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**JUN 28 2021**

Date: JUN 28 2021  
Symbol: EPC-DO-21-181  
LA-UR: 21-25743  
Locates Action No.: U2100331

Mr. Ricardo Maestas, Acting Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

**Subject: Technical Area 63 (TA-63) Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 15, April 2021, Los Alamos National Laboratory, EPA ID# NM0890010515**

Dear Mr. Maestas:

The United States Department of Energy (DOE) National Nuclear Security Administration, Los Alamos Field Office (NA-LA) and Triad National Security, LLC (Triad) submit this report titled *Technical Area 63 (TA-63) Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 15, April 2021* to the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) in accordance with the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (the Permit), Section 3.14.3.

The Permit requires that a soil vapor monitoring system for the LANL TA-63 Transuranic Waste Facility (TWF or the Facility) be sampled for designated volatile organic compounds (VOCs) and be evaluated on a quarterly basis after operations at the Facility commence to ensure protection of environmental health and safety including that of onsite workers. This report provides analytical data for the fifteenth quarter (Q15) period following the start of operations in October, 2017; sampling occurred on April 28, 2021. The sampling results indicate that vapor concentrations at the site are consistent with previous events and do not exceed the soil gas screening levels established by the Permit.

Presented in Section III (Soil Vapor Sampling), is a follow-up response to NMED-HWB's March 26, 2021 letter that required a discussion or resolution regarding field blank samples.

The attached enclosure (Enclosure 1) includes a discussion of the history and analytical findings for the fifteenth quarter, a figure of the LANL TWF permitted unit that depicts the soil vapor monitoring well locations, a data summary with analytical results for the quarter, a data comparison table, and the sample collection field logs. Specifically, Table 1 is a summary of the analytical results for the fifteenth quarter and includes detected VOCs, detection limits, the appropriate soil gas screening levels from Permit Tables 3.14.3.1 through 3.14.3.3, and a percentage comparison of the detected levels of VOCs with the screening levels. Table 2 lists the analytical results for the Q15 sampling event. Table 3 is a comparison table of the detected VOCs for the fifteen 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 the report and the analytical data in an Excel format is also included to facilitate the review of the monitoring results by the NMED-HWB.

If you have any questions or comments concerning this report, please feel free to contact Karen E. Armijo, NA-LA, at (505) 665-7314, karen.armijo@nnsa.doe.gov or Patrick L. Padilla, Triad, at (505) 412-0462, plpadilla@lanl.gov.

Sincerely,

JENNIFER

PAYNE (Affiliate)

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

Sincerely,

Karen E.

Armijo

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

JEP/KEA/PLP

Enclosure: 1) Technical Area 63 (TA-63) Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 15, April 2021, Los Alamos National Laboratory, EPA ID #NM0890010515

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Presented in Section III (Soil Vapor Sampling), is a follow-up response to NMED-HWB's March 26, 2021 letter that required a discussion or resolution regarding field blank samples.

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# ENCLOSURE 1

**Technical Area 63 (TA-63) Transuranic Waste Facility  
Soil Vapor Monitoring System Report  
Quarter 15, April 2021  
Los Alamos National Laboratory  
EPA ID# NM0890010515**

EPC-DO-21-181

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Unclassified

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## **Technical Area 63 (TA-63) Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 15, April 2021, Los Alamos National Laboratory, EPA ID# NM0890010515**

### **I. Introduction**

This report presents the fifteenth quarterly (Fiscal Year 2021, Quarter 2) soil vapor sampling results from the Technical Area (TA)-63 Transuranic Waste Facility (TWF) soil vapor monitoring network at Los Alamos National Laboratory (LANL). The TWF vapor monitoring wells evaluate vapor-phase contaminants that may migrate from TA-50 Material Disposal Area C (MDA C), Solid Waste Management Unit 50-009, which is managed under the Consent Order; the TWF is located south-east of the MDA C. Quarterly sampling is required by the LANL Hazardous Waste Facility Permit (Permit), Part 3, Section 3.14.3 (Subsurface Vapor Monitoring) in order to prevent worker exposure to potentially harmful levels of volatile organic compounds (VOCs) at the site.

Sampling and laboratory analytical results for the fifteenth quarter continue to confirm that VOC concentrations in the soil gas at the site are stable and do not exceed the screening levels established by the Permit. This report also presents a statistical analysis of the soil vapor data as part of an on-going review to determine the need to continue sampling on a quarterly basis.

### **II. Background**

The New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) approved a Permit modification for the construction of the TWF on December 23, 2013. Soil vapor monitoring wells were installed in August 2015 and baseline soil vapor monitoring samples were collected, as required by Permit Part 3, Section 3.14.3, in September 2015 with a corresponding report submitted to the NMED-HWB on October 29, 2015 (LANL, 2015). The quarterly sampling is counted from this point in time, which is considered the commencement of waste activities at the site. Previous quarterly reports for the last fourteen quarters are listed in the reference section.

The TWF soil vapor monitoring network consists of five soil vapor monitoring wells located in or near the permitted storage area at TWF. The vapor monitoring wells were installed as specified in Permit Section A.6.10 (Subsurface Vapor Monitoring). Figure 1 (Soil Vapor Monitoring Well Locations at TA-63 TWF) depicts the locations of the five soil vapor monitoring wells that make up the TWF soil vapor monitoring network. Vapor monitoring wells VMW-1 (LANL Structure Number 63-2009) and VMW-2 (63-2010) are located close to the TWF storage building foundations and adjacent to the unit boundary that faces MDA C and the utility corridor on Puye Road. A third vapor monitoring well, VMW-3 (63-2011), is located within the permitted unit at a point on the western edge of the unit and close to the utility corridor on Pajarito Road. 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 vapor monitoring wells, VMW-4 (63-2012) and VMW-5 (63-2013), are located outside the permitted unit, across Puye Road to the north and closer to MDA C. There are two sampling ports in VMW-4 and VMW-5 at depths of 25 and 60 feet below the ground surface (bgs). Each vapor monitoring well and vapor monitoring port are sampled during quarterly sampling events for a total of seven (7) samples.

The Permit presents action levels within Permit Tables 3.14.3.1, 3.14.3.2, and 3.14.3.3 (Permit Tables) for VOC constituents of concern in the contaminant plume from MDA C. Each Permit Table presents soil

gas screening levels (SGSLs) for each of the vapor monitoring well monitoring sample ports at 5ft, 25ft, and 60ft. The SGSLs are based on U.S. Environmental Protection Agency (EPA) guidance; references to the guidance and an explanation of the calculations used to develop the SGSLs are presented in Permit Part 3. All VOC laboratory analytical sampling results are compared to the SGSLs, where listed. The primary constituent of concern at the site is trichloroethylene (TCE).

### III. Soil Vapor Sampling

Field work for the fifteenth quarter took place on April 28, 2021. Soil vapor gases were extracted from the monitoring well sample ports through stainless steel tubing into stainless steel SUMMA canisters and submitted for laboratory analysis of VOCs using the EPA TO-15 method. A total of nine (9) samples were collected from each of the wells, including one field duplicate from VMW-5, 60ft port and one field blank sample. The samples were analyzed for the constituents identified in the Permit Tables. There were no variances in the sampling procedures from the Permit requirements.

Field blank analytical results starting in the sixth quarter (LANL, 2019a through LANL, 2021b) indicated the presence of ethylbenzene and xylene isomers in the field blank sample. These constituents were not present in any samples collected directly from the five soil vapor monitoring wells. In correspondence dated March 26, 2021 (NMED, 2021) the NMED-HWB required that the source of the field blank contamination be identified. Field blanks are collected on-site during sampling events. An ultra-high pure nitrogen tank, used as the vapor source, is connected to a SUMMA canister and a field blank is collected, which is sent to the analytical laboratory along with the other samples for analysis. As a corrective action to address the field blank anomalies, prior to the Q15 sampling event, a new ultra-high pure nitrogen tank was purchased. The analytical data results for the field blank sample (see Table 2, VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility – Quarter 15) demonstrate that the use of the new tank resolved the issue of field blank contamination; ethylbenzene and xylene isomers are not present in the field blank.

### IV. Analytical Results

Analytical laboratory results are processed through LANL's Sample Management Office for QA/QC; this data is presented as an Excel file included on the disc submitted with this report. Results for this quarter are also presented in Table 2 (VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility – Quarter 15).

A summary of the laboratory analytical results for the relevant VOCs detected this quarter are presented in Table 1 (Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility – Quarter 15). The data continues to demonstrate that the detected concentrations of TCE and other VOCs do not exceed the relevant SGSLs in the Permit Tables. Laboratory analyses indicate some results are detected above laboratory report detection limits. Table 1 lists the detected VOCs, both non-qualified and estimated, J-flagged detects. Each well port depth and constituent of concern has an associated SGSL, this information is presented in Table 1 for comparison to the analytical results. Also included in Table 1 is a calculated percentage of the analytical results compared to the relevant SGSL to demonstrate the relative constituent concentrations compared to the action levels.



NMED-HWB correspondence dated May 23, 2018 (NMED, 2018), required a table in the report that includes current and previous sampling results. Table 3 (Current and Previous Analytical Results for Constituents Listed in Permit Tables) presents the current and previous quarterly soil gas laboratory analytical results for comparison and tracking.

