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*Date:* **MAR 30 2020**

*Symbol:* EPC-DO: 20-121

*LA-UR:* 20-22559

*Locates Action No.:* NA

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

**Subject: Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 10, 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 tenth 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 tenth 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 ten 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, karen.armijo@nnsa.doe.gov, or Patrick L. Padilla, Triad, at (505) 667-3932, plpadilla@lanl.gov.

Sincerely,

*Signature on File*

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 10, 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 tenth 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 ten 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 10,  
Los Alamos National Laboratory  
EPA ID #NM0890010515**

EPC-DO-20-121

LAUR-20-22559  
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**Technical Area 63 Transuranic Waste Facility  
Soil Vapor Monitoring System Report  
Quarter 10  
Los Alamos National Laboratory  
EPA ID #NM0890010515**

**I. Introduction**

This report describes the tenth 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 tenth 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 tenth quarter of waste management operations on January 29, 2020. 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 and analysis was performed as required by U.S. Environmental Protection Agency (EPA) Method TO-15. Soil vapor gases were extracted through the stainless steel tubing of the sampling ports of the TA-63 TWF wells and were collected from all sampling ports. All gas samples were collected in stainless steel canisters and submitted for laboratory analysis of VOCs using the method. 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 exceeds 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 8.1% and 1.6% of the SGSL respectively. These are the sites closest to MDA-C and are not located within the permitted storage unit site at TA-63. The three monitoring wells within the permitted unit (VMW-1, VMW-2 and VMW-3) have detected concentrations for TCE of less than 1.0% of the SGSL.

The analytical results for the sixty-foot sampling port of Well VMW-5 indicate the detection of several new VOCs in the duplicate field sample (TWF63-20-193667, see Table 1). The detections were not seen in the original sample collected concurrently from the port (TWF63-20-193666). The VOCs detected include tetrahydrofuran, ethanol, propanol-2 (isopropyl alcohol), and 2-butanone. The compound 2-butanone is included in the constituents of concern identified in Tables 3.14.3.1-3 of the Permit as methyl ethyl ketone. The Permit tables do not list the other three detected compounds. The concentrations for the compounds were all quantified above the report detection limits for the analysis. The concentration for 2-butanone was less than 0.1% of the soil gas screening level (SGSL) given for the constituent in Table 3.14.3.3. A facility review of the documentary record for the sampling and analysis of this well sample completed March 12, 2020 did not indicate a data quality problem or laboratory analysis discrepancy. A



notification of additional constituents was submitted to NMED-HWB on March 26, 2020 (LANL, 2020b) providing information regarding this occurrence as required by Permit Section 3.14.3.

Additional VOC constituents of concern (e.g., chloroform, acetone) routinely seen in this project 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 additional VOCs other than TCE above the report detection limits 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 nine 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 tenth 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. The primary anomaly in this quarter's data is the detection of the VOCs tetrahydrofuran, ethanol, propanol-2 (isopropyl alcohol), and 2-butanone in the field duplicate for the sampling from the sixty-foot port of VMW-5. Further details of these detections are listed in Tables 1 and 3 of the enclosure. NMED-HWB has been notified of these detections by letter on March 26, 2020 as required by Permit Section 3.14.3.

There are no indications that the detection of the additional VOCs is incorrect based on the sampling and analysis data available for review for this quarter. However, there does not appear to be a significant basis in the data collected to this point in the TWF soil vapor monitoring sampling and analysis project to support the presence of these constituents in the field duplicate sample. These compounds have not been observed above report detection limits in the last two and a half years of quarterly sampling in any of the other TWF soil vapor monitoring wells (see Table 3).

There is no indication of significant differences in the handling of the sample collection. Concentration results for VOCs in the original well sample contain similar compounds that are within the same concentration ranges as the field duplicate sample (i.e., carbon tetrachloride, chloroform, 1,1,1-trichloroethane, dichlorodifluoromethane, and trichloroethylene [TCE]). This

indicates that similar sampling conditions existed and similar sample volumes were collected. TCE is the primary VOC of interest detected in these wells during this sampling project and the data have shown a stable trend for the concentrations seen in the wells. The TCE concentration values for both the original and field duplicate well samples fall within the statistical range of two standard deviations for the data collected over the last ten quarters. This supports equivalency of the duplicate VMW-5 samples with the exception of the newly discovered compounds.

There are two nearby soil vapor monitoring wells associated with MDA-C. The VOC concentration values from those wells were reviewed through the LANL INTELLUS database for any indication of similar VOC detections since the TA-63 TWF became operational. There have been minor qualified detections of ethanol (2x) and propanol-2 (1x) below report detection limits, but tetrahydrofuran or 2-butanone (the compound included in the Permit tables) have not been detected.

A possible explanation for the additional VOCs is inadvertently introduced contamination but there does not appear to be sufficient information available to support this hypothesis. The low SGSL percentage for the 2-butanone concentration given in Permit Section 3.14.3 and for the other constituents like TCE that are present in the well does not indicate an immediate risk-based requirement for additional re-sampling of the well. Further action for this matter appears to be the need to resolve whether the detection of the four VOCs can be duplicated. Triad proposed that the analytical results for the 60 foot sampling port at Well VMW-5 be evaluated at the next quarterly sampling event and that the field duplicate for the sampling event also be taken at that port in the March 26, 2020 notification (LANL, 2020b). This will generally replicate the physical conditions associated with this tenth quarter sampling event and will provide two additional data points for review.

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 ninth quarters (LANL, 2019a; LANL, 2019b; LANL, 2019c) and were not detected in samples taken from the actual soil vapor monitoring wells. Xylene isomers have also been detected 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 ten 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). This suggests that any trend in positive concentration 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.

LANL, 2020a. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 9, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO:19-467) of January 10, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2020b. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Additional Information, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO:20-121) of March 26, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

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

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

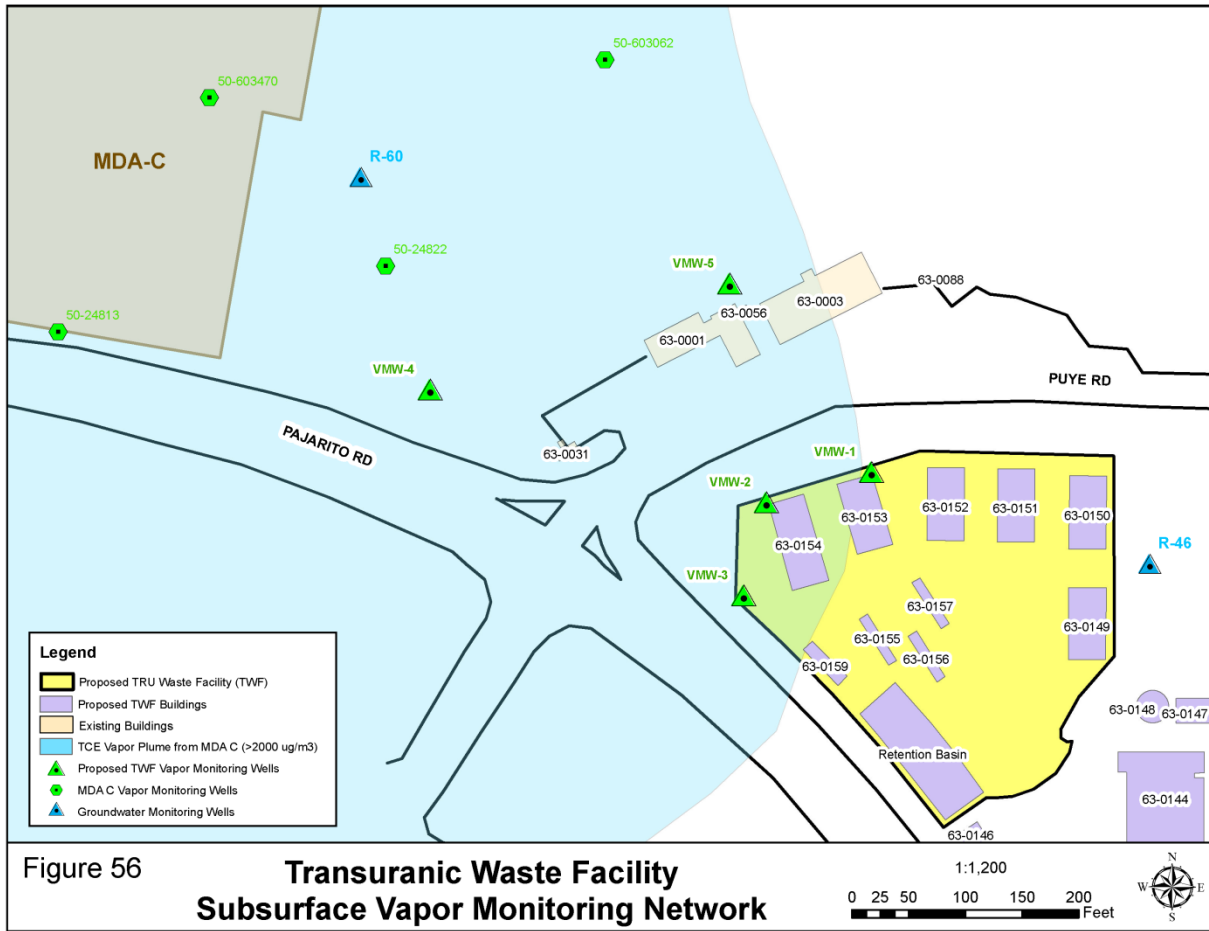


Figure 1

Soil Vapor Monitoring Well Locations at TA-63 TWF

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

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Table 1. Detected Volatile Organic Compounds  
at TA-63 Transuranic Waste Facility – Quarter 10

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Table 1: Detected Volatile Organic Compounds  
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System – Quarter 10

Well	Sample ID	Sample Port Depth (ft)	Analyte/Constituent	Listing in Permit Tables	Result (ug/m <sup>3</sup> )	EPA Data Qualifier	Report Detection Limit (ug/m <sup>3</sup> )	Soil-Gas Screening Level (ug/m <sup>3</sup> )	Percentage Of SGSL (%)
VMW-1 63-2009	TWF63- 20-193660	5	Propanol[2-]	NA	17.9	J	90.9	NA	NA
			Trichloroethene	Trichloroethylene	41.9	J	50.5	1.94E+04	0.2
VMW-2 63-2010	TWF63- 20-193661	5	Trichloroethene	Trichloroethylene	102	NQ	49.4	1.94E+04	0.5
VMW-3 63-2011	TWF63- 20-193662	5	Trichloroethene	Trichloroethylene	75.2	NQ	51.6	1.94E+04	0.4
VMW-4 63-2012	TWF63- 20-193663	25	Chloroform	Chloroform	102	NQ	42.0	2.30E+04	0.4
			Dichlorodifluoromethane	Dichlorodifluoromethane	74.1	NQ	42.5	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	2740	NQ	46.2	1.57E+05	1.7
VMW-4 63-2012	TWF63- 20-193664	60	Tetrachloroethene	Tetrachloroethylene	74.6	NQ	61.0	2.05E+06	<0.1
			Dichloroethene[cis-1,-2]	cis-1,2-Dichloroethylene	23.0	J	35.7	2.91E+06	<0.1
			Carbon Tetrachloride	Carbon tetrachloride	107	NQ	56.6	2.13E+05	<0.1
			Chloroform	Chloroform	224	NQ	43.9	4.44E+04	0.5
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	15.9	J	49.1	2.34E+08	<0.1
			Trichlorofluoromethane	Trichlorofluoromethane	10.7	J	50.5	3.01E+07	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	173	NQ	44.5	5.38E+06	<0.1
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	27.6	J	68.9	1.38E+09	<0.1
Trichloroethene	Trichloroethylene	7520	NQ	48.3	9.27E+04	8.1			
VMW-5 63-2013	TWF63- 20-193665	25	Chloroform	Chloroform	41.5	J	43.9	2.30E+04	0.2
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	24.5	J	49.1	1.16E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	48.9	NQ	44.5	2.61E+06	<0.1
			Trichloroethene	Trichloroethylene	392	NQ	48.3	1.57E+05	0.2
VMW-5 63-2013	TWF63- 20-193666	60	Carbon Tetrachloride	Carbon tetrachloride	22.6	J	55.3	2.13E+05	<0.1
			Chloroform	Chloroform	23.4	J	42.9	4.44E+04	<0.1
			Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	47.4	J	48.0	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	79.1	NQ	43.5	5.38E+06	<0.1

