	1.192	0.0000E+00	0.5168E-01	0.0000E+00	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	3.358	0.3789	172.7	0.0000E+00	1.874	0.0000E+00	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.8906E-01	0.1005E-01	4.774	0.0000E+00	0.2775E-01	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	2.709	0.3056	116.4	0.0000E+00	4.293	0.0000E+00	0.0000E+00	0.0000E+00
104	Tetrachloroethene	209.7	23.53	8021.	0.0000E+00	717.4	0.0000E+00	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	745.8	47.33	21.60	0.0000E+00	125.8	0.0000E+00	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.2295	0.2576E-01	2.276	0.0000E+00	1.404	0.0000E+00	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.6659	0.7492E-01	19.08	0.0000E+00	2.548	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	4.802	0.5400	30.47	0.0000E+00	29.93	0.0000E+00	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.4583	0.5167E-01	16.15	0.0000E+00	1.188	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	406.6	45.79	1359.	0.0000E+00	2539.	0.0000E+00	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	598.5	40.48	150.9	0.0000E+00	878.7	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	14.11	1.587	517.3	0.0000E+00	41.34	0.0000E+00	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	7132.	803.2	0.3156E+05	0.0000E+00	0.4455E+05	0.0000E+00	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	10.05	1.134	496.1	0.0000E+00	8.176	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.8730E+05	5110.	0.1222	0.0000E+00	0.7115	0.0000E+00	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	6.345	0.3733	0.6262E-02	0.0000E+00	0.3647E-01	0.0000E+00	0.0000E+00	0.0000E+00
119	Ethane	24.08	1.462	0.2244	0.0000E+00	1.307	0.0000E+00	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	3.622	0.2588	1.309	0.0000E+00	7.622	0.0000E+00	0.0000E+00	0.0000E+00
123	Propane	0.3253	0.3653E-01	1.594	0.0000E+00	2.019	0.0000E+00	0.0000E+00	0.0000E+00
124	1,3-butadiene	1.449	0.1627	19.68	0.0000E+00	8.741	0.0000E+00	0.0000E+00	0.0000E+00
125	1-butene	17.22	1.936	143.2	0.0000E+00	107.5	0.0000E+00	0.0000E+00	0.0000E+00
126	2-methylpropane	5.895	0.6612	117.2	0.0000E+00	33.28	0.0000E+00	0.0000E+00	0.0000E+00

127	Butane	1.546	0.1739	50.34	0.0000E+00	5.289	0.0000E+00	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.7255E-02	0.8186E-03	0.2837	0.0000E+00	0.1393E-01	0.0000E+00	0.0000E+00	0.0000E+00
131	2-methylbutane	0.9092	0.1026	39.70	0.0000E+00	1.345	0.0000E+00	0.0000E+00	0.0000E+00
132	Pentane	35.76	4.020	1402.	0.0000E+00	104.4	0.0000E+00	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.2212	0.2496E-01	10.22	0.0000E+00	0.2510	0.0000E+00	0.0000E+00	0.0000E+00
135	Cyclohexane	183.2	20.53	6532.	0.0000E+00	758.4	0.0000E+00	0.0000E+00	0.0000E+00
136	Methylcyclopentane	14.74	1.662	691.3	0.0000E+00	18.25	0.0000E+00	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.8927	0.1007	42.45	0.0000E+00	0.8901	0.0000E+00	0.0000E+00	0.0000E+00
138	3-methylpentane	1.593	0.1797	77.34	0.0000E+00	1.414	0.0000E+00	0.0000E+00	0.0000E+00
139	Hexane	24.51	2.765	1218.	0.0000E+00	21.48	0.0000E+00	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.5877E-02	0.6631E-03	0.2770	0.0000E+00	0.6039E-02	0.0000E+00	0.0000E+00	0.0000E+00
142	Methylcyclohexane	16.66	1.880	855.1	0.0000E+00	10.18	0.0000E+00	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	12.41	1.400	647.0	0.0000E+00	6.218	0.0000E+00	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.1155	0.1304E-01	5.717	0.0000E+00	0.8881E-01	0.0000E+00	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.1317	0.1486E-01	6.567	0.0000E+00	0.9568E-01	0.0000E+00	0.0000E+00	0.0000E+00
146	Heptane	14.21	1.604	749.3	0.0000E+00	6.125	0.0000E+00	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	13.87	1.565	736.5	0.0000E+00	5.316	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.7939E-02	0.8959E-03	0.3986	0.0000E+00	0.5459E-02	0.0000E+00	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.4140E-02	0.4672E-03	0.2046	0.0000E+00	0.3205E-02	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	27.13	3.062	1455.	0.0000E+00	8.996	0.0000E+00	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.1809	0.2041E-01	9.401	0.0000E+00	0.8902E-01	0.0000E+00	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.4361	0.4921E-01	22.88	0.0000E+00	0.1911	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.2617	0.2953E-01	13.70	0.0000E+00	0.1183	0.0000E+00	0.0000E+00	0.0000E+00
154	Octane	4.284	0.4834	231.2	0.0000E+00	1.178	0.0000E+00	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.2135E-01	0.2409E-02	1.128	0.0000E+00	0.8501E-02	0.0000E+00	0.0000E+00	0.0000E+00
156	Nonane	1.818	0.2052	99.44	0.0000E+00	0.3490	0.0000E+00	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	1.904	0.2149	104.6	0.0000E+00	0.3197	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.8863	0.1000	49.04	0.0000E+00	0.1072	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	8.937	1.009	498.4	0.0000E+00	0.6561	0.0000E+00	0.0000E+00	0.0000E+00
160	Undecane	11.79	1.330	662.5	0.0000E+00	0.3029	0.0000E+00	0.0000E+00	0.0000E+00
161	Dodecane	0.2432	0.2745E-01	13.63	0.0000E+00	0.1035E-01	0.0000E+00	0.0000E+00	0.0000E+00
162	2-propanone	0.2089	0.2361E-01	6.892	0.0000E+00	0.6038	0.0000E+00	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.6593E-01	0.7447E-02	2.446	0.0000E+00	0.1453	0.0000E+00	0.0000E+00	0.0000E+00
164	2-butanone	535.5	61.10	8106.	0.0000E+00	3329.	0.0000E+00	0.0000E+00	0.0000E+00
165	Cyclopentanone	252.0	28.22	8632.	0.0000E+00	1119.	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1442E-01	0.1628E-02	0.6058	0.0000E+00	0.2306E-01	0.0000E+00	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.2409E-01	0.2721E-02	0.9854	0.0000E+00	0.4159E-01	0.0000E+00	0.0000E+00	0.0000E+00
168	2-pentanone	1.119	0.1267	53.08	0.0000E+00	1.144	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	15.22	1.717	724.2	0.0000E+00	17.18	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	57.72	6.517	2986.	0.0000E+00	36.15	0.0000E+00	0.0000E+00	0.0000E+00
171	Cyclohexanone	120.0	13.60	6526.	0.0000E+00	33.77	0.0000E+00	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	2.220	0.2505	111.2	0.0000E+00	1.580	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	358.7	40.53	0.1890E+05	0.0000E+00	228.0	0.0000E+00	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.2690E-01	0.3036E-02	1.349	0.0000E+00	0.1871E-01	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	39.14	4.417	2139.	0.0000E+00	8.289	0.0000E+00	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.8535	0.9631E-01	44.64	0.0000E+00	0.3899	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.1989	0.2253E-01	10.28	0.0000E+00	0.1088	0.0000E+00	0.0000E+00	0.0000E+00
178	2-octanone	0.8334E-01	0.9412E-02	4.399	0.0000E+00	0.3394E-01	0.0000E+00	0.0000E+00	0.0000E+00

179	5-methyl-3-heptanone	0.9167	0.1035	49.67	0.0000E+00	0.2281	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	1.764	0.1991	97.75	0.0000E+00	0.1985	0.0000E+00	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	9.648	0.8940	0.6699E-04	0.0000E+00	0.3902E-03	0.0000E+00	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	78.73	4.762	0.5226	0.0000E+00	3.043	0.0000E+00	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.1642E-01	0.1842E-02	0.2469	0.0000E+00	0.9137E-01	0.0000E+00	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.1015	0.1142E-01	2.427	0.0000E+00	0.4524	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	13.51	1.496	24.33	0.0000E+00	82.11	0.0000E+00	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.4108E-01	0.4635E-02	1.890	0.0000E+00	0.4731E-01	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.7420E-01	0.8494E-02	1.364	0.0000E+00	0.3895	0.0000E+00	0.0000E+00	0.0000E+00
191	2-ethylhexanoic acid	0.1841	0.2081E-01	10.17	0.0000E+00	0.2587E-01	0.0000E+00	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.5336E-02	0.6025E-03	0.8434E-01	0.0000E+00	0.2858E-01	0.0000E+00	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	48.61	3.837	26.61	0.0000E+00	147.8	0.0000E+00	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.8941	0.1009	39.11	0.0000E+00	1.295	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.1106E-01	0.1248E-02	0.3738	0.0000E+00	0.2821E-01	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	3.071	0.3524	173.1	0.0000E+00	0.3365	0.0000E+00	0.0000E+00	0.0000E+00
199	Hydrogen	275.2	30.99	0.7442E-15	0.0000E+00	0.4334E-14	0.0000E+00	0.0000E+00	0.1386E+05
200	Ammonia	45.63	2.441	0.7262E-07	0.0000E+00	0.4230E-06	0.0000E+00	0.0000E+00	0.0000E+00
201	Carbon monoxide	797.1	89.77	0.5697E-10	0.0000E+00	0.3318E-09	0.0000E+00	0.0000E+00	0.4015E+05
202	Disiloxane	9.635	1.084	349.7	0.0000E+00	28.94	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	58.85	6.631	2779.	0.0000E+00	82.50	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	7.824	0.8828	401.7	0.0000E+00	4.547	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	3.602	0.4065	197.4	0.0000E+00	0.6545	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	72.49	8.180	3991.	0.0000E+00	12.04	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.7284E-02	0.8220E-03	0.4080	0.0000E+00	0.3301E-03	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	37.93	4.281	2093.	0.0000E+00	5.500	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	109.6	12.37	6178.	0.0000E+00	0.9253	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	63.07	7.117	3557.	0.0000E+00	0.2251	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	15.65	1.767	883.1	0.0000E+00	0.1739E-01	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	4341.	4341.	4341.	4341.	1009.	1009.	340.8
2	Ethanol	0.2116E+05	0.2116E+05	0.2116E+05	0.2116E+05	4917.	4917.	1660.
3	2-propen-1-ol	7.323	7.323	7.323	7.323	1.706	1.706	0.5762
4	n-propanol	577.0	577.0	577.0	577.0	134.0	134.0	45.22
5	2-propanol	5203.	5203.	5203.	5203.	1207.	1207.	407.3
6	1,2-ethanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	5892.	5892.	5892.	5892.	1363.	1363.	459.9
8	2-butanol	18.59	18.59	18.59	18.59	4.336	4.336	1.465
9	2-methyl-1-propanol	2177.	2177.	2177.	2177.	509.0	509.0	172.0
10	2-methyl-2-propanol	33.80	33.80	33.80	33.80	7.812	7.812	2.635
11	1,2-propanediol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	242.6	242.6	242.6	242.6	56.24	56.24	18.98
13	3-methyl-1-butanol	69.12	69.12	69.12	69.12	16.19	16.19	5.473
14	Phenol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	61.46	61.46	61.46	61.46	14.19	14.19	4.787
16	2-ethylbutanol	0.1012	0.1012	0.1012	0.1012	0.2339E-01	0.2339E-01	0.7892E-02

17	2-hexanol	2.148	2.148	2.148	2.148	0.4973	0.4973	0.1678
18	1,3-dichloro-2-propanol	0.8851E-01	0.8851E-01	0.8851E-01	0.8851E-01	0.2107E-01	0.2107E-01	0.7136E-02
19	2-ethylhexanol	24.86	24.86	24.86	24.86	5.800	5.800	1.959
20	Nonanol	2.420	2.420	2.420	2.420	0.5593	0.5593	0.1887
21	n-decanol	0.1771E-01	0.1771E-01	0.1771E-01	0.1771E-01	0.4096E-02	0.4096E-02	0.1382E-02
22	Methanal	0.2335	0.2335	0.2335	0.2335	0.6828E-01	0.6828E-01	0.2382E-01
23	Ethanal	138.5	138.5	138.5	138.5	31.99	31.99	10.79
24	2-propenal	0.1434	0.1434	0.1434	0.1434	0.3310E-01	0.3310E-01	0.1117E-01
25	Propanal	116.0	116.0	116.0	116.0	26.78	26.78	9.036
26	2-methylpropenal	0.3672E-01	0.3672E-01	0.3672E-01	0.3672E-01	0.8479E-02	0.8479E-02	0.2860E-02
27	Butanal	278.7	278.7	278.7	278.7	64.37	64.37	21.71
28	Pentanal	15.75	15.75	15.75	15.75	3.636	3.636	1.227
29	2,4-hexadien-1-al	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	2.818	2.818	2.818	2.818	0.6506	0.6506	0.2195
31	Benzaldehyde	12.26	12.26	12.26	12.26	2.835	2.835	0.9563
32	Heptanal	1.662	1.662	1.662	1.662	0.3838	0.3838	0.1294
33	4-methylbenzaldehyde	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	8.639	8.639	8.639	8.639	2.015	2.015	0.6807
35	Benzene	0.1596	0.1596	0.1596	0.1596	0.3684E-01	0.3684E-01	0.1243E-01
36	Methylbenzene	5.879	5.879	5.879	5.879	1.357	1.357	0.4579
37	Vinylbenzene	0.4309	0.4309	0.4309	0.4309	0.9948E-01	0.9948E-01	0.3356E-01
38	1,2-dimethylbenzene	4.320	4.320	4.320	4.320	0.9974	0.9974	0.3365
39	1,3-dimethylbenzene	14.51	14.51	14.51	14.51	3.351	3.351	1.130
40	1,4-dimethylbenzene	4.192	4.192	4.192	4.192	0.9678	0.9678	0.3265
41	Ethylbenzene	0.6062	0.6062	0.6062	0.6062	0.1400	0.1400	0.4721E-01
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.1745E-02	0.1745E-02	0.1745E-02	0.1745E-02	0.4029E-03	0.4029E-03	0.1359E-03
44	1,2,4-trimethylbenzene	0.2612	0.2612	0.2612	0.2612	0.6031E-01	0.6031E-01	0.2034E-01
45	1,3,5-trimethylbenzene	0.9822E-02	0.9822E-02	0.9822E-02	0.9822E-02	0.2268E-02	0.2268E-02	0.7649E-03
46	1-ethyl-2-methylbenzene	0.5565E-01	0.5565E-01	0.5565E-01	0.5565E-01	0.1285E-01	0.1285E-01	0.4334E-02
47	Isopropylbenzene	0.2103E-01	0.2103E-01	0.2103E-01	0.2103E-01	0.4856E-02	0.4856E-02	0.1638E-02
48	Propylbenzene	0.7349	0.7349	0.7349	0.7349	0.1697	0.1697	0.5723E-01
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.4639E-02	0.4639E-02	0.4639E-02	0.4639E-02	0.1071E-02	0.1071E-02	0.3613E-03
51	1-methyl-4-propylbenzene	0.5086E-01	0.5086E-01	0.5086E-01	0.5086E-01	0.1174E-01	0.1174E-01	0.3962E-02
52	Methyl formate	0.1283E-01	0.1283E-01	0.1283E-01	0.1283E-01	0.2961E-02	0.2961E-02	0.9988E-03
53	Ethyl formate	1.342	1.342	1.342	1.342	0.3100	0.3100	0.1046
54	Methyl acetate	78.98	78.98	78.98	78.98	18.25	18.25	6.156
55	Ethyl acetate	84.40	84.40	84.40	84.40	19.49	19.49	6.576
56	Allyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.5618E-01	0.5618E-01	0.5618E-01	0.5618E-01	0.1297E-01	0.1297E-01	0.4375E-02
59	n-butyl formate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	67.08	67.08	67.08	67.08	15.49	15.49	5.225
63	Isobutyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.9604	0.9604	0.9604	0.9604	0.2218	0.2218	0.7481E-01
65	2-Methoxy ethyl acetate	10.73	10.73	10.73	10.73	2.500	2.500	0.8442
66	Isoamyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	837.5	837.5	837.5	837.5	194.1	194.1	65.51