Overall, TCE consistently demonstrates the highest VOC concentration at the site; it is present in all five of the vapor sampling wells at all port depths. The detected concentrations are highest closer to MDA C; vapor monitoring well VMW-4 and VMW-5 are the closest vapor monitoring wells to MDA C. The TCE concentrations measured in VMW-4 are 2500 ug/m<sup>3</sup> (25ft), 1.6% of the SGSL and 7500 ug/m<sup>3</sup> (60ft), 8.1% of the SGSL. The TCE concentrations in vapor monitoring well VMW-5 are highest at 60 ft depth with a concentration of 1300 ug/m<sup>3</sup>, 1.4% of the SGSL. The TCE concentration in the 25ft port of VMW-5 is much lower, with a concentration of 360 ug/m<sup>3</sup>, 0.2% of the SGSL. The vapor monitoring wells closest to TWF (VMW-1, VMW-2, and VMW-3) also demonstrate TCE concentrations that are a fraction of a percent of the relevant SGSLs, ranging from 0.2% to 0.5%. The analytical results for the three well locations within the TWF permitted unit (VMW-1, VMW-2, and VMW-3) do not indicate the presence of VOCs other than TCE.

Chloroform is also routinely present in soil gas samples collected from vapor monitoring wells VMW-4 and VMW-5. The results for VMW-4 are above the report detection limits while the results for VMW-5 are estimated, J-flagged concentrations. The concentrations of chloroform in vapor monitoring well VMW-4 are 78 ug/m<sup>3</sup>, 0.7% of the SGSL and 180 ug/m<sup>3</sup>, 0.4% of the SGSL in the 25ft and 60ft sampling ports, respectively. The concentrations of chloroform in vapor monitoring well VMW-5 are 37 ug/m<sup>3</sup>, 0.3% of the SGSL and 17 ug/m<sup>3</sup>, <0.1% of the SGSL in the 25ft and 60ft sampling ports, respectively.

Vapor monitoring wells VMW-4 and VMW-5 also consistently demonstrate concentrations above the laboratory report detection limits for dichlorodifluoromethane, tetrachloroethylene, and carbon tetrachloride. The concentrations for these VOCs are very low at 0.1% or less of the relevant SGSLs.

The sampling results for this quarter are consistent with previous quarterly results and do not indicate additional contaminant concerns. The analytical results are consistently well below the relevant SGSLs.

#### Additional Analytic Results Discussion

A notification of additional constituents, as required by Permit Part 3, Section 3.14.3, was submitted to NMED-HWB (LANL, 2020b) regarding data anomalies in the tenth quarter (LANL, 2020c) for the field duplicate sample collected at vapor monitoring well VMW-5, 60ft port. The VOCs included: tetrahydrofuran, ethanol, propanol[2-] (isopropyl alcohol), and 2-butanone. The Permit Tables list 2-butanone (methyl ethyl ketone), but do not list the other constituents. These constituents have not been detected since the tenth quarter in VMW-5 or in its field duplicate samples.

Ethanol and propanol[2-] (isopropyl alcohol) have been detected at estimated, J-flagged concentrations in vapor monitoring well VMW-1 and VMW-4 in previous sampling events. Neither of these constituents are listed in the Permit Tables, so there are no associated Permit SGSLs for comparison. In the twelfth quarter (LANL, 2020e) vapor monitoring well VMW-1, 5ft port and VMW-4, 25ft port analytical results indicated the presence of ethanol and propanol[2-] (isopropyl alcohol). The fourteenth quarter (LANL, 2021b) analytical results for vapor monitoring well VMW-4, 60ft port demonstrated the presence of propanol[2-] (isopropyl alcohol) at 19 ug/m<sup>3</sup>. The fifteenth quarter sampling results did not detect the presence of these constituents; however, they will continue to be monitored for and reported on.

## V. Statistics

In order to further analyze constituent concentrations and potential data trends, statistics analyses, focused on TCE, which is the main soil vapor constituent detected during the TWF operating period, are run. Table 4 (Statistical Analyses) presents the mean and standard deviation for the quarterly TCE concentrations over time to determine whether the concentrations of TCE can be described statistically as within a range of defined concentrations.

The detected concentrations of TCE for the last fifteen quarters remain within the limits of a two standard deviation interval of the sample above and below the statistical mean values with a confidence probability of 95%. There are two near-range exceptions to this from data from the 25ft ports of vapor monitoring wells VMW-4 and VMW-5. A three standard deviation calculation for these wells demonstrates that the concentrations for data exceptions fall with a range with a confidence probability of 99%. This means that no significant deviations are observed for the average TCE concentrations for each well and sampling port to that approximately level of confidence.

Figures 2 and 3 present data plots of TCE in each well and port to evaluate whether any significant data trends over the sampling quarters are readily discernable. The trend line plots for each well and port depth are relatively flat. There also does not appear to be a relationship between well results that may indicate seasonal variations or indicate plume concentration changes within these wells.

The concentrations detected are also far below the permitted maximum SGSL constituent concentrations for TCE (by at least one order of magnitude). The TCE concentrations for the quarters collected to this date appear relatively stable.

The data suggest that the constituent concentrations are stable and that any increase in VOC concentrations, which are of concern according to the Permit conditions for reporting, will likely occur slowly over time and will be easily identified without approaching the SGSL action levels.

## VI. References

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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 June 28, 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.

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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.

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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.

NMED, 2021. Letter: *“Review Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 13, Los Alamos National Laboratory EPA ID#NM0890010515, HWB-LANL-18-016,”* dated March 26, 2021. New Mexico Environment Department, Hazardous Waste Bureau, Santa Fe, New Mexico.

**FIGURES AND TABLES**

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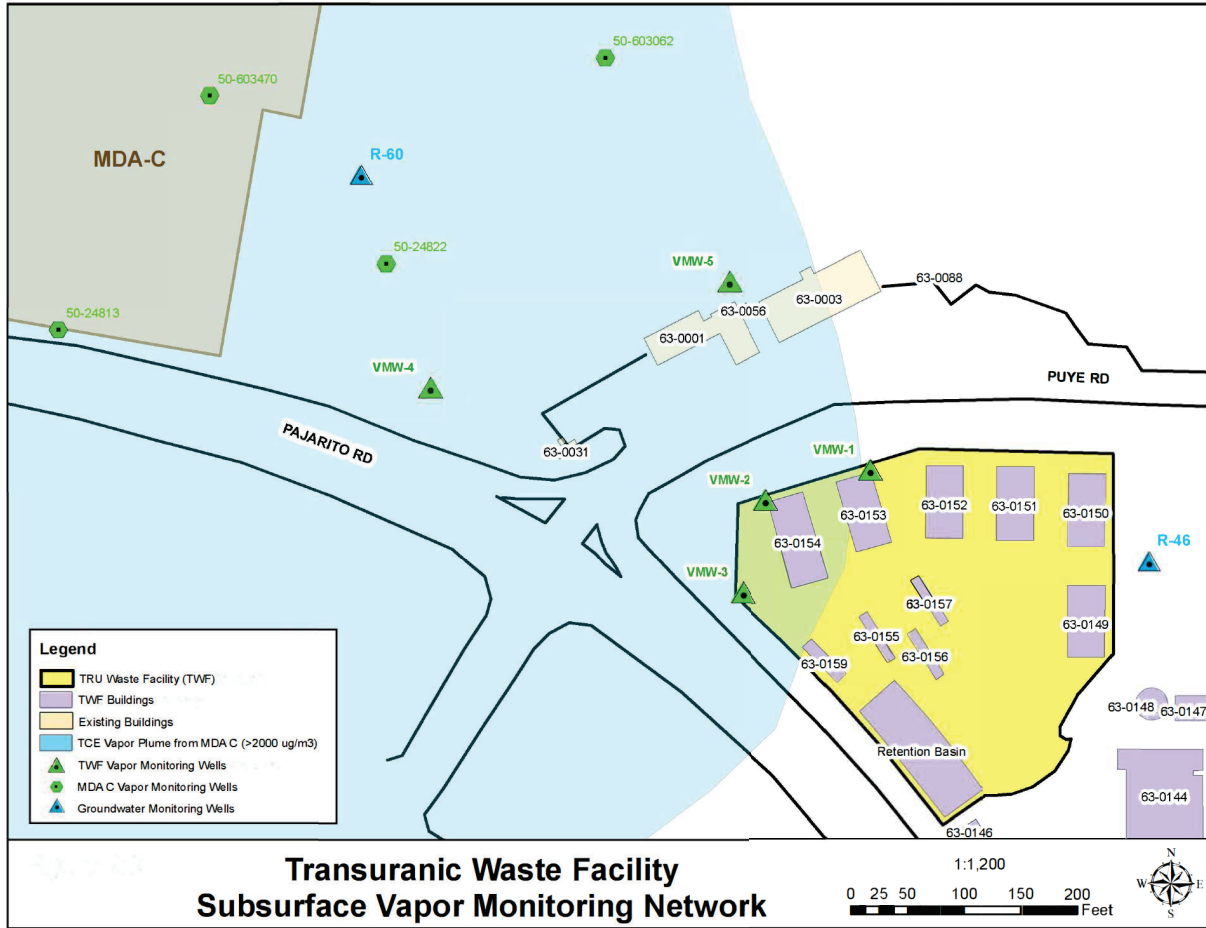


Figure 1. Soil Vapor Monitoring Well Locations at TA-63 TWF

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**Table 1: Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility - Quarter 15**

