Los Alamos NATIONAL LABORATORY EST.1943

ESHID-603352

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Date: DEC 2 7 2018
Symbol: EPC-DO: 18-448
LA-UR: 18-31686
Locates Action No.: NA

Mr. John E. Kieling
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

Subject: **Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 5, 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 fifth 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 fifth 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. The figure is Figure 56 from the Permit. Table 1 is a summary of the analytical results for the fifth 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 five quarters of sampling currently collected for the soil vapor monitoring wells. 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 notification, 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 5, Los Alamos National Laboratory

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The enclosure to this report includes a discussion of the history and analytical findings for the fifth 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. The figure is Figure 56 from the Permit. Table 1 is a summary of the analytical results for the fifth 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 five quarters of sampling currently collected for the soil vapor monitoring wells. 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 5
Los Alamos National Laboratory

EPC-DO-18-448

LAUR-18-31686
Unclassified

Date: DEC 2 7 2018

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TA-63 TRANSURANIC WASTE FACILITY
SOIL VAPOR MONITORING SYSTEM REPORT
QUARTER 5
LOS ALAMOS NATIONAL LABORATORY

I. Introduction

This report describes the fifth 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 contains conditions for hazardous waste management activities at LANL necessary to protect human health and the environment. 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 fifth quarter of waste management operations at TWF has established that soil vapor concentrations at the site do not exceed the soil vapor screening levels established by the Permit.

II. TWF Soil Vapor Monitoring Wells

The TWF is located south-east of the TA-50 Material Disposal Area C, Solid Waste Management Unit 50-009, (MDA-C) at LANL. In response to the Permit, a subsurface vapor monitoring network was installed in 2015 consisting of five vapor monitoring wells in or near the TWF as specified in Permit Section A.6.10. Two of the monitoring wells are located close to the building foundations adjacent to the unit boundary facing MDA-C and the utility corridor on Puye Road as depicted by 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 location VMW-3 (64-2011) on Figure 56. The sampling ports for these wells are located at a 5 foot nominal depth. Two monitoring wells are located between MDA-C and Puye Road, as depicted by locations VMW-4 (63-2012) and VMW-5 (63-2013) on Figure 56. The sampling ports for both these wells are located at 25 and 60 feet.

III. Soil Vapor Sampling

Sampling procedures and VOC analyses of the obtained samples were performed and scheduled in compliance with the conditions contained in the Permit. Sampling of the wells was completed on October 30, 2018 for the fifth quarter of waste management operations at the TA-63 TWF. Analytical results for the sample were compared to the soil gas screening levels (SGSLs) in Section 3.14.3 of the Permit.

The sampling of the new vapor-monitoring wells was performed using the same procedures as the ongoing vapor monitoring conducted at MDA-C. Sampling was performed by extracting formation air through the sand layer and into the stainless steel tubing of the wells. Samples were collected from all sampling ports. All samples for VOC analysis were collected in SUMMA 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

Analytical results for this sampling event are presented in Table 2 and summarized for relevant VOCs above detection limits in Table 1. 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.

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 each well at 8.7% 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 sited in the permitted unit (VMW-1, VMW-2 and VMW-3) have detected concentrations of TCE of less than 1.0% of the SGSL. TCE is the highest concentration VOC detected in this sample event and in previous MDA-C investigations.

Additional VOCs (non-TCE) included in the soil gas monitoring screening level tables in the Permit were detected in the soil vapor monitoring wells. The well locations within the boundary of the TWF permitted unit (VMW-1, VMW-2 and VMW-3) indicated additional detections of other listed VOCs but the concentrations were less than 0.1% of the SGSLs. The well locations north of Puye Road (VMW-4 and VMW-5) also detected additional VOCs matching the constituents of concern in the Permit and the results 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 potential presence of one new VOC constituent (tetrahydrofuran) has been added in the results for the fifth quarter. The laboratory results have included inconclusive results for the compound. These results are subject to the data qualifier “UJ,” which indicates the associated

compound was analyzed for and was not detected above the reported detection limit but is estimated numerically at that value. These results are present in all the samples other than the field blank and may indicate added contamination of the field samples or laboratory anomalies. A literature search indicates tetrahydrofuran is an industrial solvent used for polymerization, polyvinyl chloride chemistry and laboratory use. It 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. The evaluation of this constituent indication will continue with future quarterly samplings.

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). Results for the first quarter of waste management operations at the TWF were presented on December 21, 2017 (LANL, 2017). Results for the second, third, and fourth quarters of waste management operations at the TWF were presented on March 30, June 28, and September 26, 2018 respectively (LANL, 2018a, LANL 2018b, LANL 2018c). In reply to a letter from NMED-HWB dated May 23, 2018 (NMED, 2018), an additional Table 3 is included in this report showing the current and previous quarterly soil gas screening level results at the facility for tracking purposes. The sampling and analysis results reported herein for the fifth 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.

References

EPA, 2004. *User's Guide to Evaluating Subsurface Vapor Intrusion Into Buildings* (SW-A-005690), February 22, 2004. United States Environmental Protection Agency, Washington, DC.

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.

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.

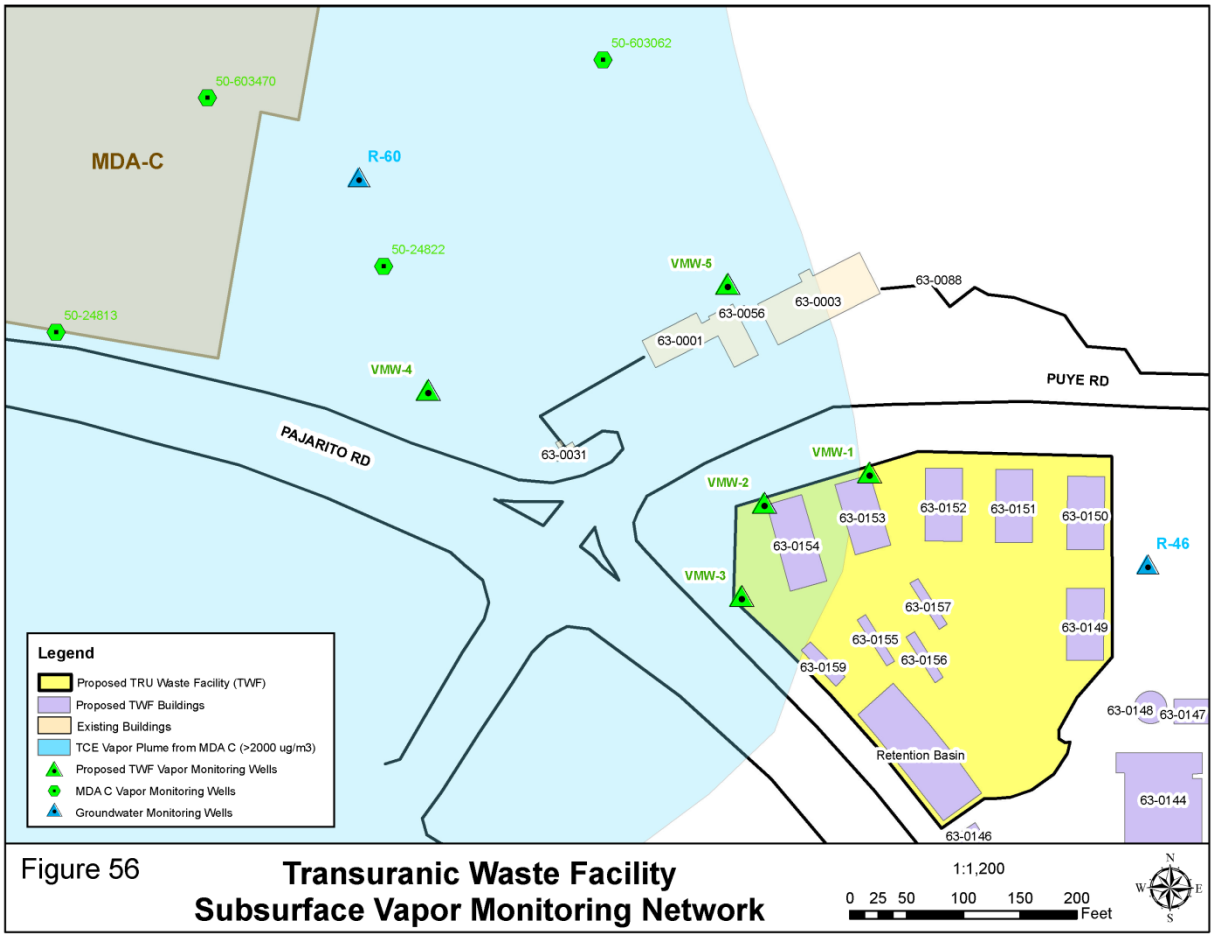

Figure 1

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 5

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Table 1: Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System– Quarter 5

Well	Sample ID	Sample Port Depth (ft)	Analyte/Constituent	Listing in Permit Tables	Result (ug/m3)	EPA Data Qualifier	Report Detection Limit (ug/m3)	Soil-Gas Screening Level (ug/m3)	Percentage Of SGSL (%)
VMW-1 63-2009	MD54-19-163931	5	Tetrahydrofuran	NA	27.7	UJ	27.7	NA	NA
			Trichloroethene	Trichloroethylene	43.5	J	50.5	1.94E+04	0.2
VMW-2 63-2010	MD54-19-163932	5	Tetrahydrofuran	NA	28.9	UJ	28.9	NA	NA
			Trichloroethene	Trichloroethylene	107		52.6	1.94E+04	0.6
VMW-3 63-2011	MD54-19-163933	5	Tetrahydrofuran	NA	27.7	UJ	27.7	NA	NA
			Trichloroethene	Trichloroethylene	75.2		50.5	1.94E+04	0.4
VMW-4 63-2012	MD54-19-163934	25	Tetrahydrofuran	NA	27.1	UJ	27.1	NA	NA
			Tetrachloroethene	Tetrachloroethylene	43.4	J	62.4	2.63E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	35.2	J	57.8	1.06E+05	<0.1
			Chloroform	Chloroform	102		44.9	2.30E+04	0.4
			Dichlorodifluoromethane	Dichlorodifluoromethane	69.2		45.5	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	2900		49.4	1.57E+05	1.8
VMW-4 63-2012	MD54-19-163935	60	Tetrahydrofuran	NA	27.1	UJ	27.1	NA	NA
			Tetrachloroethene	Tetrachloroethylene	88.1		62.4	2.05E+06	<0.1
			Dichloroethene[cis-1,2-]	cis-1,2-Dichloroethylene	19.4	J	36.5	2.91E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	107		57.8	2.13E+05	<0.1
			Chloroform	Chloroform	210		44.9	4.44E+04	0.5
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	15.3	J	50.2	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	168		45.5	5.38E+06	<0.1
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	36.8	J	70.5	1.38E+09	<0.1
			Trichloroethene	Trichloroethylene	8056		49.4	9.27E+04	8.7
VMW-5 63-2013	MD54-19-163396	25	Tetrahydrofuran	NA	29.5	UJ	29.5	NA	NA
			Chloroform	Chloroform	32.2	J	48.8	2.30E+04	0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	22.9	J	54.5	1.16E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	47.0	J	49.4	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	365		53.7	1.57E+05	0.2