Russian TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.1210E-01	0.1210E-01	0.1210E-01	0.1210E-01	0.2794E-02	0.2794E-02	0.9424E-03
72	1,4-epoxybutane	5.154	5.154	5.154	5.154	1.190	1.190	0.4014
73	3-methoxy-1-propene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.5132E-01	0.5132E-01	0.5132E-01	0.5132E-01	0.1185E-01	0.1185E-01	0.3997E-02
76	2,3-dihydropyran	0.3844	0.3844	0.3844	0.3844	0.8896E-01	0.8896E-01	0.3002E-01
77	1,4-dioxane	201.4	201.4	201.4	201.4	46.83	46.83	15.81
78	1,3,5-Trioxane	12.15	12.15	12.15	12.15	3.553	3.553	1.240
79	2-ethoxyethanol	2321.	2321.	2321.	2321.	541.8	541.8	183.0
80	Epichlorohydrin	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.4420E-02	0.4420E-02	0.4420E-02	0.4420E-02	0.1020E-02	0.1020E-02	0.3442E-03
82	4-ethylmorpholine	552.6	552.6	552.6	552.6	129.4	129.4	43.72
83	1-propoxybutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.2980	0.2980	0.2980	0.2980	0.6895E-01	0.6895E-01	0.2326E-01
85	Chloromethane	0.4978	0.4978	0.4978	0.4978	0.1149	0.1149	0.3877E-01
86	Chloroethene	0.3110E-02	0.3110E-02	0.3110E-02	0.3110E-02	0.7181E-03	0.7181E-03	0.2422E-03
87	Chloroethane	0.6380E-03	0.6380E-03	0.6380E-03	0.6380E-03	0.1473E-03	0.1473E-03	0.4968E-04
88	3-chloropropene	0.9136E-05	0.9136E-05	0.9136E-05	0.9136E-05	0.2109E-05	0.2109E-05	0.7115E-06
89	Dichloromethane	86.53	86.53	86.53	86.53	19.98	19.98	6.739
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.1226E-02	0.1226E-02	0.1226E-02	0.1226E-02	0.2830E-03	0.2830E-03	0.9544E-04
92	1,2-dichloroethane	1.967	1.967	1.967	1.967	0.4541	0.4541	0.1532
93	1,2-dichloropropene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	9.146	9.146	9.146	9.146	2.111	2.111	0.7122
95	1,2-dichloropropane	0.2097	0.2097	0.2097	0.2097	0.4842E-01	0.4842E-01	0.1633E-01
96	Trichloromethane	0.1229	0.1229	0.1229	0.1229	0.2838E-01	0.2838E-01	0.9575E-02
97	1,2-dichloro-2-methylpropane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.1874	0.1874	0.1874	0.1874	0.4326E-01	0.4326E-01	0.1459E-01
99	1,1,1-trichloroethane	1.190	1.190	1.190	1.190	0.2747	0.2747	0.9264E-01
100	1,1,2-trichloroethane	0.3612E-02	0.3612E-02	0.3612E-02	0.3612E-02	0.8339E-03	0.8339E-03	0.2813E-03
101	1,2-dichlorobenzene	0.1063	0.1063	0.1063	0.1063	0.2454E-01	0.2454E-01	0.8277E-02
102	3-chloromethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.8598E-02	0.8598E-02	0.8598E-02	0.8598E-02	0.1985E-02	0.1985E-02	0.6696E-03
104	Tetrachloroethene	0.7251	0.7251	0.7251	0.7251	0.1674	0.1674	0.5647E-01
105	Chlorodifluoromethane	1.298	1.298	1.298	1.298	0.2996	0.2996	0.1011
106	Dichlorofluoromethane	0.4083E-02	0.4083E-02	0.4083E-02	0.4083E-02	0.9426E-03	0.9426E-03	0.3180E-03
107	1-chloro-1,2,2-trifluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.1144E-02	0.1144E-02	0.1144E-02	0.1144E-02	0.2642E-03	0.2642E-03	0.8913E-04
109	1,2-dichloro-1,2-difluoroethen	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.3112	0.3112	0.3112	0.3112	0.7185E-01	0.7185E-01	0.2424E-01
112	Bromotrifluoromethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1087E-02	0.1087E-02	0.1087E-02	0.1087E-02	0.2509E-03	0.2509E-03	0.8464E-04
114	1,1,2-triCl-1,2,2-triFlethane	1.371	1.371	1.371	1.371	0.3164	0.3164	0.1067
115	1,1,2,2-tetraCl-1,2-diFlethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	6.638	6.638	6.638	6.638	1.533	1.533	0.5170
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1489E-02	0.1489E-02	0.1489E-02	0.1489E-02	0.3437E-03	0.3437E-03	0.1159E-03
119	Ethane	0.2509E-02	0.2509E-02	0.2509E-02	0.2509E-02	0.5793E-03	0.5793E-03	0.1954E-03
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1051E-02	0.1051E-02	0.1051E-02	0.1051E-02	0.2427E-03	0.2427E-03	0.8186E-04
123	Propane	0.4416E-04	0.4416E-04	0.4416E-04	0.4416E-04	0.1020E-04	0.1020E-04	0.3439E-05
124	1,3-butadiene	0.3086E-02	0.3086E-02	0.3086E-02	0.3086E-02	0.7125E-03	0.7125E-03	0.2403E-03
125	1-butene	0.6545E-02	0.6545E-02	0.6545E-02	0.6545E-02	0.1511E-02	0.1511E-02	0.5097E-03
126	2-methylpropane	0.4752E-03	0.4752E-03	0.4752E-03	0.4752E-03	0.1097E-03	0.1097E-03	0.3701E-04
127	Butane	0.1569E-03	0.1569E-03	0.1569E-03	0.1569E-03	0.3624E-04	0.3624E-04	0.1222E-04
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.1704E-05	0.1704E-05	0.1704E-05	0.1704E-05	0.3933E-06	0.3933E-06	0.1327E-06
131	2-methylbutane	0.6218E-04	0.6218E-04	0.6218E-04	0.6218E-04	0.1436E-04	0.1436E-04	0.4842E-05
132	Pentane	0.2631E-02	0.2631E-02	0.2631E-02	0.2631E-02	0.6073E-03	0.6073E-03	0.2049E-03
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.6989E-04	0.6989E-04	0.6989E-04	0.6989E-04	0.1613E-04	0.1613E-04	0.5442E-05
135	Cyclohexane	0.1187	0.1187	0.1187	0.1187	0.2740E-01	0.2740E-01	0.9241E-02
136	Methylcyclopentane	0.3852E-02	0.3852E-02	0.3852E-02	0.3852E-02	0.8892E-03	0.8892E-03	0.3000E-03
137	2,2-dimethylbutane	0.5487E-04	0.5487E-04	0.5487E-04	0.5487E-04	0.1267E-04	0.1267E-04	0.4273E-05
138	3-methylpentane	0.1326E-03	0.1326E-03	0.1326E-03	0.1326E-03	0.3061E-04	0.3061E-04	0.1032E-04
139	Hexane	0.2527E-02	0.2527E-02	0.2527E-02	0.2527E-02	0.5835E-03	0.5835E-03	0.1968E-03
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.1370E-05	0.1370E-05	0.1370E-05	0.1370E-05	0.3162E-06	0.3162E-06	0.1067E-06
142	Methylcyclohexane	0.3643E-02	0.3643E-02	0.3643E-02	0.3643E-02	0.8410E-03	0.8410E-03	0.2837E-03
143	2,2-dimethylpentane	0.3674E-03	0.3674E-03	0.3674E-03	0.3674E-03	0.8483E-04	0.8483E-04	0.2861E-04
144	2,4-dimethylpentane	0.3669E-05	0.3669E-05	0.3669E-05	0.3669E-05	0.8470E-06	0.8470E-06	0.2857E-06
145	3-ethylpentane	0.4846E-05	0.4846E-05	0.4846E-05	0.4846E-05	0.1119E-05	0.1119E-05	0.3774E-06
146	Heptane	0.4918E-03	0.4918E-03	0.4918E-03	0.4918E-03	0.1135E-03	0.1135E-03	0.3830E-04
147	1,1-dimethylcyclohexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1183E-05	0.1183E-05	0.1183E-05	0.1183E-05	0.2732E-06	0.2732E-06	0.9215E-07
149	6-methyl-1-heptene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.5316E-02	0.5316E-02	0.5316E-02	0.5316E-02	0.1227E-02	0.1227E-02	0.4140E-03
151	2,2,3-trimethylpentane	0.4437E-05	0.4437E-05	0.4437E-05	0.4437E-05	0.1024E-05	0.1024E-05	0.3455E-06
152	3,3-dimethylhexane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.6558E-05	0.6558E-05	0.6558E-05	0.6558E-05	0.1514E-05	0.1514E-05	0.5108E-06
154	Octane	0.8114E-04	0.8114E-04	0.8114E-04	0.8114E-04	0.1873E-04	0.1873E-04	0.6319E-05
155	4-ethylheptane	0.3858E-06	0.3858E-06	0.3858E-06	0.3858E-06	0.8908E-07	0.8908E-07	0.3005E-07
156	Nonane	0.2863E-04	0.2863E-04	0.2863E-04	0.2863E-04	0.6609E-05	0.6609E-05	0.2229E-05
157	4-isopropenyl-1-Mecyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.1769E-03	0.1769E-03	0.1769E-03	0.1769E-03	0.4084E-04	0.4084E-04	0.1378E-04
160	Undecane	0.6014E-03	0.6014E-03	0.6014E-03	0.6014E-03	0.1388E-03	0.1388E-03	0.4683E-04
161	Dodecane	0.1059E-02	0.1059E-02	0.1059E-02	0.1059E-02	0.2446E-03	0.2446E-03	0.8251E-04
162	2-propanone	0.4554	0.4554	0.4554	0.4554	0.1053	0.1053	0.3551E-01
163	3-buten-2-one	0.5941E-01	0.5941E-01	0.5941E-01	0.5941E-01	0.1372E-01	0.1372E-01	0.4629E-02
164	2-butanone	0.1719E+05	0.1719E+05	0.1719E+05	0.1719E+05	4038.	4038.	1365.
165	Cyclopentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1173E-01	0.1173E-01	0.1173E-01	0.1173E-01	0.2709E-02	0.2709E-02	0.9138E-03
167	Acetyl cyclopropane	0.1635E-01	0.1635E-01	0.1635E-01	0.1635E-01	0.3775E-02	0.3775E-02	0.1274E-02
168	2-pentanone	3.044	3.044	3.044	3.044	0.7038	0.7038	0.2374

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	35.36	35.36	35.36	35.36	8.166	8.166	2.755
171	Cyclohexanone	458.4	458.4	458.4	458.4	106.1	106.1	35.78
172	3,3-dimethyl-2-butanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

173	4-methyl-2-pentanone	545.8	545.8	545.8	545.8	126.1	126.1	42.55
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	3.813	3.813	3.813	3.813	0.8805	0.8805	0.2970
176	5-methyl-2-hexanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.6340	0.6340	0.6340	0.6340	0.1466	0.1466	0.4947E-01
178	2-octanone	0.5294E-01	0.5294E-01	0.5294E-01	0.5294E-01	0.1223E-01	0.1223E-01	0.4125E-02
179	5-methyl-3-heptanone	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.2489	0.2489	0.2489	0.2489	0.5747E-01	0.5747E-01	0.1939E-01
181	Hydrogen sulfide	8.382	8.382	8.382	8.382	1.936	1.936	0.6532
182	Carbonyl sulfide	0.7785E-01	0.7785E-01	0.7785E-01	0.7785E-01	0.1797E-01	0.1797E-01	0.6063E-02
183	Ethylene sulfide	0.2508E-03	0.2508E-03	0.2508E-03	0.2508E-03	0.5791E-04	0.5791E-04	0.1953E-04
184	Dimethyl sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.6447E-01	0.6447E-01	0.6447E-01	0.6447E-01	0.1488E-01	0.1488E-01	0.5021E-02
186	Pentamethylene sulfide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	5.317	5.317	5.317	5.317	1.277	1.277	0.4328
191	2-ethylhexanoic acid	0.2432	0.2432	0.2432	0.2432	0.5619E-01	0.5619E-01	0.1895E-01
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.2466E-01	0.2466E-01	0.2466E-01	0.2466E-01	0.5707E-02	0.5707E-02	0.1926E-02
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	11.71	11.71	11.71	11.71	2.704	2.704	0.9121
196	N,N-dimethylformamide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	691.2	691.2	691.2	691.2	181.5	181.5	62.28
199	Hydrogen	0.2186E-01	0.2186E-01	0.2186E-01	0.2186E-01	0.5047E-02	0.5047E-02	0.1702E-02
200	Ammonia	0.3172E+05	0.3172E+05	0.3172E+05	0.3172E+05	0.2036E+05	0.2036E+05	6867.
201	Carbon monoxide	0.6506E-01	0.6506E-01	0.6506E-01	0.6506E-01	0.1502E-01	0.1502E-01	0.5067E-02
202	Disiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
1	Methanol	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001
2	Ethanol	1.000	0.009	0.000	0.380	0.000	0.000	0.000	0.008	0.008	0.008	0.008	0.001	0.001	0.001
3	2-propen-1-ol	1.000	0.594	0.000	0.999	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001
4	n-propanol	1.000	0.249	0.000	1.000	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.001	0.001	0.001
5	2-propanol	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.006	0.006	0.006	0.006	0.001	0.001	0.000
6	1,2-ethanediol	1.000	0.777	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	n-butanol	1.000	0.045	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000
8	2-butanol	1.000	0.795	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
9	2-methyl-1-propanol	1.000	0.755	0.000	1.000	0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.003	0.003	0.001
10	2-methyl-2-propanol	1.000	0.859	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000

11	1,2-propanediol	1.000	0.810	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	n-pentanol	1.000	0.918	0.000	1.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000
13	3-methyl-1-butanol	1.000	0.887	0.000	1.000	0.000	0.000	0.000	0.018	0.018	0.018	0.018	0.003	0.003	0.001
14	Phenol	1.000	0.962	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	Cyclohexanol	1.000	0.885	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	2-ethylbutanol	1.000	0.879	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
17	2-hexanol	1.000	0.906	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000
18	1,3-dichloro-2-propanol	1.000	0.794	0.000	1.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.007	0.007	0.003
19	2-ethylhexanol	1.000	0.973	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
20	Nonanol	1.000	0.992	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
21	n-decanol	1.000	0.974	0.000	1.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000
22	Methanal	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026
23	Ethanal	1.000	0.000	0.000	0.013	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
24	2-propenal	1.000	0.000	0.000	0.989	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Propanal	1.000	0.000	0.000	0.994	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
26	2-methylpropenal	1.000	0.559	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	Butanal	1.000	0.094	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	Pentanal	1.000	0.800	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	2,4-hexadien-1-al	1.000	0.881	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	Hexanal	1.000	0.911	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	Benzaldehyde	1.000	0.919	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
32	Heptanal	1.000	0.954	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	4-methylbenzaldehyde	1.000	0.963	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	Octanal	1.000	0.979	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
35	Benzene	1.000	0.628	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	Methylbenzene	1.000	0.302	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	Vinylbenzene	1.000	0.910	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	1,2-dimethylbenzene	1.000	0.911	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	1,3-dimethylbenzene	1.000	0.451	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	1,4-dimethylbenzene	1.000	0.887	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	Ethylbenzene	1.000	0.923	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Indene	1.000	0.499	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	alpha-methylstyrene	1.000	0.889	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	1,2,4-trimethylbenzene	1.000	0.960	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	1,3,5-trimethylbenzene	1.000	0.935	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	1-ethyl-2-methylbenzene	1.000	0.940	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	Isopropylbenzene	1.000	0.941	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	Propylbenzene	1.000	0.963	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	1-methyl-3-propylbenzene	1.000	0.612	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	n-butylbenzene	1.000	0.959	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	1-methyl-4-propylbenzene	1.000	0.940	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	Methyl formate	1.000	0.001	0.000	0.882	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	Ethyl formate	1.000	0.424	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
54	Methyl acetate	1.000	0.025	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
55	Ethyl acetate	1.000	0.311	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
56	Allyl acetate	1.000	0.840	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
57	Methyl methacrylate	1.000	0.819	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	Isopropyl acetate	1.000	0.849	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	n-butyl formate	1.000	0.843	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	Propyl acetate	1.000	0.769	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	Ethyl methacrylate	1.000	0.915	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	Butyl acetate	1.000	0.891	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

63	Isobutyl acetate	1.000	0.928	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	Ethyl lactate	1.000	0.913	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	2-Methoxy ethyl acetate	1.000	0.886	0.000	1.000	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.002	0.002	0.001
66	Isoamyl acetate	1.000	0.962	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	n-amyl acetate	1.000	0.971	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	2-ethoxyethyl acetate	1.000	0.976	0.000	1.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.001	0.001	0.000
69	ethyl acetoxyacetate	1.000	0.553	0.000	0.997	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	Dibutyl oxalate	1.000	0.986	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	1,4-epoxy-1,3-butadiene	1.000	0.001	0.000	0.992	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	1,4-epoxybutane	1.000	0.078	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	3-methoxy-1-propene	1.000	0.669	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	Diethyl ether	1.000	0.290	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	2-methylfuran	1.000	0.578	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	2,3-dihydropyran	1.000	0.706	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000
77	1,4-dioxane	1.000	0.720	0.000	1.000	0.000	0.000	0.000	0.009	0.009	0.009	0.009	0.002	0.002	0.001
78	1,3,5-Trioxane	1.000	0.632	0.000	0.999	0.000	0.000	0.000	0.263	0.263	0.263	0.263	0.059	0.059	0.026
79	2-ethoxyethanol	1.000	0.906	0.000	1.000	0.000	0.000	0.000	0.013	0.013	0.013	0.013	0.002	0.002	0.001
80	Epichlorohydrin	1.000	0.693	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
81	1,1,2,2-tetraMe-1,2-epoxyEt	1.000	0.851	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	4-ethylmorpholine	1.000	0.952	0.000	1.000	0.000	0.000	0.000	0.017	0.017	0.017	0.017	0.003	0.003	0.001
83	1-propoxybutane	1.000	0.956	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84	2-butoxyethanol	1.000	0.912	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000
85	Chloromethane	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	Chloroethene	1.000	0.000	0.000	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	Chloroethane	1.000	0.138	0.000	0.996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	3-chloropropene	1.000	0.592	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	Dichloromethane	1.000	0.001	0.000	0.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	1-chlorobutane	1.000	0.419	0.000	0.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	1,1-dichloroethene	1.000	0.402	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	1,2-dichloroethane	1.000	0.305	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	1,2-dichloropropene	1.000	0.453	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	Chlorobenzene	1.000	0.493	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	1,2-dichloropropane	1.000	0.703	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	Trichloromethane	1.000	0.323	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	1,2-dichloro-2-methylpropane	1.000	0.848	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	Trichloroethylene	1.000	0.648	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99	1,1,1-trichloroethane	1.000	0.226	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	1,1,2-trichloroethane	1.000	0.718	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101	1,2-dichlorobenzene	1.000	0.911	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102	3-chloromethylheptane	1.000	0.950	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
103	Tetrachloromethane	1.000	0.744	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104	Tetrachloroethene	1.000	0.422	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	Chlorodifluoromethane	1.000	0.001	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
106	Dichlorofluoromethane	1.000	0.013	0.000	0.995	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107	1-chloro-1,2,2-trifluoroethane	1.000	0.373	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108	Dichlorodifluoromethane	1.000	0.000	0.000	0.998	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109	1,2-dichloro-1,2-difluoroethen	1.000	0.580	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	Chlorotetrafluoroethane	1.000	0.339	0.000	0.949	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
111	Trichlorofluoromethane	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112	Bromotrifluoromethane	1.000	0.000	0.000	0.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
113	1,1-diCl-1,2,2,2-tetraFlethane	1.000	0.516	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
114	1,1,2-triCl-1,2,2-triFlethane	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

115	1,1,2,2-tetraCl-1,2-diFlethane	1.000	0.869	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
116	Methane	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117	Ethyne	1.000	0.001	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
118	Ethene	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
119	Ethane	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	Propadiene	1.000	0.249	0.000	0.871	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
121	Propyne	1.000	0.239	0.000	0.859	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122	Propene	1.000	0.000	0.000	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
123	Propane	1.000	0.001	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
124	1,3-butadiene	1.000	0.027	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	1-butene	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
126	2-methylpropane	1.000	0.081	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127	Butane	1.000	0.437	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
128	Cyclopentene	1.000	0.358	0.000	0.958	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
129	2-methyl-1,3-butadiene	1.000	0.384	0.000	0.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	1-pentene	1.000	0.692	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
131	2-methylbutane	1.000	0.762	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132	Pentane	1.000	0.511	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
133	3,4,5,6-tetrahydrobenzene	1.000	0.422	0.000	0.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
134	2-hexene	1.000	0.818	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	Cyclohexane	1.000	0.303	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
136	Methylcyclopentane	1.000	0.798	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137	2,2-dimethylbutane	1.000	0.840	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
138	3-methylpentane	1.000	0.857	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
139	Hexane	1.000	0.857	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	4-methylcyclohexene	1.000	0.498	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
141	1-heptene	1.000	0.835	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142	Methylcyclohexane	1.000	0.901	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
143	2,2-dimethylpentane	1.000	0.919	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
144	2,4-dimethylpentane	1.000	0.877	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	3-ethylpentane	1.000	0.884	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
146	Heptane	1.000	0.931	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147	1,1-dimethylcyclohexane	1.000	0.938	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
148	2-octene	1.000	0.890	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
149	6-methyl-1-heptene	1.000	0.876	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	trans-1,2-dimethylcyclohexane	1.000	0.946	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
151	2,2,3-trimethylpentane	1.000	0.921	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152	3,3-dimethylhexane	1.000	0.930	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
153	3-ethylhexane	1.000	0.928	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
154	Octane	1.000	0.956	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	4-ethylheptane	1.000	0.936	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
156	Nonane	1.000	0.969	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157	4-isopropenyl-1-Mecyclohexene	1.000	0.973	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
158	2-methyl-3-ethylheptane	1.000	0.981	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
159	Decane	1.000	0.988	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	Undecane	1.000	0.996	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
161	Dodecane	1.000	0.993	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162	2-propanone	1.000	0.531	0.000	0.999	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
163	3-buten-2-one	1.000	0.646	0.000	0.999	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
164	2-butanone	1.000	0.003	0.000	1.000	0.000	0.000	0.000	0.022	0.022	0.022	0.022	0.004	0.004	0.002
165	Cyclopentanone	1.000	0.255	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166	3-penten-2-one	1.000	0.744	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
167	Acetyl cyclopropane	1.000	0.724	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
168	2-pentanone	1.000	0.836	0.000	1.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

Russian TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
169	3-methyl-2-butanone	1.000	0.816	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	4-methyl-3-penten-2-one	1.000	0.898	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
171	Cyclohexanone	1.000	0.954	0.000	1.000	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000
172	3,3-dimethyl-2-butanone	1.000	0.886	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
173	4-methyl-2-pentanone	1.000	0.893	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
174	2,4-dimethyl-3-pentanone	1.000	0.889	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	2-heptanone	1.000	0.966	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
176	5-methyl-2-hexanone	1.000	0.927	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177	acetophenone	1.000	0.912	0.000	1.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000
178	2-octanone	1.000	0.935	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
179	5-methyl-3-heptanone	1.000	0.960	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	2,6-dimethyl-4-heptanone	1.000	0.982	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
181	Hydrogen sulfide	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
182	Carbonyl sulfide	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
183	Ethylene sulfide	1.000	0.092	0.000	0.993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
184	Dimethyl sulfide	1.000	0.271	0.000	0.998	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
185	Carbon disulfide	1.000	0.000	0.000	0.963	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
186	Pentamethylene sulfide	1.000	0.816	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
187	Nitric oxide	1.000	0.096	0.000	0.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
188	Nitrogen dioxide	1.000	0.139	0.000	0.658	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
189	Nitrogen tetroxide	1.000	0.256	0.000	0.880	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
190	Ethanoic acid	1.000	0.143	0.000	0.995	0.000	0.000	0.000	0.048	0.048	0.048	0.048	0.009	0.009	0.004
191	2-ethylhexanoic acid	1.000	0.977	0.000	1.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000
192	Hydrazine	1.000	0.177	0.000	0.761	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
193	Methyl cyanide	1.000	0.123	0.000	0.990	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.001	0.001	0.000
194	methyl hydrazine	1.000	0.257	0.000	0.882	0.000	0.000	0.000	0.106	0.106	0.106	0.106	0.021	0.021	0.009
195	Nitromethane	1.000	0.011	0.000	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
196	N,N-dimethylformamide	1.000	0.767	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
197	Nitroethane	1.000	0.590	0.000	0.998	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
198	1-benzo[b]pyrrole	1.000	0.982	0.000	1.000	0.000	0.000	0.000	0.151	0.151	0.151	0.151	0.030	0.030	0.013
199	Hydrogen	1.000	0.000	0.000	0.000	0.000	0.000	0.895	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200	Ammonia	1.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000	1.000	1.000	0.493	0.493	0.209
201	Carbon monoxide	1.000	0.000	0.000	0.000	0.000	0.000	0.895	0.000	0.000	0.000	0.000	0.000	0.000	0.000
202	Disiloxane	1.000	0.503	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
203	Trimethylsilanol	1.000	0.767	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
204	Trisiloxane	1.000	0.907	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
205	Hexamethyldisiloxane	1.000	0.971	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
206	Tetrasiloxane	1.000	0.973	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
207	Diphenylsilane	1.000	0.993	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
208	Hexamethylcyclotrisiloxane	1.000	0.977	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
209	Octamethyltrisiloxane	1.000	0.999	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
210	Octamethylcyclotetrasiloxane	1.000	0.999	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
211	Decamethylcyclopentasiloxane	1.000	1.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
212	Decamethylcyclohexasiloxane	1.000	0.938	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
213	Tetradecamethylcycloheptasilox	1.000	0.963	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
214	Hexadecamethylcyclooctasiloxan	1.000	0.978	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

APPENDIX G—U.S. AND RUSSIAN TCCS UNITS CONTROLLING TO RUSSIAN 360-DAY SMACs

U.S. and Russian TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

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PROGRAM VERSION 8.1 Alpha March 15, 1994

