Quarterly Progress Report

Third Quarter 2020 Reporting Period

February 2021

FF/NN Landfill NPL Site
Ripon, Wisconsin

Prepared For:

FF/NN Landfill PRP Group
c/o Cooper Industries, LLC
1000 Eaton Boulevard
Cleveland, OH 44122

Prepared By:

TRC
150 N. Patrick Blvd., Suite 180
Brookfield, Wisconsin 53045

Prepared by:
Aaron Sobbe
Staff Engineer

Reviewed and Approved by:
Steve Sellwood, P.G.
Senior Hydrogeologist

Reviewed and Approved by:
Andrew Stehn, P.E.
Senior Project Engineer

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1.0 Introduction

In April 2019, TRC was retained by the FF/NN Landfill Potentially Responsible Party (PRP) Group (Group) to conduct operations and maintenance (O&M) and quarterly monitoring activities at the FF/NN Landfill NPL Site (Site), in Ripon, Wisconsin. This Quarterly Progress Report presents site activities during the Third Quarter (Q3) of 2020 (Reporting Period July 1 – September 30, 2020) and is intended to fulfill applicable portions of reporting requirements specified in the Revised Groundwater Monitoring Program (GMP) as outlined in the April 18, 2013 conditional approval letter (as amended on June 8, 2017) (WDNR, 2013; 2017).

2.0 Quarterly Changes and Important Dates

This section describes important dates tasks were performed, changes in routine tasks, and exceptions to the GMP made in Q3 2020. No changes nor exceptions were made in Q3 2020 to monitoring, site activities, or to the GMP.

2.1 Dates of Importance

The following dates detail sampling events, deliverables, correspondence, and meetings:

- July 13 and 14 – Quarter 3 2020 groundwater sampling event in accordance with the GMP (WDNR, 2013; 2017).
- July 17, 2020 – GEMS transmittal, Q2 2020 monitoring data.
- September 23, 2020 – Gas extraction system modifications and site regrading work.

3.0 Summary of Observation and Monitoring Data

3.1 Water Elevation Measurements

In accordance with the GMP (WDNR 2013; 2017), groundwater elevations were measured at 15 monitoring wells/piezometers associated with the Site on July 13 and 14, 2020. Field forms from the Q3 2020 measurement event are included in Appendix A and elevations are summarized in Table 1. Groundwater monitoring wells associated with the FF/NN Landfill site are grouped into four hydrostratigraphic units (Layer 1, Layer 2, Layer 3, and Layer 4) based on well screen elevations. Layer designations for the wells monitored during Q3 are included in Table 1.

3.1.1 Layer 4 Groundwater Elevations

The estimated groundwater flow direction in Layer 4 based on data collected in Q3 2020 is to the southeast as shown on Figure 1. The City of Ripon occasionally pumps from Municipal Well #9, which influences the groundwater flow direction in Layer 4. When Well #9 is not operational, groundwater flow is toward the west or southwest. When Well #9 is operational, groundwater flow is toward the southeast. Conversations with Mr. Chris Liveris, Utility Manager for the City of Ripon, confirmed that Well #9 was in operation during the Q3 2020 sampling event. The southeasterly flow direction observed in Layer 4 during Q3 2020 is indicative of flow conditions when Well #9 is operational.

3.2 Groundwater Quality Monitoring

This subsection includes an evaluation of the groundwater quality for the Q3 2020 reporting period.

3.2.1 Third Quarter 2020

Groundwater samples were collected by TRC using low-flow sampling methods from 15 monitoring wells/piezometers on July 13 and 14, 2020. Groundwater samples were analyzed by CT Laboratories for volatile organic compounds (VOCs) (EPA Method 8260C), nitrate + nitrite as nitrogen (EPA 353.2), sulfate (EPA 9056A), and manganese (EPA 6010C). Field parameters were measured at all monitoring wells including dissolved oxygen (DO), oxygen-reduction potential (ORP), temperature, pH, and specific conductance. Field parameters were measured during sampling using an In-Situ Smart Troll MP meter and flow-through cell. Field forms are included in Appendix A and the laboratory analytical report is included in Appendix B. Groundwater results exceeding Wisconsin Administrative Code (WAC) Chapter NR 140 Enforcement Standards (ES) and Preventive Action Limits (PAL) are included in Table 2. A summary of results for all detected parameters is provided in Table 3.

