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Date: October 4, 2021
Symbol: EPC-DO-21-295
LA-UR: 21-29401

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, August 2021 (Quarter 16), Los Alamos National Laboratory, EPA ID# NM0890010515**

Dear Mr. Maestas:

Please find enclosed the *Technical Area (TA) 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, August 2021 (Quarter 16)* (Report) in accordance with the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (the Permit), Section 3.14.3.

The Permit requires the soil vapor monitoring system at the LANL TA-63 Transuranic Waste Facility be sampled and evaluated for designated volatile organic compounds (VOCs) on a quarterly basis to ensure protection of environmental health and safety including that of onsite workers. The enclosed Report (Enclosure 1) provides the results of sampling conducted on August 4, 2021 for the sixteenth quarter following the start of operations in October, 2017. The sampling results indicate that vapor concentrations at the site are consistent with previous quarterly sampling events and do not exceed the soil gas screening levels established by the Permit.

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.

If you have any questions or comments concerning this report, please feel free to contact Karen E. Armijo, NA-LA, at (505) 221-3664 or (505) 665-7314, karen.armijo@nnsa.doe.gov or Patrick L. Padilla, Triad, at (505) 412-0462, plpadilla@lanl.gov.

Sincerely,

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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

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Enclosure: 1) Technical Area (TA) 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, August 2021 (Quarter 16), Los Alamos National Laboratory, EPA ID #NM0890010515

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2905 Rodeo Park Drive East, Building 1
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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.

ENCLOSURE 1

Technical Area (TA) 63 Transuranic Waste Facility
Soil Vapor Monitoring System Report, August 2021 (Quarter 16)
Los Alamos National Laboratory, EPA ID# NM0890010515

EPC-DO-21-295

LA-UR-21-29401

Unclassified

Date: October 4, 2021

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

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Technical Area (TA) 63 Transuranic Waste Facility
Soil Vapor Monitoring System Report, August 2021 (Quarter 16)
Los Alamos National Laboratory, EPA ID# NM0890010515

I. Introduction

This report provides the August 2021 (Quarter 16) 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 (MDA) C, Solid Waste Management Unit 50-009, which is managed under the Compliance Order on Consent (Consent Order); the TWF is located south-east of MDA C. Quarterly sampling is required by the LANL Hazardous Waste Facility Permit (Permit), Part 3, Section 3.14.3 (Subsurface Vapor Monitoring) to prevent worker exposure to potentially harmful levels of volatile organic compounds (VOCs) at the site.

Sampling and laboratory analytical results for Quarter 16 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 for continued 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 September 2015 sampling event represents the first quarterly sampling event and coincides with commencement of waste activities at the site. Quarterly reports for the last fifteen quarters are listed in the reference section (LANL, 2017 through LANL, 2021c).

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 comprising the TWF soil vapor monitoring network. Vapor monitoring wells (VMW), VMW-1 (LANL Structure Number 63-2009) and VMW-2 (63-2010) are located proximal 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 (ft) below the ground surface. Each vapor monitoring well and vapor monitoring port is sampled during quarterly sampling events for a total of seven (7) vapor 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 from 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

Field work for the Quarter 16 sampling event took place on August 4, 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, 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 Quarter 6 through Quarter 14 (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 to detect and identify contaminants from the sampling site. An ultra-high pure nitrogen tank is used as the vapor source for the field blank. The nitrogen tank is connected to a SUMMA canister which is then sent to the analytical laboratory along with the other samples for analysis. Prior to the Quarter 15 sampling event, a new ultra-high pure nitrogen tank was purchased and used for field blank sample collection which resulted in no detectable amounts of ethylbenzene or xylene isomers. The Quarter 16 sampling event field blank results have no detectable amounts of ethylbenzene or xylene isomers.

IV. Analytical Results

A summary of the laboratory analytical results for the relevant VOCs detected in Quarter 16 is presented in Table 1, Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility – Quarter 16. 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 constituents are detected above laboratory report detection limits. Table 1 provides the detected VOCs, both non-qualified and estimated or J-flagged detects. Each well port depth and constituent of concern has an associated SGSL that 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.

Laboratory results are processed through LANL's Sample Management Office for quality assurance (QA)/quality control (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 16.

NMED-HWB correspondence dated May 23, 2018 (NMED, 2018), requires reporting of 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 2100 micrograms per cubic meter (ug/m3) (25ft), 1.3% of the SGSL, and 6400 ug/m3 (60ft), 6.9% of the SGSL. The TCE concentrations in vapor monitoring well VMW-5 are highest at the 60 ft port depth with a concentration of 1200 ug/m3, 1.3% of the SGSL. The TCE concentration in the 25ft port of VMW-5 is much lower, with a concentration of 310 ug/m3, 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 0.3% to 0.4%. 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/m3, 0.3% of the SGSL, and 160 ug/m3, 0.4% of the SGSL in the 25ft and 60ft sampling ports, respectively. The concentrations of chloroform in vapor monitoring well VMW-5 are 35 ug/m3, 0.2% of the SGSL, and 21 ug/m3, <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 duplicate sample for VMW-5, 60ft port, demonstrates a low concentration of tetrachloroethylene at 14 ug/m3. Tetrachloroethylene has not been detected in VMW-5, 60ft port, since Quarter 7.

The sampling results for Quarter 16 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 Quarter 10 (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 (methylethylketone), but do not list the other constituents. In Quarter 16, the field duplicate for VMW-5, 60ft port, demonstrates a detection of ethanol at 30 ug/m3 (J-flagged). The note for this sample indicates that the laboratory control sample percent recovery is less than the lower acceptable limit but greater than or equal to the rejection limit.

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 Quarter 12 (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). Quarter 14 (LANL, 2021b) analytical results for vapor monitoring well VMW-4, 60ft port, demonstrated the presence of propanol[2-] (isopropyl alcohol) at 19 ug/m3. The Quarter 16 sampling results did not detect the presence of these constituents; however, they will continue to be monitored for and reported on.

V. Statistics

Statistical analyses, focusing on TCE, which is the primary soil vapor constituent detected during the TWF operating period, are computed to further analyze constituent concentrations and potential data trends. 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 within a range of defined concentrations.

The detected concentrations of TCE to date 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 associated with the 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 significantly below the permitted maximum SGSL constituent concentrations for TCE (by at least one order of magnitude). The TCE concentrations for the sampling quarters collected to 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

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

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

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

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

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

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

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

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

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

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LANL, 2020d. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 11, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO:20-196) of June 30, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2020e. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 12, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO:20-302) of October 2, 2020. Los Alamos National Laboratory, Los Alamos, New Mexico.

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LANL, 2021b. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 14, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO-21-135) of May 3, 2021. Los Alamos National Laboratory, Los Alamos, New Mexico.

LANL, 2021c. *Technical Area 63 Transuranic Waste Facility Soil Vapor Monitoring System Report, Quarter 15, Los Alamos National Laboratory EPA ID #NM0890010515*, (EPC-DO-21-181) of June 28, 2021. Los Alamos National Laboratory, Los Alamos, New Mexico.