Table 1: Detected Volatile Organic Compounds  
at TA-63 Transuranic Waste Facility Soil Vapor Monitoring System – Quarter 10

			Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	18.4	J	67.4	1.38E+09	<0.1
			Trichloroethene	Trichloroethylene	1503	NQ	47.3	9.27E+04	1.6
VMW-5 63-2013	TWF63- 20-193667 Field Duplicate	60	Tetrahydrofuran	NA	943	NQ	27.7	NA	NA
			Carbon Tetrachloride	Carbon tetrachloride	17.6	J	59.1	2.13E+05	<0.1
			Ethanol	NA	104	NQ	69.7	NA	NA
			Propanol[2-]	NA	95.8	NQ	90.9	NA	NA
			Chloroform	Chloroform	19.5	J	45.9	4.44E+04	<0.1
			Trichloroethane [1,1,1-]	1,1,1-Trichloroethane	46.3	J	51.3	2.34E+08	<0.1
			Dichlorodifluoromethane	Dichlorodifluoromethane	79.1	NQ	46.5	5.38E+06	<0.1
			Butanone[2-]	Methylethylketone (2-butanone)	162	NQ	109	2.27E+08	<0.1
			Trichloroethene	Trichloroethylene	1340	NQ	50.5	9.27E+04	1.4
			Trimethylbenzene[1,2,4-]	1,2,4-Trimethylbenzene	10.3	J	46.2	4.12E+05	<0.1
VMW-5 63-2013	TWF63- 20-193668 Field Blank		Xylene[1,3-] +Xylene[1,4-]	m-Xylene + p-Xylene	29.1	J	91.1	5.40E+05	<0.1
<p>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.  NA” indicates the analyte is not included in the LANL Hazardous Waste Facility Permit, Tables 3.14.3.1-3 for soil-gas screening levels.</p>									

Table 2. Analytical Results for Soil Vapor Monitoring Wells  
at TA-63 Transuranic Waste Facility – Quarter 10

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**TA-63 Transuranic Waste Facility Soil Vapor Monitoring System  
Sampling and Analysis - Quarter 10**

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
TWF63-20-193660	63-2009	01/29/2020	Ethylbenzene	40.7926	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.24531	40.7926
TWF63-20-193660	63-2009	01/29/2020	Styrene	40.0164	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.66272	40.0164
TWF63-20-193660	63-2009	01/29/2020	Benzyl Chloride	48.6345	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3825	48.6345
TWF63-20-193660	63-2009	01/29/2020	Dichloropropene[cis-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.25733	42.6368
TWF63-20-193660	63-2009	01/29/2020	Dichloropropene[trans-1,3-]	42.6368	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.53583	42.6368
TWF63-20-193660	63-2009	01/29/2020	Propylbenzene[1-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.40396	46.1793
TWF63-20-193660	63-2009	01/29/2020	Dichlorobenzene[1,4-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	56.4841
TWF63-20-193660	63-2009	01/29/2020	Dibromoethane[1,2-]	72.1794	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2859	72.1794
TWF63-20-193660	63-2009	01/29/2020	Butadiene[1,3-]	20.783	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.41179	20.783
TWF63-20-193660	63-2009	01/29/2020	Chloro-1-propene[3-]	115.725	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.0217	115.725
TWF63-20-193660	63-2009	01/29/2020	Dichloroethane[1,2-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.28087	38.0223
TWF63-20-193660	63-2009	01/29/2020	Methyl-2-pentanone[4-]	38.4834	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.4229	38.4834
TWF63-20-193660	63-2009	01/29/2020	Trimethylbenzene[1,3,5-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	46.1793
TWF63-20-193660	63-2009	01/29/2020	Toluene	35.4012	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.40235	35.4012
TWF63-20-193660	63-2009	01/29/2020	Chlorobenzene	43.2477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.5021	43.2477
TWF63-20-193660	63-2009	01/29/2020	Tetrahydrofuran	27.7061	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.72659	27.7061
TWF63-20-193660	63-2009	01/29/2020	Hexane	33.112	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.10188	33.112
TWF63-20-193660	63-2009	01/29/2020	Cyclohexane	32.3359	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.22398	32.3359
TWF63-20-193660	63-2009	01/29/2020	Trichlorobenzene[1,2,4-]	274.416	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	111.25	274.416
TWF63-20-193660	63-2009	01/29/2020	Dioxane[1,4-]	133.253	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	36.0144	133.253
TWF63-20-193660	63-2009	01/29/2020	Chlorodibromomethane	80.0252	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1753	80.0252
TWF63-20-193660	63-2009	01/29/2020	Tetrachloroethene	63.7151	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.3681	63.7151
TWF63-20-193660	63-2009	01/29/2020	n-Heptane	38.4988	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.106	38.4988
TWF63-20-193660	63-2009	01/29/2020	Dichloroethene[cis-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4909	37.2462
TWF63-20-193660	63-2009	01/29/2020	Dichloroethene[trans-1,2-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2645	37.2462
TWF63-20-193660	63-2009	01/29/2020	Methyl tert-Butyl Ether	33.8689	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.42292	33.8689
TWF63-20-193660	63-2009	01/29/2020	Isooctane	43.8894	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.80507	43.8894
TWF63-20-193660	63-2009	01/29/2020	Dichlorobenzene[1,3-]	56.4841	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	56.4841
TWF63-20-193660	63-2009	01/29/2020	Carbon Tetrachloride	59.1006	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8321	59.1006
TWF63-20-193660	63-2009	01/29/2020	Hexanone[2-]	151.477	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	57.3157	151.477
TWF63-20-193660	63-2009	01/29/2020	Ethyltoluene[4-]	46.1793	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.7555	46.1793
TWF63-20-193660	63-2009	01/29/2020	Ethanol	69.6741	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.4413	69.6741
TWF63-20-193660	63-2009	01/29/2020	Propanol[2-]	17.9328	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	11.7914	90.8924
TWF63-20-193660	63-2009	01/29/2020	Acetone	87.8374	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0569	87.8374
TWF63-20-193660	63-2009	01/29/2020	Chloroform	45.8681	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.80734	45.8681
TWF63-20-193660	63-2009	01/29/2020	Benzene	30.0114	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.15051	30.0114
TWF63-20-193660	63-2009	01/29/2020	Trichloroethane[1,1,1-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.72423	51.2549
TWF63-20-193660	63-2009	01/29/2020	Bromomethane	143.583	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	65.9705	143.583
TWF63-20-193660	63-2009	01/29/2020	Chloromethane	76.3587	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0972	76.3587
TWF63-20-193660	63-2009	01/29/2020	Chloroethane	97.5619	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.0049	97.5619
TWF63-20-193660	63-2009	01/29/2020	Vinyl Chloride	24.0129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17462	24.0129
TWF63-20-193660	63-2009	01/29/2020	Methylene Chloride	128.444	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.1345	128.444
TWF63-20-193660	63-2009	01/29/2020	Carbon Disulfide	115.149	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.7392	115.149
TWF63-20-193660	63-2009	01/29/2020	Bromoform	97.1038	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.4292	97.1038
TWF63-20-193660	63-2009	01/29/2020	Bromodichloromethane	62.9351	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.29351	62.9351
TWF63-20-193660	63-2009	01/29/2020	Dichloroethane[1,1-]	38.0223	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5168	38.0223
TWF63-20-193660	63-2009	01/29/2020	Dichloroethene[1,1-]	37.2462	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.15107	37.2462
TWF63-20-193660	63-2009	01/29/2020	Trichlorofluoromethane	52.7802	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86088	52.7802
TWF63-20-193660	63-2009	01/29/2020	Dichlorodifluoromethane	46.456	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3785	46.456
TWF63-20-193660	63-2009	01/29/2020	Trichloro-1,2,2-trifluoroethane[1,1,2-]	71.9935	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0201	71.9935
TWF63-20-193660	63-2009	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	65.6708	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.4656	65.6708
TWF63-20-193660	63-2009	01/29/2020	Dichloropropane[1,2-]	43.4129	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.546	43.4129
TWF63-20-193660	63-2009	01/29/2020	Butanone[2-]	109.056	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.8218	109.056
TWF63-20-193660	63-2009	01/29/2020	Trichloroethane[1,1,2-]	51.2549	ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.539	51.2549
TWF63-20-193660	63-2009	01/29/2020	Trichloroethene	41.8898	ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	15.0374	50.4826