Table 1: Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System– Quarter 5

Well	Sample ID	Sample Port Depth (ft)	Analyte/Constituent	Listing in Permit Tables	Result (ug/m3)	EPA Data Qualifier	Report Detection Limit (ug/m3)	Soil-Gas Screening Level (ug/m3)	Percentage Of SGSL (%)
VMW-5 63-2013	MDA-19-163937	60	Tetrahydrofuran	NA	27.7	UJ	27.7	NA	NA
			Chloroform	Chloroform	22.9	J	45.9	4.44E+04	<0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	50.2	J	51.3	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	79.0		46.5	5.38E+06	<0.1
			Trichloroethene	Trichloroethylene	1396		50.5	9.27E+04	1.5
VMW-3 63-2011	MD54-19-163938 Field Duplicate	5	Tetrahydrofuran	NA	28.9	UJ	28.9	NA	NA
			Trichloroethene	Trichloroethylene	80.6		52.6	1.94E+04	0.4
VMW-5 63-2013	MD54-19-163939 Field Blank		ND						

EPA Data Qualifier "J" indicates analytes that are detected but results are estimated as less than the report detection limit.
EPA Data Qualifier "UJ" indicates analytes that are not detected above the report detection limit but the reported quantitation limit is estimated at the report detection limit.
"ND" indicates no VOCs of concern detected.
"NA" indicates the analyte is not included in the LANL Hazardous Waste Facility Permit, Tables 3.14.3.1-3 for soil-gas screening levels or in Table 1, *Screening List of Chemicals* in the "User's Guide to Evaluating Subsurface Vapor Intrusion Into Buildings" (February 22, 2004, United States Environmental Protection Agency, Washington DC).

Table 2. Analytical Results for Soil Vapor Monitoring Wells
at TA-63 Transuranic Waste Facility – Quarter 5

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TA-63 Transuranic Waste Facility Soil Vapor Monitoring System
Sampling and Analysis - Quarter 5

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)
MD54-19-163931	63-2009	10/30/2018	Ethylbenzene	40.7926	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.6227	40.7926
MD54-19-163931	63-2009	10/30/2018	Styrene	40.0164	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0684	40.0164
MD54-19-163931	63-2009	10/30/2018	Benzyl Chloride	48.6345	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.7651	48.6345
MD54-19-163931	63-2009	10/30/2018	Dichloropropene[cis-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.61808	42.6368
MD54-19-163931	63-2009	10/30/2018	Dichloropropene[trans-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	42.6368
MD54-19-163931	63-2009	10/30/2018	Propylbenzene[1-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	46.1793
MD54-19-163931	63-2009	10/30/2018	Dichlorobenzene[1,4-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	56.4841
MD54-19-163931	63-2009	10/30/2018	Dibromoethane[1,2-]	72.1794	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.9645	72.1794
MD54-19-163931	63-2009	10/30/2018	Butadiene[1,3-]	20.783	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.08521	20.783
MD54-19-163931	63-2009	10/30/2018	Chloro-1-propene[3-]	115.725	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2598	115.725
MD54-19-163931	63-2009	10/30/2018	Dichloroethane[1,2-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3258	38.0223
MD54-19-163931	63-2009	10/30/2018	Methyl-2-pentanone[4-]	38.4834	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5169	38.4834
MD54-19-163931	63-2009	10/30/2018	Trimethylbenzene[1,3,5-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2643	46.1793
MD54-19-163931	63-2009	10/30/2018	Toluene	35.4012	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.41522	35.4012
MD54-19-163931	63-2009	10/30/2018	Chlorobenzene	43.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.023	43.2477
MD54-19-163931	63-2009	10/30/2018	Tetrahydrofuran	27.7061	ug/m3	UJ	N	GAS	REG	VOC	EPA:TO15	9.72659	27.7061
MD54-19-163931	63-2009	10/30/2018	Hexane	33.112	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.98835	33.112
MD54-19-163931	63-2009	10/30/2018	Cyclohexane	32.3359	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.56798	32.3359
MD54-19-163931	63-2009	10/30/2018	Trichlorobenzene[1,2,4-]	274.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	148.333	274.416
MD54-19-163931	63-2009	10/30/2018	Dioxane[1,4-]	133.253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0072	133.253
MD54-19-163931	63-2009	10/30/2018	Chlorodibromomethane	80.0252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6213	80.0252
MD54-19-163931	63-2009	10/30/2018	Tetrachloroethene	63.7151	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.0124	63.7151
MD54-19-163931	63-2009	10/30/2018	n-Heptane	38.4988	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6964	38.4988
MD54-19-163931	63-2009	10/30/2018	Dichloroethene[cis-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	37.2462
MD54-19-163931	63-2009	10/30/2018	Dichloroethene[trans-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	37.2462
MD54-19-163931	63-2009	10/30/2018	Methyl tert-Butyl Ether	33.8689	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.84585	33.8689
MD54-19-163931	63-2009	10/30/2018	Isooctane	43.8894	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53672	43.8894
MD54-19-163931	63-2009	10/30/2018	Dichlorobenzene[1,3-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8385	56.4841
MD54-19-163931	63-2009	10/30/2018	Carbon Tetrachloride	59.1006	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.3768	59.1006
MD54-19-163931	63-2009	10/30/2018	Hexanone[2-]	151.477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6041	151.477
MD54-19-163931	63-2009	10/30/2018	Ethyltoluene[4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	46.1793
MD54-19-163931	63-2009	10/30/2018	Ethanol	69.6741	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	54.6094	69.6741
MD54-19-163931	63-2009	10/30/2018	Propanol[2-]	90.8924	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.14138	90.8924
MD54-19-163931	63-2009	10/30/2018	Acetone	87.8374	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1073	87.8374
MD54-19-163931	63-2009	10/30/2018	Chloroform	45.8681	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.6147	45.8681
MD54-19-163931	63-2009	10/30/2018	Benzene	30.0114	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3854	30.0114
MD54-19-163931	63-2009	10/30/2018	Trichloroethane[1,1,1-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.36	51.2549
MD54-19-163931	63-2009	10/30/2018	Bromomethane	143.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.6121	143.583
MD54-19-163931	63-2009	10/30/2018	Chloromethane	76.3587	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.84224	76.3587
MD54-19-163931	63-2009	10/30/2018	Chloroethane	97.5619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8656	97.5619
MD54-19-163931	63-2009	10/30/2018	Vinyl Chloride	24.0129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.64188	24.0129
MD54-19-163931	63-2009	10/30/2018	Methylene Chloride	128.444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.7201	128.444
MD54-19-163931	63-2009	10/30/2018	Carbon Disulfide	115.149	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.29063	115.149
MD54-19-163931	63-2009	10/30/2018	Bromoform	97.1038	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6934	97.1038
MD54-19-163931	63-2009	10/30/2018	Bromodichloromethane	62.9351	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.4162	62.9351
MD54-19-163931	63-2009	10/30/2018	Dichloroethane[1,1-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.08986	38.0223
MD54-19-163931	63-2009	10/30/2018	Dichloroethene[1,1-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.54731	37.2462
MD54-19-163931	63-2009	10/30/2018	Trichlorofluoromethane	52.7802	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1603	52.7802
MD54-19-163931	63-2009	10/30/2018	Dichlorodifluoromethane	46.456	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.3437	46.456
MD54-19-163931	63-2009	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	71.9935	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.4449	71.9935
MD54-19-163931	63-2009	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	65.6708	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	65.6708
MD54-19-163931	63-2009	10/30/2018	Dichloropropane[1,2-]	43.4129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1644	43.4129
MD54-19-163931	63-2009	10/30/2018	Butanone[2-]	109.056	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6108	109.056
MD54-19-163931	63-2009	10/30/2018	Trichloroethane[1,1,2-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0863	51.2549
MD54-19-163931	63-2009	10/30/2018	Trichloroethene	43.5009	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	13.9633	50.4826
MD54-19-163931	63-2009	10/30/2018	Tetrachloroethane[1,1,2,2-]	64.4912	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4658	64.4912
MD54-19-163931	63-2009	10/30/2018	Hexachlorobutadiene	394.361	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	394.361
MD54-19-163931	63-2009	10/30/2018	Xylene[1,2-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	40.7887