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

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

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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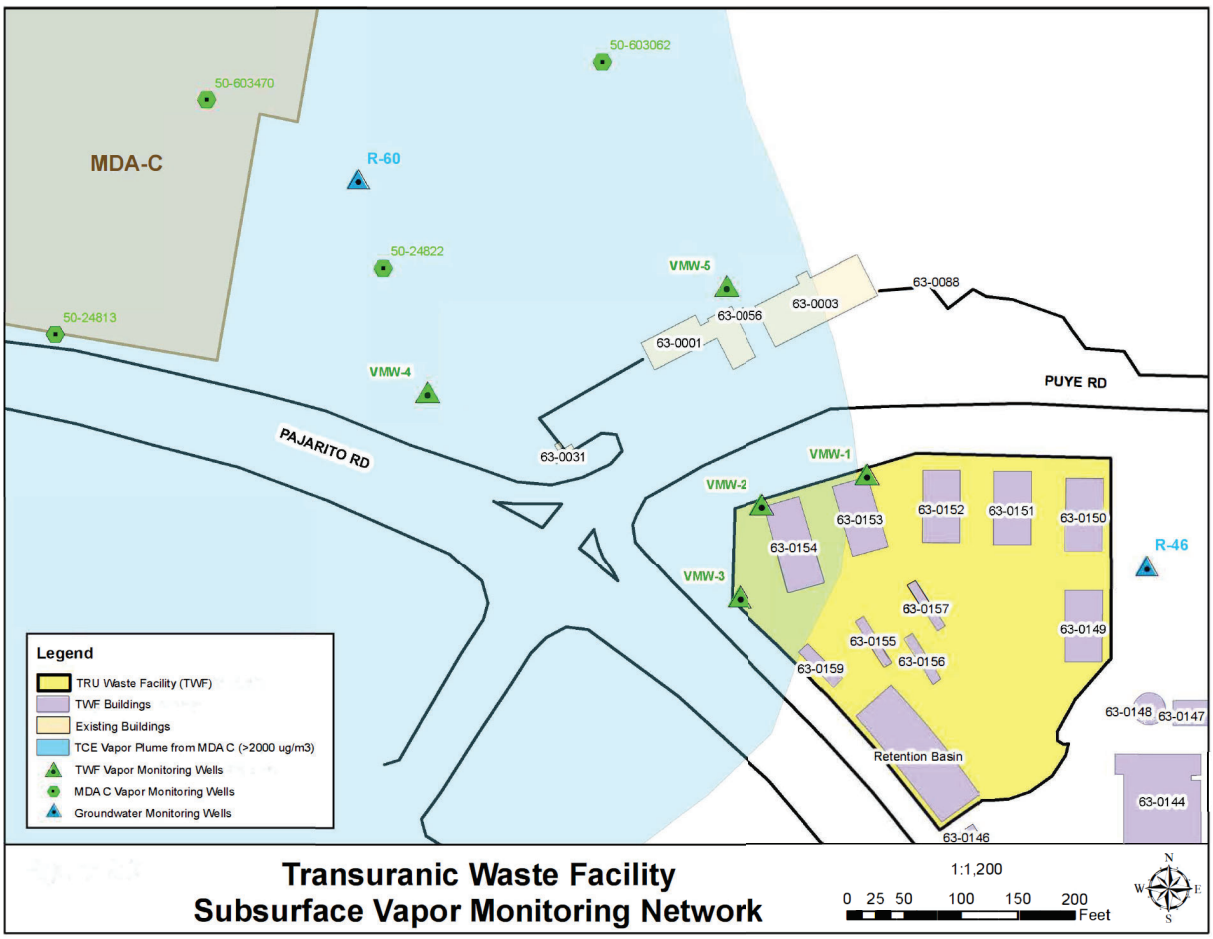

Figure 1. Soil Vapor Monitoring Well Locations at TA-63 TWF

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Table 1: Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility - Quarter 16

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)	TWF63-21-231116	5	REG	Trichloroethene	Trichloroethylene	50	J	64	1.94E+04	0.3
VMW-2 (63-2010)	TWF63-21-231117	5	REG	Trichloroethene	Trichloroethylene	70	NQ	45	1.94E+04	0.4
VMW-3 (63-2011)	TWF63-21-231118	5	REG	Trichloroethene	Trichloroethylene	59	NQ	44	1.94E+04	0.3
VMW-4 (63-2012)	TWF63-21-231119	25	REG	Trichloroethene	Trichloroethylene	2100	NQ	47	1.57E+05	1.3
	TWF63-21-231119	25	REG	Dichlorodifluoromethane	Dichlorodiflouromethane	50	NQ	43	2.61E+06	<0.1
	TWF63-21-231119	25	REG	Tetrachloroethene	Tetrachloroethylene	37	J	60	2.63E+06	<0.1
	TWF63-21-231119	25	REG	Carbon Tetrachloride	Carbon Tetrachloride	40	J	55	1.06E+05	<0.1
	TWF63-21-231119	25	REG	Chloroform	Chloroform	78	NQ	43	2.30E+04	0.3
VMW-4 (63-2012)	TWF63-21-231120	60	REG	Dichlorodifluoromethane	Dichlorodiflouromethane	130	NQ	43	5.38E+06	<0.1
	TWF63-21-231120	60	REG	Trichloro-1,2,2-trifluoroethane[1,1,2	1,1,2-Trichloro-1,2,2-trifluoroethane	25	J	67	1.38E+09	<0.1
	TWF63-21-231120	60	REG	Trichloroethene	Trichloroethylene	6400	NQ	47	9.27E+04	6.9
	TWF63-21-231120	60	REG	Chloroform	Chloroform	160	NQ	43	4.44E+04	0.4
	TWF63-21-231120	60	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	8.7	J	48	2.34E+08	<0.1
	TWF63-21-231120	60	REG	Tetrachloroethene	Tetrachloroethylene	75	NQ	60	2.05E+06	<0.1
	TWF63-21-231120	60	REG	Dichloroethene[cis-1,2-]	cis-1,2-Dichloroethylene	18	J	35	2.91E+06	<0.1
	TWF63-21-231120	60	REG	Carbon Tetrachloride	Carbon Tetrachloride	82	NQ	55	2.13E+05	<0.1
VMW-5 (63-2013)	TWF63-21-231121	25	REG	Dichlorodifluoromethane	Dichlorodiflouromethane	31	J	59	2.61E+06	<0.1
	TWF63-21-231121	25	REG	Trichloroethene	Trichloroethylene	310	NQ	64	1.57E+05	0.2
	TWF63-21-231121	25	REG	Chloroform	Chloroform	35	J	59	2.30E+04	0.2
	TWF63-21-231121	25	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	17	J	65	1.16E+08	<0.1
VMW-5 (63-2013)	TWF63-21-231122	60	REG	Carbon Tetrachloride	Carbon Tetrachloride	15	J	54	2.13E+05	<0.1
	TWF63-21-231122	60	REG	Dichlorodifluoromethane	Dichlorodiflouromethane	59	NQ	43	5.38E+06	<0.1
	TWF63-21-231122	60	REG	Trichloroethene	Trichloroethylene	1200	NQ	46	9.27E+04	1.3
	TWF63-21-231122	60	REG	Chloroform	Chloroform	21	J	42	4.44E+04	<0.1
	TWF63-21-231122	60	REG	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	36	J	47	2.34E+08	<0.1

Table 1: Detected Volatile Organic Compounds at TA-63 Transuranic Waste Facility - Quarter 16

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)	TWF63-21-231123	60	FD	Trichloroethene	Trichloroethylene	1200	NQ	48	9.27E+04	1.3
	TWF63-21-231123	60	FD	Dichlorodifluoromethane	Dichlorodiflouromethane	54	NQ	44	5.38E+06	<0.1
	TWF63-21-231123	60	FD	Ethanol	N/A	30	J-	68	N/A	N/A
	TWF63-21-231123	60	FD	Chloroform	Chloroform	19	J	43	4.44E+04	<0.1
	TWF63-21-231123	60	FD	Trichloroethane[1,1,1-]	1,1,1-Trichloroethane	30	J	49	2.34E+08	<0.1
	TWF63-21-231123	60	FD	Tetrachloroethene	Tetrachloroethylene	14	J	60	2.05E+06	<0.1
	TWF63-21-231123	60	FD	Carbon Tetrachloride	Carbon Tetrachloride	14	J	56	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

EPA Data Qualifier "J-" indicates the laboratory control sample percent recovery is less than the lower acceptable limit but greater than or equal to the rejection limit

REG = regular sample

FD = field duplicate

SGSL = Soil Gas Screening Level from Permit Tables 3.14.3.1 through 3.14.3.3

N/A = Not Applicable (Ethanol is not listed in the Permit Tables)