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TWF63-20-193660	63-2009	01/29/2020	Tetrachloroethane[1,1,2,2-]	64.4912 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60507	64.4912
TWF63-20-193660	63-2009	01/29/2020	Hexachlorobutadiene	394.361 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	245.143	394.361
TWF63-20-193660	63-2009	01/29/2020	Xylene[1,2-]	40.7887 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8481	40.7887
TWF63-20-193660	63-2009	01/29/2020	Dichlorobenzene[1,2-]	56.4841 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8206	56.4841
TWF63-20-193660	63-2009	01/29/2020	Trimethylbenzene[1,2,4-]	46.1793 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.84285	46.1793
TWF63-20-193660	63-2009	01/29/2020	Isopropylbenzene	46.1793 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.19325	46.1793
TWF63-20-193660	63-2009	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	40.7887 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81061	40.7887
TWF63-20-193661	63-2010	01/29/2020	Ethylbenzene	39.9246 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81134	39.9246
TWF63-20-193661	63-2010	01/29/2020	Styrene	39.165 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.23702	39.165
TWF63-20-193661	63-2010	01/29/2020	Benzyl Chloride	47.5997 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8652	47.5997
TWF63-20-193661	63-2010	01/29/2020	Dichloropropene[cis-1,3-]	41.7297 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.25733	41.7297
TWF63-20-193661	63-2010	01/29/2020	Dichloropropene[trans-1,3-]	41.7297 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.53583	41.7297
TWF63-20-193661	63-2010	01/29/2020	Propylbenzene[1-]	45.1968 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.40396	45.1968
TWF63-20-193661	63-2010	01/29/2020	Dichlorobenzene[1,4-]	55.2823 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	55.2823
TWF63-20-193661	63-2010	01/29/2020	Dibromoethane[1,2-]	70.6437 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2859	70.6437
TWF63-20-193661	63-2010	01/29/2020	Butadiene[1,3-]	20.3408 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.41179	20.3408
TWF63-20-193661	63-2010	01/29/2020	Chloro-1-propene[3-]	115.725 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.3961	115.725
TWF63-20-193661	63-2010	01/29/2020	Dichloroethane[1,2-]	37.2134 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.28087	37.2134
TWF63-20-193661	63-2010	01/29/2020	Methyl-2-pentanone[4-]	37.6646 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0135	37.6646
TWF63-20-193661	63-2010	01/29/2020	Trimethylbenzene[1,3,5-]	45.1968 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36904	45.1968
TWF63-20-193661	63-2010	01/29/2020	Toluene	34.648 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.02574	34.648
TWF63-20-193661	63-2010	01/29/2020	Chlorobenzene	42.3276 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.5021	42.3276
TWF63-20-193661	63-2010	01/29/2020	Tetrahydrofuran	27.1166 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.43185	27.1166
TWF63-20-193661	63-2010	01/29/2020	Hexane	32.4075 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.74962	32.4075
TWF63-20-193661	63-2010	01/29/2020	Cyclohexane	31.6479 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87998	31.6479
TWF63-20-193661	63-2010	01/29/2020	Trichlorobenzene[1,2,4-]	274.416 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	111.25	274.416
TWF63-20-193661	63-2010	01/29/2020	Dioxane[1,4-]	133.253 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	36.0144	133.253
TWF63-20-193661	63-2010	01/29/2020	Chlorodibromomethane	78.3225 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1753	78.3225
TWF63-20-193661	63-2010	01/29/2020	Tetrachloroethene	62.3595 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6902	62.3595
TWF63-20-193661	63-2010	01/29/2020	n-Heptane	37.6797 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6964	37.6797
TWF63-20-193661	63-2010	01/29/2020	Dichloroethene[cis-1,2-]	36.4538 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0946	36.4538
TWF63-20-193661	63-2010	01/29/2020	Dichloroethene[trans-1,2-]	36.4538 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8683	36.4538
TWF63-20-193661	63-2010	01/29/2020	Methyl tert-Butyl Ether	33.1483 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.35086	33.1483
TWF63-20-193661	63-2010	01/29/2020	Isooctane	42.9556 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.80507	42.9556
TWF63-20-193661	63-2010	01/29/2020	Dichlorobenzene[1,3-]	55.2823 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	55.2823
TWF63-20-193661	63-2010	01/29/2020	Carbon Tetrachloride	57.8432 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8321	57.8432
TWF63-20-193661	63-2010	01/29/2020	Hexanone[2-]	151.477 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	57.3157	151.477
TWF63-20-193661	63-2010	01/29/2020	Ethyltoluene[4-]	45.1968 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2643	45.1968
TWF63-20-193661	63-2010	01/29/2020	Ethanol	69.6741 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.0647	69.6741
TWF63-20-193661	63-2010	01/29/2020	Propanol[2-]	90.8924 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.5458	90.8924
TWF63-20-193661	63-2010	01/29/2020	Acetone	87.8374 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5821	87.8374
TWF63-20-193661	63-2010	01/29/2020	Chloroform	44.8922 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.80734	44.8922
TWF63-20-193661	63-2010	01/29/2020	Benzene	29.3728 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.15051	29.3728
TWF63-20-193661	63-2010	01/29/2020	Trichloroethane[1,1,1-]	50.1643 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.72423	50.1643
TWF63-20-193661	63-2010	01/29/2020	Bromomethane	143.583 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	62.0898	143.583
TWF63-20-193661	63-2010	01/29/2020	Chloromethane	76.3587 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.8909	76.3587
TWF63-20-193661	63-2010	01/29/2020	Chloroethane	97.5619 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.3681	97.5619
TWF63-20-193661	63-2010	01/29/2020	Vinyl Chloride	23.502 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17462	23.502
TWF63-20-193661	63-2010	01/29/2020	Methylene Chloride	128.444 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.7873	128.444
TWF63-20-193661	63-2010	01/29/2020	Carbon Disulfide	115.149 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.428	115.149
TWF63-20-193661	63-2010	01/29/2020	Bromoform	95.0377 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.4292	95.0377
TWF63-20-193661	63-2010	01/29/2020	Bromodichloromethane	61.5961 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.15961	61.5961
TWF63-20-193661	63-2010	01/29/2020	Dichloroethane[1,1-]	37.2134 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1123	37.2134
TWF63-20-193661	63-2010	01/29/2020	Dichloroethene[1,1-]	36.4538 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.75484	36.4538
TWF63-20-193661	63-2010	01/29/2020	Trichlorofluoromethane	51.6572 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86088	51.6572
TWF63-20-193661	63-2010	01/29/2020	Dichlorodifluoromethane	45.4675 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.88425	45.4675

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TWF63-20-193661	63-2010	01/29/2020	Trichloro-1,2,2-trifluoroethane[1,1,2-]	70.4617 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2542	70.4617
TWF63-20-193661	63-2010	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	64.2735 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.767	64.2735
TWF63-20-193661	63-2010	01/29/2020	Dichloropropane[1,2-]	42.4893 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0842	42.4893
TWF63-20-193661	63-2010	01/29/2020	Butanone[2-]	109.056 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.2323	109.056
TWF63-20-193661	63-2010	01/29/2020	Trichloroethane[1,1,2-]	50.1643 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.9937	50.1643
TWF63-20-193661	63-2010	01/29/2020	Trichloroethene	102.039 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	14.5003	49.4085
TWF63-20-193661	63-2010	01/29/2020	Tetrachloroethane[1,1,2,2-]	63.1191 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60507	63.1191
TWF63-20-193661	63-2010	01/29/2020	Hexachlorobutadiene	394.361 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	245.143	394.361
TWF63-20-193661	63-2010	01/29/2020	Xylene[1,2-]	39.9209 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8481	39.9209
TWF63-20-193661	63-2010	01/29/2020	Dichlorobenzene[1,2-]	55.2823 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2197	55.2823
TWF63-20-193661	63-2010	01/29/2020	Trimethylbenzene[1,2,4-]	45.1968 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.35158	45.1968
TWF63-20-193661	63-2010	01/29/2020	Isopropylbenzene	45.1968 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.14412	45.1968
TWF63-20-193661	63-2010	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	39.9209 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	39.9209
TWF63-20-193662	63-2011	01/29/2020	Ethylbenzene	41.6605 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.24531	41.6605
TWF63-20-193662	63-2011	01/29/2020	Styrene	40.8679 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.66272	40.8679
TWF63-20-193662	63-2011	01/29/2020	Benzyl Chloride	49.6693 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3825	49.6693
TWF63-20-193662	63-2011	01/29/2020	Dichloropropene[cis-1,3-]	43.544 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.71091	43.544
TWF63-20-193662	63-2011	01/29/2020	Dichloropropene[trans-1,3-]	43.544 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.98942	43.544
TWF63-20-193662	63-2011	01/29/2020	Propylbenzene[1-]	47.1619 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.89523	47.1619
TWF63-20-193662	63-2011	01/29/2020	Dichlorobenzene[1,4-]	57.6859 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.61431	57.6859
TWF63-20-193662	63-2011	01/29/2020	Dibromoethane[1,2-]	73.7152 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0537	73.7152
TWF63-20-193662	63-2011	01/29/2020	Butadiene[1,3-]	21.2252 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.63288	21.2252
TWF63-20-193662	63-2011	01/29/2020	Chloro-1-propene[3-]	118.853 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.6472	118.853
TWF63-20-193662	63-2011	01/29/2020	Dichloroethane[1,2-]	38.8313 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.28087	38.8313
TWF63-20-193662	63-2011	01/29/2020	Methyl-2-pentanone[4-]	39.3022 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.8323	39.3022
TWF63-20-193662	63-2011	01/29/2020	Trimethylbenzene[1,3,5-]	47.1619 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	47.1619
TWF63-20-193662	63-2011	01/29/2020	Toluene	36.1545 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.40235	36.1545
TWF63-20-193662	63-2011	01/29/2020	Chlorobenzene	44.1679 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.9621	44.1679
TWF63-20-193662	63-2011	01/29/2020	Tetrahydrofuran	28.2955 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.0213	28.2955
TWF63-20-193662	63-2011	01/29/2020	Hexane	33.8165 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.10188	33.8165
TWF63-20-193662	63-2011	01/29/2020	Cyclohexane	33.0239 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.22398	33.0239
TWF63-20-193662	63-2011	01/29/2020	Trichlorobenzene[1,2,4-]	281.833 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	111.25	281.833
TWF63-20-193662	63-2011	01/29/2020	Dioxane[1,4-]	136.855 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	36.0144	136.855
TWF63-20-193662	63-2011	01/29/2020	Chlorodibromomethane	81.7279 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.0266	81.7279
TWF63-20-193662	63-2011	01/29/2020	Tetrachloroethene	65.0707 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	23.0459	65.0707
TWF63-20-193662	63-2011	01/29/2020	n-Heptane	39.3179 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.106	39.3179
TWF63-20-193662	63-2011	01/29/2020	Dichloroethene[cis-1,2-]	38.0387 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4909	38.0387
TWF63-20-193662	63-2011	01/29/2020	Dichloroethene[trans-1,2-]	38.0387 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2645	38.0387
TWF63-20-193662	63-2011	01/29/2020	Methyl tert-Butyl Ether	34.5896 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.49499	34.5896
TWF63-20-193662	63-2011	01/29/2020	Isooctane	44.8232 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.272	44.8232
TWF63-20-193662	63-2011	01/29/2020	Dichlorobenzene[1,3-]	57.6859 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	57.6859
TWF63-20-193662	63-2011	01/29/2020	Carbon Tetrachloride	60.3581 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4608	60.3581
TWF63-20-193662	63-2011	01/29/2020	Hexanone[2-]	155.571 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	57.3157	155.571
TWF63-20-193662	63-2011	01/29/2020	Ethyltoluene[4-]	47.1619 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.2468	47.1619
TWF63-20-193662	63-2011	01/29/2020	Ethanol	71.5572 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.8179	71.5572
TWF63-20-193662	63-2011	01/29/2020	Propanol[2-]	93.349 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.0371	93.349
TWF63-20-193662	63-2011	01/29/2020	Acetone	90.2114 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2943	90.2114
TWF63-20-193662	63-2011	01/29/2020	Chloroform	46.844 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.80734	46.844
TWF63-20-193662	63-2011	01/29/2020	Benzene	30.6499 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.15051	30.6499
TWF63-20-193662	63-2011	01/29/2020	Trichloroethane[1,1,1-]	52.3454 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.72423	52.3454
TWF63-20-193662	63-2011	01/29/2020	Bromomethane	147.463 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	65.9705	147.463
TWF63-20-193662	63-2011	01/29/2020	Chloromethane	78.4224 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.51	78.4224
TWF63-20-193662	63-2011	01/29/2020	Chloroethane	100.199 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	29.0049	100.199
TWF63-20-193662	63-2011	01/29/2020	Vinyl Chloride	24.5239 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.43008	24.5239
TWF63-20-193662	63-2011	01/29/2020	Methylene Chloride	131.916 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.4816	131.916
TWF63-20-193662	63-2011	01/29/2020	Carbon Disulfide	118.261 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.0504	118.261