3.2.1.1 Volatile Organic Compound Parameters

Chlorinated VOCs (CVOCs) are the contaminants of concern (COC) at the Site, including trichloroethene (TCE) and its dechlorination products; cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC). In the 15 wells sampled during Q3 2020, VC was the only COC detected at concentrations above the ES and TCE was detected in samples from two wells at concentrations above the PAL. The following summarizes the distribution of VOCs detected in each hydrostratigraphic unit:

- Two monitoring wells, MW-103 and MW-112, were sampled in Layer 1. Consistent with the Q2 2020 sampling event, TCE concentrations in the samples from these monitoring wells exceeded the PAL. VC has previously been detected in samples from MW-112 at concentrations exceeding the PAL, however VC was not detected in the sample collected from MW-112 in Q3 2020.

- One well, P-103, was sampled in Layer 2. Cis-1,2-DCE was the only VOC detected in the sample collected from P-103 during Q3 2020 and the concentration was reported below the PAL. Historically samples from this well have contained VC above the PAL, but VC was not detected in the sample collected during Q3 2020.

- Nine monitoring wells were sampled in Layer 3. VC exceeded the ES in samples collected from wells P-103D, P-111D, P-114, P-115, and P-117. In recent years, VC has been detected above the PAL in samples collected from monitoring well P-118, however VC was not detected in the sample collected during Q3 2020. In addition, VC was not detected in the sample collected from MW-3B, which is consistent with Q2 2020.

- Three monitoring wells were sampled in Layer 4. VC exceeded the ES in the sample collected from P-107D. This detection is within the historical range of concentrations detected in samples from this well.

- Other VOC detections were at concentrations below their respective PALs and are summarized in Table 3.

- Trip blanks and method blanks were analyzed during the Q3 2020 sampling event and results indicated:

  - 1,4-dioxane and methylene chloride were detected in the trip blank, however were not detected in any of the samples.

  - Chloromethane and carbon disulfide were detected in the method blank. These detections are likely due to laboratory contamination. Based on these detections, all chloromethane and carbon disulfide detections at monitoring wells were flagged with the "u" qualifier indicating the analyte concentration was non-detect.

3.3 Landfill Gas Extraction System Operations

The landfill gas extraction system has been operational since 2005 (GeoTrans, 2005). Landfill gas is extracted from gas vent GV-6 and the three deeper leachate collection wells (LC-1, LC-2, and LC-3). On September 5, 2019 GV-4 was reconnected to the system. The other gas vents have remained closed to prevent oxygen levels from increasing above 5%. This subsection includes a discussion of system repairs and an evaluation of landfill gas monitoring results at the Site during Q3 2020. Table 4 summarizes the results of landfill gas monitoring during this reporting period.

3.3.1 Landfill Gas Extraction System Troubleshooting and Repairs

3.3.1.1 System Repairs

During Q3 2020 the gas extraction system (the "GES") was only shutdown on September 23 to make modifications to the system. An intake valve was added to the GES blower to help regulate the vacuum on the blower system. The valve component consists of a 2-inch gate valve and filter silencer (Solberg FS-230P-200 product details in Appendix C).The valve and filter silencer were installed just upgradient of the trailer mounted knockout tank. Photos of the added component are included in Appendix D. This component in conjunction with the gate valves previously installed on each extraction header provides the ability to adjust the vacuum on the system. These items allow for the operator to make adjustments as needed to balance gas concentrations and keep the blower system running full time.

3.3.2 Landfill Gas Measurements

Sections below discuss observations noted during landfill gas monitoring and subsequent adjustments made to the system to improve treatment performance.