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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)
MD54-19-163931	63-2009	10/30/2018	Dichlorobenzene[1,2-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.242	56.4841
MD54-19-163931	63-2009	10/30/2018	Trimethylbenzene[1,2,4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5984	46.1793
MD54-19-163931	63-2009	10/30/2018	Isopropylbenzene	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7905	46.1793
MD54-19-163931	63-2009	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5838	40.7887
MD54-19-163932	63-2010	10/30/2018	Ethylbenzene	42.5284	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4906	42.5284
MD54-19-163932	63-2010	10/30/2018	Styrene	41.7193	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9198	41.7193
MD54-19-163932	63-2010	10/30/2018	Benzyl Chloride	50.704	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7999	50.704
MD54-19-163932	63-2010	10/30/2018	Dichloropropene[cis-1,3-]	44.4512	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	44.4512
MD54-19-163932	63-2010	10/30/2018	Dichloropropene[trans-1,3-]	44.4512	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.52525	44.4512
MD54-19-163932	63-2010	10/30/2018	Propylbenzene[1-]	48.1444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.7206	48.1444
MD54-19-163932	63-2010	10/30/2018	Dichlorobenzene[1,4-]	58.8877	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.4438	58.8877
MD54-19-163932	63-2010	10/30/2018	Dibromoethane[1,2-]	75.2509	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.7324	75.2509
MD54-19-163932	63-2010	10/30/2018	Butadiene[1,3-]	21.6674	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.30631	21.6674
MD54-19-163932	63-2010	10/30/2018	Chloro-1-propene[3-]	121.981	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.5725	121.981
MD54-19-163932	63-2010	10/30/2018	Dichloroethane[1,2-]	39.6403	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1348	39.6403
MD54-19-163932	63-2010	10/30/2018	Methyl-2-pentanone[4-]	40.121	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.3357	40.121
MD54-19-163932	63-2010	10/30/2018	Trimethylbenzene[1,3,5-]	48.1444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7555	48.1444
MD54-19-163932	63-2010	10/30/2018	Toluene	36.9077	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.79183	36.9077
MD54-19-163932	63-2010	10/30/2018	Chlorobenzene	45.0881	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.9432	45.0881
MD54-19-163932	63-2010	10/30/2018	Tetrahydrofuran	28.885	ug/m3	UJ	N	GAS	REG	VOC	EPA:TO15	10.0213	28.885
MD54-19-163932	63-2010	10/30/2018	Hexane	34.521	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3406	34.521
MD54-19-163932	63-2010	10/30/2018	Cyclohexane	33.7119	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.91198	33.7119
MD54-19-163932	63-2010	10/30/2018	Trichlorobenzene[1,2,4-]	289.25	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	148.333	289.25
MD54-19-163932	63-2010	10/30/2018	Dioxane[1,4-]	140.456	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.0877	140.456
MD54-19-163932	63-2010	10/30/2018	Chlorodibromomethane	83.4305	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6213	83.4305
MD54-19-163932	63-2010	10/30/2018	Tetrachloroethene	66.4264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6902	66.4264
MD54-19-163932	63-2010	10/30/2018	n-Heptane	40.137	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.106	40.137
MD54-19-163932	63-2010	10/30/2018	Dichloroethene[cis-1,2-]	38.8312	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0946	38.8312
MD54-19-163932	63-2010	10/30/2018	Dichloroethene[trans-1,2-]	38.8312	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.73602	38.8312
MD54-19-163932	63-2010	10/30/2018	Methyl tert-Butyl Ether	35.3102	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.20616	35.3102
MD54-19-163932	63-2010	10/30/2018	Isooctane	45.757	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.00362	45.757
MD54-19-163932	63-2010	10/30/2018	Dichlorobenzene[1,3-]	58.8877	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.0403	58.8877
MD54-19-163932	63-2010	10/30/2018	Carbon Tetrachloride	61.6155	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.0056	61.6155
MD54-19-163932	63-2010	10/30/2018	Hexanone[2-]	159.665	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.4229	159.665
MD54-19-163932	63-2010	10/30/2018	Ethyltoluene[4-]	48.1444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	48.1444
MD54-19-163932	63-2010	10/30/2018	Ethanol	73.4403	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.3756	73.4403
MD54-19-163932	63-2010	10/30/2018	Propanol[2-]	95.8055	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.38703	95.8055
MD54-19-163932	63-2010	10/30/2018	Acetone	92.5854	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.8195	92.5854
MD54-19-163932	63-2010	10/30/2018	Chloroform	47.8199	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.5906	47.8199
MD54-19-163932	63-2010	10/30/2018	Benzene	31.2885	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.70467	31.2885
MD54-19-163932	63-2010	10/30/2018	Trichloroethane[1,1,1-]	53.4359	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.9053	53.4359
MD54-19-163932	63-2010	10/30/2018	Bromomethane	151.344	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.7762	151.344
MD54-19-163932	63-2010	10/30/2018	Chloromethane	80.4862	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.25499	80.4862
MD54-19-163932	63-2010	10/30/2018	Chloroethane	102.835	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.393	102.835
MD54-19-163932	63-2010	10/30/2018	Vinyl Chloride	25.0348	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.89733	25.0348
MD54-19-163932	63-2010	10/30/2018	Methylene Chloride	135.387	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4144	135.387
MD54-19-163932	63-2010	10/30/2018	Carbon Disulfide	121.373	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.60184	121.373
MD54-19-163932	63-2010	10/30/2018	Bromoform	101.236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.7264	101.236
MD54-19-163932	63-2010	10/30/2018	Bromodichloromethane	65.6132	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.0857	65.6132
MD54-19-163932	63-2010	10/30/2018	Dichloroethane[1,1-]	39.6403	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.49435	39.6403
MD54-19-163932	63-2010	10/30/2018	Dichloroethene[1,1-]	38.8312	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.94355	38.8312
MD54-19-163932	63-2010	10/30/2018	Trichlorofluoromethane	55.0262	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.2833	55.0262
MD54-19-163932	63-2010	10/30/2018	Dichlorodifluoromethane	48.4328	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8379	48.4328
MD54-19-163932	63-2010	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	75.057	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.9766	75.057
MD54-19-163932	63-2010	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	68.4653	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.767	68.4653
MD54-19-163932	63-2010	10/30/2018	Dichloropropane[1,2-]	45.2603	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.6262	45.2603
MD54-19-163932	63-2010	10/30/2018	Butanone[2-]	114.951	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.9056	114.951
MD54-19-163932	63-2010	10/30/2018	Trichloroethane[1,1,2-]	53.4359	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1769	53.4359

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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)
MD54-19-163932	63-2010	10/30/2018	Trichloroethene	107.41	ug/m3		Y	GAS	REG	VOC	EPA:TO15	14.5003	52.6308
MD54-19-163932	63-2010	10/30/2018	Tetrachloroethane[1,1,2,2-]	67.2355	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1519	67.2355
MD54-19-163932	63-2010	10/30/2018	Hexachlorobutadiene	415.678	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	415.678
MD54-19-163932	63-2010	10/30/2018	Xylene[1,2-]	42.5244	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81061	42.5244
MD54-19-163932	63-2010	10/30/2018	Dichlorobenzene[1,2-]	58.8877	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.4438	58.8877
MD54-19-163932	63-2010	10/30/2018	Trimethylbenzene[1,2,4-]	48.1444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.0722	48.1444
MD54-19-163932	63-2010	10/30/2018	Isopropylbenzene	48.1444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2817	48.1444
MD54-19-163932	63-2010	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	42.5244	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0177	42.5244
MD54-19-163933	63-2011	10/30/2018	Ethylbenzene	40.7926	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.6227	40.7926
MD54-19-163933	63-2011	10/30/2018	Styrene	40.0164	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0684	40.0164
MD54-19-163933	63-2011	10/30/2018	Benzyl Chloride	48.6345	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.7651	48.6345
MD54-19-163933	63-2011	10/30/2018	Dichloropropene[cis-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.61808	42.6368
MD54-19-163933	63-2011	10/30/2018	Dichloropropene[trans-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	42.6368
MD54-19-163933	63-2011	10/30/2018	Propylbenzene[1-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	46.1793
MD54-19-163933	63-2011	10/30/2018	Dichlorobenzene[1,4-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	56.4841
MD54-19-163933	63-2011	10/30/2018	Dibromoethane[1,2-]	72.1794	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.9645	72.1794
MD54-19-163933	63-2011	10/30/2018	Butadiene[1,3-]	20.783	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.08521	20.783
MD54-19-163933	63-2011	10/30/2018	Chloro-1-propene[3-]	115.725	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2598	115.725
MD54-19-163933	63-2011	10/30/2018	Dichloroethane[1,2-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3258	38.0223
MD54-19-163933	63-2011	10/30/2018	Methyl-2-pentanone[4-]	38.4834	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5169	38.4834
MD54-19-163933	63-2011	10/30/2018	Trimethylbenzene[1,3,5-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2643	46.1793
MD54-19-163933	63-2011	10/30/2018	Toluene	35.4012	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.41522	35.4012
MD54-19-163933	63-2011	10/30/2018	Chlorobenzene	43.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.023	43.2477
MD54-19-163933	63-2011	10/30/2018	Tetrahydrofuran	27.7061	ug/m3	UJ	N	GAS	REG	VOC	EPA:TO15	9.72659	27.7061
MD54-19-163933	63-2011	10/30/2018	Hexane	33.112	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.98835	33.112
MD54-19-163933	63-2011	10/30/2018	Cyclohexane	32.3359	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.56798	32.3359
MD54-19-163933	63-2011	10/30/2018	Trichlorobenzene[1,2,4-]	274.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	148.333	274.416
MD54-19-163933	63-2011	10/30/2018	Dioxane[1,4-]	133.253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0072	133.253
MD54-19-163933	63-2011	10/30/2018	Chlorodibromomethane	80.0252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6213	80.0252
MD54-19-163933	63-2011	10/30/2018	Tetrachloroethene	63.7151	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.0124	63.7151
MD54-19-163933	63-2011	10/30/2018	n-Heptane	38.4988	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6964	38.4988
MD54-19-163933	63-2011	10/30/2018	Dichloroethene[cis-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	37.2462
MD54-19-163933	63-2011	10/30/2018	Dichloroethene[trans-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	37.2462
MD54-19-163933	63-2011	10/30/2018	Methyl tert-Butyl Ether	33.8689	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.84585	33.8689
MD54-19-163933	63-2011	10/30/2018	Isooctane	43.8894	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53672	43.8894
MD54-19-163933	63-2011	10/30/2018	Dichlorobenzene[1,3-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8385	56.4841
MD54-19-163933	63-2011	10/30/2018	Carbon Tetrachloride	59.1006	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.3768	59.1006
MD54-19-163933	63-2011	10/30/2018	Hexanone[2-]	151.477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6041	151.477
MD54-19-163933	63-2011	10/30/2018	Ethyltoluene[4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	46.1793
MD54-19-163933	63-2011	10/30/2018	Ethanol	69.6741	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	54.6094	69.6741
MD54-19-163933	63-2011	10/30/2018	Propanol[2-]	90.8924	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.14138	90.8924
MD54-19-163933	63-2011	10/30/2018	Acetone	87.8374	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1073	87.8374
MD54-19-163933	63-2011	10/30/2018	Chloroform	45.8681	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.6147	45.8681
MD54-19-163933	63-2011	10/30/2018	Benzene	30.0114	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3854	30.0114
MD54-19-163933	63-2011	10/30/2018	Trichloroethane[1,1,1-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.36	51.2549
MD54-19-163933	63-2011	10/30/2018	Bromomethane	143.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.6121	143.583
MD54-19-163933	63-2011	10/30/2018	Chloromethane	76.3587	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.84224	76.3587
MD54-19-163933	63-2011	10/30/2018	Chloroethane	97.5619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8656	97.5619
MD54-19-163933	63-2011	10/30/2018	Vinyl Chloride	24.0129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.64188	24.0129
MD54-19-163933	63-2011	10/30/2018	Methylene Chloride	128.444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.7201	128.444
MD54-19-163933	63-2011	10/30/2018	Carbon Disulfide	115.149	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.29063	115.149
MD54-19-163933	63-2011	10/30/2018	Bromoform	97.1038	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6934	97.1038
MD54-19-163933	63-2011	10/30/2018	Bromodichloromethane	62.9351	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.4162	62.9351
MD54-19-163933	63-2011	10/30/2018	Dichloroethane[1,1-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.08986	38.0223
MD54-19-163933	63-2011	10/30/2018	Dichloroethene[1,1-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.54731	37.2462
MD54-19-163933	63-2011	10/30/2018	Trichlorofluoromethane	52.7802	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1603	52.7802
MD54-19-163933	63-2011	10/30/2018	Dichlorodifluoromethane	46.456	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.3437	46.456
MD54-19-163933	63-2011	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	71.9935	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.4449	71.9935