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	52	U	8	52	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	51	U	9	51	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	62	U	9	62	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	54	U	8	54	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	54	U	24	54	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	45	U	6	45	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	55	U	6	55	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	35	U	17	35	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	42	U	8	42	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	41	U	16	41	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	360	U	220	360	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	56	U	8	56	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	72	U	13.0	72	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	75	U	11	75	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	200	U	40	200	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	59	U	6	59	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	90	UJ	36	90	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	130	U	19	130	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	31	U	15	31	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	170	U	29	170	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	150	U	12	150	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	120	U	14	120	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	80	U	15	80	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	49	U	8.1	49	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	48	U	9.5	48	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	67	U	9	67	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	59	U	17	59	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	92	U	21.0	92	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	84	U	22.0	84	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	55	U	18	55	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	140	U	38	140	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	59	U	7	59	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	72	U	14	72	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	92	U	18	92	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	27	U	12	27	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	150	U	19	150	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	49	U	9	49	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	49	U	27.0	49	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	59	U	6	59	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	170	U	21	170	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	100	U	15	100	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	81	U	17	81	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	49	U	13	49	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	48	U	12	48	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	48	U	10	48	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	43	U	15	43	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	120	U	19	120	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	110	U	19	110	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	59	U	13	59	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	38	U	3	38	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	65	U	5	65	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	190	U	28	190	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	99	U	37	99	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	65	U	13	65	N
63-2009	**5**	**TWF63-21-231116**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**50**	**J**	**14**	**64**	**Y**
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	82	U	12	82	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	510	U	230	510	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	52	U	6.5	52	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	72	U	16	72	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	59	U	7	59	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	59	U	6.4	59	N
63-2009	5	TWF63-21-231116	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	52	U	10	52	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	33	U	7	33	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	47	U	6.2	47	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	41	U	11.0	41	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	64	U	14.0	64	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	58	U	15	58	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	38	U	12.0	38	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	97	U	26	97	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	45	U	9	45	N
63-2010	**5**	**TWF63-21-231117**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**70**	**NQ**	**10**	**45**	**Y**
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	57	U	8	57	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	350	U	160	350	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	36	U	5	36	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	50	U	11.0	50	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	41	U	4.9	41	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	41	U	5	41	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	36	U	6.5	36	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	35	U	6.0	35	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	43	U	6.2	43	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	38	U	6	38	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	38	U	16.0	38	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	41	U	5	41	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	50	U	10	50	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	64	U	12	64	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	18	U	8.6	18	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	100	U	13.0	100	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	34	U	6.1	34	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	34	U	19	34	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	41	U	4	41	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	31	U	4	31	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	38	U	4	38	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	24	U	12	24	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	29	U	5.6	29	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	29	U	11	29	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	240	U	100	240	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	120	U	14.0	120	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	71	U	10.0	71	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	56	U	12.0	56	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	34	U	9	34	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	33	U	8	33	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	33	U	7	33	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	30	U	10	30	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	39	U	6	39	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	50	U	9	50	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	52	U	8	52	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	140	U	29.0	140	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	41	U	4	41	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	62	UJ	24.0	62	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	81	U	13	81	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	78	U	14.0	78	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	41	U	8.8	41	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	26	U	2.2	26	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	45	U	3.5	45	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	130	U	19.0	130	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	68	U	25.0	68	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	87	U	13	87	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	21	U	10.0	21	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	20	110	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	100	U	9	100	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	86	U	9.9	86	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	56	U	10	56	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	34	U	5.7	34	N
63-2010	5	TWF63-21-231117	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	36	U	5.2	36	N
63-2011	**5**	**TWF63-21-231118**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**59**	**NQ**	**9**	**44**	**Y**
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	56	U	8	56	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	340	U	160	340	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	35	U	4	35	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	49	U	11.0	49	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	40	U	4.9	40	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	40	U	5	40	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	35	U	6.5	35	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	35	U	5	35	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	34	U	6.0	34	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	42	U	6	42	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	37	U	5.4	37	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	37	U	16	37	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	40	U	5	40	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	49	U	9	49	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	62	U	12.0	62	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	18	U	8.4	18	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	100	U	13.0	100	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	33	U	6	33	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	33	U	18	33	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	40	U	4	40	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	31	U	4	31	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	37	U	4	37	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	24	U	11.0	24	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	29	U	6	29	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	28	U	11	28	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	240	U	140.0	240	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	120	U	14.0	120	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	69	U	10.0	69	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	55	U	12	55	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	33	U	9	33	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	32	U	8	32	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	32	U	7	32	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	29	U	10	29	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	38	U	6	38	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	49	U	8	49	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	51	U	7.5	51	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	130	U	29	130	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	40	U	3.8	40	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	60	UJ	23	60	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	79	U	13.0	79	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	76	U	13.0	76	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-66-3	Chloroform	40	U	8.3	40	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	26	U	2.1	26	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	44	U	3.4	44	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	120	U	19.0	120	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	66	U	25.0	66	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	84	U	13	84	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	21	U	9.7	21	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	110	U	19	110	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	100	U	8	100	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	84	U	9.7	84	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	54	U	10	54	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	33	U	5.7	33	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	32	U	6	32	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	45	U	6.2	45	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-71-8	Dichlorodifluoromethane	40	U	11.0	40	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	62	U	14.0	62	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	57	U	14	57	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	37	U	12.0	37	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	94	U	25	94	N
63-2011	5	TWF63-21-231118	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	44	U	9	44	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	41	U	13	41	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	100	U	27	100	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	48	U	9.8	48	N
63-2012	**25**	**TWF63-21-231119**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**2100**	**NQ**	**10**	**47**	**Y**
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	60	U	8.9	60	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	370	U	170	370	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	38	U	4.8	38	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	120	U	21.0	120	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	110	U	9.0	110	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	91	U	10.0	91	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	59	U	11.0	59	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	36	U	6	36	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	35	U	7.1	35	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	49	U	7	49	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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**	**TWF63-21-231119**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**50**	**NQ**	**12.0**	**43**	**Y**
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	67	U	15	67	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	61	U	15	61	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	110	U	14.0	110	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	36	U	6.5	36	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	36	U	20.0	36	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	43	U	5	43	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	33	U	5	33	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	40	U	4	40	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	26	U	12	26	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	31	U	6.0	31	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	30	U	12	30	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	260	U	160.0	260	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	130	U	15.0	130	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	75	U	11.0	75	N