3.3.2.1 Gas Extraction Well Monitoring

TRC or the City of Ripon personnel were onsite on a biweekly basis while the system was operating between July 9 and September 25, 2020 to inspect and monitor the landfill gas extraction system. Gas measurements (% oxygen, methane, and carbon dioxide) and vacuum readings were periodically collected from the five gas extraction points (LC-1, LC-2, LC-3, GV-4,

and GV-6) when the system was in operation. In addition, gas measurements were collected from gas probes GP-1 and GP-2, the blower exhaust, and ambient air (background) for comparison purposes. TRC adjusted valve positioning on the extraction well headers and at the installed blower intake valve to optimize the landfill gas extraction system, as needed. Repositioning was based on measured methane and oxygen concentrations and vacuum readings recorded during the monitoring events. A summary of the monitoring data from each visit is included in Table 4.

3.3.2.2 Gas Probe Monitoring

TRC was onsite on July 14, 2020 for the quarterly site visit. Gas measurements were collected (% oxygen, methane, and carbon dioxide) from the 10 existing gas probes (GP) including GP-1 through GP-7 and GP-10 through GP-12 located surrounding the landfill. As noted above, gas probes GP-1 and GP-2 were also monitored during the biweekly site visit and GP-5 and GP-12 were monitored periodically depending on GP-1 gas concentrations. Overall, during Q3 2020, methane was only observed in GP-1 in August 2020 at a very low concentration (0.1 % to 0.6% methane by volume). In review of historical operations, GP-1 has shown low detections of methane in late summer to early fall. No other monitoring rounds detected methane at any of the offsite gas probes. Based on the results of the gas probe monitoring during Q3 2020, current system operations are controlling offsite methane migration.

3.4 Site Regrading

The landfill cap constructed at the FF/NN Landfill includes a sand drainage layer, which is above the compacted clay and geomembrane components, that conveys surface water that accumulates on top of the geomembrane to various outlet pipes located along the perimeter of the landfill. During recent site inspections, a wet area was observed just southeast of the landfill limits. One of the drainage layer outlet pipes was identified as the source of the water that was pooling in a low spot. This area is located southeast of the landfill and not within the footprint of the capped waste. The wet area did not affect the integrity of the landfill cap. On September 23, 2020, this area was regraded to promote drainage and reduce water from pooling at this outlet point. Photos have been included in Appendix D.

4.0 References

GeoTrans. 2005. Pilot Test for Landfill Gas Extraction System. FF/NN Landfill, Ripon, Wisconsin. June 29, 2005.

Tetra Tech GEO. 2011. Institutional Control Study/Plan, FF/NN Landfill NPL Site (Ripon City Landfill), Ripon Wisconsin. February 24, 2011.

WDNR. 2013. Conditional Approval of Revised Groundwater Monitoring Program for the Ripon HWY FF/NN Landfill. Ripon HWY FF/NN Landfill, License #467, Ripon, WI, WDNR BRRTS #02-20-000915. April 18, 2013.

WDNR. 2017. Proposed Second Replacement Sentinel Monitoring Well Work Plan Approval for Ripon HWY FF/NN Landfill. License #467, Ripon, WI, WDNR BRRTS #02-20-000915. June 8, 2017.

Table 1: Water Levels
FF/NN Landfill
Ripon, Wisconsin
Third Quarter 2020

Well Name	GW Layer	TOC Elevation (Feet AMSL)	Q3 Depth to Water (Feet)	Q3 GW Elevation (Feet AMSL)
			7/13/2020	7/13/2020
MW-103	1	872.30	49.03	823.27
P-103	2	872.74	47.88	824.86
P-103D	3	872.91	49.10	823.81
P-107D	4	871.90	51.10	820.80
P-111D	3	855.56	34.14	821.42
MW-112	1	874.70	52.38	822.32
P-113A	4	833.16	12.63	820.53
P-113B	3	833.16	12.39	820.77
P-114	3	839.36	18.82	820.54
P-115 (WIESE)	3	842.67	22.12	820.55
P-116 (HADEL)	3	845.86	25.79	820.07
P-117	3	833.96	14.71	819.25
P-118	3	826.74	7.59	819.15
MW-003A	4	850.60	30.35	820.25
MW-003B	3	850.89	29.23	821.66

Notes:
GW - Groundwater
TOC - Top of Casing
AMSL - Above Mean Sea Level
NM = Well not measured