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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)
MD54-19-163933	63-2011	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	65.6708	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	65.6708
MD54-19-163933	63-2011	10/30/2018	Dichloropropane[1,2-]	43.4129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1644	43.4129
MD54-19-163933	63-2011	10/30/2018	Butanone[2-]	109.056	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6108	109.056
MD54-19-163933	63-2011	10/30/2018	Trichloroethane[1,1,2-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0863	51.2549
MD54-19-163933	63-2011	10/30/2018	Trichloroethene	75.1868	ug/m3		Y	GAS	REG	VOC	EPA:TO15	13.9633	50.4826
MD54-19-163933	63-2011	10/30/2018	Tetrachloroethane[1,1,2,2-]	64.4912	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4658	64.4912
MD54-19-163933	63-2011	10/30/2018	Hexachlorobutadiene	394.361	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	394.361
MD54-19-163933	63-2011	10/30/2018	Xylene[1,2-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	40.7887
MD54-19-163933	63-2011	10/30/2018	Dichlorobenzene[1,2-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.242	56.4841
MD54-19-163933	63-2011	10/30/2018	Trimethylbenzene[1,2,4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5984	46.1793
MD54-19-163933	63-2011	10/30/2018	Isopropylbenzene	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7905	46.1793
MD54-19-163933	63-2011	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5838	40.7887
MD54-19-163934	63-2012	10/30/2018	Ethylbenzene	39.9246	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1887	39.9246
MD54-19-163934	63-2012	10/30/2018	Styrene	39.165	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0684	39.165
MD54-19-163934	63-2012	10/30/2018	Benzyl Chloride	47.5997	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.2477	47.5997
MD54-19-163934	63-2012	10/30/2018	Dichloropropene[cis-1,3-]	41.7297	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.1645	41.7297
MD54-19-163934	63-2012	10/30/2018	Dichloropropene[trans-1,3-]	41.7297	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	41.7297
MD54-19-163934	63-2012	10/30/2018	Propylbenzene[1-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	45.1968
MD54-19-163934	63-2012	10/30/2018	Dichlorobenzene[1,4-]	55.2823	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	55.2823
MD54-19-163934	63-2012	10/30/2018	Dibromoethane[1,2-]	70.6437	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.1967	70.6437
MD54-19-163934	63-2012	10/30/2018	Butadiene[1,3-]	20.3408	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.86412	20.3408
MD54-19-163934	63-2012	10/30/2018	Chloro-1-propene[3-]	115.725	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.947	115.725
MD54-19-163934	63-2012	10/30/2018	Dichloroethane[1,2-]	37.2134	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3258	37.2134
MD54-19-163934	63-2012	10/30/2018	Methyl-2-pentanone[4-]	37.6646	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6981	37.6646
MD54-19-163934	63-2012	10/30/2018	Trimethylbenzene[1,3,5-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	45.1968
MD54-19-163934	63-2012	10/30/2018	Toluene	34.648	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.03862	34.648
MD54-19-163934	63-2012	10/30/2018	Chlorobenzene	42.3276	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.563	42.3276
MD54-19-163934	63-2012	10/30/2018	Tetrahydrofuran	27.1166	ug/m3	UJ	N	GAS	REG	VOC	EPA:TO15	9.43185	27.1166
MD54-19-163934	63-2012	10/30/2018	Hexane	32.4075	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.98835	32.4075
MD54-19-163934	63-2012	10/30/2018	Cyclohexane	31.6479	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.22398	31.6479
MD54-19-163934	63-2012	10/30/2018	Trichlorobenzene[1,2,4-]	274.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	140.917	274.416
MD54-19-163934	63-2012	10/30/2018	Dioxane[1,4-]	133.253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6471	133.253
MD54-19-163934	63-2012	10/30/2018	Chlorodibromomethane	78.3225	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.77	78.3225
MD54-19-163934	63-2012	10/30/2018	Tetrachloroethene	43.3805	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	20.3346	62.3595
MD54-19-163934	63-2012	10/30/2018	n-Heptane	37.6797	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2868	37.6797
MD54-19-163934	63-2012	10/30/2018	Dichloroethene[cis-1,2-]	36.4538	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	36.4538
MD54-19-163934	63-2012	10/30/2018	Dichloroethene[trans-1,2-]	36.4538	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	36.4538
MD54-19-163934	63-2012	10/30/2018	Methyl tert-Butyl Ether	33.1483	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.84585	33.1483
MD54-19-163934	63-2012	10/30/2018	Isooctane	42.9556	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53672	42.9556
MD54-19-163934	63-2012	10/30/2018	Dichlorobenzene[1,3-]	55.2823	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.2376	55.2823
MD54-19-163934	63-2012	10/30/2018	Carbon Tetrachloride	35.2089	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	20.7481	57.8432
MD54-19-163934	63-2012	10/30/2018	Hexanone[2-]	151.477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1947	151.477
MD54-19-163934	63-2012	10/30/2018	Ethyltoluene[4-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7555	45.1968
MD54-19-163934	63-2012	10/30/2018	Ethanol	69.6741	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	54.6094	69.6741
MD54-19-163934	63-2012	10/30/2018	Propanol[2-]	90.8924	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.14138	90.8924
MD54-19-163934	63-2012	10/30/2018	Acetone	87.8374	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8699	87.8374
MD54-19-163934	63-2012	10/30/2018	Chloroform	102.471	ug/m3		Y	GAS	REG	VOC	EPA:TO15	15.1267	44.8922
MD54-19-163934	63-2012	10/30/2018	Benzene	29.3728	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3854	29.3728
MD54-19-163934	63-2012	10/30/2018	Trichloroethane[1,1,1-]	50.1643	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.36	50.1643
MD54-19-163934	63-2012	10/30/2018	Bromomethane	143.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.8359	143.583
MD54-19-163934	63-2012	10/30/2018	Chloromethane	76.3587	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.84224	76.3587
MD54-19-163934	63-2012	10/30/2018	Chloroethane	97.5619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.602	97.5619
MD54-19-163934	63-2012	10/30/2018	Vinyl Chloride	23.502	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.38642	23.502
MD54-19-163934	63-2012	10/30/2018	Methylene Chloride	128.444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.7201	128.444
MD54-19-163934	63-2012	10/30/2018	Carbon Disulfide	115.149	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.29063	115.149
MD54-19-163934	63-2012	10/30/2018	Bromoform	95.0377	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.6604	95.0377
MD54-19-163934	63-2012	10/30/2018	Bromodichloromethane	61.5961	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.7466	61.5961
MD54-19-163934	63-2012	10/30/2018	Dichloroethane[1,1-]	37.2134	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.08986	37.2134

