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Date: **APR 04 2019**

Symbol: EPC-DO: 19-103

LA-UR: 19-22871

Locates Action No.: NA

Mr. John E. Kieling
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
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Subject: Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 6, Los Alamos National Laboratory EPA ID #NM0890010515

The United States Department of Energy (DOE) National Nuclear Security Administration, Los Alamos Field Office and the Triad National Security, LLC (Triad) are submitting this report to the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) in accordance with Section 3.14.3 of the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (the Permit). The Permit requires that a soil vapor monitoring system for the LANL Technical Area (TA)-63 Transuranic Waste Facility (TWF) be sampled for various volatile organic compounds (VOCs) and evaluated on a quarterly basis after operations at the facility commence. This report provides analytical data for the sixth quarter period following the start of operations on October 11, 2017. The sampling results indicate that vapor concentrations at the site do not exceed the soil gas screening levels established by the Permit.

The enclosure to this report includes a discussion of the history and analytical findings for the sixth quarter, a figure of the LANL TWF permitted unit with the soil vapor monitoring well locations, a summary table of detected volatile organic compounds for the wells, a table of analytical results, a quarterly data comparison table and sample collection logs. Table 1 is a summary of the analytical results for the sixth quarter and includes detected VOCs, detection limits, the appropriate soil gas screening levels from Permit Tables 3.14.3.1-3 and a percentage comparison of the detected levels of VOCs with the screening levels. Table 2 is a listing of the analytical results for the sampling event. Table 3 is a comparison table of the detected VOCs for the six quarters of sampling currently collected for the soil vapor monitoring wells. A preliminary statistical analysis of the concentration data collected to this point is also introduced. A report certification is included with this submittal in compliance with Permit Section 1.9.16. A compact disc with copies of this submittal and the analytical data in Excel format is also included to facilitate the review of the monitoring results by NMED-HWB.

If you have questions or comments concerning this report, please contact Karen E. Armijo, DOE, at (505) 665-7314 or Patrick L. Padilla, Triad, at (505) 667-3932.

Sincerely,



Enrique Torres
Division Leader
Environmental Protection and Compliance Division
Triad National Security, LLC

Sincerely,



Karen E. Armijo
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

ET/KEA/PLP:gab

Enclosure: 1. TA-63 Transuranic Waste Facility Soil Vapor Monitoring System Report Quarter 6,
Los Alamos National Laboratory

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The enclosure to this report includes a discussion of the history and analytical findings for the sixth quarter, a figure of the LANL TWF permitted unit with the soil vapor monitoring well locations, a summary table of detected volatile organic compounds for the wells, a table of analytical results, a quarterly data comparison table and sample collection logs. Table 1 is a summary of the analytical results for the sixth quarter and includes detected VOCs, detection limits, the appropriate soil gas screening levels from Permit Tables 3.14.3.1-3 and a percentage comparison of the detected levels of VOCs with the screening levels. Table 2 is a listing of the analytical results for the sampling event. Table 3 is a comparison table of the detected VOCs for the six quarters of sampling currently collected for the soil vapor monitoring wells. A preliminary statistical analysis of the concentration data collected to this point is also introduced. A report certification is included with this submittal in compliance with Permit Section 1.9.16. A compact disc with copies of this submittal and the analytical data in Excel format is also included to facilitate the review of the monitoring results by NMED-HWB.



ENCLOSURE 1

**TA-63 Transuranic Waste Facility
Soil Vapor Monitoring System Report
Quarter 6
Los Alamos National Laboratory**

EPC-DO-19-103

LAUR-19-22871
Unclassified

Date: APR 04 2019

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**TA-63 TRANSURANIC WASTE FACILITY
SOIL VAPOR MONITORING SYSTEM REPORT
QUARTER 6
LOS ALAMOS NATIONAL LABORATORY**

I. Introduction

This report describes the sixth quarterly sampling of a soil vapor monitoring system for the Technical Area (TA)-63 Transuranic Waste Facility (TWF) at Los Alamos National Laboratory (LANL). Construction of the TWF was approved by the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) as a modification to the LANL Hazardous Waste Facility Permit (Permit) on December 23, 2013. The permit modification included requirements for monitoring subsurface vapors to prevent worker exposure to potentially harmful levels of volatile organic compounds (VOCs) at the TWF (Permit Section 3.14.3 and Attachment A.6.10). The monitoring network was constructed to meet the Permit conditions and sampling and analysis for the sixth quarter of waste management operations at TWF has established that soil vapor concentrations at the site do not exceed the screening levels established by the Permit.

II. TWF Soil Vapor Monitoring Wells

The TWF subsurface vapor monitoring network was installed in 2015 and consists of five vapor monitoring wells in or near the permitted storage unit as specified in Permit Section A.6.10. The TWF is located south-east of the TA-50 Material Disposal Area C, Solid Waste Management Unit 50-009, (MDA-C) at LANL, which appears to be the source of potential soil vapors. Two of the monitoring wells are located close to the storage building foundations adjacent to the unit boundary facing MDA-C and the utility corridor on Puye Road as depicted by well locations VMW-1 (LANL Structure Number 63-2009) and VMW-2 (63-2010) in Figure 56 of Attachment N, *Figures*, of the Permit (see Figure 1 of this submittal). A third monitoring well within the permitted unit is located at a point on the western edge of the unit close to the utility corridor on Pajarito Road, as depicted by well location VMW-3 (64-2011) on Figure 56. The sampling ports for these three wells are located at a 5 foot nominal depth below the concrete pad of the TWF permitted storage unit. Two monitoring wells are located outside the permitted unit across Puye Road to the north and closer to MDA-C, as depicted by well locations VMW-4 (63-2012) and VMW-5 (63-2013) on Figure 56. There are two sampling ports for both these wells located at depths of 25 and 60 feet.

III. Soil Vapor Sampling

Sampling of the wells was completed on February 5, 2019 for the sixth quarter of waste management operations at the TA-63 TWF. Sampling procedures and VOC analyses of the

obtained samples were scheduled and performed in compliance with the conditions contained in the Permit. Analytical results for the samples were compared to the soil gas screening levels (SGSLs) for individual VOC constituents in Section 3.14.3 of the Permit.

The sampling of the vapor-monitoring wells was performed using the same procedures as other vapor monitoring conducted at MDA-C. Sampling was performed by extracting formation air through sand layers and into the stainless steel tubing of the sampling ports of the wells. Samples were collected from all sampling ports. All samples for VOC analysis were collected in stainless steel canisters and submitted for laboratory analysis of VOCs using U.S. Environmental Protection Agency (EPA) Method TO-15. The samples were analyzed for the constituents identified in Tables 3.14.3.1, 3.14.3.2 and 3.14.3.3 in the Permit. There were no variances in the sampling procedures from the Permit requirements.

IV. Analytical Results

A summary of the analytical results for the relevant VOCs detected for this sampling event is presented in Table 1 of this report. While analyses of the samples indicated some positive results for trichloroethene (TCE) and other VOCs, none of the concentrations exceed the relevant SGSLs contained in Permit Tables 3.14.3.1 through 3. Table 1 lists the detected VOCs and includes the calculated percentage of the SGSL as an indicator of the relative concentrations. A complete listing of the full analytical results is included in Table 2.

TCE is the highest concentration VOC detected in this sample event and in previous TA-63 TWF quarterly sampling analysis. TCE concentrations were detected in all of the five monitoring well locations. The VMW-4 and VMW-5 locations at the 60 foot depth contain the highest concentrations for these wells at 8.1% and 1.5% of the SGSL respectively. These are the sites closest to MDA-C and are not located within the permitted storage unit site at TA-63. The three monitoring wells within the permitted unit (VMW-1, VMW-2 and VMW-3) have detected concentrations for TCE of less than 1.0% of the SGSL.

Additional VOC constituents of concern (e.g., chloroform) included in the soil gas monitoring screening level tables in the Permit were detected in the soil vapor monitoring wells. The well locations north of Puye Road (VMW-4 and VMW-5) detected additional VOCs results that are included in Table 1. None of the additional VOC detections at these two locations exceeded 1.0% of the SGSLs listed in the Permit. The well locations within the boundary of the TWF permitted unit (VMW-1, VMW-2 and VMW-3) did not indicate additional detections of other listed VOCs.

The TA-63 TWF soil vapor monitoring wells were originally installed in August 2015. Baseline soil vapor monitoring samples were taken in September 2015 and the results submitted to NMED on October 29, 2015 (LANL, 2015). Reports were submitted with analytical results for the five previous quarters of waste management operations at the TWF and are listed in the references following this discussion. In reply to a letter from NMED-HWB dated May 23, 2018 (NMED, 2018), Table 3 is included in this report to show the current and previous quarterly soil gas screening level results at the facility for tracking purposes. The sampling results reported herein

for the sixth quarter of operations at TWF are consistent with the previous results and do not appear to indicate additional contaminant concerns pending further quarterly analyses subject to the Permit.

V. Additional Discussion

This section of the report discusses several additional issues related to the analytical results presented. The fifth quarter report for the TA-63 TWF soil vapor monitoring results (LANL, 2018d) indicated that a new VOC constituent (tetrahydrofuran) had been potentially detected in the samples taken that quarter and the concentration was estimated at the detection limit for the compound. Tetrahydrofuran is not included in the lists of monitored constituents in Permit Section 3.14.3, *Subsurface Vapor Monitoring*, or in the original EPA guidance (EPA, 2004) used to derive the soil gas screening levels for the monitoring. There were no analytical results above detection limits for tetrahydrofuran in this sixth quarter.

However, two VOC constituents included in the Permit tables were detected in the field blank sample (MD-54-19-166398) for this quarter (ethylbenzene and xylene isomers) but were not detected in any samples taken from the soil vapor monitoring wells. This may be an equipment or procedural anomaly. The comparison of the current and previous quarter results also contains repeated concentration results between the fifth and sixth quarters for some individual VOC constituents (e.g., VMW-4, 25 ft, trichloroethylene; VMW-4, 60 ft, tetrachloroethylene, dichlorodifluoromethane) in several samples. The review of the laboratory supplied data for this report indicates that these data are correct as reported by the analytical laboratory to at least two significant figures and do not represent a data quality problem. The evaluation of these VOC constituent data issues will continue with future sampling events.

A preliminary statistical analysis of the quarterly soil vapor monitoring data collected for TCE during the TA-63 TWF operating period is included in this report. Permit Section 3.14.3 states that an alternate sampling frequency may be proposed after the first year of sampling based on evaluation of relevant sampling data. The following statistical discussion is used to demonstrate that the sampling data collected to this point has been relatively stable. This is presented to provide a possible basis for future discussions or determinations with NMED-HWB that the sampling frequency for the soil vapor monitoring wells can be revised.

The mean and standard deviation for the quarterly TCE concentrations in each port in the soil vapor monitoring wells during facility waste operations is presented in Table 4 of this submittal to determine whether the concentrations for the major constituent detected by this project can be described as statistically distributed within a range of concentrations. As shown in Table 4, the TCE concentrations analyzed for the soil vapor monitoring wells for six quarters have remained within the limits of two standard deviations with a confidence probability of 95%.

Simple linear regression plots for the wells have also been included in Figures 2 and 3 to evaluate whether any significant trends are readily discernable regarding constituent concentration changes over quarters. The line plots for the concentrations determined for separate sampling locations are relatively flat considering the range that would be associated

with the permitted maximum SGSL constituent concentrations for TCE and do not indicate consistent observable trends for sample concentration changes in individual wells and port depths with time. In addition, there do not appear to be potential factors such as seasonal differences in concentrations. The analytical samples taken for TCE in the TA-63 TWF soil vapor monitoring wells during the pre-operational facility phase were also consistent with the concentrations reported for the operational quarters (LANL, 2015). This would indicate that these concentration levels have not substantially changed for approximately two years prior to the beginning of the operational period soil vapor monitoring.

References

LANL, 2015. *TA-63 Transuranic Waste Facility Soil Vapor Monitoring System Report*, (ENV-DO-15-0305), October 29, 2015. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2017. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 1*, Los Alamos National Laboratory EPA ID #NM0890010515, (EPC-DO:17-560), December 21, 2017. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2018a. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2*, Los Alamos National Laboratory EPA ID #NM0890010515, (EPC-DO:18-139) of March 30, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2018b. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 3*, Los Alamos National Laboratory EPA ID #NM0890010515, (EPC-DO:18-245) of March 30, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2018c. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 4*, Los Alamos National Laboratory EPA ID #NM0890010515, (EPC-DO:18-349) of September 26, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2018d. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 5*, Los Alamos National Laboratory EPA ID #NM0890010515, (EPC-DO:18-448) of December 27, 2018. Los Alamos National Laboratory, Los Alamos, New Mexico.

NMED, 2010. *Los Alamos National Laboratory Hazardous Waste Facility Permit*, issued by New Mexico Environment Department, Hazardous Waste Bureau, November 30, 2010 and subsequent revisions.

NMED, 2018. Letter: “*Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 2*, Los Alamos National Laboratory EPA ID#NM0890010515, HWB-LANL-18-016,” dated May 23, 2018. New Mexico Environment Department, Hazardous Waste Bureau, Santa Fe, New Mexico.

