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Date: SEP 2 6 2018
Symbol: EPC-DO: 18-349
LA-UR: LA-UR-18-28936
Locates Action No.: *N/A*

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 4, Los Alamos National Laboratory EPA ID #NM0890010515**

Dear Mr. Kieling:

The United States Department of Energy (DOE) National Nuclear Security Administration, Los Alamos Field Office (NA-LA) and the Los Alamos National Security, LLC (LANS) 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 fourth 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 findings for the fourth quarter, a figure of the facility 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 from the Permit (Figure 56) and was revised as part of a permit modification request submittal on March 11, 2016 for construction updates for the TWF. Table 1 is a summary of the analytical results for the fourth 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 four 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 review by NMED of the monitoring results.

If you have questions or comments concerning this submittal, please contact Karen E. Armijo of the DOE NA-LA at (505) 665-7314, or Patrick L. Padilla, LANS, at (505) 667-3932.

Sincerely,

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

Sincerely,

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

KEA/ET/TAD/PLP/GAB;kr

Enclosure: 1) TA-63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 4, Los Alamos National Laboratory

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The enclosure to this report includes a discussion of the history and findings for the fourth quarter, a figure of the facility 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 from the Permit (Figure 56) and was revised as part of a permit modification request submittal on March 11, 2016 for construction updates for the TWF. Table 1 is a summary of the analytical results for the fourth quarter and includes detected VOCs, detection limits, the appropriate soil

ENCLOSURE 1

TA-63 Transuranic Waste Facility
Soil Vapor Monitoring System Report
Quarter 4
Los Alamos National Laboratory

EPC-DO-18-349

LAUR-18-28936
Unclassified

Date: SEP 2 6 2018

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TA-63 TRANSURANIC WASTE FACILITY
SOIL VAPOR MONITORING SYSTEM REPORT
QUARTER 4
LOS ALAMOS NATIONAL LABORATORY

I. Introduction

This report describes the fourth 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 fourth 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 facility 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 July 30, 2018 for the fourth 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. Sampling 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 1.6% 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 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 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 and third quarters of waste management operations at the TWF were presented on March 30 and June 28, 2018 (LANL, 2018a, LANL 2018b). 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 results reported herein for the fourth 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

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.

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.

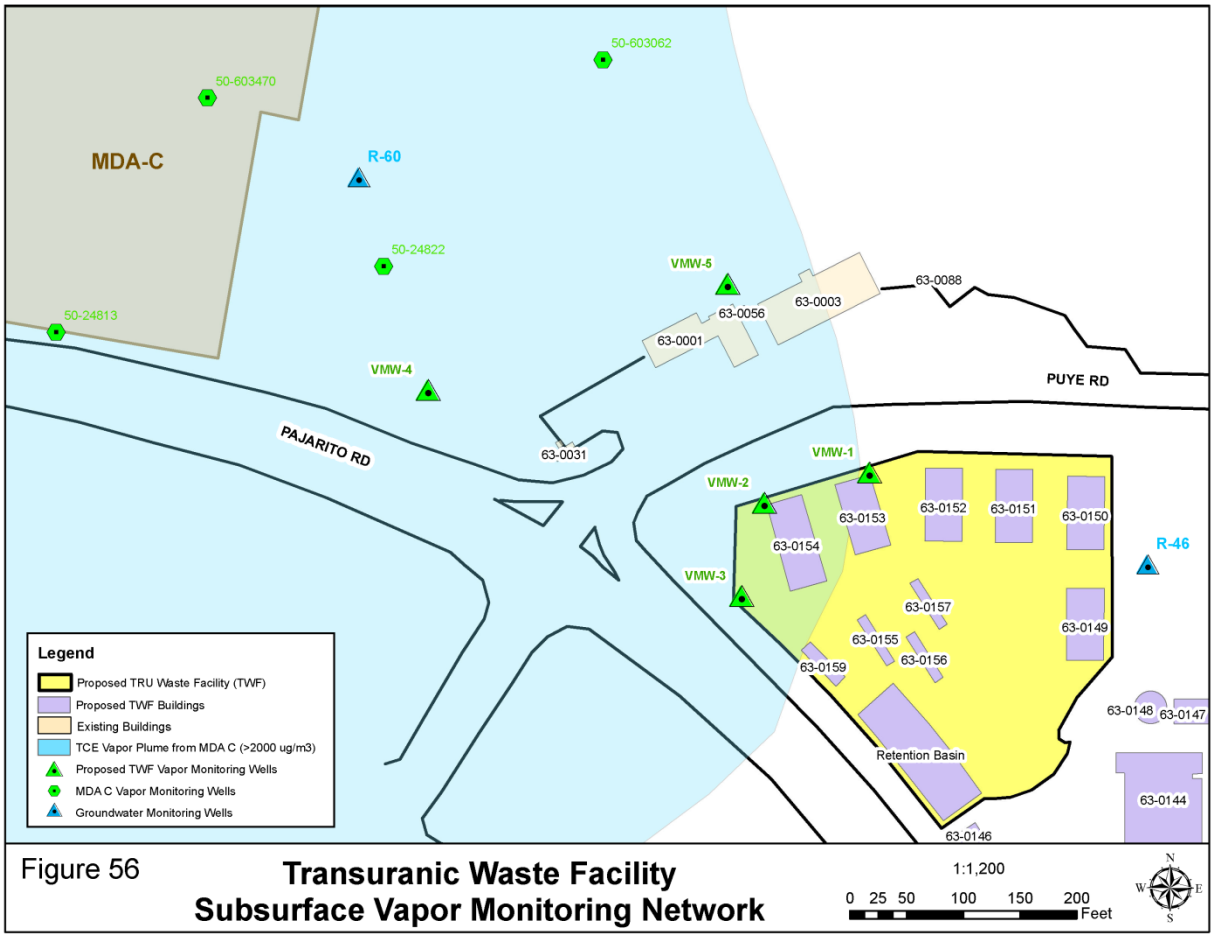

Figure 1

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 4

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Table 1: Detected volatile organic compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System– Quarter 4

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	MD54-18-159963	5	Trichloroethene	Trichloroethylene	53.7	J	59.1	1.94E+04	0.3
VMW-2 63-2010	MD54-18-159964	5	Trichloroethene	Trichloroethylene	85.9		53.7	1.94E+04	0.4
VMW-3 63-2011	MD54-18-159965	5	Acetone	Acetone	20.9	J	97.3	2.73E+08	<0.1
			Trichloroethene	Trichloroethylene	59.1		53.7	1.94E+04	0.3
VMW-4 63-2012	MD54-18-159966	25	Tetrachloroethene	Tetrachloroethylene	36.6	J	74.6	2.63E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	41.5	J	69.2	1.06E+05	<0.1
			Chloroform	Chloroform	107		53.7	2.30E+04	0.5
			Dichlorodifluoromethane	Dichlorodifluoromethane	84.0		54.4	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	2954		59.1	1.57E+05	1.9
VMW-4 63-2012	MD54-18-159967	60	Tetrachloroethene	Tetrachloroethylene	81.3		74.6	2.05E+06	<0.1
			Dichloroethene[cis-1,2-]	cis-1,2-Dichloroethylene	25.0	J	43.6	2.91E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	107		69.2	2.13E+05	<0.1
			Chloroform	Chloroform	229		53.7	4.44E+04	0.5
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	15.3	J	60.0	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	193		54.4	5.38E+06	<0.1
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	32.2	J	84.2	1.38E+09	<0.1
			Trichloroethene	Trichloroethylene	8056		59.1	9.27E+04	8.7
VMW-5 63-2013	MD54-18-159968	25	Acetone	Acetone	15.0	J	109	5.44E+08	<0.1
			Chloroform	Chloroform	32.2	J	53.7	2.30E+04	<0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	27.8	J	60.0	1.16E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	47.4	J	54.4	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	344		59.1	1.57E+05	0.2
VMW-5 63-2013	MD54-18-159969	60	Chloroform	Chloroform	19.0	J	45.9	4.44E+04	<0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	60.0		51.3	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	84.0		46.5	5.38E+06	<0.1

Table 1: Detected volatile organic compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System– Quarter 4

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 (%)
			Trichloroethene	Trichloroethylene	1504		50.5	9.27E+04	1.6
VMW-4 63-2012	MD54-18-159970 Field Duplicate	60	Tetrachloroethene	Tetrachloroethylene	81.3	J	88.1	2.05E+06	<0.1
			Dichloroethene[cis-1,2-]	cis-1,2-Dichloroethylene	27.0	J	51.5	2.91E+06	<0.1
			Carbon tetrachloride	Carbon tetrachloride	113		81.7	2.13E+05	<0.1
			Chloroform	Chloroform	249		63.4	4.44E+04	0.6
			Dichlorodifluoromethane	Dichlorodifluoromethane	188		64.2	5.38E+06	<0.1
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	32.2	J	99.6	1.38E+09	<0.1
			Trichloroethene	Trichloroethylene	8593		69.8	9.27E+04	9.3
VMW-5 63-2012	MD54-18-159971 Field Blank		n-Heptane	NA*	57.3	J	98.3	NA*	NA*
			Methylene chloride	Methylene chloride	26.4	J	340	5.34E+06	<0.1

EPA Data Qualifier "J" indicates analytes that are detected but results are estimated as less than 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 4

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TA-63 Transuranic Waste Facility Vapor Monitoring System
Sampling and Analyses - Quarter 4