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TWF63-20-193662	63-2011	01/29/2020	Bromoform	99.1698 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.4292	99.1698
TWF63-20-193662	63-2011	01/29/2020	Bromodichloromethane	64.2742 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.42742	64.2742
TWF63-20-193662	63-2011	01/29/2020	Dichloroethane[1,1-]	38.8313 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5168	38.8313
TWF63-20-193662	63-2011	01/29/2020	Dichloroethene[1,1-]	38.0387 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.15107	38.0387
TWF63-20-193662	63-2011	01/29/2020	Trichlorofluoromethane	53.9032 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86088	53.9032
TWF63-20-193662	63-2011	01/29/2020	Dichlorodifluoromethane	47.4444 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3785	47.4444
TWF63-20-193662	63-2011	01/29/2020	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	73.5253 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0201	73.5253
TWF63-20-193662	63-2011	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	67.068 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.4656	67.068
TWF63-20-193662	63-2011	01/29/2020	Dichloropropane[1,2-]	44.3366 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.546	44.3366
TWF63-20-193662	63-2011	01/29/2020	Butanone[2-]	112.003 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	27.4113	112.003
TWF63-20-193662	63-2011	01/29/2020	Trichloroethane[1,1,2-]	52.3454 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.539	52.3454
TWF63-20-193662	63-2011	01/29/2020	Trichloroethene	75.1868 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	15.0374	51.5567
TWF63-20-193662	63-2011	01/29/2020	Tetrachloroethane[1,1,2,2-]	65.8634 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.2912	65.8634
TWF63-20-193662	63-2011	01/29/2020	Hexachlorobutadiene	405.02 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	255.802	405.02
TWF63-20-193662	63-2011	01/29/2020	Xylene[1,2-]	41.6566 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.282	41.6566
TWF63-20-193662	63-2011	01/29/2020	Dichlorobenzene[1,2-]	57.6859 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.8206	57.6859
TWF63-20-193662	63-2011	01/29/2020	Trimethylbenzene[1,2,4-]	47.1619 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.84285	47.1619
TWF63-20-193662	63-2011	01/29/2020	Isopropylbenzene	47.1619 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.29151	47.1619
TWF63-20-193662	63-2011	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	41.6566 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81061	41.6566
TWF63-20-193663	63-2012	01/29/2020	Ethylbenzene	37.3209 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37738	37.3209
TWF63-20-193663	63-2012	01/29/2020	Styrene	36.6108 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.81131	36.6108
TWF63-20-193663	63-2012	01/29/2020	Benzyl Chloride	44.4954 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3478	44.4954
TWF63-20-193663	63-2012	01/29/2020	Dichloropropene[cis-1,3-]	39.0082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.80375	39.0082
TWF63-20-193663	63-2012	01/29/2020	Dichloropropene[trans-1,3-]	39.0082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.3544	39.0082
TWF63-20-193663	63-2012	01/29/2020	Propylbenzene[1-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.91269	42.2492
TWF63-20-193663	63-2012	01/29/2020	Dichlorobenzene[1,4-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	51.6769
TWF63-20-193663	63-2012	01/29/2020	Dibromoethane[1,2-]	66.0365 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.518	66.0365
TWF63-20-193663	63-2012	01/29/2020	Butadiene[1,3-]	19.0143 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.9696	19.0143
TWF63-20-193663	63-2012	01/29/2020	Chloro-1-propene[3-]	106.342 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	22.8323	106.342
TWF63-20-193663	63-2012	01/29/2020	Dichloroethane[1,2-]	34.7864 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.47189	34.7864
TWF63-20-193663	63-2012	01/29/2020	Methyl-2-pentanone[4-]	35.2082 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.1947	35.2082
TWF63-20-193663	63-2012	01/29/2020	Trimethylbenzene[1,3,5-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87777	42.2492
TWF63-20-193663	63-2012	01/29/2020	Toluene	32.3884 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.64913	32.3884
TWF63-20-193663	63-2012	01/29/2020	Chlorobenzene	39.5671 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.5819	39.5671
TWF63-20-193663	63-2012	01/29/2020	Tetrahydrofuran	25.3481 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.84236	25.3481
TWF63-20-193663	63-2012	01/29/2020	Hexane	30.294 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.39737	30.294
TWF63-20-193663	63-2012	01/29/2020	Cyclohexane	29.5839 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.53598	29.5839
TWF63-20-193663	63-2012	01/29/2020	Trichlorobenzene[1,2,4-]	252.166 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	252.166
TWF63-20-193663	63-2012	01/29/2020	Dioxane[1,4-]	122.449 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	33.8536	122.449
TWF63-20-193663	63-2012	01/29/2020	Chlorodibromomethane	73.2146 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	73.2146
TWF63-20-193663	63-2012	01/29/2020	Tetrachloroethene	58.2925 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	20.3346	58.2925
TWF63-20-193663	63-2012	01/29/2020	n-Heptane	35.2223 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8773	35.2223
TWF63-20-193663	63-2012	01/29/2020	Dichloroethene[cis-1,2-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.3021	34.0763
TWF63-20-193663	63-2012	01/29/2020	Dichloroethene[trans-1,2-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0758	34.0763
TWF63-20-193663	63-2012	01/29/2020	Methyl tert-Butyl Ether	30.9865 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.13468	30.9865
TWF63-20-193663	63-2012	01/29/2020	Isooctane	40.1541 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.87126	40.1541
TWF63-20-193663	63-2012	01/29/2020	Dichlorobenzene[1,3-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	51.6769
TWF63-20-193663	63-2012	01/29/2020	Carbon Tetrachloride	54.0708 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.5746	54.0708
TWF63-20-193663	63-2012	01/29/2020	Hexanone[2-]	139.195 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	139.195
TWF63-20-193663	63-2012	01/29/2020	Ethyltoluene[4-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	42.2492
TWF63-20-193663	63-2012	01/29/2020	Ethanol	64.0248 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.1231	64.0248
TWF63-20-193663	63-2012	01/29/2020	Propanol[2-]	83.5227 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8088	83.5227
TWF63-20-193663	63-2012	01/29/2020	Acetone	80.7155 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.8699	80.7155
TWF63-20-193663	63-2012	01/29/2020	Chloroform	102.471 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	7.31938	41.9644
TWF63-20-193663	63-2012	01/29/2020	Benzene	27.4572 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	27.4572
TWF63-20-193663	63-2012	01/29/2020	Trichloroethane[1,1,1-]	46.8927 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.17897	46.8927



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TWF63-20-193663	63-2012	01/29/2020	Bromomethane	131.941 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	58.2092	131.941
TWF63-20-193663	63-2012	01/29/2020	Chloromethane	70.1674 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.859	70.1674
TWF63-20-193663	63-2012	01/29/2020	Chloroethane	89.6515 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.8407	89.6515
TWF63-20-193663	63-2012	01/29/2020	Vinyl Chloride	21.9693 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6637	21.9693
TWF63-20-193663	63-2012	01/29/2020	Methylene Chloride	118.03 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.3988	118.03
TWF63-20-193663	63-2012	01/29/2020	Carbon Disulfide	105.813 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.1831	105.813
TWF63-20-193663	63-2012	01/29/2020	Bromoform	88.8396 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	88.8396
TWF63-20-193663	63-2012	01/29/2020	Bromodichloromethane	57.579 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.7579	57.579
TWF63-20-193663	63-2012	01/29/2020	Dichloroethane[1,1-]	34.7864 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	34.7864
TWF63-20-193663	63-2012	01/29/2020	Dichloroethene[1,1-]	34.0763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.75484	34.0763
TWF63-20-193663	63-2012	01/29/2020	Trichlorofluoromethane	48.2883 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.29939	48.2883
TWF63-20-193663	63-2012	01/29/2020	Dichlorodifluoromethane	74.1319 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	9.39003	42.5023
TWF63-20-193663	63-2012	01/29/2020	Trichloro-1,2,2-trifluoroethane[1,1,2-]	65.8664 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.4883	65.8664
TWF63-20-193663	63-2012	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	60.0818 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.3698	60.0818
TWF63-20-193663	63-2012	01/29/2020	Dichloropropane[1,2-]	39.7182 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6223	39.7182
TWF63-20-193663	63-2012	01/29/2020	Butanone[2-]	100.213 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.4639	100.213
TWF63-20-193663	63-2012	01/29/2020	Trichloroethane[1,1,2-]	46.8927 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.9032	46.8927
TWF63-20-193663	63-2012	01/29/2020	Trichloroethene	2738.95 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.4262	46.1862
TWF63-20-193663	63-2012	01/29/2020	Tetrachloroethane[1,1,2,2-]	59.0026 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.919	59.0026
TWF63-20-193663	63-2012	01/29/2020	Hexachlorobutadiene	362.386 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	223.827	362.386
TWF63-20-193663	63-2012	01/29/2020	Xylene[1,2-]	37.3173 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.98022	37.3173
TWF63-20-193663	63-2012	01/29/2020	Dichlorobenzene[1,2-]	51.6769 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6188	51.6769
TWF63-20-193663	63-2012	01/29/2020	Trimethylbenzene[1,2,4-]	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.86031	42.2492
TWF63-20-193663	63-2012	01/29/2020	Isopropylbenzene	42.2492 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	2.94762	42.2492
TWF63-20-193663	63-2012	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	37.3173 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	37.3173
TWF63-20-193664	63-2012	01/29/2020	Ethylbenzene	39.0567 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81134	39.0567
TWF63-20-193664	63-2012	01/29/2020	Styrene	38.3136 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.23702	38.3136
TWF63-20-193664	63-2012	01/29/2020	Benzyl Chloride	46.5649 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8652	46.5649
TWF63-20-193664	63-2012	01/29/2020	Dichloropropene[cis-1,3-]	40.8225 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.25733	40.8225
TWF63-20-193664	63-2012	01/29/2020	Dichloropropene[trans-1,3-]	40.8225 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.53583	40.8225
TWF63-20-193664	63-2012	01/29/2020	Propylbenzene[1-]	44.2142 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.40396	44.2142
TWF63-20-193664	63-2012	01/29/2020	Dichlorobenzene[1,4-]	54.0805 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	54.0805
TWF63-20-193664	63-2012	01/29/2020	Dibromoethane[1,2-]	69.108 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2859	69.108
TWF63-20-193664	63-2012	01/29/2020	Butadiene[1,3-]	19.8987 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.19069	19.8987
TWF63-20-193664	63-2012	01/29/2020	Chloro-1-propene[3-]	112.598 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.0834	112.598
TWF63-20-193664	63-2012	01/29/2020	Dichloroethane[1,2-]	36.4044 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87638	36.4044
TWF63-20-193664	63-2012	01/29/2020	Methyl-2-pentanone[4-]	36.8458 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6041	36.8458
TWF63-20-193664	63-2012	01/29/2020	Trimethylbenzene[1,3,5-]	44.2142 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36904	44.2142
TWF63-20-193664	63-2012	01/29/2020	Toluene	33.8948 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.02574	33.8948
TWF63-20-193664	63-2012	01/29/2020	Chlorobenzene	41.4074 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.042	41.4074
TWF63-20-193664	63-2012	01/29/2020	Tetrahydrofuran	26.5271 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.43185	26.5271
TWF63-20-193664	63-2012	01/29/2020	Hexane	31.703 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.74962	31.703
TWF63-20-193664	63-2012	01/29/2020	Cyclohexane	30.9599 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87998	30.9599
TWF63-20-193664	63-2012	01/29/2020	Trichlorobenzene[1,2,4-]	267 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	267
TWF63-20-193664	63-2012	01/29/2020	Dioxane[1,4-]	129.652 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.2941	129.652
TWF63-20-193664	63-2012	01/29/2020	Chlorodibromomethane	76.6199 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	76.6199
TWF63-20-193664	63-2012	01/29/2020	Tetrachloroethene	74.5602 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	21.6902	61.0038
TWF63-20-193664	63-2012	01/29/2020	n-Heptane	36.8605 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2868	36.8605
TWF63-20-193664	63-2012	01/29/2020	Dichloroethene[cis-1,2-]	22.9817 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	11.0946	35.6613
TWF63-20-193664	63-2012	01/29/2020	Dichloroethene[trans-1,2-]	35.6613 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.472	35.6613
TWF63-20-193664	63-2012	01/29/2020	Methyl tert-Butyl Ether	32.4277 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.2788	32.4277
TWF63-20-193664	63-2012	01/29/2020	Isooctane	42.0217 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.33817	42.0217
TWF63-20-193664	63-2012	01/29/2020	Dichlorobenzene[1,3-]	54.0805 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.41252	54.0805
TWF63-20-193664	63-2012	01/29/2020	Carbon Tetrachloride	106.884 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.2033	56.5857
TWF63-20-193664	63-2012	01/29/2020	Hexanone[2-]	147.383 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	147.383
TWF63-20-193664	63-2012	01/29/2020	Ethyltoluene[4-]	44.2142 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2643	44.2142