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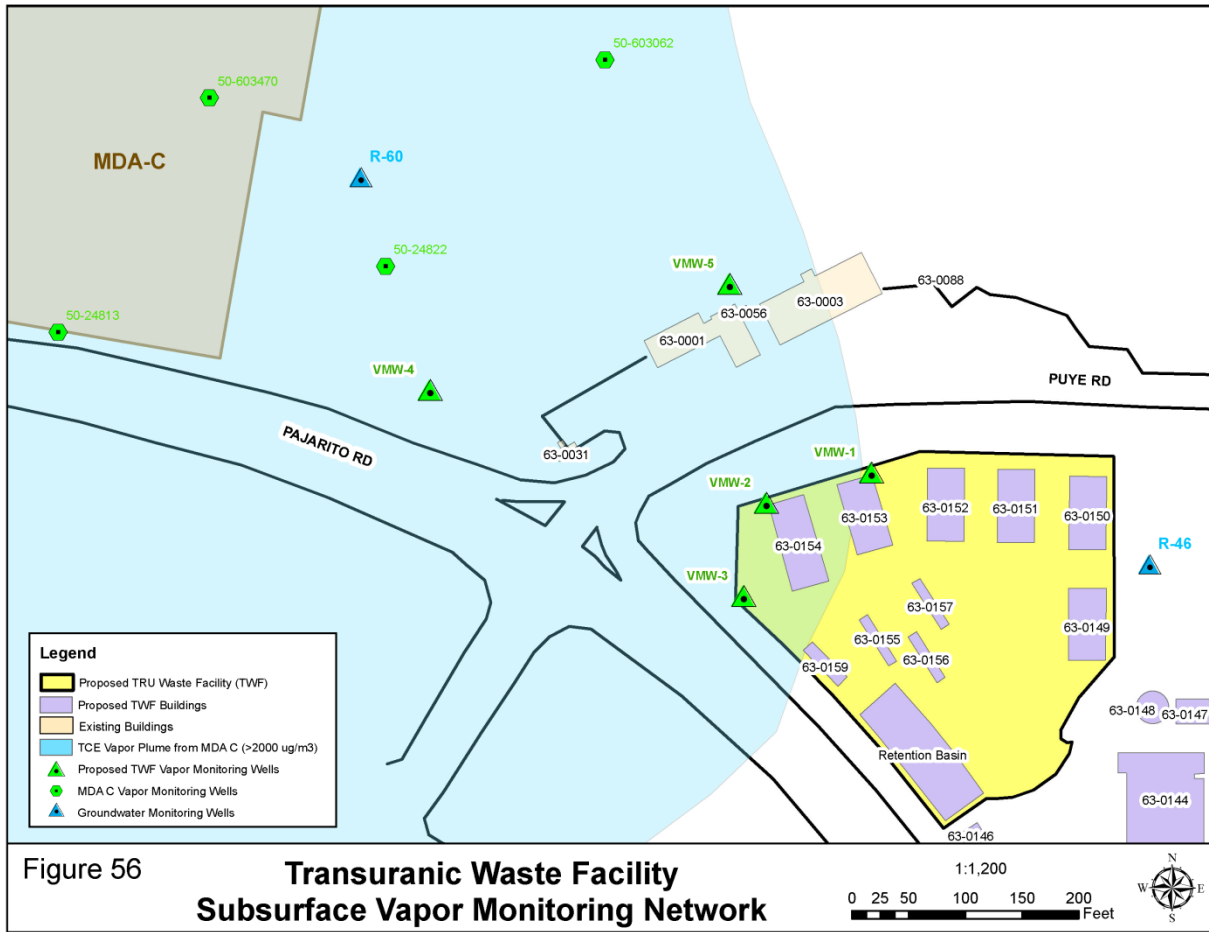


Figure 56

**Transuranic Waste Facility
Subsurface Vapor Monitoring Network**

Figure 1

Soil Vapor Monitoring Well Locations at TA-63 TWF

(Source: Los Alamos National Laboratory Hazardous Waste Facility Permit, November, 2010, Figure 56 [as revised by *Notification of Class 1 Permit Modification Construction Updates for the Technical Area 63 Transuranic Waste Facility Container Storage Unit, Los Alamos National Laboratory Hazardous Waste Facility Permit, EPA ID # NM0890010515, March 11, 2016, EPC-DO-16-055*])

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Table 1. Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility – Quarter 6

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Table 1: Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System– Quarter 6

Well	Sample ID	Sample Port Depth (ft)	Analyte/Constituent	Listing in Permit Tables	Result (ug/m3)	EPA Data Qualifier	Report Detection Limit (ug/m ³)	Soil-Gas Screening Level (ug/m ³)	Percentage Of SGSL (%)
VMW-1 63-2009	MD54-19- 166390	5	Trichloroethene	Trichloroethylene	36.0	J	64.4	1.94E+04	0.2
VMW-2 63-2010	MD54-19- 166391	5	Trichloroethene	Trichloroethylene	113		64.4	1.94E+04	0.6
VMW-3 63-2011	MD54-19- 166392	5	Trichloroethene	Trichloroethylene	85.9		51.6	1.94E+04	0.4
VMW-4 63-2012	MD54-19- 166393	25	Tetrachloroethene	Tetrachloroethylene	39.3	J	94.9	2.63E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	46.5	J	88.0	1.06E+05	<0.1
			Chloroform	Chloroform	92.7		68.3	2.30E+04	0.4
			Dichlorodifluoromethane	Dichlorodifluoromethane	79.1		69.2	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	2900		75.2	1.57E+05	1.8
VMW-4 63-2012	MD54-19- 166394	60	Tetrachloroethene	Tetrachloroethylene	88.1		67.8	2.05E+06	<0.1
			Dichloroethene[cis-1,-2]	cis-1,2-Dichloroethylene	19.8	J	39.6	2.91E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	113		62.9	2.13E+05	<0.1
			Chloroform	Chloroform	215		48.8	4.44E+04	0.5
			Dichlorodifluoromethane	Dichlorodifluoromethane	168		49.4	5.38E+06	<0.1
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	26.0	J	76.6	1.38E+09	<0.1
			Trichloroethene	Trichloroethylene	7520		53.7	9.27E+04	8.1
VMW-5 63-2013	MD54-19- 166395	25	Chloroform	Chloroform	28.8	J	63.4	2.30E+04	0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	22.9	J	70.9	1.16E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	49.4	J	64.2	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	360		69.8	1.57E+05	0.2
VMW-5 63-2013	MD54-19- 166396	60	Tetrachloroethene	Tetrachloroethylene	10.2	J	81.3	2.05E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	18.9	J	75.4	2.13E+05	<0.1
			Chloroform	Chloroform	22.0	J	58.6	4.44E+04	<0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	42.0	J	65.4	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	79.0		59.3	5.38E+06	<0.1
			Trichloroethene	Trichloroethylene	1400		64.4	9.27E+04	1.5

Table 1: Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System– Quarter 6

Well	Sample ID	Sample Port Depth (ft)	Analyte/Constituent	Listing in Permit Tables	Result (ug/m3)	EPA Data Qualifier	Report Detection Limit (ug/m ³)	Soil-Gas Screening Level (ug/m ³)	Percentage Of SGSL (%)
VMW-4 63-2012	MD54-19- 166397 Field Duplicate	25	Tetrachloroethene	Tetrachloroethylene	34.6	J	81.3	2.63E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	49.7	J	75.4	1.06E+05	<0.1
			Chloroform	Chloroform	97.6		58.6	2.30E+04	0.4
			Dichlorodifluoromethane	Dichlorodifluoromethane	79.1		59.3	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	2790		64.4	1.57E+05	1.8
VMW-2 63-2010	MD54-19- 166398 Field Blank		Ethylbenzene	Ethylbenzene	42.5	J	78.1	1.10E+05	<0.1
			Xylene[1,3] +Xylene[1,4-]	m-Xylene + p-Xylene	143		78.1	9.77E+05	<0.1
EPA Data Qualifier "J" indicates analytes that are detected but results are estimated as less than the report detection limit.									

Table 2. Analytical Results for Soil Vapor Monitoring Wells
at TA-63 Transuranic Waste Facility – Quarter 6

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TA-63 Transuranic Waste Facility Soil Vapor Monitoring System
 Sampling and Analysis - Quarter 6

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166390	63-2009	02/05/2019	Ethylbenzene	52.0756	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.07549	52.0756
MD54-19-166390	63-2009	02/05/2019	Styrene	51.0848	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3856	51.0848
MD54-19-166390	63-2009	02/05/2019	Benzyl Chloride	62.0866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8999	62.0866
MD54-19-166390	63-2009	02/05/2019	Dichloropropene[cis-1,3-]	54.43	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.443	54.43
MD54-19-166390	63-2009	02/05/2019	Dichloropropene[trans-1,3-]	54.43	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.97883	54.43
MD54-19-166390	63-2009	02/05/2019	Propylbenzene[1-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	58.9523
MD54-19-166390	63-2009	02/05/2019	Dichlorobenzene[1,4-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	72.1073
MD54-19-166390	63-2009	02/05/2019	Dibromoethane[1,2-]	92.144	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98226	92.144
MD54-19-166390	63-2009	02/05/2019	Butadiene[1,3-]	26.5315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2759	26.5315
MD54-19-166390	63-2009	02/05/2019	Chloro-1-propene[3-]	150.13	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.6515	150.13
MD54-19-166390	63-2009	02/05/2019	Dichloroethane[1,2-]	48.5392	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	48.5392
MD54-19-166390	63-2009	02/05/2019	Methyl-2-pentanone[4-]	49.1278	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0537	49.1278
MD54-19-166390	63-2009	02/05/2019	Trimethylbenzene[1,3,5-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	49.1269	58.9523
MD54-19-166390	63-2009	02/05/2019	Toluene	45.1931	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.40235	45.1931
MD54-19-166390	63-2009	02/05/2019	Chlorobenzene	55.2099	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.90123	55.2099
MD54-19-166390	63-2009	02/05/2019	Tetrahydrofuran	35.3694	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36863	35.3694
MD54-19-166390	63-2009	02/05/2019	Hexane	42.2707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.86316	42.2707
MD54-19-166390	63-2009	02/05/2019	Cyclohexane	41.2799	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.81599	41.2799
MD54-19-166390	63-2009	02/05/2019	Trichlorobenzene[1,2,4-]	356	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	118.667	356
MD54-19-166390	63-2009	02/05/2019	Dioxane[1,4-]	172.869	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	46.8188	172.869
MD54-19-166390	63-2009	02/05/2019	Chlorodibromomethane	102.16	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.08765	102.16
MD54-19-166390	63-2009	02/05/2019	Tetrachloroethene	81.3384	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.81166	81.3384
MD54-19-166390	63-2009	02/05/2019	n-Heptane	49.1474	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.3347	49.1474
MD54-19-166390	63-2009	02/05/2019	Dichloroethene[cis-1,2-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.90591	47.5484
MD54-19-166390	63-2009	02/05/2019	Dichloroethene[trans-1,2-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	47.5484
MD54-19-166390	63-2009	02/05/2019	Methyl tert-Butyl Ether	43.2369	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.684	43.2369
MD54-19-166390	63-2009	02/05/2019	Isooctane	56.029	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.5476	56.029
MD54-19-166390	63-2009	02/05/2019	Dichlorobenzene[1,3-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	72.1073
MD54-19-166390	63-2009	02/05/2019	Carbon Tetrachloride	75.4476	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.54476	75.4476
MD54-19-166390	63-2009	02/05/2019	Hexanone[2-]	196.511	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	65.5037	196.511
MD54-19-166390	63-2009	02/05/2019	Ethyltoluene[4-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6857	58.9523
MD54-19-166390	63-2009	02/05/2019	Ethanol	90.388	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	56.4925	90.388
MD54-19-166390	63-2009	02/05/2019	Propanol[2-]	117.914	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.3917	117.914
MD54-19-166390	63-2009	02/05/2019	Acetone	113.951	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.2358	113.951
MD54-19-166390	63-2009	02/05/2019	Chloroform	58.555	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.36754	58.555
MD54-19-166390	63-2009	02/05/2019	Benzene	38.3124	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.78905	38.3124
MD54-19-166390	63-2009	02/05/2019	Trichloroethane[1,1,1-]	65.4317	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9958	65.4317
MD54-19-166390	63-2009	02/05/2019	Bromomethane	186.27	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	32.5972	186.27
MD54-19-166390	63-2009	02/05/2019	Chloromethane	99.0599	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.161	99.0599
MD54-19-166390	63-2009	02/05/2019	Chloroethane	126.567	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.0049	126.567
MD54-19-166390	63-2009	02/05/2019	Vinyl Chloride	30.6548	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.7728	30.6548
MD54-19-166390	63-2009	02/05/2019	Methylene Chloride	166.63	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.8546	166.63
MD54-19-166390	63-2009	02/05/2019	Carbon Disulfide	149.383	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.0962	149.383
MD54-19-166390	63-2009	02/05/2019	Bromoform	123.962	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.50377	123.962
MD54-19-166390	63-2009	02/05/2019	Bromodichloromethane	80.3427	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.03427	80.3427
MD54-19-166390	63-2009	02/05/2019	Dichloroethane[1,1-]	48.5392	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.49435	48.5392
MD54-19-166390	63-2009	02/05/2019	Dichloroethene[1,1-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.52849	47.5484
MD54-19-166390	63-2009	02/05/2019	Trichlorofluoromethane	67.379	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1068	67.379
MD54-19-166390	63-2009	02/05/2019	Dichlorodifluoromethane	59.3055	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.91897	59.3055
MD54-19-166390	63-2009	02/05/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	91.9066	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8495	91.9066
MD54-19-166390	63-2009	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	83.835	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.98625	83.835
MD54-19-166390	63-2009	02/05/2019	Dichloropropane[1,2-]	55.4208	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.69864	55.4208
MD54-19-166390	63-2009	02/05/2019	Butanone[2-]	141.478	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.3694	141.478
MD54-19-166390	63-2009	02/05/2019	Trichloroethane[1,1,2-]	65.4317	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6316	65.4317
MD54-19-166390	63-2009	02/05/2019	Trichloroethene	35.9823	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	6.98163	64.4458
MD54-19-166390	63-2009	02/05/2019	Tetrachloroethane[1,1,2,2-]	82.3292	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.6633	82.3292
MD54-19-166390	63-2009	02/05/2019	Hexachlorobutadiene	511.604	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	117.242	511.604
MD54-19-166390	63-2009	02/05/2019	Xylene[1,2-]	52.0707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.282	52.0707

