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Date: **JAN 10 2020**

Symbol: EPC-DO: 19-467

LA-UR: 20-20000

Locates Action No.: NA

Mr. Kevin Pierard
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
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Subject: Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 9, Los Alamos National Laboratory EPA ID #NM0890010515

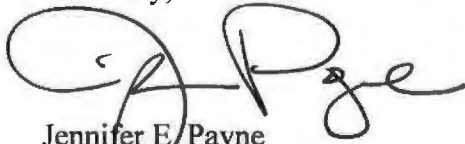
The United States Department of Energy (DOE) National Nuclear Security Administration, Los Alamos Field Office and the Triad National Security, LLC (Triad) submit this report to the New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) in accordance with Section 3.14.3 of the Los Alamos 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 certain volatile organic compounds (VOCs) and evaluated on a quarterly basis after operations at the facility commence. This report provides analytical data for the ninth quarter period following the start of operations in October, 2017. The sampling results indicate that vapor concentrations at the site do not exceed the soil gas screening levels established by the Permit.

The enclosure to this report includes a discussion of the history and analytical findings for the ninth quarter, a figure of the LANL TWF permitted unit with the soil vapor monitoring well locations, a data summary and analytical results for the quarter, and a data comparison table and sample collection logs. Specifically, Table 1 is a summary of the analytical results for the ninth 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 nine quarters of sampling currently collected for the soil vapor monitoring wells. This report also presents a statistical evaluation of the data collected for the project to this date.

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 an Excel format is also included to facilitate the review of the monitoring results by NMED-HWB.

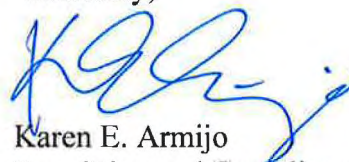
If you have questions or comments concerning this report, please contact Karen E. Armijo, DOE, at (505) 665-7314 or Patrick L. Padilla, Triad, at (505) 667-3932.

Sincerely,



Jennifer E. Payne
Division Leader
Environmental Protection & Compliance Division
Triad National Security, LLC

Sincerely,



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

JEP/KEA/PLP:gab

Enclosure: 1) Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 9, Los Alamos National Laboratory EPA ID #NM0890010515

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The enclosure to this report includes a discussion of the history and analytical findings for the ninth quarter, a figure of the LANL TWF permitted unit with the soil vapor monitoring well locations, a data summary and analytical results for the quarter, and a data comparison table and sample collection logs. Specifically, Table 1 is a summary of the analytical results for the ninth 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 nine quarters of sampling currently collected for the soil vapor monitoring wells. This report also presents a statistical evaluation of the data collected for the project to this date.



ENCLOSURE 1

**TA-63 Transuranic Waste Facility
Soil Vapor Monitoring System Report,
Quarter 9,
Los Alamos National Laboratory
EPA ID #NM0890010515**

EPC-DO-19-467

LAUR-20-20000
Unclassified

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**Technical Area 63 Transuranic Waste Facility
Soil Vapor Monitoring System Report
Quarter 9
Los Alamos National Laboratory
EPA ID #NM0890010515**

I. Introduction

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

II. TWF Soil Vapor Monitoring Wells

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

III. Soil Vapor Sampling

The soil vapor monitoring wells at the TA-63 TWF were sampled for the ninth quarter of waste management operations on November 14, 2019. Sampling procedures and VOC analyses of the obtained samples were scheduled and performed in compliance with the conditions contained in the Permit. Analytical results for the samples were compared to the soil gas screening levels (SGSLs) for individual VOC constituents in Section 3.14.3 of the Permit.

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

IV. Analytical Results

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

TCE is the highest concentration VOC detected in this sample event and in previous TA-63 TWF quarterly sampling analyses. 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 7.5% and 1.5% of the SGSL respectively. These are the sites closest to MDA-C and are not located within the permitted storage unit site at TA-63. The three monitoring wells within the permitted unit (VMW-1, VMW-2 and VMW-3) have detected concentrations for TCE of less than 1.0% of the SGSL.

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

The TA-63 TWF soil vapor monitoring wells were originally installed in August 2015. Baseline soil vapor monitoring samples were taken in September 2015 and the results submitted to NMED on October 29, 2015 (LANL, 2015). Reports were submitted with analytical results for the eight

previous quarters of waste management operations at the TWF and are listed in the references following this discussion. In reply to a letter from NMED-HWB dated May 23, 2018 (NMED, 2018), Table 3 is included in this report to show the current and previous quarterly soil gas screening level results at the facility for tracking purposes. The sampling results reported herein for the ninth quarter of operations at TWF are consistent with the previous results and do not appear to indicate additional contaminant concerns pending future sampling events subject to the Permit.

V. Additional Discussion

This section of the report discusses additional issues related to the analytical results presented. Two VOC constituents included in the Permit tables (ethylbenzene and xylene isomers) were detected above the report detection limit in the field blank samples for the sixth through eighth quarters (LANL, 2019a; LANL, 2019b; LANL, 2019c) and were not detected in samples taken from the actual soil vapor monitoring wells. This result has also occurred in the sampling for this quarter. The relative concentrations of these constituents are well below the permitted SGSLs for the constituent concentrations (<0.1%). Review of the analytical laboratory data does not indicate a data quality error and this may be an equipment or procedural anomaly as it is limited to the field blanks.

The following statistical discussion is included to demonstrate that the sampling data collected for TCE as the main soil vapor constituent detected during the TA-63 TWF operating period has been relatively stable. The mean and standard deviation for the quarterly TCE concentrations in each port in the soil vapor monitoring wells during facility waste operations are presented in Table 4 of this submittal to determine whether the concentrations for the major constituent detected by this project can be described statistically as within a range of defined concentrations. As shown in Table 4, the TCE concentrations analyzed for the soil vapor monitoring wells for the nine quarters have remained within the limits of a two standard deviation interval of the sample above or below the mean analytical values with a confidence probability of 95% with only one exception. Therefore, no significant deviations have been observed for the average TCE concentrations for each sampling port or well to that level of confidence.

Simple linear regression plots for the wells have also been included in Figures 2 and 3 to evaluate whether any significant trends are readily discernable regarding constituent concentration changes over quarters. The line plots for the concentrations determined for separate sampling locations are relatively flat and there does not appear to be a data relationship between the well results that would indicate a consistent effect in increasing or decreasing constituent concentrations such as seasonal variations. The concentrations detected are also far below the permitted maximum SGSL constituent concentrations for TCE (at least one order of magnitude), which indicates that any trend in positive changes that would be of concern according to the Permit conditions for reporting would not occur in a short time interval. The TCE concentrations for the quarters collected to this date appear stable.

References

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

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

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

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

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

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

LANL, 2019a. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 6, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO:19-103) of April 4, 2019. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2019b. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 7, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO:19-203) of June 26, 2019. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2019c. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 8, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO:19-343) of September 30, 2019. 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.

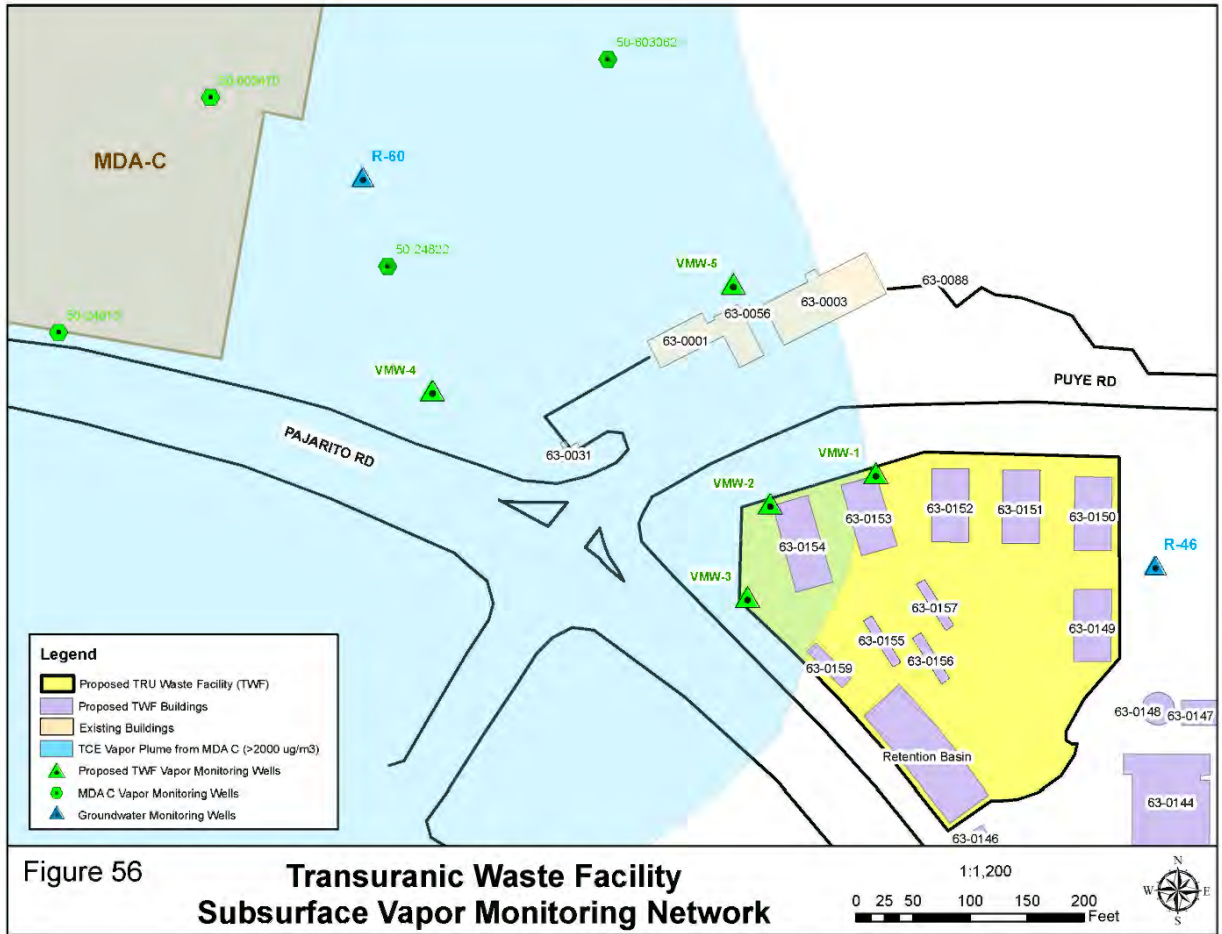


Figure 56 **Transuranic Waste Facility Subsurface Vapor Monitoring Network**

Figure 1

Soil Vapor Monitoring Well Locations at TA-63 TWF

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

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Table 1. Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility – Quarter 9

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Table 1: Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System – Quarter 9

Well	Sample ID	Sample Port Depth (ft)	Analyte/Constituent	Listing in Permit Tables	Result (ug/m ³)	EPA Data Qualifier	Report Detection Limit (ug/m ³)	Soil-Gas Screening Level (ug/m ³)	Percentage Of SGSL (%)
VMW-1 63-2009	TWF63- 20-189072	5	Trichloroethene	Trichloroethylene	40.3	J	45.1	1.94E+04	0.2
VMW-2 63-2010	TWF63- 20-189073	5	Trichloroethene	Trichloroethylene	96.7	NQ	44.6	1.94E+04	0.5
VMW-3 63-2011	TWF63- 20-189074	5	Trichloroethene	Trichloroethylene	64.4	NQ	46.2	1.94E+04	0.3
VMW-4 63-2012	TWF63- 20-189075	25	Tetrachloroethene	Tetrachloroethylene	35.9	J	56.9	2.63E+06	<0.1
			Carbon Tetrachloride	Carbon tetrachloride	41.5	J	52.8	1.06E+05	<0.1
			Chloroform	Chloroform	102	NQ	41.0	2.30E+04	0.4
			Dichlorodifluoromethane	Dichlorodifluoromethane	74.1	NQ	41.5	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	2790	NQ	45.1	1.57E+05	1.8
VMW-4 63-2012	TWF63- 20-189076	60	Tetrachloroethene	Tetrachloroethylene	67.8	NQ	58.3	2.05E+06	<0.1
			Dichloroethene[cis-1,-2]	cis-1,2-Dichloroethylene	22.2	J	34.1	2.91E+06	<0.1
			Carbon Tetrachloride	Carbon tetrachloride	101	NQ	54.1	2.13E+05	<0.1
			Chloroform	Chloroform	200	NQ	42.0	4.44E+04	0.5
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	13.1	J	46.9	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	148	NQ	42.5	5.38E+06	<0.1
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	26.8	J	65.9	1.38E+09	<0.1
			Trichloroethene	Trichloroethylene	6980	NQ	46.2	9.27E+04	7.5
VMW-5 63-2013	TWF63- 20-189077	25	Chloroform	Chloroform	36.6	J	43.2	2.30E+04	<0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	21.8	J	48.5	1.16E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	45.5	NQ	44.0	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	338	NQ	47.8	1.57E+05	0.2
VMW-5 63-2013	TWF63- 20-189078	60	Carbon Tetrachloride	Carbon tetrachloride	20.1	J	59.7	2.13E+05	<0.1
			Chloroform	Chloroform	21.0	J	46.4	4.44E+04	<0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	44.7	J	51.8	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	64.2	NQ	47.0	5.38E+06	<0.1
			Trichloroethene	Trichloroethylene	1400	NQ	51.0	9.27E+04	1.5

Table 1: Detected Volatile Organic Compounds
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System – Quarter 9

Well	Sample ID	Sample Port Depth (ft)	Analyte/Constituent	Listing in Permit Tables	Result (ug/m ³)	EPA Data Qualifier	Report Detection Limit (ug/m ³)	Soil-Gas Screening Level (ug/m ³)	Percentage Of SGSL (%)
VMW-5 63-2013	TWF63-20-189079 Field Duplicate	60	Carbon Tetrachloride	Carbon tetrachloride	15.1	J	53.4	2.13E+05	<0.1
			Chloroform	Chloroform	20.5	J	41.5	4.44E+04	<0.1
			Trichloroethane [1,1,1-]	1,1,1-Trichloroethane	48.5	NQ	46.3	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	69.2	NQ	42.0	5.38E+06	<0.1
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	17.6	J	65.1	1.38E+09	<0.1
			Trichloroethene	Trichloroethylene	1340	NQ	45.6	9.27E+04	1.4
VMW-5 63-2013	TWF63-20-189080 Field Blank	60	Ethylbenzene	Ethylbenzene	20.4	J	91.1	5.40E+05	<0.1
			Xylene[1,3-] +Xylene[1,4-]	m-Xylene + p-Xylene	56.4	J	91.1	4.74E+06	<0.1
EPA Data Qualifier "J" indicates analytes that are detected but results are estimated as less than the report detection limit. EPA Data Qualifier "NQ" indicates analytes that are detected above the report detection limit with no data qualifiers.									