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TWF63-20-193664	63-2012	01/29/2020	Ethanol	67.791 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.6881	67.791
TWF63-20-193664	63-2012	01/29/2020	Propanol[2-]	88.4358 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.3001	88.4358
TWF63-20-193664	63-2012	01/29/2020	Acetone	85.4635 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3447	85.4635
TWF63-20-193664	63-2012	01/29/2020	Chloroform	224.461 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	7.31938	43.9163
TWF63-20-193664	63-2012	01/29/2020	Benzene	28.7343 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	28.7343
TWF63-20-193664	63-2012	01/29/2020	Trichloroethane[1,1,1-]	15.8127 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.17897	49.0738
TWF63-20-193664	63-2012	01/29/2020	Bromomethane	139.702 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	62.0898	139.702
TWF63-20-193664	63-2012	01/29/2020	Chloromethane	74.2949 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.4781	74.2949
TWF63-20-193664	63-2012	01/29/2020	Chloroethane	94.9251 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.3681	94.9251
TWF63-20-193664	63-2012	01/29/2020	Vinyl Chloride	22.9911 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.91916	22.9911
TWF63-20-193664	63-2012	01/29/2020	Methylene Chloride	124.973 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	19.093	124.973
TWF63-20-193664	63-2012	01/29/2020	Carbon Disulfide	112.037 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.8055	112.037
TWF63-20-193664	63-2012	01/29/2020	Bromoform	92.9717 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	92.9717
TWF63-20-193664	63-2012	01/29/2020	Bromodichloromethane	60.257 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.0257	60.257
TWF63-20-193664	63-2012	01/29/2020	Dichloroethane[1,1-]	36.4044 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.1123	36.4044
TWF63-20-193664	63-2012	01/29/2020	Dichloroethene[1,1-]	35.6613 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.75484	35.6613
TWF63-20-193664	63-2012	01/29/2020	Trichlorofluoromethane	10.6683 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	7.29939	50.5342
TWF63-20-193664	63-2012	01/29/2020	Dichlorodifluoromethane	172.974 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	9.88425	44.4791
TWF63-20-193664	63-2012	01/29/2020	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	27.572 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	12.2542	68.9299
TWF63-20-193664	63-2012	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	62.8763 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.767	62.8763
TWF63-20-193664	63-2012	01/29/2020	Dichloropropane[1,2-]	41.5656 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0842	41.5656
TWF63-20-193664	63-2012	01/29/2020	Butanone[2-]	106.108 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.6428	106.108
TWF63-20-193664	63-2012	01/29/2020	Trichloroethane[1,1,2-]	49.0738 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.4485	49.0738
TWF63-20-193664	63-2012	01/29/2020	Trichloroethene	7518.68 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.9633	48.3344
TWF63-20-193664	63-2012	01/29/2020	Tetrachloroethane[1,1,2,2-]	61.7469 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60507	61.7469
TWF63-20-193664	63-2012	01/29/2020	Hexachlorobutadiene	383.703 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	234.485	383.703
TWF63-20-193664	63-2012	01/29/2020	Xylene[1,2-]	39.053 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4141	39.053
TWF63-20-193664	63-2012	01/29/2020	Dichlorobenzene[1,2-]	54.0805 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.2197	54.0805
TWF63-20-193664	63-2012	01/29/2020	Trimethylbenzene[1,2,4-]	44.2142 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.35158	44.2142
TWF63-20-193664	63-2012	01/29/2020	Isopropylbenzene	44.2142 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.095	44.2142
TWF63-20-193664	63-2012	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	39.053 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.37669	39.053
TWF63-20-193665	63-2013	01/29/2020	Ethylbenzene	39.0567 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81134	39.0567
TWF63-20-193665	63-2013	01/29/2020	Styrene	38.3136 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.23702	38.3136
TWF63-20-193665	63-2013	01/29/2020	Benzyl Chloride	46.5649 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.8652	46.5649
TWF63-20-193665	63-2013	01/29/2020	Dichloropropene[cis-1,3-]	40.8225 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.25733	40.8225
TWF63-20-193665	63-2013	01/29/2020	Dichloropropene[trans-1,3-]	40.8225 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.53583	40.8225
TWF63-20-193665	63-2013	01/29/2020	Propylbenzene[1-]	44.2142 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.40396	44.2142
TWF63-20-193665	63-2013	01/29/2020	Dichlorobenzene[1,4-]	54.0805 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.01342	54.0805
TWF63-20-193665	63-2013	01/29/2020	Dibromoethane[1,2-]	69.108 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2859	69.108
TWF63-20-193665	63-2013	01/29/2020	Butadiene[1,3-]	19.8987 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.19069	19.8987
TWF63-20-193665	63-2013	01/29/2020	Chloro-1-propene[3-]	112.598 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	24.0834	112.598
TWF63-20-193665	63-2013	01/29/2020	Dichloroethane[1,2-]	36.4044 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87638	36.4044
TWF63-20-193665	63-2013	01/29/2020	Methyl-2-pentanone[4-]	36.8458 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.6041	36.8458
TWF63-20-193665	63-2013	01/29/2020	Trimethylbenzene[1,3,5-]	44.2142 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.36904	44.2142
TWF63-20-193665	63-2013	01/29/2020	Toluene	33.8948 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.02574	33.8948
TWF63-20-193665	63-2013	01/29/2020	Chlorobenzene	41.4074 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.042	41.4074
TWF63-20-193665	63-2013	01/29/2020	Tetrahydrofuran	26.5271 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.43185	26.5271
TWF63-20-193665	63-2013	01/29/2020	Hexane	31.703 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.74962	31.703
TWF63-20-193665	63-2013	01/29/2020	Cyclohexane	30.9599 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.87998	30.9599
TWF63-20-193665	63-2013	01/29/2020	Trichlorobenzene[1,2,4-]	267 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	103.833	267
TWF63-20-193665	63-2013	01/29/2020	Dioxane[1,4-]	129.652 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	35.2941	129.652
TWF63-20-193665	63-2013	01/29/2020	Chlorodibromomethane	76.6199 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	76.6199
TWF63-20-193665	63-2013	01/29/2020	Tetrachloroethene	61.0038 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.6902	61.0038
TWF63-20-193665	63-2013	01/29/2020	n-Heptane	36.8605 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2868	36.8605
TWF63-20-193665	63-2013	01/29/2020	Dichloroethene[cis-1,2-]	35.6613 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0946	35.6613
TWF63-20-193665	63-2013	01/29/2020	Dichloroethene[trans-1,2-]	35.6613 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.472	35.6613



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TWF63-20-193666	63-2013	01/29/2020	Dioxane[1,4-]	126.051 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	34.5739	126.051
TWF63-20-193666	63-2013	01/29/2020	Chlorodibromomethane	74.9172 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.324	74.9172
TWF63-20-193666	63-2013	01/29/2020	Tetrachloroethene	59.6482 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	21.0124	59.6482
TWF63-20-193666	63-2013	01/29/2020	n-Heptane	36.0414 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.2868	36.0414
TWF63-20-193666	63-2013	01/29/2020	Dichloroethene[cis-1,2-]	34.8688 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6984	34.8688
TWF63-20-193666	63-2013	01/29/2020	Dichloroethene[trans-1,2-]	34.8688 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	13.0758	34.8688
TWF63-20-193666	63-2013	01/29/2020	Methyl tert-Butyl Ether	31.7071 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.20674	31.7071
TWF63-20-193666	63-2013	01/29/2020	Isooctane	41.0879 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.33817	41.0879
TWF63-20-193666	63-2013	01/29/2020	Dichlorobenzene[1,3-]	52.8787 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.81163	52.8787
TWF63-20-193666	63-2013	01/29/2020	Carbon Tetrachloride	22.6343 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	13.2033	55.3282
TWF63-20-193666	63-2013	01/29/2020	Hexanone[2-]	143.289 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	53.2217	143.289
TWF63-20-193666	63-2013	01/29/2020	Ethyltoluene[4-]	43.2317 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.773	43.2317
TWF63-20-193666	63-2013	01/29/2020	Ethanol	65.9079 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	14.4997	65.9079
TWF63-20-193666	63-2013	01/29/2020	Propanol[2-]	85.9793 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	11.0545	85.9793
TWF63-20-193666	63-2013	01/29/2020	Acetone	83.0895 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.1073	83.0895
TWF63-20-193666	63-2013	01/29/2020	Chloroform	23.422 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	7.31938	42.9404
TWF63-20-193666	63-2013	01/29/2020	Benzene	28.0958 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	3.83124	28.0958
TWF63-20-193666	63-2013	01/29/2020	Trichloroethane[1,1,1-]	47.438 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	8.17897	47.9833
TWF63-20-193666	63-2013	01/29/2020	Bromomethane	135.822 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	62.0898	135.822
TWF63-20-193666	63-2013	01/29/2020	Chloromethane	72.2312 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	15.2717	72.2312
TWF63-20-193666	63-2013	01/29/2020	Chloroethane	92.2883 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	26.3681	92.2883
TWF63-20-193666	63-2013	01/29/2020	Vinyl Chloride	22.4802 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.6637	22.4802
TWF63-20-193666	63-2013	01/29/2020	Methylene Chloride	121.501 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	18.7459	121.501
TWF63-20-193666	63-2013	01/29/2020	Carbon Disulfide	108.925 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.4943	108.925
TWF63-20-193666	63-2013	01/29/2020	Bromoform	90.9056 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.3962	90.9056
TWF63-20-193666	63-2013	01/29/2020	Bromodichloromethane	58.918 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	5.8918	58.918
TWF63-20-193666	63-2013	01/29/2020	Dichloroethane[1,1-]	35.5954 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.70783	35.5954
TWF63-20-193666	63-2013	01/29/2020	Dichloroethene[1,1-]	34.8688 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	4.75484	34.8688
TWF63-20-193666	63-2013	01/29/2020	Trichlorofluoromethane	49.4113 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	7.29939	49.4113
TWF63-20-193666	63-2013	01/29/2020	Dichlorodifluoromethane	79.074 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	9.39003	43.4907
TWF63-20-193666	63-2013	01/29/2020	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	18.3813 ug/m3	J	Y	GAS	REG	VOC	EPA:TO15	12.2542	67.3982
TWF63-20-193666	63-2013	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	61.479 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	16.0684	61.479
TWF63-20-193666	63-2013	01/29/2020	Dichloropropane[1,2-]	40.6419 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.6223	40.6419
TWF63-20-193666	63-2013	01/29/2020	Butanone[2-]	103.161 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	25.0534	103.161
TWF63-20-193666	63-2013	01/29/2020	Trichloroethane[1,1,2-]	47.9833 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	17.4485	47.9833
TWF63-20-193666	63-2013	01/29/2020	Trichloroethene	1503.74 ug/m3	NQ	Y	GAS	REG	VOC	EPA:TO15	13.9633	47.2603
TWF63-20-193666	63-2013	01/29/2020	Tetrachloroethane[1,1,2,2-]	60.3748 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	9.60507	60.3748
TWF63-20-193666	63-2013	01/29/2020	Hexachlorobutadiene	373.044 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	234.485	373.044
TWF63-20-193666	63-2013	01/29/2020	Xylene[1,2-]	38.1852 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	10.4141	38.1852
TWF63-20-193666	63-2013	01/29/2020	Dichlorobenzene[1,2-]	52.8787 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	12.6188	52.8787
TWF63-20-193666	63-2013	01/29/2020	Trimethylbenzene[1,2,4-]	43.2317 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	8.35158	43.2317
TWF63-20-193666	63-2013	01/29/2020	Isopropylbenzene	43.2317 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	2.99674	43.2317
TWF63-20-193666	63-2013	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	38.1852 ug/m3	U	N	GAS	REG	VOC	EPA:TO15	6.94276	38.1852
TWF63-20-193667	63-2013	01/29/2020	Ethylbenzene	40.7926 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.24531	40.7926
TWF63-20-193667	63-2013	01/29/2020	Styrene	40.0164 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.66272	40.0164
TWF63-20-193667	63-2013	01/29/2020	Benzyl Chloride	48.6345 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.3825	48.6345
TWF63-20-193667	63-2013	01/29/2020	Dichloropropene[cis-1,3-]	42.6368 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.25733	42.6368
TWF63-20-193667	63-2013	01/29/2020	Dichloropropene[trans-1,3-]	42.6368 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.53583	42.6368
TWF63-20-193667	63-2013	01/29/2020	Propylbenzene[1-]	46.1793 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.40396	46.1793
TWF63-20-193667	63-2013	01/29/2020	Dichlorobenzene[1,4-]	56.4841 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.61431	56.4841
TWF63-20-193667	63-2013	01/29/2020	Dibromoethane[1,2-]	72.1794 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	12.2859	72.1794
TWF63-20-193667	63-2013	01/29/2020	Butadiene[1,3-]	20.783 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.41179	20.783
TWF63-20-193667	63-2013	01/29/2020	Chloro-1-propene[3-]	115.725 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	25.0217	115.725
TWF63-20-193667	63-2013	01/29/2020	Dichloroethane[1,2-]	38.0223 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.28087	38.0223
TWF63-20-193667	63-2013	01/29/2020	Methyl-2-pentanone[4-]	38.4834 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.4229	38.4834
TWF63-20-193667	63-2013	01/29/2020	Trimethylbenzene[1,3,5-]	46.1793 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.86031	46.1793