Created by: P. Popp 8/4/2020
Checked by: A. Sobbe 12/18/2020

Table 2: Parameters That Exceed Current NR140 Standards
FF/NN Landfill
Ripon, Wisconsin
Third Quarter 2020

Chemical Parameter	Units	NR140 PAL	NR140 ES	Well ID	Date	Result	Data Flags	Exceedance
1,4-Dioxane	µg/L	0.3	3	TRIP BLANK	7/14/2020	**13**	J	ES
Manganese, dissolved	µg/L	25	50	MW-003A	7/13/2020	**413**		ES
				MW-003B	7/13/2020	**76.7**		ES
				MW-112	7/14/2020	**358**		ES
				P-103	7/14/2020	**85.8**		ES
				P-103D	7/14/2020	**78.8**		ES
				P-107D	7/14/2020	**186**		ES
				P-111D	7/13/2020	*30.3*		PAL
				P-113B	7/13/2020	*34.5*		PAL
				P-114	7/13/2020	**61.8**		ES
				P-114 DUP	7/13/2020	**61.6**		ES
				P-115 (WIESE)	7/13/2020	**107**		ES
				P-116 (HADEL)	7/13/2020	**72.2**		ES
				P-117	7/13/2020	**198**		ES
				P-118	7/13/2020	**63.1**		ES
Methylene chloride	µg/L	0.5	5	TRIP BLANK	7/14/2020	*1.2*	j+	PAL
Nitrogen, nitrate + nitrite, total	mg/L	2	10	MW-103	7/14/2020	**19**	j-	ES
Trichloroethene	µg/L	0.5	5	MW-103	7/14/2020	*1.5*		PAL
				MW-112	7/14/2020	*0.62*		PAL
Vinyl chloride	µg/L	0.02	0.2	P-103D	7/14/2020	**0.3**		ES
				P-107D	7/14/2020	**5.8**		ES
				P-111D	7/13/2020	**3.7**		ES
				P-114	7/13/2020	**7.7**		ES
				P-114 DUP	7/13/2020	**8**		ES
				P-115 (WIESE)	7/13/2020	**0.85**		ES
				P-117	7/13/2020	**1.4**		ES

Notes:

Created by: P. Popp 8/4/2020

Checked by: A. Sobbe 12/18/2020

1. µg/l = micrograms per liter (ppb).
2. mg/L = milligrams per liter (ppm).
2. NR 140 ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard.
3. NR 140 PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit.
4. **BOLD** = Exceedence (or potential exceedence if J- or B-flagged) of the NR 140, WAC ES.
5. *Italics* = Exceedence (or potential exceedence if J- or B-flagged) of the NR 140, WAC PAL.
6. J = Reported concentration is estimated, between the Limit of Detection (LOD) and the Limit Of Quantitation (LOQ).
7. j+ = Reported concentration is estimated with a possible high bias.
8. j- = Reported concentration is estimated with a possible low bias.

Table 3: Detected Parameters in Groundwater
FF/NN Landfill
Ripon, Wisconsin
Third Quarter 2020