Well ID	Field Sample ID	Port Depth	Sample Purpose	Analyte Name	Analyte Listing in Permit	Report Result (ug/m3)	EPA Data Qualifier	Report Detection Limit (ug/m3)	SGSL (ug/m3)	% SGSL
VMW-1 (63-2009)	TWF63-21-222724	5	REG	Trichloroethene	Trichloroethylene	41	J	43	1.94E+04	0.2
VMW-2 (63-2010)	TWF63-21-222725	5	REG	Trichloroethene	Trichloroethylene	100	NQ	41	1.94E+04	0.5
VMW-3 (63-2011)	TWF63-21-222726	5	REG	Trichloroethene	Trichloroethylene	97	NQ	41	1.94E+04	0.5
VMW-4 (63-2012)	TWF63-21-222727	25	REG	Trichloroethene	Trichloroethylene	2500	NQ	47	1.57E+05	1.6
	TWF63-21-222727	25	REG	Tetrachloroethene	Tetrachloroethylene	26	J	60	2.63E+06	<0.1
	TWF63-21-222727	25	REG	Carbon Tetrachloride	Carbon Tetrachloride	35	J	55	4.42E+04	0.1
	TWF63-21-222727	25	REG	Chloroform	Chloroform	78	NQ	43	1.08E+04	0.7
	TWF63-21-222727	25	REG	Dichlorodifluoromethane	Dichlorodifluoromethane	59	NQ	43	2.61E+06	<0.1
VMW-4 (63-2012)	TWF63-21-222728	60	REG	Trichloroethene	Trichloroethylene	7500	NQ	43	9.27E+04	8.1
	TWF63-21-222728	60	REG	Tetrachloroethene	Tetrachloroethylene	75	NQ	54	2.05E+06	<0.1
	TWF63-21-222728	60	REG	Dichloroethene[cis-1,2-]	cis-1,2-Dichloroethylene	16	J	32	2.91E+06	<0.1
	TWF63-21-222728	60	REG	Carbon Tetrachloride	Carbon Tetrachloride	88	NQ	50	2.13E+05	<0.1
	TWF63-21-222728	60	REG	Chloroform	Chloroform	180	NQ	39	4.44E+04	0.4
	TWF63-21-222728	60	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	9.8	J	44	2.34E+08	<0.1
	TWF63-21-222728	60	REG	Dichlorodifluoromethane	Dichlorodifluoromethane	130	NQ	40	5.38E+06	<0.1
TWF63-21-222728	60	REG	Trichloro-1,2,2-trifluoroethane[1,1,2-]	1,1,2-Trichloro-1,2,2-trifluoroethane	27	J	61	1.38E+09	<0.1	
VMW-5 (63-2013)	TWF63-21-222729	25	REG	Trichloroethene	Trichloroethylene	360	NQ	44	1.57E+05	0.2
	TWF63-21-222729	25	REG	Chloroform	Chloroform	37	J	40	1.08E+04	0.3
	TWF63-21-222729	25	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	16	J	45	1.16E+08	<0.1
	TWF63-21-222729	25	REG	Dichlorodifluoromethane	Dichlorodifluoromethane	38	J	41	2.61E+06	<0.1
VMW-5 (63-2013)	TWF63-21-222730	60	REG	Trichloroethene	Trichloroethylene	1300	NQ	45	9.27E+04	1.4
	TWF63-21-222730	60	REG	Chloroform	Chloroform	17	J	41	4.44E+04	<0.1
	TWF63-21-222730	60	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	29	J	45	2.34E+08	<0.1
	TWF63-21-222730	60	REG	Dichlorodifluoromethane	Dichlorodifluoromethane	54	NQ	41	5.38E+06	<0.1
	TWF63-21-222730	60	REG	Carbon Tetrachloride	Carbon Tetrachloride	14	J	52	2.13E+05	<0.1

**Table 1: Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility - Quarter 15**

Well ID	Field Sample ID	Port Depth	Sample Purpose	Analyte Name	Analyte Listing in Permit	Report Result (ug/m3)	EPA Data Qualifier	Report Detection Limit (ug/m3)	SGSL (ug/m3)	% SGSL
Field Duplicate VMW-5 (63-2013)	TWF63-21-222731	60	FD	Trichloroethene	Trichloroethylene	1300	NQ	42	9.27E+04	1.4
	TWF63-21-222731	60	FD	Chloroform	Chloroform	20	J	38	4.44E+04	<0.1
	TWF63-21-222731	60	FD	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	36	J	43	2.34E+08	<0.1
	TWF63-21-222731	60	FD	Dichlorodifluoromethane	Dichlorodifluoromethane	59	NQ	39	5.38E+06	<0.1
	TWF63-21-222731	60	FD	Carbon Tetrachloride	Carbon Tetrachloride	14	J	49	2.13E+05	<0.1

**Notes:** 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  
 REG = regular sample  
 FD = field duplicate  
 SGSL = Soil Gas Screening Level from Permit Tables 3.14.3.1 through 3.14.3.3

**Table 2:** VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	32	U	6	32	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	33	U	18	33	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	39	U	4	39	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	30	U	4	30	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	37	U	4	37	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	24	U	11	24	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	32	U	8	32	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	32	U	7	32	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	29	U	10	29	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isocane	37	U	6	37	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	48	U	8	48	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	50	U	8	50	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	130	U	29.0	130	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	39	U	4	39	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	60	U	23	60	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propano[2-]	79	U	13	79	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	76	U	13	76	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	39	U	8	39	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	26	U	2	26	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	44	U	3	44	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	120	U	19	120	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	66	U	25	66	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	84	U	13	84	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	20	U	9.7	20	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	19.0	110	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	100	U	8	100	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	83	U	10	83	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	54	U	9.4	54	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	32	U	5.3	32	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	32	U	6	32	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	45	U	6	45	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	40	U	11	40	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	61	U	14	61	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2-tetrafluoroethane[1,2-]	56	U	14	56	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	37	U	12	37	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	94	U	25	94	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-+Xylene[1,4-]	35	U	7	35	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	35	U	5.2	35	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	34	U	6	34	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	41	U	6	41	N
63-2009	5	<b>TWF63-21-222724</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>41</b>	<b>J</b>	<b>9</b>	<b>43</b>	<b>Y</b>
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	36	U	5	36	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	36	U	15	36	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	39	U	5	39	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	48	U	9	48	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	61	U	12	61	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	18	U	8	18	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	100	U	13	100	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	28	U	5	28	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	28	U	11	28	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	240	U	140	240	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	120	U	14	120	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	68	U	10	68	N

Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	54	U	11	54	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	33	U	9	33	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	44	U	9	44	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	55	U	8	55	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	340	U	160.0	340	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	35	U	4	35	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	48	U	11	48	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	39	U	4.8	39	N
63-2009	5	TWF63-21-222724	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	39	U	4	39	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	32	U	6	32	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	39	U	5.7	39	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	34	U	5.0	34	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	34	U	15.0	34	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	37	U	5	37	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	46	U	8.4	46	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	58	U	12	58	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	17	U	8	17	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	90	U	12	90	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	31	U	5	31	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	33	U	5	33	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	30	U	8	30	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	30	U	6.3	30	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	27	U	9.3	27	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isocane	35	U	5	35	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	46	U	7.8	46	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	48	U	6.9	48	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	100	U	27.0	100	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	37	U	4	37	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	60	U	23.0	60	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	70	U	12	70	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	70	U	12	70	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	37	U	8	37	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	24	U	2.0	24	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	41	U	3.2	41	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	100	U	17.0	100	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	60	U	23	60	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	80	U	12	80	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	19	U	9	19	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	100	U	18	100	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	90	U	8	90	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	79	U	9.1	79	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	51	U	9	51	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	31	U	5	31	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	30	U	5.9	30	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	43	U	5.6	43	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	38	U	10.0	38	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	58	U	13	58	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	53	U	13	53	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	35	U	11	35	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	90	U	23	90	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	41	U	8	41	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	52	U	8	52	N

Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	87-68-3	Hexachlorobutadiene	300	U	150	300	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	95-47-6	Xylene[1,2-]	33	U	4.2	33	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	46	U	10	46	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	37	U	4.5	37	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	98-82-8	Isopropylbenzene	37	U	4	37	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	33	U	6.1	33	N
63-2010	5	<b>TWF63-21-222725</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA.TO15</b>	<b>REG</b>	<b>GAS</b>	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>100</b>	<b>NQ</b>	<b>8.6</b>	<b>41</b>	<b>Y</b>
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	31	U	17.0	31	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	37	U	3.9	37	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-88-3	Toluene	29	U	3.7	29	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-90-7	Chlorobenzene	35	U	3.5	35	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	109-99-9	Tetrahydrofuran	22	U	11	22	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	110-54-3	Hexane	27	U	4.9	27	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	110-82-7	Cyclohexane	26	U	10	26	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	200	U	130	200	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	123-91-1	Dioxane[1,4-]	100	U	13.0	100	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	124-48-1	Chlorodibromomethane	65	U	9	65	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	127-18-4	Tetrachloroethene	52	U	11.0	52	N
63-2010	5	TWF63-21-222725	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	142-82-5	n-Heptane	31	U	8.2	31	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	100-41-4	Ethylbenzene	33	U	5	33	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	100-42-5	Styrene	32	U	6	32	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	100-44-7	Benzyl Chloride	39	U	6	39	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	34	U	5	34	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	34	U	15.0	34	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	103-65-1	Propylbenzene[1-]	37	U	4.8	37	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	46	U	8	46	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	58	U	12.0	58	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	106-99-0	Butadiene[1,3-]	17	U	8	17	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	90	U	12.0	90	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	31	U	5	31	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	31	U	17.0	31	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	37	U	4	37	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-88-3	Toluene	29	U	4	29	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	108-90-7	Chlorobenzene	35	U	4	35	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	109-99-9	Tetrahydrofuran	22	U	11.0	22	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	110-54-3	Hexane	27	U	4.9	27	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	110-82-7	Cyclohexane	26	U	10.0	26	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	200	U	130	200	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	123-91-1	Dioxane[1,4-]	100	U	13	100	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	124-48-1	Chlorodibromomethane	65	U	9	65	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	127-18-4	Tetrachloroethene	52	U	11	52	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	142-82-5	n-Heptane	31	U	8	31	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	30	U	7.9	30	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	30	U	6	30	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	27	U	10	27	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	540-84-1	Isocane	35	U	5.1	35	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	46	U	7.8	46	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	56-23-5	Carbon Tetrachloride	48	U	7.5	48	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	591-78-6	Hexanone[2-]	100	U	27	100	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	37	U	4	37	N
63-2011	5	<b>TWF63-21-222726</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA.TO15</b>	<b>REG</b>	<b>GAS</b>	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>97</b>	<b>NQ</b>	<b>9</b>	<b>41</b>	<b>Y</b>
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA.TO15	REG	GAS	64-17-5	Ethanol	60	U	23	60	N

Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	70	U	12	70	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	70	U	12	70	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	37	U	8	37	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	24	U	2.0	24	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	41	U	3	41	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	100	U	18.0	100	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	60	U	25	60	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	80	U	12.0	80	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	19	U	9.2	19	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	100	U	18.0	100	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	90	U	7.8	90	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	79	U	9.1	79	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	51	U	9.4	51	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	31	U	5.3	31	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	30	U	6	30	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	43	U	5.6	43	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	38	U	7.5	38	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	58	U	13	58	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	53	U	13.0	53	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	35	U	11	35	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	90	U	23.0	90	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	41	U	8	41	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	52	U	7.5	52	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	300	U	150.0	300	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	33	U	4.2	33	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	46	U	10	46	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	37	U	4.6	37	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	37	U	4	37	N
63-2011	5	TWF63-21-222726	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	33	U	6	33	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	43	U	5	43	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	53	U	10	53	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromomethane[1,2-]	68	U	14.0	68	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	19	U	9	19	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	110	U	14.0	110	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	36	U	7	36	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	36	U	20.0	36	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	43	U	4.6	43	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	33	U	4.5	33	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	40	U	4.0	40	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	370	U	170.0	370	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	38	U	5	38	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	53	U	12.0	53	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	43	U	5	43	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	43	U	4.9	43	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	38	U	7	38	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	26	U	12	26	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	31	U	6.0	31	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	30	U	12.0	30	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	260	U	160.0	260	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	130	U	15	130	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	75	U	11	75	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	26	J	12	60	Y

Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	36	U	9	36	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	35	U	9.1	35	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	35	U	8	35	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	28	U	2.3	28	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	48	U	3.8	48	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	140	U	21.0	140	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	72	U	27	72	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	92	U	14.0	92	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	22	U	11	22	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	120	U	21	120	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	110	U	9	110	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	91	U	10	91	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	40	U	6	40	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	40	U	17.0	40	N
63-2012	25	<b>TWF63-21-222727</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>56-23-5</b>	<b>Carbon Tetrachloride</b>	<b>35</b>	<b>J</b>	<b>8.2</b>	<b>55</b>	<b>Y</b>
63-2012	25	<b>TWF63-21-222727</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>67-66-3</b>	<b>Chloroform</b>	<b>78</b>	<b>NQ</b>	<b>9.3</b>	<b>43</b>	<b>Y</b>
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	32	U	11	32	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	41	U	6.1	41	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Chlorobenzene[1,3-]	53	U	9.6	53	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	140	U	32.0	140	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	43	U	4	43	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	66	U	26.0	66	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propano[2-]	86	U	14	86	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	83	U	14	83	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	38	U	6	38	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	37	U	6.4	37	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	46	U	6.2	46	N
63-2012	25	<b>TWF63-21-222727</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>75-71-8</b>	<b>Dichlorodifluoromethane</b>	<b>59</b>	<b>NQ</b>	<b>12.0</b>	<b>43</b>	<b>Y</b>
63-2012	25	<b>TWF63-21-222727</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>2500</b>	<b>NQ</b>	<b>10</b>	<b>47</b>	<b>Y</b>
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	59	U	11	59	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	36	U	6	36	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	35	U	7	35	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	49	U	7	49	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	67	U	15.0	67	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	61	U	15.0	61	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	41	U	13.0	41	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	100	U	27	100	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	48	U	10	48	N
63-2012	25	TWF63-21-222727	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	60	U	8.9	60	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	35	U	5.2	35	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	34	U	6	34	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	41	U	6	41	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	36	U	5	36	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	36	U	15.0	36	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	39	U	4.9	39	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	32	U	6.3	32	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	45	U	6.2	45	N
63-2012	60	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>75-71-8</b>	<b>Dichlorodifluoromethane</b>	<b>130</b>	<b>NQ</b>	<b>11</b>	<b>40</b>	<b>Y</b>
63-2012	60	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>76-13-1</b>	<b>Trichloro-1,2,2-trifluoroethane[1,1,2-]</b>	<b>27</b>	<b>J</b>	<b>14.0</b>	<b>61</b>	<b>Y</b>
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	56	U	14	56	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	37	U	12.0	37	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	94	U	25.0	94	N

Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	44	U	8.7	44	N
<b>63-2012</b>	<b>60</b>	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>7500</b>	<b>NQ</b>	<b>9</b>	<b>43</b>	<b>Y</b>
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	55	U	8.2	55	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	340	U	160	340	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	35	U	4	35	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	18	U	8	18	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	100	U	13	100	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	32	U	6	32	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	33	U	18.0	33	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	39	U	4.2	39	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	30	U	3.8	30	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	37	U	4	37	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	24	U	11.0	24	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	28	U	5.3	28	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	28	U	11.0	28	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	240	U	14.0	240	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	120	U	14.0	120	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	48	U	9	48	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromomethane[1,2-]	61	U	12	61	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	60	U	23	60	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propano[2-]	79	U	13	79	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	76	U	13	76	N
<b>63-2012</b>	<b>60</b>	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>67-66-3</b>	<b>Chloroform</b>	<b>180</b>	<b>NQ</b>	<b>8.3</b>	<b>39</b>	<b>Y</b>
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	26	U	2	26	N
<b>63-2012</b>	<b>60</b>	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>71-55-6</b>	<b>Trichloroethane[1,1,1-]</b>	<b>10</b>	<b>J</b>	<b>3</b>	<b>44</b>	<b>Y</b>
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	120	U	19.0	120	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	66	U	25.0	66	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	84.0	U	13.0	84	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	20	U	9.7	20	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	19.0	110	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	100	U	8.1	100	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	68	U	10.0	68	N
<b>63-2012</b>	<b>60</b>	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>75</b>	<b>NQ</b>	<b>11.0</b>	<b>54</b>	<b>Y</b>
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	33	U	8.6	33	N
<b>63-2012</b>	<b>60</b>	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>156-59-2</b>	<b>Dichloroethene[<i>cis</i>-1,2-]</b>	<b>16</b>	<b>J</b>	<b>8</b>	<b>32</b>	<b>Y</b>
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[ <i>trans</i> -1,2-]	32	U	6.7	32	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	29	U	10	29	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isocane	37	U	6	37	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	48	U	8	48	N
<b>63-2012</b>	<b>60</b>	<b>TWF63-21-222728</b>	<b>04/28/2021</b>	<b>05/04/2021</b>	<b>VOC</b>	<b>EPA:TO15</b>	<b>REG</b>	<b>GAS</b>	<b>56-23-5</b>	<b>Carbon Tetrachloride</b>	<b>88</b>	<b>NQ</b>	<b>8</b>	<b>50</b>	<b>Y</b>
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	130	U	29	130	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	39	U	4	39	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	83	U	10	83	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	54	U	9.4	54	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichlorobenzene[1,1-]	32	U	5	32	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	48	U	11.0	48	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	39	U	5	39	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	39	U	4.4	39	N
63-2012	60	TWF63-21-222728	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+pp]	Xylene[1,3-]+Xylene[1,4-]	35	U	7	35	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	62	U	24.0	62	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propano[2-]	81	U	13.0	81	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	78	U	13.0	78	N



Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	37	J	8.3	40	Y
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	26	U	2	26	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	16	J	3.5	45	Y
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	130	U	19	130	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	68	U	25	68	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	87	U	13	87	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	21	U	10	21	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	19	110	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	100	U	8	100	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	18	U	8	18	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	100	U	13	100	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	33	U	6	33	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	34	U	18.0	34	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	40	U	4	40	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	31	U	3.8	31	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	38	U	4	38	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	24	U	11.0	24	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	29	U	6	29	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	28	U	11.0	28	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	240	U	140	240	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	120	U	14.0	120	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	70	U	10	70	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	56	U	12.0	56	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	34	U	9.0	34	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	32	U	8.3	32	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	32	U	7.1	32	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	30	U	10.0	30	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	38	U	5.6	38	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	49	U	8	49	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	52	U	7.5	52	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	140	U	29.0	140	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	40	U	3.8	40	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromofluoromethane	85	U	10	85	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	55	U	10	55	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	33	U	6	33	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	49	U	11	49	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	40	U	5	40	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	40	U	4.5	40	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	36	U	7	36	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	36	U	5	36	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	35	U	6.0	35	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	42	U	6	42	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	37	U	5.4	37	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	37	U	16	37	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	40	U	4.9	40	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	49	U	9.0	49	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	63	U	12.0	63	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	32	U	6	32	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	46	U	6.2	46	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	38	J	11	41	Y
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	63	U	14	63	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	57	U	15	57	N
63-2013	25	TWF63-21-222729	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	38	U	12	38	N



Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	34	U	9	34	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	33	U	8	33	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	33	U	7	33	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	30	U	10	30	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	39	U	6	39	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	50	U	9	50	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	140	U	29	140	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	41	U	3.9	41	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	62	U	24.0	62	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propano[2-]	81	U	13.0	81	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	78	U	14	78	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	26	U	2.2	26	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	34	U	6	34	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	33	U	6.7	33	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	47	U	6.2	47	N
63-2013	60	TWF63-21-222730	04/28/2021	05/04/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	64	U	14.0	64	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	87-68-3	Hexachlorobutadiene	330	U	160	330	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	95-47-6	Xylene[1,2-]	34	U	4.3	34	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	95-50-1	Dichlorobenzene[1,2-]	47	U	11	47	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	95-63-6	Trimethylbenzene[1,2,4-]	38	U	4.7	38	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	98-82-8	Isopropylbenzene	38	U	4	38	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	34	U	6.1	34	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	56-23-5	Carbon Tetrachloride	14	J	7.5	49	Y
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	67-66-3	Chloroform	20	J	8.3	38	Y
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	71-55-6	Trichloroethane[1,1,1-]	36	J	3.3	43	Y
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-71-8	Dichlorodifluoromethane	59	NQ	11.0	39	Y
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	79-01-6	Trichloroethene	1300	NQ	9.1	42	Y
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	100-41-4	Ethylbenzene	34	U	5.2	34	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	100-42-5	Styrene	33	U	6	33	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	100-44-7	Benzyl Chloride	40	U	5.7	40	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	10061-01-5	Dichloropropene[cis-1,3-]	35	U	5	35	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	10061-02-6	Dichloropropene[trans-1,3-]	35	U	15	35	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	103-65-1	Propylbenzene[1-]	38	U	5	38	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	106-46-7	Dichlorobenzene[1,4-]	47	U	9	47	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	106-93-4	Dibromoethane[1,2-]	60	U	12.0	60	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	106-99-0	Butadiene[1,3-]	17	U	8	17	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	107-05-1	Chloro-1-propene[3-]	97	U	12.0	97	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	107-06-2	Dichloroethane[1,2-]	32	U	5.7	32	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	108-10-1	Methyl-2-pentanone[4-]	32	U	18.0	32	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	108-67-8	Trimethylbenzene[1,3,5-]	38	U	4	38	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	108-88-3	Toluene	29	U	3.8	29	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	108-90-7	Chlorobenzene	36	U	4	36	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	109-99-9	Tetrahydrofuran	23	U	11	23	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	110-54-3	Hexane	27	U	5	27	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	110-82-7	Cyclohexane	27	U	11	27	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	120-82-1	Trichlorobenzene[1,2,4-]	230	U	140	230	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	123-91-1	Dioxane[1,4-]	110	U	13	110	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	124-48-1	Chlorodibromomethane	66	U	10	66	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	127-18-4	Tetrachloroethene	53	U	11.0	53	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	142-82-5	n-Heptane	32	U	9	32	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	156-59-2	Dichloroethene[cis-1,2-]	31	U	7.9	31	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	156-60-5	Dichloroethene[trans-1,2-]	31	U	7	31	N

Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	1634-04-4	Methyl tert-Butyl Ether	28	U	10.0	28	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	540-84-1	Isooctane	36	U	6	36	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	541-73-1	Dichlorobenzene[1,3-]	47	U	8.4	47	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	591-78-6	Hexanone[2-]	130	U	28	130	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	622-96-8	Ethyltoluene[4-]	38	U	4	38	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	64-17-5	Ethanol	58	U	23	58	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	67-63-0	Propanol[2-]	76	U	12	76	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	67-64-1	Acetone	74	U	13.0	74	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	71-43-2	Benzene	25	U	2.0	25	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	74-83-9	Bromomethane	120	U	18	120	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	74-87-3	Chloromethane	64	U	25	64	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-00-3	Chloroethane	82	U	12	82	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-01-4	Vinyl Chloride	20	U	10	20	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-09-2	Methylene Chloride	110	U	19	110	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-15-0	Carbon Disulfide	96	U	8	96	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-25-2	Bromoform	81	U	9	81	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-27-4	Bromodichloromethane	52	U	9	52	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-34-3	Dichloroethane[1,1-]	32	U	5.3	32	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-35-4	Dichloroethane[1,1-]	31	U	6.3	31	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	75-69-4	Trichlorofluoromethane	44	U	5.6	44	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	76-13-1	Trichloro-1,1,2,2-trifluoroethane[1,1,2-]	60	U	14	60	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	54	U	14	54	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	78-87-5	Dichloropropane[1,2-]	36	U	12	36	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	78-93-3	Butanone[2-]	91	U	24	91	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	79-00-5	Trichloroethane[1,1,2-]	43	U	9	43	N
63-2013	60	TWF63-21-222731	04/28/2021	05/04/2021	VOC	EPA:TO15	FD	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	54	U	8	54	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	87-68-3	Hexachlorocyclopentadiene	800	U	370	800	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	95-47-6	Xylene[1,2-]	82	U	10	82	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	95-50-1	Dichlorobenzene[1,2-]	110	U	25	110	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	95-63-6	Trimethylbenzene[1,2,4-]	93	U	11	93	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	98-82-8	Isopropylbenzene	93	U	10	93	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	100-41-4	Ethylbenzene	82	U	12	82	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	100-42-5	Styrene	81	U	14	81	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	100-44-7	Benzyl Chloride	98	U	14	98	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	10061-01-5	Dichloropropene[cis-1,3-]	86	U	13	86	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	10061-02-6	Dichloropropene[trans-1,3-]	86	U	37	86	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	103-65-1	Propylbenzene[1-]	93	U	12	93	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	106-46-7	Dichlorobenzene[1,4-]	110	U	21	110	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	106-93-4	Dibromoethane[1,2-]	150	U	28	150	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	74-87-3	Chloroethane	150	U	58	150	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-00-3	Chloroethane	200	U	29	200	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-01-4	Vinyl Chloride	49	U	23	49	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-09-2	Methylene Chloride	260	U	45	260	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-15-0	Carbon Disulfide	230	U	19	230	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-25-2	Bromoform	200	U	23.0	200	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-27-4	Bromodichloromethane	130	U	23	130	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-34-3	Dichloroethane[1,1-]	77	U	13	77	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-35-4	Dichloroethane[1,1-]	75	U	15	75	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-69-4	Trichlorofluoromethane	110	U	14.0	110	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	75-71-8	Dichlorodifluoromethane	94	U	26.0	94	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	64-17-5	Ethanol	140	U	55	140	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	67-63-0	Propanol[2-]	180	U	29	180	N

**Table 2: VOC Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 15**

Location ID	Port Depth (ft)	Field Sample ID	Sample Date	Analysis Date	Method Category	Lab Method	Sample Purpose	Sample Type	Parameter Code	Parameter Name	Report Result (ug/m3)	Validation Qualifier	Report Method Detection Limit (ug/m3)	Report Detection Limit (ug/m3)	Detected
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	67-64-1	Acetone	180	U	31	180	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	67-66-3	Chloroform	93	U	20	93	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	71-43-2	Benzene	61	U	5	61	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	71-55-6	Trichloroethane[1,1,1-]	100	U	8	100	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	74-83-9	Bromomethane	290	U	43	290	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	124-48-1	Chlorodibromomethane	160	U	24	160	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	127-18-4	Tetrachloroethene	130	U	26	130	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	142-82-5	n-Heptane	78	U	20	78	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	156-59-2	Dichloroethene[cis-1,2-]	75	U	19	75	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	156-60-5	Dichloroethene[trans-1,2-]	75	U	16	75	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	1634-04-4	Methyl tert-Butyl Ether	68	U	24.0	68	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	540-84-1	Isooctane	89	U	13.0	89	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	541-73-1	Dichlorobenzene[1,3-]	110	U	20.0	110	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	56-23-5	Carbon Tetrachloride	120	U	18	120	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	591-78-6	Hexanone[2-]	310	U	66	310	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	622-96-8	Ethyltoluene[4-]	93	U	9	93	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	82	U	15	82	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	106-99-0	Butadiene[1,3-]	42	U	19	42	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	107-05-1	Chloro-1-propene[3-]	230	U	29	230	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	107-06-2	Dichloroethane[1,2-]	77	U	13	77	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	108-10-1	Methyl-2-pentanone[4-]	78	U	40	78	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	108-67-8	Trimethylbenzene[1,3,5-]	93	U	10	93	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	108-88-3	Toluene	72	U	9	72	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	108-90-7	Chlorobenzene	87	U	9	87	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	109-99-9	Tetrahydrofuran	56	U	27	56	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	110-54-3	Hexane	67	U	13	67	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	110-82-7	Cyclohexane	65	U	25	65	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	120-82-1	Trichlorobenzene[1,2,4-]	560	U	330	560	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	123-91-1	Dioxane[1,4-]	270	U	32	270	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	150	U	32	150	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	130	U	34.0	130	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	78-87-5	Dichloropropane[1,2-]	88	U	27	88	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	78-93-3	Butanone[2-]	220	U	60	220	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	79-00-5	Trichloroethane[1,1,2-]	100	U	21	100	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	79-01-6	Trichloroethene	100	U	21.0	100	N
		TWF63-21-222732	04/28/2021	05/06/2021	VOC	EPA:TO15	FB	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	130	U	19	130	N