4/15/1994 8: 0 2TCCS.DAT PAGE 1

TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
1	Methanol	1.263	0.2000	Y
2	Ethanol	4.949	10.00	N
3	2-propen-1-ol	0.6930E-03	1.000	N
4	n-propanol	0.7282E-01	98.30	N
5	2-propanol	0.7418	98.30	N
6	1,2-ethanediol	0.2350E-02	10.00	N
7	n-butanol	1.489	0.8000	Y
8	2-butanol	0.1636E-02	121.0	N
9	2-methyl-1-propanol	0.1731	121.0	N
10	2-methyl-2-propanol	0.1569E-01	121.0	N
11	1,2-propanediol	0.1078E-03	0.1000	N
12	n-pentanol	0.3675E-01	126.0	N
13	3-methyl-1-butanol	0.5116E-02	126.0	N
14	Phenol	0.1898	0.1000	Y
15	Cyclohexanol	0.2844	123.0	N
16	2-ethylbutanol	0.5381E-04	0.1000	N
17	2-hexanol	0.4402E-03	167.0	N
18	1,3-dichloro-2-propanol	0.4654E-05	0.1000	N
19	2-ethylhexanol	0.2187E-02	186.4	N
20	Nonanol	0.1337E-02	236.0	N
21	n-decanol	0.4776E-05	259.0	N
22	Methanal	0.4023E-05	0.5000E-01	N
23	Ethanal	0.1347	1.000	N
24	2-propenal	0.1352E-02	0.1100	N
25	Propanal	0.9615E-01	95.00	N
26	2-methylpropenal	0.7887E-03	0.1000	N
27	Butanal	0.3255	118.0	N
28	Pentanal	0.2956E-01	106.0	N
29	2,4-hexadien-1-al	0.3162E-03	4.700	N
30	Hexanal	0.1186E-01	4.700	N
31	Benzaldehyde	0.5050E-02	173.0	N
32	Heptanal	0.5854E-02	0.1000	N
33	4-methylbenzaldehyde	0.9760E-04	0.1000	N
34	Octanal	0.7598E-03	210.0	N
35	Benzene	0.5996E-02	2.000	N
36	Methylbenzene	0.3031	8.000	N
37	Vinylbenzene	0.9223E-02	4.000	N
38	1,2-dimethylbenzene	0.1469	5.000	N
39	1,3-dimethylbenzene	0.7846	5.000	N
40	1,4-dimethylbenzene	0.2064	5.000	N
41	Ethylbenzene	0.3957E-01	86.80	N
42	Indene	0.0000E+00	9.500	N
43	alpha-methylstyrene	0.4015E-04	145.0	N
44	1,2,4-trimethylbenzene	0.1195E-01	15.00	N
45	1,3,5-trimethylbenzene	0.6319E-03	15.00	N
46	1-ethyl-2-methylbenzene	0.1286E-02	25.00	N
47	Isopropylbenzene	0.2473E-02	0.5000	N
48	Propylbenzene	0.6089E-01	49.10	N
49	1-methyl-3-propylbenzene	0.0000E+00	11.00	N
50	n-butylbenzene	0.4951E-03	55.00	N

51	1-methyl-4-propylbenzene	0.1039E-03	0.1000	N
52	Methyl formate	0.1511E-02	12.30	N
53	Ethyl formate	0.1352E-02	90.90	N
54	Methyl acetate	0.4814E-01	121.0	N
55	Ethyl acetate	0.8166E-01	4.000	N
56	Allyl acetate	0.1089E-02	51.20	N

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4/15/1994 8: 0 2TCCS.DAT PAGE 2

TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
57	Methyl methacrylate	0.2807E-01	102.0	N
58	Isopropyl acetate	0.1499E-02	209.0	N
59	n-butyl formate	0.3391E-03	83.50	N
60	Propyl acetate	0.1297	167.0	N
61	Ethyl methacrylate	0.7858E-02	116.7	N
62	Butyl acetate	0.2078	2.000	N
63	Isobutyl acetate	0.5465E-01	190.0	N
64	Ethyl lactate	0.1464E-02	193.0	N
65	2-Methoxy ethyl acetate	0.1014E-02	24.20	N
66	Isoamyl acetate	0.1022E-01	159.5	N
67	n-amyl acetate	0.1716E-01	160.0	N
68	2-ethoxyethyl acetate	0.1319	162.0	N
69	ethyl acetoxyacetate	0.0000E+00	0.1000	N
70	Dibutyl oxalate	0.8107E-05	0.1000	N
71	1,4-epoxy-1,3-butadiene	0.5257E-03	0.1100	N
72	1,4-epoxybutane	0.2134E-01	118.0	N
73	3-methoxy-1-propene	0.1382E-04	0.1000	N
74	Diethyl ether	0.2250E-01	242.0	N
75	2-methylfuran	0.9342E-03	0.1300	N
76	2,3-dihydropyran	0.8551E-04	0.1000	N
77	1,4-dioxane	0.2130E-01	1.800	N
78	1,3,5-Trioxane	0.1733E-03	0.1000	N
79	2-ethoxyethanol	0.2004	73.70	N
80	Epichlorohydrin	0.1079E-02	1.200	N
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.3448E-03	0.1000	N
82	4-ethylmorpholine	0.4191E-01	16.00	N
83	1-propoxybutane	0.1286E-01	186.8	N
84	2-butoxyethanol	0.7687E-04	24.20	N
85	Chloromethane	0.2713E-01	41.30	N
86	Chloroethene	0.1039E-02	0.2600	N
87	Chloroethane	0.3567E-04	263.7	N
88	3-chloropropene	0.3087E-04	0.6300	N
89	Dichloromethane	3.009	86.80	N
90	1-chlorobutane	0.0000E+00	151.0	N
91	1,1-dichloroethene	0.2214E-03	7.900	N
92	1,2-dichloroethane	0.2001E-01	0.5000	N
93	1,2-dichloropropene	0.1055E-01	42.20	N
94	Chlorobenzene	0.3369	46.00	N
95	1,2-dichloropropane	0.2259E-02	42.20	N
96	Trichloromethane	0.4038E-02	4.900	N
97	1,2-dichloro-2-methylpropane	0.4274E-03	0.1000	N
98	Trichloroethylene	0.1310E-01	0.5400	N
99	1,1,1-trichloroethane	0.1443	164.0	N
100	1,1,2-trichloroethane	0.2241E-04	5.500	N
101	1,2-dichlorobenzene	0.2548E-02	30.00	N
102	3-chloromethylheptane	0.6745E-04	0.1000	N

103	Tetrachloromethane	0.2048E-02	13.00	N
104	Tetrachloroethene	0.1578	34.00	N
105	Chlorodifluoromethane	0.3839	353.6	N
106	Dichlorofluoromethane	0.1722E-03	21.00	N
107	1-chloro-1,2,2-trifluoroethane	0.5012E-03	484.5	N
108	Dichlorodifluoromethane	0.3602E-02	494.4	N
109	1,2-dichloro-1,2-difluoroethen	0.3459E-03	136.0	N
110	Chlorotetrafluoroethane	0.0000E+00	555.0	N
111	Trichlorofluoromethane	0.3052	561.8	N
112	Bromotrifluoromethane	0.5262	608.8	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1063E-01	702.9	N
114	1,1,2-triCl-1,2,2-triFlethane	5.354	383.0	N
115	1,1,2,2-tetraCl-1,2-diFlethane	0.7606E-02	834.2	N
116	Methane	28.01	3342.	N
117	Ethyne	0.0000E+00	532.4	N
118	Ethene	0.7763E-03	344.1	N
119	Ethane	0.3634E-02	1230.	N
120	Propadiene	0.0000E+00	81.90	N
121	Propyne	0.0000E+00	409.5	N
122	Propene	0.2742E-02	860.3	N
123	Propane	0.2435E-03	901.4	N
124	1,3-butadiene	0.1088E-02	221.2	N
125	1-butene	0.1293E-01	458.0	N
126	2-methylpropane	0.4423E-02	237.6	N
127	Butane	0.1164E-02	237.6	N
128	Cyclopentene	0.0000E+00	167.0	N
129	2-methyl-1,3-butadiene	0.0000E+00	557.0	N
130	1-pentene	0.5482E-05	186.0	N
131	2-methylbutane	0.6874E-03	295.0	N
132	Pentane	0.2694E-01	590.0	N
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	86.00	N
134	2-hexene	0.1673E-03	172.0	N
135	Cyclohexane	0.1376	206.0	N
136	Methylcyclopentane	0.1115E-01	51.60	N
137	2,2-dimethylbutane	0.6754E-03	88.10	N
138	3-methylpentane	0.1205E-02	1762.	N
139	Hexane	0.1855E-01	176.0	N
140	4-methylcyclohexene	0.0000E+00	393.2	N
141	1-heptene	0.4446E-05	201.0	N
142	Methylcyclohexane	0.1261E-01	60.20	N
143	2,2-dimethylpentane	0.9395E-02	408.6	N
144	2,4-dimethylpentane	0.8745E-04	201.0	N
145	3-ethylpentane	0.9969E-04	201.0	N
146	Heptane	0.1076E-01	10.00	N
147	1,1-dimethylcyclohexane	0.1050E-01	115.0	N
148	2-octene	0.6009E-05	229.0	N
149	6-methyl-1-heptene	0.3133E-05	229.0	N
150	trans-1,2-dimethylcyclohexane	0.2055E-01	115.0	N
151	2,2,3-trimethylpentane	0.1369E-03	229.0	N
152	3,3-dimethylhexane	0.3302E-03	229.0	N
153	3-ethylhexane	0.1981E-03	229.0	N
154	Octane	0.3244E-02	10.00	N

155	4-ethylheptane	0.1617E-04	129.0	N
156	Nonane	0.1377E-02	315.0	N
157	4-isopropenyl-1-Mecyclohexene	0.1443E-02	557.0	N
158	2-methyl-3-ethylheptane	0.6714E-03	116.0	N
159	Decane	0.6770E-02	223.0	N
160	Undecane	0.8931E-02	319.0	N
161	Dodecane	0.1843E-03	278.0	N
162	2-propanone	0.1826E-03	1.000	N
163	3-buten-2-one	0.5308E-04	0.1000	N
164	2-butanone	1.180	0.2500	Y
165	Cyclopentanone	0.1892	29.20	N
166	3-penten-2-one	0.1155E-04	0.1000	N
167	Acetyl cyclopropane	0.1912E-04	0.1000	N
168	2-pentanone	0.1012E-02	70.40	N

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

CONT NO.	NAME	FINAL CABIN CONC (MG/M3)	MAC	EXCEEDS MAC
169	3-methyl-2-butanone	0.1151E-01	70.40	N
170	4-methyl-3-penten-2-one	0.4565E-01	40.10	N
171	Cyclohexanone	0.1156	60.20	N
172	3,3-dimethyl-2-butanone	0.1680E-02	81.90	N
173	4-methyl-2-pentanone	0.3014	82.00	N
174	2,4-dimethyl-3-pentanone	0.2036E-04	23.50	N
175	2-heptanone	0.2986E-01	23.50	N
176	5-methyl-2-hexanone	0.6462E-03	23.50	N
177	acetophenone	0.1849E-03	245.0	N
178	2-octanone	0.6603E-04	105.0	N
179	5-methyl-3-heptanone	0.6943E-03	0.1000	N
180	2,6-dimethyl-4-heptanone	0.1350E-02	58.10	N
181	Hydrogen sulfide	0.5136E-02	0.5000	N
182	Carbonyl sulfide	0.2591E-01	12.00	N
183	Ethylene sulfide	0.1231E-04	0.1000	N
184	Dimethyl sulfide	0.7633E-04	2.500	N
185	Carbon disulfide	0.1124E-01	16.00	N
186	Pentamethylene sulfide	0.3107E-04	0.1000	N
187	Nitric oxide	0.0000E+00	0.1000	N
188	Nitrogen dioxide	0.0000E+00	0.9400	N
189	Nitrogen tetroxide	0.0000E+00	1.900	N
190	Ethanoic acid	0.2498E-03	1.000	N
191	2-ethylhexanoic acid	0.1528E-03	0.1000	N
192	Hydrazine	0.0000E+00	0.5000E-01	N
193	Methyl cyanide	0.5341E-05	6.700	N
194	methyl hydrazine	0.0000E+00	0.8000E-01	N
195	Nitromethane	0.4436E-01	0.1000	N
196	N,N-dimethylformamide	0.6760E-03	6.000	N
197	Nitroethane	0.8350E-05	0.1000	N
198	1-benzo[b]pyrrole	0.1599E-01	0.4800	N
199	Hydrogen	0.2980	1677.	N
200	Ammonia	0.1868	1.000	N
201	Carbon monoxide	0.8632	5.000	N
202	Disiloxane	0.7261E-02	52.40	N
203	Trimethylsilanol	0.4447E-01	1.800	N
204	Trisiloxane	0.5923E-02	83.40	N
205	Hexamethyldisiloxane	0.2729E-02	96.60	N
206	Tetrasiloxane	0.5491E-01	114.0	N

207	Diphenylsilane	0.5518E-05	0.1000	N
208	Hexamethylcyclotrisiloxane	0.2873E-01	227.0	N
209	Octamethyltrisiloxane	0.8305E-01	114.0	N
210	Octamethylcyclotetrasiloxane	0.4778E-01	151.7	N
211	Decamethylcyclopentasiloxane	0.1186E-01	150.7	N
212	Decamethylcyclohexasiloxane	0.0000E+00	150.7	N
213	Tetradecamethylcycloheptasilox	0.0000E+00	150.7	N
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	150.7	N

GROUP T-VALUES AS SPECIFIED IN NHB 8060.1B APPENDIX D

-01-	-02-	-03-	-04-	-05-	-06-	-07-	-08-	-09-	-10-	-11-	-12-	-13-	-14-	-15-	-16-
10.58	0.22	0.28	0.13	0.04	0.12	0.02	0.00	0.01	0.00	4.74	0.01	0.00	0.00	0.48	0.36

OVERALL T-VALUE
16.36

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	0.1746	0.5041E-01	0.4481E-05	0.0000E+00	0.2534E-01	0.0000E+00	0.0000E+00	0.0000E+00
2	Ethanol	5.930	0.1978	2.272	0.0000E+00	15.52	0.0000E+00	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.2403E-06	0.2772E-04	0.8185E-02	0.0000E+00	0.5554E-02	0.0000E+00	0.0000E+00	0.0000E+00
4	n-propanol	0.1400E-03	0.2913E-02	0.3760	0.0000E+00	1.058	0.0000E+00	0.0000E+00	0.0000E+00
5	2-propanol	0.1335E-04	0.2967E-01	0.2681E-03	0.0000E+00	14.52	0.0000E+00	0.0000E+00	0.0000E+00
6	1,2-ethanediol	0.2459E-06	0.9400E-04	0.3605E-01	0.0000E+00	0.1072E-01	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	0.3349E-02	0.5955E-01	3.711	0.0000E+00	25.52	0.0000E+00	0.0000E+00	0.0000E+00
8	2-butanol	0.5960E-07	0.6542E-04	0.2611E-01	0.0000E+00	0.6461E-02	0.0000E+00	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	0.1588E-03	0.6924E-02	2.487	0.0000E+00	0.9548	0.0000E+00	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	0.1371E-05	0.6278E-03	0.2689	0.0000E+00	0.4400E-01	0.0000E+00	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.6985E-09	0.4311E-05	0.1722E-02	0.0000E+00	0.4243E-03	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.1788E-05	0.1470E-02	0.6737	0.0000E+00	0.6003E-01	0.0000E+00	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	0.8941E-07	0.2046E-03	0.9130E-01	0.0000E+00	0.1079E-01	0.0000E+00	0.0000E+00	0.0000E+00
14	Phenol	0.1335E-04	0.7592E-02	3.641	0.0000E+00	0.1513	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	0.9155E-04	0.1138E-01	5.176	0.0000E+00	0.5013	0.0000E+00	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.0000E+00	0.2152E-05	0.9400E-03	0.0000E+00	0.1333E-03	0.0000E+00	0.0000E+00	0.0000E+00
17	2-hexanol	0.0000E+00	0.1761E-04	0.7945E-02	0.0000E+00	0.8406E-03	0.0000E+00	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.0000E+00	0.1861E-06	0.7504E-04	0.0000E+00	0.1765E-04	0.0000E+00	0.0000E+00	0.0000E+00
19	2-ethylhexanol	0.0000E+00	0.8747E-04	0.4261E-01	0.0000E+00	0.1099E-02	0.0000E+00	0.0000E+00	0.0000E+00
20	Nonanol	0.3725E-08	0.5347E-04	0.2647E-01	0.0000E+00	0.2582E-03	0.0000E+00	0.0000E+00	0.0000E+00
21	n-decanol	0.0000E+00	0.1910E-06	0.9282E-04	0.0000E+00	0.2644E-05	0.0000E+00	0.0000E+00	0.0000E+00
22	Methanal	0.0000E+00	0.1609E-06	0.7342E-19	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
23	Ethanal	0.8713E-01	0.5333E-02	0.8477E-03	0.0000E+00	0.3306E-01	0.0000E+00	0.0000E+00	0.0000E+00
24	2-propenal	0.2981E-04	0.5408E-04	0.1242E-04	0.0000E+00	0.2624E-01	0.0000E+00	0.0000E+00	0.0000E+00
25	Propanal	0.5812E-02	0.3843E-02	0.3542E-02	0.0000E+00	1.872	0.0000E+00	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.3856E-06	0.3155E-04	0.9308E-02	0.0000E+00	0.6329E-02	0.0000E+00	0.0000E+00	0.0000E+00
27	Butanal	0.9203E-03	0.1302E-01	1.845	0.0000E+00	4.566	0.0000E+00	0.0000E+00	0.0000E+00
28	Pentanal	0.8702E-05	0.1182E-02	0.4854	0.0000E+00	0.1035	0.0000E+00	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.9313E-09	0.1265E-04	0.5515E-02	0.0000E+00	0.7921E-03	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.4768E-06	0.4743E-03	0.2154	0.0000E+00	0.2135E-01	0.0000E+00	0.0000E+00	0.0000E+00
31	Benzaldehyde	0.4470E-07	0.2020E-03	0.9219E-01	0.0000E+00	0.8625E-02	0.0000E+00	0.0000E+00	0.0000E+00
32	Heptanal	0.4470E-07	0.2341E-03	0.1111	0.0000E+00	0.5806E-02	0.0000E+00	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.2328E-09	0.3904E-05	0.1869E-02	0.0000E+00	0.8093E-04	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.0000E+00	0.3039E-04	0.1490E-01	0.0000E+00	0.2943E-03	0.0000E+00	0.0000E+00	0.0000E+00