Parameter	Units	NR140 ES	NR 140 PAL	MW-003A 7/13/2020 445412	MW-003B 7/13/2020 445413	MW-103 7/14/2020 445422	MW-112 7/14/2020 445419	P-103 7/14/2020 445421	P-103D 7/14/2020 445420	P-107D 7/14/2020 445418	P-111D 7/13/2020 445416	P-113A 7/13/2020 445408	P-113B 7/13/2020 445402	P-114 7/13/2020 445410	P-114 DUP 7/13/2020 445417	P-115 (Wiese) 7/13/2020 445411	P-116 (Hadel) 7/13/2020 445409	P-117 7/13/2020 445414	P-118 7/13/2020 445415	Trip Blank 7/14/2020 445425
Field Parameters																				
Depth to water	Feet			30.35	29.23	49.03	52.38	47.88	49.10	51.10	34.14	12.63	12.39	18.82		22.12	25.79	14.71	7.59	
Water elevation	Feet			820.25	821.66	823.27	822.32	824.86	823.81	820.8	821.42	820.53	820.77	820.54		820.55	820.07	819.25	819.15	
pH, field	SU			7.41	7.39	7.11	6.94	7.02	6.97	6.56	7.34	6.67	6.37	7.27		7.46	7.31	7.32	7.37	
Conductance, specific	µmhos/cm			627.0	769.5	873.8	749.7	748.0	790.4	623.12	958.0	619.6	747.3	874.8		706.4	588.3	840.9	656.5	
ORP	mV			-9.8	-63.7	-12.6	94.8	-2.7	18.0	82.3	-67.4	8.3	8.70	-15.80		-37.6	16.3	-36.9	-39.7	
Oxygen, dissolved	mg/L			0.16 j	0.13 j	5.98 j	3.67 j	0.52 j	0.2 j	1.67 j	0.60 j	0.39 j	0.19 j	0.13 j		0.14 j	0.32 j	0.20 j	0.23 j	
Turbidity, field				NONE	NONE	SLIGHT	SLIGHT	NONE	NONE	NONE	NONE	NONE	NONE	NONE		SLIGHT	VERY	NONE	NONE	
Temperature	Deg C			11.52	11.79	15.67	14.27	12.72	12.22	11.20	12.42	12.03	12.35	11.41		11.72	12.81	11.47	12.17	
Color, field				NONE	NONE	NONE	YES	NONE	NONE	NONE	NONE	NONE	NONE	NONE		NONE	RUST	NONE	NONE	
Odor, field				NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	LT SULF		LT SULF	NONE	NONE	NONE	
Inorganic Analytes																				
Nitrogen, nitrate + nitrite, total	mg/L	10	2	< 0.057 j-	< 0.057 j-	**19 j-**	1.5 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	< 0.057 j-	
Sulfate, total	mg/L	250	125	21	58	120	64	65	73	30	59	12	74	66	66	37	13	58	25	
Manganese, dissolved	µg/L	50	25	**413**	**76.7**	< 2.2	**358**	**85.8**	**78.8**	**186**	*30.3*	18.5	*34.5*	**61.8**	**61.6**	**107**	**72.2**	**198**	**63.1**	
Organic Analytes																				
1,4-Dioxane	µg/L	3	0.3	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	< 7	**13 J**
Benzene	µg/L	5	0.5	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	0.029 J	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	0.022 J	< 0.019	< 0.019
Carbon disulfide	µg/L	1000	200	0.025 JBu	0.043 JBu	< 0.014	< 0.014	< 0.014	< 0.014	0.024 Ju	0.021 JBu	0.031 Ju	0.019 JBu	0.019 JBu	0.018 Ju	0.032 JBu	0.018 Ju	0.034 JBu	< 0.014	0.021 J
Chlorobenzene	µg/L	100	20	< 0.015	< 0.015	< 0.015	0.068	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015
Chloroethane	µg/L	400	80	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	2.6	1.6	< 0.023	< 0.023	0.34	0.54	< 0.023	< 0.023	0.72	< 0.023	< 0.023
Chloromethane	µg/L	30	3	0.046 JBu	0.037 JBu	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.037 Ju	0.033 JBu	0.044 JBu	< 0.03	0.041 JBu	< 0.03	0.04 JBu	0.052 JBu	0.037 J
cis-1,2-Dichloroethene	µg/L	70	7	< 0.027	< 0.027	0.24	0.15	0.043 J	0.32	1.7	3.1	< 0.027	< 0.027	2	2.1	0.19	< 0.027	0.78	< 0.027	< 0.027
Dichlorodifluoromethane	µg/L	1000	200	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.067 J	0.058 J	< 0.03	< 0.03	0.04 J	0.067 J	< 0.03	< 0.03	0.041 J	< 0.03	< 0.03
Methylene chloride	µg/L	5	0.5	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	*1.2 j+*
Tetrachloroethene	µg/L	5	0.5	< 0.023	< 0.023	0.24	0.24	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023
Toluene	µg/L	800	160	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	0.023 J	< 0.017
Trichloroethene	µg/L	5	0.5	< 0.025	< 0.025	*1.5*	*0.62*	< 0.025	0.07 J	0.098	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.063 J	< 0.025	< 0.025
Vinyl chloride	µg/L	0.2	0.02	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013	**0.3**	**5.8**	**3.7**	< 0.013	< 0.013	**7.7**	**8**	**0.85**	< 0.013	**1.4**	< 0.013	< 0.013