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)
MD54-18-159963	63-2009	07/30/2018	Styrene	46.8278	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.7712	46.8278
MD54-18-159963	63-2009	07/30/2018	Benzyl Chloride	56.9127	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8694	56.9127
MD54-18-159963	63-2009	07/30/2018	Dichloropropene[cis-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.97883	49.8942
MD54-18-159963	63-2009	07/30/2018	Dichloropropene[trans-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4324	49.8942
MD54-18-159963	63-2009	07/30/2018	Propylbenzene[1-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1944	54.0396
MD54-18-159963	63-2009	07/30/2018	Dichlorobenzene[1,4-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	32.4483	66.0984
MD54-18-159963	63-2009	07/30/2018	Dibromoethane[1,2-]	84.4653	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.036	84.4653
MD54-18-159963	63-2009	07/30/2018	Butadiene[1,3-]	24.3206	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.7485	24.3206
MD54-18-159963	63-2009	07/30/2018	Chloro-1-propene[3-]	134.491	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.8236	134.491
MD54-18-159963	63-2009	07/30/2018	Dichloroethane[1,2-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.3483	44.4942
MD54-18-159963	63-2009	07/30/2018	Methyl-2-pentanone[4-]	45.0338	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.7921	45.0338
MD54-18-159963	63-2009	07/30/2018	Trimethylbenzene[1,3,5-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2294	54.0396
MD54-18-159963	63-2009	07/30/2018	Toluene	41.427	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.545	41.427
MD54-18-159963	63-2009	07/30/2018	Chlorobenzene	50.609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.3235	50.609
MD54-18-159963	63-2009	07/30/2018	Tetrahydrofuran	32.422	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2003	32.422
MD54-18-159963	63-2009	07/30/2018	Hexane	38.7481	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.04511	38.7481
MD54-18-159963	63-2009	07/30/2018	Cyclohexane	37.8399	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.59997	37.8399
MD54-18-159963	63-2009	07/30/2018	Trichlorobenzene[1,2,4-]	318.916	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	170.583	318.916
MD54-18-159963	63-2009	07/30/2018	Dioxane[1,4-]	154.862	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.8884	154.862
MD54-18-159963	63-2009	07/30/2018	Chlorodibromomethane	93.6465	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	93.6465
MD54-18-159963	63-2009	07/30/2018	Tetrachloroethene	74.5602	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7237	74.5602
MD54-18-159963	63-2009	07/30/2018	n-Heptane	45.0518	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.3347	45.0518
MD54-18-159963	63-2009	07/30/2018	Dichloroethene[cis-1,2-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8871	43.586
MD54-18-159963	63-2009	07/30/2018	Dichloroethene[trans-1,2-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.52849	43.586
MD54-18-159963	63-2009	07/30/2018	Methyl tert-Butyl Ether	39.6339	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.92677	39.6339
MD54-18-159963	63-2009	07/30/2018	Isooctane	51.3599	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.93744	51.3599
MD54-18-159963	63-2009	07/30/2018	Dichlorobenzene[1,3-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.4438	66.0984
MD54-18-159963	63-2009	07/30/2018	Carbon Tetrachloride	69.1603	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.5205	69.1603
MD54-18-159963	63-2009	07/30/2018	Hexanone[2-]	176.041	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.4699	176.041
MD54-18-159963	63-2009	07/30/2018	Ethyltoluene[4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.7032	54.0396
MD54-18-159963	63-2009	07/30/2018	Ethanol	80.9726	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	64.0248	80.9726
MD54-18-159963	63-2009	07/30/2018	Propanol[2-]	105.632	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.124	105.632
MD54-18-159963	63-2009	07/30/2018	Acetone	102.081	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.0065	102.081
MD54-18-159963	63-2009	07/30/2018	Chloroform	53.6754	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0545	53.6754
MD54-18-159963	63-2009	07/30/2018	Benzene	35.1197	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.34321	35.1197
MD54-18-159963	63-2009	07/30/2018	Trichloroethane[1,1,1-]	59.9791	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9958	59.9791
MD54-18-159963	63-2009	07/30/2018	Bromomethane	166.866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.4927	166.866
MD54-18-159963	63-2009	07/30/2018	Chloromethane	88.7412	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.08049	88.7412
MD54-18-159963	63-2009	07/30/2018	Chloroethane	113.383	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7114	113.383
MD54-18-159963	63-2009	07/30/2018	Vinyl Chloride	28.1003	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6637	28.1003
MD54-18-159963	63-2009	07/30/2018	Methylene Chloride	13.1916	ug/m3	J	N	GAS	REG	VOC	EPA:TO15	11.4558	149.273
MD54-18-159963	63-2009	07/30/2018	Carbon Disulfide	133.822	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.22427	133.822
MD54-18-159963	63-2009	07/30/2018	Bromoform	113.632	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.7924	113.632
MD54-18-159963	63-2009	07/30/2018	Bromodichloromethane	73.6475	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.0942	73.6475
MD54-18-159963	63-2009	07/30/2018	Dichloroethane[1,1-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.30334	44.4942
MD54-18-159963	63-2009	07/30/2018	Dichloroethene[1,1-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	43.586
MD54-18-159963	63-2009	07/30/2018	Trichlorofluoromethane	61.7641	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.9677	61.7641
MD54-18-159963	63-2009	07/30/2018	Dichlorodifluoromethane	54.3634	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.3206	54.3634
MD54-18-159963	63-2009	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	84.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.2743	84.2477
MD54-18-159963	63-2009	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	76.8488	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.8629	76.8488
MD54-18-159963	63-2009	07/30/2018	Dichloropropane[1,2-]	50.8024	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.4736	50.8024
MD54-18-159963	63-2009	07/30/2018	Butanone[2-]	126.74	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.0846	126.74
MD54-18-159963	63-2009	07/30/2018	Trichloroethane[1,1,2-]	59.9791	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2674	59.9791
MD54-18-159963	63-2009	07/30/2018	Trichloroethene	53.7049	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	16.1115	59.0754
MD54-18-159963	63-2009	07/30/2018	Tetrachloroethane[1,1,2,2-]	75.4685	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.2101	75.4685
MD54-18-159963	63-2009	07/30/2018	Hexachlorobutadiene	458.312	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	149.218	458.312
MD54-18-159963	63-2009	07/30/2018	Xylene[1,2-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.67845	47.7315

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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)
MD54-18-159963	63-2009	07/30/2018	Dichlorobenzene[1,2-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	32.4483	66.0984
MD54-18-159963	63-2009	07/30/2018	Trimethylbenzene[1,2,4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.5285	54.0396
MD54-18-159963	63-2009	07/30/2018	Isopropylbenzene	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7555	54.0396
MD54-18-159963	63-2009	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.3194	47.7315
MD54-18-159964	63-2010	07/30/2018	Ethylbenzene	43.3963	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.3585	43.3963
MD54-18-159964	63-2010	07/30/2018	Styrene	42.5707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3455	42.5707
MD54-18-159964	63-2010	07/30/2018	Benzyl Chloride	51.7388	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.8346	51.7388
MD54-18-159964	63-2010	07/30/2018	Dichloropropene[cis-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.52525	45.3583
MD54-18-159964	63-2010	07/30/2018	Dichloropropene[trans-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.97883	45.3583
MD54-18-159964	63-2010	07/30/2018	Propylbenzene[1-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.7032	49.1269
MD54-18-159964	63-2010	07/30/2018	Dichlorobenzene[1,4-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2465	60.0895
MD54-18-159964	63-2010	07/30/2018	Dibromoethane[1,2-]	76.7866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.5003	76.7866
MD54-18-159964	63-2010	07/30/2018	Butadiene[1,3-]	22.1096	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.5274	22.1096
MD54-18-159964	63-2010	07/30/2018	Chloro-1-propene[3-]	128.236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5108	128.236
MD54-18-159964	63-2010	07/30/2018	Dichloroethane[1,2-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5393	40.4493
MD54-18-159964	63-2010	07/30/2018	Methyl-2-pentanone[4-]	40.9398	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.5639	40.9398
MD54-18-159964	63-2010	07/30/2018	Trimethylbenzene[1,3,5-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	49.1269
MD54-18-159964	63-2010	07/30/2018	Toluene	37.6609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1684	37.6609
MD54-18-159964	63-2010	07/30/2018	Chlorobenzene	46.0082	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.8634	46.0082
MD54-18-159964	63-2010	07/30/2018	Tetrahydrofuran	29.4745	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6108	29.4745
MD54-18-159964	63-2010	07/30/2018	Hexane	35.2256	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.69286	35.2256
MD54-18-159964	63-2010	07/30/2018	Cyclohexane	34.3999	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.25598	34.3999
MD54-18-159964	63-2010	07/30/2018	Trichlorobenzene[1,2,4-]	304.083	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	163.167	304.083
MD54-18-159964	63-2010	07/30/2018	Dioxane[1,4-]	147.659	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.1681	147.659
MD54-18-159964	63-2010	07/30/2018	Chlorodibromomethane	85.1332	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4726	85.1332
MD54-18-159964	63-2010	07/30/2018	Tetrachloroethene	67.782	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.0459	67.782
MD54-18-159964	63-2010	07/30/2018	n-Heptane	40.9561	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.9251	40.9561
MD54-18-159964	63-2010	07/30/2018	Dichloroethene[cis-1,2-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4909	39.6236
MD54-18-159964	63-2010	07/30/2018	Dichloroethene[trans-1,2-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.13226	39.6236
MD54-18-159964	63-2010	07/30/2018	Methyl tert-Butyl Ether	36.0308	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.56646	36.0308
MD54-18-159964	63-2010	07/30/2018	Isooctane	46.6908	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.47053	46.6908
MD54-18-159964	63-2010	07/30/2018	Dichlorobenzene[1,3-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.242	60.0895
MD54-18-159964	63-2010	07/30/2018	Carbon Tetrachloride	62.873	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.263	62.873
MD54-18-159964	63-2010	07/30/2018	Hexanone[2-]	167.853	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.6511	167.853
MD54-18-159964	63-2010	07/30/2018	Ethyltoluene[4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.7206	49.1269
MD54-18-159964	63-2010	07/30/2018	Ethanol	77.2064	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	60.2587	77.2064
MD54-18-159964	63-2010	07/30/2018	Propanol[2-]	100.719	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87834	100.719
MD54-18-159964	63-2010	07/30/2018	Acetone	97.3334	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2943	97.3334
MD54-18-159964	63-2010	07/30/2018	Chloroform	48.7959	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.0786	48.7959
MD54-18-159964	63-2010	07/30/2018	Benzene	31.927	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.02394	31.927
MD54-18-159964	63-2010	07/30/2018	Trichloroethane[1,1,1-]	54.5264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9958	54.5264
MD54-18-159964	63-2010	07/30/2018	Bromomethane	159.105	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.3285	159.105
MD54-18-159964	63-2010	07/30/2018	Chloromethane	84.6137	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.87412	84.6137
MD54-18-159964	63-2010	07/30/2018	Chloroethane	108.109	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.184	108.109
MD54-18-159964	63-2010	07/30/2018	Vinyl Chloride	25.5457	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.15279	25.5457
MD54-18-159964	63-2010	07/30/2018	Methylene Chloride	14.233	ug/m3	J	N	GAS	REG	VOC	EPA:TO15	10.7615	142.33
MD54-18-159964	63-2010	07/30/2018	Carbon Disulfide	127.598	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.91306	127.598
MD54-18-159964	63-2010	07/30/2018	Bromoform	103.302	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7594	103.302
MD54-18-159964	63-2010	07/30/2018	Bromodichloromethane	66.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.4247	66.9523
MD54-18-159964	63-2010	07/30/2018	Dichloroethane[1,1-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	40.4493
MD54-18-159964	63-2010	07/30/2018	Dichloroethene[1,1-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	39.6236
MD54-18-159964	63-2010	07/30/2018	Trichlorofluoromethane	56.1492	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8447	56.1492
MD54-18-159964	63-2010	07/30/2018	Dichlorodifluoromethane	49.4212	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.8264	49.4212
MD54-18-159964	63-2010	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	76.5888	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7425	76.5888
MD54-18-159964	63-2010	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	69.8625	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.1643	69.8625
MD54-18-159964	63-2010	07/30/2018	Dichloropropane[1,2-]	46.184	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.5499	46.184
MD54-18-159964	63-2010	07/30/2018	Butanone[2-]	120.846	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4951	120.846