35 Benzene	0.3189E-05	0.2398E-03	0.8014E-01	0.0000E+00	0.3894E-01	0.0000E+00	0.0000E+00	0.0000E+00
36 Methylbenzene	0.7267E-03	0.1212E-01	3.305	0.0000E+00	2.699	0.0000E+00	0.0000E+00	0.0000E+00
37 Vinylbenzene	0.2682E-06	0.3689E-03	0.1670	0.0000E+00	0.1714E-01	0.0000E+00	0.0000E+00	0.0000E+00
38 1,2-dimethylbenzene	0.2575E-04	0.5875E-02	2.714	0.0000E+00	0.2191	0.0000E+00	0.0000E+00	0.0000E+00
39 1,3-dimethylbenzene	0.1596E-02	0.3138E-01	11.43	0.0000E+00	4.167	0.0000E+00	0.0000E+00	0.0000E+00
40 1,4-dimethylbenzene	0.5484E-04	0.8256E-02	3.768	0.0000E+00	0.3518	0.0000E+00	0.0000E+00	0.0000E+00
41 Ethylbenzene	0.2503E-05	0.1583E-02	0.7307	0.0000E+00	0.5933E-01	0.0000E+00	0.0000E+00	0.0000E+00
42 Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43 alpha-methylstyrene	0.0000E+00	0.1606E-05	0.7083E-03	0.0000E+00	0.9268E-04	0.0000E+00	0.0000E+00	0.0000E+00
44 1,2,4-trimethylbenzene	0.8941E-07	0.4780E-03	0.2285	0.0000E+00	0.1031E-01	0.0000E+00	0.0000E+00	0.0000E+00
45 1,3,5-trimethylbenzene	0.1863E-08	0.2528E-04	0.1174E-01	0.0000E+00	0.8816E-03	0.0000E+00	0.0000E+00	0.0000E+00
46 1-ethyl-2-methylbenzene	0.7451E-08	0.5145E-04	0.2403E-01	0.0000E+00	0.1659E-02	0.0000E+00	0.0000E+00	0.0000E+00
47 Isopropylbenzene	0.1490E-07	0.9893E-04	0.4630E-01	0.0000E+00	0.3102E-02	0.0000E+00	0.0000E+00	0.0000E+00
48 Propylbenzene	0.1907E-05	0.2436E-02	1.171	0.0000E+00	0.4605E-01	0.0000E+00	0.0000E+00	0.0000E+00
49 1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50 n-butylbenzene	0.0000E+00	0.1981E-04	0.9450E-02	0.0000E+00	0.4430E-03	0.0000E+00	0.0000E+00	0.0000E+00
51 1-methyl-4-propylbenzene	0.4657E-09	0.4156E-05	0.1944E-02	0.0000E+00	0.1314E-03	0.0000E+00	0.0000E+00	0.0000E+00
52 Methyl formate	0.5839E-03	0.6044E-04	0.4703E-03	0.0000E+00	0.2602E-01	0.0000E+00	0.0000E+00	0.0000E+00
53 Ethyl formate	0.1278E-05	0.5407E-04	0.1310E-01	0.0000E+00	0.1364E-01	0.0000E+00	0.0000E+00	0.0000E+00
54 Methyl acetate	0.5460E-04	0.1926E-02	0.6989E-01	0.0000E+00	0.8741	0.0000E+00	0.0000E+00	0.0000E+00
55 Ethyl acetate	0.1624E-03	0.3266E-02	0.7716	0.0000E+00	0.8435	0.0000E+00	0.0000E+00	0.0000E+00
56 Allyl acetate	0.2235E-07	0.4355E-04	0.1813E-01	0.0000E+00	0.3567E-02	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO. NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57 Methyl methacrylate	0.6378E-05	0.1123E-02	0.4685	0.0000E+00	0.9092E-01	0.0000E+00	0.0000E+00	0.0000E+00
58 Isopropyl acetate	0.2980E-07	0.5994E-04	0.2527E-01	0.0000E+00	0.4606E-02	0.0000E+00	0.0000E+00	0.0000E+00
59 n-butyl formate	0.3725E-08	0.1356E-04	0.5666E-02	0.0000E+00	0.1093E-02	0.0000E+00	0.0000E+00	0.0000E+00
60 Propyl acetate	0.7200E-04	0.5187E-02	2.146	0.0000E+00	0.4378	0.0000E+00	0.0000E+00	0.0000E+00
61 Ethyl methacrylate	0.1788E-06	0.3143E-03	0.1431	0.0000E+00	0.1381E-01	0.0000E+00	0.0000E+00	0.0000E+00
62 Butyl acetate	0.5198E-04	0.8310E-02	3.804	0.0000E+00	0.3436	0.0000E+00	0.0000E+00	0.0000E+00
63 Isobutyl acetate	0.3934E-05	0.2186E-02	1.017	0.0000E+00	0.7478E-01	0.0000E+00	0.0000E+00	0.0000E+00
64 Ethyl lactate	0.3725E-08	0.5856E-04	0.2653E-01	0.0000E+00	0.2690E-02	0.0000E+00	0.0000E+00	0.0000E+00
65 2-Methoxy ethyl acetate	-0.3725E-08	0.4058E-04	0.1802E-01	0.0000E+00	0.2219E-02	0.0000E+00	0.0000E+00	0.0000E+00
66 Isoamyl acetate	0.5960E-07	0.4086E-03	0.1956	0.0000E+00	0.8492E-02	0.0000E+00	0.0000E+00	0.0000E+00
67 n-amyl acetate	0.5960E-07	0.6863E-03	0.3320	0.0000E+00	0.1086E-01	0.0000E+00	0.0000E+00	0.0000E+00
68 2-ethoxyethyl acetate	0.2384E-05	0.5276E-02	2.574	0.0000E+00	0.6292E-01	0.0000E+00	0.0000E+00	0.0000E+00
69 ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70 Dibutyl oxalate	0.0000E+00	0.3243E-06	0.1595E-03	0.0000E+00	0.2601E-05	0.0000E+00	0.0000E+00	0.0000E+00
71 1,4-epoxy-1,3-butadiene	0.6557E-05	0.2102E-04	0.7442E-05	0.0000E+00	0.1022E-01	0.0000E+00	0.0000E+00	0.0000E+00
72 1,4-epoxybutane	0.3743E-04	0.8536E-03	0.7699E-01	0.0000E+00	0.3425	0.0000E+00	0.0000E+00	0.0000E+00
73 3-methoxy-1-propene	0.2328E-09	0.5529E-06	0.1832E-03	0.0000E+00	0.9125E-04	0.0000E+00	0.0000E+00	0.0000E+00
74 Diethyl ether	0.3874E-04	0.9001E-03	0.2008	0.0000E+00	0.2441	0.0000E+00	0.0000E+00	0.0000E+00
75 2-methylfuran	0.4210E-06	0.3737E-04	0.1133E-01	0.0000E+00	0.7197E-02	0.0000E+00	0.0000E+00	0.0000E+00
76 2,3-dihydropyran	0.1397E-08	0.3420E-05	0.1201E-02	0.0000E+00	0.4988E-03	0.0000E+00	0.0000E+00	0.0000E+00
77 1,4-dioxane	0.8941E-05	0.8520E-03	0.3052	0.0000E+00	0.1183	0.0000E+00	0.0000E+00	0.0000E+00
78 1,3,5-Trioxane	0.3725E-08	0.6934E-05	0.2244E-02	0.0000E+00	0.1197E-02	0.0000E+00	0.0000E+00	0.0000E+00
79 2-ethoxyethanol	0.3719E-04	0.8014E-02	3.621	0.0000E+00	0.3783	0.0000E+00	0.0000E+00	0.0000E+00
80 Epichlorohydrin	0.1863E-06	0.4316E-04	0.1504E-01	0.0000E+00	0.6406E-02	0.0000E+00	0.0000E+00	0.0000E+00
81 1,1,2,2-tetraMe-1,2-epoxyEt	0.3725E-08	0.1379E-04	0.5818E-02	0.0000E+00	0.1055E-02	0.0000E+00	0.0000E+00	0.0000E+00
82 4-ethylmorpholine	0.7153E-06	0.1676E-02	0.8010	0.0000E+00	0.3638E-01	0.0000E+00	0.0000E+00	0.0000E+00
83 1-propoxybutane	0.1490E-06	0.5145E-03	0.2449	0.0000E+00	0.1209E-01	0.0000E+00	0.0000E+00	0.0000E+00
84 2-butoxyethanol	-0.2328E-09	0.3075E-05	0.1396E-02	0.0000E+00	0.1385E-03	0.0000E+00	0.0000E+00	0.0000E+00
85 Chloromethane	0.3300E-02	0.1083E-02	0.1983E-04	0.0000E+00	0.1143E-03	0.0000E+00	0.0000E+00	0.0000E+00
86 Chloroethene	0.1205E-02	0.4152E-04	0.3774E-03	0.0000E+00	0.3527E-02	0.0000E+00	0.0000E+00	0.0000E+00

87	Chloroethane	0.8452E-07	0.1427E-05	0.1420E-03	0.0000E+00	0.5571E-03	0.0000E+00	0.0000E+00	0.0000E+00
88	3-chloropropene	0.4191E-08	0.1235E-05	0.3666E-03	0.0000E+00	0.2453E-03	0.0000E+00	0.0000E+00	0.0000E+00
89	Dichloromethane	2.823	0.1203	0.3723	0.0000E+00	2.185	0.0000E+00	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.1839E-06	0.8855E-05	0.1995E-02	0.0000E+00	0.2378E-02	0.0000E+00	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	0.3183E-04	0.8002E-03	0.1711	0.0000E+00	0.2242	0.0000E+00	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	0.1100E-04	0.4221E-03	0.1157	0.0000E+00	0.9331E-01	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.5617E-03	0.1347E-01	4.553	0.0000E+00	2.138	0.0000E+00	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	0.4694E-06	0.9037E-04	0.3230E-01	0.0000E+00	0.1262E-01	0.0000E+00	0.0000E+00	0.0000E+00
96	Trichloromethane	0.5141E-05	0.1615E-03	0.3349E-01	0.0000E+00	0.4627E-01	0.0000E+00	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.1863E-08	0.1710E-04	0.7186E-02	0.0000E+00	0.1335E-02	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.6765E-05	0.5241E-03	0.1800	0.0000E+00	0.8028E-01	0.0000E+00	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	0.3190E-03	0.5773E-02	1.208	0.0000E+00	1.643	0.0000E+00	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.1746E-09	0.8966E-06	0.3186E-03	0.0000E+00	0.1269E-03	0.0000E+00	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	0.1490E-07	0.1019E-03	0.4603E-01	0.0000E+00	0.4825E-02	0.0000E+00	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.0000E+00	0.2698E-05	0.1276E-02	0.0000E+00	0.7172E-04	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.2235E-06	0.8193E-04	0.3053E-01	0.0000E+00	0.1022E-01	0.0000E+00	0.0000E+00	0.0000E+00
104	Tetrachloroethene	0.2542E-03	0.6310E-02	1.858	0.0000E+00	1.270	0.0000E+00	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	0.1672	0.1525E-01	0.5029E-02	0.0000E+00	0.2878E-01	0.0000E+00	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.7083E-06	0.6886E-05	0.1195E-03	0.0000E+00	0.3239E-02	0.0000E+00	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.4768E-06	0.2005E-04	0.4379E-02	0.0000E+00	0.5522E-02	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.9775E-05	0.1441E-03	0.1679E-03	0.0000E+00	0.7022E-01	0.0000E+00	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.1024E-06	0.1383E-04	0.4126E-02	0.0000E+00	0.2731E-02	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	0.2604E-03	0.1221E-01	0.8932E-04	0.0000E+00	5.973	0.0000E+00	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	0.5694	0.2103E-01	0.1037	0.0000E+00	0.6156	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	0.8792E-05	0.4253E-03	0.1261	0.0000E+00	0.8476E-01	0.0000E+00	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	-0.1526E-04	0.2142	0.2690E-04	0.0000E+00	104.8	0.0000E+00	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	0.2682E-06	0.3042E-03	0.1315	0.0000E+00	0.2014E-01	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	13.32	1.112	0.1839E-04	0.0000E+00	0.1071E-03	0.0000E+00	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1204E-04	0.3105E-04	0.8156E-09	0.0000E+00	0.9445E-07	0.0000E+00	0.0000E+00	0.0000E+00
119	Ethane	0.6173E-03	0.1450E-03	0.2150E-06	0.0000E+00	0.4816E-04	0.0000E+00	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.3195E-02	0.1096E-03	0.8296E-03	0.0000E+00	0.5838E-02	0.0000E+00	0.0000E+00	0.0000E+00
123	Propane	0.2397E-05	0.9737E-05	0.5550E-05	0.0000E+00	0.4732E-02	0.0000E+00	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.1691E-05	0.4350E-04	0.1619E-02	0.0000E+00	0.1969E-01	0.0000E+00	0.0000E+00	0.0000E+00
125	1-butene	0.6229E-05	0.5170E-03	0.1274E-02	0.0000E+00	0.2518	0.0000E+00	0.0000E+00	0.0000E+00
126	2-methylpropane	0.7346E-05	0.1769E-03	0.1649E-01	0.0000E+00	0.7045E-01	0.0000E+00	0.0000E+00	0.0000E+00
127	Butane	0.1043E-05	0.4658E-04	0.1191E-01	0.0000E+00	0.1114E-01	0.0000E+00	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.4366E-10	0.2193E-06	0.7513E-04	0.0000E+00	0.3377E-04	0.0000E+00	0.0000E+00	0.0000E+00
131	2-methylbutane	0.5402E-07	0.2750E-04	0.1046E-01	0.0000E+00	0.3217E-02	0.0000E+00	0.0000E+00	0.0000E+00
132	Pentane	0.3034E-04	0.1078E-02	0.3386	0.0000E+00	0.1960	0.0000E+00	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.1397E-08	0.6693E-05	0.2714E-02	0.0000E+00	0.6189E-03	0.0000E+00	0.0000E+00	0.0000E+00
135	Cyclohexane	0.2952E-03	0.5504E-02	1.419	0.0000E+00	1.304	0.0000E+00	0.0000E+00	0.0000E+00
136	Methylcyclopentane	0.2295E-05	0.4458E-03	0.1808	0.0000E+00	0.4127E-01	0.0000E+00	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.9313E-08	0.2702E-04	0.1127E-01	0.0000E+00	0.2192E-02	0.0000E+00	0.0000E+00	0.0000E+00
138	3-methylpentane	0.2980E-07	0.4821E-04	0.2054E-01	0.0000E+00	0.3492E-02	0.0000E+00	0.0000E+00	0.0000E+00

139	Hexane	0.2623E-05	0.7418E-03	0.3210	0.0000E+00	0.4887E-01	0.0000E+00	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.0000E+00	0.1778E-06	0.7368E-04	0.0000E+00	0.1492E-04	0.0000E+00	0.0000E+00	0.0000E+00
142	Methylcyclohexane	0.6557E-06	0.5046E-03	0.2269	0.0000E+00	0.2484E-01	0.0000E+00	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	0.2384E-06	0.3758E-03	0.1722	0.0000E+00	0.1538E-01	0.0000E+00	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.0000E+00	0.3498E-05	0.1522E-02	0.0000E+00	0.2218E-03	0.0000E+00	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.0000E+00	0.3988E-05	0.1749E-02	0.0000E+00	0.2396E-03	0.0000E+00	0.0000E+00	0.0000E+00
146	Heptane	0.2384E-06	0.4304E-03	0.1996	0.0000E+00	0.1532E-01	0.0000E+00	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	0.1788E-06	0.4201E-03	0.1963	0.0000E+00	0.1350E-01	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.0000E+00	0.2404E-06	0.1062E-03	0.0000E+00	0.1366E-04	0.0000E+00	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.7276E-11	0.1253E-06	0.5452E-04	0.0000E+00	0.7974E-05	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.4768E-06	0.8219E-03	0.3878	0.0000E+00	0.2268E-01	0.0000E+00	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.4657E-09	0.5478E-05	0.2508E-02	0.0000E+00	0.2259E-03	0.0000E+00	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.0000E+00	0.1321E-04	0.6106E-02	0.0000E+00	0.4877E-03	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.4657E-09	0.7925E-05	0.3655E-02	0.0000E+00	0.3015E-03	0.0000E+00	0.0000E+00	0.0000E+00
154	Octane	0.1490E-07	0.1298E-03	0.6175E-01	0.0000E+00	0.3070E-02	0.0000E+00	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.0000E+00	0.6467E-06	0.3012E-03	0.0000E+00	0.2166E-04	0.0000E+00	0.0000E+00	0.0000E+00
156	Nonane	0.0000E+00	0.5509E-04	0.2660E-01	0.0000E+00	0.9251E-03	0.0000E+00	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	0.7451E-08	0.5770E-04	0.2798E-01	0.0000E+00	0.8550E-03	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.0000E+00	0.2686E-04	0.1313E-01	0.0000E+00	0.2896E-03	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	-0.1490E-07	0.2708E-03	0.1335	0.0000E+00	0.1823E-02	0.0000E+00	0.0000E+00	0.0000E+00
160	Undecane	0.0000E+00	0.3572E-03	0.1777	0.0000E+00	0.8947E-03	0.0000E+00	0.0000E+00	0.0000E+00
161	Dodecane	0.0000E+00	0.7373E-05	0.3656E-02	0.0000E+00	0.2923E-04	0.0000E+00	0.0000E+00	0.0000E+00
162	2-propanone	0.7264E-07	0.7302E-05	0.1990E-02	0.0000E+00	0.1625E-02	0.0000E+00	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.4307E-08	0.2123E-05	0.6827E-03	0.0000E+00	0.3708E-03	0.0000E+00	0.0000E+00	0.0000E+00
164	2-butanone	0.3815E-05	0.4720E-01	0.3793E-02	0.0000E+00	23.10	0.0000E+00	0.0000E+00	0.0000E+00
165	Cyclopentanone	0.4516E-03	0.7568E-02	1.731	0.0000E+00	2.010	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.5821E-10	0.4619E-06	0.1700E-03	0.0000E+00	0.5962E-04	0.0000E+00	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.1746E-09	0.7646E-06	0.2737E-03	0.0000E+00	0.1063E-03	0.0000E+00	0.0000E+00	0.0000E+00
168	2-pentanone	0.1863E-07	0.4049E-04	0.1682E-01	0.0000E+00	0.3353E-02	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	0.1937E-05	0.4606E-03	0.1898	0.0000E+00	0.3962E-01	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.5484E-05	0.1826E-02	0.8231	0.0000E+00	0.8800E-01	0.0000E+00	0.0000E+00	0.0000E+00
171	Cyclohexanone	0.4768E-05	0.4623E-02	2.201	0.0000E+00	0.1079	0.0000E+00	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	0.1863E-07	0.6722E-04	0.2956E-01	0.0000E+00	0.3963E-02	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	0.7915E-04	0.1206E-01	5.497	0.0000E+00	0.5206	0.0000E+00	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.0000E+00	0.8146E-06	0.3593E-03	0.0000E+00	0.4702E-04	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.4768E-06	0.1194E-02	0.5749	0.0000E+00	0.2176E-01	0.0000E+00	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.1863E-08	0.2585E-04	0.1190E-01	0.0000E+00	0.1002E-02	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.4657E-09	0.7397E-05	0.3357E-02	0.0000E+00	0.3342E-03	0.0000E+00	0.0000E+00	0.0000E+00
178	2-octanone	0.0000E+00	0.2641E-05	0.1228E-02	0.0000E+00	0.9050E-04	0.0000E+00	0.0000E+00	0.0000E+00
179	5-methyl-3-heptanone	0.0000E+00	0.2777E-04	0.1327E-01	0.0000E+00	0.6020E-03	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.3725E-08	0.5400E-04	0.2644E-01	0.0000E+00	0.5500E-03	0.0000E+00	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	0.3893E-06	0.2054E-03	0.2384E-11	0.0000E+00	0.1356E-10	0.0000E+00	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	0.3341E-02	0.1034E-02	0.2236E-04	0.0000E+00	0.1288E-03	0.0000E+00	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.4721E-07	0.4925E-06	0.3360E-04	0.0000E+00	0.2067E-03	0.0000E+00	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.1041E-06	0.3053E-05	0.5070E-03	0.0000E+00	0.9958E-03	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	0.3658E-02	0.4478E-03	0.4565E-02	0.0000E+00	0.2107	0.0000E+00	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.1164E-09	0.1243E-05	0.5016E-03	0.0000E+00	0.1173E-03	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.5029E-06	0.9991E-05	0.3878E-03	0.0000E+00	0.4494E-02	0.0000E+00	0.0000E+00	0.0000E+00

191	2-ethylhexanoic acid	-0.4657E-09	0.6111E-05	0.2978E-02	0.0000E+00	0.7593E-04	0.0000E+00	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.2491E-07	0.2136E-06	0.1506E-04	0.0000E+00	0.8886E-04	0.0000E+00	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.4849E-01	0.1773E-02	0.1843E-01	0.0000E+00	0.1620	0.0000E+00	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.3539E-07	0.2704E-04	0.1028E-01	0.0000E+00	0.3171E-02	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.5821E-09	0.3340E-06	0.9777E-04	0.0000E+00	0.6765E-04	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	0.0000E+00	0.6396E-03	0.3168	0.0000E+00	0.2880E-02	0.0000E+00	0.0000E+00	0.0000E+00
199	Hydrogen	0.4768E-06	0.1192E-01	0.0000E+00	0.0000E+00	0.5849E-23	0.0000E+00	0.0000E+00	5.332
200	Ammonia	0.0000E+00	0.7471E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
201	Carbon monoxide	0.1907E-05	0.3453E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	15.44
202	Disiloxane	0.6497E-05	0.2904E-03	0.8377E-01	0.0000E+00	0.6015E-01	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.1907E-04	0.1779E-02	0.7166	0.0000E+00	0.1692	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.1192E-06	0.2369E-03	0.1068	0.0000E+00	0.1144E-01	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.0000E+00	0.1091E-03	0.5281E-01	0.0000E+00	0.1720E-02	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.8345E-06	0.2196E-02	1.067	0.0000E+00	0.3095E-01	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.0000E+00	0.2207E-06	0.1094E-03	0.0000E+00	0.9407E-06	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.1192E-06	0.1149E-02	0.5598	0.0000E+00	0.1463E-01	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	0.4768E-06	0.3322E-02	1.658	0.0000E+00	0.2630E-02	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.0000E+00	0.1911E-02	0.9549	0.0000E+00	0.7009E-03	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.0000E+00	0.4744E-03	0.2371	0.0000E+00	0.5657E-04	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	0.8046E-04	5.142	0.0000E+00	0.0000E+00	2.740	0.9250	0.4625
2	Ethanol	38.18	9.871	0.0000E+00	0.0000E+00	9.317	3.145	1.573
3	2-propen-1-ol	0.1048E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1895E-02	0.6398E-03	0.3199E-03
4	n-propanol	1.101	0.0000E+00	0.0000E+00	0.0000E+00	0.1211	0.4087E-01	0.2044E-01
5	2-propanol	11.22	0.0000E+00	0.0000E+00	0.0000E+00	1.015	0.3426	0.1713
6	1,2-ethanediol	0.3553E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	22.51	0.0000E+00	0.0000E+00	0.0000E+00	0.9291	0.3135	0.1567
8	2-butanol	0.2473E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.5132E-02	0.1733E-02	0.8667E-03
9	2-methyl-1-propanol	2.617	0.0000E+00	0.0000E+00	0.0000E+00	0.6663	0.2251	0.1126
10	2-methyl-2-propanol	0.2373	0.0000E+00	0.0000E+00	0.0000E+00	0.4741E-02	0.1600E-02	0.7998E-03
11	1,2-propanediol	0.1629E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	0.5557	0.0000E+00	0.0000E+00	0.0000E+00	0.4585E-01	0.1547E-01	0.7737E-02
13	3-methyl-1-butanol	0.7736E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.2279E-01	0.7702E-02	0.3851E-02
14	Phenol	2.870	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	4.300	0.0000E+00	0.0000E+00	0.0000E+00	0.7710E-02	0.2601E-02	0.1300E-02
16	2-ethylbutanol	0.8135E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.1397E-04	0.4713E-05	0.2356E-05
17	2-hexanol	0.6656E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.3592E-03	0.1212E-03	0.6060E-04
18	1,3-dichloro-2-propanol	0.7036E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.4361E-04	0.1477E-04	0.7384E-05
19	2-ethylhexanol	0.3306E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.6862E-02	0.2318E-02	0.1159E-02
20	Nonanol	0.2021E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.3328E-03	0.1123E-03	0.5614E-04
21	n-decanol	0.7222E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.2739E-05	0.9242E-06	0.4621E-06
22	Methanal	0.0000E+00	0.1641E-04	0.0000E+00	0.0000E+00	0.3219E-03	0.1123E-03	0.5616E-04
23	Ethanal	0.1519E-01	0.5399	0.0000E+00	0.0000E+00	0.2029E-01	0.6844E-02	0.3422E-02
24	2-propenal	0.2044E-01	0.6355E-06	0.0000E+00	0.0000E+00	0.1775E-04	0.5986E-05	0.2993E-05
25	Propanal	1.424	0.7825E-02	0.0000E+00	0.0000E+00	0.1536E-01	0.5182E-02	0.2591E-02
26	2-methylpropenal	0.1193E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.4553E-05	0.1536E-05	0.7680E-06
27	Butanal	4.921	0.0000E+00	0.0000E+00	0.0000E+00	0.3622E-01	0.1222E-01	0.6108E-02
28	Pentanal	0.4469	0.0000E+00	0.0000E+00	0.0000E+00	0.2009E-02	0.6778E-03	0.3389E-03