Table 2. Analytical Results for Soil Vapor Monitoring Wells
at TA-63 Transuranic Waste Facility – Quarter 9

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**TA-63 Transuranic Waste Facility Soil Vapor Monitoring System
Sampling and Analysis - Quarter 9**

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Validation Qualifier	Detected	Sample Type	Sample Purpose	Method Category	Lab Method	Report Method Detection Limit	Report Detection Limit
TWF63-20-189072	63-2009	11/14/2019	Ethylbenzene	36.4529	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37738	36.4529
TWF63-20-189072	63-2009	11/14/2019	Styrene	35.7594	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.81131	35.7594
TWF63-20-189072	63-2009	11/14/2019	Benzyl Chloride	43.4606	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3478	43.4606
TWF63-20-189072	63-2009	11/14/2019	Dichloropropene[cis-1,3-]	38.101	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.80375	38.101
TWF63-20-189072	63-2009	11/14/2019	Dichloropropene[trans-1,3-]	38.101	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.26368	38.101
TWF63-20-189072	63-2009	11/14/2019	Propylbenzene[1-]	41.2666	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.91269	41.2666
TWF63-20-189072	63-2009	11/14/2019	Dichlorobenzene[1,4-]	50.4751	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	50.4751
TWF63-20-189072	63-2009	11/14/2019	Dibromoethane[1,2-]	64.5008	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.518	64.5008
TWF63-20-189072	63-2009	11/14/2019	Butadiene[1,3-]	18.5721	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.7485	18.5721
TWF63-20-189072	63-2009	11/14/2019	Chloro-1-propene[3-]	106.342	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5195	106.342
TWF63-20-189072	63-2009	11/14/2019	Dichloroethane[1,2-]	33.9774	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.47189	33.9774
TWF63-20-189072	63-2009	11/14/2019	Methyl-2-pentanone[4-]	34.3894	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.7853	34.3894
TWF63-20-189072	63-2009	11/14/2019	Trimethylbenzene[1,3,5-]	41.2666	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87777	41.2666
TWF63-20-189072	63-2009	11/14/2019	Toluene	31.6352	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.64913	31.6352
TWF63-20-189072	63-2009	11/14/2019	Chlorobenzene	38.6469	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5819	38.6469
TWF63-20-189072	63-2009	11/14/2019	Tetrahydrofuran	24.7586	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.84236	24.7586
TWF63-20-189072	63-2009	11/14/2019	Hexane	29.5895	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	29.5895
TWF63-20-189072	63-2009	11/14/2019	Cyclohexane	28.8959	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53598	28.8959
TWF63-20-189072	63-2009	11/14/2019	Trichlorobenzene[1,2,4-]	252.166	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	252.166
TWF63-20-189072	63-2009	11/14/2019	Dioxane[1,4-]	122.449	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.1333	122.449
TWF63-20-189072	63-2009	11/14/2019	Chlorodibromomethane	71.5119	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4726	71.5119
TWF63-20-189072	63-2009	11/14/2019	Tetrachloroethene	56.9369	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.3346	56.9369
TWF63-20-189072	63-2009	11/14/2019	n-Heptane	34.4032	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4677	34.4032
TWF63-20-189072	63-2009	11/14/2019	Dichloroethene[cis-1,2-]	33.2839	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	33.2839
TWF63-20-189072	63-2009	11/14/2019	Dichloroethene[trans-1,2-]	33.2839	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6796	33.2839
TWF63-20-189072	63-2009	11/14/2019	Methyl tert-Butyl Ether	30.2659	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.09865	30.2659
TWF63-20-189072	63-2009	11/14/2019	Isooctane	39.2203	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.87126	39.2203
TWF63-20-189072	63-2009	11/14/2019	Dichlorobenzene[1,3-]	50.4751	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	50.4751
TWF63-20-189072	63-2009	11/14/2019	Carbon Tetrachloride	52.8133	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5746	52.8133
TWF63-20-189072	63-2009	11/14/2019	Hexanone[2-]	139.195	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	49.1278	139.195
TWF63-20-189072	63-2009	11/14/2019	Ethyltoluene[4-]	41.2666	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2817	41.2666
TWF63-20-189072	63-2009	11/14/2019	Ethanol	64.0248	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.9348	64.0248
TWF63-20-189072	63-2009	11/14/2019	Propanol[2-]	83.5227	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5632	83.5227
TWF63-20-189072	63-2009	11/14/2019	Acetone	80.7155	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.6325	80.7155
TWF63-20-189072	63-2009	11/14/2019	Chloroform	40.9885	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.83142	40.9885
TWF63-20-189072	63-2009	11/14/2019	Benzene	26.8187	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	26.8187
TWF63-20-189072	63-2009	11/14/2019	Trichloroethane[1,1,1-]	45.8022	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6337	45.8022
TWF63-20-189072	63-2009	11/14/2019	Bromomethane	131.941	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.2092	131.941
TWF63-20-189072	63-2009	11/14/2019	Chloromethane	70.1674	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4462	70.1674
TWF63-20-189072	63-2009	11/14/2019	Chloroethane	89.6515	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.3134	89.6515
TWF63-20-189072	63-2009	11/14/2019	Vinyl Chloride	21.4584	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.40825	21.4584
TWF63-20-189072	63-2009	11/14/2019	Methylene Chloride	118.03	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0516	118.03
TWF63-20-189072	63-2009	11/14/2019	Carbon Disulfide	105.813	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.8719	105.813
TWF63-20-189072	63-2009	11/14/2019	Bromoform	86.7736	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	86.7736
TWF63-20-189072	63-2009	11/14/2019	Bromodichloromethane	56.2399	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.62399	56.2399
TWF63-20-189072	63-2009	11/14/2019	Dichloroethane[1,1-]	33.9774	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.30334	33.9774
TWF63-20-189072	63-2009	11/14/2019	Dichloroethene[1,1-]	33.2839	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.3586	33.2839
TWF63-20-189072	63-2009	11/14/2019	Trichlorofluoromethane	47.1653	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.7379	47.1653
TWF63-20-189072	63-2009	11/14/2019	Dichlorodifluoromethane	41.5138	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.39003	41.5138
TWF63-20-189072	63-2009	11/14/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	64.3346	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4883	64.3346
TWF63-20-189072	63-2009	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	58.6845	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.3698	58.6845
TWF63-20-189072	63-2009	11/14/2019	Dichloropropane[1,2-]	38.7945	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1605	38.7945
TWF63-20-189072	63-2009	11/14/2019	Butanone[2-]	100.213	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.8744	100.213
TWF63-20-189072	63-2009	11/14/2019	Trichloroethane[1,1,2-]	45.8022	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.3579	45.8022
TWF63-20-189072	63-2009	11/14/2019	Trichloroethene	40.2787	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	13.4262	45.1121

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TWF63-20-189072	63-2009	11/14/2019	Tetrachloroethane[1,1,2,2-]	57.6304 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.919	57.6304
TWF63-20-189072	63-2009	11/14/2019	Hexachlorobutadiene	362.386 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	223.827	362.386
TWF63-20-189072	63-2009	11/14/2019	Xylene[1,2-]	36.4495 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98022	36.4495
TWF63-20-189072	63-2009	11/14/2019	Dichlorobenzene[1,2-]	50.4751 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.0179	50.4751
TWF63-20-189072	63-2009	11/14/2019	Trimethylbenzene[1,2,4-]	41.2666 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	41.2666
TWF63-20-189072	63-2009	11/14/2019	Isopropylbenzene	41.2666 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	2.89849	41.2666
TWF63-20-189072	63-2009	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	36.4495 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	36.4495
TWF63-20-189073	63-2010	11/14/2019	Ethylbenzene	36.019 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37738	36.019
TWF63-20-189073	63-2010	11/14/2019	Styrene	35.3337 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.81131	35.3337
TWF63-20-189073	63-2010	11/14/2019	Benzyl Chloride	42.9432 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.83037	42.9432
TWF63-20-189073	63-2010	11/14/2019	Dichloropropene[cis-1,3-]	37.6474 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.80375	37.6474
TWF63-20-189073	63-2010	11/14/2019	Dichloropropene[trans-1,3-]	37.6474 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.21832	37.6474
TWF63-20-189073	63-2010	11/14/2019	Propylbenzene[1-]	40.7754 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.91269	40.7754
TWF63-20-189073	63-2010	11/14/2019	Dichlorobenzene[1,4-]	49.8742 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	49.8742
TWF63-20-189073	63-2010	11/14/2019	Dibromoethane[1,2-]	63.7329 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.518	63.7329
TWF63-20-189073	63-2010	11/14/2019	Butadiene[1,3-]	18.351 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.7485	18.351
TWF63-20-189073	63-2010	11/14/2019	Chloro-1-propene[3-]	103.214 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.2067	103.214
TWF63-20-189073	63-2010	11/14/2019	Dichloroethane[1,2-]	33.5729 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.47189	33.5729
TWF63-20-189073	63-2010	11/14/2019	Methyl-2-pentanone[4-]	33.98 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.3759	33.98
TWF63-20-189073	63-2010	11/14/2019	Trimethylbenzene[1,3,5-]	40.7754 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87777	40.7754
TWF63-20-189073	63-2010	11/14/2019	Toluene	31.2585 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.64913	31.2585
TWF63-20-189073	63-2010	11/14/2019	Chlorobenzene	38.1868 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1218	38.1868
TWF63-20-189073	63-2010	11/14/2019	Tetrahydrofuran	24.4639 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.54761	24.4639
TWF63-20-189073	63-2010	11/14/2019	Hexane	29.2372 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.04511	29.2372
TWF63-20-189073	63-2010	11/14/2019	Cyclohexane	28.5519 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.19198	28.5519
TWF63-20-189073	63-2010	11/14/2019	Trichlorobenzene[1,2,4-]	244.75 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	96.4166	244.75
TWF63-20-189073	63-2010	11/14/2019	Dioxane[1,4-]	118.848 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	32.7731	118.848
TWF63-20-189073	63-2010	11/14/2019	Chlorodibromomethane	70.6606 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4726	70.6606
TWF63-20-189073	63-2010	11/14/2019	Tetrachloroethene	56.2591 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.6568	56.2591
TWF63-20-189073	63-2010	11/14/2019	n-Heptane	33.9936 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4677	33.9936
TWF63-20-189073	63-2010	11/14/2019	Dichloroethene[cis-1,2-]	32.8876 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	32.8876
TWF63-20-189073	63-2010	11/14/2019	Dichloroethene[trans-1,2-]	32.8876 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6796	32.8876
TWF63-20-189073	63-2010	11/14/2019	Methyl tert-Butyl Ether	29.9056 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.06262	29.9056
TWF63-20-189073	63-2010	11/14/2019	Isooctane	38.7534 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.87126	38.7534
TWF63-20-189073	63-2010	11/14/2019	Dichlorobenzene[1,3-]	49.8742 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	49.8742
TWF63-20-189073	63-2010	11/14/2019	Carbon Tetrachloride	52.1846 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5746	52.1846
TWF63-20-189073	63-2010	11/14/2019	Hexanone[2-]	135.101 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	49.1278	135.101
TWF63-20-189073	63-2010	11/14/2019	Ethyltoluene[4-]	40.7754 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2817	40.7754
TWF63-20-189073	63-2010	11/14/2019	Ethanol	62.1418 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7465	62.1418
TWF63-20-189073	63-2010	11/14/2019	Propanol[2-]	81.0662 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3175	81.0662
TWF63-20-189073	63-2010	11/14/2019	Acetone	78.3415 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3951	78.3415
TWF63-20-189073	63-2010	11/14/2019	Chloroform	40.5006 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.83142	40.5006
TWF63-20-189073	63-2010	11/14/2019	Benzene	26.4994 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	26.4994
TWF63-20-189073	63-2010	11/14/2019	Trichloroethane[1,1,1-]	45.257 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6337	45.257
TWF63-20-189073	63-2010	11/14/2019	Bromomethane	128.06 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.2092	128.06
TWF63-20-189073	63-2010	11/14/2019	Chloromethane	68.1037 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4462	68.1037
TWF63-20-189073	63-2010	11/14/2019	Chloroethane	87.0146 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.0497	87.0146
TWF63-20-189073	63-2010	11/14/2019	Vinyl Chloride	21.2029 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.40825	21.2029
TWF63-20-189073	63-2010	11/14/2019	Methylene Chloride	114.558 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.7045	114.558
TWF63-20-189073	63-2010	11/14/2019	Carbon Disulfide	102.7 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.5607	102.7
TWF63-20-189073	63-2010	11/14/2019	Bromoform	85.7405 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3632	85.7405
TWF63-20-189073	63-2010	11/14/2019	Bromodichloromethane	55.5704 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.55704	55.5704
TWF63-20-189073	63-2010	11/14/2019	Dichloroethane[1,1-]	33.5729 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.30334	33.5729
TWF63-20-189073	63-2010	11/14/2019	Dichloroethene[1,1-]	32.8876 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.3586	32.8876
TWF63-20-189073	63-2010	11/14/2019	Trichlorofluoromethane	46.6038 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.7379	46.6038
TWF63-20-189073	63-2010	11/14/2019	Dichlorodifluoromethane	41.0196 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.89582	41.0196