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166390	63-2009	02/05/2019	Dichlorobenzene[1,2-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	72.1073
MD54-19-166390	63-2009	02/05/2019	Trimethylbenzene[1,2,4-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.9849	58.9523
MD54-19-166390	63-2009	02/05/2019	Isopropylbenzene	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	36.8452	58.9523
MD54-19-166390	63-2009	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	52.0707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.50884	52.0707
MD54-19-166391	63-2010	02/05/2019	Ethylbenzene	52.0756	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.07549	52.0756
MD54-19-166391	63-2010	02/05/2019	Styrene	51.0848	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3856	51.0848
MD54-19-166391	63-2010	02/05/2019	Benzyl Chloride	62.0866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8999	62.0866
MD54-19-166391	63-2010	02/05/2019	Dichloropropene[cis-1,3-]	54.43	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.443	54.43
MD54-19-166391	63-2010	02/05/2019	Dichloropropene[trans-1,3-]	54.43	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.97883	54.43
MD54-19-166391	63-2010	02/05/2019	Propylbenzene[1-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	58.9523
MD54-19-166391	63-2010	02/05/2019	Dichlorobenzene[1,4-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	72.1073
MD54-19-166391	63-2010	02/05/2019	Dibromoethane[1,2-]	92.144	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98226	92.144
MD54-19-166391	63-2010	02/05/2019	Butadiene[1,3-]	26.5315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.497	26.5315
MD54-19-166391	63-2010	02/05/2019	Chloro-1-propene[3-]	153.258	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.9643	153.258
MD54-19-166391	63-2010	02/05/2019	Dichloroethane[1,2-]	48.5392	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	48.5392
MD54-19-166391	63-2010	02/05/2019	Methyl-2-pentanone[4-]	49.1278	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4631	49.1278
MD54-19-166391	63-2010	02/05/2019	Trimethylbenzene[1,3,5-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	49.1269	58.9523
MD54-19-166391	63-2010	02/05/2019	Toluene	45.1931	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.77896	45.1931
MD54-19-166391	63-2010	02/05/2019	Chlorobenzene	55.2099	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.90123	55.2099
MD54-19-166391	63-2010	02/05/2019	Tetrahydrofuran	35.3694	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36863	35.3694
MD54-19-166391	63-2010	02/05/2019	Hexane	42.2707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.86316	42.2707
MD54-19-166391	63-2010	02/05/2019	Cyclohexane	41.2799	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.81599	41.2799
MD54-19-166391	63-2010	02/05/2019	Trichlorobenzene[1,2,4-]	363.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	126.083	363.416
MD54-19-166391	63-2010	02/05/2019	Dioxane[1,4-]	176.471	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	50.4202	176.471
MD54-19-166391	63-2010	02/05/2019	Chlorodibromomethane	102.16	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17279	102.16
MD54-19-166391	63-2010	02/05/2019	Tetrachloroethene	81.3384	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.81166	81.3384
MD54-19-166391	63-2010	02/05/2019	n-Heptane	49.1474	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.3347	49.1474
MD54-19-166391	63-2010	02/05/2019	Dichloroethene[cis-1,2-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.90591	47.5484
MD54-19-166391	63-2010	02/05/2019	Dichloroethene[trans-1,2-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	47.5484
MD54-19-166391	63-2010	02/05/2019	Methyl tert-Butyl Ether	43.2369	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.684	43.2369
MD54-19-166391	63-2010	02/05/2019	Isooctane	56.029	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.0145	56.029
MD54-19-166391	63-2010	02/05/2019	Dichlorobenzene[1,3-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	72.1073
MD54-19-166391	63-2010	02/05/2019	Carbon Tetrachloride	75.4476	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17349	75.4476
MD54-19-166391	63-2010	02/05/2019	Hexanone[2-]	200.605	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	69.5977	200.605
MD54-19-166391	63-2010	02/05/2019	Ethyltoluene[4-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	58.9523
MD54-19-166391	63-2010	02/05/2019	Ethanol	92.2711	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	56.4925	92.2711
MD54-19-166391	63-2010	02/05/2019	Propanol[2-]	120.371	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.3917	120.371
MD54-19-166391	63-2010	02/05/2019	Acetone	116.325	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.2358	116.325
MD54-19-166391	63-2010	02/05/2019	Chloroform	58.555	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.8555	58.555
MD54-19-166391	63-2010	02/05/2019	Benzene	38.3124	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.78905	38.3124
MD54-19-166391	63-2010	02/05/2019	Trichloroethane[1,1,1-]	65.4317	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9958	65.4317
MD54-19-166391	63-2010	02/05/2019	Bromomethane	190.15	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	32.9852	190.15
MD54-19-166391	63-2010	02/05/2019	Chloromethane	101.124	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.3674	101.124
MD54-19-166391	63-2010	02/05/2019	Chloroethane	129.204	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.0049	129.204
MD54-19-166391	63-2010	02/05/2019	Vinyl Chloride	30.6548	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.7728	30.6548
MD54-19-166391	63-2010	02/05/2019	Methylene Chloride	170.102	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.2017	170.102
MD54-19-166391	63-2010	02/05/2019	Carbon Disulfide	152.495	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.0962	152.495
MD54-19-166391	63-2010	02/05/2019	Bromoform	123.962	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60707	123.962
MD54-19-166391	63-2010	02/05/2019	Bromodichloromethane	80.3427	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.03427	80.3427
MD54-19-166391	63-2010	02/05/2019	Dichloroethane[1,1-]	48.5392	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	48.5392
MD54-19-166391	63-2010	02/05/2019	Dichloroethene[1,1-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.52849	47.5484
MD54-19-166391	63-2010	02/05/2019	Trichlorofluoromethane	67.379	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6683	67.379
MD54-19-166391	63-2010	02/05/2019	Dichlorodifluoromethane	59.3055	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.91897	59.3055
MD54-19-166391	63-2010	02/05/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	91.9066	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8495	91.9066
MD54-19-166391	63-2010	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	83.835	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.68488	83.835
MD54-19-166391	63-2010	02/05/2019	Dichloropropane[1,2-]	55.4208	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1605	55.4208
MD54-19-166391	63-2010	02/05/2019	Butanone[2-]	144.425	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.3694	144.425
MD54-19-166391	63-2010	02/05/2019	Trichloroethane[1,1,2-]	65.4317	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1769	65.4317

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166391	63-2010	02/05/2019	Trichloroethene	112.78	ug/m3		Y	GAS	REG	VOC	EPA:TO15	7.51868	64.4458
MD54-19-166391	63-2010	02/05/2019	Tetrachloroethane[1,1,2,2-]	82.3292	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.6633	82.3292
MD54-19-166391	63-2010	02/05/2019	Hexachlorobutadiene	522.262	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	117.242	522.262
MD54-19-166391	63-2010	02/05/2019	Xylene[1,2-]	52.0707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.282	52.0707
MD54-19-166391	63-2010	02/05/2019	Dichlorobenzene[1,2-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	72.1073
MD54-19-166391	63-2010	02/05/2019	Trimethylbenzene[1,2,4-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.4762	58.9523
MD54-19-166391	63-2010	02/05/2019	Isopropylbenzene	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	37.3365	58.9523
MD54-19-166391	63-2010	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	52.0707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.50884	52.0707
MD54-19-166392	63-2011	02/05/2019	Ethylbenzene	41.6605	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.7736	41.6605
MD54-19-166392	63-2011	02/05/2019	Styrene	40.8679	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.10848	40.8679
MD54-19-166392	63-2011	02/05/2019	Benzyl Chloride	49.6693	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.31299	49.6693
MD54-19-166392	63-2011	02/05/2019	Dichloropropene[cis-1,3-]	43.544	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.26368	43.544
MD54-19-166392	63-2011	02/05/2019	Dichloropropene[trans-1,3-]	43.544	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.71091	43.544
MD54-19-166392	63-2011	02/05/2019	Propylbenzene[1-]	47.1619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	47.1619
MD54-19-166392	63-2011	02/05/2019	Dichlorobenzene[1,4-]	57.6859	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.60984	57.6859
MD54-19-166392	63-2011	02/05/2019	Dibromoethane[1,2-]	73.7152	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.67866	73.7152
MD54-19-166392	63-2011	02/05/2019	Butadiene[1,3-]	21.2252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.06494	21.2252
MD54-19-166392	63-2011	02/05/2019	Chloro-1-propene[3-]	118.853	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.3961	118.853
MD54-19-166392	63-2011	02/05/2019	Dichloroethane[1,2-]	38.8313	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.28087	38.8313
MD54-19-166392	63-2011	02/05/2019	Methyl-2-pentanone[4-]	39.3022	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.00676	39.3022
MD54-19-166392	63-2011	02/05/2019	Trimethylbenzene[1,3,5-]	47.1619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	39.7928	47.1619
MD54-19-166392	63-2011	02/05/2019	Toluene	36.1545	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.27252	36.1545
MD54-19-166392	63-2011	02/05/2019	Chlorobenzene	44.1679	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.52099	44.1679
MD54-19-166392	63-2011	02/05/2019	Tetrahydrofuran	28.2955	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.89491	28.2955
MD54-19-166392	63-2011	02/05/2019	Hexane	33.8165	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.74962	33.8165
MD54-19-166392	63-2011	02/05/2019	Cyclohexane	33.0239	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.78399	33.0239
MD54-19-166392	63-2011	02/05/2019	Trichlorobenzene[1,2,4-]	281.833	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	96.4166	281.833
MD54-19-166392	63-2011	02/05/2019	Dioxane[1,4-]	136.855	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	39.6159	136.855
MD54-19-166392	63-2011	02/05/2019	Chlorodibromomethane	81.7279	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.38499	81.7279
MD54-19-166392	63-2011	02/05/2019	Tetrachloroethene	65.0707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.7782	65.0707
MD54-19-166392	63-2011	02/05/2019	n-Heptane	39.3179	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4677	39.3179
MD54-19-166392	63-2011	02/05/2019	Dichloroethene[cis-1,2-]	38.0387	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.92473	38.0387
MD54-19-166392	63-2011	02/05/2019	Dichloroethene[trans-1,2-]	38.0387	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.32096	38.0387
MD54-19-166392	63-2011	02/05/2019	Methyl tert-Butyl Ether	34.5896	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.60308	34.5896
MD54-19-166392	63-2011	02/05/2019	Isooctane	44.8232	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.9447	44.8232
MD54-19-166392	63-2011	02/05/2019	Dichlorobenzene[1,3-]	57.6859	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.21073	57.6859
MD54-19-166392	63-2011	02/05/2019	Carbon Tetrachloride	60.3581	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.2873	60.3581
MD54-19-166392	63-2011	02/05/2019	Hexanone[2-]	155.571	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	155.571
MD54-19-166392	63-2011	02/05/2019	Ethyltoluene[4-]	47.1619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	47.1619
MD54-19-166392	63-2011	02/05/2019	Ethanol	71.5572	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	45.194	71.5572
MD54-19-166392	63-2011	02/05/2019	Propanol[2-]	93.349	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.0221	93.349
MD54-19-166392	63-2011	02/05/2019	Acetone	90.2114	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.1138	90.2114
MD54-19-166392	63-2011	02/05/2019	Chloroform	46.844	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.44042	46.844
MD54-19-166392	63-2011	02/05/2019	Benzene	30.6499	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	30.6499
MD54-19-166392	63-2011	02/05/2019	Trichloroethane[1,1,1-]	52.3454	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.2695	52.3454
MD54-19-166392	63-2011	02/05/2019	Bromomethane	147.463	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.0001	147.463
MD54-19-166392	63-2011	02/05/2019	Chloromethane	78.4224	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4462	78.4224
MD54-19-166392	63-2011	02/05/2019	Chloroethane	100.199	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7313	100.199
MD54-19-166392	63-2011	02/05/2019	Vinyl Chloride	24.5239	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.2183	24.5239
MD54-19-166392	63-2011	02/05/2019	Methylene Chloride	131.916	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.6059	131.916
MD54-19-166392	63-2011	02/05/2019	Carbon Disulfide	118.261	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.428	118.261
MD54-19-166392	63-2011	02/05/2019	Bromoform	99.1698	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.54104	99.1698
MD54-19-166392	63-2011	02/05/2019	Bromodichloromethane	64.2742	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.42742	64.2742
MD54-19-166392	63-2011	02/05/2019	Dichloroethane[1,1-]	38.8313	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87638	38.8313
MD54-19-166392	63-2011	02/05/2019	Dichloroethene[1,1-]	38.0387	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.94355	38.0387
MD54-19-166392	63-2011	02/05/2019	Trichlorofluoromethane	53.9032	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.42237	53.9032
MD54-19-166392	63-2011	02/05/2019	Dichlorodifluoromethane	47.4444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.43634	47.4444
MD54-19-166392	63-2011	02/05/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	73.5253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0201	73.5253