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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)
MD54-19-163934	63-2012	10/30/2018	Dichloroethene[1,1-]	36.4538	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.54731	36.4538
MD54-19-163934	63-2012	10/30/2018	Trichlorofluoromethane	51.6572	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1603	51.6572
MD54-19-163934	63-2012	10/30/2018	Dichlorodifluoromethane	69.1897	ug/m3		Y	GAS	REG	VOC	EPA:TO15	12.8495	45.4675
MD54-19-163934	63-2012	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	70.4617	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.4449	70.4617
MD54-19-163934	63-2012	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	64.2735	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	64.2735
MD54-19-163934	63-2012	10/30/2018	Dichloropropane[1,2-]	42.4893	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.7026	42.4893
MD54-19-163934	63-2012	10/30/2018	Butanone[2-]	109.056	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3161	109.056
MD54-19-163934	63-2012	10/30/2018	Trichloroethane[1,1,2-]	50.1643	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0863	50.1643
MD54-19-163934	63-2012	10/30/2018	Trichloroethene	2900.06	ug/m3		Y	GAS	REG	VOC	EPA:TO15	13.4262	49.4085
MD54-19-163934	63-2012	10/30/2018	Tetrachloroethane[1,1,2,2-]	63.1191	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4658	63.1191
MD54-19-163934	63-2012	10/30/2018	Hexachlorobutadiene	394.361	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	394.361
MD54-19-163934	63-2012	10/30/2018	Xylene[1,2-]	39.9209	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	39.9209
MD54-19-163934	63-2012	10/30/2018	Dichlorobenzene[1,2-]	55.2823	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	55.2823
MD54-19-163934	63-2012	10/30/2018	Trimethylbenzene[1,2,4-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5984	45.1968
MD54-19-163934	63-2012	10/30/2018	Isopropylbenzene	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2992	45.1968
MD54-19-163934	63-2012	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	39.9209	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1498	39.9209
MD54-19-163935	63-2012	10/30/2018	Ethylbenzene	39.9246	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1887	39.9246
MD54-19-163935	63-2012	10/30/2018	Styrene	39.165	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0684	39.165
MD54-19-163935	63-2012	10/30/2018	Benzyl Chloride	47.5997	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.2477	47.5997
MD54-19-163935	63-2012	10/30/2018	Dichloropropene[cis-1,3-]	41.7297	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.1645	41.7297
MD54-19-163935	63-2012	10/30/2018	Dichloropropene[trans-1,3-]	41.7297	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	41.7297
MD54-19-163935	63-2012	10/30/2018	Propylbenzene[1-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	45.1968
MD54-19-163935	63-2012	10/30/2018	Dichlorobenzene[1,4-]	55.2823	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	55.2823
MD54-19-163935	63-2012	10/30/2018	Dibromoethane[1,2-]	70.6437	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.1967	70.6437
MD54-19-163935	63-2012	10/30/2018	Butadiene[1,3-]	20.3408	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.86412	20.3408
MD54-19-163935	63-2012	10/30/2018	Chloro-1-propene[3-]	115.725	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.947	115.725
MD54-19-163935	63-2012	10/30/2018	Dichloroethane[1,2-]	37.2134	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3258	37.2134
MD54-19-163935	63-2012	10/30/2018	Methyl-2-pentanone[4-]	37.6646	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6981	37.6646
MD54-19-163935	63-2012	10/30/2018	Trimethylbenzene[1,3,5-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	45.1968
MD54-19-163935	63-2012	10/30/2018	Toluene	34.648	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.03862	34.648
MD54-19-163935	63-2012	10/30/2018	Chlorobenzene	42.3276	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.563	42.3276
MD54-19-163935	63-2012	10/30/2018	Tetrahydrofuran	27.1166	ug/m3	UJ	N	GAS	REG	VOC	EPA:TO15	9.43185	27.1166
MD54-19-163935	63-2012	10/30/2018	Hexane	32.4075	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.98835	32.4075
MD54-19-163935	63-2012	10/30/2018	Cyclohexane	31.6479	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.22398	31.6479
MD54-19-163935	63-2012	10/30/2018	Trichlorobenzene[1,2,4-]	274.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	140.917	274.416
MD54-19-163935	63-2012	10/30/2018	Dioxane[1,4-]	133.253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6471	133.253
MD54-19-163935	63-2012	10/30/2018	Chlorodibromomethane	78.3225	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.77	78.3225
MD54-19-163935	63-2012	10/30/2018	Tetrachloroethene	88.1166	ug/m3		Y	GAS	REG	VOC	EPA:TO15	20.3346	62.3595
MD54-19-163935	63-2012	10/30/2018	n-Heptane	37.6797	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2868	37.6797
MD54-19-163935	63-2012	10/30/2018	Dichloroethene[cis-1,2-]	19.4156	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	10.3021	36.4538
MD54-19-163935	63-2012	10/30/2018	Dichloroethene[trans-1,2-]	36.4538	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	36.4538
MD54-19-163935	63-2012	10/30/2018	Methyl tert-Butyl Ether	33.1483	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.84585	33.1483
MD54-19-163935	63-2012	10/30/2018	Isooctane	42.9556	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53672	42.9556
MD54-19-163935	63-2012	10/30/2018	Dichlorobenzene[1,3-]	55.2823	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.2376	55.2823
MD54-19-163935	63-2012	10/30/2018	Carbon Tetrachloride	106.884	ug/m3		Y	GAS	REG	VOC	EPA:TO15	20.7481	57.8432
MD54-19-163935	63-2012	10/30/2018	Hexanone[2-]	151.477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1947	151.477
MD54-19-163935	63-2012	10/30/2018	Ethyltoluene[4-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7555	45.1968
MD54-19-163935	63-2012	10/30/2018	Ethanol	69.6741	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	54.6094	69.6741
MD54-19-163935	63-2012	10/30/2018	Propanol[2-]	90.8924	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.14138	90.8924
MD54-19-163935	63-2012	10/30/2018	Acetone	87.8374	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8699	87.8374
MD54-19-163935	63-2012	10/30/2018	Chloroform	209.822	ug/m3		Y	GAS	REG	VOC	EPA:TO15	15.1267	44.8922
MD54-19-163935	63-2012	10/30/2018	Benzene	29.3728	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3854	29.3728
MD54-19-163935	63-2012	10/30/2018	Trichloroethane[1,1,1-]	15.2674	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	10.36	50.1643
MD54-19-163935	63-2012	10/30/2018	Bromomethane	143.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.8359	143.583
MD54-19-163935	63-2012	10/30/2018	Chloromethane	76.3587	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.84224	76.3587
MD54-19-163935	63-2012	10/30/2018	Chloroethane	97.5619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.602	97.5619
MD54-19-163935	63-2012	10/30/2018	Vinyl Chloride	23.502	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.38642	23.502
MD54-19-163935	63-2012	10/30/2018	Methylene Chloride	128.444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.7201	128.444

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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)
MD54-19-163935	63-2012	10/30/2018	Carbon Disulfide	115.149	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.29063	115.149
MD54-19-163935	63-2012	10/30/2018	Bromoform	95.0377	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.6604	95.0377
MD54-19-163935	63-2012	10/30/2018	Bromodichloromethane	61.5961	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.7466	61.5961
MD54-19-163935	63-2012	10/30/2018	Dichloroethane[1,1-]	37.2134	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.08986	37.2134
MD54-19-163935	63-2012	10/30/2018	Dichloroethene[1,1-]	36.4538	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.54731	36.4538
MD54-19-163935	63-2012	10/30/2018	Trichlorofluoromethane	51.6572	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1603	51.6572
MD54-19-163935	63-2012	10/30/2018	Dichlorodifluoromethane	168.032	ug/m3		Y	GAS	REG	VOC	EPA:TO15	12.8495	45.4675
MD54-19-163935	63-2012	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	36.7626	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	21.4449	70.4617
MD54-19-163935	63-2012	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	64.2735	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	64.2735
MD54-19-163935	63-2012	10/30/2018	Dichloropropane[1,2-]	42.4893	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.7026	42.4893
MD54-19-163935	63-2012	10/30/2018	Butanone[2-]	109.056	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3161	109.056
MD54-19-163935	63-2012	10/30/2018	Trichloroethane[1,1,2-]	50.1643	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0863	50.1643
MD54-19-163935	63-2012	10/30/2018	Trichloroethene	8055.73	ug/m3		Y	GAS	REG	VOC	EPA:TO15	13.4262	49.4085
MD54-19-163935	63-2012	10/30/2018	Tetrachloroethane[1,1,2,2-]	63.1191	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4658	63.1191
MD54-19-163935	63-2012	10/30/2018	Hexachlorobutadiene	394.361	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	394.361
MD54-19-163935	63-2012	10/30/2018	Xylene[1,2-]	39.9209	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	39.9209
MD54-19-163935	63-2012	10/30/2018	Dichlorobenzene[1,2-]	55.2823	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	55.2823
MD54-19-163935	63-2012	10/30/2018	Trimethylbenzene[1,2,4-]	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5984	45.1968
MD54-19-163935	63-2012	10/30/2018	Isopropylbenzene	45.1968	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2992	45.1968
MD54-19-163935	63-2012	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	39.9209	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1498	39.9209
MD54-19-163936	63-2013	10/30/2018	Ethylbenzene	43.3963	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4906	43.3963
MD54-19-163936	63-2013	10/30/2018	Styrene	42.5707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9198	42.5707
MD54-19-163936	63-2013	10/30/2018	Benzyl Chloride	51.7388	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.3172	51.7388
MD54-19-163936	63-2013	10/30/2018	Dichloropropene[cis-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	45.3583
MD54-19-163936	63-2013	10/30/2018	Dichloropropene[trans-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.97883	45.3583
MD54-19-163936	63-2013	10/30/2018	Propylbenzene[1-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.2119	49.1269
MD54-19-163936	63-2013	10/30/2018	Dichlorobenzene[1,4-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.0447	60.0895
MD54-19-163936	63-2013	10/30/2018	Dibromoethane[1,2-]	76.7866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.5003	76.7866
MD54-19-163936	63-2013	10/30/2018	Butadiene[1,3-]	22.1096	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.5274	22.1096
MD54-19-163936	63-2013	10/30/2018	Chloro-1-propene[3-]	125.108	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8853	125.108
MD54-19-163936	63-2013	10/30/2018	Dichloroethane[1,2-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1348	40.4493
MD54-19-163936	63-2013	10/30/2018	Methyl-2-pentanone[4-]	40.9398	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.1545	40.9398
MD54-19-163936	63-2013	10/30/2018	Trimethylbenzene[1,3,5-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	49.1269
MD54-19-163936	63-2013	10/30/2018	Toluene	37.6609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.79183	37.6609
MD54-19-163936	63-2013	10/30/2018	Chlorobenzene	46.0082	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.4033	46.0082
MD54-19-163936	63-2013	10/30/2018	Tetrahydrofuran	29.4745	ug/m3	UJ	N	GAS	REG	VOC	EPA:TO15	10.3161	29.4745
MD54-19-163936	63-2013	10/30/2018	Hexane	35.2256	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.69286	35.2256
MD54-19-163936	63-2013	10/30/2018	Cyclohexane	34.3999	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.25598	34.3999
MD54-19-163936	63-2013	10/30/2018	Trichlorobenzene[1,2,4-]	296.666	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	155.75	296.666
MD54-19-163936	63-2013	10/30/2018	Dioxane[1,4-]	144.058	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.4478	144.058
MD54-19-163936	63-2013	10/30/2018	Chlorodibromomethane	85.1332	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4726	85.1332
MD54-19-163936	63-2013	10/30/2018	Tetrachloroethene	67.782	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.3681	67.782
MD54-19-163936	63-2013	10/30/2018	n-Heptane	40.9561	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.5155	40.9561
MD54-19-163936	63-2013	10/30/2018	Dichloroethene[cis-1,2-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0946	39.6236
MD54-19-163936	63-2013	10/30/2018	Dichloroethene[trans-1,2-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.73602	39.6236
MD54-19-163936	63-2013	10/30/2018	Methyl tert-Butyl Ether	36.0308	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.20616	36.0308
MD54-19-163936	63-2013	10/30/2018	Isooctane	46.6908	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.47053	46.6908
MD54-19-163936	63-2013	10/30/2018	Dichlorobenzene[1,3-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	60.0895
MD54-19-163936	63-2013	10/30/2018	Carbon Tetrachloride	62.873	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.6343	62.873
MD54-19-163936	63-2013	10/30/2018	Hexanone[2-]	163.759	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.8323	163.759
MD54-19-163936	63-2013	10/30/2018	Ethyltoluene[4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2294	49.1269
MD54-19-163936	63-2013	10/30/2018	Ethanol	75.3233	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	60.2587	75.3233
MD54-19-163936	63-2013	10/30/2018	Propanol[2-]	98.2621	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.63269	98.2621
MD54-19-163936	63-2013	10/30/2018	Acetone	94.9594	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0569	94.9594
MD54-19-163936	63-2013	10/30/2018	Chloroform	32.2053	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	16.5906	48.7959
MD54-19-163936	63-2013	10/30/2018	Benzene	31.927	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.02394	31.927
MD54-19-163936	63-2013	10/30/2018	Trichloroethane[1,1,1-]	22.9011	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	11.4506	54.5264
MD54-19-163936	63-2013	10/30/2018	Bromomethane	155.225	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.1643	155.225