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TWF63-20-189073	63-2010	11/14/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	63.5687 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4883	63.5687
TWF63-20-189073	63-2010	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	57.9859 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.3698	57.9859
TWF63-20-189073	63-2010	11/14/2019	Dichloropropane[1,2-]	38.3327 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1605	38.3327
TWF63-20-189073	63-2010	11/14/2019	Butanone[2-]	97.266 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.5796	97.266
TWF63-20-189073	63-2010	11/14/2019	Trichloroethane[1,1,2-]	45.257 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.3579	45.257
TWF63-20-189073	63-2010	11/14/2019	Trichloroethene	96.6688 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	12.8892	44.575
TWF63-20-189073	63-2010	11/14/2019	Tetrachloroethane[1,1,2,2-]	56.9444 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.919	56.9444
TWF63-20-189073	63-2010	11/14/2019	Hexachlorobutadiene	351.727 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	213.168	351.727
TWF63-20-189073	63-2010	11/14/2019	Xylene[1,2-]	36.0156 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.5463	36.0156
TWF63-20-189073	63-2010	11/14/2019	Dichlorobenzene[1,2-]	49.8742 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.0179	49.8742
TWF63-20-189073	63-2010	11/14/2019	Trimethylbenzene[1,2,4-]	40.7754 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	40.7754
TWF63-20-189073	63-2010	11/14/2019	Isopropylbenzene	40.7754 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	2.84936	40.7754
TWF63-20-189073	63-2010	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	36.0156 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	36.0156
TWF63-20-189074	63-2011	11/14/2019	Ethylbenzene	37.3209 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37738	37.3209
TWF63-20-189074	63-2011	11/14/2019	Styrene	36.6108 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.81131	36.6108
TWF63-20-189074	63-2011	11/14/2019	Benzyl Chloride	44.4954 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3478	44.4954
TWF63-20-189074	63-2011	11/14/2019	Dichloropropene[cis-1,3-]	39.0082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.80375	39.0082
TWF63-20-189074	63-2011	11/14/2019	Dichloropropene[trans-1,3-]	39.0082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.3544	39.0082
TWF63-20-189074	63-2011	11/14/2019	Propylbenzene[1-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.91269	42.2492
TWF63-20-189074	63-2011	11/14/2019	Dichlorobenzene[1,4-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	51.6769
TWF63-20-189074	63-2011	11/14/2019	Dibromoethane[1,2-]	66.0365 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.518	66.0365
TWF63-20-189074	63-2011	11/14/2019	Butadiene[1,3-]	19.0143 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.9696	19.0143
TWF63-20-189074	63-2011	11/14/2019	Chloro-1-propene[3-]	106.342 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.8323	106.342
TWF63-20-189074	63-2011	11/14/2019	Dichloroethane[1,2-]	34.7864 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.47189	34.7864
TWF63-20-189074	63-2011	11/14/2019	Methyl-2-pentanone[4-]	35.2082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1947	35.2082
TWF63-20-189074	63-2011	11/14/2019	Trimethylbenzene[1,3,5-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87777	42.2492
TWF63-20-189074	63-2011	11/14/2019	Toluene	32.3884 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.64913	32.3884
TWF63-20-189074	63-2011	11/14/2019	Chlorobenzene	39.5671 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5819	39.5671
TWF63-20-189074	63-2011	11/14/2019	Tetrahydrofuran	25.3481 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.84236	25.3481
TWF63-20-189074	63-2011	11/14/2019	Hexane	30.294 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	30.294
TWF63-20-189074	63-2011	11/14/2019	Cyclohexane	29.5839 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53598	29.5839
TWF63-20-189074	63-2011	11/14/2019	Trichlorobenzene[1,2,4-]	252.166 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	252.166
TWF63-20-189074	63-2011	11/14/2019	Dioxane[1,4-]	122.449 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.8536	122.449
TWF63-20-189074	63-2011	11/14/2019	Chlorodibromomethane	73.2146 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	73.2146
TWF63-20-189074	63-2011	11/14/2019	Tetrachloroethene	58.2925 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.3346	58.2925
TWF63-20-189074	63-2011	11/14/2019	n-Heptane	35.2223 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8773	35.2223
TWF63-20-189074	63-2011	11/14/2019	Dichloroethene[cis-1,2-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	34.0763
TWF63-20-189074	63-2011	11/14/2019	Dichloroethene[trans-1,2-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0758	34.0763
TWF63-20-189074	63-2011	11/14/2019	Methyl tert-Butyl Ether	30.9865 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.13468	30.9865
TWF63-20-189074	63-2011	11/14/2019	Isooctane	40.1541 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.87126	40.1541
TWF63-20-189074	63-2011	11/14/2019	Dichlorobenzene[1,3-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	51.6769
TWF63-20-189074	63-2011	11/14/2019	Carbon Tetrachloride	54.0708 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5746	54.0708
TWF63-20-189074	63-2011	11/14/2019	Hexanone[2-]	139.195 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	139.195
TWF63-20-189074	63-2011	11/14/2019	Ethyltoluene[4-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	42.2492
TWF63-20-189074	63-2011	11/14/2019	Ethanol	64.0248 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1231	64.0248
TWF63-20-189074	63-2011	11/14/2019	Propanol[2-]	83.5227 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8088	83.5227
TWF63-20-189074	63-2011	11/14/2019	Acetone	80.7155 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8699	80.7155
TWF63-20-189074	63-2011	11/14/2019	Chloroform	41.9644 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.31938	41.9644
TWF63-20-189074	63-2011	11/14/2019	Benzene	27.4572 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	27.4572
TWF63-20-189074	63-2011	11/14/2019	Trichloroethane[1,1,1-]	46.8927 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17897	46.8927
TWF63-20-189074	63-2011	11/14/2019	Bromomethane	131.941 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.2092	131.941
TWF63-20-189074	63-2011	11/14/2019	Chloromethane	70.1674 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.859	70.1674
TWF63-20-189074	63-2011	11/14/2019	Chloroethane	89.6515 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8407	89.6515
TWF63-20-189074	63-2011	11/14/2019	Vinyl Chloride	21.9693 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6637	21.9693
TWF63-20-189074	63-2011	11/14/2019	Methylene Chloride	118.03 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.3988	118.03
TWF63-20-189074	63-2011	11/14/2019	Carbon Disulfide	105.813 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1831	105.813

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TWF63-20-189074	63-2011	11/14/2019	Bromoform	88.8396 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	88.8396
TWF63-20-189074	63-2011	11/14/2019	Bromodichloromethane	57.579 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.7579	57.579
TWF63-20-189074	63-2011	11/14/2019	Dichloroethane[1,1-]	34.7864 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	34.7864
TWF63-20-189074	63-2011	11/14/2019	Dichloroethene[1,1-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.75484	34.0763
TWF63-20-189074	63-2011	11/14/2019	Trichlorofluoromethane	48.2883 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.29939	48.2883
TWF63-20-189074	63-2011	11/14/2019	Dichlorodifluoromethane	42.5023 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.39003	42.5023
TWF63-20-189074	63-2011	11/14/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	65.8664 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4883	65.8664
TWF63-20-189074	63-2011	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	60.0818 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.3698	60.0818
TWF63-20-189074	63-2011	11/14/2019	Dichloropropane[1,2-]	39.7182 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6223	39.7182
TWF63-20-189074	63-2011	11/14/2019	Butanone[2-]	100.213 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.4639	100.213
TWF63-20-189074	63-2011	11/14/2019	Trichloroethane[1,1,2-]	46.8927 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.9032	46.8927
TWF63-20-189074	63-2011	11/14/2019	Trichloroethene	64.4458 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.4262	46.1862
TWF63-20-189074	63-2011	11/14/2019	Tetrachloroethane[1,1,2,2-]	59.0026 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.919	59.0026
TWF63-20-189074	63-2011	11/14/2019	Hexachlorobutadiene	362.386 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	223.827	362.386
TWF63-20-189074	63-2011	11/14/2019	Xylene[1,2-]	37.3173 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98022	37.3173
TWF63-20-189074	63-2011	11/14/2019	Dichlorobenzene[1,2-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6188	51.6769
TWF63-20-189074	63-2011	11/14/2019	Trimethylbenzene[1,2,4-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	42.2492
TWF63-20-189074	63-2011	11/14/2019	Isopropylbenzene	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	2.94762	42.2492
TWF63-20-189074	63-2011	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	37.3173 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	37.3173
TWF63-20-189075	63-2012	11/14/2019	Ethylbenzene	36.4529 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37738	36.4529
TWF63-20-189075	63-2012	11/14/2019	Styrene	35.7594 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.81131	35.7594
TWF63-20-189075	63-2012	11/14/2019	Benzyl Chloride	43.4606 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3478	43.4606
TWF63-20-189075	63-2012	11/14/2019	Dichloropropene[cis-1,3-]	38.101 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.80375	38.101
TWF63-20-189075	63-2012	11/14/2019	Dichloropropene[trans-1,3-]	38.101 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.30904	38.101
TWF63-20-189075	63-2012	11/14/2019	Propylbenzene[1-]	41.2666 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.91269	41.2666
TWF63-20-189075	63-2012	11/14/2019	Dichlorobenzene[1,4-]	50.4751 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	50.4751
TWF63-20-189075	63-2012	11/14/2019	Dibromoethane[1,2-]	64.5008 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.518	64.5008
TWF63-20-189075	63-2012	11/14/2019	Butadiene[1,3-]	18.5721 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.7485	18.5721
TWF63-20-189075	63-2012	11/14/2019	Chloro-1-propene[3-]	106.342 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.5195	106.342
TWF63-20-189075	63-2012	11/14/2019	Dichloroethane[1,2-]	33.9774 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.47189	33.9774
TWF63-20-189075	63-2012	11/14/2019	Methyl-2-pentanone[4-]	34.3894 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.7853	34.3894
TWF63-20-189075	63-2012	11/14/2019	Trimethylbenzene[1,3,5-]	41.2666 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87777	41.2666
TWF63-20-189075	63-2012	11/14/2019	Toluene	31.6352 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.64913	31.6352
TWF63-20-189075	63-2012	11/14/2019	Chlorobenzene	38.6469 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5819	38.6469
TWF63-20-189075	63-2012	11/14/2019	Tetrahydrofuran	24.7586 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.84236	24.7586
TWF63-20-189075	63-2012	11/14/2019	Hexane	29.5895 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	29.5895
TWF63-20-189075	63-2012	11/14/2019	Cyclohexane	28.8959 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53598	28.8959
TWF63-20-189075	63-2012	11/14/2019	Trichlorobenzene[1,2,4-]	252.166 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	252.166
TWF63-20-189075	63-2012	11/14/2019	Dioxane[1,4-]	122.449 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.4934	122.449
TWF63-20-189075	63-2012	11/14/2019	Chlorodibromomethane	71.5119 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4726	71.5119
TWF63-20-189075	63-2012	11/14/2019	Tetrachloroethene	35.9245 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	20.3346	56.9369
TWF63-20-189075	63-2012	11/14/2019	n-Heptane	34.4032 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4677	34.4032
TWF63-20-189075	63-2012	11/14/2019	Dichloroethene[cis-1,2-]	33.2839 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	33.2839
TWF63-20-189075	63-2012	11/14/2019	Dichloroethene[trans-1,2-]	33.2839 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6796	33.2839
TWF63-20-189075	63-2012	11/14/2019	Methyl tert-Butyl Ether	30.2659 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.09865	30.2659
TWF63-20-189075	63-2012	11/14/2019	Isooctane	39.2203 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.87126	39.2203
TWF63-20-189075	63-2012	11/14/2019	Dichlorobenzene[1,3-]	50.4751 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	50.4751
TWF63-20-189075	63-2012	11/14/2019	Carbon Tetrachloride	41.4962 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	12.5746	52.8133
TWF63-20-189075	63-2012	11/14/2019	Hexanone[2-]	139.195 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	139.195
TWF63-20-189075	63-2012	11/14/2019	Ethyltoluene[4-]	41.2666 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2817	41.2666
TWF63-20-189075	63-2012	11/14/2019	Ethanol	64.0248 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.9348	64.0248
TWF63-20-189075	63-2012	11/14/2019	Propanol[2-]	83.5227 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5632	83.5227
TWF63-20-189075	63-2012	11/14/2019	Acetone	80.7155 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.6325	80.7155
TWF63-20-189075	63-2012	11/14/2019	Chloroform	102.471 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	6.83142	40.9885
TWF63-20-189075	63-2012	11/14/2019	Benzene	26.8187 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	26.8187
TWF63-20-189075	63-2012	11/14/2019	Trichloroethane[1,1,1-]	45.8022 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6337	45.8022