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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)
MD54-18-159964	63-2010	07/30/2018	Trichloroethane[1,1,2-]	54.5264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7221	54.5264
MD54-18-159964	63-2010	07/30/2018	Trichloroethene	85.9278	ug/m3		Y	GAS	REG	VOC	EPA:TO15	15.0374	53.7049
MD54-18-159964	63-2010	07/30/2018	Tetrachloroethane[1,1,2,2-]	68.6077	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.5241	68.6077
MD54-18-159964	63-2010	07/30/2018	Hexachlorobutadiene	436.995	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	138.559	436.995
MD54-18-159964	63-2010	07/30/2018	Xylene[1,2-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.24453	43.3923
MD54-18-159964	63-2010	07/30/2018	Dichlorobenzene[1,2-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2465	60.0895
MD54-18-159964	63-2010	07/30/2018	Trimethylbenzene[1,2,4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.546	49.1269
MD54-18-159964	63-2010	07/30/2018	Isopropylbenzene	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	49.1269
MD54-18-159964	63-2010	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8855	43.3923
MD54-18-159965	63-2011	07/30/2018	Ethylbenzene	43.3963	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.3585	43.3963
MD54-18-159965	63-2011	07/30/2018	Styrene	42.5707	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3455	42.5707
MD54-18-159965	63-2011	07/30/2018	Benzyl Chloride	51.7388	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.8346	51.7388
MD54-18-159965	63-2011	07/30/2018	Dichloropropene[cis-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.52525	45.3583
MD54-18-159965	63-2011	07/30/2018	Dichloropropene[trans-1,3-]	45.3583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.97883	45.3583
MD54-18-159965	63-2011	07/30/2018	Propylbenzene[1-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.7032	49.1269
MD54-18-159965	63-2011	07/30/2018	Dichlorobenzene[1,4-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.6456	60.0895
MD54-18-159965	63-2011	07/30/2018	Dibromoethane[1,2-]	76.7866	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.5003	76.7866
MD54-18-159965	63-2011	07/30/2018	Butadiene[1,3-]	22.1096	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.5274	22.1096
MD54-18-159965	63-2011	07/30/2018	Chloro-1-propene[3-]	128.236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1981	128.236
MD54-18-159965	63-2011	07/30/2018	Dichloroethane[1,2-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5393	40.4493
MD54-18-159965	63-2011	07/30/2018	Methyl-2-pentanone[4-]	40.9398	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.5639	40.9398
MD54-18-159965	63-2011	07/30/2018	Trimethylbenzene[1,3,5-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7381	49.1269
MD54-18-159965	63-2011	07/30/2018	Toluene	37.6609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1684	37.6609
MD54-18-159965	63-2011	07/30/2018	Chlorobenzene	46.0082	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.4033	46.0082
MD54-18-159965	63-2011	07/30/2018	Tetrahydrofuran	29.4745	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6108	29.4745
MD54-18-159965	63-2011	07/30/2018	Hexane	35.2256	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.69286	35.2256
MD54-18-159965	63-2011	07/30/2018	Cyclohexane	34.3999	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.25598	34.3999
MD54-18-159965	63-2011	07/30/2018	Trichlorobenzene[1,2,4-]	304.083	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	163.167	304.083
MD54-18-159965	63-2011	07/30/2018	Dioxane[1,4-]	147.659	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.1681	147.659
MD54-18-159965	63-2011	07/30/2018	Chlorodibromomethane	85.1332	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4726	85.1332
MD54-18-159965	63-2011	07/30/2018	Tetrachloroethene	67.782	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.0459	67.782
MD54-18-159965	63-2011	07/30/2018	n-Heptane	40.9561	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.9251	40.9561
MD54-18-159965	63-2011	07/30/2018	Dichloroethene[cis-1,2-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4909	39.6236
MD54-18-159965	63-2011	07/30/2018	Dichloroethene[trans-1,2-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.13226	39.6236
MD54-18-159965	63-2011	07/30/2018	Methyl tert-Butyl Ether	36.0308	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.56646	36.0308
MD54-18-159965	63-2011	07/30/2018	Isooctane	46.6908	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.47053	46.6908
MD54-18-159965	63-2011	07/30/2018	Dichlorobenzene[1,3-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.242	60.0895
MD54-18-159965	63-2011	07/30/2018	Carbon Tetrachloride	62.873	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.263	62.873
MD54-18-159965	63-2011	07/30/2018	Hexanone[2-]	167.853	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.6511	167.853
MD54-18-159965	63-2011	07/30/2018	Ethyltoluene[4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.7206	49.1269
MD54-18-159965	63-2011	07/30/2018	Ethanol	77.2064	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	60.2587	77.2064
MD54-18-159965	63-2011	07/30/2018	Propanol[2-]	100.719	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87834	100.719
MD54-18-159965	63-2011	07/30/2018	Acetone	20.8911	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	13.2943	97.3334
MD54-18-159965	63-2011	07/30/2018	Chloroform	48.7959	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.0786	48.7959
MD54-18-159965	63-2011	07/30/2018	Benzene	31.927	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.02394	31.927
MD54-18-159965	63-2011	07/30/2018	Trichloroethane[1,1,1-]	54.5264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4506	54.5264
MD54-18-159965	63-2011	07/30/2018	Bromomethane	159.105	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.9404	159.105
MD54-18-159965	63-2011	07/30/2018	Chloromethane	84.6137	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.66774	84.6137
MD54-18-159965	63-2011	07/30/2018	Chloroethane	108.109	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.184	108.109
MD54-18-159965	63-2011	07/30/2018	Vinyl Chloride	25.5457	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.15279	25.5457
MD54-18-159965	63-2011	07/30/2018	Methylene Chloride	142.33	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.7615	142.33
MD54-18-159965	63-2011	07/30/2018	Carbon Disulfide	127.598	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.91306	127.598
MD54-18-159965	63-2011	07/30/2018	Bromoform	103.302	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7594	103.302
MD54-18-159965	63-2011	07/30/2018	Bromodichloromethane	66.9523	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.4247	66.9523
MD54-18-159965	63-2011	07/30/2018	Dichloroethane[1,1-]	40.4493	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89885	40.4493
MD54-18-159965	63-2011	07/30/2018	Dichloroethene[1,1-]	39.6236	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.94355	39.6236
MD54-18-159965	63-2011	07/30/2018	Trichlorofluoromethane	56.1492	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8447	56.1492