63-2012	**25**	**TWF63-21-231119**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**127-18-4**	**Tetrachloroethene**	**37**	**J**	**12**	**60**	**Y**
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	36	U	9.4	36	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	38	U	6	38	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	37	U	6	37	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	46	U	6	46	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	40	U	6	40	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	40	U	17	40	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	43	U	5.4	43	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	53	U	10.0	53	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	68	U	14.0	68	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	19	U	9	19	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	35	U	9.1	35	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	35	U	7.5	35	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	32	U	11.0	32	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	41	U	6	41	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	53	U	9.6	53	N
63-2012	**25**	**TWF63-21-231119**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**40**	**J**	**8**	**55**	**Y**
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	140	U	32	140	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	43	U	4	43	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	66	UJ	26.0	66	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	86	U	14.0	86	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	83	U	14.0	83	N
63-2012	**25**	**TWF63-21-231119**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**78**	**NQ**	**9**	**43**	**Y**
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	28	U	2	28	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-55-6	Trichloroethane[1,1,1-]	48	U	4	48	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	140	U	21	140	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	72	U	27	72	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	92	U	14.0	92	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	22	U	11.0	22	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	53	U	12.0	53	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	43	U	5	43	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	43	U	5	43	N
63-2012	25	TWF63-21-231119	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	38	U	6.9	38	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	43	U	4.1	43	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	140	U	21	140	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	72	U	27	72	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	92	U	14	92	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	22	U	11.0	22	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	120	U	21.0	120	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	110	U	9.0	110	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	91	U	10.0	91	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	59	U	11	59	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	36	U	6.1	36	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	35	U	7	35	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	49	U	6.7	49	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	43	U	4.8	43	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	38	U	6.9	38	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	38	U	6	38	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	37	U	6.4	37	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	46	U	6	46	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	40	U	6	40	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	40	U	17	40	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	43	U	5	43	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	53	U	10	53	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	68	U	13.0	68	N
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**130**	**NQ**	**12.0**	**43**	**Y**
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**76-13-1**	**Trichloro-1,2,2-trifluoroethane[1,1,2-]**	**25**	**J**	**15.0**	**67**	**Y**
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	61	U	15	61	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	41	U	13.0	41	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	100	U	27.0	100	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	48	U	9.8	48	N
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**6400**	**NQ**	**10**	**47**	**Y**
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	60	U	8.9	60	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	370	U	170	370	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	38	U	5	38	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	53	U	12	53	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	43	U	5	43	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	66	UJ	26	66	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	86	U	14.0	86	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	83	U	14	83	N
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**160**	**NQ**	**9**	**43**	**Y**
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	28	U	2.3	28	N
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**9**	**J**	**3.8**	**48**	**Y**
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	19.0	U	9.1	19	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	110	U	14.0	110	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	36	U	6.1	36	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	36	U	20.0	36	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	43	U	4.6	43	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	33	U	4.1	33	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	40	U	4.0	40	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	26	U	12	26	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	31	U	6.0	31	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	30	U	12	30	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	260	U	160	260	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	130	U	15	130	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	75	U	11	75	N
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**127-18-4**	**Tetrachloroethene**	**75**	**NQ**	**12**	**60**	**Y**
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	36	U	9	36	N
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**156-59-2**	**Dichloroethene[cis-1,2-]**	**18**	**J**	**9**	**35**	**Y**
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	35	U	7.5	35	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	32	U	11	32	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	41	U	6.1	41	N
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	53	U	9	53	N
63-2012	**60**	**TWF63-21-231120**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**82**	**NQ**	**8.2**	**55**	**Y**
63-2012	60	TWF63-21-231120	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	140	U	31	140	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	52	U	7.8	52	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	51	U	9.4	51	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	62	U	9.3	62	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	54	U	8.6	54	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	54	U	24	54	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	59	U	7.9	59	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	72	U	14	72	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	92	U	18	92	N
63-2013	**25**	**TWF63-21-231121**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**31**	**J**	**17**	**59**	**Y**
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	92	U	21	92	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	84	U	22	84	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	55	U	18	55	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	100	U	38	100	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	65	U	14	65	N
63-2013	**25**	**TWF63-21-231121**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**310**	**NQ**	**14**	**64**	**Y**
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	82	U	12.0	82	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	500	U	250	500	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	52	U	6.9	52	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	72	U	17	72	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	59	U	7.4	59	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	100	U	20	100	N
63-2013	**25**	**TWF63-21-231121**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**35**	**J**	**13.0**	**59**	**Y**
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	38	U	3	38	N
63-2013	**25**	**TWF63-21-231121**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**17**	**J**	**5.3**	**65**	**Y**
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	200	U	29	200	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	100	U	39.0	100	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	100	U	20.0	100	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	31	U	15.0	31	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	200	U	30.0	200	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	200	U	13.0	200	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	120	U	14.0	120	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	80	U	15	80	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	27	U	13.0	27	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	200	U	19.0	200	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	49	U	8.9	49	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	49	U	28	49	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	59	U	6	59	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	45	U	6	45	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	55	U	6	55	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	35	U	18	35	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	42	U	8.5	42	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	41	U	17	41	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	400	U	200	400	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	200	U	21.0	200	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	90	UJ	36	90	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	100	U	20.0	100	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	100	U	15	100	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	81	U	18.0	81	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	49	U	14.0	49	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	48	U	13.0	48	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	48	U	11	48	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	43	U	16.0	43	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	56	U	9	56	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	72	U	13	72	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	56-23-5	Carbon Tetrachloride	75	U	12	75	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	200	U	45	200	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	59	U	6	59	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	48	U	10	48	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	67	U	10	67	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	49	U	9	49	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	59	U	6.9	59	N
63-2013	25	TWF63-21-231121	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	52	U	10.0	52	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-54-3	Hexane	30	U	6.0	30	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	110-82-7	Cyclohexane	30	U	12	30	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	120-82-1	Trichlorobenzene[1,2,4-]	260	U	160	260	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	123-91-1	Dioxane[1,4-]	130	U	15	130	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	124-48-1	Chlorodibromomethane	73	U	11	73	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	127-18-4	Tetrachloroethene	58	U	12	58	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	142-82-5	n-Heptane	35	U	9.4	35	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-99-0	Butadiene[1,3-]	19	U	8.8	19	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-05-1	Chloro-1-propene[3-]	110	U	13	110	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	107-06-2	Dichloroethane[1,2-]	35	U	6.1	35	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-10-1	Methyl-2-pentanone[4-]	35	U	20	35	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-67-8	Trimethylbenzene[1,3,5-]	42	U	4.5	42	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-88-3	Toluene	32	U	4.1	32	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	108-90-7	Chlorobenzene	40	U	4.0	40	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	109-99-9	Tetrahydrofuran	25	U	12	25	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-59-2	Dichloroethene[cis-1,2-]	34	U	8.7	34	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	156-60-5	Dichloroethene[trans-1,2-]	34	U	7.5	34	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	1634-04-4	Methyl tert-Butyl Ether	31	U	11	31	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	540-84-1	Isooctane	40	U	6.1	40	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	541-73-1	Dichlorobenzene[1,3-]	52	U	9.0	52	N
63-2013	**60**	**TWF63-21-231122**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**15**	**J**	**8.2**	**54**	**Y**
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	591-78-6	Hexanone[2-]	140	U	31	140	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	622-96-8	Ethyltoluene[4-]	42	U	4.1	42	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	64-17-5	Ethanol	66	UJ	24	66	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-63-0	Propanol[2-]	86	U	14	86	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	67-64-1	Acetone	83	U	14	83	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-09-2	Methylene Chloride	120	U	21	120	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-15-0	Carbon Disulfide	110	U	9.0	110	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-25-2	Bromoform	89	U	10	89	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-27-4	Bromodichloromethane	58	U	11	58	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-34-3	Dichloroethane[1,1-]	35	U	5.7	35	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-35-4	Dichloroethene[1,1-]	34	U	6.7	34	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-69-4	Trichlorofluoromethane	48	U	6.7	48	N