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TWF63-20-189075	63-2012	11/14/2019	Bromomethane	131.941 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.2092	131.941
TWF63-20-189075	63-2012	11/14/2019	Chloromethane	70.1674 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.6526	70.1674
TWF63-20-189075	63-2012	11/14/2019	Chloroethane	89.6515 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.577	89.6515
TWF63-20-189075	63-2012	11/14/2019	Vinyl Chloride	21.4584 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.40825	21.4584
TWF63-20-189075	63-2012	11/14/2019	Methylene Chloride	118.03 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0516	118.03
TWF63-20-189075	63-2012	11/14/2019	Carbon Disulfide	105.813 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.8719	105.813
TWF63-20-189075	63-2012	11/14/2019	Bromoform	86.7736 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	86.7736
TWF63-20-189075	63-2012	11/14/2019	Bromodichloromethane	56.2399 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.62399	56.2399
TWF63-20-189075	63-2012	11/14/2019	Dichloroethane[1,1-]	33.9774 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.30334	33.9774
TWF63-20-189075	63-2012	11/14/2019	Dichloroethene[1,1-]	33.2839 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.3586	33.2839
TWF63-20-189075	63-2012	11/14/2019	Trichlorofluoromethane	47.1653 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.7379	47.1653
TWF63-20-189075	63-2012	11/14/2019	Dichlorodifluoromethane	74.1319 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	9.39003	41.5138
TWF63-20-189075	63-2012	11/14/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	64.3346 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4883	64.3346
TWF63-20-189075	63-2012	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	58.6845 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.3698	58.6845
TWF63-20-189075	63-2012	11/14/2019	Dichloropropane[1,2-]	38.7945 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1605	38.7945
TWF63-20-189075	63-2012	11/14/2019	Butanone[2-]	100.213 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.1691	100.213
TWF63-20-189075	63-2012	11/14/2019	Trichloroethane[1,1,2-]	45.8022 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.3579	45.8022
TWF63-20-189075	63-2012	11/14/2019	Trichloroethene	2792.65 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.4262	45.1121
TWF63-20-189075	63-2012	11/14/2019	Tetrachloroethane[1,1,2,2-]	57.6304 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.919	57.6304
TWF63-20-189075	63-2012	11/14/2019	Hexachlorobutadiene	362.386 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	223.827	362.386
TWF63-20-189075	63-2012	11/14/2019	Xylene[1,2-]	36.4495 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98022	36.4495
TWF63-20-189075	63-2012	11/14/2019	Dichlorobenzene[1,2-]	50.4751 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.0179	50.4751
TWF63-20-189075	63-2012	11/14/2019	Trimethylbenzene[1,2,4-]	41.2666 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	41.2666
TWF63-20-189075	63-2012	11/14/2019	Isopropylbenzene	41.2666 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	2.89849	41.2666
TWF63-20-189075	63-2012	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	36.4495 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	36.4495
TWF63-20-189076	63-2012	11/14/2019	Ethylbenzene	37.3209 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37738	37.3209
TWF63-20-189076	63-2012	11/14/2019	Styrene	36.6108 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.81131	36.6108
TWF63-20-189076	63-2012	11/14/2019	Benzyl Chloride	44.4954 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3478	44.4954
TWF63-20-189076	63-2012	11/14/2019	Dichloropropene[cis-1,3-]	39.0082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.80375	39.0082
TWF63-20-189076	63-2012	11/14/2019	Dichloropropene[trans-1,3-]	39.0082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.39976	39.0082
TWF63-20-189076	63-2012	11/14/2019	Propylbenzene[1-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.91269	42.2492
TWF63-20-189076	63-2012	11/14/2019	Dichlorobenzene[1,4-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	51.6769
TWF63-20-189076	63-2012	11/14/2019	Dibromoethane[1,2-]	66.0365 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.518	66.0365
TWF63-20-189076	63-2012	11/14/2019	Butadiene[1,3-]	19.0143 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.9696	19.0143
TWF63-20-189076	63-2012	11/14/2019	Chloro-1-propene[3-]	109.47 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.145	109.47
TWF63-20-189076	63-2012	11/14/2019	Dichloroethane[1,2-]	34.7864 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87638	34.7864
TWF63-20-189076	63-2012	11/14/2019	Methyl-2-pentanone[4-]	35.2082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1947	35.2082
TWF63-20-189076	63-2012	11/14/2019	Trimethylbenzene[1,3,5-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87777	42.2492
TWF63-20-189076	63-2012	11/14/2019	Toluene	32.3884 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.02574	32.3884
TWF63-20-189076	63-2012	11/14/2019	Chlorobenzene	39.5671 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.042	39.5671
TWF63-20-189076	63-2012	11/14/2019	Tetrahydrofuran	25.3481 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.1371	25.3481
TWF63-20-189076	63-2012	11/14/2019	Hexane	30.294 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	30.294
TWF63-20-189076	63-2012	11/14/2019	Cyclohexane	29.5839 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53598	29.5839
TWF63-20-189076	63-2012	11/14/2019	Trichlorobenzene[1,2,4-]	259.583 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	259.583
TWF63-20-189076	63-2012	11/14/2019	Dioxane[1,4-]	126.051 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.2137	126.051
TWF63-20-189076	63-2012	11/14/2019	Chlorodibromomethane	73.2146 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	73.2146
TWF63-20-189076	63-2012	11/14/2019	Tetrachloroethene	67.782 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	20.3346	58.2925
TWF63-20-189076	63-2012	11/14/2019	n-Heptane	35.2223 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8773	35.2223
TWF63-20-189076	63-2012	11/14/2019	Dichloroethene[cis-1,2-]	22.1892 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	10.6984	34.0763
TWF63-20-189076	63-2012	11/14/2019	Dichloroethene[trans-1,2-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0758	34.0763
TWF63-20-189076	63-2012	11/14/2019	Methyl tert-Butyl Ether	30.9865 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.17071	30.9865
TWF63-20-189076	63-2012	11/14/2019	Isooctane	40.1541 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.33817	40.1541
TWF63-20-189076	63-2012	11/14/2019	Dichlorobenzene[1,3-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	51.6769
TWF63-20-189076	63-2012	11/14/2019	Carbon Tetrachloride	100.597 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	12.5746	54.0708
TWF63-20-189076	63-2012	11/14/2019	Hexanone[2-]	143.289 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	143.289
TWF63-20-189076	63-2012	11/14/2019	Ethyltoluene[4-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	42.2492

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TWF63-20-189076	63-2012	11/14/2019	Ethanol	65.9079 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.3114	65.9079
TWF63-20-189076	63-2012	11/14/2019	Propanol[2-]	85.9793 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8088	85.9793
TWF63-20-189076	63-2012	11/14/2019	Acetone	83.0895 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8699	83.0895
TWF63-20-189076	63-2012	11/14/2019	Chloroform	200.063 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	7.31938	41.9644
TWF63-20-189076	63-2012	11/14/2019	Benzene	27.4572 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	27.4572
TWF63-20-189076	63-2012	11/14/2019	Trichloroethane[1,1,1-]	13.0863 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.17897	46.8927
TWF63-20-189076	63-2012	11/14/2019	Bromomethane	135.822 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.2092	135.822
TWF63-20-189076	63-2012	11/14/2019	Chloromethane	72.2312 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.0654	72.2312
TWF63-20-189076	63-2012	11/14/2019	Chloroethane	92.2883 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.1044	92.2883
TWF63-20-189076	63-2012	11/14/2019	Vinyl Chloride	21.9693 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6637	21.9693
TWF63-20-189076	63-2012	11/14/2019	Methylene Chloride	121.501 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.7459	121.501
TWF63-20-189076	63-2012	11/14/2019	Carbon Disulfide	108.925 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1831	108.925
TWF63-20-189076	63-2012	11/14/2019	Bromoform	88.8396 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	88.8396
TWF63-20-189076	63-2012	11/14/2019	Bromodichloromethane	57.579 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.7579	57.579
TWF63-20-189076	63-2012	11/14/2019	Dichloroethane[1,1-]	34.7864 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	34.7864
TWF63-20-189076	63-2012	11/14/2019	Dichloroethene[1,1-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.75484	34.0763
TWF63-20-189076	63-2012	11/14/2019	Trichlorofluoromethane	48.2883 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.29939	48.2883
TWF63-20-189076	63-2012	11/14/2019	Dichlorodifluoromethane	148.264 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	9.39003	42.5023
TWF63-20-189076	63-2012	11/14/2019	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	26.8061 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	11.4883	65.8664
TWF63-20-189076	63-2012	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	60.0818 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	60.0818
TWF63-20-189076	63-2012	11/14/2019	Dichloropropane[1,2-]	39.7182 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6223	39.7182
TWF63-20-189076	63-2012	11/14/2019	Butanone[2-]	103.161 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.7586	103.161
TWF63-20-189076	63-2012	11/14/2019	Trichloroethane[1,1,2-]	46.8927 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.9032	46.8927
TWF63-20-189076	63-2012	11/14/2019	Trichloroethene	6981.63 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.9633	46.1862
TWF63-20-189076	63-2012	11/14/2019	Tetrachloroethane[1,1,2,2-]	59.0026 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.919	59.0026
TWF63-20-189076	63-2012	11/14/2019	Hexachlorobutadiene	373.044 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	223.827	373.044
TWF63-20-189076	63-2012	11/14/2019	Xylene[1,2-]	37.3173 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98022	37.3173
TWF63-20-189076	63-2012	11/14/2019	Dichlorobenzene[1,2-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6188	51.6769
TWF63-20-189076	63-2012	11/14/2019	Trimethylbenzene[1,2,4-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	42.2492
TWF63-20-189076	63-2012	11/14/2019	Isopropylbenzene	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	2.94762	42.2492
TWF63-20-189076	63-2012	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	37.3173 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	37.3173
TWF63-20-189077	63-2013	11/14/2019	Ethylbenzene	38.6227 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81134	38.6227
TWF63-20-189077	63-2013	11/14/2019	Styrene	37.8879 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.23702	37.8879
TWF63-20-189077	63-2013	11/14/2019	Benzyl Chloride	46.0475 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8652	46.0475
TWF63-20-189077	63-2013	11/14/2019	Dichloropropene[cis-1,3-]	40.3689 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.25733	40.3689
TWF63-20-189077	63-2013	11/14/2019	Dichloropropene[trans-1,3-]	40.3689 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.53583	40.3689
TWF63-20-189077	63-2013	11/14/2019	Propylbenzene[1-]	43.723 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.40396	43.723
TWF63-20-189077	63-2013	11/14/2019	Dichlorobenzene[1,4-]	53.4796 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	53.4796
TWF63-20-189077	63-2013	11/14/2019	Dibromoethane[1,2-]	68.3401 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2859	68.3401
TWF63-20-189077	63-2013	11/14/2019	Butadiene[1,3-]	19.6776 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.19069	19.6776
TWF63-20-189077	63-2013	11/14/2019	Chloro-1-propene[3-]	112.598 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.7706	112.598
TWF63-20-189077	63-2013	11/14/2019	Dichloroethane[1,2-]	35.9999 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87638	35.9999
TWF63-20-189077	63-2013	11/14/2019	Methyl-2-pentanone[4-]	36.4364 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6041	36.4364
TWF63-20-189077	63-2013	11/14/2019	Trimethylbenzene[1,3,5-]	43.723 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36904	43.723
TWF63-20-189077	63-2013	11/14/2019	Toluene	33.5182 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.02574	33.5182
TWF63-20-189077	63-2013	11/14/2019	Chlorobenzene	40.9473 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.042	40.9473
TWF63-20-189077	63-2013	11/14/2019	Tetrahydrofuran	26.2323 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.43185	26.2323
TWF63-20-189077	63-2013	11/14/2019	Hexane	31.3507 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.74962	31.3507
TWF63-20-189077	63-2013	11/14/2019	Cyclohexane	30.6159 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87998	30.6159
TWF63-20-189077	63-2013	11/14/2019	Trichlorobenzene[1,2,4-]	267 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	267
TWF63-20-189077	63-2013	11/14/2019	Dioxane[1,4-]	129.652 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.2941	129.652
TWF63-20-189077	63-2013	11/14/2019	Chlorodibromomethane	75.7685 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	75.7685
TWF63-20-189077	63-2013	11/14/2019	Tetrachloroethene	60.326 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.0124	60.326
TWF63-20-189077	63-2013	11/14/2019	n-Heptane	36.451 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2868	36.451
TWF63-20-189077	63-2013	11/14/2019	Dichloroethene[cis-1,2-]	35.265 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6984	35.265
TWF63-20-189077	63-2013	11/14/2019	Dichloroethene[trans-1,2-]	35.265 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.472	35.265