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TWF63-20-193667	63-2013	01/29/2020	Toluene	35.4012 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.40235	35.4012
TWF63-20-193667	63-2013	01/29/2020	Chlorobenzene	43.2477 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.5021	43.2477
TWF63-20-193667	63-2013	01/29/2020	Tetrahydrofuran	943.185 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	9.72659	27.7061
TWF63-20-193667	63-2013	01/29/2020	Hexane	33.112 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.10188	33.112
TWF63-20-193667	63-2013	01/29/2020	Cyclohexane	32.3359 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.22398	32.3359
TWF63-20-193667	63-2013	01/29/2020	Trichlorobenzene[1,2,4-]	274.416 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	111.25	274.416
TWF63-20-193667	63-2013	01/29/2020	Dioxane[1,4-]	133.253 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	36.0144	133.253
TWF63-20-193667	63-2013	01/29/2020	Chlorodibromomethane	80.0252 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.1753	80.0252
TWF63-20-193667	63-2013	01/29/2020	Tetrachloroethene	63.7151 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	22.3681	63.7151
TWF63-20-193667	63-2013	01/29/2020	n-Heptane	38.4988 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.106	38.4988
TWF63-20-193667	63-2013	01/29/2020	Dichloroethene[cis-1,2-]	37.2462 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.4909	37.2462
TWF63-20-193667	63-2013	01/29/2020	Dichloroethene[trans-1,2-]	37.2462 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	14.2645	37.2462
TWF63-20-193667	63-2013	01/29/2020	Methyl tert-Butyl Ether	33.8689 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	3.42292	33.8689
TWF63-20-193667	63-2013	01/29/2020	Isooctane	43.8894 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.80507	43.8894
TWF63-20-193667	63-2013	01/29/2020	Dichlorobenzene[1,3-]	56.4841 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.41252	56.4841
TWF63-20-193667	63-2013	01/29/2020	Carbon Tetrachloride	17.6044 ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	13.8321	59.1006
TWF63-20-193667	63-2013	01/29/2020	Hexanone[2-]	151.477 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	57.3157	151.477
TWF63-20-193667	63-2013	01/29/2020	Ethyltoluene[4-]	46.1793 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.7555	46.1793
TWF63-20-193667	63-2013	01/29/2020	Ethanol	103.57 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	15.4413	69.6741
TWF63-20-193667	63-2013	01/29/2020	Propanol[2-]	95.8055 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	11.7914	90.8924
TWF63-20-193667	63-2013	01/29/2020	Acetone	87.8374 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.0569	87.8374
TWF63-20-193667	63-2013	01/29/2020	Chloroform	19.5183 ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	7.80734	45.8681
TWF63-20-193667	63-2013	01/29/2020	Benzene	30.0114 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	4.15051	30.0114
TWF63-20-193667	63-2013	01/29/2020	Trichloroethane[1,1,1-]	46.3475 ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	8.72423	51.2549
TWF63-20-193667	63-2013	01/29/2020	Bromomethane	143.583 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	65.9705	143.583
TWF63-20-193667	63-2013	01/29/2020	Chloromethane	76.3587 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	16.0972	76.3587
TWF63-20-193667	63-2013	01/29/2020	Chloroethane	97.5619 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	29.0049	97.5619
TWF63-20-193667	63-2013	01/29/2020	Vinyl Chloride	24.0129 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	8.17462	24.0129
TWF63-20-193667	63-2013	01/29/2020	Methylene Chloride	128.444 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	20.1345	128.444
TWF63-20-193667	63-2013	01/29/2020	Carbon Disulfide	115.149 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	17.7392	115.149
TWF63-20-193667	63-2013	01/29/2020	Bromoform	97.1038 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.4292	97.1038
TWF63-20-193667	63-2013	01/29/2020	Bromodichloromethane	62.9351 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	6.29351	62.9351
TWF63-20-193667	63-2013	01/29/2020	Dichloroethane[1,1-]	38.0223 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.5168	38.0223
TWF63-20-193667	63-2013	01/29/2020	Dichloroethene[1,1-]	37.2462 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	5.15107	37.2462
TWF63-20-193667	63-2013	01/29/2020	Trichlorofluoromethane	52.7802 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.86088	52.7802
TWF63-20-193667	63-2013	01/29/2020	Dichlorodifluoromethane	79.074 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	10.3785	46.456
TWF63-20-193667	63-2013	01/29/2020	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	71.9935 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.0201	71.9935
TWF63-20-193667	63-2013	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	65.6708 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	17.4656	65.6708
TWF63-20-193667	63-2013	01/29/2020	Dichloropropane[1,2-]	43.4129 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	11.546	43.4129
TWF63-20-193667	63-2013	01/29/2020	Butanone[2-]	162.11 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	26.8218	109.056
TWF63-20-193667	63-2013	01/29/2020	Trichloroethane[1,1,2-]	51.2549 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	18.539	51.2549
TWF63-20-193667	63-2013	01/29/2020	Trichloroethene	1342.62 ug/m3	NQ	Y	GAS	FD	VOC	EPA:TO15	15.0374	50.4826
TWF63-20-193667	63-2013	01/29/2020	Tetrachloroethane[1,1,2,2-]	64.4912 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	9.60507	64.4912
TWF63-20-193667	63-2013	01/29/2020	Hexachlorobutadiene	394.361 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	245.143	394.361
TWF63-20-193667	63-2013	01/29/2020	Xylene[1,2-]	40.7887 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	10.8481	40.7887
TWF63-20-193667	63-2013	01/29/2020	Dichlorobenzene[1,2-]	56.4841 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	13.8206	56.4841
TWF63-20-193667	63-2013	01/29/2020	Trimethylbenzene[1,2,4-]	10.3167 ug/m3	J	Y	GAS	FD	VOC	EPA:TO15	8.84285	46.1793
TWF63-20-193667	63-2013	01/29/2020	Isopropylbenzene	46.1793 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	3.19325	46.1793
TWF63-20-193667	63-2013	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	9.11238 ug/m3	U	N	GAS	FD	VOC	EPA:TO15	7.81061	40.7887
TWF63-20-193668	63-2013	01/29/2020	Ethylbenzene	91.1323 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	18.2265	91.1323
TWF63-20-193668	63-2013	01/29/2020	Styrene	89.3984 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.0283	89.3984
TWF63-20-193668	63-2013	01/29/2020	Benzyl Chloride	108.652 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.352	108.652
TWF63-20-193668	63-2013	01/29/2020	Dichloropropene[cis-1,3-]	95.2525 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.7826	95.2525
TWF63-20-193668	63-2013	01/29/2020	Dichloropropene[trans-1,3-]	95.2525 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	10.886	95.2525
TWF63-20-193668	63-2013	01/29/2020	Propylbenzene[1-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	12.773	103.167
TWF63-20-193668	63-2013	01/29/2020	Dichlorobenzene[1,4-]	126.188 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	21.6322	126.188