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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)
MD54-19-163936	63-2013	10/30/2018	Chloromethane	82.5499	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.46137	82.5499
MD54-19-163936	63-2013	10/30/2018	Chloroethane	105.472	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.9204	105.472
MD54-19-163936	63-2013	10/30/2018	Vinyl Chloride	25.5457	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.15279	25.5457
MD54-19-163936	63-2013	10/30/2018	Methylene Chloride	138.859	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4144	138.859
MD54-19-163936	63-2013	10/30/2018	Carbon Disulfide	124.485	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.91306	124.485
MD54-19-163936	63-2013	10/30/2018	Bromoform	103.302	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.7264	103.302
MD54-19-163936	63-2013	10/30/2018	Bromodichloromethane	66.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.7552	66.9523
MD54-19-163936	63-2013	10/30/2018	Dichloroethane[1,1-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	40.4493
MD54-19-163936	63-2013	10/30/2018	Dichloroethene[1,1-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.94355	39.6236
MD54-19-163936	63-2013	10/30/2018	Trichlorofluoromethane	56.1492	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8447	56.1492
MD54-19-163936	63-2013	10/30/2018	Dichlorodifluoromethane	46.9502	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	14.3322	49.4212
MD54-19-163936	63-2013	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	76.5888	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.9766	76.5888
MD54-19-163936	63-2013	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	69.8625	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.4656	69.8625
MD54-19-163936	63-2013	10/30/2018	Dichloropropane[1,2-]	46.184	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.0881	46.184
MD54-19-163936	63-2013	10/30/2018	Butanone[2-]	117.898	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2003	117.898
MD54-19-163936	63-2013	10/30/2018	Trichloroethane[1,1,2-]	54.5264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1769	54.5264
MD54-19-163936	63-2013	10/30/2018	Trichloroethene	365.193	ug/m3		Y	GAS	REG	VOC	EPA:TO15	15.0374	53.7049
MD54-19-163936	63-2013	10/30/2018	Tetrachloroethane[1,1,2,2-]	68.6077	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.838	68.6077
MD54-19-163936	63-2013	10/30/2018	Hexachlorobutadiene	426.336	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	138.559	426.336
MD54-19-163936	63-2013	10/30/2018	Xylene[1,2-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81061	43.3923
MD54-19-163936	63-2013	10/30/2018	Dichlorobenzene[1,2-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.0447	60.0895
MD54-19-163936	63-2013	10/30/2018	Trimethylbenzene[1,2,4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.5635	49.1269
MD54-19-163936	63-2013	10/30/2018	Isopropylbenzene	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	49.1269
MD54-19-163936	63-2013	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.4516	43.3923
MD54-19-163937	63-2013	10/30/2018	Ethylbenzene	40.7926	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.6227	40.7926
MD54-19-163937	63-2013	10/30/2018	Styrene	40.0164	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0684	40.0164
MD54-19-163937	63-2013	10/30/2018	Benzyl Chloride	48.6345	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.7651	48.6345
MD54-19-163937	63-2013	10/30/2018	Dichloropropene[cis-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.61808	42.6368
MD54-19-163937	63-2013	10/30/2018	Dichloropropene[trans-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	42.6368
MD54-19-163937	63-2013	10/30/2018	Propylbenzene[1-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	46.1793
MD54-19-163937	63-2013	10/30/2018	Dichlorobenzene[1,4-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.6411	56.4841
MD54-19-163937	63-2013	10/30/2018	Dibromoethane[1,2-]	72.1794	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.9645	72.1794
MD54-19-163937	63-2013	10/30/2018	Butadiene[1,3-]	20.783	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.08521	20.783
MD54-19-163937	63-2013	10/30/2018	Chloro-1-propene[3-]	115.725	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2598	115.725
MD54-19-163937	63-2013	10/30/2018	Dichloroethane[1,2-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3258	38.0223
MD54-19-163937	63-2013	10/30/2018	Methyl-2-pentanone[4-]	38.4834	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5169	38.4834
MD54-19-163937	63-2013	10/30/2018	Trimethylbenzene[1,3,5-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2643	46.1793
MD54-19-163937	63-2013	10/30/2018	Toluene	35.4012	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.41522	35.4012
MD54-19-163937	63-2013	10/30/2018	Chlorobenzene	43.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.023	43.2477
MD54-19-163937	63-2013	10/30/2018	Tetrahydrofuran	27.7061	ug/m3	UJ	N	GAS	REG	VOC	EPA:TO15	9.72659	27.7061
MD54-19-163937	63-2013	10/30/2018	Hexane	33.112	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.98835	33.112
MD54-19-163937	63-2013	10/30/2018	Cyclohexane	32.3359	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.56798	32.3359
MD54-19-163937	63-2013	10/30/2018	Trichlorobenzene[1,2,4-]	274.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	148.333	274.416
MD54-19-163937	63-2013	10/30/2018	Dioxane[1,4-]	133.253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0072	133.253
MD54-19-163937	63-2013	10/30/2018	Chlorodibromomethane	80.0252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6213	80.0252
MD54-19-163937	63-2013	10/30/2018	Tetrachloroethene	63.7151	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.0124	63.7151
MD54-19-163937	63-2013	10/30/2018	n-Heptane	38.4988	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6964	38.4988
MD54-19-163937	63-2013	10/30/2018	Dichloroethene[cis-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	37.2462
MD54-19-163937	63-2013	10/30/2018	Dichloroethene[trans-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	37.2462
MD54-19-163937	63-2013	10/30/2018	Methyl tert-Butyl Ether	33.8689	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.84585	33.8689
MD54-19-163937	63-2013	10/30/2018	Isooctane	43.8894	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53672	43.8894
MD54-19-163937	63-2013	10/30/2018	Dichlorobenzene[1,3-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8385	56.4841
MD54-19-163937	63-2013	10/30/2018	Carbon Tetrachloride	59.1006	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.3768	59.1006
MD54-19-163937	63-2013	10/30/2018	Hexanone[2-]	151.477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6041	151.477
MD54-19-163937	63-2013	10/30/2018	Ethyltoluene[4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	46.1793
MD54-19-163937	63-2013	10/30/2018	Ethanol	69.6741	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	54.6094	69.6741
MD54-19-163937	63-2013	10/30/2018	Propanol[2-]	90.8924	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.14138	90.8924
MD54-19-163937	63-2013	10/30/2018	Acetone	87.8374	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1073	87.8374

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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)
MD54-19-163937	63-2013	10/30/2018	Chloroform	22.9341	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	15.6147	45.8681
MD54-19-163937	63-2013	10/30/2018	Benzene	30.0114	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3854	30.0114
MD54-19-163937	63-2013	10/30/2018	Trichloroethane[1,1,1-]	50.1643	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	10.36	51.2549
MD54-19-163937	63-2013	10/30/2018	Bromomethane	143.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.6121	143.583
MD54-19-163937	63-2013	10/30/2018	Chloromethane	76.3587	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.84224	76.3587
MD54-19-163937	63-2013	10/30/2018	Chloroethane	97.5619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8656	97.5619
MD54-19-163937	63-2013	10/30/2018	Vinyl Chloride	24.0129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.64188	24.0129
MD54-19-163937	63-2013	10/30/2018	Methylene Chloride	128.444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.7201	128.444
MD54-19-163937	63-2013	10/30/2018	Carbon Disulfide	115.149	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.29063	115.149
MD54-19-163937	63-2013	10/30/2018	Bromoform	97.1038	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6934	97.1038
MD54-19-163937	63-2013	10/30/2018	Bromodichloromethane	62.9351	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.4162	62.9351
MD54-19-163937	63-2013	10/30/2018	Dichloroethane[1,1-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.08986	38.0223
MD54-19-163937	63-2013	10/30/2018	Dichloroethene[1,1-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.54731	37.2462
MD54-19-163937	63-2013	10/30/2018	Trichlorofluoromethane	52.7802	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1603	52.7802
MD54-19-163937	63-2013	10/30/2018	Dichlorodifluoromethane	79.074	ug/m3		Y	GAS	REG	VOC	EPA:TO15	13.3437	46.456
MD54-19-163937	63-2013	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	71.9935	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.4449	71.9935
MD54-19-163937	63-2013	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	65.6708	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	65.6708
MD54-19-163937	63-2013	10/30/2018	Dichloropropane[1,2-]	43.4129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1644	43.4129
MD54-19-163937	63-2013	10/30/2018	Butanone[2-]	109.056	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6108	109.056
MD54-19-163937	63-2013	10/30/2018	Trichloroethane[1,1,2-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0863	51.2549
MD54-19-163937	63-2013	10/30/2018	Trichloroethene	1396.33	ug/m3		Y	GAS	REG	VOC	EPA:TO15	13.9633	50.4826
MD54-19-163937	63-2013	10/30/2018	Tetrachloroethane[1,1,2,2-]	64.4912	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4658	64.4912
MD54-19-163937	63-2013	10/30/2018	Hexachlorobutadiene	394.361	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	394.361
MD54-19-163937	63-2013	10/30/2018	Xylene[1,2-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	40.7887
MD54-19-163937	63-2013	10/30/2018	Dichlorobenzene[1,2-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.242	56.4841
MD54-19-163937	63-2013	10/30/2018	Trimethylbenzene[1,2,4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5984	46.1793
MD54-19-163937	63-2013	10/30/2018	Isopropylbenzene	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7905	46.1793
MD54-19-163937	63-2013	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5838	40.7887
MD54-19-163938	63-2011	10/30/2018	Ethylbenzene	42.5284	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.4906	42.5284
MD54-19-163938	63-2011	10/30/2018	Styrene	41.7193	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.9198	41.7193
MD54-19-163938	63-2011	10/30/2018	Benzyl Chloride	50.704	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	23.7999	50.704
MD54-19-163938	63-2011	10/30/2018	Dichloropropene[cis-1,3-]	44.4512	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.07166	44.4512
MD54-19-163938	63-2011	10/30/2018	Dichloropropene[trans-1,3-]	44.4512	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.52525	44.4512
MD54-19-163938	63-2011	10/30/2018	Propylbenzene[1-]	48.1444	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	15.7206	48.1444
MD54-19-163938	63-2011	10/30/2018	Dichlorobenzene[1,4-]	58.8877	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	29.4438	58.8877
MD54-19-163938	63-2011	10/30/2018	Dibromoethane[1,2-]	75.2509	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	20.7324	75.2509
MD54-19-163938	63-2011	10/30/2018	Butadiene[1,3-]	21.6674	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.30631	21.6674
MD54-19-163938	63-2011	10/30/2018	Chloro-1-propene[3-]	121.981	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.5725	121.981
MD54-19-163938	63-2011	10/30/2018	Dichloroethane[1,2-]	39.6403	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.1348	39.6403
MD54-19-163938	63-2011	10/30/2018	Methyl-2-pentanone[4-]	40.121	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	23.3357	40.121
MD54-19-163938	63-2011	10/30/2018	Trimethylbenzene[1,3,5-]	48.1444	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.7555	48.1444
MD54-19-163938	63-2011	10/30/2018	Toluene	36.9077	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.79183	36.9077
MD54-19-163938	63-2011	10/30/2018	Chlorobenzene	45.0881	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	17.9432	45.0881
MD54-19-163938	63-2011	10/30/2018	Tetrahydrofuran	28.885	ug/m3	UJ	N	GAS	FD	VOC	EPA:TO15	10.0213	28.885
MD54-19-163938	63-2011	10/30/2018	Hexane	34.521	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.3406	34.521
MD54-19-163938	63-2011	10/30/2018	Cyclohexane	33.7119	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.91198	33.7119
MD54-19-163938	63-2011	10/30/2018	Trichlorobenzene[1,2,4-]	289.25	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	148.333	289.25
MD54-19-163938	63-2011	10/30/2018	Dioxane[1,4-]	140.456	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	19.0877	140.456
MD54-19-163938	63-2011	10/30/2018	Chlorodibromomethane	83.4305	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.6213	83.4305
MD54-19-163938	63-2011	10/30/2018	Tetrachloroethene	66.4264	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	21.6902	66.4264
MD54-19-163938	63-2011	10/30/2018	n-Heptane	40.137	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.106	40.137
MD54-19-163938	63-2011	10/30/2018	Dichloroethene[cis-1,2-]	38.8312	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.0946	38.8312
MD54-19-163938	63-2011	10/30/2018	Dichloroethene[trans-1,2-]	38.8312	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.73602	38.8312
MD54-19-163938	63-2011	10/30/2018	Methyl tert-Butyl Ether	35.3102	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.20616	35.3102
MD54-19-163938	63-2011	10/30/2018	Isooctane	45.757	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.00362	45.757
MD54-19-163938	63-2011	10/30/2018	Dichlorobenzene[1,3-]	58.8877	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	27.0403	58.8877
MD54-19-163938	63-2011	10/30/2018	Carbon Tetrachloride	61.6155	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	22.0056	61.6155
MD54-19-163938	63-2011	10/30/2018	Hexanone[2-]	159.665	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.4229	159.665