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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)
MD54-18-159965	63-2011	07/30/2018	Dichlorodifluoromethane	49.4212	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.8264	49.4212
MD54-18-159965	63-2011	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	76.5888	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7425	76.5888
MD54-18-159965	63-2011	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	69.8625	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.1643	69.8625
MD54-18-159965	63-2011	07/30/2018	Dichloropropane[1,2-]	46.184	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.5499	46.184
MD54-18-159965	63-2011	07/30/2018	Butanone[2-]	120.846	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4951	120.846
MD54-18-159965	63-2011	07/30/2018	Trichloroethane[1,1,2-]	54.5264	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7221	54.5264
MD54-18-159965	63-2011	07/30/2018	Trichloroethene	59.0754	ug/m3		Y	GAS	REG	VOC	EPA:TO15	15.0374	53.7049
MD54-18-159965	63-2011	07/30/2018	Tetrachloroethane[1,1,2,2-]	68.6077	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.838	68.6077
MD54-18-159965	63-2011	07/30/2018	Hexachlorobutadiene	436.995	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	138.559	436.995
MD54-18-159965	63-2011	07/30/2018	Xylene[1,2-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.24453	43.3923
MD54-18-159965	63-2011	07/30/2018	Dichlorobenzene[1,2-]	60.0895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2465	60.0895
MD54-18-159965	63-2011	07/30/2018	Trimethylbenzene[1,2,4-]	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.0547	49.1269
MD54-18-159965	63-2011	07/30/2018	Isopropylbenzene	49.1269	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	49.1269
MD54-18-159965	63-2011	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	43.3923	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8855	43.3923
MD54-18-159966	63-2012	07/30/2018	Ethylbenzene	47.736	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.0944	47.736
MD54-18-159966	63-2012	07/30/2018	Styrene	46.8278	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6226	46.8278
MD54-18-159966	63-2012	07/30/2018	Benzyl Chloride	56.9127	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.4216	56.9127
MD54-18-159966	63-2012	07/30/2018	Dichloropropene[cis-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4324	49.8942
MD54-18-159966	63-2012	07/30/2018	Dichloropropene[trans-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.886	49.8942
MD54-18-159966	63-2012	07/30/2018	Propylbenzene[1-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	54.0396
MD54-18-159966	63-2012	07/30/2018	Dichlorobenzene[1,4-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.251	66.0984
MD54-18-159966	63-2012	07/30/2018	Dibromoethane[1,2-]	84.4653	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.8039	84.4653
MD54-18-159966	63-2012	07/30/2018	Butadiene[1,3-]	24.3206	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.19069	24.3206
MD54-18-159966	63-2012	07/30/2018	Chloro-1-propene[3-]	143.875	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7619	143.875
MD54-18-159966	63-2012	07/30/2018	Dichloroethane[1,2-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1573	44.4942
MD54-18-159966	63-2012	07/30/2018	Methyl-2-pentanone[4-]	45.0338	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.0203	45.0338
MD54-18-159966	63-2012	07/30/2018	Trimethylbenzene[1,3,5-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.2119	54.0396
MD54-18-159966	63-2012	07/30/2018	Toluene	41.427	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2983	41.427
MD54-18-159966	63-2012	07/30/2018	Chlorobenzene	50.609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.7037	50.609
MD54-18-159966	63-2012	07/30/2018	Tetrahydrofuran	32.422	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7898	32.422
MD54-18-159966	63-2012	07/30/2018	Hexane	38.7481	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	38.7481
MD54-18-159966	63-2012	07/30/2018	Cyclohexane	37.8399	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.28797	37.8399
MD54-18-159966	63-2012	07/30/2018	Trichlorobenzene[1,2,4-]	341.166	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	178	341.166
MD54-18-159966	63-2012	07/30/2018	Dioxane[1,4-]	165.666	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.3289	165.666
MD54-18-159966	63-2012	07/30/2018	Chlorodibromomethane	93.6465	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1753	93.6465
MD54-18-159966	63-2012	07/30/2018	Tetrachloroethene	36.6023	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	25.0793	74.5602
MD54-18-159966	63-2012	07/30/2018	n-Heptane	45.0518	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1538	45.0518
MD54-18-159966	63-2012	07/30/2018	Dichloroethene[cis-1,2-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6796	43.586
MD54-18-159966	63-2012	07/30/2018	Dichloroethene[trans-1,2-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.92473	43.586
MD54-18-159966	63-2012	07/30/2018	Methyl tert-Butyl Ether	39.6339	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.28708	39.6339
MD54-18-159966	63-2012	07/30/2018	Isooctane	51.3599	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.40435	51.3599
MD54-18-159966	63-2012	07/30/2018	Dichlorobenzene[1,3-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2465	66.0984
MD54-18-159966	63-2012	07/30/2018	Carbon Tetrachloride	41.4962	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	25.7779	69.1603
MD54-18-159966	63-2012	07/30/2018	Hexanone[2-]	188.323	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6981	188.323
MD54-18-159966	63-2012	07/30/2018	Ethyltoluene[4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6857	54.0396
MD54-18-159966	63-2012	07/30/2018	Ethanol	86.6218	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	67.791	86.6218
MD54-18-159966	63-2012	07/30/2018	Propanol[2-]	113.001	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.61531	113.001
MD54-18-159966	63-2012	07/30/2018	Acetone	109.203	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7187	109.203
MD54-18-159966	63-2012	07/30/2018	Chloroform	107.351	ug/m3		Y	GAS	REG	VOC	EPA:TO15	19.0304	53.6754
MD54-18-159966	63-2012	07/30/2018	Benzene	35.1197	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.98175	35.1197
MD54-18-159966	63-2012	07/30/2018	Trichloroethane[1,1,1-]	59.9791	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0863	59.9791
MD54-18-159966	63-2012	07/30/2018	Bromomethane	178.508	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.0449	178.508
MD54-18-159966	63-2012	07/30/2018	Chloromethane	94.9324	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.69962	94.9324
MD54-18-159966	63-2012	07/30/2018	Chloroethane	121.293	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.5024	121.293
MD54-18-159966	63-2012	07/30/2018	Vinyl Chloride	28.1003	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.91916	28.1003
MD54-18-159966	63-2012	07/30/2018	Methylene Chloride	159.687	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.803	159.687
MD54-18-159966	63-2012	07/30/2018	Carbon Disulfide	143.158	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53548	143.158

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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)
MD54-18-159966	63-2012	07/30/2018	Bromoform	113.632	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.8585	113.632
MD54-18-159966	63-2012	07/30/2018	Bromodichloromethane	73.6475	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.4333	73.6475
MD54-18-159966	63-2012	07/30/2018	Dichloroethane[1,1-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	44.4942
MD54-18-159966	63-2012	07/30/2018	Dichloroethene[1,1-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.73602	43.586
MD54-18-159966	63-2012	07/30/2018	Trichlorofluoromethane	61.7641	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.0907	61.7641
MD54-18-159966	63-2012	07/30/2018	Dichlorodifluoromethane	84.0161	ug/m3		Y	GAS	REG	VOC	EPA:TO15	16.309	54.3634
MD54-18-159966	63-2012	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	84.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.8061	84.2477
MD54-18-159966	63-2012	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	76.8488	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.5615	76.8488
MD54-18-159966	63-2012	07/30/2018	Dichloropropane[1,2-]	50.8024	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.3973	50.8024
MD54-18-159966	63-2012	07/30/2018	Butanone[2-]	135.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.674	135.583
MD54-18-159966	63-2012	07/30/2018	Trichloroethane[1,1,2-]	59.9791	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.3579	59.9791
MD54-18-159966	63-2012	07/30/2018	Trichloroethene	2953.77	ug/m3		Y	GAS	REG	VOC	EPA:TO15	16.6485	59.0754
MD54-18-159966	63-2012	07/30/2018	Tetrachloroethane[1,1,2,2-]	75.4685	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.8962	75.4685
MD54-18-159966	63-2012	07/30/2018	Hexachlorobutadiene	490.287	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	149.218	490.287
MD54-18-159966	63-2012	07/30/2018	Xylene[1,2-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.11238	47.7315
MD54-18-159966	63-2012	07/30/2018	Dichlorobenzene[1,2-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.251	66.0984
MD54-18-159966	63-2012	07/30/2018	Trimethylbenzene[1,2,4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.0024	54.0396
MD54-18-159966	63-2012	07/30/2018	Isopropylbenzene	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	54.0396
MD54-18-159966	63-2012	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1873	47.7315
MD54-18-159967	63-2012	07/30/2018	Ethylbenzene	47.736	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.6604	47.736
MD54-18-159967	63-2012	07/30/2018	Styrene	46.8278	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6226	46.8278
MD54-18-159967	63-2012	07/30/2018	Benzyl Chloride	56.9127	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.4216	56.9127
MD54-18-159967	63-2012	07/30/2018	Dichloropropene[cis-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4324	49.8942
MD54-18-159967	63-2012	07/30/2018	Dichloropropene[trans-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.886	49.8942
MD54-18-159967	63-2012	07/30/2018	Propylbenzene[1-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	54.0396
MD54-18-159967	63-2012	07/30/2018	Dichlorobenzene[1,4-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.6501	66.0984
MD54-18-159967	63-2012	07/30/2018	Dibromoethane[1,2-]	84.4653	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.8039	84.4653
MD54-18-159967	63-2012	07/30/2018	Butadiene[1,3-]	24.3206	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.19069	24.3206
MD54-18-159967	63-2012	07/30/2018	Chloro-1-propene[3-]	140.747	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.4491	140.747
MD54-18-159967	63-2012	07/30/2018	Dichloroethane[1,2-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7528	44.4942
MD54-18-159967	63-2012	07/30/2018	Methyl-2-pentanone[4-]	45.0338	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.0203	45.0338
MD54-18-159967	63-2012	07/30/2018	Trimethylbenzene[1,3,5-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.2119	54.0396
MD54-18-159967	63-2012	07/30/2018	Toluene	41.427	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2983	41.427
MD54-18-159967	63-2012	07/30/2018	Chlorobenzene	50.609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.2436	50.609
MD54-18-159967	63-2012	07/30/2018	Tetrahydrofuran	32.422	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7898	32.422
MD54-18-159967	63-2012	07/30/2018	Hexane	38.7481	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	38.7481
MD54-18-159967	63-2012	07/30/2018	Cyclohexane	37.8399	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.94397	37.8399
MD54-18-159967	63-2012	07/30/2018	Trichlorobenzene[1,2,4-]	333.75	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	178	333.75
MD54-18-159967	63-2012	07/30/2018	Dioxane[1,4-]	162.065	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.9688	162.065
MD54-18-159967	63-2012	07/30/2018	Chlorodibromomethane	93.6465	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1753	93.6465
MD54-18-159967	63-2012	07/30/2018	Tetrachloroethene	81.3384	ug/m3		Y	GAS	REG	VOC	EPA:TO15	25.0793	74.5602
MD54-18-159967	63-2012	07/30/2018	n-Heptane	45.0518	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1538	45.0518
MD54-18-159967	63-2012	07/30/2018	Dichloroethene[cis-1,2-]	24.9629	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	12.6796	43.586
MD54-18-159967	63-2012	07/30/2018	Dichloroethene[trans-1,2-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.92473	43.586
MD54-18-159967	63-2012	07/30/2018	Methyl tert-Butyl Ether	39.6339	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.28708	39.6339
MD54-18-159967	63-2012	07/30/2018	Isooctane	51.3599	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.40435	51.3599
MD54-18-159967	63-2012	07/30/2018	Dichlorobenzene[1,3-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2465	66.0984
MD54-18-159967	63-2012	07/30/2018	Carbon Tetrachloride	106.884	ug/m3		Y	GAS	REG	VOC	EPA:TO15	25.7779	69.1603
MD54-18-159967	63-2012	07/30/2018	Hexanone[2-]	184.229	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.2887	184.229
MD54-18-159967	63-2012	07/30/2018	Ethyltoluene[4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1944	54.0396
MD54-18-159967	63-2012	07/30/2018	Ethanol	84.7388	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	65.9079	84.7388
MD54-18-159967	63-2012	07/30/2018	Propanol[2-]	110.545	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36965	110.545
MD54-18-159967	63-2012	07/30/2018	Acetone	106.829	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7187	106.829
MD54-18-159967	63-2012	07/30/2018	Chloroform	229.341	ug/m3		Y	GAS	REG	VOC	EPA:TO15	19.0304	53.6754
MD54-18-159967	63-2012	07/30/2018	Benzene	35.1197	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.66248	35.1197
MD54-18-159967	63-2012	07/30/2018	Trichloroethane[1,1,1-]	15.2674	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	13.0863	59.9791
MD54-18-159967	63-2012	07/30/2018	Bromomethane	174.628	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	30.6569	174.628