63-2013	**60**	**TWF63-21-231122**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**59**	**NQ**	**12**	**43**	**Y**
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	66	U	15	66	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	87-68-3	Hexachlorobutadiene	370	U	170.0	370	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-47-6	Xylene[1,2-]	37	U	4.8	37	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-50-1	Dichlorobenzene[1,2-]	52	U	11.0	52	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	95-63-6	Trimethylbenzene[1,2,4-]	42	U	4.9	42	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	98-82-8	Isopropylbenzene	42	U	5	42	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	37	U	6.9	37	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-00-5	Trichloroethane[1,1,2-]	47	U	9.3	47	N
63-2013	**60**	**TWF63-21-231122**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**79-01-6**	**Trichloroethene**	**1200**	**NQ**	**10**	**46**	**Y**
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	59	U	8.2	59	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-41-4	Ethylbenzene	37	U	5.6	37	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-42-5	Styrene	37	U	6.4	37	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	100-44-7	Benzyl Chloride	44	U	6	44	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-01-5	Dichloropropene[cis-1,3-]	39	U	6	39	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	10061-02-6	Dichloropropene[trans-1,3-]	39	U	17	39	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	103-65-1	Propylbenzene[1-]	42	U	5	42	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-46-7	Dichlorobenzene[1,4-]	52	U	10	52	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	106-93-4	Dibromoethane[1,2-]	66	U	13	66	N
63-2013	**60**	**TWF63-21-231122**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**67-66-3**	**Chloroform**	**21**	**J**	**9**	**42**	**Y**
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	71-43-2	Benzene	27	U	2.3	27	N
63-2013	**60**	**TWF63-21-231122**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**REG**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**36**	**J**	**3.7**	**47**	**Y**
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-83-9	Bromomethane	140	U	20.0	140	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	74-87-3	Chloromethane	72	U	27	72	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-00-3	Chloroethane	92	U	14.0	92	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	75-01-4	Vinyl Chloride	22	U	10	22	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	60	U	15.0	60	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-87-5	Dichloropropane[1,2-]	40	U	12.0	40	N
63-2013	60	TWF63-21-231122	08/04/2021	08/11/2021	VOC	EPA:TO15	REG	GAS	78-93-3	Butanone[2-]	100	U	27.0	100	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	106-99-0	Butadiene[1,3-]	20	U	9	20	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	107-05-1	Chloro-1-propene[3-]	110	U	14.0	110	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	107-06-2	Dichloroethane[1,2-]	36	U	7	36	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	108-10-1	Methyl-2-pentanone[4-]	36	U	20.0	36	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	108-67-8	Trimethylbenzene[1,3,5-]	44	U	5	44	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	108-88-3	Toluene	34	U	4.5	34	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	108-90-7	Chlorobenzene	41	U	4.1	41	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	109-99-9	Tetrahydrofuran	26	U	13.0	26	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	110-54-3	Hexane	31	U	6.0	31	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	110-82-7	Cyclohexane	31	U	12.0	31	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	120-82-1	Trichlorobenzene[1,2,4-]	270	U	160.0	270	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	123-91-1	Dioxane[1,4-]	130	U	15.0	130	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	68	U	15	68	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	62	U	16.0	62	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	78-87-5	Dichloropropane[1,2-]	41	U	13	41	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	78-93-3	Butanone[2-]	110	U	27	110	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	79-00-5	Trichloroethane[1,1,2-]	49	U	10	49	N
63-2013	**60**	**TWF63-21-231123**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**79-01-6**	**Trichloroethene**	**1200**	**NQ**	**10**	**48**	**Y**
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	61	U	8.9	61	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	106-93-4	Dibromoethane[1,2-]	68	U	14	68	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	74-87-3	Chloromethane	74	U	27.0	74	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-00-3	Chloroethane	95	U	14.0	95	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-01-4	Vinyl Chloride	23	U	11.0	23	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-09-2	Methylene Chloride	120	U	22	120	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-15-0	Carbon Disulfide	110	U	9.3	110	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-25-2	Bromoform	92	U	10	92	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-27-4	Bromodichloromethane	60	U	11	60	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-34-3	Dichloroethane[1,1-]	36	U	6	36	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-35-4	Dichloroethene[1,1-]	35	U	7	35	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	75-69-4	Trichlorofluoromethane	50	U	7	50	N
63-2013	**60**	**TWF63-21-231123**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**75-71-8**	**Dichlorodifluoromethane**	**54**	**NQ**	**12**	**44**	**Y**
63-2013	**60**	**TWF63-21-231123**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**64-17-5**	**Ethanol**	**30**	**J-**	**26**	**68**	**Y**
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	67-63-0	Propanol[2-]	88	U	14.0	88	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	67-64-1	Acetone	85	U	14	85	N
63-2013	**60**	**TWF63-21-231123**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**67-66-3**	**Chloroform**	**19**	**J**	**9.3**	**43**	**Y**
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	71-43-2	Benzene	28	U	2	28	N
63-2013	**60**	**TWF63-21-231123**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**71-55-6**	**Trichloroethane[1,1,1-]**	**30**	**J**	**3.8**	**49**	**Y**
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	74-83-9	Bromomethane	140	U	21	140	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	124-48-1	Chlorodibromomethane	76	U	11.0	76	N
63-2013	**60**	**TWF63-21-231123**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**127-18-4**	**Tetrachloroethene**	**14**	**J**	**12**	**60**	**Y**
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	142-82-5	n-Heptane	36	U	9	36	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	156-59-2	Dichloroethene[cis-1,2-]	35	U	9	35	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	156-60-5	Dichloroethene[trans-1,2-]	35	U	8	35	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	1634-04-4	Methyl tert-Butyl Ether	32	U	12.0	32	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	540-84-1	Isooctane	42	U	6.1	42	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	541-73-1	Dichlorobenzene[1,3-]	53	U	10	53	N
63-2013	**60**	**TWF63-21-231123**	**08/04/2021**	**08/11/2021**	**VOC**	**EPA:TO15**	**FD**	**GAS**	**56-23-5**	**Carbon Tetrachloride**	**14**	**J**	**9**	**56**	**Y**
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	591-78-6	Hexanone[2-]	150	U	32	150	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	622-96-8	Ethyltoluene[4-]	44	U	4	44	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	39	U	7	39	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	87-68-3	Hexachlorobutadiene	380	U	170	380	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	95-47-6	Xylene[1,2-]	39	U	5	39	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	95-50-1	Dichlorobenzene[1,2-]	53	U	12	53	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	95-63-6	Trimethylbenzene[1,2,4-]	44	U	5.4	44	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	98-82-8	Isopropylbenzene	44	U	4.9	44	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	100-41-4	Ethylbenzene	39	U	5.6	39	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	100-42-5	Styrene	38	U	6	38	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	100-44-7	Benzyl Chloride	46	U	7	46	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	10061-01-5	Dichloropropene[cis-1,3-]	40	U	6	40	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	10061-02-6	Dichloropropene[trans-1,3-]	40	U	17	40	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	103-65-1	Propylbenzene[1-]	44	U	5	44	N
63-2013	60	TWF63-21-231123	08/04/2021	08/11/2021	VOC	EPA:TO15	FD	GAS	106-46-7	Dichlorobenzene[1,4-]	53	U	10	53	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	10061-01-5	Dichloropropene[cis-1,3-]	82	U	12	82	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	10061-02-6	Dichloropropene[trans-1,3-]	82	U	34	82	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	103-65-1	Propylbenzene[1-]	88	U	11	88	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	106-46-7	Dichlorobenzene[1,4-]	110	U	20	110	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	106-93-4	Dibromoethane[1,2-]	140	U	27	140	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	106-99-0	Butadiene[1,3-]	40	U	18	40	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	107-05-1	Chloro-1-propene[3-]	220	U	28	220	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	100-41-4	Ethylbenzene	78	U	11	78	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	100-42-5	Styrene	77	U	13	77	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	100-44-7	Benzyl Chloride	93	U	13	93	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	107-06-2	Dichloroethane[1,2-]	73	U	13	73	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	108-10-1	Methyl-2-pentanone[4-]	74	U	40	74	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	108-67-8	Trimethylbenzene[1,3,5-]	88	U	9	88	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	108-88-3	Toluene	68	U	9	68	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	108-90-7	Chlorobenzene	83	U	8	83	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	109-99-9	Tetrahydrofuran	53	U	25	53	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	110-54-3	Hexane	63	U	12	63	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	110-82-7	Cyclohexane	62	U	24	62	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	120-82-1	Trichlorobenzene[1,2,4-]	530	U	310.0	530	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	123-91-1	Dioxane[1,4-]	260	U	30	260	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	124-48-1	Chlorodibromomethane	150	U	22	150	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	127-18-4	Tetrachloroethene	120	U	24	120	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	142-82-5	n-Heptane	74	U	19.0	74	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	156-59-2	Dichloroethene[cis-1,2-]	71	U	18.0	71	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	156-60-5	Dichloroethene[trans-1,2-]	71	U	15	71	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	1634-04-4	Methyl tert-Butyl Ether	65	U	23	65	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	540-84-1	Isooctane	84	U	13	84	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	541-73-1	Dichlorobenzene[1,3-]	110	U	19	110	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	56-23-5	Carbon Tetrachloride	110	U	17	110	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	591-78-6	Hexanone[2-]	290	U	61	290	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	622-96-8	Ethyltoluene[4-]	88	U	8	88	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	64-17-5	Ethanol	130	UJ	53	130	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	67-63-0	Propanol[2-]	170	U	27	170	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	67-64-1	Acetone	170	U	28	170	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	67-66-3	Chloroform	88	U	19	88	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	71-43-2	Benzene	57	U	5	57	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	71-55-6	Trichloroethane[1,1,1-]	98	U	7.6	98	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	74-83-9	Bromomethane	280	U	43.0	280	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	74-87-3	Chloromethane	150	U	56.0	150	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-00-3	Chloroethane	190	U	29	190	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-01-4	Vinyl Chloride	46	U	21	46	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-09-2	Methylene Chloride	250	U	42	250	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-15-0	Carbon Disulfide	220	U	18	220	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-25-2	Bromoform	190	U	21	190	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-27-4	Bromodichloromethane	120	U	21	120	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-34-3	Dichloroethane[1,1-]	73	U	12	73	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-35-4	Dichloroethene[1,1-]	71	U	14	71	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-69-4	Trichlorofluoromethane	100	U	13	100	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	75-71-8	Dichlorodifluoromethane	89	U	25	89	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	76-13-1	Trichloro-1,2,2-trifluoroethane[1,1,2-]	140	U	31	140	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	76-14-2	Dichloro-1,1,2,2-tetrafluoroethane[1,2-]	130	U	31	130	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	78-87-5	Dichloropropane[1,2-]	83	U	26	83	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	78-93-3	Butanone[2-]	210	U	53	210	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	79-00-5	Trichloroethane[1,1,2-]	98	U	20	98	N