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TWF63-20-189077	63-2013	11/14/2019	Methyl tert-Butyl Ether	32.0674 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.2788	32.0674
TWF63-20-189077	63-2013	11/14/2019	Isooctane	41.5548 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.33817	41.5548
TWF63-20-189077	63-2013	11/14/2019	Dichlorobenzene[1,3-]	53.4796 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	53.4796
TWF63-20-189077	63-2013	11/14/2019	Carbon Tetrachloride	55.957 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2033	55.957
TWF63-20-189077	63-2013	11/14/2019	Hexanone[2-]	147.383 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	147.383
TWF63-20-189077	63-2013	11/14/2019	Ethyltoluene[4-]	43.723 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2643	43.723
TWF63-20-189077	63-2013	11/14/2019	Ethanol	67.791 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.6881	67.791
TWF63-20-189077	63-2013	11/14/2019	Propanol[2-]	88.4358 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0545	88.4358
TWF63-20-189077	63-2013	11/14/2019	Acetone	85.4635 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3447	85.4635
TWF63-20-189077	63-2013	11/14/2019	Chloroform	36.5969 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	7.31938	43.4283
TWF63-20-189077	63-2013	11/14/2019	Benzene	28.415 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	28.415
TWF63-20-189077	63-2013	11/14/2019	Trichloroethane[1,1,1-]	21.8106 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.17897	48.5285
TWF63-20-189077	63-2013	11/14/2019	Bromomethane	139.702 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	62.0898	139.702
TWF63-20-189077	63-2013	11/14/2019	Chloromethane	74.2949 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.4781	74.2949
TWF63-20-189077	63-2013	11/14/2019	Chloroethane	94.9251 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.3681	94.9251
TWF63-20-189077	63-2013	11/14/2019	Vinyl Chloride	22.7357 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.91916	22.7357
TWF63-20-189077	63-2013	11/14/2019	Methylene Chloride	124.973 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.093	124.973
TWF63-20-189077	63-2013	11/14/2019	Carbon Disulfide	112.037 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8055	112.037
TWF63-20-189077	63-2013	11/14/2019	Bromoform	91.9387 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	91.9387
TWF63-20-189077	63-2013	11/14/2019	Bromodichloromethane	59.5875 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.95875	59.5875
TWF63-20-189077	63-2013	11/14/2019	Dichloroethane[1,1-]	35.9999 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1123	35.9999
TWF63-20-189077	63-2013	11/14/2019	Dichloroethene[1,1-]	35.265 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.75484	35.265
TWF63-20-189077	63-2013	11/14/2019	Trichlorofluoromethane	49.9728 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.29939	49.9728
TWF63-20-189077	63-2013	11/14/2019	Dichlorodifluoromethane	45.4675 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	9.88425	43.9849
TWF63-20-189077	63-2013	11/14/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	68.164 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2542	68.164
TWF63-20-189077	63-2013	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	62.1776 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	62.1776
TWF63-20-189077	63-2013	11/14/2019	Dichloropropane[1,2-]	41.1037 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0842	41.1037
TWF63-20-189077	63-2013	11/14/2019	Butanone[2-]	106.108 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.3481	106.108
TWF63-20-189077	63-2013	11/14/2019	Trichloroethane[1,1,2-]	48.5285 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.4485	48.5285
TWF63-20-189077	63-2013	11/14/2019	Trichloroethene	338.341 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.9633	47.7973
TWF63-20-189077	63-2013	11/14/2019	Tetrachloroethane[1,1,2,2-]	61.0608 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60507	61.0608
TWF63-20-189077	63-2013	11/14/2019	Hexachlorobutadiene	383.703 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	234.485	383.703
TWF63-20-189077	63-2013	11/14/2019	Xylene[1,2-]	38.6191 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4141	38.6191
TWF63-20-189077	63-2013	11/14/2019	Dichlorobenzene[1,2-]	53.4796 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2197	53.4796
TWF63-20-189077	63-2013	11/14/2019	Trimethylbenzene[1,2,4-]	43.723 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.35158	43.723
TWF63-20-189077	63-2013	11/14/2019	Isopropylbenzene	43.723 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.04587	43.723
TWF63-20-189077	63-2013	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	38.6191 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	38.6191
TWF63-20-189078	63-2013	11/14/2019	Ethylbenzene	41.2265 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.24531	41.2265
TWF63-20-189078	63-2013	11/14/2019	Styrene	40.4422 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.66272	40.4422
TWF63-20-189078	63-2013	11/14/2019	Benzyl Chloride	49.1519 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3825	49.1519
TWF63-20-189078	63-2013	11/14/2019	Dichloropropene[cis-1,3-]	43.0904 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.71091	43.0904
TWF63-20-189078	63-2013	11/14/2019	Dichloropropene[trans-1,3-]	43.0904 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.98942	43.0904
TWF63-20-189078	63-2013	11/14/2019	Propylbenzene[1-]	46.6706 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.89523	46.6706
TWF63-20-189078	63-2013	11/14/2019	Dichlorobenzene[1,4-]	57.085 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	57.085
TWF63-20-189078	63-2013	11/14/2019	Dibromoethane[1,2-]	72.9473 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0537	72.9473
TWF63-20-189078	63-2013	11/14/2019	Butadiene[1,3-]	21.0041 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.63288	21.0041
TWF63-20-189078	63-2013	11/14/2019	Chloro-1-propene[3-]	118.853 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.3344	118.853
TWF63-20-189078	63-2013	11/14/2019	Dichloroethane[1,2-]	38.4268 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.28087	38.4268
TWF63-20-189078	63-2013	11/14/2019	Methyl-2-pentanone[4-]	38.8928 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.8323	38.8928
TWF63-20-189078	63-2013	11/14/2019	Trimethylbenzene[1,3,5-]	46.6706 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	46.6706
TWF63-20-189078	63-2013	11/14/2019	Toluene	35.7779 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.40235	35.7779
TWF63-20-189078	63-2013	11/14/2019	Chlorobenzene	43.7078 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9621	43.7078
TWF63-20-189078	63-2013	11/14/2019	Tetrahydrofuran	28.0008 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.0213	28.0008
TWF63-20-189078	63-2013	11/14/2019	Hexane	33.4643 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.10188	33.4643
TWF63-20-189078	63-2013	11/14/2019	Cyclohexane	32.6799 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.22398	32.6799
TWF63-20-189078	63-2013	11/14/2019	Trichlorobenzene[1,2,4-]	281.833 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	111.25	281.833

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TWF63-20-189078	63-2013	11/14/2019	Dioxane[1,4-]	136.855 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	36.0144	136.855
TWF63-20-189078	63-2013	11/14/2019	Chlorodibromomethane	80.8765 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.0266	80.8765
TWF63-20-189078	63-2013	11/14/2019	Tetrachloroethene	64.3929 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.3681	64.3929
TWF63-20-189078	63-2013	11/14/2019	n-Heptane	38.9083 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.106	38.9083
TWF63-20-189078	63-2013	11/14/2019	Dichloroethene[cis-1,2-]	37.6425 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4909	37.6425
TWF63-20-189078	63-2013	11/14/2019	Dichloroethene[trans-1,2-]	37.6425 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2645	37.6425
TWF63-20-189078	63-2013	11/14/2019	Methyl tert-Butyl Ether	34.2292 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.49499	34.2292
TWF63-20-189078	63-2013	11/14/2019	Isooctane	44.3563 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.272	44.3563
TWF63-20-189078	63-2013	11/14/2019	Dichlorobenzene[1,3-]	57.085 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	57.085
TWF63-20-189078	63-2013	11/14/2019	Carbon Tetrachloride	20.1194 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	14.4608	59.7294
TWF63-20-189078	63-2013	11/14/2019	Hexanone[2-]	155.571 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	57.3157	155.571
TWF63-20-189078	63-2013	11/14/2019	Ethyltoluene[4-]	46.6706 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7555	46.6706
TWF63-20-189078	63-2013	11/14/2019	Ethanol	71.5572 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.6296	71.5572
TWF63-20-189078	63-2013	11/14/2019	Propanol[2-]	93.349 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.7914	93.349
TWF63-20-189078	63-2013	11/14/2019	Acetone	90.2114 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0569	90.2114
TWF63-20-189078	63-2013	11/14/2019	Chloroform	20.9822 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	7.80734	46.3561
TWF63-20-189078	63-2013	11/14/2019	Benzene	30.3306 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.15051	30.3306
TWF63-20-189078	63-2013	11/14/2019	Trichloroethane[1,1,1-]	44.7117 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.72423	51.8001
TWF63-20-189078	63-2013	11/14/2019	Bromomethane	147.463 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	65.9705	147.463
TWF63-20-189078	63-2013	11/14/2019	Chloromethane	78.4224 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.51	78.4224
TWF63-20-189078	63-2013	11/14/2019	Chloroethane	100.199 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.0049	100.199
TWF63-20-189078	63-2013	11/14/2019	Vinyl Chloride	24.2684 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.43008	24.2684
TWF63-20-189078	63-2013	11/14/2019	Methylene Chloride	131.916 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.4816	131.916
TWF63-20-189078	63-2013	11/14/2019	Carbon Disulfide	118.261 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0504	118.261
TWF63-20-189078	63-2013	11/14/2019	Bromoform	98.1368 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.4292	98.1368
TWF63-20-189078	63-2013	11/14/2019	Bromodichloromethane	63.6047 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.36047	63.6047
TWF63-20-189078	63-2013	11/14/2019	Dichloroethane[1,1-]	38.4268 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5168	38.4268
TWF63-20-189078	63-2013	11/14/2019	Dichloroethene[1,1-]	37.6425 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.15107	37.6425
TWF63-20-189078	63-2013	11/14/2019	Trichlorofluoromethane	53.3417 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86088	53.3417
TWF63-20-189078	63-2013	11/14/2019	Dichlorodifluoromethane	64.2476 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	10.3785	46.9502
TWF63-20-189078	63-2013	11/14/2019	Trichloro-1,2,2-trifluoroethane[1,1,2-]	72.7594 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0201	72.7594
TWF63-20-189078	63-2013	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	66.3694 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.4656	66.3694
TWF63-20-189078	63-2013	11/14/2019	Dichloropropane[1,2-]	43.8748 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.546	43.8748
TWF63-20-189078	63-2013	11/14/2019	Butanone[2-]	112.003 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.1166	112.003
TWF63-20-189078	63-2013	11/14/2019	Trichloroethane[1,1,2-]	51.8001 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.539	51.8001
TWF63-20-189078	63-2013	11/14/2019	Trichloroethene	1396.33 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	15.0374	51.0196
TWF63-20-189078	63-2013	11/14/2019	Tetrachloroethane[1,1,2,2-]	65.1773 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.2912	65.1773
TWF63-20-189078	63-2013	11/14/2019	Hexachlorobutadiene	405.02 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	245.143	405.02
TWF63-20-189078	63-2013	11/14/2019	Xylene[1,2-]	41.2226 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.282	41.2226
TWF63-20-189078	63-2013	11/14/2019	Dichlorobenzene[1,2-]	57.085 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8206	57.085
TWF63-20-189078	63-2013	11/14/2019	Trimethylbenzene[1,2,4-]	46.6706 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.84285	46.6706
TWF63-20-189078	63-2013	11/14/2019	Isopropylbenzene	46.6706 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.24238	46.6706
TWF63-20-189078	63-2013	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	41.2226 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81061	41.2226
TWF63-20-189079	63-2013	11/14/2019	Ethylbenzene	36.8869 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.37738	36.8869
TWF63-20-189079	63-2013	11/14/2019	Styrene	36.1851 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.81131	36.1851
TWF63-20-189079	63-2013	11/14/2019	Benzyl Chloride	43.978 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.3478	43.978
TWF63-20-189079	63-2013	11/14/2019	Dichloropropene[cis-1,3-]	38.5546 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.80375	38.5546
TWF63-20-189079	63-2013	11/14/2019	Dichloropropene[trans-1,3-]	38.5546 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.30904	38.5546
TWF63-20-189079	63-2013	11/14/2019	Propylbenzene[1-]	41.7579 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.91269	41.7579
TWF63-20-189079	63-2013	11/14/2019	Dichlorobenzene[1,4-]	51.076 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.41252	51.076
TWF63-20-189079	63-2013	11/14/2019	Dibromoethane[1,2-]	65.2687 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.518	65.2687
TWF63-20-189079	63-2013	11/14/2019	Butadiene[1,3-]	18.7932 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.9696	18.7932
TWF63-20-189079	63-2013	11/14/2019	Chloro-1-propene[3-]	106.342 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	22.8323	106.342
TWF63-20-189079	63-2013	11/14/2019	Dichloroethane[1,2-]	34.3819 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.47189	34.3819
TWF63-20-189079	63-2013	11/14/2019	Methyl-2-pentanone[4-]	34.7988 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.7853	34.7988
TWF63-20-189079	63-2013	11/14/2019	Trimethylbenzene[1,3,5-]	41.7579 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.87777	41.7579