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166392	63-2011	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	67.068	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.86845	67.068
MD54-19-166392	63-2011	02/05/2019	Dichloropropane[1,2-]	44.3366	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.85128	44.3366
MD54-19-166392	63-2011	02/05/2019	Butanone[2-]	112.003	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.4113	112.003
MD54-19-166392	63-2011	02/05/2019	Trichloroethane[1,1,2-]	52.3454	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.9053	52.3454
MD54-19-166392	63-2011	02/05/2019	Trichloroethene	85.9278	ug/m3		Y	GAS	REG	VOC	EPA:TO15	5.90754	51.5567
MD54-19-166392	63-2011	02/05/2019	Tetrachloroethane[1,1,2,2-]	65.8634	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60507	65.8634
MD54-19-166392	63-2011	02/05/2019	Hexachlorobutadiene	405.02	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	90.5965	405.02
MD54-19-166392	63-2011	02/05/2019	Xylene[1,2-]	41.6566	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.67845	41.6566
MD54-19-166392	63-2011	02/05/2019	Dichlorobenzene[1,2-]	57.6859	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.00894	57.6859
MD54-19-166392	63-2011	02/05/2019	Trimethylbenzene[1,2,4-]	47.1619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.0897	47.1619
MD54-19-166392	63-2011	02/05/2019	Isopropylbenzene	47.1619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.4762	47.1619
MD54-19-166392	63-2011	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	41.6566	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.20707	41.6566
MD54-19-166393	63-2012	02/05/2019	Ethylbenzene	60.7549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94342	60.7549
MD54-19-166393	63-2012	02/05/2019	Styrene	59.599	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.23702	59.599
MD54-19-166393	63-2012	02/05/2019	Benzyl Chloride	72.4343	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.4521	72.4343
MD54-19-166393	63-2012	02/05/2019	Dichloropropene[cis-1,3-]	63.5017	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.89658	63.5017
MD54-19-166393	63-2012	02/05/2019	Dichloropropene[trans-1,3-]	63.5017	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3396	63.5017
MD54-19-166393	63-2012	02/05/2019	Propylbenzene[1-]	68.7777	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.6333	68.7777
MD54-19-166393	63-2012	02/05/2019	Dichlorobenzene[1,4-]	84.1252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	84.1252
MD54-19-166393	63-2012	02/05/2019	Dibromoethane[1,2-]	107.501	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.7501	107.501
MD54-19-166393	63-2012	02/05/2019	Butadiene[1,3-]	30.9535	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.8236	30.9535
MD54-19-166393	63-2012	02/05/2019	Chloro-1-propene[3-]	168.896	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.4048	168.896
MD54-19-166393	63-2012	02/05/2019	Dichloroethane[1,2-]	56.629	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1123	56.629
MD54-19-166393	63-2012	02/05/2019	Methyl-2-pentanone[4-]	57.3157	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6913	57.3157
MD54-19-166393	63-2012	02/05/2019	Trimethylbenzene[1,3,5-]	68.7777	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.9523	68.7777
MD54-19-166393	63-2012	02/05/2019	Toluene	52.7253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.53218	52.7253
MD54-19-166393	63-2012	02/05/2019	Chlorobenzene	64.4115	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36132	64.4115
MD54-19-166393	63-2012	02/05/2019	Tetrahydrofuran	41.2643	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.25287	41.2643
MD54-19-166393	63-2012	02/05/2019	Hexane	49.3158	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2722	49.3158
MD54-19-166393	63-2012	02/05/2019	Cyclohexane	48.1599	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.50398	48.1599
MD54-19-166393	63-2012	02/05/2019	Trichlorobenzene[1,2,4-]	400.5	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	133.5	400.5
MD54-19-166393	63-2012	02/05/2019	Dioxane[1,4-]	194.478	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	54.0217	194.478
MD54-19-166393	63-2012	02/05/2019	Chlorodibromomethane	119.186	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.36465	119.186
MD54-19-166393	63-2012	02/05/2019	Tetrachloroethene	39.3136	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	9.48948	94.8948
MD54-19-166393	63-2012	02/05/2019	n-Heptane	57.3386	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.9729	57.3386
MD54-19-166393	63-2012	02/05/2019	Dichloroethene[cis-1,2-]	55.4731	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0946	55.4731
MD54-19-166393	63-2012	02/05/2019	Dichloroethene[trans-1,2-]	55.4731	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8871	55.4731
MD54-19-166393	63-2012	02/05/2019	Methyl tert-Butyl Ether	50.4431	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.04431	50.4431
MD54-19-166393	63-2012	02/05/2019	Isooctane	65.3672	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.8159	65.3672
MD54-19-166393	63-2012	02/05/2019	Dichlorobenzene[1,3-]	84.1252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8161	84.1252
MD54-19-166393	63-2012	02/05/2019	Carbon Tetrachloride	46.526	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.80222	88.0222
MD54-19-166393	63-2012	02/05/2019	Hexanone[2-]	221.075	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	73.6916	221.075
MD54-19-166393	63-2012	02/05/2019	Ethyltoluene[4-]	68.7777	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.142	68.7777
MD54-19-166393	63-2012	02/05/2019	Ethanol	101.687	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	64.0248	101.687
MD54-19-166393	63-2012	02/05/2019	Propanol[2-]	132.654	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	36.8483	132.654
MD54-19-166393	63-2012	02/05/2019	Acetone	128.195	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	37.9838	128.195
MD54-19-166393	63-2012	02/05/2019	Chloroform	92.7121	ug/m3		Y	GAS	REG	VOC	EPA:TO15	6.34346	68.3142
MD54-19-166393	63-2012	02/05/2019	Benzene	44.6978	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.42759	44.6978
MD54-19-166393	63-2012	02/05/2019	Trichloroethane[1,1,1-]	76.337	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6316	76.337
MD54-19-166393	63-2012	02/05/2019	Bromomethane	209.553	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	36.4778	209.553
MD54-19-166393	63-2012	02/05/2019	Chloromethane	111.442	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.6375	111.442
MD54-19-166393	63-2012	02/05/2019	Chloroethane	142.388	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.2785	142.388
MD54-19-166393	63-2012	02/05/2019	Vinyl Chloride	35.764	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.3056	35.764
MD54-19-166393	63-2012	02/05/2019	Methylene Chloride	187.459	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.6732	187.459
MD54-19-166393	63-2012	02/05/2019	Carbon Disulfide	168.055	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.8971	168.055
MD54-19-166393	63-2012	02/05/2019	Bromoform	144.623	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3302	144.623
MD54-19-166393	63-2012	02/05/2019	Bromodichloromethane	93.7332	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.37332	93.7332
MD54-19-166393	63-2012	02/05/2019	Dichloroethane[1,1-]	56.629	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	56.629

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166393	63-2012	02/05/2019	Dichloroethene[1,1-]	55.4731	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.32096	55.4731
MD54-19-166393	63-2012	02/05/2019	Trichlorofluoromethane	78.6088	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7913	78.6088
MD54-19-166393	63-2012	02/05/2019	Dichlorodifluoromethane	79.074	ug/m3		Y	GAS	REG	VOC	EPA:TO15	7.9074	69.1897
MD54-19-166393	63-2012	02/05/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	107.224	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.3813	107.224
MD54-19-166393	63-2012	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	97.8075	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.3835	97.8075
MD54-19-166393	63-2012	02/05/2019	Dichloropropane[1,2-]	64.6576	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0842	64.6576
MD54-19-166393	63-2012	02/05/2019	Butanone[2-]	159.162	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	38.3169	159.162
MD54-19-166393	63-2012	02/05/2019	Trichloroethane[1,1,2-]	76.337	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2674	76.337
MD54-19-166393	63-2012	02/05/2019	Trichloroethene	2900.06	ug/m3		Y	GAS	REG	VOC	EPA:TO15	8.05573	75.1868
MD54-19-166393	63-2012	02/05/2019	Tetrachloroethane[1,1,2,2-]	96.0508	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0355	96.0508
MD54-19-166393	63-2012	02/05/2019	Hexachlorobutadiene	575.554	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	575.554
MD54-19-166393	63-2012	02/05/2019	Xylene[1,2-]	60.7492	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5838	60.7492
MD54-19-166393	63-2012	02/05/2019	Dichlorobenzene[1,2-]	84.1252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	84.1252
MD54-19-166393	63-2012	02/05/2019	Trimethylbenzene[1,2,4-]	68.7777	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	32.4238	68.7777
MD54-19-166393	63-2012	02/05/2019	Isopropylbenzene	68.7777	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	41.7579	68.7777
MD54-19-166393	63-2012	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	60.7492	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	60.7492
MD54-19-166394	63-2012	02/05/2019	Ethylbenzene	43.3963	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.20756	43.3963
MD54-19-166394	63-2012	02/05/2019	Styrene	42.5707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.10848	42.5707
MD54-19-166394	63-2012	02/05/2019	Benzyl Chloride	51.7388	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.83037	51.7388
MD54-19-166394	63-2012	02/05/2019	Dichloropropene[cis-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.49047	45.3583
MD54-19-166394	63-2012	02/05/2019	Dichloropropene[trans-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.1645	45.3583
MD54-19-166394	63-2012	02/05/2019	Propylbenzene[1-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2294	49.1269
MD54-19-166394	63-2012	02/05/2019	Dichlorobenzene[1,4-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.21073	60.0895
MD54-19-166394	63-2012	02/05/2019	Dibromoethane[1,2-]	76.7866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.44653	76.7866
MD54-19-166394	63-2012	02/05/2019	Butadiene[1,3-]	22.1096	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.50714	22.1096
MD54-19-166394	63-2012	02/05/2019	Chloro-1-propene[3-]	125.108	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.6472	125.108
MD54-19-166394	63-2012	02/05/2019	Dichloroethane[1,2-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.28087	40.4493
MD54-19-166394	63-2012	02/05/2019	Methyl-2-pentanone[4-]	40.9398	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.41615	40.9398
MD54-19-166394	63-2012	02/05/2019	Trimethylbenzene[1,3,5-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	42.2492	49.1269
MD54-19-166394	63-2012	02/05/2019	Toluene	37.6609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.27252	37.6609
MD54-19-166394	63-2012	02/05/2019	Chlorobenzene	46.0082	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.52099	46.0082
MD54-19-166394	63-2012	02/05/2019	Tetrahydrofuran	29.4745	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.18965	29.4745
MD54-19-166394	63-2012	02/05/2019	Hexane	35.2256	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.45413	35.2256
MD54-19-166394	63-2012	02/05/2019	Cyclohexane	34.3999	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.12799	34.3999
MD54-19-166394	63-2012	02/05/2019	Trichlorobenzene[1,2,4-]	296.666	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	296.666
MD54-19-166394	63-2012	02/05/2019	Dioxane[1,4-]	144.058	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	39.6159	144.058
MD54-19-166394	63-2012	02/05/2019	Chlorodibromomethane	85.1332	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.72552	85.1332
MD54-19-166394	63-2012	02/05/2019	Tetrachloroethene	88.1166	ug/m3		Y	GAS	REG	VOC	EPA:TO15	7.45602	67.782
MD54-19-166394	63-2012	02/05/2019	n-Heptane	40.9561	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8773	40.9561
MD54-19-166394	63-2012	02/05/2019	Dichloroethene[cis-1,2-]	19.8118	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.32096	39.6236
MD54-19-166394	63-2012	02/05/2019	Dichloroethene[trans-1,2-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.7172	39.6236
MD54-19-166394	63-2012	02/05/2019	Methyl tert-Butyl Ether	36.0308	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.96339	36.0308
MD54-19-166394	63-2012	02/05/2019	Isooctane	46.6908	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.8785	46.6908
MD54-19-166394	63-2012	02/05/2019	Dichlorobenzene[1,3-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	60.0895
MD54-19-166394	63-2012	02/05/2019	Carbon Tetrachloride	113.171	ug/m3		Y	GAS	REG	VOC	EPA:TO15	6.2873	62.873
MD54-19-166394	63-2012	02/05/2019	Hexanone[2-]	163.759	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	57.3157	163.759
MD54-19-166394	63-2012	02/05/2019	Ethyltoluene[4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	49.1269
MD54-19-166394	63-2012	02/05/2019	Ethanol	75.3233	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	47.0771	75.3233
MD54-19-166394	63-2012	02/05/2019	Propanol[2-]	98.2621	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.0221	98.2621
MD54-19-166394	63-2012	02/05/2019	Acetone	94.9594	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.4878	94.9594
MD54-19-166394	63-2012	02/05/2019	Chloroform	214.702	ug/m3		Y	GAS	REG	VOC	EPA:TO15	4.63561	48.7959
MD54-19-166394	63-2012	02/05/2019	Benzene	31.927	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.15051	31.927
MD54-19-166394	63-2012	02/05/2019	Trichloroethane[1,1,1-]	54.5264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.81476	54.5264
MD54-19-166394	63-2012	02/05/2019	Bromomethane	155.225	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.1643	155.225
MD54-19-166394	63-2012	02/05/2019	Chloromethane	82.5499	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2717	82.5499
MD54-19-166394	63-2012	02/05/2019	Chloroethane	105.472	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.0497	105.472
MD54-19-166394	63-2012	02/05/2019	Vinyl Chloride	25.5457	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.7292	25.5457
MD54-19-166394	63-2012	02/05/2019	Methylene Chloride	138.859	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.9945	138.859