Table 2: Volatile Organic Compound Analytical Results for Soil Vapor Monitoring Wells at TA-63 Transuranic Waste Facility - Quarter 16

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		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	79-01-6	Trichloroethene	97	U	20	97	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	79-34-5	Tetrachloroethane[1,1,2,2-]	120	U	18	120	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	87-68-3	Hexachlorobutadiene	760	U	350.0	760	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	95-47-6	Xylene[1,2-]	78	U	10	78	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	95-50-1	Dichlorobenzene[1,2-]	110	U	24	110	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	95-63-6	Trimethylbenzene[1,2,4-]	88	U	11	88	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	98-82-8	Isopropylbenzene	88	U	9.8	88	N
63-2013		TWF63-21-231124	08/04/2021	08/11/2021	VOC	EPA:TO15	FB	GAS	Xylene[m+p]	Xylene[1,3-]+Xylene[1,4-]	78	U	14	78	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

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

Well ID (Port(ft))	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 (%)
VMW-1 (5) 63-2009	Trichloroethylene	64.4	0.3	31.1	0.2	48.3	0.2	53.7	0.3	43.5	0.2	36	0.2	44	0.2	59.1	0.3	40.3	0.2
	Toluene	12.4	<0.1																
	Tetrachloroethylene	11.5	<0.1																
	cis-1,2-Dichloroethylene	11.5	<0.1																
	Acetone	16.1	<0.1																
	1,1,1-Trichloroethane	142	<0.1			8.2	<0.1									8.7	<0.1		
	1,1-Dichloroethane	33.6	<0.1																
	1,1-Dichloroethylene	10.3	<0.1																
	Dichlorodifluoromethane	6.9	<0.1																
	Methylene chloride							13.2	<0.1										
	Chloroform															5.9	<0.1		
VMW-2 (5) 63-2010	Trichloroethylene	134	0.7	80.6	0.4	129	0.7	85.9	0.4	107	0.6	113	0.6	118	0.6	102	0.5	96.7	0.5
	Dichlorodifluoromethane	7.9	<0.1													6.4	<0.1		
	Acetone													20.2	<0.1				
	1,1,1-Trichloroethane																		
	Toluene															6.8	<0.1		
VMW-3 (5) 63-2011	Trichloroethylene	69.8	0.4	64.4	0.3	96.7	0.5	59.1	0.3	75.2	0.4	85.9	0.4	107	0.6	85.9	0.4	64.4	0.3
	Toluene	8.3	<0.1																
	Acetone							20.9	<0.1					12.3	<0.1				
	Dichlorodifluoromethane															5.9	<0.1		
VMW-4 (25) 63-2012	Trichloroethylene	3810	2.4	2793	1.8	3437	2.2	2954	1.9	2900	1.8	2900	1.8	2790	1.8	3010	1.9	2790	1.8
	Tetrachloroethylene	49.5	<0.1	34.6	<0.1	34.6	<0.1	36.6	<0.1	43.4	<0.1	39.3	<0.1	34.6	<0.1			35.9	<0.1
	Carbon tetrachloride	49.7	<0.1	35.2	<0.1	48.4	<0.1	41.5	<0.1	35.2	<0.1	46.5	<0.1	42.1	<0.1	50.9	<0.1	41.5	<0.1
	Chloroform	112	0.5	87.8	0.2	107	0.5	107	0.5	102	0.4	92.7	0.4	97.6	0.4	97.6	0.4	102	0.4
	Dichlorodifluoromethane	84	<0.1	74.1	<0.1	84	<0.1	84	<0.1	69.2	<0.1	79.1	<0.1	84	<0.1	59.3	<0.1	74.1	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane	17.6	<0.1	13	<0.1									16.1	<0.1	13	<0.1		
	1,1,1-Trichloroethane	7.1	<0.1																
	Bromodichloromethane															6.6	<0.1		
VMW-4 (60) 63-2012	Trichloroethylene	8060	8.7	6980	7.5	8590	9.3	8060	8.7	8060	8.7	7520	8.1	7520	8.1	8590	9.3	6980	7.5
	Tetrachloroethylene	81.3	<0.1	74.6	<0.1	88.1	<0.1	81.3	<0.1	88.1	<0.1	88.1	<0.1	81.3	<0.1	94.9	<0.1	67.8	<0.1
	cis-1,2-Dichloroethylene	16.6	<0.1	23.8	<0.1	25.8	<0.1	25	<0.1	19.4	<0.1	19.8	<0.1	19.8	<0.1	21.8	<0.1	22.2	<0.1
	Carbon tetrachloride	94.3	<0.1	88	<0.1	113	<0.1	107	<0.1	107	<0.1	113	<0.1	101	<0.1	107	<0.1	101	<0.1
	Chloroform	190	0.4	200	0.5	244	0.5	229	0.5	210	0.5	215	0.5	215	0.5	220	0.5	200	0.5
	1,1,1-Trichloroethane	13.1	<0.1	14.2	<0.1	14.2	<0.1	15.3	<0.1	15.3	<0.1			13.6	<0.1	15.8	<0.1	13.1	<0.1
	Dichlorodifluoromethane	143	<0.1	158	<0.1	148	<0.1	193	<0.1	168	<0.1	168	<0.1	183	<0.1	133	<0.1	148	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane	25.3	<0.1	28.3	<0.1	29.9	<0.1	32.2	<0.1	36.8	<0.1	26	<0.1	28.3	<0.1			26.8	<0.1
	Toluene	7.6	<0.1																
	Acetone	16.1	<0.1																
	Trichlorofluoromethane	6.2	<0.1			6.7	<0.1												
VMW-5 (25) 63-2013	Trichloroethylene	483	0.3	258	0.2	414	0.3	344	0.2	365	0.2	360	0.2	360	0.2	424	0.3	338	0.2
	Chloroform	35.6	0.2	19	<0.1	26.3	0.1	32.2	<0.1	32.2	0.1	28.8	0.1	32.2	0.1	30.3	0.1	36.6	<0.1
	1,1,1-Trichloroethane	30.5	<0.1	19.6	<0.1	20.2	<0.1	27.8	<0.1	22.9	<0.1			23.4	<0.1	22.4	<0.1	21.8	<0.1
	Dichlorodifluoromethane	59.3	<0.1	42	<0.1	42	<0.1	47.4	<0.1	47	<0.1	49.4	<0.1	54.4	<0.1	36.6	<0.1	45.5	<0.1
	Tetrachloroethylene	6.8	<0.1																
	Acetone							15	<0.1					12.3	<0.1				
	Carbon tetrachloride															7.5	<0.1		
VMW-5 (60) 63-2013	Trichloroethylene	1340	1.4	1343	1.4	1557	1.7	1504	1.6	1396	1.5	1400	1.5	1560	1.7	1500	1.6	1400	1.5
	Tetrachloroethylene	16.9	<0.1	12.9	<0.1	15.6	<0.1					10.2	<0.1	12.9	<0.1				
	Chloroform	15.6	<0.1	18.1	<0.1	22.9	<0.1	19	<0.1	22.9	<0.1	22	<0.1	21.5	<0.1	26.3	<0.1	21	<0.1
	1,1,1-Trichloroethane	44.7	<0.1	47.4	<0.1	47.4	<0.1	60	<0.1	50.2	<0.1	42	<0.1	45.3	<0.1	46.9	<0.1	44.7	<0.1
	Dichlorodifluoromethane	64.2	<0.1	84	<0.1	69.2	<0.1	84	<0.1	79	<0.1	79	<0.1	79	<0.1	59.3	<0.1	64.2	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane			10	<0.1	19.9	<0.1							15.3	<0.1	14.6	<0.1		
	Toluene	10.5	<0.1																
	Carbon tetrachloride	13.2	<0.1			10.7	<0.1							18.2	<0.1	21.4	<0.1	20.1	<0.1
	Acetone	26.1	<0.1													26.1	<0.1		

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

Well ID (Port(ft))	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 (5) 63-2011(FD)	Trichloroethylene			45.6	0.2					80.6	0.4								
VMW-4 (25) 63-2012(FD)	Trichloroethylene					3276	2.1					2790	1.8						
	Tetrachloroethylene					32.5	<0.1					34.6	<0.1						
	Carbon tetrachloride					56.6	<0.1					49.7	<0.1						
	Chloroform					112	0.5					97.6	0.4						
	1,1,1-Trichloroethane					12.5	<0.1												
	Dichlorofluoromethane					74.1	<0.1					79.1	<0.1						
VWM-4 (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															18.2	<0.1		
	1,1,1-Trichloroethane															47.4	<0.1	48.5	<0.1
	Dichlorodifluoromethane															64.2	<0.1	69.2	<0.1
	1,1,2-Trichloro-1,2,2-trifluoroethane															15.3	<0.1	17.6	<0.1
	Chloroform																	20.5	<0.1
	Methylethylketone (2-butanone)																		
	Tetrachloroethylene																		
	1,2,4-Trimethylbenzene																		

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

Well ID (Port(ft))	Constituent	Q10		Q11		Q12		Q13		Q14		Q15		Q16	
		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 (%)
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	50	0.3
	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	70	0.4
	Dichlorodifluoromethane			6.9	<0.1	5.9	<0.1	5.9	<0.1						
	Acetone														
	1,1,1-Trichloroethane							5.1	<0.1						
	Toluene														
VMW-3 (5) 63-2011	Trichloroethylene	75.2	0.4	97	0.5	75	0.4	86	0.4	75	0.4	97	0.5	59	0.3
	Toluene														
	Acetone														
	Dichlorodifluoromethane							7.9	<0.1						
VMW-4 (25) 63-2012	Trichloroethylene	2740	1.7	2800	1.8	2600	1.7	2600	1.7	2600	1.7	2500	1.6	2100	1.3
	Tetrachloroethylene					40	<0.1	40	<0.1	35	<0.1	26	<0.1	37	<0.1
	Carbon tetrachloride			47	<0.1	39	<0.1	43	<0.1	41	<0.1	35	0.1	40	<0.1
	Chloroform	102	0.4	93	0.4	88	0.4	83	0.5	88	0.8	78	0.7	78	0.3
	Dichlorodifluoromethane	74.1	<0.1	79	<0.1	59	<0.1	64	<0.1	59	<0.1	59	<0.1	50	<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	8.1	6400	6.9
	Tetrachloroethylene	74.6	<0.1	81	<0.1	81	<0.1	75	<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	18	<0.1
	Carbon tetrachloride	107	<0.1	100	<0.1	100	<0.1	110	<0.1	94	<0.1	88	<0.1	82	0.2
	Chloroform	224	0.5	240	0.5	200	0.5	200	0.4	200	0.5	180	0.4	160	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	8.7	<0.1
	Dichlorodifluoromethane	173	<0.1	190	<0.1	160	<0.1	160	<0.1	140	<0.1	130	<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	25	<0.1
	Toluene														
	Acetone														
	Trichlorofluoromethane	10.7	<0.1							7.3	<0.1				
VMW-5 (25) 63-2013	Trichloroethylene	392	0.2	380	0.2	390	0.2	400	0.3	360	0.2	360	0.2	310	0.2
	Chloroform	41.5	0.2	41	0.2	40	0.2	35	0.2	36	0.3	37	0.3	35	0.2
	1,1,1-Trichloroethane	24.5	<0.1	24	<0.1	19	<0.1	19	<0.1	18	<0.1	16	<0.1	17	<0.1
	Dichlorodifluoromethane	48.9	<0.1	47	<0.1	37	<0.1	47	<0.1	41	<0.1	38	<0.1	31	<0.1
	Tetrachloroethylene														
	Acetone														
	Carbon tetrachloride														
VMW-5 (60) 63-2013	Trichloroethylene	1503	1.6	1400	1.5	1400	1.5	1300	1.4	1300	1.4	1300	1.4	1200	1.3
	Tetrachloroethylene														
	Chloroform	23.4	<0.1	23	<0.1	20	<0.1	19	<0.1	20	<0.1	17	<0.1	21	<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	36	<0.1
	Dichlorodifluoromethane	79.1	<0.1	84	<0.1	69	<0.1	74	<0.1	69	<0.1	54	<0.1	59	<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	15	<0.1
	Acetone														