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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)
MD54-19-163938	63-2011	10/30/2018	Ethyltoluene[4-]	48.1444	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.7381	48.1444
MD54-19-163938	63-2011	10/30/2018	Ethanol	73.4403	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	58.3756	73.4403
MD54-19-163938	63-2011	10/30/2018	Propanol[2-]	95.8055	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.38703	95.8055
MD54-19-163938	63-2011	10/30/2018	Acetone	92.5854	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.8195	92.5854
MD54-19-163938	63-2011	10/30/2018	Chloroform	47.8199	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.5906	47.8199
MD54-19-163938	63-2011	10/30/2018	Benzene	31.2885	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.70467	31.2885
MD54-19-163938	63-2011	10/30/2018	Trichloroethane[1,1,1-]	53.4359	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.9053	53.4359
MD54-19-163938	63-2011	10/30/2018	Bromomethane	151.344	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	26.7762	151.344
MD54-19-163938	63-2011	10/30/2018	Chloromethane	80.4862	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.25499	80.4862
MD54-19-163938	63-2011	10/30/2018	Chloroethane	102.835	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.393	102.835
MD54-19-163938	63-2011	10/30/2018	Vinyl Chloride	25.0348	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.89733	25.0348
MD54-19-163938	63-2011	10/30/2018	Methylene Chloride	135.387	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.4144	135.387
MD54-19-163938	63-2011	10/30/2018	Carbon Disulfide	121.373	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.60184	121.373
MD54-19-163938	63-2011	10/30/2018	Bromoform	101.236	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	22.7264	101.236
MD54-19-163938	63-2011	10/30/2018	Bromodichloromethane	65.6132	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	20.0857	65.6132
MD54-19-163938	63-2011	10/30/2018	Dichloroethane[1,1-]	39.6403	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.49435	39.6403
MD54-19-163938	63-2011	10/30/2018	Dichloroethene[1,1-]	38.8312	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.94355	38.8312
MD54-19-163938	63-2011	10/30/2018	Trichlorofluoromethane	55.0262	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.2833	55.0262
MD54-19-163938	63-2011	10/30/2018	Dichlorodifluoromethane	48.4328	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.8379	48.4328
MD54-19-163938	63-2011	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	75.057	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	22.9766	75.057
MD54-19-163938	63-2011	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	68.4653	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.767	68.4653
MD54-19-163938	63-2011	10/30/2018	Dichloropropane[1,2-]	45.2603	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.6262	45.2603
MD54-19-163938	63-2011	10/30/2018	Butanone[2-]	114.951	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.9056	114.951
MD54-19-163938	63-2011	10/30/2018	Trichloroethane[1,1,2-]	53.4359	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.1769	53.4359
MD54-19-163938	63-2011	10/30/2018	Trichloroethene	80.5573	ug/m3		Y	GAS	FD	VOC	EPA:TO15	14.5003	52.6308
MD54-19-163938	63-2011	10/30/2018	Tetrachloroethane[1,1,2,2-]	67.2355	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	17.1519	67.2355
MD54-19-163938	63-2011	10/30/2018	Hexachlorobutadiene	415.678	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	127.901	415.678
MD54-19-163938	63-2011	10/30/2018	Xylene[1,2-]	42.5244	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.81061	42.5244
MD54-19-163938	63-2011	10/30/2018	Dichlorobenzene[1,2-]	58.8877	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	29.4438	58.8877
MD54-19-163938	63-2011	10/30/2018	Trimethylbenzene[1,2,4-]	48.1444	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	24.0722	48.1444
MD54-19-163938	63-2011	10/30/2018	Isopropylbenzene	48.1444	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.2817	48.1444
MD54-19-163938	63-2011	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	42.5244	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.0177	42.5244
MD54-19-163939	63-2013	10/30/2018	Ethylbenzene	91.1323	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	35.151	91.1323
MD54-19-163939	63-2013	10/30/2018	Styrene	89.3984	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.5424	89.3984
MD54-19-163939	63-2013	10/30/2018	Benzyl Chloride	108.652	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	50.704	108.652
MD54-19-163939	63-2013	10/30/2018	Dichloropropene[cis-1,3-]	95.2525	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.0505	95.2525
MD54-19-163939	63-2013	10/30/2018	Dichloropropene[trans-1,3-]	95.2525	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	20.4112	95.2525
MD54-19-163939	63-2013	10/30/2018	Propylbenzene[1-]	103.167	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	33.8976	103.167
MD54-19-163939	63-2013	10/30/2018	Dichlorobenzene[1,4-]	126.188	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	60.0895	126.188
MD54-19-163939	63-2013	10/30/2018	Dibromoethane[1,2-]	161.252	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	44.5363	161.252
MD54-19-163939	63-2013	10/30/2018	Butadiene[1,3-]	46.4302	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	11.497	46.4302
MD54-19-163939	63-2013	10/30/2018	Chloro-1-propene[3-]	265.855	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.3344	265.855
MD54-19-163939	63-2013	10/30/2018	Dichloroethane[1,2-]	84.9435	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.8876	84.9435
MD54-19-163939	63-2013	10/30/2018	Methyl-2-pentanone[4-]	85.9736	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	49.1278	85.9736
MD54-19-163939	63-2013	10/30/2018	Trimethylbenzene[1,3,5-]	103.167	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.9674	103.167
MD54-19-163939	63-2013	10/30/2018	Toluene	79.0879	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.0901	79.0879
MD54-19-163939	63-2013	10/30/2018	Chlorobenzene	96.6173	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	38.1868	96.6173
MD54-19-163939	63-2013	10/30/2018	Tetrahydrofuran	61.8965	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.8112	61.8965
MD54-19-163939	63-2013	10/30/2018	Hexane	73.9737	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	13.738	73.9737
MD54-19-163939	63-2013	10/30/2018	Cyclohexane	72.2398	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.8559	72.2398
MD54-19-163939	63-2013	10/30/2018	Trichlorobenzene[1,2,4-]	630.416	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	326.333	630.416
MD54-19-163939	63-2013	10/30/2018	Dioxane[1,4-]	306.123	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	39.6159	306.123
MD54-19-163939	63-2013	10/30/2018	Chlorodibromomethane	178.78	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.648	178.78
MD54-19-163939	63-2013	10/30/2018	Tetrachloroethene	142.342	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	46.7696	142.342
MD54-19-163939	63-2013	10/30/2018	n-Heptane	86.0079	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.2597	86.0079
MD54-19-163939	63-2013	10/30/2018	Dichloroethene[cis-1,2-]	83.2096	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	23.7742	83.2096
MD54-19-163939	63-2013	10/30/2018	Dichloroethene[trans-1,2-]	83.2096	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.6607	83.2096
MD54-19-163939	63-2013	10/30/2018	Methyl tert-Butyl Ether	75.6646	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	15.4932	75.6646

TA-63 Transuranic Waste Facility Soil Vapor Monitoring System
Sampling and Analysis - Quarter 5