Notes:

1. µg/l = micrograms per liter (ppb).
2. SU = Standard Units
3. µmhos/cm = microSiemens per centimeter
4. Deg C = Degrees Celsius
5. mV = millivolts
6. mg/L = milligrams per liter (ppm).
7. ORP - Oxidation Reduction Potential
8. Metals analyzed using EPA Method 6010.
9. NR 140 ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard.
10. NR 140 PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit.
11. **BOLD** = Exceedence (or potential exceedence if J- or B-flagged) of the NR 140, WAC ES.
12. *Italics* = Exceedence (or potential exceedence if J- or B-flagged) of the NR 140, WAC PAL.
13. J = Reported concentration is estimated, between the Limit of Detection (LOD) and the Limit Of Quantitation (LOQ).
14. j+ = Reported concentration is estimated with a possible high bias.
15. j- = Reported concentration is estimated with a possible low bias.
16. j = DO cap on instrument expired, could not calibrate.
17. B = Analyte detected in the associated Method Blank.
18. u = Result is noted in an associated blank and the concentration was flagged during data review as non-detect.

Created by: P. Popp 8/4/2020
Checked by: A. Sobbe 12/18/2020

Table 4: Landfill Gas Field Parameter Monitoring Results
FF/NN Landfill
Ripon, Wisconsin,
Third Quarter 2020

Monitoring Point	Time	Date	CH_4 (%)	CO_2 (%)	O_2 (%)	N (%)	Comments
Background	13:00	7/9/2020	0.0	0.0	20.9	79.1	
	15:03	7/24/2020	0.0	0.0	21.0	79.0	
	13:24	8/7/2020	0.0	0.0	20.9	79.1	
	11:27	8/10/2020	0.0	0.0	20.9	79.1	
	14:01	8/19/2020	0.0	0.0	20.9	79.1	
	14:02	8/21/2020	0.0	0.0	20.9	79.1	
	13:38	9/11/2020	0.0	0.0	20.9	79.1	
	13:10	9/25/2020	0.0	0.0	20.9	79.1	
LC-1	-	7/9/2020	-	-	-	-	RKI Eagle Instrument stopped working, reading could not be collected.
	15:33	7/14/2020	2.2	16.0	4.9	76.9	
	15:27	7/24/2020	3.2	18.6	1.5	76.7	
	13:40	8/7/2020	2.3	18.6	5.2	74.0	
	11:51	8/10/2020	2.6	15.0	5.4	77.0	
	14:19	8/19/2020	2.5	15.2	5.6	76.7	
	13:56	9/11/2020	2.5	14.6	6.0	77.0	
	7:54	9/23/2020	3.1	16.7	4.4	75.8	Intake valve added to blower to regulate overall system vacuum.
	--	9/23/2020	3.5	16.8	3.5	76.2	Reading collected after system modification made.
	13:29	9/25/2020	3.4	12.4	6.2	78.0	
LC-2	-	7/9/2020	-	-	-	-	RKI Eagle Instrument stopped working, reading could not be collected.
	15:17	7/14/2020	21.9	23.5	0.8	53.8	
	15:37	7/24/2020	22.1	23.9	0.6	53.4	
	13:48	8/7/2020	19.0	28.0	1.3	51.7	
	11:59	8/10/2020	19.0	23.8	1.4	55.8	
	14:25	8/19/2020	18.5	23.8	1.6	56.1	
	14:03	9/11/2020	19.0	23.4	1.3	56.3	
	7:43	9/23/2020	19.9	23.9	0.9	55.3	Intake valve added to blower to regulate overall system vacuum.
	--	9/23/2020	22.0	24.4	0.5	53.1	Reading collected after system modification made.
	13:41	9/25/2020	19.5	23.2	1.2	56.1	
LC-3	-	7/9/2020	-	-	-	-	RKI Eagle Instrument stopped working, reading could not be collected.
	15:30	7/14/2020	9.8	18.9	2.2	69.1	
	15:34	7/24/2020	11.0	18.8	2.7	67.5	
	13:46	8/7/2020	7.0	20.6	3.3	69.1	
	11:56	8/10/2020	7.0	17.2	3.7	72.1	
	14:23	8/19/2020	6.5	16.8	3.7	73.0	
	14:01	9/11/2020	6.5	16.2	4.0	73.3	
	7:51	9/23/2020	7.9	17.7	3.2	71.2	Intake valve added to blower to regulate overall system vacuum.
	--	9/23/2020	8.1	17.5	3.3	71.1	Reading collected after system modification made.
	13:36	9/25/2020	8.5	16.4	3.7	71.4	
GV-4	-	7/9/2020	-	-	-	-	RKI Eagle Instrument stopped working, reading could not be collected.
	15:41	7/14/2020	0.9	8.0	12.3	78.9	
	15:24	7/24/2020	0.2	7.1	13.6	79.1	
	13:38	8/7/2020	0.1	6.0	14.7	79.2	
	11:48	8/10/2020	0.2	5.4	14.6	79.9	
	14:17	8/19/2020	0.3	6.0	13.8	79.9	
	13:54	9/11/2020	0.2	5.6	14.4	79.8	
	7:57	9/23/2020	0.2	6.3	14.5	79.0	Intake valve added to blower to regulate overall system vacuum.
	--	9/23/2020	0.4	8.2	11.6	79.8	Reading collected after system modification made.
	13:27	9/25/2020	0.8	7.6	10.9	80.8	