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TWF63-20-189079	63-2013	11/14/2019	Toluene	32.0118 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.64913	32.0118
TWF63-20-189079	63-2013	11/14/2019	Chlorobenzene	39.107 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.5819	39.107
TWF63-20-189079	63-2013	11/14/2019	Tetrahydrofuran	25.0534 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.84236	25.0534
TWF63-20-189079	63-2013	11/14/2019	Hexane	29.9417 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.39737	29.9417
TWF63-20-189079	63-2013	11/14/2019	Cyclohexane	29.2399 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.53598	29.2399
TWF63-20-189079	63-2013	11/14/2019	Trichlorobenzene[1,2,4-]	252.166 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	103.833	252.166
TWF63-20-189079	63-2013	11/14/2019	Dioxane[1,4-]	122.449 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	33.8536	122.449
TWF63-20-189079	63-2013	11/14/2019	Chlorodibromomethane	72.3632 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	15.324	72.3632
TWF63-20-189079	63-2013	11/14/2019	Tetrachloroethene	57.6147 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	20.3346	57.6147
TWF63-20-189079	63-2013	11/14/2019	n-Heptane	34.8127 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.8773	34.8127
TWF63-20-189079	63-2013	11/14/2019	Dichloroethene[cis-1,2-]	33.6801 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.3021	33.6801
TWF63-20-189079	63-2013	11/14/2019	Dichloroethene[trans-1,2-]	33.6801 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.6796	33.6801
TWF63-20-189079	63-2013	11/14/2019	Methyl tert-Butyl Ether	30.6262 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	3.13468	30.6262
TWF63-20-189079	63-2013	11/14/2019	Isooctane	39.6872 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.87126	39.6872
TWF63-20-189079	63-2013	11/14/2019	Dichlorobenzene[1,3-]	51.076 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.81163	51.076
TWF63-20-189079	63-2013	11/14/2019	Carbon Tetrachloride	15.0895 ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	12.5746	53.4421
TWF63-20-189079	63-2013	11/14/2019	Hexanone[2-]	139.195 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	53.2217	139.195
TWF63-20-189079	63-2013	11/14/2019	Ethyltoluene[4-]	41.7579 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.773	41.7579
TWF63-20-189079	63-2013	11/14/2019	Ethanol	64.0248 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.9348	64.0248
TWF63-20-189079	63-2013	11/14/2019	Propanol[2-]	83.5227 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.5632	83.5227
TWF63-20-189079	63-2013	11/14/2019	Acetone	80.7155 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.8699	80.7155
TWF63-20-189079	63-2013	11/14/2019	Chloroform	20.4943 ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	7.31938	41.4765
TWF63-20-189079	63-2013	11/14/2019	Benzene	27.1379 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	3.83124	27.1379
TWF63-20-189079	63-2013	11/14/2019	Trichloroethane[1,1,1-]	48.5285 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	8.17897	46.3475
TWF63-20-189079	63-2013	11/14/2019	Bromomethane	131.941 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	58.2092	131.941
TWF63-20-189079	63-2013	11/14/2019	Chloromethane	70.1674 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.6526	70.1674
TWF63-20-189079	63-2013	11/14/2019	Chloroethane	89.6515 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	25.8407	89.6515
TWF63-20-189079	63-2013	11/14/2019	Vinyl Chloride	21.7138 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.40825	21.7138
TWF63-20-189079	63-2013	11/14/2019	Methylene Chloride	118.03 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.3988	118.03
TWF63-20-189079	63-2013	11/14/2019	Carbon Disulfide	105.813 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.1831	105.813
TWF63-20-189079	63-2013	11/14/2019	Bromoform	87.8066 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.3962	87.8066
TWF63-20-189079	63-2013	11/14/2019	Bromodichloromethane	56.9094 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.69094	56.9094
TWF63-20-189079	63-2013	11/14/2019	Dichloroethane[1,1-]	34.3819 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.70783	34.3819
TWF63-20-189079	63-2013	11/14/2019	Dichloroethene[1,1-]	33.6801 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.75484	33.6801
TWF63-20-189079	63-2013	11/14/2019	Trichlorofluoromethane	47.7268 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.7379	47.7268
TWF63-20-189079	63-2013	11/14/2019	Dichlorodifluoromethane	69.1897 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	9.39003	42.008
TWF63-20-189079	63-2013	11/14/2019	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	17.6154 ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	11.4883	65.1005
TWF63-20-189079	63-2013	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	59.3831 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	15.3698	59.3831
TWF63-20-189079	63-2013	11/14/2019	Dichloropropane[1,2-]	39.2564 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.6223	39.2564
TWF63-20-189079	63-2013	11/14/2019	Butanone[2-]	100.213 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	24.1691	100.213
TWF63-20-189079	63-2013	11/14/2019	Trichloroethane[1,1,2-]	46.3475 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.9032	46.3475
TWF63-20-189079	63-2013	11/14/2019	Trichloroethene	1342.62 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	13.4262	45.6491
TWF63-20-189079	63-2013	11/14/2019	Tetrachloroethane[1,1,2,2-]	58.3165 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.919	58.3165
TWF63-20-189079	63-2013	11/14/2019	Hexachlorobutadiene	362.386 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	223.827	362.386
TWF63-20-189079	63-2013	11/14/2019	Xylene[1,2-]	36.8834 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.98022	36.8834
TWF63-20-189079	63-2013	11/14/2019	Dichlorobenzene[1,2-]	51.076 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.0179	51.076
TWF63-20-189079	63-2013	11/14/2019	Trimethylbenzene[1,2,4-]	41.7579 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.86031	41.7579
TWF63-20-189079	63-2013	11/14/2019	Isopropylbenzene	41.7579 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	2.94762	41.7579
TWF63-20-189079	63-2013	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	36.8834 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.94276	36.8834
TWF63-20-189080	63-2013	11/14/2019	Ethylbenzene	20.3963 ug/m3	J	Y	GAS	FB	VOC	EPA:TO15	17.7925	91.1323
TWF63-20-189080	63-2013	11/14/2019	Styrene	89.3984 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.6026	89.3984
TWF63-20-189080	63-2013	11/14/2019	Benzyl Chloride	108.652 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	24.8346	108.652
TWF63-20-189080	63-2013	11/14/2019	Dichloropropene[cis-1,3-]	95.2525 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.329	95.2525
TWF63-20-189080	63-2013	11/14/2019	Dichloropropene[trans-1,3-]	95.2525 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	10.4324	95.2525
TWF63-20-189080	63-2013	11/14/2019	Propylbenzene[1-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.2817	103.167
TWF63-20-189080	63-2013	11/14/2019	Dichlorobenzene[1,4-]	126.188 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.0313	126.188

**TA-63 Transuranic Waste Facility Soil Vapor Monitoring System
Sampling and Analysis - Quarter 9**

TWF63-20-189080	63-2013	11/14/2019	Dibromoethane[1,2-]	161.252 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	27.6432	161.252
TWF63-20-189080	63-2013	11/14/2019	Butadiene[1,3-]	46.4302 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.3713	46.4302
TWF63-20-189080	63-2013	11/14/2019	Chloro-1-propene[3-]	259.6 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	56.2988	259.6
TWF63-20-189080	63-2013	11/14/2019	Dichloroethane[1,2-]	84.9435 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.1797	84.9435
TWF63-20-189080	63-2013	11/14/2019	Methyl-2-pentanone[4-]	85.9736 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.9398	85.9736
TWF63-20-189080	63-2013	11/14/2019	Trimethylbenzene[1,3,5-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.7032	103.167
TWF63-20-189080	63-2013	11/14/2019	Toluene	79.0879 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	13.9345	79.0879
TWF63-20-189080	63-2013	11/14/2019	Chlorobenzene	96.6173 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.7646	96.6173
TWF63-20-189080	63-2013	11/14/2019	Tetrahydrofuran	61.8965 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.5164	61.8965
TWF63-20-189080	63-2013	11/14/2019	Hexane	73.9737 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.965	73.9737
TWF63-20-189080	63-2013	11/14/2019	Cyclohexane	72.2398 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	15.824	72.2398
TWF63-20-189080	63-2013	11/14/2019	Trichlorobenzene[1,2,4-]	615.583 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	244.75	615.583
TWF63-20-189080	63-2013	11/14/2019	Dioxane[1,4-]	298.92 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	82.8332	298.92
TWF63-20-189080	63-2013	11/14/2019	Chlorodibromomethane	178.78 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	36.6073	178.78
TWF63-20-189080	63-2013	11/14/2019	Tetrachloroethene	142.342 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	49.4809	142.342
TWF63-20-189080	63-2013	11/14/2019	n-Heptane	86.0079 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.6693	86.0079
TWF63-20-189080	63-2013	11/14/2019	Dichloroethene[cis-1,2-]	83.2096 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.3591	83.2096
TWF63-20-189080	63-2013	11/14/2019	Dichloroethene[trans-1,2-]	83.2096 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	31.3027	83.2096
TWF63-20-189080	63-2013	11/14/2019	Methyl tert-Butyl Ether	75.6646 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	7.56646	75.6646
TWF63-20-189080	63-2013	11/14/2019	Isooctane	98.0507 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.9447	98.0507
TWF63-20-189080	63-2013	11/14/2019	Dichlorobenzene[1,3-]	126.188 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.2286	126.188
TWF63-20-189080	63-2013	11/14/2019	Carbon Tetrachloride	132.033 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.8078	132.033
TWF63-20-189080	63-2013	11/14/2019	Hexanone[2-]	339.8 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	126.913	339.8
TWF63-20-189080	63-2013	11/14/2019	Ethyltoluene[4-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.4587	103.167
TWF63-20-189080	63-2013	11/14/2019	Ethanol	156.296 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	33.8955	156.296
TWF63-20-189080	63-2013	11/14/2019	Propanol[2-]	203.894 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	24.5655	203.894
TWF63-20-189080	63-2013	11/14/2019	Acetone	197.041 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.4878	197.041
TWF63-20-189080	63-2013	11/14/2019	Chloroform	102.471 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.5665	102.471
TWF63-20-189080	63-2013	11/14/2019	Benzene	67.0467 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	9.25883	67.0467
TWF63-20-189080	63-2013	11/14/2019	Trichloroethane[1,1,1-]	114.506 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.6295	114.506
TWF63-20-189080	63-2013	11/14/2019	Bromomethane	322.091 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	143.583	322.091
TWF63-20-189080	63-2013	11/14/2019	Chloromethane	171.291 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	35.0837	171.291
TWF63-20-189080	63-2013	11/14/2019	Chloroethane	218.855 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	63.2834	218.855
TWF63-20-189080	63-2013	11/14/2019	Vinyl Chloride	53.6459 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	18.3929	53.6459
TWF63-20-189080	63-2013	11/14/2019	Methylene Chloride	288.131 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	45.129	288.131
TWF63-20-189080	63-2013	11/14/2019	Carbon Disulfide	258.307 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	37.3456	258.307
TWF63-20-189080	63-2013	11/14/2019	Bromoform	216.934 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.9245	216.934
TWF63-20-189080	63-2013	11/14/2019	Bromodichloromethane	140.6 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.06	140.6
TWF63-20-189080	63-2013	11/14/2019	Dichloroethane[1,1-]	84.9435 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	23.4606	84.9435
TWF63-20-189080	63-2013	11/14/2019	Dichloroethene[1,1-]	83.2096 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	11.0946	83.2096
TWF63-20-189080	63-2013	11/14/2019	Trichlorofluoromethane	117.913 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.4062	117.913
TWF63-20-189080	63-2013	11/14/2019	Dichlorodifluoromethane	103.785 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	22.7338	103.785
TWF63-20-189080	63-2013	11/14/2019	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	160.837 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.3379	160.837
TWF63-20-189080	63-2013	11/14/2019	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	146.711 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	38.4244	146.711
TWF63-20-189080	63-2013	11/14/2019	Dichloropropane[1,2-]	96.9864 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.4012	96.9864
TWF63-20-189080	63-2013	11/14/2019	Butanone[2-]	244.639 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	58.9491	244.639
TWF63-20-189080	63-2013	11/14/2019	Trichloroethane[1,1,2-]	114.506 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.8948	114.506
TWF63-20-189080	63-2013	11/14/2019	Trichloroethene	112.78 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	32.76	112.78
TWF63-20-189080	63-2013	11/14/2019	Tetrachloroethane[1,1,2,2-]	144.076 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.9545	144.076
TWF63-20-189080	63-2013	11/14/2019	Hexachlorobutadiene	884.648 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	543.579	884.648
TWF63-20-189080	63-2013	11/14/2019	Xylene[1,2-]	91.1238 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	24.2997	91.1238
TWF63-20-189080	63-2013	11/14/2019	Dichlorobenzene[1,2-]	126.188 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.0447	126.188
TWF63-20-189080	63-2013	11/14/2019	Trimethylbenzene[1,2,4-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.1595	103.167
TWF63-20-189080	63-2013	11/14/2019	Isopropylbenzene	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	6.87777	103.167
TWF63-20-189080	63-2013	11/14/2019	Xylene[1,3-]+Xylene[1,4-]	56.4099 ug/m3	J	Y	GAS	FB	VOC	EPA:TO15	16.923	91.1238