29	2,4-hexadien-1-al	0.4781E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	0.1793	0.0000E+00	0.0000E+00	0.0000E+00	0.3538E-03	0.1193E-03	0.5967E-04
31	Benzaldehyde	0.7635E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1750E-02	0.5903E-03	0.2951E-03
32	Heptanal	0.8851E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.2093E-03	0.7059E-04	0.3530E-04
33	4-methylbenzaldehyde	0.1476E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.1149E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.2384E-02	0.8052E-03	0.4026E-03
35	Benzene	0.9065E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1978E-04	0.6672E-05	0.3336E-05
36	Methylbenzene	4.582	0.0000E+00	0.0000E+00	0.0000E+00	0.7288E-03	0.2458E-03	0.1229E-03
37	Vinylbenzene	0.1395	0.0000E+00	0.0000E+00	0.0000E+00	0.5353E-04	0.1806E-04	0.9029E-05
38	1,2-dimethylbenzene	2.221	0.0000E+00	0.0000E+00	0.0000E+00	0.5364E-03	0.1809E-03	0.9047E-04
39	1,3-dimethylbenzene	11.86	0.0000E+00	0.0000E+00	0.0000E+00	0.1800E-02	0.6072E-03	0.3036E-03
40	1,4-dimethylbenzene	3.121	0.0000E+00	0.0000E+00	0.0000E+00	0.5202E-03	0.1755E-03	0.8773E-04
41	Ethylbenzene	0.5982	0.0000E+00	0.0000E+00	0.0000E+00	0.7520E-04	0.2536E-04	0.1268E-04
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.6071E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.2167E-06	0.7311E-07	0.3655E-07
44	1,2,4-trimethylbenzene	0.1807	0.0000E+00	0.0000E+00	0.0000E+00	0.3242E-04	0.1094E-04	0.5468E-05
45	1,3,5-trimethylbenzene	0.9554E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.1218E-05	0.4110E-06	0.2055E-06
46	1-ethyl-2-methylbenzene	0.1945E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.6914E-05	0.2332E-05	0.1166E-05
47	Isopropylbenzene	0.3740E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.2608E-05	0.8797E-06	0.4399E-06
48	Propylbenzene	0.9206	0.0000E+00	0.0000E+00	0.0000E+00	0.9117E-04	0.3075E-04	0.1538E-04
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.7486E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.5754E-06	0.1941E-06	0.9704E-07
51	1-methyl-4-propylbenzene	0.1571E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.6477E-05	0.2185E-05	0.1092E-05
52	Methyl formate	0.8346E-02	0.3913E-02	0.0000E+00	0.0000E+00	0.2035E-05	0.6864E-06	0.3432E-06
53	Ethyl formate	0.2044E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1755E-03	0.5920E-04	0.2960E-04
54	Methyl acetate	0.7279	0.0000E+00	0.0000E+00	0.0000E+00	0.1073E-01	0.3619E-02	0.1809E-02
55	Ethyl acetate	1.235	0.0000E+00	0.0000E+00	0.0000E+00	0.1108E-01	0.3736E-02	0.1868E-02
56	Allyl acetate	0.1646E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	0.4244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	0.2266E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.6972E-05	0.2352E-05	0.1176E-05
59	n-butyl formate	0.5127E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	1.961	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	0.1188	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	3.141	0.0000E+00	0.0000E+00	0.0000E+00	0.8465E-02	0.2855E-02	0.1428E-02
63	Isobutyl acetate	0.8264	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	0.2213E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1234E-03	0.4164E-04	0.2082E-04
65	2-Methoxy ethyl acetate	0.1534E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.2773E-02	0.9366E-03	0.4683E-03
66	Isoamyl acetate	0.1545	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	0.2594	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	1.994	0.0000E+00	0.0000E+00	0.0000E+00	0.1554	0.5245E-01	0.2622E-01
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.1226E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.7947E-02	0.7797E-08	0.0000E+00	0.0000E+00	0.1491E-05	0.5030E-06	0.2515E-06
72	1,4-epoxybutane	0.3227	0.0000E+00	0.0000E+00	0.0000E+00	0.6458E-03	0.2178E-03	0.1089E-03
73	3-methoxy-1-propene	0.2090E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	0.3402	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	0.1412E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.6366E-05	0.2147E-05	0.1074E-05
76	2,3-dihydropyran	0.1293E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.6256E-04	0.2111E-04	0.1055E-04
77	1,4-dioxane	0.3221	0.0000E+00	0.0000E+00	0.0000E+00	0.4752E-01	0.1604E-01	0.8022E-02
78	1,3,5-Trioxane	0.2621E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.1387E-01	0.4840E-02	0.2420E-02
79	2-ethoxyethanol	3.029	0.0000E+00	0.0000E+00	0.0000E+00	0.6528	0.2205	0.1103
80	Epichlorohydrin	0.1631E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

81	1,1,2,2-tetraMe-1,2-epoxyEt	0.5213E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.5478E-06	0.1848E-06	0.9239E-07
82	4-ethylmorpholine	0.6336	0.0000E+00	0.0000E+00	0.0000E+00	0.1774	0.5994E-01	0.2997E-01
83	1-propoxybutane	0.1945	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.1162E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.4660E-04	0.1572E-04	0.7862E-05
85	Chloromethane	0.3554E-03	0.4415E-01	0.0000E+00	0.0000E+00	0.5011E-04	0.1690E-04	0.8452E-05
86	Chloroethene	0.6422E-02	0.1126E-02	0.0000E+00	0.0000E+00	0.7080E-06	0.2388E-06	0.1194E-06
87	Chloroethane	0.5393E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.7880E-07	0.2658E-07	0.1329E-07
88	3-chloropropene	0.4668E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.1129E-08	0.3809E-09	0.1904E-09
89	Dichloromethane	6.685	4.186	0.0000E+00	0.0000E+00	0.1856E-01	0.6259E-02	0.3130E-02
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.3347E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.1515E-06	0.5109E-07	0.2555E-07
92	1,2-dichloroethane	0.3025	0.0000E+00	0.0000E+00	0.0000E+00	0.2446E-03	0.8251E-04	0.4125E-04
93	1,2-dichloropropene	0.1595	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	5.093	0.0000E+00	0.0000E+00	0.0000E+00	0.1135E-02	0.3827E-03	0.1914E-03
95	1,2-dichloropropane	0.3416E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.2609E-04	0.8799E-05	0.4399E-05
96	Trichloromethane	0.6105E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1523E-04	0.5136E-05	0.2568E-05
97	1,2-dichloro-2-methylpropane	0.6463E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	0.1981	0.0000E+00	0.0000E+00	0.0000E+00	0.2321E-04	0.7828E-05	0.3914E-05
99	1,1,1-trichloroethane	2.182	0.0000E+00	0.0000E+00	0.0000E+00	0.1473E-03	0.4968E-04	0.2484E-04
100	1,1,2-trichloroethane	0.3389E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.4508E-06	0.1521E-06	0.7603E-07
101	1,2-dichlorobenzene	0.3852E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1320E-04	0.4453E-05	0.2226E-05
102	3-chloromethylheptane	0.1020E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	0.3097E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1064E-05	0.3590E-06	0.1795E-06
104	Tetrachloroethene	2.385	0.0000E+00	0.0000E+00	0.0000E+00	0.8979E-04	0.3029E-04	0.1514E-04
105	Chlorodifluoromethane	0.9012E-01	0.4594	0.0000E+00	0.0000E+00	0.1930E-03	0.6512E-04	0.3256E-04
106	Dichlorofluoromethane	0.2603E-02	0.1340E-10	0.0000E+00	0.0000E+00	0.5039E-06	0.1700E-06	0.8499E-07
107	1-chloro-1,2,2-trifluoroethane	0.7578E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	0.5445E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1410E-06	0.4756E-07	0.2378E-07
109	1,2-dichloro-1,2-difluoroethen	0.5229E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	4.614	0.0000E+00	0.0000E+00	0.0000E+00	0.3830E-04	0.1292E-04	0.6460E-05
112	Bromotrifluoromethane	1.854	0.5263	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	0.1608	0.0000E+00	0.0000E+00	0.0000E+00	0.1345E-06	0.4536E-07	0.2268E-07
114	1,1,2-triCl-1,2,2-triFlethane	80.95	0.0000E+00	0.0000E+00	0.0000E+00	0.1688E-03	0.5692E-04	0.2846E-04
115	1,1,2,2-tetraCl-1,2-diFlethane	0.1150	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.3296E-03	28.37	0.0000E+00	0.0000E+00	0.6669E-03	0.2250E-03	0.1125E-03
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1464E-07	0.3167E-02	0.0000E+00	0.0000E+00	0.5716E-07	0.1928E-07	0.9641E-08
119	Ethane	0.3853E-05	0.1479E-01	0.0000E+00	0.0000E+00	0.1149E-06	0.3875E-07	0.1937E-07
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	0.1472E-01	0.7207E-02	0.0000E+00	0.0000E+00	0.2055E-06	0.6933E-07	0.3466E-07
123	Propane	0.3681E-02	0.1184E-08	0.0000E+00	0.0000E+00	0.5435E-08	0.1833E-08	0.9167E-09
124	1,3-butadiene	0.1644E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.3810E-06	0.1285E-06	0.6425E-07
125	1-butene	0.1954	0.0000E+00	0.0000E+00	0.0000E+00	0.8070E-06	0.2722E-06	0.1361E-06
126	2-methylpropane	0.6688E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.5871E-07	0.1980E-07	0.9902E-08
127	Butane	0.1761E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1941E-07	0.6546E-08	0.3273E-08
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.8288E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.2107E-09	0.7108E-10	0.3554E-10
131	2-methylbutane	0.1039E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.7696E-08	0.2596E-08	0.1298E-08
132	Pentane	0.4073	0.0000E+00	0.0000E+00	0.0000E+00	0.3256E-06	0.1098E-06	0.5492E-07

133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.2530E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.8653E-08	0.2919E-08	0.1459E-08
135	Cyclohexane	2.080	0.0000E+00	0.0000E+00	0.0000E+00	0.1469E-04	0.4955E-05	0.2478E-05
136	Methylcyclopentane	0.1685	0.0000E+00	0.0000E+00	0.0000E+00	0.4770E-06	0.1609E-06	0.8045E-07
137	2,2-dimethylbutane	0.1021E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.6795E-08	0.2292E-08	0.1146E-08
138	3-methylpentane	0.1822E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1642E-07	0.5539E-08	0.2770E-08
139	Hexane	0.2804	0.0000E+00	0.0000E+00	0.0000E+00	0.3131E-06	0.1056E-06	0.5281E-07
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.6722E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.1696E-09	0.5721E-10	0.2860E-10
142	Methylcyclohexane	0.1907	0.0000E+00	0.0000E+00	0.0000E+00	0.4514E-06	0.1523E-06	0.7613E-07
143	2,2-dimethylpentane	0.1421	0.0000E+00	0.0000E+00	0.0000E+00	0.4553E-07	0.1536E-07	0.7680E-08
144	2,4-dimethylpentane	0.1322E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.4545E-09	0.1533E-09	0.7665E-10
145	3-ethylpentane	0.1507E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.6004E-09	0.2025E-09	0.1013E-09
146	Heptane	0.1627	0.0000E+00	0.0000E+00	0.0000E+00	0.6095E-07	0.2056E-07	0.1028E-07
147	1,1-dimethylcyclohexane	0.1588	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.9086E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.1466E-09	0.4945E-10	0.2472E-10
149	6-methyl-1-heptene	0.4738E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	0.3107	0.0000E+00	0.0000E+00	0.0000E+00	0.6589E-06	0.2223E-06	0.1111E-06
151	2,2,3-trimethylpentane	0.2071E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.5498E-09	0.1855E-09	0.9273E-10
152	3,3-dimethylhexane	0.4993E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.2996E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.8128E-09	0.2742E-09	0.1371E-09
154	Octane	0.4905E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.1006E-07	0.3393E-08	0.1696E-08
155	4-ethylheptane	0.2445E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.4782E-10	0.1613E-10	0.8065E-11
156	Nonane	0.2082E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.3549E-08	0.1197E-08	0.5986E-09
157	4-isopropenyl-1-Mecyclohexene	0.2181E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.1015E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	0.1024	0.0000E+00	0.0000E+00	0.0000E+00	0.2193E-07	0.7399E-08	0.3699E-08
160	Undecane	0.1350	0.0000E+00	0.0000E+00	0.0000E+00	0.7457E-07	0.2515E-07	0.1258E-07
161	Dodecane	0.2787E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.1314E-06	0.4433E-07	0.2216E-07
162	2-propanone	0.2760E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.6511E-04	0.2197E-04	0.1098E-04
163	3-buten-2-one	0.8026E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.7825E-05	0.2640E-05	0.1320E-05
164	2-butanone	17.84	0.0000E+00	0.0000E+00	0.0000E+00	6.239	2.109	1.055
165	Cyclopentanone	2.861	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.1746E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.1537E-05	0.5183E-06	0.2592E-06
167	Acetyl cyclopropane	0.2890E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.2122E-05	0.7157E-06	0.3578E-06
168	2-pentanone	0.1531E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.4499E-03	0.1518E-03	0.7590E-04

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

RATE OF CONTAMINANT REMOVAL-EACH DEVICE (MG/HR) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	0.1741	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	0.6902	0.0000E+00	0.0000E+00	0.0000E+00	0.4576E-02	0.1544E-02	0.7718E-03
171	Cyclohexanone	1.748	0.0000E+00	0.0000E+00	0.0000E+00	0.7213E-01	0.2434E-01	0.1217E-01
172	3,3-dimethyl-2-butanone	0.2541E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	4.558	0.0000E+00	0.0000E+00	0.0000E+00	0.7505E-01	0.2532E-01	0.1266E-01
174	2,4-dimethyl-3-pentanone	0.3079E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	0.4514	0.0000E+00	0.0000E+00	0.0000E+00	0.4761E-03	0.1606E-03	0.8030E-04
176	5-methyl-2-hexanone	0.9771E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.2796E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.9630E-04	0.3249E-04	0.1625E-04
178	2-octanone	0.9984E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.6862E-05	0.2315E-05	0.1157E-05
179	5-methyl-3-heptanone	0.1050E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	0.2041E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.3117E-04	0.1052E-04	0.5258E-05
181	Hydrogen sulfide	0.4186E-10	0.2095E-01	0.0000E+00	0.0000E+00	0.8899E-03	0.3002E-03	0.1501E-03
182	Carbonyl sulfide	0.4008E-03	0.4216E-01	0.0000E+00	0.0000E+00	0.7809E-05	0.2634E-05	0.1317E-05
183	Ethylene sulfide	0.1862E-03	0.2994E-11	0.0000E+00	0.0000E+00	0.3096E-07	0.1044E-07	0.5221E-08
184	Dimethyl sulfide	0.1154E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

185	Carbon disulfide	0.1202	0.3444E-02	0.0000E+00	0.0000E+00	0.8909E-05	0.3005E-05	0.1503E-05
186	Pentamethylene sulfide	0.4698E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.3777E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.3004E-02	0.1018E-02	0.5091E-03
191	2-ethylhexanoic acid	0.2310E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.3301E-04	0.1113E-04	0.5567E-05
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.8075E-04	0.1559E-11	0.0000E+00	0.0000E+00	0.4047E-05	0.1366E-05	0.6828E-06
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	0.3091	0.9741E-01	0.0000E+00	0.0000E+00	0.2499E-02	0.8429E-03	0.4215E-03
196	N,N-dimethylformamide	0.1022E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.1262E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	0.2418	0.0000E+00	0.0000E+00	0.0000E+00	0.6588	0.2261	0.1130
199	Hydrogen	0.0000E+00	1.216	0.0000E+00	0.0000E+00	0.3883E-05	0.1310E-05	0.6548E-06
200	Ammonia	2.824	0.0000E+00	0.0000E+00	0.0000E+00	51.77	17.46	8.732
201	Carbon monoxide	0.4125E-18	3.522	0.0000E+00	0.0000E+00	0.1156E-04	0.3898E-05	0.1949E-05
202	Disiloxane	0.1098	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	0.6724	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	0.8955E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	0.4126E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	0.8303	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.8344E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	0.4345	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	1.256	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	0.7225	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	0.1793	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
1	Methanol	950.2	98.03	22.91	0.0000E+00	133.4	0.0000E+00	0.0000E+00	0.0000E+00
2	Ethanol	3723.	273.1	2379.	0.0000E+00	0.1364E+05	0.0000E+00	0.0000E+00	0.0000E+00
3	2-propen-1-ol	0.5214	0.5932E-01	18.78	0.0000E+00	1.318	0.0000E+00	0.0000E+00	0.0000E+00
4	n-propanol	54.78	6.213	1679.	0.0000E+00	245.1	0.0000E+00	0.0000E+00	0.0000E+00
5	2-propanol	558.1	63.38	4627.	0.0000E+00	3486.	0.0000E+00	0.0000E+00	0.0000E+00
6	1,2-ethanediol	1.768	0.2010	78.30	0.0000E+00	2.559	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	1120.	126.7	0.3631E+05	0.0000E+00	5912.	0.0000E+00	0.0000E+00	0.0000E+00
8	2-butanol	1.230	0.1401	56.21	0.0000E+00	1.547	0.0000E+00	0.0000E+00	0.0000E+00
9	2-methyl-1-propanol	130.2	14.81	6072.	0.0000E+00	218.9	0.0000E+00	0.0000E+00	0.0000E+00
10	2-methyl-2-propanol	11.81	1.343	581.7	0.0000E+00	10.48	0.0000E+00	0.0000E+00	0.0000E+00
11	1,2-propanediol	0.8107E-01	0.9219E-02	3.684	0.0000E+00	0.1018	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	27.65	3.145	1450.	0.0000E+00	14.30	0.0000E+00	0.0000E+00	0.0000E+00
13	3-methyl-1-butanol	3.849	0.4384	195.9	0.0000E+00	2.586	0.0000E+00	0.0000E+00	0.0000E+00
14	Phenol	142.8	16.23	7847.	0.0000E+00	35.56	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	213.9	24.32	0.1142E+05	0.0000E+00	115.3	0.0000E+00	0.0000E+00	0.0000E+00
16	2-ethylbutanol	0.4048E-01	0.4603E-02	2.010	0.0000E+00	0.3199E-01	0.0000E+00	0.0000E+00	0.0000E+00
17	2-hexanol	0.3312	0.3767E-01	17.00	0.0000E+00	0.2017	0.0000E+00	0.0000E+00	0.0000E+00
18	1,3-dichloro-2-propanol	0.3501E-02	0.3992E-03	0.1609	0.0000E+00	0.4236E-02	0.0000E+00	0.0000E+00	0.0000E+00
19	2-ethylhexanol	1.645	0.1873	91.24	0.0000E+00	0.2637	0.0000E+00	0.0000E+00	0.0000E+00
20	Nonanol	1.006	0.1144	56.62	0.0000E+00	0.6196E-01	0.0000E+00	0.0000E+00	0.0000E+00
21	n-decanol	0.3593E-02	0.4087E-03	0.1986	0.0000E+00	0.6347E-03	0.0000E+00	0.0000E+00	0.0000E+00
22	Methanal	0.3026E-02	0.3466E-03	0.7623E-10	0.0000E+00	0.4440E-09	0.0000E+00	0.0000E+00	0.0000E+00