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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)
MD54-18-159967	63-2012	07/30/2018	Chloromethane	92.8687	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.49324	92.8687
MD54-18-159967	63-2012	07/30/2018	Chloroethane	118.656	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.5024	118.656
MD54-18-159967	63-2012	07/30/2018	Vinyl Chloride	28.1003	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.91916	28.1003
MD54-18-159967	63-2012	07/30/2018	Methylene Chloride	15.2744	ug/m3	J	N	GAS	REG	VOC	EPA:TO15	11.803	156.216
MD54-18-159967	63-2012	07/30/2018	Carbon Disulfide	140.046	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53548	140.046
MD54-18-159967	63-2012	07/30/2018	Bromoform	113.632	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8255	113.632
MD54-18-159967	63-2012	07/30/2018	Bromodichloromethane	73.6475	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.4333	73.6475
MD54-18-159967	63-2012	07/30/2018	Dichloroethane[1,1-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	44.4942
MD54-18-159967	63-2012	07/30/2018	Dichloroethene[1,1-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.73602	43.586
MD54-18-159967	63-2012	07/30/2018	Trichlorofluoromethane	61.7641	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.5292	61.7641
MD54-18-159967	63-2012	07/30/2018	Dichlorodifluoromethane	192.743	ug/m3		Y	GAS	REG	VOC	EPA:TO15	16.309	54.3634
MD54-18-159967	63-2012	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	32.1673	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	26.0402	84.2477
MD54-18-159967	63-2012	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	76.8488	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.5615	76.8488
MD54-18-159967	63-2012	07/30/2018	Dichloropropane[1,2-]	50.8024	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.3973	50.8024
MD54-18-159967	63-2012	07/30/2018	Butanone[2-]	132.635	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.674	132.635
MD54-18-159967	63-2012	07/30/2018	Trichloroethane[1,1,2-]	59.9791	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.3579	59.9791
MD54-18-159967	63-2012	07/30/2018	Trichloroethene	8055.73	ug/m3		Y	GAS	REG	VOC	EPA:TO15	16.6485	59.0754
MD54-18-159967	63-2012	07/30/2018	Tetrachloroethane[1,1,2,2-]	75.4685	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.8962	75.4685
MD54-18-159967	63-2012	07/30/2018	Hexachlorobutadiene	479.628	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	149.218	479.628
MD54-18-159967	63-2012	07/30/2018	Xylene[1,2-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.11238	47.7315
MD54-18-159967	63-2012	07/30/2018	Dichlorobenzene[1,2-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.6501	66.0984
MD54-18-159967	63-2012	07/30/2018	Trimethylbenzene[1,2,4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.5111	54.0396
MD54-18-159967	63-2012	07/30/2018	Isopropylbenzene	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	54.0396
MD54-18-159967	63-2012	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.7534	47.7315
MD54-18-159968	63-2013	07/30/2018	Ethylbenzene	47.736	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.0944	47.736
MD54-18-159968	63-2013	07/30/2018	Styrene	46.8278	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6226	46.8278
MD54-18-159968	63-2013	07/30/2018	Benzyl Chloride	56.9127	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.4216	56.9127
MD54-18-159968	63-2013	07/30/2018	Dichloropropene[cis-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4324	49.8942
MD54-18-159968	63-2013	07/30/2018	Dichloropropene[trans-1,3-]	49.8942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.886	49.8942
MD54-18-159968	63-2013	07/30/2018	Propylbenzene[1-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.177	54.0396
MD54-18-159968	63-2013	07/30/2018	Dichlorobenzene[1,4-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.251	66.0984
MD54-18-159968	63-2013	07/30/2018	Dibromoethane[1,2-]	84.4653	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.8039	84.4653
MD54-18-159968	63-2013	07/30/2018	Butadiene[1,3-]	24.3206	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.19069	24.3206
MD54-18-159968	63-2013	07/30/2018	Chloro-1-propene[3-]	143.875	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7619	143.875
MD54-18-159968	63-2013	07/30/2018	Dichloroethane[1,2-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1573	44.4942
MD54-18-159968	63-2013	07/30/2018	Methyl-2-pentanone[4-]	45.0338	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.4297	45.0338
MD54-18-159968	63-2013	07/30/2018	Trimethylbenzene[1,3,5-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.2119	54.0396
MD54-18-159968	63-2013	07/30/2018	Toluene	41.427	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2983	41.427
MD54-18-159968	63-2013	07/30/2018	Chlorobenzene	50.609	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.7037	50.609
MD54-18-159968	63-2013	07/30/2018	Tetrahydrofuran	32.422	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7898	32.422
MD54-18-159968	63-2013	07/30/2018	Hexane	38.7481	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	38.7481
MD54-18-159968	63-2013	07/30/2018	Cyclohexane	37.8399	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.28797	37.8399
MD54-18-159968	63-2013	07/30/2018	Trichlorobenzene[1,2,4-]	341.166	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	178	341.166
MD54-18-159968	63-2013	07/30/2018	Dioxane[1,4-]	165.666	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.3289	165.666
MD54-18-159968	63-2013	07/30/2018	Chlorodibromomethane	93.6465	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1753	93.6465
MD54-18-159968	63-2013	07/30/2018	Tetrachloroethene	74.5602	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.7572	74.5602
MD54-18-159968	63-2013	07/30/2018	n-Heptane	45.0518	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.5633	45.0518
MD54-18-159968	63-2013	07/30/2018	Dichloroethene[cis-1,2-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6796	43.586
MD54-18-159968	63-2013	07/30/2018	Dichloroethene[trans-1,2-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.92473	43.586
MD54-18-159968	63-2013	07/30/2018	Methyl tert-Butyl Ether	39.6339	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.28708	39.6339
MD54-18-159968	63-2013	07/30/2018	Isooctane	51.3599	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.40435	51.3599
MD54-18-159968	63-2013	07/30/2018	Dichlorobenzene[1,3-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.2465	66.0984
MD54-18-159968	63-2013	07/30/2018	Carbon Tetrachloride	69.1603	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.7779	69.1603
MD54-18-159968	63-2013	07/30/2018	Hexanone[2-]	188.323	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6981	188.323
MD54-18-159968	63-2013	07/30/2018	Ethyltoluene[4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6857	54.0396
MD54-18-159968	63-2013	07/30/2018	Ethanol	86.6218	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	67.791	86.6218
MD54-18-159968	63-2013	07/30/2018	Propanol[2-]	113.001	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.61531	113.001

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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)
MD54-18-159968	63-2013	07/30/2018	Acetone	14.9561	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	14.7187	109.203
MD54-18-159968	63-2013	07/30/2018	Chloroform	32.2053	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	19.0304	53.6754
MD54-18-159968	63-2013	07/30/2018	Benzene	35.1197	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.98175	35.1197
MD54-18-159968	63-2013	07/30/2018	Trichloroethane[1,1,1-]	27.8085	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	13.0863	59.9791
MD54-18-159968	63-2013	07/30/2018	Bromomethane	178.508	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	31.0449	178.508
MD54-18-159968	63-2013	07/30/2018	Chloromethane	94.9324	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.69962	94.9324
MD54-18-159968	63-2013	07/30/2018	Chloroethane	121.293	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.5024	121.293
MD54-18-159968	63-2013	07/30/2018	Vinyl Chloride	28.1003	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.91916	28.1003
MD54-18-159968	63-2013	07/30/2018	Methylene Chloride	159.687	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.803	159.687
MD54-18-159968	63-2013	07/30/2018	Carbon Disulfide	143.158	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53548	143.158
MD54-18-159968	63-2013	07/30/2018	Bromoform	113.632	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.8585	113.632
MD54-18-159968	63-2013	07/30/2018	Bromodichloromethane	73.6475	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.4333	73.6475
MD54-18-159968	63-2013	07/30/2018	Dichloroethane[1,1-]	44.4942	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	44.4942
MD54-18-159968	63-2013	07/30/2018	Dichloroethene[1,1-]	43.586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.73602	43.586
MD54-18-159968	63-2013	07/30/2018	Trichlorofluoromethane	61.7641	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.0907	61.7641
MD54-18-159968	63-2013	07/30/2018	Dichlorodifluoromethane	47.4444	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	16.309	54.3634
MD54-18-159968	63-2013	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	84.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.8061	84.2477
MD54-18-159968	63-2013	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	76.8488	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.5615	76.8488
MD54-18-159968	63-2013	07/30/2018	Dichloropropane[1,2-]	50.8024	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.3973	50.8024
MD54-18-159968	63-2013	07/30/2018	Butanone[2-]	135.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.9688	135.583
MD54-18-159968	63-2013	07/30/2018	Trichloroethane[1,1,2-]	59.9791	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.3579	59.9791
MD54-18-159968	63-2013	07/30/2018	Trichloroethene	343.711	ug/m3		Y	GAS	REG	VOC	EPA:TO15	16.6485	59.0754
MD54-18-159968	63-2013	07/30/2018	Tetrachloroethane[1,1,2,2-]	75.4685	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.5823	75.4685
MD54-18-159968	63-2013	07/30/2018	Hexachlorobutadiene	490.287	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	149.218	490.287
MD54-18-159968	63-2013	07/30/2018	Xylene[1,2-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.11238	47.7315
MD54-18-159968	63-2013	07/30/2018	Dichlorobenzene[1,2-]	66.0984	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.251	66.0984
MD54-18-159968	63-2013	07/30/2018	Trimethylbenzene[1,2,4-]	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.0024	54.0396
MD54-18-159968	63-2013	07/30/2018	Isopropylbenzene	54.0396	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	54.0396
MD54-18-159968	63-2013	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	47.7315	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.1873	47.7315
MD54-18-159969	63-2013	07/30/2018	Ethylbenzene	40.7926	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.6227	40.7926
MD54-18-159969	63-2013	07/30/2018	Styrene	40.0164	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0684	40.0164
MD54-18-159969	63-2013	07/30/2018	Benzyl Chloride	48.6345	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.7651	48.6345
MD54-18-159969	63-2013	07/30/2018	Dichloropropene[cis-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.61808	42.6368
MD54-18-159969	63-2013	07/30/2018	Dichloropropene[trans-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.07166	42.6368
MD54-18-159969	63-2013	07/30/2018	Propylbenzene[1-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2294	46.1793
MD54-18-159969	63-2013	07/30/2018	Dichlorobenzene[1,4-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.242	56.4841
MD54-18-159969	63-2013	07/30/2018	Dibromoethane[1,2-]	72.1794	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.9645	72.1794
MD54-18-159969	63-2013	07/30/2018	Butadiene[1,3-]	20.783	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.08521	20.783
MD54-18-159969	63-2013	07/30/2018	Chloro-1-propene[3-]	118.853	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.2598	118.853
MD54-18-159969	63-2013	07/30/2018	Dichloroethane[1,2-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3258	38.0223
MD54-18-159969	63-2013	07/30/2018	Methyl-2-pentanone[4-]	38.4834	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5169	38.4834
MD54-18-159969	63-2013	07/30/2018	Trimethylbenzene[1,3,5-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2643	46.1793
MD54-18-159969	63-2013	07/30/2018	Toluene	35.4012	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.41522	35.4012
MD54-18-159969	63-2013	07/30/2018	Chlorobenzene	43.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.023	43.2477
MD54-18-159969	63-2013	07/30/2018	Tetrahydrofuran	27.7061	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.72659	27.7061
MD54-18-159969	63-2013	07/30/2018	Hexane	33.112	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.98835	33.112
MD54-18-159969	63-2013	07/30/2018	Cyclohexane	32.3359	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.56798	32.3359
MD54-18-159969	63-2013	07/30/2018	Trichlorobenzene[1,2,4-]	281.833	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	148.333	281.833
MD54-18-159969	63-2013	07/30/2018	Dioxane[1,4-]	136.855	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.3674	136.855
MD54-18-159969	63-2013	07/30/2018	Chlorodibromomethane	80.0252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6213	80.0252
MD54-18-159969	63-2013	07/30/2018	Tetrachloroethene	63.7151	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.0124	63.7151
MD54-18-159969	63-2013	07/30/2018	n-Heptane	38.4988	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6964	38.4988
MD54-18-159969	63-2013	07/30/2018	Dichloroethene[cis-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	37.2462
MD54-18-159969	63-2013	07/30/2018	Dichloroethene[trans-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.33978	37.2462
MD54-18-159969	63-2013	07/30/2018	Methyl tert-Butyl Ether	33.8689	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.84585	33.8689
MD54-18-159969	63-2013	07/30/2018	Isooctane	43.8894	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.00362	43.8894
MD54-18-159969	63-2013	07/30/2018	Dichlorobenzene[1,3-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8385	56.4841