**Notes:**  
 Rows in Bold font indicate the analyte is detected  
 FD= Field Duplicate  
 FB = Field Blank  
 U = Non-detect  
 J = estimated value  
 NQ = no data qualifiers

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Table 3: Current and Previous Analytical Results for Constituents Listed in Permit Tables

Well ID (Port#)	Constituent	Q1		Q2		Q3		Q4		Q5		Q6		Q7		Q8		Q9	
		Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)
Field Duplicates:																			
VMW-1 (5) 63-2009(FD)	Trichloroethylene													59.1	0.3				
	Dichlorodifluoromethane													6.9	<0.1				
VMW-3 63-2011(FD)	Trichloroethylene		45.6	0.2						80.6	0.4								
VMW-4 (25) 63-2012(FD)	Trichloroethylene					3276	2.1					2720	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						
VMW-4 (60) 23-2012(FD)	Trichloroethylene							8593	9.3										
	Tetrachloroethylene							81.3	<0.1										
	cis-1,2-Dichloroethylene							27	<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-5 (25) 63-2013(FD)	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-5 (60) 63-2013(FD)	Trichloroethylene															1560	1.7	1340	1.4
	Carbon tetrachloride														15.2	<0.1			
	1,1,1-Trichloroethane														47.4	<0.1	48.5	<0.1	
	Dichlorodifluoromethane														64.2	<0.1	69.2	<0.1	
	1,1,2-Trichloro-1,2,2-trifluoroethane														15.3	<0.1	17.6	<0.1	
	Chloroform																20.5	<0.1	
	Methyl ethyl ketone (2-butanone)																		
	1,2,4-Trimethylbenzene																		



Table 3: Current and Previous Analytical Results for Constituents Listed in Permit Tables

Well ID (Port#)	Constituent	Q10		Q11		Q12		Q13		Q14		Q15	
		Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)
VMW-1 (5) 63-2009	Trichloroethylene	41.9	0.2	41	0.2	59	0.3	44	0.2	43	0.2	41	0.2
	Toluene												
	Tetrachloroethylene												
	cis-1,2-Dichloroethylene												
	Acetone												
	1,1,1-Trichloroethane			7.6	<0.1	6	<0.1						
	1,1-Dichloroethane												
	1,1-Dichloroethylene												
	Dichlorodifluoromethane					6.9	<0.1						
	Methylene chloride												
Chloroform													
VMW-2 (5) 63-2010	Trichloroethylene	102	0.5	97	0.5	86	0.4	130	0.7	97	0.5	100	0.5
	Dichlorodifluoromethane			6.9	<0.1	5.9	<0.1	5.9	<0.1				
	Acetone												
	1,1,1-Trichloroethane							5.1	<0.1				
VMW-3 (5) 63-2011	Toluene												
	Trichloroethylene	75.2	0.4	97	0.5	75	0.4	86	0.4	75	0.4	97	0.5
	Toluene												
	Acetone							7.9	<0.1				
VMW-4 (25) 63-2012	Dichlorodifluoromethane												
	Trichloroethylene	2740	1.7	2800	1.8	2600	1.7	2600	1.7	2600	1.7	2500	1.6
	Tetrachloroethylene					40	<0.1	40	<0.1	35	<0.1	26	<0.1
	Carbon tetrachloride			47	<0.1	39	<0.1	43	<0.1	41	<0.1	35	0.1
	Chloroform	102	0.4	93	0.4	88	0.4	83	0.5	88	0.8	78	0.7
	Dichlorodifluoromethane	74.1	<0.1	79	<0.1	59	<0.1	64	<0.1	59	<0.1	59	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane			19	<0.1								
	1,1,1-Trichloroethane			9.3	<0.1	5.5	<0.1						
	Bromodichloromethane												
	VMW-4 (60) 63-2012	Trichloroethylene	7520	8.1	7500	8.1	7500	8.1	7500	8.1	7000	7.6	7500
Tetrachloroethylene		74.6	<0.1	81	<0.1	81	<0.1	75	<0.1	75	<0.1	75	<0.1
cis-1,2-Dichloroethylene		23	<0.1	23	<0.1	22	<0.1	21	<0.1	23	<0.1	16	<0.1
Carbon tetrachloride		107	<0.1	100	<0.1	100	<0.1	110	<0.1	94	<0.1	88	<0.1
Chloroform		224	0.5	240	0.5	200	0.5	200	0.4	200	0.5	180	0.4
1,1,1-Trichloroethane		15.9	<0.1	18	<0.1	13	<0.1	15	<0.1	13	<0.1	9.8	<0.1
Dichlorodifluoromethane		173	<0.1	190	<0.1	160	<0.1	160	<0.1	140	<0.1	130	<0.1
1,1,2-Trichloro-1,2,2-trifluoroethane		27.6	<0.1	38	<0.1	24	<0.1	34	<0.1	29	<0.1	27	<0.1
Toluene													
Acetone													
VMW-5 (25) 63-2013	Trichloroethylene	10.7	<0.1							7.3	<0.1		
	Trichloroethylene	392	0.2	380	0.2	390	0.2	400	0.3	360	0.2	360	0.2
	Chloroform	41.5	0.2	41	0.2	40	0.2	35	0.2	36	0.3	37	0.3
	1,1,1-Trichloroethane	24.5	<0.1	24	<0.1	19	<0.1	19	<0.1	19	<0.1	16	<0.1
	Dichlorodifluoromethane	48.9	<0.1	47	<0.1	37	<0.1	47	<0.1	41	<0.1	38	<0.1
	Tetrachloroethylene												
	Acetone												
VMW-5 (60) 63-2013	Carbon tetrachloride	1503	1.6	1400	1.5	1400	1.5	1300	1.4	1300	1.4	1300	1.4
	Trichloroethylene												
	Tetrachloroethylene												
	Chloroform	23.4	<0.1	23	<0.1	20	<0.1	19	<0.1	20	<0.1	17	<0.1
	1,1,1-Trichloroethane	47.4	<0.1	47	<0.1	40	<0.1	33	<0.1	40	<0.1	29	<0.1
	Dichlorodifluoromethane	79.1	<0.1	84	<0.1	69	<0.1	74	<0.1	69	<0.1	54	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane	18.4	<0.1			17	<0.1						
Toluene													
Carbon tetrachloride			19	<0.1	18	<0.1	18	<0.1	19	<0.1	14	<0.1	
Acetone													

Table 3: Current and Previous Analytical Results for Constituents Listed in Permit Tables

Well ID (Port#)	Constituent	Q10		Q11		Q12		Q13		Q14		Q15	
		Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)	Result (ug/m3)	Percent of SGSL (%)
Field Duplicates:													
VMW-1 (5) 63-2009(FD)	Trichloroethylene												
	Dichlorodifluoromethane												
VMW-3 63-2011(FD)	Trichloroethylene												
	Tetrachloroethylene												
VMW-4 (25) 63-2012(FD)	Carbon tetrachloride												
	Chloroform												
	1,1,1-Trichloroethane												
	Dichlorodifluoromethane												
	Trichloroethylene												
	Tetrachloroethylene												
	cis-1,2-Dichloroethylene												
VMW-4 (60) 23-2012(FD)	Carbon tetrachloride												
	Chloroform												
	Dichlorodifluoromethane												
	1,1,2-Trichloro-1,2,2-trifluoroethane												
	Trichloroethylene												
VMW-5 (25) 63-2013(FD)	Tetrachloroethylene												
	Chloroform												
	1,1,1-Trichloroethane												
	Dichlorodifluoromethane												
	Trichloroethylene	1340	1.4	1500	1.6	1400	1.5	1400	1.5	1300	1.4	1300	1.4
	Carbon tetrachloride	17.6	<0.1	19	<0.1	19	<0.1	22	<0.1	19	<0.1	14	<0.1
	1,1,1-Trichloroethane	46.3	<0.1	47	<0.1	38	<0.1	47	<0.1	40	<0.1	36	<0.1
	Dichlorodifluoromethane	79.1	<0.1	79	<0.1	69	<0.1	74	<0.1	69	<0.1	59	<0.1
VMW-5 (60) 63-2013(FD)	1,1,2-Trichloro-1,2,2-trifluoroethane							18	<0.1				
	Chloroform	19.5	<0.1	29	<0.1	24	<0.1	22	<0.1	20	<0.1	20	<0.1
	Methylethylketone (2-butanone)	162	<0.1										
	1,2,4-Trimethylbenzene	10.3	<0.1										