Table 3. Current and Previous
Quarterly Results

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Table 3: Current and Previous Quarter Results

Well	Sample Port Depth (ft)	Analyte/Constituent (as Listed in Permit Tables)	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 5		Quarter 6		Quarter 7		Quarter 8		Quarter 9		
			Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	
VMW-1 63-2009	5	Trichloroethylene	64.4	0.3	31.1	0.2	48.3	0.2	53.7	0.3	43.5	0.2	36.0	0.2	44.0	0.2	59.1	0.3	40.3	0.2	
		Toluene	12.4	<0.1																	
		Tetrachloroethylene	11.5	<0.1																	
		cis-1,2-Dichloroethylene	11.5	<0.1																	
		Acetone	16.1	<0.1																	
		1,1,1-Trichloroethane	142	<0.1			8.2	<0.1									8.7	<0.1			
		1,1-Dichloroethane	33.6	<0.1																	
		1,1-Dichloroethylene	10.3	<0.1																	
		Dichlorodifluoromethane	6.9	<0.1																	
		Methylene chloride								13.2	<0.1										
Chloroform																5.9	<0.1				
VMW-2 63-2010	5	Trichloroethylene	134	0.7	80.6	0.4	129	0.7	85.9	0.4	107	0.6	113	0.6	118	0.6	102	0.5	96.7	0.5	
		Dichlorodifluoromethane	7.9	<0.1														6.4	<0.1		
		Acetone												20.2	<0.1						
		Toluene																6.8	<0.1		
VMW-3 63-2011	5	Trichloroethylene	69.8	0.4	64.4	0.3	96.7	0.5	59.1	0.3	75.2	0.4	85.9	0.4	107	0.6	85.9	0.4	64.4	0.3	
		Toluene	8.3	<0.1																	
		Acetone							20.9	<0.1					12.3	<0.1					
		Dichlorodifluoromethane																5.9	<0.1		
VMW-4 63-2012	25	Trichloroethylene	3810	2.4	2793	1.8	3437	2.2	2954	1.9	2900	1.8	2900	1.8	2790	1.8	3010	1.9	2790	1.8	
		Tetrachloroethylene	49.5	<0.1	34.6	<0.1	34.6	<0.1	36.6	<0.1	43.4	<0.1	39.3	<0.1	34.6	<0.1			35.9	<0.1	
		Carbon tetrachloride	49.7	<0.1	35.2	<0.1	48.4	<0.1	41.5	<0.1	35.2	<0.1	46.5	<0.1	42.1	<0.1	50.9	<0.1	41.5	<0.1	
		Chloroform	112	0.5	87.8	0.2	107	0.5	107	0.5	102	0.4	92.7	0.4	97.6	0.4	97.6	0.4	102	0.4	
		Dichlorodifluoromethane	84	<0.1	74.1	<0.1	84.0	<0.1	84.0	<0.1	69.2	<0.1	79.1	<0.1	84.0	<0.1	59.3	<0.1	74.1	<0.1	
		1,1,2-Trichloro-1,2,2-trifluoroethane	17.6	<0.1	13.0	<0.1									16.1	<0.1	13.0	<0.1			
		1,1,1-Trichloroethane	7.1	<0.1																	
		Bromodichloromethane																6.6	<0.1		
VMW-4 63-2012	60	Trichloroethylene	8060	8.7	6980	7.5	8590	9.3	8060	8.7	8060	8.7	7520	8.1	7520	8.1	8590	9.3	6980	7.5	
		Tetrachloroethylene	81.3	<0.1	74.6	<0.1	88.1	<0.1	81.3	<0.1	88.1	<0.1	88.1	<0.1	81.3	<0.1	94.9	<0.1	67.8	<0.1	
		cis-1,2-Dichloroethylene	16.6	<0.1	23.8	<0.1	25.8	<0.1	25.0	<0.1	19.4	<0.1	19.8	<0.1	19.8	<0.1	21.8	<0.1	22.2	<0.1	
		Carbon tetrachloride	94.3	<0.1	88.0	<0.1	113	<0.1	107	<0.1	107	<0.1	113	<0.1	101	<0.1	107	<0.1	101	<0.1	
		Chloroform	190	0.4	200	0.5	244	0.5	229	0.5	210	0.5	215	0.5	215	0.5	220	0.5	200	0.5	
		1,1,1-Trichloroethane	13.1	<0.1	14.2	<0.1	14.2	<0.1	15.3	<0.1	15.3	<0.1			13.6	<0.1	15.8	<0.1	13.1	<0.1	
		Dichlorodifluoromethane	143	<0.1	158	<0.1	148	<0.1	193	<0.1	168	<0.1	168	<0.1	183	<0.1	133	<0.1	148	<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	36.8	<0.1	26.0	<0.1	28.3	<0.1			26.8	<0.1	
		Toluene	7.6	<0.1																	
		Acetone	16.1	<0.1																	
Trichlorofluoromethane	6.2	<0.1			6.7	<0.1															
VMW-5 63-2013	25	Trichloroethylene	483	0.3	258	0.2	414	0.3	344	0.2	365	0.2	360	0.2	360	0.2	424	0.3	338	0.2	
		Chloroform	35.6	0.2	19.0	<0.1	26.3	0.1	32.2	<0.1	32.2	0.1	28.8	0.1	32.2	0.1	30.3	0.1	36.6	<0.1	
		1,1,1-Trichloroethane	30.5	<0.1	19.6	<0.1	20.2	<0.1	27.8	<0.1	22.9	<0.1	22.9	<0.1	23.4	<0.1	22.4	<0.1	21.8	<0.1	
		Dichlorodifluoromethane	59.3	<0.1	42.0	<0.1	42.0	<0.1	47.4	<0.1	47.0	<0.1	49.4	<0.1	54.4	<0.1	36.6	<0.1	45.5	<0.1	
		Tetrachloroethylene	6.8	<0.1																	

Table 3: Current and Previous Quarter Results

Well	Sample Port Depth (ft)	Analyte/Constituent (as Listed in Permit Tables)	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 5		Quarter 6		Quarter 7		Quarter 8		Quarter 9	
			Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)
		Acetone							15.0	<0.1					12.3	<0.1				
		Carbon tetrachloride															7.5	<0.1		
VMW-5 63-2013	60	Trichloroethylene	1340	1.4	1343	1.4	1557	1.7	1504	1.6	1396	1.5	1400	1.5	1560	1.7	1500	1.6	1400	1.5
		Tetrachloroethylene	16.9	<0.1	12.9	<0.1	15.6	<0.1					10.2	<0.1	12.9	<0.1				
		Chloroform	15.6	<0.1	18.1	<0.1	22.9	<0.1	19.0	<0.1	22.9	<0.1	22.0	<0.1	21.5	<0.1	26.3	<0.1	21.0	<0.1
		1,1,1-Trichloroethane	44.7	<0.1	47.4	<0.1	47.4	<0.1	60.0	<0.1	50.2	<0.1	42.0	<0.1	45.3	<0.1	46.9	<0.1	44.7	<0.1
		Dichlorodifluoromethane	64.2	<0.1	84.0	<0.1	69.2	<0.1	84.0	<0.1	79.0	<0.1	79.0	<0.1	79.0	<0.1	59.3	<0.1	64.2	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	<0.1	19.9	<0.1							15.3	<0.1	14.6	<0.1		
		Toluene	10.5	<0.1																
		Carbon tetrachloride	13.2	<0.1			10.7	<0.1							18.2	<0.1	21.4	<0.1	20.1	<0.1
		Acetone	26.1	<0.1													26.1	<0.1		
VMW-5 63-2013 Field Duplicate	25	Trichloroethylene	451	0.3																
		Tetrachloroethylene	8.8	<0.1																
		Chloroform	30.7	0.1																
		1,1,1-Trichloroethane	32.7	<0.1																
		Dichlorodifluoromethane	59.3	<0.1																
VMW-3 63-2011 Field Duplicate	5	Trichloroethylene			45.6	0.2					80.6	0.4								
VMW-4 63-2012 Field Duplicate	25	Trichloroethylene					3276	2.1					2790	1.8						
		Tetrachloroethylene					32.5	<0.1					34.6	<0.1						
		Carbon tetrachloride					56.6	<0.1					49.7	<0.1						
		Chloroform					112	0.5					97.6	0.4						
		1,1,1-Trichloroethane					12.5	<0.1												
		Dichlorofluoromethane					74.1	<0.1					79.1	<0.1						
VWM-4 63-2012 Field Duplicate	60	Trichloroethylene							8593	9.3										
		Tetrachloroethylene							81.3	<0.1										
		cis-1,2-Dichloroethylene							27.0	<0.1										
		Carbon tetrachloride							113	<0.1										
		Chloroform							249	0.6										
		Dichlorodifluoromethane							188	<0.1										
		1,1,2-Trichloro-1,2,2-trifluoroethane							32.2	<0.1										
VMW-1 63-2009 Field Duplicate	5	Trichloroethylene													59.1	0.3				
		Dichlorodifluoromethane													6.9	<0.1				

Table 3: Current and Previous Quarter Results

Well	Sample Port Depth (ft)	Analyte/Constituent (as Listed in Permit Tables)	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 5		Quarter 6		Quarter 7		Quarter 8		Quarter 9	
			Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)	Result (ug/m ³)	Percentage of SGSL (%)
VMW-5 63-2013 Field Duplicate	60	Trichloroethylene															1560	1.7	1340	1.4
		Carbon tetrachloride															18.2	<0.1		
		1,1,1-Trichloroethane															47.4	<0.1	48.5	<0.1
		Dichlorodifluoromethane															64.2	<0.1	69.2	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane															15.3	<0.1	17.6	<0.1
		Chloroform																	20.5	<0.1

Table 4. Statistical Analysis

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

	VMW-1 (ug/m ³)	VMW-2 (ug/m ³)	VMW-3 (ug/m ³)	VMW-4 25 ft (ug/m ³)	VMW-4 60 ft (ug/m ³)	VMW-5 25 ft (ug/m ³)	VMW-5 60 ft (ug/m ³)
Quarter 1	64.4	134	69.8	3810	8060	483	1340
Quarter 2	31.1	80.6	64.4	2793	6982	258	1343
Quarter 3	48.3	129	96.7	3437	8593	414	1557
Quarter 4	53.7	85.9	59.1	2954	8056	344	1504
Quarter 5	43.5	107	75.2	2900	8056	365	1396
Quarter 6	36.0	113	85.9	2900	7520	360	1400
Quarter 7	44.0	118	107	2790	7520	360	1560
Quarter 8	59.1	102	85.9	3010	8590	424	1500
Quarter 9	40.3	96.7	64.4	2790	6980	338	1400
Mean	46.7	107	78.7	3040	7820	372	1440
Std. Deviation (n-1)	10.8	18.2	16.3	351	607	63.3	87.0
2xStd. Dev.	21.6	36.4	32.6	702	1214	126	174
Lower Limit (95%=-2 SD)	25.1	70.6	46.1	2338	6606	246	1266
Upper Limit (95%=+2 SD)	68.3	143	111	3742	9034	498	1614