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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)
MD54-18-159969	63-2013	07/30/2018	Carbon Tetrachloride	59.1006	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.3768	59.1006
MD54-18-159969	63-2013	07/30/2018	Hexanone[2-]	155.571	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6041	155.571
MD54-18-159969	63-2013	07/30/2018	Ethyltoluene[4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	46.1793
MD54-18-159969	63-2013	07/30/2018	Ethanol	71.5572	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	56.4925	71.5572
MD54-18-159969	63-2013	07/30/2018	Propanol[2-]	93.349	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.14138	93.349
MD54-18-159969	63-2013	07/30/2018	Acetone	90.2114	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1073	90.2114
MD54-18-159969	63-2013	07/30/2018	Chloroform	19.0304	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	15.6147	45.8681
MD54-18-159969	63-2013	07/30/2018	Benzene	30.0114	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.3854	30.0114
MD54-18-159969	63-2013	07/30/2018	Trichloroethane[1,1,1-]	59.9791	ug/m3		Y	GAS	REG	VOC	EPA:TO15	10.9053	51.2549
MD54-18-159969	63-2013	07/30/2018	Bromomethane	147.463	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.6121	147.463
MD54-18-159969	63-2013	07/30/2018	Chloromethane	78.4224	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.04862	78.4224
MD54-18-159969	63-2013	07/30/2018	Chloroethane	100.199	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8656	100.199
MD54-18-159969	63-2013	07/30/2018	Vinyl Chloride	24.0129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.64188	24.0129
MD54-18-159969	63-2013	07/30/2018	Methylene Chloride	131.916	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.7201	131.916
MD54-18-159969	63-2013	07/30/2018	Carbon Disulfide	118.261	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.29063	118.261
MD54-18-159969	63-2013	07/30/2018	Bromoform	97.1038	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6934	97.1038
MD54-18-159969	63-2013	07/30/2018	Bromodichloromethane	62.9351	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.4162	62.9351
MD54-18-159969	63-2013	07/30/2018	Dichloroethane[1,1-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.08986	38.0223
MD54-18-159969	63-2013	07/30/2018	Dichloroethene[1,1-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.54731	37.2462
MD54-18-159969	63-2013	07/30/2018	Trichlorofluoromethane	52.7802	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.7218	52.7802
MD54-18-159969	63-2013	07/30/2018	Dichlorodifluoromethane	84.0161	ug/m3		Y	GAS	REG	VOC	EPA:TO15	13.3437	46.456
MD54-18-159969	63-2013	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	71.9935	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.4449	71.9935
MD54-18-159969	63-2013	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	65.6708	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	65.6708
MD54-18-159969	63-2013	07/30/2018	Dichloropropane[1,2-]	43.4129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1644	43.4129
MD54-18-159969	63-2013	07/30/2018	Butanone[2-]	112.003	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6108	112.003
MD54-18-159969	63-2013	07/30/2018	Trichloroethane[1,1,2-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.6316	51.2549
MD54-18-159969	63-2013	07/30/2018	Trichloroethene	1503.74	ug/m3		Y	GAS	REG	VOC	EPA:TO15	13.9633	50.4826
MD54-18-159969	63-2013	07/30/2018	Tetrachloroethane[1,1,2,2-]	64.4912	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4658	64.4912
MD54-18-159969	63-2013	07/30/2018	Hexachlorobutadiene	405.02	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	127.901	405.02
MD54-18-159969	63-2013	07/30/2018	Xylene[1,2-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	40.7887
MD54-18-159969	63-2013	07/30/2018	Dichlorobenzene[1,2-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	28.242	56.4841
MD54-18-159969	63-2013	07/30/2018	Trimethylbenzene[1,2,4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.0897	46.1793
MD54-18-159969	63-2013	07/30/2018	Isopropylbenzene	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7905	46.1793
MD54-18-159969	63-2013	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	40.7887	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5838	40.7887
MD54-18-159970	63-2012	07/30/2018	Ethylbenzene	56.4153	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	21.6982	56.4153
MD54-18-159970	63-2012	07/30/2018	Styrene	55.3419	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	15.7512	55.3419
MD54-18-159970	63-2012	07/30/2018	Benzyl Chloride	67.2605	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	31.5607	67.2605
MD54-18-159970	63-2012	07/30/2018	Dichloropropene[cis-1,3-]	58.9658	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.7932	58.9658
MD54-18-159970	63-2012	07/30/2018	Dichloropropene[trans-1,3-]	58.9658	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.7003	58.9658
MD54-18-159970	63-2012	07/30/2018	Propylbenzene[1-]	63.865	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	21.1246	63.865
MD54-18-159970	63-2012	07/30/2018	Dichlorobenzene[1,4-]	78.1163	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	39.0581	78.1163
MD54-18-159970	63-2012	07/30/2018	Dibromoethane[1,2-]	99.8226	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	27.6432	99.8226
MD54-18-159970	63-2012	07/30/2018	Butadiene[1,3-]	28.7425	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.07508	28.7425
MD54-18-159970	63-2012	07/30/2018	Chloro-1-propene[3-]	165.769	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	15.6385	165.769
MD54-18-159970	63-2012	07/30/2018	Dichloroethane[1,2-]	52.5841	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.1797	52.5841
MD54-18-159970	63-2012	07/30/2018	Methyl-2-pentanone[4-]	53.2217	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	31.5236	53.2217
MD54-18-159970	63-2012	07/30/2018	Trimethylbenzene[1,3,5-]	63.865	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.6682	63.865
MD54-18-159970	63-2012	07/30/2018	Toluene	48.9592	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.1813	48.9592
MD54-18-159970	63-2012	07/30/2018	Chlorobenzene	59.8107	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	23.9243	59.8107
MD54-18-159970	63-2012	07/30/2018	Tetrahydrofuran	38.3169	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.5583	38.3169
MD54-18-159970	63-2012	07/30/2018	Hexane	45.7932	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.45413	45.7932
MD54-18-159970	63-2012	07/30/2018	Cyclohexane	44.7199	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.664	44.7199
MD54-18-159970	63-2012	07/30/2018	Trichlorobenzene[1,2,4-]	393.083	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	207.666	393.083
MD54-18-159970	63-2012	07/30/2018	Dioxane[1,4-]	190.876	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	25.5702	190.876
MD54-18-159970	63-2012	07/30/2018	Chlorodibromomethane	110.673	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.7293	110.673
MD54-18-159970	63-2012	07/30/2018	Tetrachloroethene	81.3384	ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	29.1463	88.1166
MD54-18-159970	63-2012	07/30/2018	n-Heptane	53.243	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	17.6111	53.243