**Table 4: Statistical Analysis**

	VMW-1 5ft (ug/m3)	VMW-2 5ft (ug/m3)	VMW-3 5ft (ug/m3)	VMW-4 25ft (ug/m3)	VMW-4 60ft (ug/m3)	VMW-5 25ft (ug/m3)	VMW-5 60ft (ug/m3)
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	113	85.9	2900	7520	360	1400
Quarter 7	44	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
Quarter 11	41	97	97	2800	7500	380	1400
Quarter 12	59	86	75	2600	7500	390	1400
Quarter 13	44	130	86	2600	7500	400	1300
Quarter 14	43	97	75	2600	7000	360	1300
Quarter 15	41	100	97	2500	7500	360	1300
<b>Mean (M)</b>							
	46.0	105.2	80.9	2881.6	7658.5	375.2	1413.3
<b>Standard Deviation (SD)[n-1]</b>							
	9.2	16.6	14.1	341.0	516.0	49.1	90.7
<b>Lower Limit (95%=M-2xSD)</b>							
	27.6	72.1	52.6	2199.7	6626.4	277.0	1231.9
<b>Upper Limit (95%=M+2xSD)</b>							
	64.4	138.3	109.2	3563.5	8690.5	473.4	1594.8
<b>Lower Limit (99%=M-3xSD)</b>							
				1858.7		227.9	
<b>Upper Limit (99%=M+3xSD)</b>							
				3904.5		522.5	

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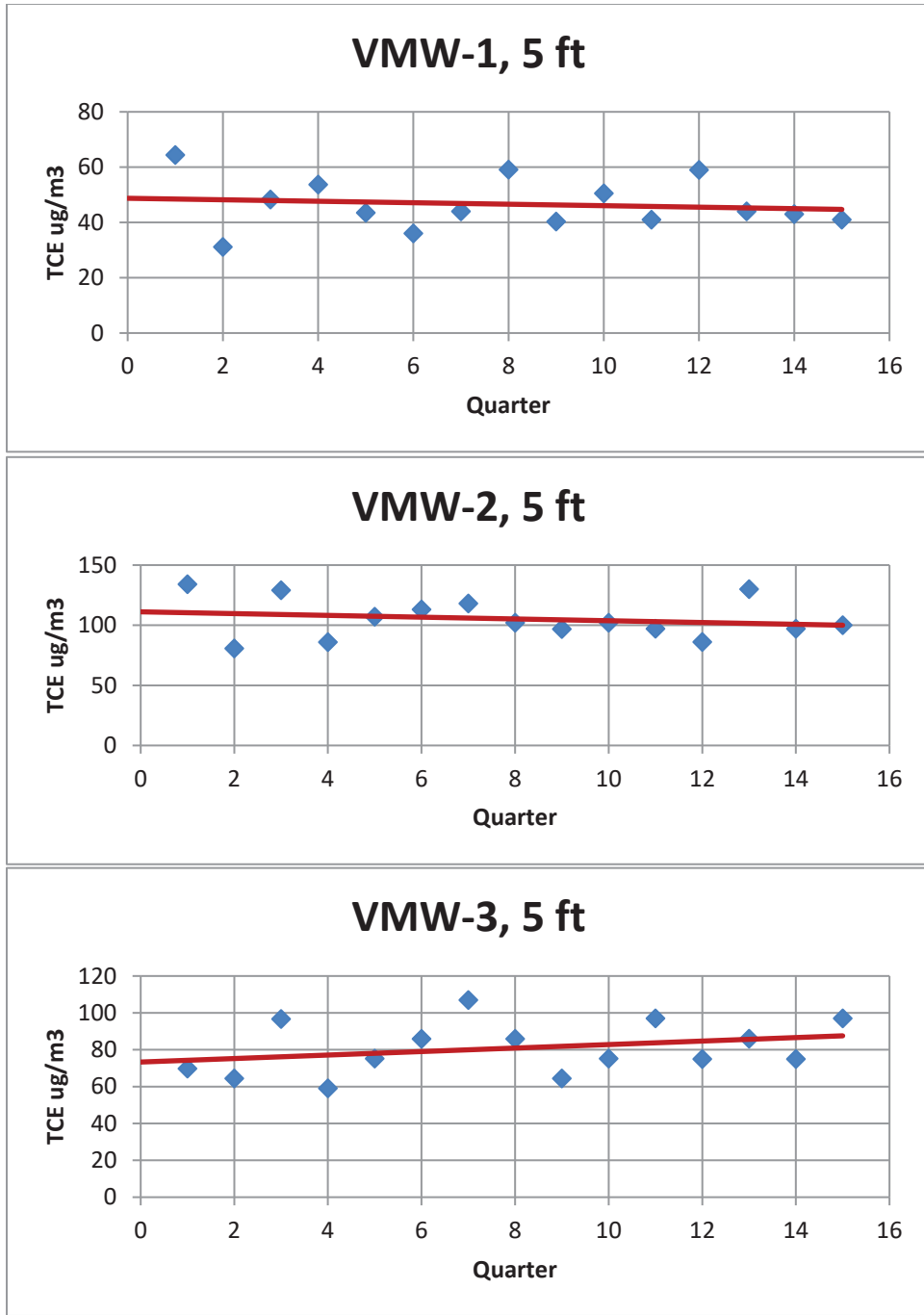


Figure 2. Data Plots for TA-63 TWF Soil Vapor Monitoring Wells Inside of the Permitted Unit

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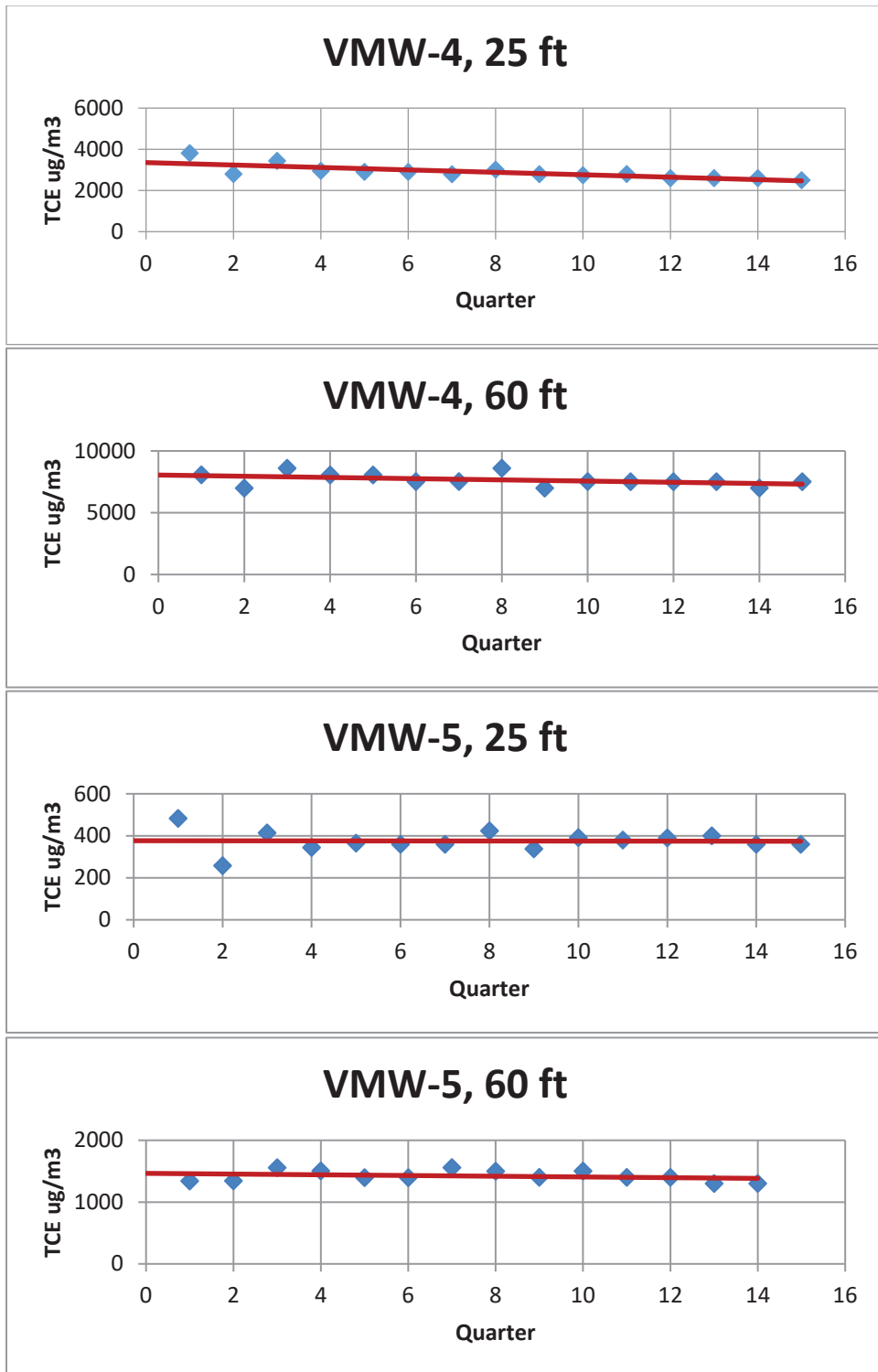