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166394	63-2012	02/05/2019	Carbon Disulfide	124.485	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.3616	124.485
MD54-19-166394	63-2012	02/05/2019	Bromoform	103.302	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.95424	103.302
MD54-19-166394	63-2012	02/05/2019	Bromodichloromethane	66.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.69523	66.9523
MD54-19-166394	63-2012	02/05/2019	Dichloroethane[1,1-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.28087	40.4493
MD54-19-166394	63-2012	02/05/2019	Dichloroethene[1,1-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	39.6236
MD54-19-166394	63-2012	02/05/2019	Trichlorofluoromethane	56.1492	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.98387	56.1492
MD54-19-166394	63-2012	02/05/2019	Dichlorodifluoromethane	168.032	ug/m3		Y	GAS	REG	VOC	EPA:TO15	5.93055	49.4212
MD54-19-166394	63-2012	02/05/2019	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	26.0402	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	13.786	76.5888
MD54-19-166394	63-2012	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	69.8625	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.1479	69.8625
MD54-19-166394	63-2012	02/05/2019	Dichloropropane[1,2-]	46.184	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.31312	46.184
MD54-19-166394	63-2012	02/05/2019	Butanone[2-]	117.898	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.885	117.898
MD54-19-166394	63-2012	02/05/2019	Trichloroethane[1,1,2-]	54.5264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4506	54.5264
MD54-19-166394	63-2012	02/05/2019	Trichloroethene	7518.68	ug/m3		Y	GAS	REG	VOC	EPA:TO15	5.90754	53.7049
MD54-19-166394	63-2012	02/05/2019	Tetrachloroethane[1,1,2,2-]	68.6077	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60507	68.6077
MD54-19-166394	63-2012	02/05/2019	Hexachlorobutadiene	426.336	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	95.9257	426.336
MD54-19-166394	63-2012	02/05/2019	Xylene[1,2-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.11238	43.3923
MD54-19-166394	63-2012	02/05/2019	Dichlorobenzene[1,2-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.60984	60.0895
MD54-19-166394	63-2012	02/05/2019	Trimethylbenzene[1,2,4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.0722	49.1269
MD54-19-166394	63-2012	02/05/2019	Isopropylbenzene	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.95	49.1269
MD54-19-166394	63-2012	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.20707	43.3923
MD54-19-166395	63-2013	02/05/2019	Ethylbenzene	56.4153	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.07549	56.4153
MD54-19-166395	63-2013	02/05/2019	Styrene	55.3419	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.81131	55.3419
MD54-19-166395	63-2013	02/05/2019	Benzyl Chloride	67.2605	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.4173	67.2605
MD54-19-166395	63-2013	02/05/2019	Dichloropropene[cis-1,3-]	58.9658	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.443	58.9658
MD54-19-166395	63-2013	02/05/2019	Dichloropropene[trans-1,3-]	58.9658	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4324	58.9658
MD54-19-166395	63-2013	02/05/2019	Propylbenzene[1-]	63.865	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.1595	63.865
MD54-19-166395	63-2013	02/05/2019	Dichlorobenzene[1,4-]	78.1163	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	78.1163
MD54-19-166395	63-2013	02/05/2019	Dibromoethane[1,2-]	99.8226	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98226	99.8226
MD54-19-166395	63-2013	02/05/2019	Butadiene[1,3-]	28.7425	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9392	28.7425
MD54-19-166395	63-2013	02/05/2019	Chloro-1-propene[3-]	159.513	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2771	159.513
MD54-19-166395	63-2013	02/05/2019	Dichloroethane[1,2-]	52.5841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.30334	52.5841
MD54-19-166395	63-2013	02/05/2019	Methyl-2-pentanone[4-]	53.2217	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8725	53.2217
MD54-19-166395	63-2013	02/05/2019	Trimethylbenzene[1,3,5-]	63.865	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	54.0396	63.865
MD54-19-166395	63-2013	02/05/2019	Toluene	48.9592	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.77896	48.9592
MD54-19-166395	63-2013	02/05/2019	Chlorobenzene	59.8107	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.90123	59.8107
MD54-19-166395	63-2013	02/05/2019	Tetrahydrofuran	38.3169	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.66338	38.3169
MD54-19-166395	63-2013	02/05/2019	Hexane	45.7932	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5677	45.7932
MD54-19-166395	63-2013	02/05/2019	Cyclohexane	44.7199	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.15998	44.7199
MD54-19-166395	63-2013	02/05/2019	Trichlorobenzene[1,2,4-]	378.25	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	126.083	378.25
MD54-19-166395	63-2013	02/05/2019	Dioxane[1,4-]	183.674	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	50.4202	183.674
MD54-19-166395	63-2013	02/05/2019	Chlorodibromomethane	110.673	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.51332	110.673
MD54-19-166395	63-2013	02/05/2019	Tetrachloroethene	88.1166	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.81166	88.1166
MD54-19-166395	63-2013	02/05/2019	n-Heptane	53.243	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1538	53.243
MD54-19-166395	63-2013	02/05/2019	Dichloroethene[cis-1,2-]	51.5107	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	51.5107
MD54-19-166395	63-2013	02/05/2019	Dichloroethene[trans-1,2-]	51.5107	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0946	51.5107
MD54-19-166395	63-2013	02/05/2019	Methyl tert-Butyl Ether	46.84	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.684	46.84
MD54-19-166395	63-2013	02/05/2019	Isooctane	60.6981	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.9483	60.6981
MD54-19-166395	63-2013	02/05/2019	Dichlorobenzene[1,3-]	78.1163	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	78.1163
MD54-19-166395	63-2013	02/05/2019	Carbon Tetrachloride	81.7349	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17349	81.7349
MD54-19-166395	63-2013	02/05/2019	Hexanone[2-]	208.793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	69.5977	208.793
MD54-19-166395	63-2013	02/05/2019	Ethyltoluene[4-]	63.865	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.6682	63.865
MD54-19-166395	63-2013	02/05/2019	Ethanol	96.0373	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	60.2587	96.0373
MD54-19-166395	63-2013	02/05/2019	Propanol[2-]	125.284	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.3917	125.284
MD54-19-166395	63-2013	02/05/2019	Acetone	121.073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.6098	121.073
MD54-19-166395	63-2013	02/05/2019	Chloroform	28.7896	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	5.8555	63.4346
MD54-19-166395	63-2013	02/05/2019	Benzene	41.5051	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.10832	41.5051
MD54-19-166395	63-2013	02/05/2019	Trichloroethane[1,1,1-]	22.9011	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	12.5411	70.8844
MD54-19-166395	63-2013	02/05/2019	Bromomethane	197.911	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.1494	197.911

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166395	63-2013	02/05/2019	Chloromethane	105.251	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.1929	105.251
MD54-19-166395	63-2013	02/05/2019	Chloroethane	134.477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.6417	134.477
MD54-19-166395	63-2013	02/05/2019	Vinyl Chloride	33.2094	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2838	33.2094
MD54-19-166395	63-2013	02/05/2019	Methylene Chloride	177.045	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2432	177.045
MD54-19-166395	63-2013	02/05/2019	Carbon Disulfide	158.719	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.0298	158.719
MD54-19-166395	63-2013	02/05/2019	Bromoform	134.292	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.91698	134.292
MD54-19-166395	63-2013	02/05/2019	Bromodichloromethane	87.0379	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.70379	87.0379
MD54-19-166395	63-2013	02/05/2019	Dichloroethane[1,1-]	52.5841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.30334	52.5841
MD54-19-166395	63-2013	02/05/2019	Dichloroethene[1,1-]	51.5107	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.92473	51.5107
MD54-19-166395	63-2013	02/05/2019	Trichlorofluoromethane	72.9939	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2298	72.9939
MD54-19-166395	63-2013	02/05/2019	Dichlorodifluoromethane	49.4212	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	7.41319	64.2476
MD54-19-166395	63-2013	02/05/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	99.5655	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6154	99.5655
MD54-19-166395	63-2013	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	90.8213	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.68488	90.8213
MD54-19-166395	63-2013	02/05/2019	Dichloropropane[1,2-]	60.0392	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6223	60.0392
MD54-19-166395	63-2013	02/05/2019	Butanone[2-]	150.32	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.3694	150.32
MD54-19-166395	63-2013	02/05/2019	Trichloroethane[1,1,2-]	70.8844	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7221	70.8844
MD54-19-166395	63-2013	02/05/2019	Trichloroethene	359.823	ug/m3		Y	GAS	REG	VOC	EPA:TO15	7.51868	69.8163
MD54-19-166395	63-2013	02/05/2019	Tetrachloroethane[1,1,2,2-]	89.19	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3494	89.19
MD54-19-166395	63-2013	02/05/2019	Hexachlorobutadiene	543.579	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	117.242	543.579
MD54-19-166395	63-2013	02/05/2019	Xylene[1,2-]	56.4099	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7159	56.4099
MD54-19-166395	63-2013	02/05/2019	Dichlorobenzene[1,2-]	78.1163	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	78.1163
MD54-19-166395	63-2013	02/05/2019	Trimethylbenzene[1,2,4-]	63.865	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.4587	63.865
MD54-19-166395	63-2013	02/05/2019	Isopropylbenzene	63.865	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	38.8103	63.865
MD54-19-166395	63-2013	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	56.4099	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.50884	56.4099
MD54-19-166396	63-2013	02/05/2019	Ethylbenzene	52.0756	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.07549	52.0756
MD54-19-166396	63-2013	02/05/2019	Styrene	51.0848	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3856	51.0848
MD54-19-166396	63-2013	02/05/2019	Benzyl Chloride	62.0866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8999	62.0866
MD54-19-166396	63-2013	02/05/2019	Dichloropropene[cis-1,3-]	54.43	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.443	54.43
MD54-19-166396	63-2013	02/05/2019	Dichloropropene[trans-1,3-]	54.43	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.97883	54.43
MD54-19-166396	63-2013	02/05/2019	Propylbenzene[1-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	58.9523
MD54-19-166396	63-2013	02/05/2019	Dichlorobenzene[1,4-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	72.1073
MD54-19-166396	63-2013	02/05/2019	Dibromoethane[1,2-]	92.144	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98226	92.144
MD54-19-166396	63-2013	02/05/2019	Butadiene[1,3-]	26.5315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.497	26.5315
MD54-19-166396	63-2013	02/05/2019	Chloro-1-propene[3-]	153.258	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2771	153.258
MD54-19-166396	63-2013	02/05/2019	Dichloroethane[1,2-]	48.5392	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	48.5392
MD54-19-166396	63-2013	02/05/2019	Methyl-2-pentanone[4-]	49.1278	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4631	49.1278
MD54-19-166396	63-2013	02/05/2019	Trimethylbenzene[1,3,5-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	49.1269	58.9523
MD54-19-166396	63-2013	02/05/2019	Toluene	45.1931	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.77896	45.1931
MD54-19-166396	63-2013	02/05/2019	Chlorobenzene	55.2099	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.90123	55.2099
MD54-19-166396	63-2013	02/05/2019	Tetrahydrofuran	35.3694	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36863	35.3694
MD54-19-166396	63-2013	02/05/2019	Hexane	42.2707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.2154	42.2707
MD54-19-166396	63-2013	02/05/2019	Cyclohexane	41.2799	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.81599	41.2799
MD54-19-166396	63-2013	02/05/2019	Trichlorobenzene[1,2,4-]	363.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	126.083	363.416
MD54-19-166396	63-2013	02/05/2019	Dioxane[1,4-]	176.471	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	50.4202	176.471
MD54-19-166396	63-2013	02/05/2019	Chlorodibromomethane	102.16	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17279	102.16
MD54-19-166396	63-2013	02/05/2019	Tetrachloroethene	10.1673	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.81166	81.3384
MD54-19-166396	63-2013	02/05/2019	n-Heptane	49.1474	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7442	49.1474
MD54-19-166396	63-2013	02/05/2019	Dichloroethene[cis-1,2-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.90591	47.5484
MD54-19-166396	63-2013	02/05/2019	Dichloroethene[trans-1,2-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6984	47.5484
MD54-19-166396	63-2013	02/05/2019	Methyl tert-Butyl Ether	43.2369	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.684	43.2369
MD54-19-166396	63-2013	02/05/2019	Isooctane	56.029	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.0145	56.029
MD54-19-166396	63-2013	02/05/2019	Dichlorobenzene[1,3-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	72.1073
MD54-19-166396	63-2013	02/05/2019	Carbon Tetrachloride	18.8619	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.17349	75.4476
MD54-19-166396	63-2013	02/05/2019	Hexanone[2-]	200.605	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	69.5977	200.605
MD54-19-166396	63-2013	02/05/2019	Ethyltoluene[4-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	58.9523
MD54-19-166396	63-2013	02/05/2019	Ethanol	92.2711	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.3756	92.2711
MD54-19-166396	63-2013	02/05/2019	Propanol[2-]	120.371	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.3917	120.371
MD54-19-166396	63-2013	02/05/2019	Acetone	116.325	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.2358	116.325