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

Well ID (Port(ft))	Constituent	Q10		Q11		Q12		Q13		Q14		Q15		Q16	
		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)	Trichloroethylene														
63-2009(FD)	Dichlorodifluoromethane														
VMW-3 (5)															
63-2011(FD)	Trichloroethylene														
VMW-4 (25)	Trichloroethylene														
	Tetrachloroethylene														
63-2012(FD)	Carbon tetrachloride														
	Chloroform														
	1,1,1-Trichloroethane														
	Dichlorofluoromethane														
VWM-4 (60)	Trichloroethylene														
	Tetrachloroethylene														
	cis-1,2-Dichloroethylene														
23-2012(FD)	Carbon tetrachloride														
	Chloroform														
	Dichlorodifluoromethane														
	1,1,2-Trichloro-1,2,2-trifluoroethane														
VMW-5 (25)	Trichloroethylene														
	Tetrachloroethylene														
63-2013(FD)	Chloroform														
	1,1,1-Trichloroethane														
	Dichlorodifluoromethane														
VMW-5 (60)	Trichloroethylene	1340	1.4	1500	1.6	1400	1.5	1400	1.5	1300	1.4	1300	1.4	1200	1.3
	Carbon tetrachloride	17.6	<0.1	19	<0.1	19	<0.1	22	<0.1	19	<0.1	14	<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	30	<0.1
	Dichlorodifluoromethane	79.1	<0.1	79	<0.1	69	<0.1	74	<0.1	69	<0.1	59	<0.1	54	<0.1
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	19	<0.1
	Methylethylketone (2-butanone)	162	<0.1												
	Tetrachloroethylene													14	<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
Quarter 16	50	70	59	2100	6400	310	1200
Mean (M)	46.3	103.0	79.5	2832.8	7579.8	371.1	1400.0
Standard Deviation (SD)[n-1]	9.0	18.3	14.7	383.0	589.5	50.2	102.6
Lower Limit (95%=M-2xSD)	28.4	66.5	50.1	2066.7	6400.8	270.8	1194.8
Upper Limit (95%=M+2xSD)	64.2	139.5	109.0	3598.8	8758.8	471.5	1605.2
Lower Limit (99%=M-3xSD)				1683.7		220.6	
Upper Limit (99%=M+3xSD)				3981.8		521.6	

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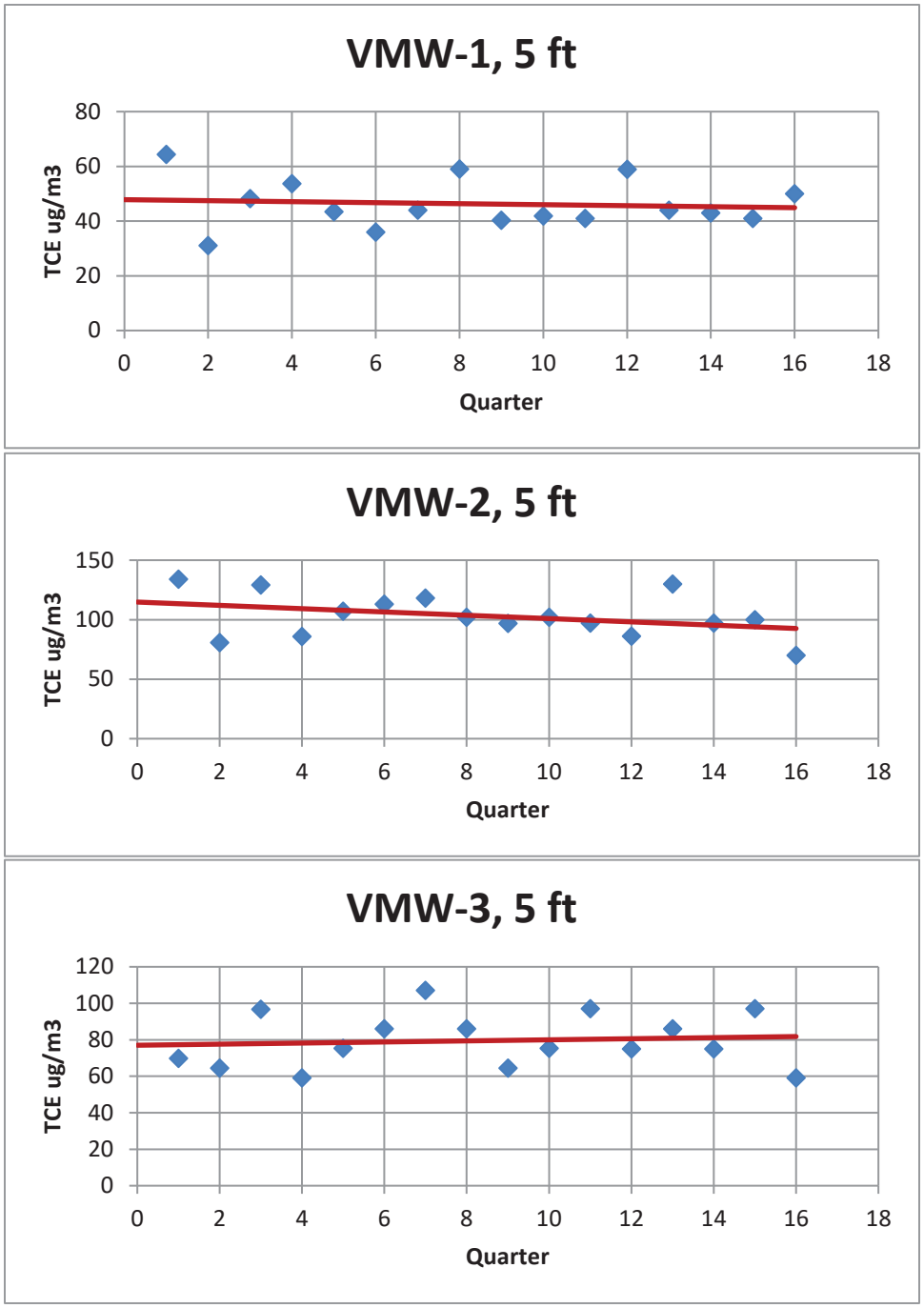

Figure 2. Data Plots for TA-63 TWF Soil Vapor Monitoring Wells Inside of the Permitted Unit