Figure 3. Data Plots for TA-63 TWF Soil Vapor Monitoring Wells Outside of the Permitted Unit

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## **SAMPLE COLLECTION LOGS**

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### SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222724

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	ck	FIELD MATRIX:	GAS	ck
TIME COLLECTED (HH:MM):	10 13	ck	MEDIA:	BH	
PRS ID:	UA		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2009		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5 ft	↓	EXCAVATED:	YES / NO / <u>NA</u>	

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

SAMPLE COMMENTS: Summa # 00277

LOCATION COMMENTS: VMC-1

**FIELD PARAMETERS:**

Sample Time UA HH:MM

CH4 = 0%      CO2 10,600 ppm      O2 20.5 % VOC 0 ppm

COLLECTED BY (PRINT): M. Shendo

RELINQUISHED BY (Printed Name) Daniel Zank (Signature) <i>DZ</i>	Date/Time 4/28/21 1340	RECEIVED BY <i>M Shendo</i> (Printed Name) M Shendo (Signature) <i>M Shendo</i>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222725

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1036	OK	MEDIA:	BH	OK
PRS ID:	W	OK	SAMPLE TECH CODE:	VOST	OK
LOCATION ID:	63-2010	OK	FIELD PREP:	NA	OK
LOCATION TYPE:	AMS	OK	FIELD QC TYPE:	REG	OK
TOP DEPTH:	6.5 ft	OK	SAMPLE USAGE:	INV	OK
BOTTOM DEPTH:	7.5 ft	OK	EXCAVATED:		YES / NO / <del>NA</del>

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

SAMPLE COMMENTS: Summa #

LOCATION COMMENTS: <sup>03 4/28/21</sup> VMW-2

**FIELD PARAMETERS:**

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

CH<sub>4</sub> = 0%      CO<sub>2</sub> 2600 rpm      O<sub>2</sub> 20.9 %      VOC = 0.0 ppm

COLLECTED BY (PRINT): M. Slendo

RELINQUISHED BY (Printed Name) Dandel Serub (Signature) <i>[Signature]</i>	Date/Time 4/28/21 1340	RECEIVED BY (Printed Name) S. Sherwood (Signature) <i>[Signature]</i>	Date/Time 4/28/2021 1340
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222726

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1058	ok	MEDIA:	BH	
PRS ID:	W		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2011		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	6.5 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	7.5 ft	↓	EXCAVATED:		YES / NO <u>NA</u>

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

SAMPLE COMMENTS: Summa : 102826

LOCATION COMMENTS: VMW-3

**FIELD PARAMETERS:**

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

CH4 = 0%      CO2 = 5400 ppm      O2 20.9%  
 4/28/21      Voc 0 ppm

COLLECTED BY (PRINT): M. Slondo

RELINQUISHED BY (Printed Name) <u>Daniel Franko</u> (Signature) <u>[Signature]</u>	Date/Time 4/28/21 1340	RECEIVED BY <u>S. Sherwood</u> (Printed Name) (Signature) <u>[Signature]</u>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222727

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1152	ok	MEDIA:	BH	
PRS ID:	N2		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	24 ft		SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	25 ft	↓	EXCAVATED:	YES / NO / NA	

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

SAMPLE COMMENTS: Summa S 4587

LOCATION COMMENTS: Vmcu4

**FIELD PARAMETERS:**

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

CH4 = 0%    CO2 11,800 ppm    O2 20.2%    VOC 0 ppm

COLLECTED BY (PRINT): M. Skendo

RELINQUISHED BY (Printed Name) Daniel Jerant (Signature) <i>DJS</i>	Date/Time 4/28/21 1340	RECEIVED BY (Printed Name) J. Sherwood (Signature) <i>J. Sherwood</i>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222728

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1209	ok	MEDIA:	BH	
PRS ID:	nt		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2012		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	59 ft		SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	60 ft	↓	EXCAVATED:	YES / NO / NA	

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

SAMPLE COMMENTS: Summa # 11891

LOCATION COMMENTS: Vm64

**FIELD PARAMETERS:**

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

CH<sub>4</sub> = 0      CO<sub>2</sub> 16,600 ppm      O<sub>2</sub> 19.7%      V<sub>OC</sub> 1.3 ppm

COLLECTED BY (PRINT): M. Slonda

RELINQUISHED BY (Printed Name) Daniel J. ... (Signature) <i>[Signature]</i>	Date/Time 4/28/21 1340	RECEIVED BY (Printed Name) J. Sherwood (Signature) <i>[Signature]</i>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

### SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222729

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	ck	FIELD MATRIX:	GAS	ck
TIME COLLECTED (HH:MM):	1236	ck	MEDIA:	BH	
PRS ID:	W		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	24 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	25 ft		EXCAVATED:		YES / NO / <u>NA</u>

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

SAMPLE COMMENTS: Summa # 33962

LOCATION COMMENTS: UMW-5

FIELD PARAMETERS:

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

CH<sub>4</sub> = 0%      CO<sub>2</sub> = 30.600 ppm      O<sub>2</sub> = 18.9%      VOC = 0 ppm

COLLECTED BY (PRINT): M. Slando

RELINQUISHED BY (Printed Name) Daniel Jeramb (Signature) <i>[Signature]</i>	Date/Time 4/28/21 1340	RECEIVED BY (Printed Name) G. Sherwood (Signature) <i>[Signature]</i>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222730

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	OK	FIELD MATRIX:	GAS	OK
TIME COLLECTED (HH:MM):	1253	OK	MEDIA:	BH	
PRS ID:	M		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2013		FIELD PREP:	NA	
LOCATION TYPE:	AMS		FIELD QC TYPE:	REG	
TOP DEPTH:	59 ft		SAMPLE USAGE:	INV	
BOTTOM DEPTH:	60 ft		EXCAVATED:		YES / NO <del>NA</del>

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

SAMPLE COMMENTS: Summa #00339

LOCATION COMMENTS: MWS

**FIELD PARAMETERS:**

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

CH4 = 0%      CO2 32,000 ppm      O2 19.2%      UCC 0.0 ppm

COLLECTED BY (PRINT): M Slendo

RELINQUISHED BY (Printed Name) (Signature) <i>Daniel J. Frank</i>	Date/Time 4/28/21 1340	RECEIVED BY (Printed Name) (Signature) <i>S. Sherwood</i>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

### SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222731

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	ok	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	12 54	ok	MEDIA:	BH	
PRS ID:	wt		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK		FIELD PREP:	NA	
LOCATION TYPE:	BHover10ft		FIELD QC TYPE:	FD	
TOP DEPTH:	59 ft		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	60 ft		EXCAVATED:		YES / NO / NA

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

SAMPLE COMMENTS: Summa # 0d125

LOCATION COMMENTS: QC sample of TWF63-21-222730

**FIELD PARAMETERS:**

Sample Time NA HH:MM

CH<sub>4</sub> - 0%    CO<sub>2</sub> = 32,00    O<sub>2</sub> = 19.2%    VOC = 0 ppm

COLLECTED BY (PRINT): M. Slando

RELINQUISHED BY (Printed Name) Daniel J. Slando (Signature) <i>[Signature]</i>	Date/Time 4/28/21 1340	RECEIVED BY (Printed Name) J. Sherwood (Signature) <i>[Signature]</i>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222732

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)	04/28/2021	ck	FIELD MATRIX:	GAS	ck
TIME COLLECTED (HH:MM):	1320	ck	MEDIA:	BH	
PRS ID:	N		SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK		FIELD PREP:	NA	
LOCATION TYPE:	BHover10ft		FIELD QC TYPE:	FB	
TOP DEPTH:	NA		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	NA		EXCAVATED:	YES / NO / NA	

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

SAMPLE COMMENTS: Summa # 0265

LOCATION COMMENTS: QC collected for TWF63-21-222730

**FIELD PARAMETERS:**

Sample Time N HH:MM

COLLECTED BY (PRINT): M. Stando

RELINQUISHED BY (Printed Name) Daniel Jernick (Signature) <i>[Signature]</i>	Date/Time 4/28/21 1340	RECEIVED BY (Printed Name) S. Shewood (Signature) <i>[Signature]</i>	Date/Time 4/28/2021 13:40
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13640

EVENT NAME: FY 2021 - Poregas Sampling - TA-63 - TWF - April

SAMPLE ID: TWF63-21-222733

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
Date Collected (MM/DD/YYYY)			FIELD MATRIX:	GAS	
TIME COLLECTED (HH:MM):			MEDIA:		
PRS ID:			SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK		FIELD PREP:	NA	
LOCATION TYPE:	BHover10ft		FIELD QC TYPE:	FB	
TOP DEPTH:			SAMPLE USAGE:	QC	
BOTTOM DEPTH:			EXCAVATED:		YES / NO / NA

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

SAMPLE COMMENTS:

LOCATION COMMENTS:

FIELD PARAMETERS:

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

Cancelled

D. S. 4/28/21

COLLECTED BY (PRINT):

RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

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**CERTIFICATION**

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## CERTIFICATION

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


JENNIFER  
PAYNE (Affiliate)  Digitally signed by JENNIFER  
PAYNE (Affiliate)  
Date: 2021.06.25 12:22:34  
-06'00'

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

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Date Signed

Karen E.  
Armijo  Digitally signed by Karen  
E. Armijo  
Date: 2021.06.28  
12:56:42 -06'00'

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

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Date Signed



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