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166396	63-2013	02/05/2019	Chloroform	21.9581	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	5.8555	58.555
MD54-19-166396	63-2013	02/05/2019	Benzene	38.3124	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.78905	38.3124
MD54-19-166396	63-2013	02/05/2019	Trichloroethane[1,1,1-]	41.9854	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	11.9958	65.4317
MD54-19-166396	63-2013	02/05/2019	Bromomethane	190.15	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	32.9852	190.15
MD54-19-166396	63-2013	02/05/2019	Chloromethane	101.124	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.5737	101.124
MD54-19-166396	63-2013	02/05/2019	Chloroethane	129.204	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.6417	129.204
MD54-19-166396	63-2013	02/05/2019	Vinyl Chloride	30.6548	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0283	30.6548
MD54-19-166396	63-2013	02/05/2019	Methylene Chloride	170.102	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.2017	170.102
MD54-19-166396	63-2013	02/05/2019	Carbon Disulfide	152.495	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.4074	152.495
MD54-19-166396	63-2013	02/05/2019	Bromoform	123.962	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60707	123.962
MD54-19-166396	63-2013	02/05/2019	Bromodichloromethane	80.3427	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.03427	80.3427
MD54-19-166396	63-2013	02/05/2019	Dichloroethane[1,1-]	48.5392	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	48.5392
MD54-19-166396	63-2013	02/05/2019	Dichloroethene[1,1-]	47.5484	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.52849	47.5484
MD54-19-166396	63-2013	02/05/2019	Trichlorofluoromethane	67.379	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6683	67.379
MD54-19-166396	63-2013	02/05/2019	Dichlorodifluoromethane	79.074	ug/m3		Y	GAS	REG	VOC	EPA:TO15	6.91897	59.3055
MD54-19-166396	63-2013	02/05/2019	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	91.9066	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8495	91.9066
MD54-19-166396	63-2013	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	83.835	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.68488	83.835
MD54-19-166396	63-2013	02/05/2019	Dichloropropane[1,2-]	55.4208	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1605	55.4208
MD54-19-166396	63-2013	02/05/2019	Butanone[2-]	144.425	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.3694	144.425
MD54-19-166396	63-2013	02/05/2019	Trichloroethane[1,1,2-]	65.4317	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1769	65.4317
MD54-19-166396	63-2013	02/05/2019	Trichloroethene	1396.33	ug/m3		Y	GAS	REG	VOC	EPA:TO15	7.51868	64.4458
MD54-19-166396	63-2013	02/05/2019	Tetrachloroethane[1,1,2,2-]	82.3292	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.6633	82.3292
MD54-19-166396	63-2013	02/05/2019	Hexachlorobutadiene	522.262	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	117.242	522.262
MD54-19-166396	63-2013	02/05/2019	Xylene[1,2-]	52.0707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.282	52.0707
MD54-19-166396	63-2013	02/05/2019	Dichlorobenzene[1,2-]	72.1073	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	72.1073
MD54-19-166396	63-2013	02/05/2019	Trimethylbenzene[1,2,4-]	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.4762	58.9523
MD54-19-166396	63-2013	02/05/2019	Isopropylbenzene	58.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	37.3365	58.9523
MD54-19-166396	63-2013	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	52.0707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.50884	52.0707
MD54-19-166397	63-2012	02/05/2019	Ethylbenzene	52.0756	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.07549	52.0756
MD54-19-166397	63-2012	02/05/2019	Styrene	51.0848	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.3856	51.0848
MD54-19-166397	63-2012	02/05/2019	Benzyl Chloride	62.0866	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.8999	62.0866
MD54-19-166397	63-2012	02/05/2019	Dichloropropene[cis-1,3-]	54.43	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.443	54.43
MD54-19-166397	63-2012	02/05/2019	Dichloropropene[trans-1,3-]	54.43	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.97883	54.43
MD54-19-166397	63-2012	02/05/2019	Propylbenzene[1-]	58.9523	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.177	58.9523
MD54-19-166397	63-2012	02/05/2019	Dichlorobenzene[1,4-]	72.1073	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.41252	72.1073
MD54-19-166397	63-2012	02/05/2019	Dibromoethane[1,2-]	92.144	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.98226	92.144
MD54-19-166397	63-2012	02/05/2019	Butadiene[1,3-]	26.5315	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.497	26.5315
MD54-19-166397	63-2012	02/05/2019	Chloro-1-propene[3-]	153.258	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	30.9643	153.258
MD54-19-166397	63-2012	02/05/2019	Dichloroethane[1,2-]	48.5392	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.89885	48.5392
MD54-19-166397	63-2012	02/05/2019	Methyl-2-pentanone[4-]	49.1278	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.4631	49.1278
MD54-19-166397	63-2012	02/05/2019	Trimethylbenzene[1,3,5-]	58.9523	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	49.1269	58.9523
MD54-19-166397	63-2012	02/05/2019	Toluene	45.1931	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.77896	45.1931
MD54-19-166397	63-2012	02/05/2019	Chlorobenzene	55.2099	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.90123	55.2099
MD54-19-166397	63-2012	02/05/2019	Tetrahydrofuran	35.3694	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.36863	35.3694
MD54-19-166397	63-2012	02/05/2019	Hexane	42.2707	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.86316	42.2707
MD54-19-166397	63-2012	02/05/2019	Cyclohexane	41.2799	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.81599	41.2799
MD54-19-166397	63-2012	02/05/2019	Trichlorobenzene[1,2,4-]	363.416	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	126.083	363.416
MD54-19-166397	63-2012	02/05/2019	Dioxane[1,4-]	176.471	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	50.4202	176.471
MD54-19-166397	63-2012	02/05/2019	Chlorodibromomethane	102.16	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.17279	102.16
MD54-19-166397	63-2012	02/05/2019	Tetrachloroethene	34.5688	ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	8.81166	81.3384
MD54-19-166397	63-2012	02/05/2019	n-Heptane	49.1474	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.3347	49.1474
MD54-19-166397	63-2012	02/05/2019	Dichloroethene[cis-1,2-]	47.5484	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.90591	47.5484
MD54-19-166397	63-2012	02/05/2019	Dichloroethene[trans-1,2-]	47.5484	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.3021	47.5484
MD54-19-166397	63-2012	02/05/2019	Methyl tert-Butyl Ether	43.2369	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.684	43.2369
MD54-19-166397	63-2012	02/05/2019	Isooctane	56.029	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	28.0145	56.029
MD54-19-166397	63-2012	02/05/2019	Dichlorobenzene[1,3-]	72.1073	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.61431	72.1073
MD54-19-166397	63-2012	02/05/2019	Carbon Tetrachloride	49.6697	ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	8.17349	75.4476
MD54-19-166397	63-2012	02/05/2019	Hexanone[2-]	200.605	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	69.5977	200.605

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Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166397	63-2012	02/05/2019	Ethyltoluene[4-]	58.9523	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.177	58.9523
MD54-19-166397	63-2012	02/05/2019	Ethanol	92.2711	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	56.4925	92.2711
MD54-19-166397	63-2012	02/05/2019	Propanol[2-]	120.371	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	34.3917	120.371
MD54-19-166397	63-2012	02/05/2019	Acetone	116.325	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	33.2358	116.325
MD54-19-166397	63-2012	02/05/2019	Chloroform	97.5917	ug/m3		Y	GAS	FD	VOC	EPA:TO15	5.8555	58.555
MD54-19-166397	63-2012	02/05/2019	Benzene	38.3124	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.78905	38.3124
MD54-19-166397	63-2012	02/05/2019	Trichloroethane[1,1,1-]	65.4317	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.9958	65.4317
MD54-19-166397	63-2012	02/05/2019	Bromomethane	190.15	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	32.9852	190.15
MD54-19-166397	63-2012	02/05/2019	Chloromethane	101.124	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.3674	101.124
MD54-19-166397	63-2012	02/05/2019	Chloroethane	129.204	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	29.0049	129.204
MD54-19-166397	63-2012	02/05/2019	Vinyl Chloride	30.6548	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.7728	30.6548
MD54-19-166397	63-2012	02/05/2019	Methylene Chloride	170.102	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	30.2017	170.102
MD54-19-166397	63-2012	02/05/2019	Carbon Disulfide	152.495	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	22.0962	152.495
MD54-19-166397	63-2012	02/05/2019	Bromoform	123.962	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.60707	123.962
MD54-19-166397	63-2012	02/05/2019	Bromodichloromethane	80.3427	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.03427	80.3427
MD54-19-166397	63-2012	02/05/2019	Dichloroethane[1,1-]	48.5392	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.89885	48.5392
MD54-19-166397	63-2012	02/05/2019	Dichloroethene[1,1-]	47.5484	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.52849	47.5484
MD54-19-166397	63-2012	02/05/2019	Trichlorofluoromethane	67.379	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.6683	67.379
MD54-19-166397	63-2012	02/05/2019	Dichlorodifluoromethane	79.074	ug/m3		Y	GAS	FD	VOC	EPA:TO15	6.91897	59.3055
MD54-19-166397	63-2012	02/05/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	91.9066	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.8495	91.9066
MD54-19-166397	63-2012	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	83.835	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.68488	83.835
MD54-19-166397	63-2012	02/05/2019	Dichloropropane[1,2-]	55.4208	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.1605	55.4208
MD54-19-166397	63-2012	02/05/2019	Butanone[2-]	144.425	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	35.3694	144.425
MD54-19-166397	63-2012	02/05/2019	Trichloroethane[1,1,2-]	65.4317	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.1769	65.4317
MD54-19-166397	63-2012	02/05/2019	Trichloroethene	2792.65	ug/m3		Y	GAS	FD	VOC	EPA:TO15	7.51868	64.4458
MD54-19-166397	63-2012	02/05/2019	Tetrachloroethane[1,1,2,2-]	82.3292	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.6633	82.3292
MD54-19-166397	63-2012	02/05/2019	Hexachlorobutadiene	522.262	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	117.242	522.262
MD54-19-166397	63-2012	02/05/2019	Xylene[1,2-]	52.0707	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.282	52.0707
MD54-19-166397	63-2012	02/05/2019	Dichlorobenzene[1,2-]	72.1073	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.81163	72.1073
MD54-19-166397	63-2012	02/05/2019	Trimethylbenzene[1,2,4-]	58.9523	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	29.4762	58.9523
MD54-19-166397	63-2012	02/05/2019	Isopropylbenzene	58.9523	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	37.3365	58.9523
MD54-19-166397	63-2012	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	52.0707	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.50884	52.0707
MD54-19-166398	63-2010	02/05/2019	Ethylbenzene	42.5284	ug/m3	J	Y	GAS	FB	VOC	EPA:TO15	8.67927	78.1134
MD54-19-166398	63-2010	02/05/2019	Styrene	76.6272	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	9.36555	76.6272
MD54-19-166398	63-2010	02/05/2019	Benzyl Chloride	93.1299	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.5912	93.1299
MD54-19-166398	63-2010	02/05/2019	Dichloropropene[cis-1,3-]	81.645	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	7.71091	81.645
MD54-19-166398	63-2010	02/05/2019	Dichloropropene[trans-1,3-]	81.645	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.5147	81.645
MD54-19-166398	63-2010	02/05/2019	Propylbenzene[1-]	88.4285	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	26.5285	88.4285
MD54-19-166398	63-2010	02/05/2019	Dichlorobenzene[1,4-]	108.161	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.6188	108.161
MD54-19-166398	63-2010	02/05/2019	Dibromoethane[1,2-]	138.216	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.5895	138.216
MD54-19-166398	63-2010	02/05/2019	Butadiene[1,3-]	39.7973	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.5822	39.7973
MD54-19-166398	63-2010	02/05/2019	Chloro-1-propene[3-]	222.067	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	43.7879	222.067
MD54-19-166398	63-2010	02/05/2019	Dichloroethane[1,2-]	72.8088	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.9438	72.8088
MD54-19-166398	63-2010	02/05/2019	Methyl-2-pentanone[4-]	73.6916	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.3759	73.6916
MD54-19-166398	63-2010	02/05/2019	Trimethylbenzene[1,3,5-]	88.4285	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	73.6904	88.4285
MD54-19-166398	63-2010	02/05/2019	Toluene	67.7896	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	9.41522	67.7896
MD54-19-166398	63-2010	02/05/2019	Chlorobenzene	82.8148	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	9.66173	82.8148
MD54-19-166398	63-2010	02/05/2019	Tetrahydrofuran	53.0542	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	10.9056	53.0542
MD54-19-166398	63-2010	02/05/2019	Hexane	63.406	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.4425	63.406
MD54-19-166398	63-2010	02/05/2019	Cyclohexane	61.9198	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	6.87998	61.9198
MD54-19-166398	63-2010	02/05/2019	Trichlorobenzene[1,2,4-]	526.583	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	178	526.583
MD54-19-166398	63-2010	02/05/2019	Dioxane[1,4-]	255.702	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	72.0289	255.702
MD54-19-166398	63-2010	02/05/2019	Chlorodibromomethane	153.24	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	11.9186	153.24
MD54-19-166398	63-2010	02/05/2019	Tetrachloroethene	122.008	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.8786	122.008
MD54-19-166398	63-2010	02/05/2019	n-Heptane	73.7211	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	20.8876	73.7211
MD54-19-166398	63-2010	02/05/2019	Dichloroethene[cis-1,2-]	71.3226	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.2645	71.3226
MD54-19-166398	63-2010	02/05/2019	Dichloroethene[trans-1,2-]	71.3226	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	15.057	71.3226
MD54-19-166398	63-2010	02/05/2019	Methyl tert-Butyl Ether	64.8554	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	6.84585	64.8554