23	Ethanal	101.3	8.353	8.630	0.0000E+00	50.25	0.0000E+00	0.0000E+00	0.0000E+00
24	2-propenal	1.017	0.1153	3.968	0.0000E+00	6.315	0.0000E+00	0.0000E+00	0.0000E+00
25	Propanal	72.33	8.168	193.5	0.0000E+00	449.1	0.0000E+00	0.0000E+00	0.0000E+00
26	2-methylpropenal	0.5933	0.6742E-01	21.72	0.0000E+00	1.498	0.0000E+00	0.0000E+00	0.0000E+00
27	Butanal	244.8	27.72	8825.	0.0000E+00	1042.	0.0000E+00	0.0000E+00	0.0000E+00
28	Pentanal	22.23	2.527	1078.	0.0000E+00	24.35	0.0000E+00	0.0000E+00	0.0000E+00
29	2,4-hexadien-1-al	0.2379	0.2705E-01	11.80	0.0000E+00	0.1901	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	8.921	1.014	462.6	0.0000E+00	5.098	0.0000E+00	0.0000E+00	0.0000E+00
31	Benzaldehyde	3.799	0.4320	197.3	0.0000E+00	2.068	0.0000E+00	0.0000E+00	0.0000E+00
32	Heptanal	4.404	0.5007	237.8	0.0000E+00	1.392	0.0000E+00	0.0000E+00	0.0000E+00
33	4-methylbenzaldehyde	0.7343E-01	0.8349E-02	3.998	0.0000E+00	0.1942E-01	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	0.5716	0.6507E-01	31.89	0.0000E+00	0.7063E-01	0.0000E+00	0.0000E+00	0.0000E+00
35	Benzene	4.510	0.5125	186.1	0.0000E+00	9.166	0.0000E+00	0.0000E+00	0.0000E+00
36	Methylbenzene	228.0	25.86	9937.	0.0000E+00	607.0	0.0000E+00	0.0000E+00	0.0000E+00
37	Vinylbenzene	6.939	0.7890	358.3	0.0000E+00	4.098	0.0000E+00	0.0000E+00	0.0000E+00
38	1,2-dimethylbenzene	110.5	12.56	5911.	0.0000E+00	51.18	0.0000E+00	0.0000E+00	0.0000E+00
39	1,3-dimethylbenzene	590.2	66.99	0.2958E+05	0.0000E+00	912.5	0.0000E+00	0.0000E+00	0.0000E+00
40	1,4-dimethylbenzene	155.3	17.65	8281.	0.0000E+00	81.38	0.0000E+00	0.0000E+00	0.0000E+00
41	Ethylbenzene	29.77	3.384	1575.	0.0000E+00	14.09	0.0000E+00	0.0000E+00	0.0000E+00
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	0.3020E-01	0.3435E-02	1.515	0.0000E+00	0.2224E-01	0.0000E+00	0.0000E+00	0.0000E+00
44	1,2,4-trimethylbenzene	8.990	1.022	489.1	0.0000E+00	2.470	0.0000E+00	0.0000E+00	0.0000E+00
45	1,3,5-trimethylbenzene	0.4754	0.5405E-01	25.10	0.0000E+00	0.2115	0.0000E+00	0.0000E+00	0.0000E+00
46	1-ethyl-2-methylbenzene	0.9677	0.1100	51.40	0.0000E+00	0.3981	0.0000E+00	0.0000E+00	0.0000E+00
47	Isopropylbenzene	1.861	0.2116	99.05	0.0000E+00	0.7440	0.0000E+00	0.0000E+00	0.0000E+00
48	Propylbenzene	45.81	5.208	2512.	0.0000E+00	10.95	0.0000E+00	0.0000E+00	0.0000E+00
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	0.3725	0.4235E-01	20.21	0.0000E+00	0.1063	0.0000E+00	0.0000E+00	0.0000E+00
51	1-methyl-4-propylbenzene	0.7816E-01	0.8888E-02	4.157	0.0000E+00	0.3154E-01	0.0000E+00	0.0000E+00	0.0000E+00
52	Methyl formate	1.137	0.1038	1.839	0.0000E+00	6.814	0.0000E+00	0.0000E+00	0.0000E+00
53	Ethyl formate	1.017	0.1155	34.03	0.0000E+00	3.204	0.0000E+00	0.0000E+00	0.0000E+00
54	Methyl acetate	36.22	4.104	742.5	0.0000E+00	206.6	0.0000E+00	0.0000E+00	0.0000E+00
55	Ethyl acetate	61.44	6.969	2383.	0.0000E+00	193.2	0.0000E+00	0.0000E+00	0.0000E+00
56	Allyl acetate	0.8190	0.9312E-01	38.87	0.0000E+00	0.8548	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
57	Methyl methacrylate	21.12	2.400	1031.	0.0000E+00	21.46	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	1.127	0.1282	54.19	0.0000E+00	1.104	0.0000E+00	0.0000E+00	0.0000E+00
59	n-butyl formate	0.2551	0.2901E-01	12.13	0.0000E+00	0.2621	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	97.55	11.09	4882.	0.0000E+00	101.1	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	5.912	0.6722	306.8	0.0000E+00	3.304	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	156.3	17.77	8348.	0.0000E+00	79.53	0.0000E+00	0.0000E+00	0.0000E+00
63	Isobutyl acetate	41.12	4.675	2193.	0.0000E+00	17.72	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	1.101	0.1252	56.77	0.0000E+00	0.6452	0.0000E+00	0.0000E+00	0.0000E+00
65	2-Methoxy ethyl acetate	0.7632	0.8687E-01	38.60	0.0000E+00	0.5323	0.0000E+00	0.0000E+00	0.0000E+00
66	Isoamyl acetate	7.685	0.8739	418.7	0.0000E+00	2.034	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	12.91	1.468	710.7	0.0000E+00	2.600	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	99.22	11.29	5517.	0.0000E+00	14.97	0.0000E+00	0.0000E+00	0.0000E+00
69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.6099E-02	0.6935E-03	0.3411	0.0000E+00	0.6243E-03	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	0.3955	0.4485E-01	2.183	0.0000E+00	2.456	0.0000E+00	0.0000E+00	0.0000E+00
72	1,4-epoxybutane	16.06	1.819	419.7	0.0000E+00	80.02	0.0000E+00	0.0000E+00	0.0000E+00
73	3-methoxy-1-propene	0.1040E-01	0.1182E-02	0.3929	0.0000E+00	0.2189E-01	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	16.93	1.921	612.0	0.0000E+00	56.38	0.0000E+00	0.0000E+00	0.0000E+00

75	2-methylfuran	0.7028	0.7986E-01	26.19	0.0000E+00	1.704	0.0000E+00	0.0000E+00	0.0000E+00
76	2,3-dihydropyran	0.6433E-01	0.7317E-02	2.576	0.0000E+00	0.1196	0.0000E+00	0.0000E+00	0.0000E+00
77	1,4-dioxane	16.02	1.823	698.1	0.0000E+00	27.84	0.0000E+00	0.0000E+00	0.0000E+00
78	1,3,5-Trioxane	0.1304	0.1494E-01	4.905	0.0000E+00	0.2864	0.0000E+00	0.0000E+00	0.0000E+00
79	2-ethoxyethanol	150.7	17.16	7935.	0.0000E+00	88.42	0.0000E+00	0.0000E+00	0.0000E+00
80	Epichlorohydrin	0.8117	0.9228E-01	33.04	0.0000E+00	1.527	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	0.2594	0.2949E-01	12.45	0.0000E+00	0.2530	0.0000E+00	0.0000E+00	0.0000E+00
82	4-ethylmorpholine	31.53	3.590	1719.	0.0000E+00	8.692	0.0000E+00	0.0000E+00	0.0000E+00
83	1-propoxybutane	9.677	1.100	524.5	0.0000E+00	2.893	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	0.5783E-01	0.6577E-02	2.986	0.0000E+00	0.3324E-01	0.0000E+00	0.0000E+00	0.0000E+00
85	Chloromethane	20.41	1.806	0.1618	0.0000E+00	0.9422	0.0000E+00	0.0000E+00	0.0000E+00
86	Chloroethene	0.7817	0.5279E-01	0.4330	0.0000E+00	2.464	0.0000E+00	0.0000E+00	0.0000E+00
87	Chloroethane	0.2684E-01	0.3044E-02	0.5478	0.0000E+00	0.1315	0.0000E+00	0.0000E+00	0.0000E+00
88	3-chloropropene	0.2323E-01	0.2641E-02	0.8022	0.0000E+00	0.5867E-01	0.0000E+00	0.0000E+00	0.0000E+00
89	Dichloromethane	2264.	134.8	480.6	0.0000E+00	2790.	0.0000E+00	0.0000E+00	0.0000E+00
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	0.1665	0.1892E-01	5.062	0.0000E+00	0.5618	0.0000E+00	0.0000E+00	0.0000E+00
92	1,2-dichloroethane	15.05	1.708	519.8	0.0000E+00	52.00	0.0000E+00	0.0000E+00	0.0000E+00
93	1,2-dichloropropene	7.938	0.9014	298.3	0.0000E+00	21.78	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	253.4	28.76	0.1185E+05	0.0000E+00	481.9	0.0000E+00	0.0000E+00	0.0000E+00
95	1,2-dichloropropane	1.700	0.1932	71.29	0.0000E+00	3.002	0.0000E+00	0.0000E+00	0.0000E+00
96	Trichloromethane	3.038	0.3448	96.65	0.0000E+00	10.82	0.0000E+00	0.0000E+00	0.0000E+00
97	1,2-dichloro-2-methylpropane	0.3216	0.3656E-01	15.38	0.0000E+00	0.3202	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	9.857	1.120	415.9	0.0000E+00	18.89	0.0000E+00	0.0000E+00	0.0000E+00
99	1,1,1-trichloroethane	108.6	12.31	4068.	0.0000E+00	376.2	0.0000E+00	0.0000E+00	0.0000E+00
100	1,1,2-trichloroethane	0.1686E-01	0.1917E-02	0.6818	0.0000E+00	0.3046E-01	0.0000E+00	0.0000E+00	0.0000E+00
101	1,2-dichlorobenzene	1.917	0.2180	98.51	0.0000E+00	1.157	0.0000E+00	0.0000E+00	0.0000E+00
102	3-chloromethylheptane	0.5074E-01	0.5770E-02	2.728	0.0000E+00	0.1721E-01	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	1.541	0.1752	66.33	0.0000E+00	2.441	0.0000E+00	0.0000E+00	0.0000E+00
104	Tetrachloroethene	118.7	13.47	5038.	0.0000E+00	290.6	0.0000E+00	0.0000E+00	0.0000E+00
105	Chlorodifluoromethane	288.8	21.06	11.71	0.0000E+00	68.15	0.0000E+00	0.0000E+00	0.0000E+00
106	Dichlorofluoromethane	0.1295	0.1468E-01	1.597	0.0000E+00	0.7723	0.0000E+00	0.0000E+00	0.0000E+00
107	1-chloro-1,2,2-trifluoroethane	0.3771	0.4282E-01	11.51	0.0000E+00	1.301	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	2.709	0.3074	22.87	0.0000E+00	16.84	0.0000E+00	0.0000E+00	0.0000E+00
109	1,2-dichloro-1,2-difluoroethen	0.2602	0.2957E-01	9.299	0.0000E+00	0.6499	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	229.6	26.07	1047.	0.0000E+00	1434.	0.0000E+00	0.0000E+00	0.0000E+00
112	Bromotrifluoromethane	395.8	22.59	119.7	0.0000E+00	693.8	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
113	1,1-diCl-1,2,2,2-tetraFlethane	7.998	0.9085	310.1	0.0000E+00	19.85	0.0000E+00	0.0000E+00	0.0000E+00
114	1,1,2-triCl-1,2,2-triFlethane	4028.	457.3	0.2606E+05	0.0000E+00	0.2516E+05	0.0000E+00	0.0000E+00	0.0000E+00
115	1,1,2,2-tetraCl-1,2-diFlethane	5.722	0.6506	282.6	0.0000E+00	4.819	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.2107E+05	1253.	0.2675E-01	0.0000E+00	0.1558	0.0000E+00	0.0000E+00	0.0000E+00
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.5840	0.6108E-01	0.9021E-03	0.0000E+00	0.5254E-02	0.0000E+00	0.0000E+00	0.0000E+00
119	Ethane	2.734	0.2707	0.4811E-01	0.0000E+00	0.2802	0.0000E+00	0.0000E+00	0.0000E+00
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	2.063	0.1379	0.9363	0.0000E+00	5.397	0.0000E+00	0.0000E+00	0.0000E+00
123	Propane	0.1831	0.2077E-01	1.169	0.0000E+00	1.137	0.0000E+00	0.0000E+00	0.0000E+00
124	1,3-butadiene	0.8182	0.9276E-01	14.13	0.0000E+00	4.665	0.0000E+00	0.0000E+00	0.0000E+00
125	1-butene	9.724	1.103	110.7	0.0000E+00	60.31	0.0000E+00	0.0000E+00	0.0000E+00
126	2-methylpropane	3.328	0.3772	82.69	0.0000E+00	16.50	0.0000E+00	0.0000E+00	0.0000E+00

127	Butane	0.8760	0.9949E-01	30.36	0.0000E+00	2.615	0.0000E+00	0.0000E+00	0.0000E+00
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.4124E-02	0.4689E-03	0.1608	0.0000E+00	0.8102E-02	0.0000E+00	0.0000E+00	0.0000E+00
131	2-methylbutane	0.5171	0.5880E-01	22.62	0.0000E+00	0.7691	0.0000E+00	0.0000E+00	0.0000E+00
132	Pentane	20.27	2.301	855.6	0.0000E+00	45.34	0.0000E+00	0.0000E+00	0.0000E+00
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	0.1259	0.1431E-01	5.810	0.0000E+00	0.1485	0.0000E+00	0.0000E+00	0.0000E+00
135	Cyclohexane	103.5	11.74	4279.	0.0000E+00	296.5	0.0000E+00	0.0000E+00	0.0000E+00
136	Methylcyclopentane	8.385	0.9532	397.1	0.0000E+00	9.778	0.0000E+00	0.0000E+00	0.0000E+00
137	2,2-dimethylbutane	0.5081	0.5777E-01	24.15	0.0000E+00	0.5255	0.0000E+00	0.0000E+00	0.0000E+00
138	3-methylpentane	0.9067	0.1031	44.03	0.0000E+00	0.8368	0.0000E+00	0.0000E+00	0.0000E+00
139	Hexane	13.95	1.586	698.6	0.0000E+00	11.58	0.0000E+00	0.0000E+00	0.0000E+00
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.3345E-02	0.3803E-03	0.1576	0.0000E+00	0.3580E-02	0.0000E+00	0.0000E+00	0.0000E+00
142	Methylcyclohexane	9.490	1.079	488.3	0.0000E+00	5.925	0.0000E+00	0.0000E+00	0.0000E+00
143	2,2-dimethylpentane	7.068	0.8037	369.5	0.0000E+00	3.677	0.0000E+00	0.0000E+00	0.0000E+00
144	2,4-dimethylpentane	0.6579E-01	0.7481E-02	3.256	0.0000E+00	0.5322E-01	0.0000E+00	0.0000E+00	0.0000E+00
145	3-ethylpentane	0.7500E-01	0.8528E-02	3.741	0.0000E+00	0.5751E-01	0.0000E+00	0.0000E+00	0.0000E+00
146	Heptane	8.095	0.9204	428.0	0.0000E+00	3.663	0.0000E+00	0.0000E+00	0.0000E+00
147	1,1-dimethylcyclohexane	7.901	0.8985	420.6	0.0000E+00	3.229	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.4521E-02	0.5141E-03	0.2272	0.0000E+00	0.3278E-02	0.0000E+00	0.0000E+00	0.0000E+00
149	6-methyl-1-heptene	0.2357E-02	0.2680E-03	0.1166	0.0000E+00	0.1914E-02	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	15.46	1.758	831.7	0.0000E+00	5.414	0.0000E+00	0.0000E+00	0.0000E+00
151	2,2,3-trimethylpentane	0.1030	0.1171E-01	5.364	0.0000E+00	0.5421E-01	0.0000E+00	0.0000E+00	0.0000E+00
152	3,3-dimethylhexane	0.2484	0.2825E-01	13.06	0.0000E+00	0.1170	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	0.1491	0.1695E-01	7.816	0.0000E+00	0.7235E-01	0.0000E+00	0.0000E+00	0.0000E+00
154	Octane	2.441	0.2775	132.1	0.0000E+00	0.7361	0.0000E+00	0.0000E+00	0.0000E+00
155	4-ethylheptane	0.1216E-01	0.1383E-02	0.6442	0.0000E+00	0.5198E-02	0.0000E+00	0.0000E+00	0.0000E+00
156	Nonane	1.036	0.1178	56.88	0.0000E+00	0.2220	0.0000E+00	0.0000E+00	0.0000E+00
157	4-isopropenyl-1-Mecyclohexene	1.085	0.1234	59.83	0.0000E+00	0.2051	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	0.5051	0.5743E-01	28.08	0.0000E+00	0.6951E-01	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	5.093	0.5791	285.6	0.0000E+00	0.4372	0.0000E+00	0.0000E+00	0.0000E+00
160	Undecane	6.719	0.7640	380.1	0.0000E+00	0.2145	0.0000E+00	0.0000E+00	0.0000E+00
161	Dodecane	0.1387	0.1577E-01	7.819	0.0000E+00	0.7016E-02	0.0000E+00	0.0000E+00	0.0000E+00
162	2-propanone	0.1373	0.1561E-01	4.583	0.0000E+00	0.3862	0.0000E+00	0.0000E+00	0.0000E+00
163	3-buten-2-one	0.3993E-01	0.4541E-02	1.479	0.0000E+00	0.8877E-01	0.0000E+00	0.0000E+00	0.0000E+00
164	2-butanone	887.8	100.9	9976.	0.0000E+00	5544.	0.0000E+00	0.0000E+00	0.0000E+00
165	Cyclopentanone	142.3	16.14	5679.	0.0000E+00	456.8	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.8686E-02	0.9878E-03	0.3637	0.0000E+00	0.1431E-01	0.0000E+00	0.0000E+00	0.0000E+00
167	Acetyl cyclopropane	0.1438E-01	0.1635E-02	0.5857	0.0000E+00	0.2552E-01	0.0000E+00	0.0000E+00	0.0000E+00
168	2-pentanone	0.7616	0.8661E-01	36.04	0.0000E+00	0.8039	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 1

NO.	NAME	CABIN	LEAK	DEV3	DEV4	DEV5	DEV6	DEV7	DEV8
169	3-methyl-2-butanone	8.662	0.9848	414.9	0.0000E+00	9.400	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	34.34	3.904	1785.	0.0000E+00	20.81	0.0000E+00	0.0000E+00	0.0000E+00
171	Cyclohexanone	86.95	9.889	4732.	0.0000E+00	25.62	0.0000E+00	0.0000E+00	0.0000E+00
172	3,3-dimethyl-2-butanone	1.264	0.1437	63.31	0.0000E+00	0.9500	0.0000E+00	0.0000E+00	0.0000E+00
173	4-methyl-2-pentanone	226.8	25.78	0.1208E+05	0.0000E+00	120.5	0.0000E+00	0.0000E+00	0.0000E+00
174	2,4-dimethyl-3-pentanone	0.1532E-01	0.1742E-02	0.7682	0.0000E+00	0.1128E-01	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	22.46	2.554	1232.	0.0000E+00	5.196	0.0000E+00	0.0000E+00	0.0000E+00
176	5-methyl-2-hexanone	0.4862	0.5528E-01	25.45	0.0000E+00	0.2404	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	0.1391	0.1582E-01	7.181	0.0000E+00	0.8020E-01	0.0000E+00	0.0000E+00	0.0000E+00
178	2-octanone	0.4967E-01	0.5649E-02	2.627	0.0000E+00	0.2172E-01	0.0000E+00	0.0000E+00	0.0000E+00

U.S. and Russian TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

179	5-methyl-3-heptanone	0.5223	0.5940E-01	28.38	0.0000E+00	0.1445	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	1.016	0.1155	56.54	0.0000E+00	0.1320	0.0000E+00	0.0000E+00	0.0000E+00
181	Hydrogen sulfide	3.864	0.4084	0.2389E-04	0.0000E+00	0.1391E-03	0.0000E+00	0.0000E+00	0.0000E+00
182	Carbonyl sulfide	19.49	1.721	0.1668	0.0000E+00	0.9714	0.0000E+00	0.0000E+00	0.0000E+00
183	Ethylene sulfide	0.9263E-02	0.1050E-02	0.1581	0.0000E+00	0.4893E-01	0.0000E+00	0.0000E+00	0.0000E+00
184	Dimethyl sulfide	0.5742E-01	0.6518E-02	1.484	0.0000E+00	0.2347	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	8.459	0.8560	18.01	0.0000E+00	49.20	0.0000E+00	0.0000E+00	0.0000E+00
186	Pentamethylene sulfide	0.2338E-01	0.2658E-02	1.073	0.0000E+00	0.2816E-01	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	0.1879	0.2140E-01	2.916	0.0000E+00	1.066	0.0000E+00	0.0000E+00	0.0000E+00
191	2-ethylhexanoic acid	0.1149	0.1307E-01	6.369	0.0000E+00	0.1822E-01	0.0000E+00	0.0000E+00	0.0000E+00
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.4018E-02	0.4557E-03	0.6649E-01	0.0000E+00	0.2106E-01	0.0000E+00	0.0000E+00	0.0000E+00
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	33.37	2.440	19.83	0.0000E+00	112.8	0.0000E+00	0.0000E+00	0.0000E+00
196	N,N-dimethylformamide	0.5086	0.5782E-01	22.16	0.0000E+00	0.7590	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.6282E-02	0.7142E-03	0.2114	0.0000E+00	0.1621E-01	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	12.03	1.377	682.0	0.0000E+00	0.6907	0.0000E+00	0.0000E+00	0.0000E+00
199	Hydrogen	224.2	25.34	0.7441E-15	0.0000E+00	0.4334E-14	0.0000E+00	0.0000E+00	0.1134E+05
200	Ammonia	140.6	16.12	0.1430E-05	0.0000E+00	0.8326E-05	0.0000E+00	0.0000E+00	0.0000E+00
201	Carbon monoxide	649.4	73.40	0.3923E-10	0.0000E+00	0.2285E-09	0.0000E+00	0.0000E+00	0.3283E+05
202	Disiloxane	5.462	0.6204	209.1	0.0000E+00	14.07	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	33.46	3.802	1615.	0.0000E+00	39.55	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	4.456	0.5066	228.9	0.0000E+00	2.739	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	2.053	0.2334	113.0	0.0000E+00	0.4126	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	41.31	4.697	2285.	0.0000E+00	7.377	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.4151E-02	0.4720E-03	0.2340	0.0000E+00	0.2258E-03	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	21.62	2.458	1198.	0.0000E+00	3.499	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	62.48	7.104	3547.	0.0000E+00	0.6262	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	35.95	4.087	2042.	0.0000E+00	0.1676	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	8.922	1.015	507.2	0.0000E+00	0.1356E-01	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
1	Methanol	410.5	9888.	0.0000E+00	0.0000E+00	5328.	1799.	899.4
2	Ethanol	0.4251E+05	0.1639E+05	0.0000E+00	0.0000E+00	0.1287E+05	4344.	2172.
3	2-propen-1-ol	22.42	0.0000E+00	0.0000E+00	0.0000E+00	4.054	1.369	0.6845
4	n-propanol	2349.	0.0000E+00	0.0000E+00	0.0000E+00	258.3	87.19	43.60
5	2-propanol	0.2396E+05	0.0000E+00	0.0000E+00	0.0000E+00	2168.	731.7	365.9
6	1,2-ethanediol	75.98	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7	n-butanol	0.4790E+05	0.0000E+00	0.0000E+00	0.0000E+00	1977.	667.0	333.5
8	2-butanol	52.95	0.0000E+00	0.0000E+00	0.0000E+00	10.99	3.711	1.856
9	2-methyl-1-propanol	5600.	0.0000E+00	0.0000E+00	0.0000E+00	1425.	481.6	240.8
10	2-methyl-2-propanol	507.5	0.0000E+00	0.0000E+00	0.0000E+00	10.14	3.421	1.710
11	1,2-propanediol	3.485	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
12	n-pentanol	1189.	0.0000E+00	0.0000E+00	0.0000E+00	98.10	33.11	16.55
13	3-methyl-1-butanol	165.7	0.0000E+00	0.0000E+00	0.0000E+00	48.82	16.50	8.249
14	Phenol	6137.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
15	Cyclohexanol	9193.	0.0000E+00	0.0000E+00	0.0000E+00	16.48	5.560	2.780
16	2-ethylbutanol	1.740	0.0000E+00	0.0000E+00	0.0000E+00	0.2988E-01	0.1008E-01	0.5040E-02