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TWF63-20-193668	63-2013	01/29/2020	Dibromoethane[1,2-]	161.252 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.4111	161.252
TWF63-20-193668	63-2013	01/29/2020	Butadiene[1,3-]	46.4302 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.5923	46.4302
TWF63-20-193668	63-2013	01/29/2020	Chloro-1-propene[3-]	265.855 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	56.2988	265.855
TWF63-20-193668	63-2013	01/29/2020	Dichloroethane[1,2-]	84.9435 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.5842	84.9435
TWF63-20-193668	63-2013	01/29/2020	Methyl-2-pentanone[4-]	85.9736 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.9398	85.9736
TWF63-20-193668	63-2013	01/29/2020	Trimethylbenzene[1,3,5-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.1944	103.167
TWF63-20-193668	63-2013	01/29/2020	Toluene	79.0879 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.3111	79.0879
TWF63-20-193668	63-2013	01/29/2020	Chlorobenzene	96.6173 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	26.6848	96.6173
TWF63-20-193668	63-2013	01/29/2020	Tetrahydrofuran	61.8965 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	22.1059	61.8965
TWF63-20-193668	63-2013	01/29/2020	Hexane	73.9737 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	18.3173	73.9737
TWF63-20-193668	63-2013	01/29/2020	Cyclohexane	72.2398 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	16.1679	72.2398
TWF63-20-193668	63-2013	01/29/2020	Trichlorobenzene[1,2,4-]	630.416 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	252.166	630.416
TWF63-20-193668	63-2013	01/29/2020	Dioxane[1,4-]	306.123 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	82.8332	306.123
TWF63-20-193668	63-2013	01/29/2020	Chlorodibromomethane	178.78 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	37.4586	178.78
TWF63-20-193668	63-2013	01/29/2020	Tetrachloroethene	142.342 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	50.1587	142.342
TWF63-20-193668	63-2013	01/29/2020	n-Heptane	86.0079 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.0789	86.0079
TWF63-20-193668	63-2013	01/29/2020	Dichloroethene[cis-1,2-]	83.2096 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.7554	83.2096
TWF63-20-193668	63-2013	01/29/2020	Dichloroethene[trans-1,2-]	83.2096 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	32.0952	83.2096
TWF63-20-193668	63-2013	01/29/2020	Methyl tert-Butyl Ether	75.6646 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	7.92677	75.6646
TWF63-20-193668	63-2013	01/29/2020	Isooctane	98.0507 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	22.4116	98.0507
TWF63-20-193668	63-2013	01/29/2020	Dichlorobenzene[1,3-]	126.188 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.2286	126.188
TWF63-20-193668	63-2013	01/29/2020	Carbon Tetrachloride	132.033 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	31.4365	132.033
TWF63-20-193668	63-2013	01/29/2020	Hexanone[2-]	347.988 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	131.007	347.988
TWF63-20-193668	63-2013	01/29/2020	Ethyltoluene[4-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.95	103.167
TWF63-20-193668	63-2013	01/29/2020	Ethanol	160.062 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	33.8955	160.062
TWF63-20-193668	63-2013	01/29/2020	Propanol[2-]	208.807 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	27.0221	208.807
TWF63-20-193668	63-2013	01/29/2020	Acetone	201.789 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	28.4878	201.789
TWF63-20-193668	63-2013	01/29/2020	Chloroform	102.471 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.5665	102.471
TWF63-20-193668	63-2013	01/29/2020	Benzene	67.0467 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	9.5781	67.0467
TWF63-20-193668	63-2013	01/29/2020	Trichloroethane[1,1,1-]	114.506 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.6295	114.506
TWF63-20-193668	63-2013	01/29/2020	Bromomethane	329.852 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	147.463	329.852
TWF63-20-193668	63-2013	01/29/2020	Chloromethane	175.419 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	37.1475	175.419
TWF63-20-193668	63-2013	01/29/2020	Chloroethane	224.129 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	63.2834	224.129
TWF63-20-193668	63-2013	01/29/2020	Vinyl Chloride	53.6459 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	18.6483	53.6459
TWF63-20-193668	63-2013	01/29/2020	Methylene Chloride	295.074 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	45.129	295.074
TWF63-20-193668	63-2013	01/29/2020	Carbon Disulfide	264.532 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	40.4578	264.532
TWF63-20-193668	63-2013	01/29/2020	Bromoform	216.934 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.9575	216.934
TWF63-20-193668	63-2013	01/29/2020	Bromodichloromethane	140.6 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	14.06	140.6
TWF63-20-193668	63-2013	01/29/2020	Dichloroethane[1,1-]	84.9435 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	23.8651	84.9435
TWF63-20-193668	63-2013	01/29/2020	Dichloroethene[1,1-]	83.2096 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	11.4909	83.2096
TWF63-20-193668	63-2013	01/29/2020	Trichlorofluoromethane	117.913 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	17.4062	117.913
TWF63-20-193668	63-2013	01/29/2020	Dichlorodifluoromethane	103.785 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	23.228	103.785
TWF63-20-193668	63-2013	01/29/2020	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	160.837 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	29.1038	160.837
TWF63-20-193668	63-2013	01/29/2020	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	146.711 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	39.123	146.711
TWF63-20-193668	63-2013	01/29/2020	Dichloropropane[1,2-]	96.9864 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	25.863	96.9864
TWF63-20-193668	63-2013	01/29/2020	Butanone[2-]	250.534 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	58.9491	250.534
TWF63-20-193668	63-2013	01/29/2020	Trichloroethane[1,1,2-]	114.506 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	41.4401	114.506
TWF63-20-193668	63-2013	01/29/2020	Trichloroethene	112.78 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	33.8341	112.78
TWF63-20-193668	63-2013	01/29/2020	Tetrachloroethane[1,1,2,2-]	144.076 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	22.6405	144.076
TWF63-20-193668	63-2013	01/29/2020	Hexachlorobutadiene	905.965 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	554.237	905.965
TWF63-20-193668	63-2013	01/29/2020	Xylene[1,2-]	91.1238 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	24.7336	91.1238
TWF63-20-193668	63-2013	01/29/2020	Dichlorobenzene[1,2-]	126.188 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	30.6456	126.188
TWF63-20-193668	63-2013	01/29/2020	Trimethylbenzene[1,2,4-]	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	19.6508	103.167
TWF63-20-193668	63-2013	01/29/2020	Isopropylbenzene	103.167 ug/m3	U	N	GAS	FB	VOC	EPA:TO15	7.36904	103.167
TWF63-20-193668	63-2013	01/29/2020	Xylene[1,3-]+Xylene[1,4-]	29.0728 ug/m3	J	Y	GAS	FB	VOC	EPA:TO15	17.3569	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		Quarter 10		
			Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	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	41.9	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	102	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	75.2	0.4	
		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	2740	1.7	
		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	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	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	7520	8.1	
		Tetrachloroethylene	81.3	<0.1	74.6	<0.1	88.1	<0.1	81.3	<0.1	88.1	<0.1	88.1	<0.1	81.3	<0.1	94.9	<0.1	67.8	<0.1	74.6	<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	23.0	<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	107	<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	224	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	15.9	<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	173	<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	27.6	<0.1	
		Toluene	7.6	<0.1																			
		Acetone	16.1	<0.1																			
Trichlorofluoromethane	6.2	<0.1			6.7	<0.1														10.7	<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	392	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	41.5	0.2	
		1,1,1-Trichloroethane	30.5	<0.1	19.6	<0.1	20.2	<0.1	27.8	<0.1	22.9	<0.1			23.4	<0.1	22.4	<0.1	21.8	<0.1	24.5	<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	48.9	<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		Quarter 10	
			Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	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	1503	1.6
		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	23.4	<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	47.4	<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	79.1	<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			18.4	<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														
		Dichlorodifluoromethane					74.1	<0.1					79.1	<0.1								
VWM-4 63-2012 Field Duplicate	60	Trichloroethylene							8593	9.3												
		Tetrachloroethylene							81.3	<0.1												
		cis-1,2-Dichloroethylene							27.0	<0.1												
		Carbon tetrachloride							113	<0.1												
		Chloroform							249	0.6												
		Dichlorodifluoromethane							188	<0.1												
		1,1,2-Trichloro-1,2,2-trifluoroethane							32.2	<0.1												
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		Quarter 10	
			Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)	Result (ug/m <sup>3</sup> )	Percentage of SGSL (%)
VMW-5 63-2013 Field Duplicate	60	Trichloroethylene															1560	1.7	1340	1.4	1340	1.4
		Carbon tetrachloride															18.2	<0.1			17.6	<0.1
		1,1,1-Trichloroethane															47.4	<0.1	48.5	<0.1	46.3	<0.1
		Dichlorodifluoromethane															64.2	<0.1	69.2	<0.1	79.1	<0.1
		1,1,2-Trichloro-1,2,2-trifluoroethane															15.3	<0.1	17.6	<0.1		
		Chloroform																	20.5	<0.1	19.5	<0.1
		Methylethylketone (2-butanone)																			162	<0.1
		1,2,4-Trimethylbenzene																			10.3	<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 <sup>3</sup> )	VMW-2 (ug/m <sup>3</sup> )	VMW-3 (ug/m <sup>3</sup> )	VMW-4 25 ft (ug/m <sup>3</sup> )	VMW-4 60 ft (ug/m <sup>3</sup> )	VMW-5 25 ft (ug/m <sup>3</sup> )	VMW-5 60 ft (ug/m <sup>3</sup> )
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
Quarter 10	41.9	102	75.2	2740	7520	392	1500
Mean	47.1	107	78.4	3010	7790	374	1450
Std. Deviation (n-1)	10.3	17.2	15.4	344	580	60.0	84.1
2xStd. Dev.	20.6	34.4	30.8	688	1160	120	168
Lower Limit (95%=-2 SD)	26.5	72.6	47.6	2320	6630	254	1280
Upper Limit (95%=+2 SD)	67.7	141	109	3700	8950	494	1620

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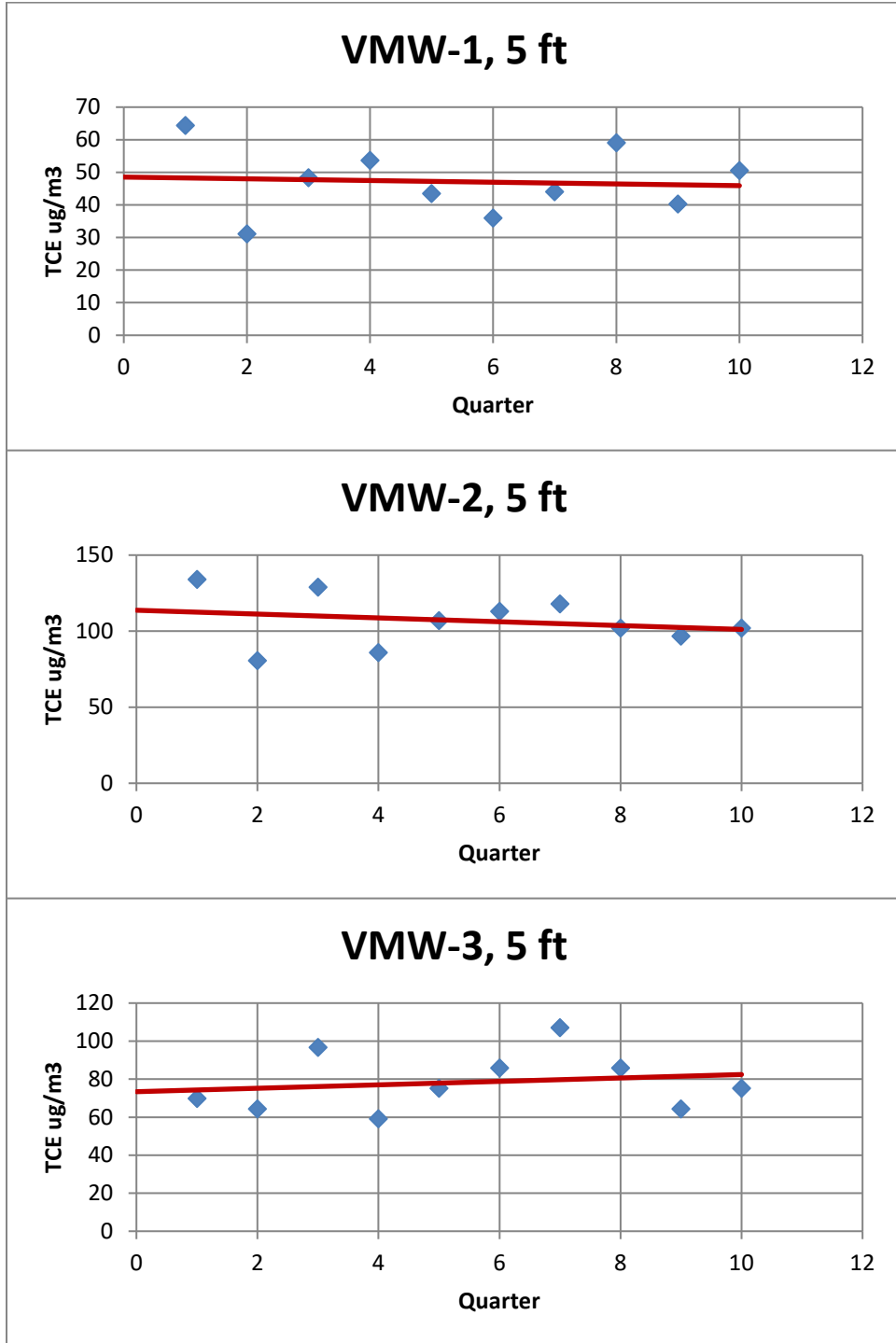