TA-63 Transuranic Waste Facility Soil Vapor Monitoring System
 Sampling and Analysis - Quarter 6

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)
MD54-19-166398	63-2010	02/05/2019	Isooctane	84.0435	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.1541	84.0435
MD54-19-166398	63-2010	02/05/2019	Dichlorobenzene[1,3-]	108.161	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	13.8206	108.161
MD54-19-166398	63-2010	02/05/2019	Carbon Tetrachloride	113.171	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	11.3171	113.171
MD54-19-166398	63-2010	02/05/2019	Hexanone[2-]	290.673	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	98.2555	290.673
MD54-19-166398	63-2010	02/05/2019	Ethyltoluene[4-]	88.4285	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	26.0373	88.4285
MD54-19-166398	63-2010	02/05/2019	Ethanol	133.699	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	82.8557	133.699
MD54-19-166398	63-2010	02/05/2019	Propanol[2-]	174.415	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	49.131	174.415
MD54-19-166398	63-2010	02/05/2019	Acetone	168.553	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	47.4797	168.553
MD54-19-166398	63-2010	02/05/2019	Chloroform	87.8325	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	8.2953	87.8325
MD54-19-166398	63-2010	02/05/2019	Benzene	57.4686	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	7.02394	57.4686
MD54-19-166398	63-2010	02/05/2019	Trichloroethane[1,1,1-]	98.1476	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.4485	98.1476
MD54-19-166398	63-2010	02/05/2019	Bromomethane	275.524	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	46.5674	275.524
MD54-19-166398	63-2010	02/05/2019	Chloromethane	146.526	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	26.8287	146.526
MD54-19-166398	63-2010	02/05/2019	Chloroethane	187.213	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	42.1889	187.213
MD54-19-166398	63-2010	02/05/2019	Vinyl Chloride	45.9822	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	18.6483	45.9822
MD54-19-166398	63-2010	02/05/2019	Methylene Chloride	246.474	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	41.6576	246.474
MD54-19-166398	63-2010	02/05/2019	Carbon Disulfide	220.962	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	31.1214	220.962
MD54-19-166398	63-2010	02/05/2019	Bromoform	185.943	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	13.4292	185.943
MD54-19-166398	63-2010	02/05/2019	Bromodichloromethane	120.514	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.0514	120.514
MD54-19-166398	63-2010	02/05/2019	Dichloroethane[1,1-]	72.8088	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.5393	72.8088
MD54-19-166398	63-2010	02/05/2019	Dichloroethene[1,1-]	71.3226	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	11.0946	71.3226
MD54-19-166398	63-2010	02/05/2019	Trichlorofluoromethane	101.068	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	15.1603	101.068
MD54-19-166398	63-2010	02/05/2019	Dichlorodifluoromethane	88.9582	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	9.88425	88.9582
MD54-19-166398	63-2010	02/05/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	137.86	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	24.5084	137.86
MD54-19-166398	63-2010	02/05/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	125.753	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	10.4794	125.753
MD54-19-166398	63-2010	02/05/2019	Dichloropropane[1,2-]	83.1312	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.317	83.1312
MD54-19-166398	63-2010	02/05/2019	Butanone[2-]	209.269	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	50.1067	209.269
MD54-19-166398	63-2010	02/05/2019	Trichloroethane[1,1,2-]	98.1476	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	20.1748	98.1476
MD54-19-166398	63-2010	02/05/2019	Trichloroethene	96.6688	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	10.741	96.6688
MD54-19-166398	63-2010	02/05/2019	Tetrachloroethane[1,1,2,2-]	123.494	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.1519	123.494
MD54-19-166398	63-2010	02/05/2019	Hexachlorobutadiene	756.747	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	170.535	756.747
MD54-19-166398	63-2010	02/05/2019	Xylene[1,2-]	47.7315	ug/m3	J	N	GAS	FB	VOC	EPA:TO15	16.0551	78.1061
MD54-19-166398	63-2010	02/05/2019	Dichlorobenzene[1,2-]	108.161	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	11.417	108.161
MD54-19-166398	63-2010	02/05/2019	Trimethylbenzene[1,2,4-]	88.4285	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	42.2492	88.4285
MD54-19-166398	63-2010	02/05/2019	Isopropylbenzene	88.4285	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	54.0396	88.4285
MD54-19-166398	63-2010	02/05/2019	Xylene[1,3-]+Xylene[1,4-]	143.194	ug/m3		Y	GAS	FB	VOC	EPA:TO15	9.11238	78.1061

Table 3. Current and Previous
Quarterly Results

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Table 3: Current and Previous Quarter Results

Well	Sample Port Depth (ft)	Analyte/Constituent (as Listed in Permit Tables)	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 5		Quarter 6	
			Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)
VMW-1 63-2009	5	Trichloroethylene	64.4	0.3	31.1	0.2	48.3	0.2	53.7	0.3	43.5	0.2	36.0	0.2
		Toluene	12.4	<0.1										
		Tetrachloroethylene	11.5	<0.1										
		cis-1,2-Dichloroethylene	11.5	<0.1										
		Acetone	16.1	<0.1										
		1,1,1-Trichloroethane	142	<0.1			8.2	<0.1						
		1,1-Dichloroethane	33.6	<0.1										
		1,1-Dichloroethylene	10.3	<0.1										
		Dichlorodifluoromethane	6.9	<0.1										
		Methylene chloride								13.2	<0.1			
VMW-2 63-2010	5	Trichloroethylene	134	0.7	80.6	0.4	129	0.7	85.9	0.4	107	0.6	113	0.6
		Dichlorodifluoromethane	7.9	<0.1										
VMW-3 63-2011	5	Trichloroethylene	69.8	0.4	64.4	0.3	96.7	0.5	59.1	0.3	75.2	0.4	85.9	0.4
		Toluene	8.3	<0.1										
		Acetone							20.9	<0.1				
VMW-4 63-2012	25	Trichloroethylene	3810	2.4	2793	1.8	3437	2.2	2954	1.9	2900	1.8	2900	1.8
		Tetrachloroethylene	49.5	<0.1	34.6	<0.1	34.6	<0.1	36.6	<0.1	43.4	<0.1	39.3	<0.1
		Carbon tetrachloride	49.7	<0.1	35.2	<0.1	48.4	<0.1	41.5	<0.1	35.2	<0.1	46.5	<0.1
		Chloroform	112	0.5	87.8	0.2	107	0.5	107	0.5	102	0.4	92.7	0.4
		Dichlorodifluoromethane	84	<0.1	74.1	<0.1	84.0	<0.1	84.0	<0.1	69.2	<0.1	79.1	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane	17.6	<0.1	13.0	<0.1								
		1,1,1-Trichloroethane	7.1	<0.1										
VMW-4 63-2012	60	Trichloroethylene	8060	8.7	6980	7.5	8590	9.3	8060	8.7	8060	8.7	7520	8.1
		Tetrachloroethylene	81.3	<0.1	74.6	<0.1	88.1	<0.1	81.3	<0.1	88.1	<0.1	88.1	<0.1
		cis-1,2-Dichloroethylene	16.6	<0.1	23.8	<0.1	25.8	<0.1	25.0	<0.1	19.4	<0.1	19.8	<0.1
		Carbon tetrachloride	94.3	<0.1	88.0	<0.1	113	<0.1	107	<0.1	107	<0.1	113	<0.1
		Chloroform	190	0.4	200	0.5	244	0.5	229	0.5	210	0.5	215	0.5
		1,1,1-Trichloroethane	13.1	<0.1	14.2	<0.1	14.2	<0.1	15.3	<0.1	15.3	<0.1		
		Dichlorodifluoromethane	143	<0.1	158	<0.1	148	<0.1	193	<0.1	168	<0.1	168	<0.1

Table 3: Current and Previous Quarter Results

Well	Sample Port Depth (ft)	Analyte/Constituent (as Listed in Permit Tables)	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 5		Quarter 6	
			Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)
		1,1,2-Trichloro-1,2,2-trifluoroethane	25.3	<0.1	28.3	<0.1	29.9	<0.1	32.2	<0.1	36.8	<0.1	26.0	<0.1
		Toluene	7.6	<0.1										
		Acetone	16.1	<0.1										
		Trichlorofluoromethane	6.2	<0.1			6.7	<0.1						
VMW-5 63-2013	25	Trichloroethylene	483	0.3	258	0.2	414	0.3	344	0.2	365	0.2	360	0.2
		Chloroform	35.6	0.2	19.0	<0.1	26.3	0.1	32.2	<0.1	32.2	0.1	28.8	0.1
		1,1,1-Trichloroethane	30.5	<0.1	19.6	<0.1	20.2	<0.1	27.8	<0.1	22.9	<0.1		
		Dichlorodifluoromethane	59.3	<0.1	42.0	<0.1	42.0	<0.1	47.4	<0.1	47.0	<0.1	49.4	<0.1
		Tetrachloroethylene	6.8	<0.1										
		Acetone							15.0	<0.1				
VMW-5 63-2013	60	Trichloroethylene	1340	1.4	1343	1.4	1557	1.7	1504	1.6	1396	1.5	1400	1.5
		Tetrachloroethylene	16.9	<0.1	12.9	<0.1	15.6	<0.1					10.2	<0.1
		Chloroform	15.6	<0.1	18.1	<0.1	22.9	<0.1	19.0	<0.1	22.9	<0.1	22.0	<0.1
		1,1,1-Trichloroethane	44.7	<0.1	47.4	<0.1	47.4	<0.1	60.0	<0.1	50.2	<0.1	42.0	<0.1
		Dichlorodifluoromethane	64.2	<0.1	84.0	<0.1	69.2	<0.1	84.0	<0.1	79.0	<0.1	79.0	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	<0.1	19.9	<0.1						
		Toluene	10.5	<0.1										
		Carbon tetrachloride	13.2	<0.1			10.7	<0.1						
		Acetone	26.1	<0.1										
VMW-5 63-2013 Field Duplicate	25	Trichloroethylene	451	0.3										
		Tetrachloroethylene	8.8	<0.1										
		Chloroform	30.7	0.1										
		1,1,1-Trichloroethane	32.7	<0.1										
		Dichlorodifluoromethane	59.3	<0.1										
VMW-3 63-2011 Field Duplicate	5	Trichloroethylene			45.6	0.2					80.6	0.4		

Table 3: Current and Previous Quarter Results

Well	Sample Port Depth (ft)	Analyte/Constituent (as Listed in Permit Tables)	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 5		Quarter 6	
			Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)
VMW-4 63-2012 Field Duplicate	25	Trichloroethylene					3276	2.1					2790	1.8
		Tetrachloroethylene					32.5	<0.1					34.6	<0.1
		Carbon tetrachloride					56.6	<0.1					49.7	<0.1
		Chloroform					112	0.5					97.6	0.4
		1,1,1-Trichloroethane					12.5	<0.1						
		Dichlorodifluoromethane					74.1	<0.1					79.1	<0.1
VWM-4 63-2012 Field Duplicate	60	Trichloroethylene							8593	9.3				
		Tetrachloroethylene							81.3	<0.1				
		cis-1,2-Dichloroethylene							27.0	<0.1				
		Carbon tetrachloride							113	<0.1				
		Chloroform							249	0.6				
		Dichlorodifluoromethane							188	<0.1				
		1,1,2-Trichloro-1,2,2-trifluoroethane						32.2	<0.1					

Table 4. Statistical Analysis

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Table 4. Statistical Analysis
 TWF Soil Vapor Monitoring
 Trichloroethylene Data Statistics
 Mean and 95% Confidence Range

	VMW-1 (ug/m ³)	VMW-2 (ug/m ³)	VMW-3 (ug/m ³)	VMW-4 25 ft (ug/m ³)	VMW-4 60 ft (ug/m ³)	VMW-5 25 ft (ug/m ³)	VMW-5 60 ft (ug/m ³)
Quarter 1	64.4	134	69.8	3810	8060	483	1340
Quarter 2	31.1	80.6	64.4	2793	6982	258	1343
Quarter 3	48.3	129	96.7	3437	8593	414	1557
Quarter 4	53.7	85.9	59.1	2954	8056	344	1504
Quarter 5	43.5	107	75.2	2900	8056	365	1396
Quarter 6	36.0	113	85.9	2900	7520	360	1400
Mean	46.2	108	75.2	3132	7878	371	1423
Std. Deviation (n-1)	12.1	21.8	14.0	402	555	75	89
2xStd. Dev.	24.2	43.7	28.0	803	1110	150	177
Lower Limit (95%=-2 SD)	22.0	64.3	47.2	2329	6768	221	1246
Upper Limit (95%=+2 SD)	70.4	151.7	103.2	3935	8988	521	1600