17	2-hexanol	14.24	0.0000E+00	0.0000E+00	0.0000E+00	0.7684	0.2593	0.1296
18	1,3-dichloro-2-propanol	0.1509	0.0000E+00	0.0000E+00	0.0000E+00	0.9353E-01	0.3167E-01	0.1584E-01
19	2-ethylhexanol	70.79	0.0000E+00	0.0000E+00	0.0000E+00	14.69	4.962	2.481
20	Nonanol	43.23	0.0000E+00	0.0000E+00	0.0000E+00	0.7119	0.2402	0.1201
21	n-decanol	0.1545	0.0000E+00	0.0000E+00	0.0000E+00	0.5859E-02	0.1977E-02	0.9885E-03
22	Methanal	0.1366E-08	0.3535E-01	0.0000E+00	0.0000E+00	0.6935	0.2419	0.1210
23	Ethanal	154.7	810.3	0.0000E+00	0.0000E+00	31.78	10.72	5.359
24	2-propenal	43.59	0.1042E-03	0.0000E+00	0.0000E+00	0.3784E-01	0.1276E-01	0.6382E-02
25	Propanal	3085.	0.6828	0.0000E+00	0.0000E+00	32.65	11.01	5.507
26	2-methylpropenal	25.49	0.0000E+00	0.0000E+00	0.0000E+00	0.9731E-02	0.3282E-02	0.1641E-02
27	Butanal	0.1048E+05	0.0000E+00	0.0000E+00	0.0000E+00	77.13	26.02	13.01
28	Pentanal	955.4	0.0000E+00	0.0000E+00	0.0000E+00	4.295	1.449	0.7245
29	2,4-hexadien-1-al	10.22	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
30	Hexanal	383.4	0.0000E+00	0.0000E+00	0.0000E+00	0.7566	0.2552	0.1276
31	Benzaldehyde	163.3	0.0000E+00	0.0000E+00	0.0000E+00	3.742	1.263	0.6313
32	Heptanal	189.3	0.0000E+00	0.0000E+00	0.0000E+00	0.4476	0.1510	0.7549E-01
33	4-methylbenzaldehyde	3.156	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
34	Octanal	24.60	0.0000E+00	0.0000E+00	0.0000E+00	5.105	1.724	0.8621
35	Benzene	193.7	0.0000E+00	0.0000E+00	0.0000E+00	0.4227E-01	0.1426E-01	0.7129E-02
36	Methylbenzene	9774.	0.0000E+00	0.0000E+00	0.0000E+00	1.555	0.5244	0.2622
37	Vinylbenzene	298.2	0.0000E+00	0.0000E+00	0.0000E+00	0.1145	0.3862E-01	0.1931E-01
38	1,2-dimethylbenzene	4748.	0.0000E+00	0.0000E+00	0.0000E+00	1.147	0.3869	0.1934
39	1,3-dimethylbenzene	0.2532E+05	0.0000E+00	0.0000E+00	0.0000E+00	3.843	1.296	0.6481
40	1,4-dimethylbenzene	6672.	0.0000E+00	0.0000E+00	0.0000E+00	1.112	0.3751	0.1876
41	Ethylbenzene	1279.	0.0000E+00	0.0000E+00	0.0000E+00	0.1608	0.5424E-01	0.2712E-01
42	Indene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
43	alpha-methylstyrene	1.298	0.0000E+00	0.0000E+00	0.0000E+00	0.4635E-03	0.1563E-03	0.7817E-04
44	1,2,4-trimethylbenzene	386.4	0.0000E+00	0.0000E+00	0.0000E+00	0.6933E-01	0.2339E-01	0.1169E-01
45	1,3,5-trimethylbenzene	20.43	0.0000E+00	0.0000E+00	0.0000E+00	0.2606E-02	0.8789E-03	0.4394E-03
46	1-ethyl-2-methylbenzene	41.59	0.0000E+00	0.0000E+00	0.0000E+00	0.1479E-01	0.4988E-02	0.2494E-02
47	Isopropylbenzene	79.98	0.0000E+00	0.0000E+00	0.0000E+00	0.5577E-02	0.1881E-02	0.9407E-03
48	Propylbenzene	1969.	0.0000E+00	0.0000E+00	0.0000E+00	0.1950	0.6577E-01	0.3288E-01
49	1-methyl-3-propylbenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
50	n-butylbenzene	16.01	0.0000E+00	0.0000E+00	0.0000E+00	0.1231E-02	0.4151E-03	0.2075E-03
51	1-methyl-4-propylbenzene	3.360	0.0000E+00	0.0000E+00	0.0000E+00	0.1385E-01	0.4673E-02	0.2336E-02
52	Methyl formate	32.88	1.715	0.0000E+00	0.0000E+00	0.3495E-02	0.1179E-02	0.5894E-03
53	Ethyl formate	43.66	0.0000E+00	0.0000E+00	0.0000E+00	0.3749	0.1265	0.6323E-01
54	Methyl acetate	1551.	0.0000E+00	0.0000E+00	0.0000E+00	22.86	7.712	3.856
55	Ethyl acetate	2634.	0.0000E+00	0.0000E+00	0.0000E+00	23.63	7.971	3.985
56	Allyl acetate	35.20	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
57	Methyl methacrylate	907.4	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
58	Isopropyl acetate	48.45	0.0000E+00	0.0000E+00	0.0000E+00	0.1491E-01	0.5029E-02	0.2515E-02
59	n-butyl formate	10.97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
60	Propyl acetate	4190.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
61	Ethyl methacrylate	254.1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
62	Butyl acetate	6716.	0.0000E+00	0.0000E+00	0.0000E+00	18.10	6.105	3.052
63	Isobutyl acetate	1767.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
64	Ethyl lactate	47.34	0.0000E+00	0.0000E+00	0.0000E+00	0.2640	0.8905E-01	0.4452E-01
65	2-Methoxy ethyl acetate	32.84	0.0000E+00	0.0000E+00	0.0000E+00	5.937	2.005	1.003
66	Isoamyl acetate	330.3	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
67	n-amyl acetate	554.8	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
68	2-ethoxyethyl acetate	4267.	0.0000E+00	0.0000E+00	0.0000E+00	332.5	112.2	56.11

69	ethyl acetoxyacetate	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
70	Dibutyl oxalate	0.2622	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
71	1,4-epoxy-1,3-butadiene	16.95	0.1830E-05	0.0000E+00	0.0000E+00	0.3181E-02	0.1073E-02	0.5365E-03
72	1,4-epoxybutane	687.7	0.0000E+00	0.0000E+00	0.0000E+00	1.376	0.4643	0.2321
73	3-methoxy-1-propene	0.4469	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
74	Diethyl ether	726.0	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
75	2-methylfuran	30.19	0.0000E+00	0.0000E+00	0.0000E+00	0.1361E-01	0.4590E-02	0.2295E-02
76	2,3-dihydropyran	2.766	0.0000E+00	0.0000E+00	0.0000E+00	0.1338	0.4516E-01	0.2258E-01
77	1,4-dioxane	689.0	0.0000E+00	0.0000E+00	0.0000E+00	101.7	34.32	17.16
78	1,3,5-Trioxane	5.648	0.0000E+00	0.0000E+00	0.0000E+00	29.90	10.43	5.215
79	2-ethoxyethanol	6485.	0.0000E+00	0.0000E+00	0.0000E+00	1398.	472.0	236.0
80	Epichlorohydrin	34.88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
81	1,1,2,2-tetraMe-1,2-epoxyEt	11.15	0.0000E+00	0.0000E+00	0.0000E+00	0.1172E-02	0.3952E-03	0.1976E-03
82	4-ethylmorpholine	1357.	0.0000E+00	0.0000E+00	0.0000E+00	379.9	128.4	64.19
83	1-propoxybutane	415.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
84	2-butoxyethanol	2.486	0.0000E+00	0.0000E+00	0.0000E+00	0.9969E-01	0.3364E-01	0.1682E-01
85	Chloromethane	2.899	73.38	0.0000E+00	0.0000E+00	0.8357E-01	0.2819E-01	0.1409E-01
86	Chloroethene	7.738	1.484	0.0000E+00	0.0000E+00	0.9002E-03	0.3036E-03	0.1518E-03
87	Chloroethane	1.151	0.0000E+00	0.0000E+00	0.0000E+00	0.1681E-03	0.5670E-04	0.2835E-04
88	3-chloropropene	0.9981	0.0000E+00	0.0000E+00	0.0000E+00	0.2414E-05	0.8143E-06	0.4072E-06
89	Dichloromethane	8612.	4572.	0.0000E+00	0.0000E+00	20.80	7.017	3.509
90	1-chlorobutane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
91	1,1-dichloroethene	7.150	0.0000E+00	0.0000E+00	0.0000E+00	0.3236E-03	0.1091E-03	0.5457E-04
92	1,2-dichloroethane	645.5	0.0000E+00	0.0000E+00	0.0000E+00	0.5220	0.1761	0.8803E-01
93	1,2-dichloropropene	340.7	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
94	Chlorobenzene	0.1087E+05	0.0000E+00	0.0000E+00	0.0000E+00	2.422	0.8170	0.4085
95	1,2-dichloropropane	73.03	0.0000E+00	0.0000E+00	0.0000E+00	0.5577E-01	0.1881E-01	0.9406E-02
96	Trichloromethane	130.3	0.0000E+00	0.0000E+00	0.0000E+00	0.3250E-01	0.1096E-01	0.5482E-02
97	1,2-dichloro-2-methylpropane	13.82	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
98	Trichloroethylene	423.4	0.0000E+00	0.0000E+00	0.0000E+00	0.4960E-01	0.1673E-01	0.8365E-02
99	1,1,1-trichloroethane	4653.	0.0000E+00	0.0000E+00	0.0000E+00	0.3141	0.1059	0.5297E-01
100	1,1,2-trichloroethane	0.7247	0.0000E+00	0.0000E+00	0.0000E+00	0.9640E-03	0.3252E-03	0.1626E-03
101	1,2-dichlorobenzene	82.39	0.0000E+00	0.0000E+00	0.0000E+00	0.2823E-01	0.9522E-02	0.4761E-02
102	3-chloromethylheptane	2.181	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
103	Tetrachloromethane	66.22	0.0000E+00	0.0000E+00	0.0000E+00	0.2276E-02	0.7677E-03	0.3839E-03
104	Tetrachloroethene	5092.	0.0000E+00	0.0000E+00	0.0000E+00	0.1916	0.6465E-01	0.3232E-01
105	Chlorodifluoromethane	209.8	627.4	0.0000E+00	0.0000E+00	0.2666	0.8992E-01	0.4496E-01
106	Dichlorofluoromethane	5.550	0.1929E-08	0.0000E+00	0.0000E+00	0.1074E-02	0.3624E-03	0.1812E-03
107	1-chloro-1,2,2-trifluoroethane	16.19	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
108	Dichlorodifluoromethane	116.2	0.0000E+00	0.0000E+00	0.0000E+00	0.3009E-03	0.1015E-03	0.5074E-04
109	1,2-dichloro-1,2-difluoroethen	11.18	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
110	Chlorotetrafluoroethane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
111	Trichlorofluoromethane	9856.	0.0000E+00	0.0000E+00	0.0000E+00	0.8182E-01	0.2760E-01	0.1380E-01
112	Bromotrifluoromethane	2144.	552.1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
113	1,1-diCl-1,2,2,2-tetraFlethane	343.4	0.0000E+00	0.0000E+00	0.0000E+00	0.2872E-03	0.9689E-04	0.4845E-04
114	1,1,2-triCl-1,2,2-triFlethane	0.1729E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.3604	0.1216	0.6078E-01
115	1,1,2,2-tetraCl-1,2-diFlethane	245.9	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
116	Methane	0.4794	0.7012E+05	0.0000E+00	0.0000E+00	0.7514	0.2535	0.1267
117	Ethyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
118	Ethene	0.1617E-01	6.226	0.0000E+00	0.0000E+00	0.1125E-03	0.3793E-04	0.1897E-04
119	Ethane	0.8622	27.38	0.0000E+00	0.0000E+00	0.2145E-03	0.7236E-04	0.3618E-04
120	Propadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

121	Propyne	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
122	Propene	16.74	9.545	0.0000E+00	0.0000E+00	0.2585E-03	0.8721E-04	0.4360E-04
123	Propane	7.850	0.3137E-06	0.0000E+00	0.0000E+00	0.1159E-04	0.3910E-05	0.1955E-05
124	1,3-butadiene	35.06	0.0000E+00	0.0000E+00	0.0000E+00	0.8123E-03	0.2740E-03	0.1370E-03
125	1-butene	416.9	0.0000E+00	0.0000E+00	0.0000E+00	0.1722E-02	0.5807E-03	0.2903E-03
126	2-methylpropane	142.6	0.0000E+00	0.0000E+00	0.0000E+00	0.1252E-03	0.4222E-04	0.2111E-04
127	Butane	37.61	0.0000E+00	0.0000E+00	0.0000E+00	0.4145E-04	0.1398E-04	0.6991E-05
128	Cyclopentene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
129	2-methyl-1,3-butadiene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
130	1-pentene	0.1772	0.0000E+00	0.0000E+00	0.0000E+00	0.4506E-06	0.1520E-06	0.7600E-07
131	2-methylbutane	22.22	0.0000E+00	0.0000E+00	0.0000E+00	0.1646E-04	0.5551E-05	0.2776E-05
132	Pentane	869.9	0.0000E+00	0.0000E+00	0.0000E+00	0.6954E-03	0.2346E-03	0.1173E-03
133	3,4,5,6-tetrahydrobenzene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
134	2-hexene	5.411	0.0000E+00	0.0000E+00	0.0000E+00	0.1851E-04	0.6242E-05	0.3121E-05
135	Cyclohexane	4438.	0.0000E+00	0.0000E+00	0.0000E+00	0.3134E-01	0.1057E-01	0.5285E-02
136	Methylcyclopentane	360.3	0.0000E+00	0.0000E+00	0.0000E+00	0.1020E-02	0.3440E-03	0.1720E-03
137	2,2-dimethylbutane	21.84	0.0000E+00	0.0000E+00	0.0000E+00	0.1453E-04	0.4902E-05	0.2451E-05
138	3-methylpentane	38.97	0.0000E+00	0.0000E+00	0.0000E+00	0.3512E-04	0.1185E-04	0.5923E-05
139	Hexane	599.5	0.0000E+00	0.0000E+00	0.0000E+00	0.6695E-03	0.2258E-03	0.1129E-03
140	4-methylcyclohexene	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
141	1-heptene	0.1438	0.0000E+00	0.0000E+00	0.0000E+00	0.3627E-06	0.1223E-06	0.6117E-07
142	Methylcyclohexane	407.9	0.0000E+00	0.0000E+00	0.0000E+00	0.9653E-03	0.3256E-03	0.1628E-03
143	2,2-dimethylpentane	303.8	0.0000E+00	0.0000E+00	0.0000E+00	0.9738E-04	0.3285E-04	0.1642E-04
144	2,4-dimethylpentane	2.828	0.0000E+00	0.0000E+00	0.0000E+00	0.9719E-06	0.3278E-06	0.1639E-06
145	3-ethylpentane	3.224	0.0000E+00	0.0000E+00	0.0000E+00	0.1284E-05	0.4331E-06	0.2165E-06
146	Heptane	347.9	0.0000E+00	0.0000E+00	0.0000E+00	0.1303E-03	0.4397E-04	0.2198E-04
147	1,1-dimethylcyclohexane	339.6	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
148	2-octene	0.1943	0.0000E+00	0.0000E+00	0.0000E+00	0.3135E-06	0.1057E-06	0.5287E-07
149	6-methyl-1-heptene	0.1013	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
150	trans-1,2-dimethylcyclohexane	664.4	0.0000E+00	0.0000E+00	0.0000E+00	0.1409E-02	0.4753E-03	0.2377E-03
151	2,2,3-trimethylpentane	4.428	0.0000E+00	0.0000E+00	0.0000E+00	0.1176E-05	0.3966E-06	0.1983E-06
152	3,3-dimethylhexane	10.68	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
153	3-ethylhexane	6.407	0.0000E+00	0.0000E+00	0.0000E+00	0.1738E-05	0.5863E-06	0.2932E-06
154	Octane	104.9	0.0000E+00	0.0000E+00	0.0000E+00	0.2151E-04	0.7255E-05	0.3628E-05
155	4-ethylheptane	0.5228	0.0000E+00	0.0000E+00	0.0000E+00	0.1023E-06	0.3450E-07	0.1725E-07
156	Nonane	44.53	0.0000E+00	0.0000E+00	0.0000E+00	0.7590E-05	0.2560E-05	0.1280E-05
157	4-isopropenyl-1-Mecyclohexene	46.64	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
158	2-methyl-3-ethylheptane	21.71	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
159	Decane	218.9	0.0000E+00	0.0000E+00	0.0000E+00	0.4691E-04	0.1582E-04	0.7911E-05
160	Undecane	288.8	0.0000E+00	0.0000E+00	0.0000E+00	0.1595E-03	0.5379E-04	0.2690E-04
161	Dodecane	5.960	0.0000E+00	0.0000E+00	0.0000E+00	0.2810E-03	0.9480E-04	0.4740E-04
162	2-propanone	5.900	0.0000E+00	0.0000E+00	0.0000E+00	0.1392	0.4696E-01	0.2348E-01
163	3-buten-2-one	1.716	0.0000E+00	0.0000E+00	0.0000E+00	0.1673E-01	0.5644E-02	0.2822E-02
164	2-butanone	0.3815E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.1334E+05	4510.	2255.
165	Cyclopentanone	6100.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
166	3-penten-2-one	0.3734	0.0000E+00	0.0000E+00	0.0000E+00	0.3286E-02	0.1109E-02	0.5543E-03
167	Acetyl cyclopropane	0.6181	0.0000E+00	0.0000E+00	0.0000E+00	0.4537E-02	0.1531E-02	0.7653E-03
168	2-pentanone	32.74	0.0000E+00	0.0000E+00	0.0000E+00	0.9624	0.3247	0.1623

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

TOTAL CONTAMINANT MASS REMOVED BY EACH DEVICE (MG) SHEET 2

NO.	NAME	DEV9	DEV10	DEV11	DEV12	DEV13	DEV14	DEV15
169	3-methyl-2-butanone	372.2	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
170	4-methyl-3-penten-2-one	1476.	0.0000E+00	0.0000E+00	0.0000E+00	9.785	3.301	1.650
171	Cyclohexanone	3738.	0.0000E+00	0.0000E+00	0.0000E+00	154.3	52.06	26.03
172	3,3-dimethyl-2-butanone	54.34	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