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)
MD54-19-163939	63-2013	10/30/2018	Isooctane	98.0507	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	15.408	98.0507
MD54-19-163939	63-2013	10/30/2018	Dichlorobenzene[1,3-]	126.188	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	58.2868	126.188
MD54-19-163939	63-2013	10/30/2018	Carbon Tetrachloride	132.033	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	47.7835	132.033
MD54-19-163939	63-2013	10/30/2018	Hexanone[2-]	347.988	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.121	347.988
MD54-19-163939	63-2013	10/30/2018	Ethyltoluene[4-]	103.167	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	32.4238	103.167
MD54-19-163939	63-2013	10/30/2018	Ethanol	160.062	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	124.284	160.062
MD54-19-163939	63-2013	10/30/2018	Propanol[2-]	208.807	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.0023	208.807
MD54-19-163939	63-2013	10/30/2018	Acetone	201.789	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.4878	201.789
MD54-19-163939	63-2013	10/30/2018	Chloroform	102.471	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	35.133	102.471
MD54-19-163939	63-2013	10/30/2018	Benzene	67.0467	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.6864	67.0467
MD54-19-163939	63-2013	10/30/2018	Trichloroethane[1,1,1-]	114.506	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	23.9916	114.506
MD54-19-163939	63-2013	10/30/2018	Bromomethane	329.852	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	58.2092	329.852
MD54-19-163939	63-2013	10/30/2018	Chloromethane	175.419	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.9546	175.419
MD54-19-163939	63-2013	10/30/2018	Chloroethane	224.129	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	26.3681	224.129
MD54-19-163939	63-2013	10/30/2018	Vinyl Chloride	53.6459	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.8165	53.6459
MD54-19-163939	63-2013	10/30/2018	Methylene Chloride	295.074	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	22.2174	295.074
MD54-19-163939	63-2013	10/30/2018	Carbon Disulfide	264.532	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.1373	264.532
MD54-19-163939	63-2013	10/30/2018	Bromoform	216.934	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	48.5519	216.934
MD54-19-163939	63-2013	10/30/2018	Bromodichloromethane	140.6	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	43.519	140.6
MD54-19-163939	63-2013	10/30/2018	Dichloroethane[1,1-]	84.9435	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	18.2022	84.9435
MD54-19-163939	63-2013	10/30/2018	Dichloroethene[1,1-]	83.2096	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.6796	83.2096
MD54-19-163939	63-2013	10/30/2018	Trichlorofluoromethane	117.913	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	34.8125	117.913
MD54-19-163939	63-2013	10/30/2018	Dichlorodifluoromethane	103.785	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.147	103.785
MD54-19-163939	63-2013	10/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	160.837	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	49.0168	160.837
MD54-19-163939	63-2013	10/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	146.711	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	36.3285	146.711
MD54-19-163939	63-2013	10/30/2018	Dichloropropane[1,2-]	96.9864	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	36.4853	96.9864
MD54-19-163939	63-2013	10/30/2018	Butanone[2-]	250.534	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	23.5796	250.534
MD54-19-163939	63-2013	10/30/2018	Trichloroethane[1,1,2-]	114.506	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.9895	114.506
MD54-19-163939	63-2013	10/30/2018	Trichloroethene	112.78	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	31.1488	112.78
MD54-19-163939	63-2013	10/30/2018	Tetrachloroethane[1,1,2,2-]	144.076	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	37.0481	144.076
MD54-19-163939	63-2013	10/30/2018	Hexachlorobutadiene	905.965	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	287.777	905.965
MD54-19-163939	63-2013	10/30/2018	Xylene[1,2-]	91.1238	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.923	91.1238
MD54-19-163939	63-2013	10/30/2018	Dichlorobenzene[1,2-]	126.188	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	60.0895	126.188
MD54-19-163939	63-2013	10/30/2018	Trimethylbenzene[1,2,4-]	103.167	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	49.1269	103.167
MD54-19-163939	63-2013	10/30/2018	Isopropylbenzene	103.167	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	26.5285	103.167
MD54-19-163939	63-2013	10/30/2018	Xylene[1,3-]+Xylene[1,4-]	91.1238	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.205	91.1238

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	
			Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	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
		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
		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
		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
		Tetrachloroethylene	49.5	<0.1	34.6	<0.1	34.6	<0.1	36.6	<0.1	43.4	<0.1
		Carbon tetrachloride	49.7	<0.1	35.2	<0.1	48.4	<0.1	41.5	<0.1	35.2	<0.1
		Chloroform	112	0.5	87.8	0.2	107	0.5	107	0.5	102	0.4
		Dichlorodifluoromethane	84	<0.1	74.1	<0.1	84.0	<0.1	84.0	<0.1	69.2	<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	6982	7.5	8593	9.3	8056	8.7	8056	8.7
		Tetrachloroethylene	81.3	<0.1	74.6	<0.1	88.1	<0.1	81.3	<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
		Carbon tetrachloride	94.3	<0.1	88.0	<0.1	113	<0.1	107	<0.1	107	<0.1
		Chloroform	190	0.4	200	0.5	244	0.5	229	0.5	210	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

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	
			Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	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
		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
		Chloroform	35.6	0.2	19.0	<0.1	26.3	0.1	32.2	<0.1	32.2	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
		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
		Tetrachloroethylene	16.9	<0.1	12.9	<0.1	15.6	<0.1				
		Chloroform	15.6	<0.1	18.1	<0.1	22.9	<0.1	19.0	<0.1	22.9	<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
		Dichlorodifluoromethane	64.2	<0.1	84.0	<0.1	69.2	<0.1	84.0	<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	
			Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)
VMW-4 63-2012 Field Duplicate	25	Trichloroethylene					3276	2.1				
		Tetrachloroethylene					32.5	<0.1				
		Carbon tetrachloride					56.6	<0.1				
		Chloroform					112	0.5				
		1,1,1-Trichloroethane					12.5	<0.1				
		Dichlorofluoromethane					74.1	<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		

Sample Collection Logs
at TA-63 Transuranic Waste Facility – Quarter 5

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SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163931

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-2018	dc	**FIELD MATRIX:**	GAS	dc
TIME COLLECTED (HH:MM):	958		**MEDIA:**	GAS	
PRS ID:	TA-63		**SAMPLE TECH CODE:**	VOST	
LOCATION ID:	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 # N2406

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\%$ $CO_2 = 14{,}000\ ppm$ $O_2 = 19.2\%$ VOC = 0.0%

COLLECTED BY (PRINT): D. Saramillo

RELINQUISHED BY (Printed Name) Maurice Shendo **(Signature)**	**Date/Time** 10-30-18 1340	**RECEIVED BY (Printed Name)** S Sherwood **(Signature)**	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY (Printed Name) (Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163932

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1026		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: VMW-2

LOCATION COMMENTS: Summa # N0137

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\%$ $CO_2 = 8170$ ppm $O_2 = 19.9\%$ VOC = 0.0 ppm

COLLECTED BY (PRINT): D. Saramillo

RELINQUISHED BY (Printed Name) Maurice Shendo (Signature)	**Date/Time** 10-30-18 1340	**RECEIVED BY** (Printed Name) S. Sherwood (Signature)	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163933

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	o/c	**FIELD MATRIX:**	GAS	o/c
TIME COLLECTED (HH:MM):	1050		**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
N/A	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-3

LOCATION COMMENTS: Summa # 00981

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\ \%$ $CO_2 = 6100\ ppm$ $O_2 = 20.3\ \%$ $VOC = 0.0\ ppm$

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Maurice Shendo **(Signature)**	**Date/Time** 10-30-18 1340	**RECEIVED BY (Printed Name)** S. Sherwood **(Signature)**	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY (Printed Name) (Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163938

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1051 ~~1050~~ MLS 10-30-18		MEDIA:	GHS	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	63-2011	FIELD PREP:	NA	
LOCATION TYPE:	BH	BH	FIELD QC TYPE:	FD	
TOP DEPTH:	6.5	ok	SAMPLE USAGE:	QC	
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-3

LOCATION COMMENTS: Summa # 00942

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\%$ $CO_2 = 6100$ ppm $O_2 = 20.3\%$ VOC = 0.0 ppm

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Maurice Shendo (Signature)	**Date/Time** 10-30-18 1340	**RECEIVED BY** (Printed Name) S. Sherwood (Signature)	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163934

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	o/c	**FIELD MATRIX:**	GAS	o/c
TIME COLLECTED (HH:MM):	1145		**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 / (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-4

LOCATION COMMENTS: Summa # 00356

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\%$ $CO_2 = 13{,}700\ ppm$ $O_2 = 19.7\%$ $VOC = 0.3\ ppm$

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Mauricio Mendo **(Signature)**	**Date/Time** 10-30-18 1340	**RECEIVED BY (Printed Name)** S. Sherwood **(Signature)** S. Sherwood	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) **(Signature)**	**Date/Time**	**RECEIVED BY (Printed Name)** **(Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163935

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	o/c	**FIELD MATRIX:**	GAS	o/c
TIME COLLECTED (HH:MM):	1202		**MEDIA:**	~~GAS~~	
PRS ID:	TA-63		**SAMPLE TECH CODE:**	VOST	
LOCATION ID:	63-2012		**FIELD PREP:**	NA	
LOCATION TYPE:	Bft		**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-4

LOCATION COMMENTS: Summa # N1723

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\%$ $CO_2 = 17.000$ ppm $O_2 = 19.4\%$ VOC = 1.1 ppm

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Maurice Shendo **(Signature)**	**Date/Time** 10-30-18 1340	**RECEIVED BY (Printed Name)** S. Sherwood **(Signature)** S. Sherwood	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) **(Signature)**	**Date/Time**	**RECEIVED BY (Printed Name)** **(Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163936

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	d/c	**FIELD MATRIX:**	GAS	d/c
TIME COLLECTED (HH:MM):	1225		**MEDIA:**	GAS	
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: VMW-5

LOCATION COMMENTS: Summa # N2506

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\%$ $CO_2 = 45{,}800_{ppm}$ $O_2 = 17.9\%$ $VOC = 0.0_{ppm}$

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Mauricio Sheldo **(Signature)**	**Date/Time** 10-30-18 1340	**RECEIVED BY (Printed Name)** S. Sherwood **(Signature)** S. Sherwood	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) **(Signature)**	**Date/Time**	**RECEIVED BY (Printed Name)** **(Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163937

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1245		MEDIA:	Gas	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		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: VMW-5

LOCATION COMMENTS: Summa # N2400

FIELD PARAMETERS:

Sample Time _____ HH:MM

$CH_4 = 0\%$ $CO_2 = 27{,}800\ ppm$ $O_2 = 19.0\%$ $VOC = 0.1\ ppm$

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Maurice Shendo (Signature)	**Date/Time** 10-30-18 1340	**RECEIVED BY** (Printed Name) S. Sherwood (Signature)	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12100

EVENT NAME: FY18 - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-19-163939

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	10-30-18	o/c	**FIELD MATRIX:**	GAS	o/c
TIME COLLECTED (HH:MM):	1246		**MEDIA:**	o/c	Nitrogen
PRS ID:	TA-63		**SAMPLE TECH CODE:**	VOST	o/c
LOCATION ID:	UNK	↓	**FIELD PREP:**	NA	
LOCATION TYPE:	NA	NA	**FIELD QC TYPE:**	FB	
TOP DEPTH:	NA	NA	**SAMPLE USAGE:**	QC	↓
BOTTOM DEPTH:	NA	NA	**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: QC Sample of MD54-19-163937

LOCATION COMMENTS: Summa # 600857

FIELD PARAMETERS:

Sample Time _____ HH:MM

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Monica Skeen **(Signature)**	**Date/Time** 10-30-18 1340	**RECEIVED BY (Printed Name)** S. Sherwood **(Signature)** S. Sherwood	**Date/Time** 10/30/18 1340
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY (Printed Name) (Signature)**	**Date/Time**

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 according to 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.

12/18/18

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

Date Signed

19 Dec 2018

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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