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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)
MD54-18-159970	63-2012	07/30/2018	Dichloroethene[cis-1,2-]	26.9441	ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	14.6607	51.5107
MD54-18-159970	63-2012	07/30/2018	Dichloroethene[trans-1,2-]	51.5107	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.11344	51.5107
MD54-18-159970	63-2012	07/30/2018	Methyl tert-Butyl Ether	46.84	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.72831	46.84
MD54-18-159970	63-2012	07/30/2018	Isooctane	60.6981	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.33817	60.6981
MD54-18-159970	63-2012	07/30/2018	Dichlorobenzene[1,3-]	78.1163	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	36.0537	78.1163
MD54-18-159970	63-2012	07/30/2018	Carbon Tetrachloride	113.171	ug/m3		Y	GAS	FD	VOC	EPA:TO15	29.5503	81.7349
MD54-18-159970	63-2012	07/30/2018	Hexanone[2-]	216.981	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	24.9733	216.981
MD54-18-159970	63-2012	07/30/2018	Ethyltoluene[4-]	63.865	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	20.142	63.865
MD54-18-159970	63-2012	07/30/2018	Ethanol	99.8034	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	77.2064	99.8034
MD54-18-159970	63-2012	07/30/2018	Propanol[2-]	130.197	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.84358	130.197
MD54-18-159970	63-2012	07/30/2018	Acetone	125.821	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	17.0927	125.821
MD54-18-159970	63-2012	07/30/2018	Chloroform	248.859	ug/m3		Y	GAS	FD	VOC	EPA:TO15	21.9581	63.4346
MD54-18-159970	63-2012	07/30/2018	Benzene	41.5051	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.93956	41.5051
MD54-18-159970	63-2012	07/30/2018	Trichloroethane[1,1,1-]	70.8844	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.7221	70.8844
MD54-18-159970	63-2012	07/30/2018	Bromomethane	205.673	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	35.7017	205.673
MD54-18-159970	63-2012	07/30/2018	Chloromethane	109.379	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.1442	109.379
MD54-18-159970	63-2012	07/30/2018	Chloroethane	139.751	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.8756	139.751
MD54-18-159970	63-2012	07/30/2018	Vinyl Chloride	33.2094	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.19645	33.2094
MD54-18-159970	63-2012	07/30/2018	Methylene Chloride	183.988	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.8859	183.988
MD54-18-159970	63-2012	07/30/2018	Carbon Disulfide	164.943	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.46913	164.943
MD54-18-159970	63-2012	07/30/2018	Bromoform	134.292	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	29.9575	134.292
MD54-18-159970	63-2012	07/30/2018	Bromodichloromethane	87.0379	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	26.7809	87.0379
MD54-18-159970	63-2012	07/30/2018	Dichloroethane[1,1-]	52.5841	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.3258	52.5841
MD54-18-159970	63-2012	07/30/2018	Dichloroethene[1,1-]	51.5107	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.92473	51.5107
MD54-18-159970	63-2012	07/30/2018	Trichlorofluoromethane	72.9939	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	21.8982	72.9939
MD54-18-159970	63-2012	07/30/2018	Dichlorodifluoromethane	187.801	ug/m3		Y	GAS	FD	VOC	EPA:TO15	18.7801	64.2476
MD54-18-159970	63-2012	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	32.1673	ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	30.6355	99.5655
MD54-18-159970	63-2012	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	90.8213	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	23.0546	90.8213
MD54-18-159970	63-2012	07/30/2018	Dichloropropane[1,2-]	60.0392	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	22.6302	60.0392
MD54-18-159970	63-2012	07/30/2018	Butanone[2-]	156.215	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.7373	156.215
MD54-18-159970	63-2012	07/30/2018	Trichloroethane[1,1,2-]	70.8844	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.539	70.8844
MD54-18-159970	63-2012	07/30/2018	Trichloroethene	8592.78	ug/m3		Y	GAS	FD	VOC	EPA:TO15	19.3338	69.8163
MD54-18-159970	63-2012	07/30/2018	Tetrachloroethane[1,1,2,2-]	89.19	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	23.3266	89.19
MD54-18-159970	63-2012	07/30/2018	Hexachlorobutadiene	564.896	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	181.193	564.896
MD54-18-159970	63-2012	07/30/2018	Xylene[1,2-]	56.4099	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.4141	56.4099
MD54-18-159970	63-2012	07/30/2018	Dichlorobenzene[1,2-]	78.1163	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	39.659	78.1163
MD54-18-159970	63-2012	07/30/2018	Trimethylbenzene[1,2,4-]	63.865	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	31.9325	63.865
MD54-18-159970	63-2012	07/30/2018	Isopropylbenzene	63.865	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.7032	63.865
MD54-18-159970	63-2012	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	56.4099	ug/m3	U	N	GAS	FD	VOC	EPA:TO15	17.3569	56.4099
MD54-18-159971	63-2012	07/30/2018	Ethylbenzene	104.151	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.7926	104.151
MD54-18-159971	63-2012	07/30/2018	Styrene	102.17	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.3738	102.17
MD54-18-159971	63-2012	07/30/2018	Benzyl Chloride	124.173	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	56.9127	124.173
MD54-18-159971	63-2012	07/30/2018	Dichloropropene[cis-1,3-]	108.86	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	22.2256	108.86
MD54-18-159971	63-2012	07/30/2018	Dichloropropene[trans-1,3-]	108.86	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	23.5863	108.86
MD54-18-159971	63-2012	07/30/2018	Propylbenzene[1-]	117.905	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	39.3016	117.905
MD54-18-159971	63-2012	07/30/2018	Dichlorobenzene[1,4-]	144.215	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	72.1073	144.215
MD54-18-159971	63-2012	07/30/2018	Dibromoethane[1,2-]	184.288	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	51.4471	184.288
MD54-18-159971	63-2012	07/30/2018	Butadiene[1,3-]	53.0631	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	13.2658	53.0631
MD54-18-159971	63-2012	07/30/2018	Chloro-1-propene[3-]	306.515	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.0877	306.515
MD54-18-159971	63-2012	07/30/2018	Dichloroethane[1,2-]	97.0783	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.9325	97.0783
MD54-18-159971	63-2012	07/30/2018	Methyl-2-pentanone[4-]	98.2555	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	57.3157	98.2555
MD54-18-159971	63-2012	07/30/2018	Trimethylbenzene[1,3,5-]	117.905	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	34.8801	117.905
MD54-18-159971	63-2012	07/30/2018	Toluene	90.3861	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	24.103	90.3861
MD54-18-159971	63-2012	07/30/2018	Chlorobenzene	110.42	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	44.1679	110.42
MD54-18-159971	63-2012	07/30/2018	Tetrahydrofuran	70.7389	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.3481	70.7389
MD54-18-159971	63-2012	07/30/2018	Hexane	84.5413	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	15.8515	84.5413
MD54-18-159971	63-2012	07/30/2018	Cyclohexane	82.5598	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.6079	82.5598

TA-63 Transuranic Waste Facility Vapor Monitoring System
Sampling and Analyses - Quarter 4

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)
MD54-18-159971	63-2012	07/30/2018	Trichlorobenzene[1,2,4-]	726.833	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	378.25	726.833
MD54-18-159971	63-2012	07/30/2018	Dioxane[1,4-]	352.941	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	46.8188	352.941
MD54-18-159971	63-2012	07/30/2018	Chlorodibromomethane	204.32	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	34.9046	204.32
MD54-18-159971	63-2012	07/30/2018	Tetrachloroethene	162.677	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	54.2256	162.677
MD54-18-159971	63-2012	07/30/2018	n-Heptane	57.3386	ug/m3	J	Y	GAS	FB	VOC	EPA:TO15	32.7649	98.2947
MD54-18-159971	63-2012	07/30/2018	Dichloroethene[cis-1,2-]	95.0967	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	27.3403	95.0967
MD54-18-159971	63-2012	07/30/2018	Dichloroethene[trans-1,2-]	95.0967	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.6419	95.0967
MD54-18-159971	63-2012	07/30/2018	Methyl tert-Butyl Ether	86.4739	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	18.0154	86.4739
MD54-18-159971	63-2012	07/30/2018	Isooctane	112.058	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.7425	112.058
MD54-18-159971	63-2012	07/30/2018	Dichlorobenzene[1,3-]	144.215	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	66.0984	144.215
MD54-18-159971	63-2012	07/30/2018	Carbon Tetrachloride	150.895	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	55.3282	150.895
MD54-18-159971	63-2012	07/30/2018	Hexanone[2-]	401.21	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	45.0338	401.21
MD54-18-159971	63-2012	07/30/2018	Ethyltoluene[4-]	117.905	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	37.3365	117.905
MD54-18-159971	63-2012	07/30/2018	Ethanol	184.542	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	144.997	184.542
MD54-18-159971	63-2012	07/30/2018	Propanol[2-]	240.742	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.2132	240.742
MD54-18-159971	63-2012	07/30/2018	Acetone	232.651	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.8618	232.651
MD54-18-159971	63-2012	07/30/2018	Chloroform	117.11	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.5006	117.11
MD54-18-159971	63-2012	07/30/2018	Benzene	76.6248	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.9213	76.6248
MD54-18-159971	63-2012	07/30/2018	Trichloroethane[1,1,1-]	130.863	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	27.8085	130.863
MD54-18-159971	63-2012	07/30/2018	Bromomethane	380.3	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	65.9705	380.3
MD54-18-159971	63-2012	07/30/2018	Chloromethane	202.247	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	20.6375	202.247
MD54-18-159971	63-2012	07/30/2018	Chloroethane	258.407	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	31.6417	258.407
MD54-18-159971	63-2012	07/30/2018	Vinyl Chloride	61.3096	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.1156	61.3096
MD54-18-159971	63-2012	07/30/2018	Methylene Chloride	26.3831	ug/m3	J	Y	GAS	FB	VOC	EPA:TO15	25.6888	340.203
MD54-18-159971	63-2012	07/30/2018	Carbon Disulfide	304.989	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.0046	304.989
MD54-18-159971	63-2012	07/30/2018	Bromoform	247.924	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	56.816	247.924
MD54-18-159971	63-2012	07/30/2018	Bromodichloromethane	160.685	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	50.2142	160.685
MD54-18-159971	63-2012	07/30/2018	Dichloroethane[1,1-]	97.0783	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.0336	97.0783
MD54-18-159971	63-2012	07/30/2018	Dichloroethene[1,1-]	95.0967	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.6607	95.0967
MD54-18-159971	63-2012	07/30/2018	Trichlorofluoromethane	134.758	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.4274	134.758
MD54-18-159971	63-2012	07/30/2018	Dichlorodifluoromethane	118.611	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	35.0891	118.611
MD54-18-159971	63-2012	07/30/2018	Trichloro-1,2,2-trifluoroethane[1,1,2-]	183.813	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	56.6757	183.813
MD54-18-159971	63-2012	07/30/2018	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	167.67	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	41.9175	167.67
MD54-18-159971	63-2012	07/30/2018	Dichloropropane[1,2-]	110.842	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	42.0274	110.842
MD54-18-159971	63-2012	07/30/2018	Butanone[2-]	288.85	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	27.4113	288.85
MD54-18-159971	63-2012	07/30/2018	Trichloroethane[1,1,2-]	130.863	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	34.8969	130.863
MD54-18-159971	63-2012	07/30/2018	Trichloroethene	128.892	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	35.9823	128.892
MD54-18-159971	63-2012	07/30/2018	Tetrachloroethane[1,1,2,2-]	164.658	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	43.2228	164.658
MD54-18-159971	63-2012	07/30/2018	Hexachlorobutadiene	1044.52	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	330.411	1044.52
MD54-18-159971	63-2012	07/30/2018	Xylene[1,2-]	104.141	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.5265	104.141
MD54-18-159971	63-2012	07/30/2018	Dichlorobenzene[1,2-]	144.215	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	72.1073	144.215
MD54-18-159971	63-2012	07/30/2018	Trimethylbenzene[1,2,4-]	117.905	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	58.9523	117.905
MD54-18-159971	63-2012	07/30/2018	Isopropylbenzene	117.905	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.4587	117.905
MD54-18-159971	63-2012	07/30/2018	Xylene[1,3-]+Xylene[1,4-]	104.141	ug/m3	U	N	GAS	FB	VOC	EPA:TO15	32.5442	104.141