173	4-methyl-2-pentanone	9745.	0.0000E+00	0.0000E+00	0.0000E+00	160.5	54.13	27.07
174	2,4-dimethyl-3-pentanone	0.6585	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
175	2-heptanone	965.4	0.0000E+00	0.0000E+00	0.0000E+00	1.018	0.3434	0.1717
176	5-methyl-2-hexanone	20.90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
177	acetophenone	5.981	0.0000E+00	0.0000E+00	0.0000E+00	0.2060	0.6950E-01	0.3475E-01
178	2-octanone	2.135	0.0000E+00	0.0000E+00	0.0000E+00	0.1468E-01	0.4951E-02	0.2475E-02
179	5-methyl-3-heptanone	22.45	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
180	2,6-dimethyl-4-heptanone	43.65	0.0000E+00	0.0000E+00	0.0000E+00	0.6667E-01	0.2249E-01	0.1124E-01
181	Hydrogen sulfide	0.4281E-03	41.66	0.0000E+00	0.0000E+00	1.769	0.5969	0.2984
182	Carbonyl sulfide	2.989	69.88	0.0000E+00	0.0000E+00	0.1299E-01	0.4382E-02	0.2191E-02
183	Ethylene sulfide	0.3970	0.2656E-08	0.0000E+00	0.0000E+00	0.6602E-04	0.2227E-04	0.1113E-04
184	Dimethyl sulfide	2.464	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
185	Carbon disulfide	314.1	0.6678	0.0000E+00	0.0000E+00	0.1703E-01	0.5745E-02	0.2872E-02
186	Pentamethylene sulfide	1.005	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
187	Nitric oxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
188	Nitrogen dioxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
189	Nitrogen tetroxide	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
190	Ethanoic acid	8.089	0.0000E+00	0.0000E+00	0.0000E+00	6.433	2.181	1.090
191	2-ethylhexanoic acid	4.941	0.0000E+00	0.0000E+00	0.0000E+00	0.7059E-01	0.2381E-01	0.1191E-01
192	Hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
193	Methyl cyanide	0.1722	0.1607E-08	0.0000E+00	0.0000E+00	0.8632E-02	0.2913E-02	0.1456E-02
194	methyl hydrazine	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
195	Nitromethane	354.3	153.3	0.0000E+00	0.0000E+00	3.440	1.160	0.5802
196	N,N-dimethylformamide	21.86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
197	Nitroethane	0.2700	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
198	1-benzo[b]pyrrole	520.3	0.0000E+00	0.0000E+00	0.0000E+00	1418.	486.6	243.3
199	Hydrogen	0.1334E-13	2585.	0.0000E+00	0.0000E+00	0.8254E-02	0.2784E-02	0.1392E-02
200	Ammonia	6092.	0.0000E+00	0.0000E+00	0.0000E+00	0.1117E+06	0.3769E+05	0.1885E+05
201	Carbon monoxide	0.7031E-09	7486.	0.0000E+00	0.0000E+00	0.2456E-01	0.8286E-02	0.4143E-02
202	Disiloxane	234.5	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
203	Trimethylsilanol	1437.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
204	Trisiloxane	191.5	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
205	Hexamethyldisiloxane	88.23	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
206	Tetrasiloxane	1776.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
207	Diphenylsilane	0.1784	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
208	Hexamethylcyclotrisiloxane	929.1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
209	Octamethyltrisiloxane	2685.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
210	Octamethylcyclotetrasiloxane	1545.	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
211	Decamethylcyclopentasiloxane	383.5	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
212	Decamethylcyclohexasiloxane	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
213	Tetradecamethylcycloheptasilox	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
214	Hexadecamethylcyclooctasiloxan	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
1	Methanol	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.002	0.001	0.001
2	Ethanol	1.000	0.023	0.000	0.164	0.000	0.000	0.000	0.511	1.000	0.000	0.000	0.001	0.001	0.001
3	2-propen-1-ol	1.000	0.591	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.002	0.001	0.001
4	n-propanol	1.000	0.258	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.001	0.001	0.001
5	2-propanol	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.001	0.000	0.000
6	1,2-ethanediol	1.000	0.767	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
7	n-butanol	1.000	0.125	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
8	2-butanol	1.000	0.798	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.002	0.001	0.001
9	2-methyl-1-propanol	1.000	0.718	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.003	0.001	0.001
10	2-methyl-2-propanol	1.000	0.857	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000

11	1,2-propanediol	1.000	0.799	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
12	n-pentanol	1.000	0.917	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.001	0.000	0.000
13	3-methyl-1-butanol	1.000	0.892	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.003	0.001	0.001
14	Phenol	1.000	0.959	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
15	Cyclohexanol	1.000	0.910	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
16	2-ethylbutanol	1.000	0.873	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
17	2-hexanol	1.000	0.902	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.001	0.000	0.000
18	1,3-dichloro-2-propanol	1.000	0.806	0.000	1.000	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.007	0.003	0.003
19	2-ethylhexanol	1.000	0.974	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.002	0.001	0.001
20	Nonanol	1.000	0.990	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
21	n-decanol	1.000	0.972	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
22	Methanal	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.059	0.026	0.026
23	Ethanal	1.000	0.000	0.000	0.013	0.000	0.000	0.000	0.008	1.000	0.000	0.000	0.000	0.000	0.000
24	2-propenal	1.000	0.000	0.000	0.992	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
25	Propanal	1.000	0.002	0.000	0.997	0.000	0.000	0.000	0.980	1.000	0.000	0.000	0.000	0.000	0.000
26	2-methylpropenal	1.000	0.590	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
27	Butanal	1.000	0.284	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
28	Pentanal	1.000	0.821	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
29	2,4-hexadien-1-al	1.000	0.872	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
30	Hexanal	1.000	0.908	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
31	Benzaldehyde	1.000	0.913	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
32	Heptanal	1.000	0.949	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
33	4-methylbenzaldehyde	1.000	0.958	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
34	Octanal	1.000	0.980	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.002	0.001	0.001
35	Benzene	1.000	0.668	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
36	Methylbenzene	1.000	0.545	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
37	Vinylbenzene	1.000	0.905	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
38	1,2-dimethylbenzene	1.000	0.924	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
39	1,3-dimethylbenzene	1.000	0.729	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
40	1,4-dimethylbenzene	1.000	0.913	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
41	Ethylbenzene	1.000	0.923	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
42	Indene	1.000	0.499	0.000	0.993	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
43	alpha-methylstyrene	1.000	0.882	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
44	1,2,4-trimethylbenzene	1.000	0.956	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
45	1,3,5-trimethylbenzene	1.000	0.929	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
46	1-ethyl-2-methylbenzene	1.000	0.934	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
47	Isopropylbenzene	1.000	0.936	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
48	Propylbenzene	1.000	0.961	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
49	1-methyl-3-propylbenzene	1.000	0.612	0.000	0.999	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
50	n-butylbenzene	1.000	0.954	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
51	1-methyl-4-propylbenzene	1.000	0.935	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
52	Methyl formate	1.000	0.016	0.000	0.894	0.000	0.000	0.000	0.365	1.000	0.000	0.000	0.000	0.000	0.000
53	Ethyl formate	1.000	0.484	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
54	Methyl acetate	1.000	0.073	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
55	Ethyl acetate	1.000	0.472	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
56	Allyl acetate	1.000	0.833	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
57	Methyl methacrylate	1.000	0.835	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
58	Isopropyl acetate	1.000	0.843	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
59	n-butyl formate	1.000	0.835	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
60	Propyl acetate	1.000	0.828	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
61	Ethyl methacrylate	1.000	0.910	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
62	Butyl acetate	1.000	0.916	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000

U.S. and Russian TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

63	Isobutyl acetate	1.000	0.930	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
64	Ethyl lactate	1.000	0.906	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
65	2-Methoxy ethyl acetate	1.000	0.888	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.002	0.001	0.001
66	Isoamyl acetate	1.000	0.958	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
67	n-amyl acetate	1.000	0.968	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
68	2-ethoxyethyl acetate	1.000	0.976	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.001	0.000	0.000
69	ethyl acetoxyacetate	1.000	0.553	0.000	0.997	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
70	Dibutyl oxalate	1.000	0.984	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
71	1,4-epoxy-1,3-butadiene	1.000	0.001	0.000	0.993	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
72	1,4-epoxybutane	1.000	0.180	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
73	3-methoxy-1-propene	1.000	0.663	0.000	0.999	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
74	Diethyl ether	1.000	0.446	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
75	2-methylfuran	1.000	0.606	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
76	2,3-dihydropyran	1.000	0.702	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.001	0.000	0.000
77	1,4-dioxane	1.000	0.716	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.002	0.001	0.001
78	1,3,5-Trioxane	1.000	0.647	0.000	0.999	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.059	0.026	0.026
79	2-ethoxyethanol	1.000	0.904	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.002	0.001	0.001
80	Epichlorohydrin	1.000	0.697	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
81	1,1,2,2-tetraMe-1,2-epoxyEt	1.000	0.844	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
82	4-ethylmorpholine	1.000	0.956	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.003	0.001	0.001
83	1-propoxybutane	1.000	0.952	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
84	2-butoxyethanol	1.000	0.908	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
85	Chloromethane	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.400	0.000	0.000	0.000	0.000	0.000
86	Chloroethene	1.000	0.018	0.000	0.177	0.000	0.000	0.000	0.409	0.450	0.000	0.000	0.000	0.000	0.000
87	Chloroethane	1.000	0.199	0.000	0.996	0.000	0.000	0.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000
88	3-chloropropene	1.000	0.594	0.000	0.999	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000
89	Dichloromethane	1.000	0.006	0.000	0.037	0.000	0.000	0.000	0.147	0.400	0.000	0.000	0.000	0.000	0.000
90	1-chlorobutane	1.000	0.419	0.000	0.980	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000
91	1,1-dichloroethene	1.000	0.451	0.000	0.999	0.000	0.000	0.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000
92	1,2-dichloroethane	1.000	0.428	0.000	1.000	0.000	0.000	0.000	1.000	0.420	0.000	0.000	0.000	0.000	0.000
93	1,2-dichloropropene	1.000	0.548	0.000	1.000	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000
94	Chlorobenzene	1.000	0.676	0.000	1.000	0.000	0.000	0.000	1.000	0.500	0.000	0.000	0.000	0.000	0.000
95	1,2-dichloropropane	1.000	0.715	0.000	1.000	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000
96	Trichloromethane	1.000	0.415	0.000	1.000	0.000	0.000	0.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000
97	1,2-dichloro-2-methylpropane	1.000	0.841	0.000	1.000	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000
98	Trichloroethylene	1.000	0.687	0.000	1.000	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000
99	1,1,1-trichloroethane	1.000	0.419	0.000	1.000	0.000	0.000	0.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000
100	1,1,2-trichloroethane	1.000	0.711	0.000	1.000	0.000	0.000	0.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000
101	1,2-dichlorobenzene	1.000	0.903	0.000	1.000	0.000	0.000	0.000	1.000	0.450	0.000	0.000	0.000	0.000	0.000
102	3-chloromethylheptane	1.000	0.946	0.000	1.000	0.000	0.000	0.000	1.000	0.470	0.000	0.000	0.000	0.000	0.000
103	Tetrachloromethane	1.000	0.745	0.000	1.000	0.000	0.000	0.000	1.000	0.400	0.000	0.000	0.000	0.000	0.000
104	Tetrachloroethene	1.000	0.589	0.000	1.000	0.000	0.000	0.000	1.000	0.430	0.000	0.000	0.000	0.000	0.000
105	Chlorodifluoromethane	1.000	0.001	0.000	0.004	0.000	0.000	0.000	0.016	0.300	0.000	0.000	0.000	0.000	0.000
106	Dichlorofluoromethane	1.000	0.035	0.000	0.995	0.000	0.000	0.000	1.000	0.320	0.000	0.000	0.000	0.000	0.000
107	1-chloro-1,2,2-trifluoroethane	1.000	0.437	0.000	0.999	0.000	0.000	0.000	1.000	0.320	0.000	0.000	0.000	0.000	0.000
108	Dichlorodifluoromethane	1.000	0.002	0.000	0.998	0.000	0.000	0.000	1.000	0.300	0.000	0.000	0.000	0.000	0.000
109	1,2-dichloro-1,2-difluoroethen	1.000	0.596	0.000	0.999	0.000	0.000	0.000	1.000	0.350	0.000	0.000	0.000	0.000	0.000
110	Chlorotetrafluoroethane	1.000	0.339	0.000	0.949	0.000	0.000	0.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000
111	Trichlorofluoromethane	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.320	0.000	0.000	0.000	0.000	0.000
112	Bromotrifluoromethane	1.000	0.010	0.000	0.060	0.000	0.000	0.000	0.233	0.320	0.000	0.000	0.000	0.000	0.000

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TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
113	1,1-diCl-1,2,2,2-tetraFlethane	1.000	0.593	0.000	1.000	0.000	0.000	0.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000
114	1,1,2-triCl-1,2,2-triFlethane	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000

115	1,1,2,2-tetraCl-1,2-diFlethane	1.000	0.865	0.000	1.000	0.000	0.000	0.000	1.000	0.330	0.000	0.000	0.000	0.000	0.000
116	Methane	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000
117	Ethyne	1.000	0.001	0.000	0.003	0.000	0.000	0.000	0.012	1.000	0.000	0.000	0.000	0.000	0.000
118	Ethene	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
119	Ethane	1.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
120	Propadiene	1.000	0.249	0.000	0.871	0.000	0.000	0.000	0.999	1.000	0.000	0.000	0.000	0.000	0.000
121	Propyne	1.000	0.239	0.000	0.859	0.000	0.000	0.000	0.999	1.000	0.000	0.000	0.000	0.000	0.000
122	Propene	1.000	0.015	0.000	0.110	0.000	0.000	0.000	0.355	1.000	0.000	0.000	0.000	0.000	0.000
123	Propane	1.000	0.001	0.000	0.994	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
124	1,3-butadiene	1.000	0.074	0.000	0.999	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
125	1-butene	1.000	0.005	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
126	2-methylpropane	1.000	0.186	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
127	Butane	1.000	0.511	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
128	Cyclopentene	1.000	0.358	0.000	0.958	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
129	2-methyl-1,3-butadiene	1.000	0.384	0.000	0.969	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
130	1-pentene	1.000	0.685	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
131	2-methylbutane	1.000	0.761	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
132	Pentane	1.000	0.628	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
133	3,4,5,6-tetrahydrobenzene	1.000	0.422	0.000	0.980	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
134	2-hexene	1.000	0.811	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
135	Cyclohexane	1.000	0.516	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
136	Methylcyclopentane	1.000	0.811	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
137	2,2-dimethylbutane	1.000	0.834	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
138	3-methylpentane	1.000	0.852	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
139	Hexane	1.000	0.865	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
140	4-methylcyclohexene	1.000	0.498	0.000	0.993	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
141	1-heptene	1.000	0.829	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
142	Methylcyclohexane	1.000	0.899	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
143	2,2-dimethylpentane	1.000	0.916	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
144	2,4-dimethylpentane	1.000	0.870	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
145	3-ethylpentane	1.000	0.877	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
146	Heptane	1.000	0.927	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
147	1,1-dimethylcyclohexane	1.000	0.934	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
148	2-octene	1.000	0.884	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
149	6-methyl-1-heptene	1.000	0.870	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
150	trans-1,2-dimethylcyclohexane	1.000	0.944	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
151	2,2,3-trimethylpentane	1.000	0.916	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
152	3,3-dimethylhexane	1.000	0.925	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
153	3-ethylhexane	1.000	0.922	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
154	Octane	1.000	0.952	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
155	4-ethylheptane	1.000	0.932	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
156	Nonane	1.000	0.966	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
157	4-isopropenyl-1-Mecyclohexene	1.000	0.970	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
158	2-methyl-3-ethylheptane	1.000	0.978	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
159	Decane	1.000	0.986	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
160	Undecane	1.000	0.995	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
161	Dodecane	1.000	0.992	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
162	2-propanone	1.000	0.545	0.000	0.999	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
163	3-buten-2-one	1.000	0.643	0.000	0.999	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
164	2-butanone	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.004	0.002	0.002
165	Cyclopentanone	1.000	0.457	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
166	3-penten-2-one	1.000	0.736	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
167	Acetyl cyclopropane	1.000	0.716	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
168	2-pentanone	1.000	0.831	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000

1

TIME INCR FINAL INITIAL TIME (HRS)= 2136.00 FINAL TIME (HRS)= 2160.00

DEVICE REMOVAL EFFICIENCY AT END OF TIME INCREMENT (DEC)

U.S. and Russian TCCS with Condensing Heat Exchanger Contribution Controlling to Russian 360-day SMACs

NO.	NAME	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
169	3-methyl-2-butanone	1.000	0.824	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
170	4-methyl-3-penten-2-one	1.000	0.902	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
171	Cyclohexanone	1.000	0.952	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
172	3,3-dimethyl-2-butanone	1.000	0.880	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
173	4-methyl-2-pentanone	1.000	0.912	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
174	2,4-dimethyl-3-pentanone	1.000	0.882	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
175	2-heptanone	1.000	0.963	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
176	5-methyl-2-hexanone	1.000	0.921	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
177	acetophenone	1.000	0.908	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
178	2-octanone	1.000	0.930	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
179	5-methyl-3-heptanone	1.000	0.956	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
180	2,6-dimethyl-4-heptanone	1.000	0.979	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
181	Hydrogen sulfide	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
182	Carbonyl sulfide	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.400	0.000	0.000	0.000	0.000	0.000
183	Ethylene sulfide	1.000	0.136	0.000	0.993	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
184	Dimethyl sulfide	1.000	0.332	0.000	0.998	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
185	Carbon disulfide	1.000	0.020	0.000	0.981	0.000	0.000	0.000	0.710	0.260	0.000	0.000	0.000	0.000	0.000
186	Pentamethylene sulfide	1.000	0.807	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
187	Nitric oxide	1.000	0.096	0.000	0.516	0.000	0.000	0.000	0.926	1.000	0.000	0.000	0.000	0.000	0.000
188	Nitrogen dioxide	1.000	0.139	0.000	0.658	0.000	0.000	0.000	0.979	0.000	1.000	0.000	0.000	0.000	0.000
189	Nitrogen tetroxide	1.000	0.256	0.000	0.880	0.000	0.000	0.000	0.999	0.000	0.000	0.000	0.000	0.000	0.000
190	Ethanoic acid	1.000	0.078	0.000	0.996	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.009	0.004	0.004
191	2-ethylhexanoic acid	1.000	0.975	0.000	1.000	0.000	0.000	0.000	1.000	1.000	1.000	0.000	0.000	0.000	0.000
192	Hydrazine	1.000	0.177	0.000	0.761	0.000	0.000	0.000	0.995	1.000	0.000	0.000	0.000	0.000	0.000
193	Methyl cyanide	1.000	0.141	0.000	0.989	0.000	0.000	0.000	1.000	0.300	0.000	0.000	0.001	0.000	0.000
194	methyl hydrazine	1.000	0.257	0.000	0.882	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.021	0.009	0.009
195	Nitromethane	1.000	0.021	0.000	0.191	0.000	0.000	0.000	0.461	1.000	0.000	0.000	0.000	0.000	0.000
196	N,N-dimethylformamide	1.000	0.760	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
197	Nitroethane	1.000	0.585	0.000	0.998	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
198	1-benzo[b]pyrrole	1.000	0.991	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.030	0.013	0.013
199	Hydrogen	1.000	0.000	0.000	0.000	0.000	0.000	0.895	0.000	1.000	0.000	0.000	0.000	0.000	0.000
200	Ammonia	1.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.205	0.087	0.087
201	Carbon monoxide	1.000	0.000	0.000	0.000	0.000	0.000	0.895	0.000	1.000	0.000	0.000	0.000	0.000	0.000
202	Disiloxane	1.000	0.577	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
203	Trimethylsilanol	1.000	0.806	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
204	Trisiloxane	1.000	0.901	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
205	Hexamethyldisiloxane	1.000	0.968	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
206	Tetrasiloxane	1.000	0.971	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
207	Diphenylsilane	1.000	0.991	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
208	Hexamethylcyclotrisiloxane	1.000	0.974	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
209	Octamethyltrisiloxane	1.000	0.998	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
210	Octamethylcyclotetrasiloxane	1.000	0.999	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
211	Decamethylcyclopentasiloxane	1.000	1.000	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
212	Decamethylcyclohexasiloxane	1.000	0.938	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
213	Tetradecamethylcycloheptasilox	1.000	0.963	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
214	Hexadecamethylcyclooctasiloxan	1.000	0.978	0.000	1.000	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000

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01–07–2016	Technical Memorandum	

4. TITLE AND SUBTITLE

Analysis of the Ability of United States and Russian Trace Contaminant Control Systems to Meet U.S. 180-Day and Russian 360-Day Spacecraft Maximum Allowable Concentrations

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5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

J.L. Perry

5d. PROJECT NUMBER

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13. SUPPLEMENTARY NOTES

Prepared by the Space Systems Department, Engineering Directorate

14. ABSTRACT

As the Space Station Freedom program transitioned to become the International Space Station (ISS), uncertainty existed concerning the performance capabilities for U.S.- and Russian-provided trace contaminant control (TCC) equipment. In preparation for the first dialogue between NASA and Russian Space Agency personnel in Moscow, Russia, in late April 1994, an engineering analysis was conducted to serve as a basis for discussing TCC equipment engineering assumptions as well as relevant assumptions on equipment offgassing and cabin air quality standards. The analysis presented was conducted as part of the efforts to integrate Russia into the ISS program via the early ISS Multilateral Medical Operations Panel's Air Quality Subgroup deliberations. This analysis, served as a basis for technical deliberations that established a framework for TCC system design and operations among the ISS program's international partners that has been instrumental in successfully managing the ISS common cabin environment.

15. SUBJECT TERMS

life support, trace contaminant control, air quality, space station, contaminant generation, maximum allowable concentration

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
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