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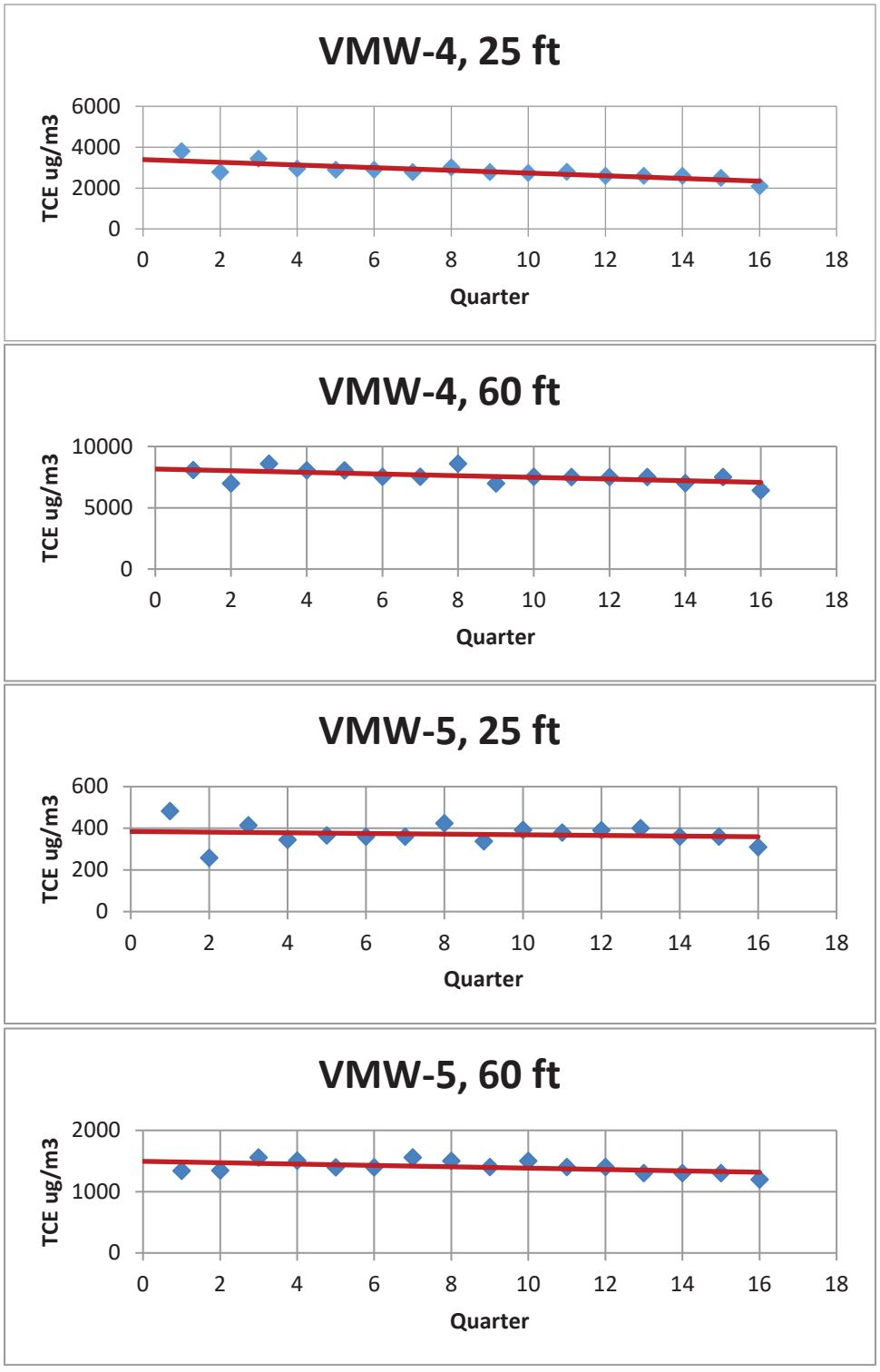

Figure 3. Data Plots for TA-63 TWF Soil Vapor Monitoring Wells Outside of the Permitted Unit

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SAMPLE COLLECTION LOGS

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Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231116 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ok	08/04/2021	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	ok	959	MEDIA:	BH	
PRS ID:	M	ok	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 / NA

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

SAMPLE COMMENTS: VMW-1

LOCATION COMMENTS: Summa #0925

FIELD PARAMETERS:

Sample Time M HH:MM

CH_4 = 0 % CO_2 = 14,800 ppm O_2 = 19.4 % VOC = 0.8 ppm

COLLECTED BY (PRINT): K. Reid, M. Shendo

RELINQUISHED BY (Printed Name) Daniel Scrambo (Signature)	**Date/Time** 08/4/2021 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature) Sheri Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231117 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ok	08/04/2021	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	1022	ok	MEDIA:	BH	
PRS ID:	ok		SAMPLE TECH CODE:	VOST	
LOCATION ID:	63-2010		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 / NA

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

SAMPLE COMMENTS: VMW-2

LOCATION COMMENTS: Summa # N2826

FIELD PARAMETERS:

Sample Time M HH:MM

CH_4 = 0 % CO_2 = 8.000 ppm O_2 = 20.6 % VOC = 0.8 ppm

COLLECTED BY (PRINT): K. Reed M. Shendo

RELINQUISHED BY (Printed Name) Daniel Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature) S. Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231118 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ok	08/04/2021	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		10:44	MEDIA:	BH	
PRS ID:	V	ok	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 / ~~NA~~

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

SAMPLE COMMENTS: VMW-3

LOCATION COMMENTS: Summa # 7643

FIELD PARAMETERS:

Sample Time M HH:MM

CH_4 = 0 % CO_2 = 6.400 ppm O_2 = 20.9 % VOC = 0.1 ppm

COLLECTED BY (PRINT): K.Read M.Shanda

RELINQUISHED BY (Printed Name) David Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature) S. Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231119 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ok	08/04/2021	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):		1131	MEDIA:	BH	
PRS ID:	↓	ok	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
N	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-4 Port 1

LOCATION COMMENTS: Summa # 30844

FIELD PARAMETERS:

Sample Time ~~N~~ HH:MM

CH_4 = 0 % CO_2 = 13,400 ppm O_2 = 20.8 % VOC = 0.8 ppm

COLLECTED BY (PRINT): K. Reid, M. Shando

RELINQUISHED BY (Printed Name) Daniel Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature) Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231120 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ok	08/04/2021	FIELD MATRIX:	GAS	ok
TIME COLLECTED (HH:MM):	↓	1147	MEDIA:	BH	↓
PRS ID:	↓	ok	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
M	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-4 Port 2

LOCATION COMMENTS: Summa # 22504

FIELD PARAMETERS:

Sample Time M HH:MM

CH_4 = 0 % CO_2 = 18,200 ppm O_2 = 20.6 % VOC = 2.1 ppm

COLLECTED BY (PRINT): K. Reid, M. Shendo

RELINQUISHED BY (Printed Name) Daniel Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature)	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231121 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ck	08/04/2021	FIELD MATRIX:	GAS	ck
TIME COLLECTED (HH:MM):		1215	MEDIA:	BH	
PRS ID:	↓	ck	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 / ~~NA~~

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

SAMPLE COMMENTS: VMW-5 Port 1

LOCATION COMMENTS: Summa # 34216

FIELD PARAMETERS:

Sample Time NA HH:MM

CH_4 = 0 % CO_2 = 39,400 ppm O_2 = 19.1 % VOC = 0.3 ppm

COLLECTED BY (PRINT): M. Shenck K. Reid

RELINQUISHED BY (Printed Name) Daniel Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature) S. Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231122 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ck	08/04/21	FIELD MATRIX:	GAS	ck
TIME COLLECTED (HH:MM):		1231	MEDIA:	BH	
PRS ID:	↓	ok	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 / (NA)

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

SAMPLE COMMENTS: ~~VAA5~~ VMW-5 Port 2
MS 8/4/21

LOCATION COMMENTS: Summa # 9553

FIELD PARAMETERS:

Sample Time WA HH:MM

CH_4 = 0 % CO_2 = 27,800 ppm O_2 = 20.5 % VOC = 0.6 ppm

COLLECTED BY (PRINT): K. Reid M. Shendo

RELINQUISHED BY (Printed Name) Daniel Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S Sherwood (Signature) S Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231123 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ck	08/04/2021	FIELD MATRIX:	GAS	ck
TIME COLLECTED (HH:MM):		1232	MEDIA:	BH	
PRS ID:		ck	SAMPLE TECH CODE:	VOST	
LOCATION ID:	UNK	63-243	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
NA	TO15	6 Liter Summa Canister	1	NONE	Y	6 Liter Summa

SAMPLE COMMENTS: VMW-5 QC for TWF63-21-231112

LOCATION COMMENTS: Summa # 33793

FIELD PARAMETERS:

Sample Time NA HH:MM

CH_4 = 0 % CO_2 = 27,800 ppm O_2 = 20.5 % VOC = 0.6 ppm

COLLECTED BY (PRINT): K. Reid, M. Shendo

RELINQUISHED BY (Printed Name) Daniel Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature) Sheri Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 13803 **EVENT NAME:** FY 2021 - 3rd Qtr. - Poregas Sampling - TA-63 - TWF - August

SAMPLE ID: TWF63-21-231124 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYYY)	ck	08/04/21	FIELD MATRIX:	GAS	ck
TIME COLLECTED (HH:MM):		1305	MEDIA:	DJ 8/4/21 ~~PH~~	Nitrogen
PRS ID:	↓	ck	SAMPLE TECH CODE:	VOST	ck
LOCATION ID:	63-2013	↓	FIELD PREP:	NA	↓
LOCATION TYPE:	AMS		FIELD QC TYPE:	FB	
TOP DEPTH:	NA		SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	↓	↓	EXCAVATED:		YES / NO / NA

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

SAMPLE COMMENTS: QC Sample of TWF63-21-231122

LOCATION COMMENTS: Summa # N1752

FIELD PARAMETERS:

Sample Time NA HH:MM

COLLECTED BY (PRINT): K. Reid M. Shendo

RELINQUISHED BY (Printed Name) Daniel Jaramillo (Signature)	**Date/Time** 8/4/21 13:20	**RECEIVED BY** (Printed Name) S. Sherwood (Signature) S. Sherwood	**Date/Time** 8/4/2021 13:20
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**