Figure 2. Simple Linear Regression Plots for TA-63 TWF Soil Vapor Monitoring Wells Inside the Permitted Unit

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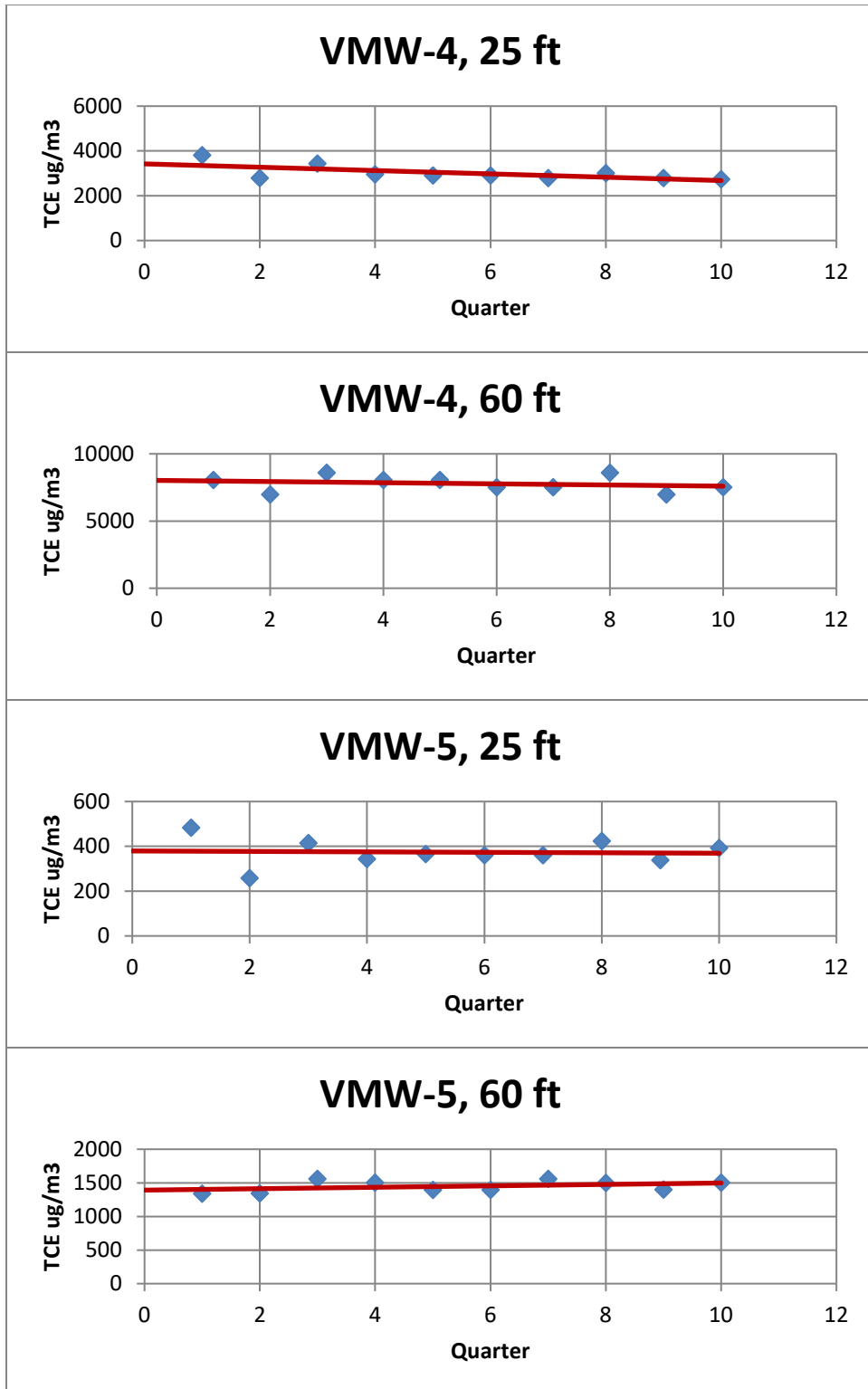


Figure 3. Simple Linear Regression Plots for TA-63 TWF Soil Vapor Monitoring Wells Outside the Permitted Unit

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**Document:** TA63 TWF SVM Report-Quarter 10  
**Date:** March, 2020

Sample Collection Logs  
TA-63 Transuranic Waste Facility – Quarter 10

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# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193660

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/2020	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	10:42		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 / <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">NA</span>

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

**SAMPLE COMMENTS:**

Summa #: 33983

**LOCATION COMMENTS:**

**FIELD PARAMETERS:**

Sample Time: NA HH:MM

CH<sub>4</sub>% = /

CO<sub>2</sub> = 9850 (ppm)

O<sub>2</sub>% = 20.9

VOC ppm = 0

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 1/29/2020 1416	RECEIVED BY (Printed Name) STANISLAW MARCIN (Signature) <i>[Signature]</i>	Date/Time 1/29/2020 1416
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193661

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/2020	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	11:08		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 / <u>NA</u>

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

**SAMPLE COMMENTS:**

Summa #: N2872

**LOCATION COMMENTS:**

**FIELD PARAMETERS:**

Sample Time NA HH:MM

$CH_4 \% = 652$        $CO_2 \text{ ppm} = 6525$        $O_2 \% = 20.9$        $VOC \text{ ppm} = 0.0$   
Bm 1-29-20

COLLECTED BY (PRINT): M. Siendo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 1/29/2020 1416	RECEIVED BY (Printed Name) STANISLAW MARCIN (Signature) <i>Stanislaw Marcin</i>	Date/Time 1/29/2020 1416
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193662

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/20	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	11:31		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 / <u>NA</u>

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

**SAMPLE COMMENTS:**

Summa # : 00315

**LOCATION COMMENTS:**

**FIELD PARAMETERS:**

Sample Time NA HH:MM

$CH_4\% = \overset{2}{3750}$       $CO_2 (ppm) = 3750$       $O_2\% = 20.9$       $VOC (ppm) = 0.0$   
 DM  
 1/29/20

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) <u>Bryn Morgan</u> (Signature) <u>Bryn Morgan</u>	Date/Time <u>1-29-2020</u> <u>1416</u>	RECEIVED BY <u>STANISLAW MARCZAK</u> (Printed Name) (Signature) <u>horoza</u>	Date/Time <u>1/29/2020</u> <u>1416</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193663

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/20	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	12:30		MEDIA:	Gas	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	24		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	25		EXCAVATED:		YES / NO / <u>NA</u>

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

SAMPLE COMMENTS:

Summa #: N1671

LOCATION COMMENTS:

FIELD PARAMETERS:

$CH_4(\%) = \emptyset$     $CO_2(ppm) = 710,000$     $O_2(\%) = 20.6$     $VOC(ppm) = 0.0$

Sample Time NA HH:MM

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) <u>Bryn Morgan</u> (Signature) <u>Bryn Morgan</u>	Date/Time <u>1-29-2020</u> <u>1416</u>	RECEIVED BY <u>STANISLAW MARCZAK</u> (Printed Name) (Signature) <u>Stanislaw</u>	Date/Time <u>1/29/2020</u> <u>1416</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 12902

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

**SAMPLE ID:** TWF63-20-193664

**WORK ORDER:**

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/2020	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	12:46		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 / <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">NA</span>	

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

**SAMPLE COMMENTS:**

**LOCATION COMMENTS:**

Summa #: 35281

**FIELD PARAMETERS:**

CH<sub>4</sub> = 0%    CO<sub>2</sub> = 7<sup>10,000</sup> ppm    O<sub>2</sub> = 20.3%    VOC = 1.0 ppm

Sample Time NA    HH:MM

**COLLECTED BY (PRINT):** M. Shendo

RELINQUISHED BY <u>Bryn Morgan</u> (Printed Name) (Signature) <i>Bryn Morgan</i>	Date/Time 1-29-2020 1416	RECEIVED BY <u>STANISLAW MARCZAK</u> (Printed Name) (Signature) <i>Marczak</i>	Date/Time 1/29/2020 1416
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193665

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/2020	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	13:16		MEDIA:	GAS	OK
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:**

Summa #: 34432

**LOCATION COMMENTS:**

CH<sub>4</sub> = 0% CO<sub>2</sub> = >10,000 ppm O<sub>2</sub> = 19.0% VOC = 0.0 ppm

**FIELD PARAMETERS:**

Sample Time NA HH:MM

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) <u>Bryn Morgan</u> (Signature) <u>[Signature]</u>	Date/Time <u>1-29-2020</u> <u>1416</u>	RECEIVED BY <u>STANISLAW MARCZAK</u> (Printed Name) (Signature) <u>[Signature]</u>	Date/Time <u>1/29/2020</u> <u>1416</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193666

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/20	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	13:31		MEDIA:	Gas	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:	BH		FIELD QC TYPE:	REG	
TOP DEPTH:	59		SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	60	↓	EXCAVATED:		YES / NO / (NA)

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

SAMPLE COMMENTS:

Summa #: N3518

LOCATION COMMENTS:

CH<sub>4</sub> = 0 % CO<sub>2</sub> = >10,000 ppm O<sub>2</sub> = 19.8 % VOC = 0.0 ppm

FIELD PARAMETERS:

Sample Time NA HH:MM

COLLECTED BY (PRINT): M. Suendo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 1-29-2020 1416	RECEIVED BY (Printed Name) STANISLAW MARCZAK (Signature) <i>Stanislaw Marczak</i>	Date/Time 1/29/2020 1416
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193667

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/20	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1332		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 / <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">NA</span>

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

SAMPLE COMMENTS:

LOCATION COMMENTS: Summa #: 21016 ; FD of TWF63-20-193666

FIELD PARAMETERS: CH<sub>4</sub> = 0% CO<sub>2</sub> = >10,000 ppm O<sub>2</sub> = 19.8% VOC = 0.0 ppm

Sample Time \_\_\_\_\_ HH:MM

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) <i>Bryn Morgan</i> (Signature) <i>Bryn Morgan</i>	Date/Time 1-29-2020 1416	RECEIVED BY <i>STANISLAW MARCZAN</i> (Printed Name) (Signature) <i>Stanislaw Marczan</i>	Date/Time 1/29/2020 1416
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 12902

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

SAMPLE ID: TWF63-20-193668

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY):	1/29/2020	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	13:54		MEDIA:	Nitrogen	
PRS ID:	TA-63		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK		FIELD PREP:	NA	
LOCATION TYPE:	NA		FIELD QC TYPE:	FB	
TOP DEPTH:			SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:		↓	EXCAVATED:	YES / NO / <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">NA</span>	

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

SAMPLE COMMENTS:

Summa # = N1698; QC of TWF63-20-193668

LOCATION COMMENTS:

FIELD PARAMETERS:

Sample Time NA HH:MM

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) Bryn Morgan (Signature) <i>Bryn Morgan</i>	Date/Time 1-29-2020 1416	RECEIVED BY STANISLAW MARCZAN (Printed Name) <i>Stanislaw Marczan</i> (Signature) <i>Stanislaw Marczan</i>	Date/Time 1/29/2020 1416
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time





**Document:** TA63 TWF SVM Report–Quarter 10  
**Date:** March, 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.

*Signature on File*

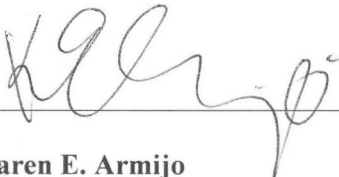
*March 30, 2020*

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

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Date Signed



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

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*30 March 2020*

Date Signed

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