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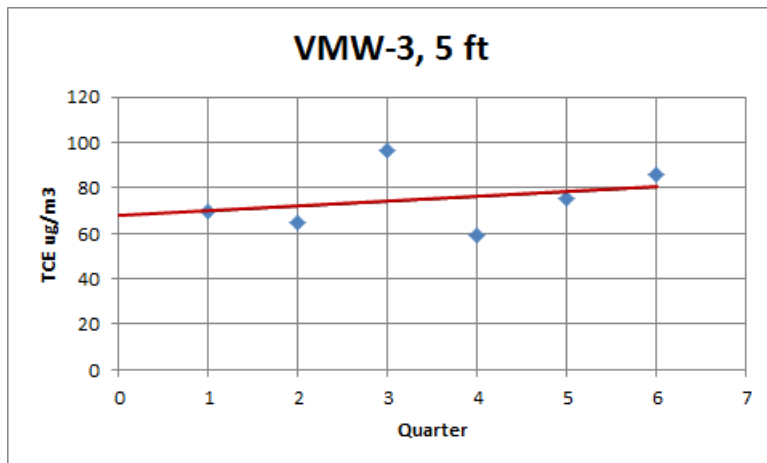
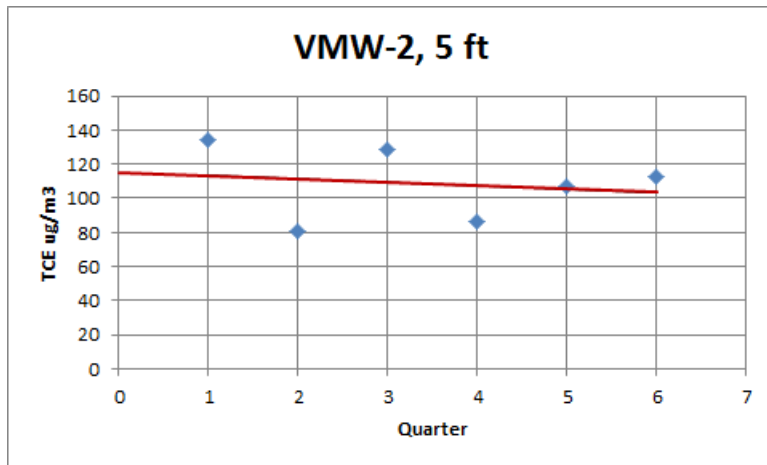
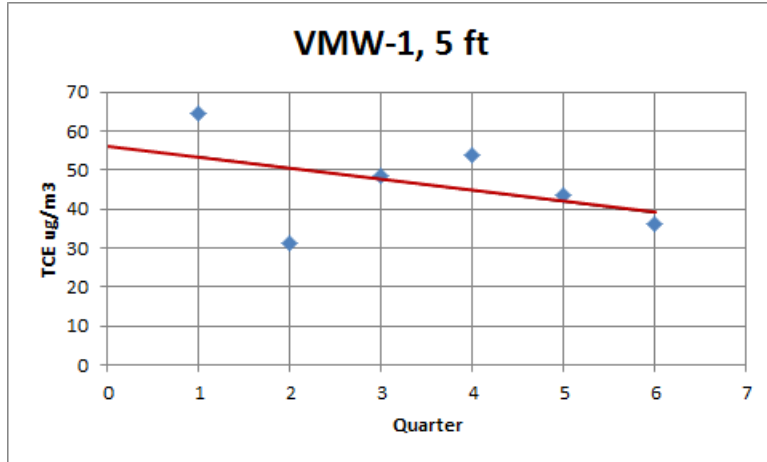


Figure 2. Simple Linear Regression Plots for TA-63 TWF Soil Vapor Monitoring Wells Inside the Permitted Unit

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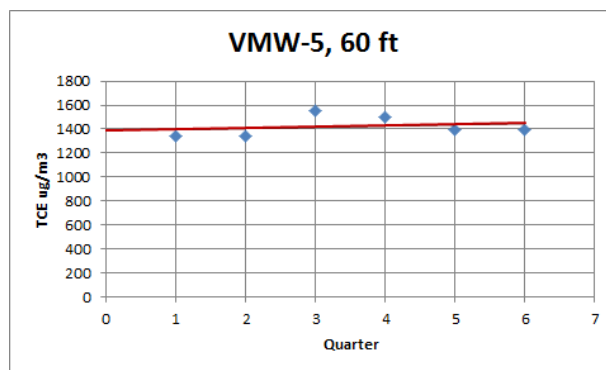
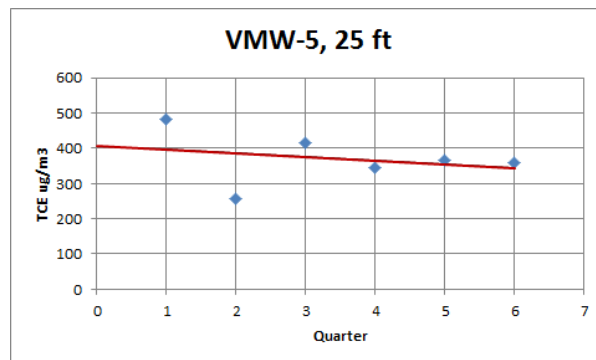
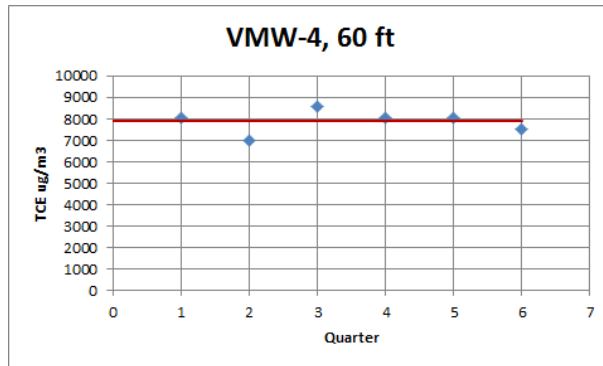
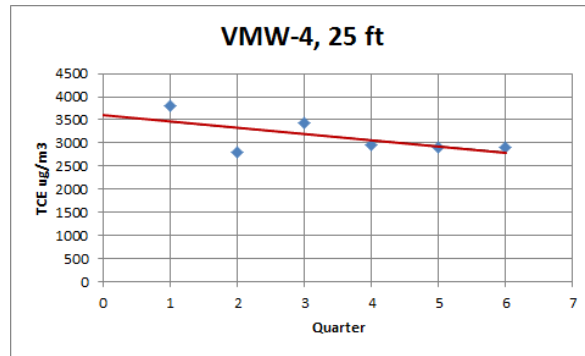


Figure 3. Simple Linear Regression Plots for TA-63 TWF Soil Vapor Monitoring Wells Outside the Permitted Unit

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Document: TA-63 TWF SVM Report–Quarter 6
Date: April, 2019

Sample Collection Logs
at TA-63 Transuranic Waste Facility – Quarter 6

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SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166390

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1026		MEDIA:	GAS	
PRS ID:	TA-63 NA		SAMPLE TECH CODE:	VOST	
LOCATION ID:	KT 2/5/19 63-2009		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5	↓	EXCAVATED:	YES / NO / NA	

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Vmw-1

LOCATION COMMENTS: Summa # NØ 6Ø 1

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 7300 ppm O₂ = 19.8% Voc = 0.0 ppm

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) Katrina Tow	Date/Time 2/5/19 14:01	RECEIVED BY (Printed Name) S. Sherwood	Date/Time 2/5/19 14:01
RELINQUISHED BY (Signature) <i>Katrina Tow</i>		RECEIVED BY (Signature) <i>S. Sherwood</i>	
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time
RELINQUISHED BY (Signature)		RECEIVED BY (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166391

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	215/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1048		MEDIA:	GAS	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2010		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5		SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	7.5	↓	EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: UMW-2

LOCATION COMMENTS: Summa # NØ45Ø

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 5270 ppm O₂ = 20.1% Volc = 0.00 ppm

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) (Signature)	Date/Time 215/19 1401	RECEIVED BY (Printed Name) (Signature)	Date/Time 215/19 14:01
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166392

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1106		MEDIA:	GAS	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2011		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5	↓	EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: *Umw3*

LOCATION COMMENTS: *Summa # NØ 786*

FIELD PARAMETERS:

Sample Time *NA* HH:MM

CH4 = 0% CO2 = 3310 ppm O2 = 20.6% VOC = 0.0 ppm

COLLECTED BY (PRINT): *M. Shendo*

RELINQUISHED BY (Printed Name) <i>Katrina Tow</i>	Date/Time <i>2/5/19</i>	RECEIVED BY (Printed Name) <i>S Shewood</i>	Date/Time <i>2/5/19</i>
RELINQUISHED BY (Signature) <i>[Signature]</i>	<i>1401</i>	RECEIVED BY (Signature) <i>[Signature]</i>	<i>14:01</i>
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time
RELINQUISHED BY (Signature)		RECEIVED BY (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166393

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1144		MEDIA:	GAS	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	24		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	25	↓	EXCAVATED:		YES / NO / <u>NA</u>

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Vmw-4 Part 1

LOCATION COMMENTS: Summa # NØ874

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 9350 ppm O₂ = 19.8% VOC = 0.5 ppm

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) (Signature)	Date/Time 2/5/19 1401	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/5/19 14:01
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166394

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1200		MEDIA:	GAS	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	59		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	60	↓	EXCAVATED:		YES / NO / NA

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW4 Pent 2

LOCATION COMMENTS: Summa N1648

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 11,700 ppm O₂ = 19.6% Vex = 1.7 ppm

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) Katrina Tow	Date/Time 2/5/19 1401	RECEIVED BY (Printed Name) S. Sherwood	Date/Time 2/5/19 1401
RELINQUISHED BY (Printed Name) <i>(Signature)</i>	Date/Time	RECEIVED BY (Printed Name) <i>(Signature)</i>	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166395

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1229		MEDIA:	C-A5	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	24		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	25	↓	EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: UMW part 1

LOCATION COMMENTS: Summa # 00460

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 24,300 ppm O₂ = 18.6% Vol = 0.0 ppm

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) (Signature)	Date/Time 2/5/19 1401	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/5/19 14:01
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166396

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1243		MEDIA:	GAS	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:			FIELD QC TYPE:	REG	
TOP DEPTH:	59		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	60	↓	EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-5 part 2

LOCATION COMMENTS: Summa # N3501

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0%

CO₂ = 18,500 ppm O₂ = 19.0% Vex = 0.2 ppm

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) (Signature)	Katrina Tow <i>[Signature]</i>	Date/Time 2/5/19 1401	RECEIVED BY (Printed Name) (Signature)	S. Sherwood <i>[Signature]</i>	Date/Time 2/5/19 14:01
RELINQUISHED BY (Printed Name) (Signature)		Date/Time	RECEIVED BY (Printed Name) (Signature)		Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166397

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1145	↓	MEDIA:	GAS	↓
PRS ID:	TA-63	↓	SAMPLE TECH CODE:	VOST	↓
LOCATION ID:	UNK	63-2012	FIELD PREP:	NA	↓
LOCATION TYPE:	BH	OK	FIELD QC TYPE:	FD	↓
TOP DEPTH:	24	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	25	↓	EXCAVATED:	YES / NO / <input checked="" type="radio"/> NA	

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: Port 1

LOCATION COMMENTS: Summa # N1748

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0 %

CO₂ = 9350 ppm

O₂ = 19.8% V_{OC} = 0.5 ppm

COLLECTED BY (PRINT): M. Sherwood

RELINQUISHED BY (Printed Name) Katrina Tow	Date/Time 2/5/19 1401	RECEIVED BY (Printed Name) S. Sherwood	Date/Time 2/5/19 14:01
RELINQUISHED BY (Printed Name) <i>(Signature)</i>	Date/Time	RECEIVED BY (Printed Name) <i>(Signature)</i>	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12218

EVENT NAME: FY 19 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-166398

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	2/5/19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1315	↓	MEDIA:	Nitrogen	↓
PRS ID:	TA-63	↓	SAMPLE TECH CODE:	VOST	↓
LOCATION ID:	UNK	63-2010	FIELD PREP:	NA	↓
LOCATION TYPE:	NA	OK	FIELD QC TYPE:	FB	↓
TOP DEPTH:	↓	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	↓	↓	EXCAVATED:	YES / NO / NA	

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
N	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: QC of MD54-19-166391

LOCATION COMMENTS: Summa # N1644

FIELD PARAMETERS:

Sample Time NA HH:MM

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Katrina Tow	Date/Time 2/5/19 1401	RECEIVED BY (Printed Name) S. Sherwood	Date/Time 2/5/19 1401
RELINQUISHED BY (Signature) <i>[Signature]</i>		RECEIVED BY (Signature) <i>[Signature]</i>	
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time
RELINQUISHED BY (Signature)		RECEIVED BY (Signature)	

Document: TA-63 TWF SVM Report-Quarter 6
Date: April, 2019

CERTIFICATION

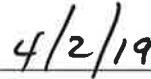
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CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



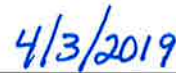
Enrique Torres
Division Leader
Environmental Protection and Compliance Division
Los Alamos National Security, LLC



Date Signed



Karen E. Armijo
Permitting and Compliance Program Manager
Los Alamos Site Office
National Nuclear Security Administration
U.S. Department of Energy



Date Signed

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