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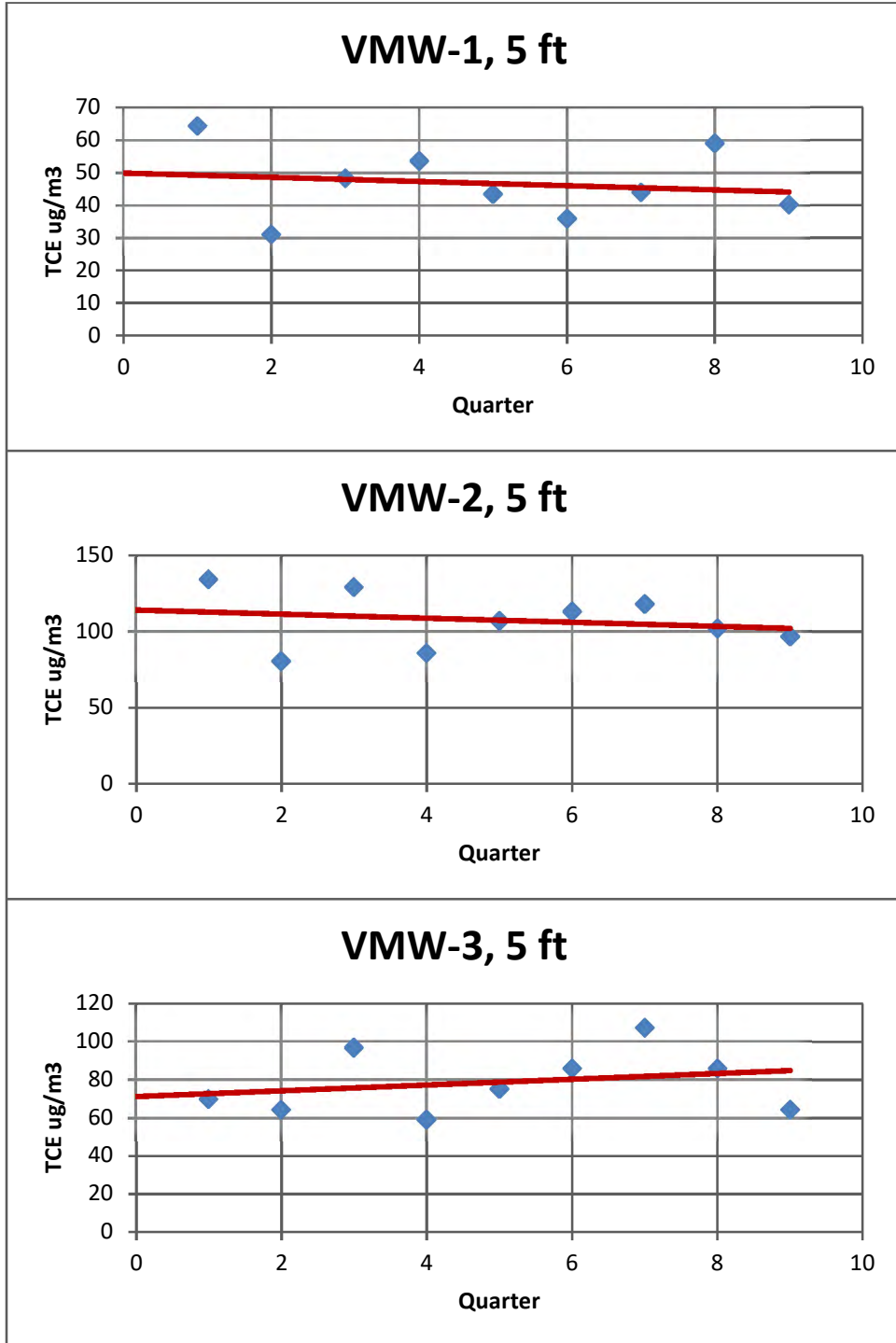


Figure 2. Simple Linear Regression Plots for TA-63 TWF Soil Vapor Monitoring Wells Inside the Permitted Unit

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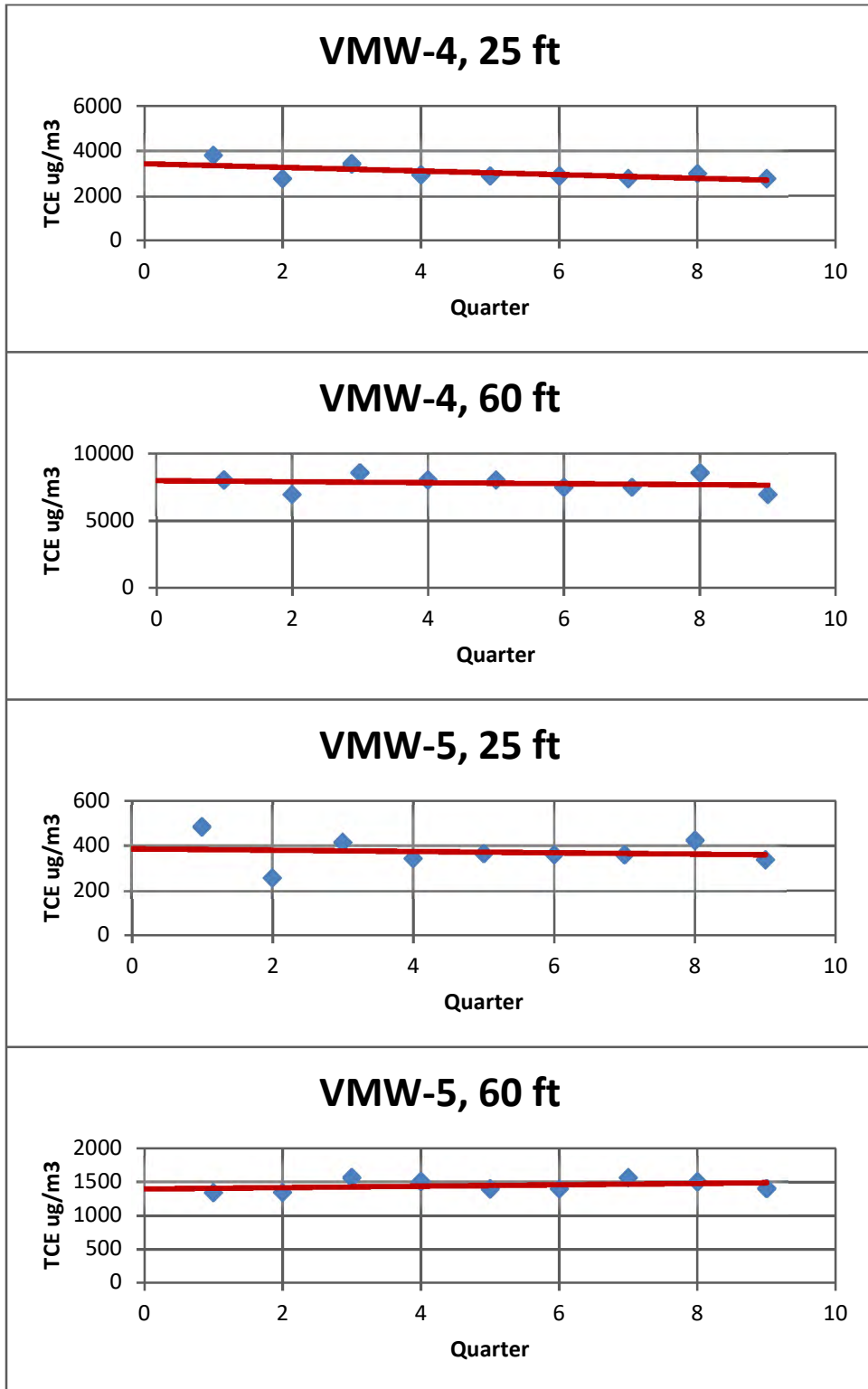


Figure 3. Simple Linear Regression Plots for TA-63 TWF Soil Vapor Monitoring Wells Outside the Permitted Unit

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Document: TA-63 TWF SVM Report-Quarter 9
Date: January, 2020

Sample Collection Logs
at TA-63 Transuranic Waste Facility – Quarter 9

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SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189072

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-2019	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	0942		MEDIA:	Gas	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2009		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5		EXCAVATED:		YES / NO / NA

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

SAMPLE COMMENTS:

VMW-1

LOCATION COMMENTS:

Summa #: N2872

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0 % CO₂ = 8570 ppm O₂ = 19.4 % VOC = 0.0 ppm

COLLECTED BY (PRINT): B. Morgan

RELINQUISHED BY <u>Bryn Morgan</u> (Printed Name) (Signature) <u>Bryn Morgan</u>	Date/Time 11-14-19 1338	RECEIVED BY <u>S. Sherwood</u> (Printed Name) (Signature) <u>S. Sherwood</u>	Date/Time 11/14/19 1338
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189073

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	10:10		MEDIA:	Gas	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2010		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5	↓	EXCAVATED:		YES / NO / NA

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

SAMPLE COMMENTS: VMW-2

LOCATION COMMENTS: Summa #: 35165

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 4750 ppm O₂ = 20.4% VOC = 0.0 ppm

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) <u>Bryn Morgan</u> (Signature) <u>Bryn Morgan</u>	Date/Time <u>11-14-19</u> <u>1338</u>	RECEIVED BY <u>S. Sherwood</u> (Printed Name) <u>S. Sherwood</u> (Signature)	Date/Time <u>11/14/19</u> <u>1338</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189074

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1035		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 #: 00132

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0 % CO₂ = 3550 ppm O₂ = 20.4% VOC = 00 ppm

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 11-14-19 1338	RECEIVED BY (Printed Name) S. Sherwood (Signature) <i>S. Sherwood</i>	Date/Time 11/14/19 1338
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189075

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	11:28		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 #: 25267

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = % CO₂ = 11,200 ppm O₂ = 19.5% VOC = 0.3 ppm
 COLLECTED BY (PRINT): D. Taramillo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 11-14-19 1338	RECEIVED BY (Printed Name) S. Sherwood (Signature) <i>S. Sherwood</i>	Date/Time 11/14/19 1338
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189076

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	11:47	↓	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 #: N0442

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = ∅ % CO₂ = 10,200 ppm O₂ = 19.6% VOC = 0.9 ppm
 COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 11-14-19 1338	RECEIVED BY (Printed Name) S. Sherwood (Signature) <i>S. Sherwood</i>	Date/Time 11/14/19 1338
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189077

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	12:20		MEDIA:	Gas	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	24		SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	25	↓	EXCAVATED:	YES / NO / NA	

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

SAMPLE COMMENTS: VMW-5

LOCATION COMMENTS: Summa #: 34202

FIELD PARAMETERS:

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 31,100 ppm O₂ = 18.1% VOC = 0.0 ppm
 COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 11-14-19 1338	RECEIVED BY <i>S. Sherwood</i> (Printed Name) S. Sherwood (Signature) <i>S. Sherwood</i>	Date/Time 11/14/19 1338
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189078

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	12:40		MEDIA:	Gas	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:			FIELD QC TYPE:	REG	
TOP DEPTH:	59	↓	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	60		EXCAVATED:		YES / NO / NA

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

SAMPLE COMMENTS:

VMW-5

LOCATION COMMENTS:

Summa #: 34202 34354

FIELD PARAMETERS:

Bm
11-14-19

Sample Time

NA

HH:MM

CH₄ = 0 % CO₂ = 17,500 ppm O₂ = 19.3 % VOC = 0.1 ppm

COLLECTED BY (PRINT):

D. Jaramillo

RELINQUISHED BY (Printed Name) Bryn Morgan	Date/Time 11-14-19 1338	RECEIVED BY (Printed Name) S. Sherwood	Date/Time 11/14/19 1338
RELINQUISHED BY (Signature) <i>Bryn Morgan</i>		RECEIVED BY (Signature) <i>S. Sherwood</i>	
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189079

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	12:41		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
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-5 QC of TWF63-20-189078

LOCATION COMMENTS: Summa #: ~~34354~~ 33576

FIELD PARAMETERS: Bm 11-14-19

Sample Time NA HH:MM

CH₄ = 0% CO₂ = 17,500 ppm O₂ = 19.3% VOC = 0.1 ppm

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) (Signature) <i>Bryn Morgan</i>	Date/Time 11-14-19 1338	RECEIVED BY (Printed Name) (Signature) <i>S. Sherwood</i>	Date/Time 11/14/19 1338
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12759

EVENT NAME: FY 19 - TWF - Poregas Sampling - TA-63

SAMPLE ID: TWF63-20-189080

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	11-14-19	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	13:22	↓	MEDIA:	nitrogen	
PRS ID:	TA-63	↓	SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	43-2013	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
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: QC of TWF63-20-189078

LOCATION COMMENTS: summa #: N2403

FIELD PARAMETERS:
 Sample Time NA HH:MM

COLLECTED BY (PRINT): D. Jaramillo

RELINQUISHED BY (Printed Name) (Signature) <i>Bryn Morgan</i>	Date/Time 11-14-19 1338	RECEIVED BY <i>S. Sherwood</i> (Printed Name) (Signature) <i>S. Sherwood</i>	Date/Time 11/14/19 1338
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

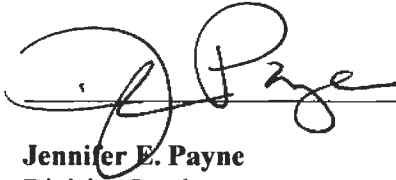
Document: TA-63 TWF SVM Report-Quarter 9
Date: January, 2020

CERTIFICATION

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CERTIFICATION

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



Jennifer E. Payne
Division Leader
Environmental Protection and Compliance Division
Triad National Security, LLC

8 January 2020
Date Signed



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

10 Jan 2020
Date Signed

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