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	
			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
		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			8.18	<0.1		
		1,1-Dichloroethane	33.6	<0.1						
		1,1-Dichloroethylene	10.3	<0.1						
		Dichlorodifluoromethane	6.9	<0.1						
VMW-2 63-2010	5	Trichloroethylene	134	0.7	80.6	0.4	129	0.7	86.0	0.4
		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
		Toluene	8.3	<0.1						
		Acetone							20.9	<0.1
VMW-4 63-2012	25	Tetrachloroethylene	49.5	<0.1	34.6	<0.1	34.6	<0.1		
		Carbon tetrachloride	49.7	<0.1	35.2	<0.1	48.4	<0.1	41.5	<0.1
		Chloroform	112	0.5	87.8	0.2	107	0.5	107	0.5
		Dichlorodifluoromethane	84	<0.1	74.1	<0.1	84.0	<0.1	84.0	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane	17.6	<0.1	13.0	<0.1				
		Trichloroethylene	3810	2.4	2793	1.8	3437	2.2	2954	1.9
		1,1,1-Trichloroethane	7.1	<0.1						
VMW-4 63-2012	60	Tetrachloroethylene	81.3	<0.1	74.6	<0.1	88.1	<0.1	81.3	<0.1
		cis-1,2-Dichloroethylene	16.6	<0.1	23.8	<0.1	25.8	<0.1	25.0	<0.1
		Carbon tetrachloride	94.3	<0.1	88.0	<0.1	113	<0.1	107	<0.1
		Chloroform	190	0.4	200	0.5	244	0.5	229	0.5
		1,1,1-Trichloroethane	13.1	<0.1	14.2	<0.1	14.2	<0.1	15.3	<0.1
		Dichlorodifluoromethane	143	<0.1	158	<0.1	148	<0.1	193	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane	25.3	<0.1	28.3	<0.1	29.9	<0.1	32.2	<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	
			Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)	Result (ug/m3)	Percentage of SGSL (%)
		Trichloroethylene	8060	8.7	6982	7.5	8593	9.3	8056	8.7
		Toluene	7.6	<0.1						
		Acetone	16.1	<0.1						
		Trichlorofluoromethane	6.2	<0.1			6.7	<0.1		
		Methylene chloride							15.3	<0.1
VMW-5 63-2013	25	Chloroform	35.6	0.2	19.0	<0.1	26.3	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
		Dichlorodifluoromethane	59.3	<0.1	42.0	<0.1	42.0	<0.1	47.4	<0.1
		Trichloroethylene	483	0.3	258	0.2	414	0.3	344	0.2
		Tetrachloroethylene	6.8	<0.1						
		Acetone							15.0	<0.1
VMW-5 63-2013	60	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
		1,1,1-Trichloroethane	44.7	<0.1	47.4	<0.1	47.4	<0.1	60.0	<0.1
		Dichlorodifluoromethane	64.2	<0.1	84.0	<0.1	69.2	<0.1	84.0	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	<0.1	19.9	<0.1		
		Trichloroethylene	1340	1.4	1343	1.4	1557	1.7	1504	<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	Tetrachloroethylene	8.8	<0.1						
		Chloroform	30.7	0.1						
		1,1,1-Trichloroethane	32.7	<0.1						
		Dichlorodifluoromethane	59.3	<0.1						
		Trichloroethylene	451	0.3						
VMW-3 63-2011 Field Duplicate	5	Trichloroethylene			45.6	0.2				

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	
			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	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		
		Trichloroethylene					3276	2.1		
VWM-4 63-2012 Field Duplicate	60	Tetrachloroethylene							81.3	<0.1
		cis-1,2-dichloroethylene							27.0	<0.1
		Carbon tetrachloride							113	0.1
		Chloroform							249	1.1
		Dichlorodifluoromethane							188	<0.1
		Trichloroethylene							8593	9.3

Sample Collection Logs
at TA-63 Transuranic Waste Facility – Quarter 4

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SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159963

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	7/30/18	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	0954		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
WA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-1

LOCATION COMMENTS: Summa # 0∅923

FIELD PARAMETERS:

Sample Time NA HH:MM

$CH_4 = 0\%$ $CO_2 = 15,400$ ppm $O_2 = 18.9\%$ VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Sloan

RELINQUISHED BY (Printed Name) Daniel Sloan (Signature)	**Date/Time** 7/30/18 0954 7/31/18 1315	**RECEIVED BY** (Printed Name) M. Martin (Signature)	**Date/Time** 7/30/18 1315
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159964

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/18	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1018		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
N/A	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-2

LOCATION COMMENTS: Summa # 0168

FIELD PARAMETERS:

Sample Time NA HH:MM

CH_4 = 0% CO_2 = 7910 ppm O_2 = 20.1 % VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Sloan

	Date/Time		Date/Time
RELINQUISHED BY (Printed Name) Daniel Scrank (Signature)	7/30/18 1315	**RECEIVED BY** (Printed Name) M. Martinez (Signature)	7/30/18 1315
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159965

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/2018	OK	**FIELD MATRIX:**	GAS	OK
TIME COLLECTED (HH:MM):	1040		**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
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-3

LOCATION COMMENTS: Summa # N2399

FIELD PARAMETERS:

Sample Time NA HH:MM

$CH_4 = 0\%$ $CO_2 = 7650$ ppm $O_2 = 20.1\%$ VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Sandoval

RELINQUISHED BY (Printed Name) Daniel Franks **(Signature)**	**Date/Time** 7/30/18 1315	**RECEIVED BY (Printed Name)** **(Signature)**	**Date/Time** 7/30/18 1315
RELINQUISHED BY (Printed Name) **(Signature)**	**Date/Time**	**RECEIVED BY (Printed Name)** **(Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159966

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/2018	OK	**FIELD MATRIX:**	GAS	OK
TIME COLLECTED (HH:MM):	1135		**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 #34423

FIELD PARAMETERS:

Sample Time NA HH:MM

$CH_4 = 0\%$ $CO_2 = 13800$ ppm $O_2 = 19.8\%$ VOC = 0.2 ppm

COLLECTED BY (PRINT): M. Sleeds

RELINQUISHED BY (Printed Name) David Scrum **(Signature)**	**Date/Time** 7/30/18 1315	**RECEIVED BY (Printed Name)** M. Martinez **(Signature)**	**Date/Time** 7/30/18 1315
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY (Printed Name) (Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159967

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/2018	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1151		MEDIA:	GAS	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	59		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	60		EXCAVATED:		YES / NO / ~~NA~~

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

SAMPLE COMMENTS: VMW-4

LOCATION COMMENTS: Summa #34423

FIELD PARAMETERS:

Sample Time NA HH:MM

$CH_4 = 0\%$ $CO_2 = 17{,}300$ ppm $O_2 = 19.6\%$ VOC = 1.3 ppm

COLLECTED BY (PRINT): M. Sladek

RELINQUISHED BY (Printed Name) David Sanchez (Signature) DS	**Date/Time** 7/30/18 1315	**RECEIVED BY** (Printed Name) M. Martinez (Signature)	**Date/Time** 7/30/18 1315
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159968

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/2018	OK	**FIELD MATRIX:**	GAS	OK
TIME COLLECTED (HH:MM):	1230		**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
NT	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-5

LOCATION COMMENTS: Summa # N 2833

FIELD PARAMETERS:

Sample Time NA HH:MM

$CH_4 = 0\%$ $CO_2 = 38,600$ ppm $O_2 = 18.4\%$ VOC = 00 ppm

COLLECTED BY (PRINT): M. Glenda

RELINQUISHED BY (Printed Name) David Jaramillo (Signature)	**Date/Time** 7/30/18 1315	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 7/30/18 1315
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159969

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/2018	OK	**FIELD MATRIX:**	GAS	OK
TIME COLLECTED (HH:MM):	1250		**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
UA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-5

LOCATION COMMENTS: Summa # A 8964

FIELD PARAMETERS:

Sample Time NA HH:MM

$CH_4 = 0\%$ $CO_2 = 27,600$ ppm $O_2 =$ ~~NO~~ 19.0% VOC = 0.1 ppm

KT 7/27/18

COLLECTED BY (PRINT): M. Sloan

RELINQUISHED BY (Printed Name) Daniel Drake **(Signature)**	**Date/Time** 7/30/18 1315	**RECEIVED BY (Printed Name)** M. Sloan **(Signature)**	**Date/Time** 7/30/18 1315
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY (Printed Name) (Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159970

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/2018	OK	**FIELD MATRIX:**	GAS	OK
TIME COLLECTED (HH:MM):	1152		**MEDIA:**	GAS	
PRS ID:	TA-63		**SAMPLE TECH CODE:**	VOST	
LOCATION ID:	UNK		**FIELD PREP:**	NA	
LOCATION TYPE:	BH		**FIELD QC TYPE:**	FD	
TOP DEPTH:	59		**SAMPLE USAGE:**	QC	
BOTTOM DEPTH:	60		**EXCAVATED:**		YES / NO / ~~NA~~

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
W7	TO15	6 Liter Summa Canister	1	NONE	y	6 Liter Summa

SAMPLE COMMENTS: ~~N/A~~ KT 7/27/18 VMW-4

LOCATION COMMENTS: summa #0∅939

FIELD PARAMETERS:

Sample Time NA HH:MM

$CH_4 = 0\ \%$ $CO_2 = $ ~~14.6~~ 17,300 ppm DO 7/31/18 $O_2 = 19.6\ \%$ VOC = 1.3 ppm

COLLECTED BY (PRINT): M Sloan

RELINQUISHED BY (Printed Name) David Scrafford **(Signature)**	**Date/Time** 7/30/18 1315	**RECEIVED BY (Printed Name)** M. Vaughn **(Signature)**	**Date/Time** 7/30/18 1315
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY (Printed Name) (Signature)**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11905

EVENT NAME: FY18 - 4th Qtr. - TWF Poregas Sampling - 54-009

SAMPLE ID: MD54-18-159971

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):	07/30/2018	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	11:53		MEDIA:	N_2	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	63-2012	FIELD PREP:	NA	
LOCATION TYPE:	NA	OK	FIELD QC TYPE:	FB	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DEPTH:			EXCAVATED:		YES / NO / NA

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
N1	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-4

LOCATION COMMENTS: Summa # 0Ø298

FIELD PARAMETERS:

Sample Time NA HH:MM

CH_4 = NA CO_2 = NA O_2 = NA VOC = NA

COLLECTED BY (PRINT): M. Sloan

RELINQUISHED BY (Printed Name) David Strank (Signature)	**Date/Time** 07/30/18 1315	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time** 7/30/18 1315
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 in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

9/21/18

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

Date Signed

24 Sept 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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