Table 4: Landfill Gas Field Parameter Monitoring Results
FF/NN Landfill
Ripon, Wisconsin,
Third Quarter 2020

Monitoring Point	Time	Date	CH_4 (%)	CO_2 (%)	O_2 (%)	N (%)	Comments
GV-6	-	7/9/2020	-	-	-	-	RKI Eagle Instrument stopped working, reading could not be collected.
	15:25	7/14/2020	2.7	9.9	10.8	76.7	
	15:31	7/24/2020	2.7	10.8	10.1	76.4	
	13:43	8/7/2020	2.2	10.4	11.2	76.3	
	11:53	8/10/2020	2.2	8.8	11.6	77.5	
	14:20	8/19/2020	2.4	8.8	11.4	77.5	
	13:58	9/11/2020	2.7	9.6	10.5	77.2	
	7:46	9/23/2020	2.0	9.8	11.5	76.7	Intake valve added to blower to regulate overall system vacuum.
	--	9/23/2020	2.4	8.5	12.8	76.3	Reading collected after system modification made.
	13:31	9/25/2020	3.1	9.8	9.7	77.4	
GP-1	13:02	7/9/2020	0.0	6.8	12.0	81.2	
	14:19	7/14/2020	0.0	10.1	5.1	84.8	
	15:06	7/24/2020	0.0	9.4	8.0	82.6	
	13:24	8/7/2020	0.5	11.0	5.6	82.9	
	14:25	8/7/2020	0.4	11.0	5.3	83.4	
	11:34	8/10/2020	0.0	10.4	5.3	84.3	
	12:36	8/10/2020	0.0	10.8	5.0	84.2	
	14:03	8/19/2020	0.5	9.2	6.5	83.8	
	15:05	8/19/2020	0.6	12.4	2.4	84.6	
	14:05	8/21/2020	0.1	10.6	7.1	82.2	
	14:39	8/31/2020	0.0	7.6	6.8	85.6	
	13:40	9/11/2020	0.0	7.6	7.8	84.6	
	14:42	9/11/2020	0.0	8.2	7.1	84.7	
	7:39	9/23/2020	0.0	8.7	8.5	82.8	Intake valve added to blower to regulate overall system vacuum.
	--	9/23/2020	0.0	9.3	7.5	83.2	Reading collected after system modification made.
	13:11	9/25/2020	0.0	9	6.6	84.4	
	14:12	9/25/2020	0.0	8.6	6.6	84.8	
GP-2	-	7/9/2020	-	-	-	-	RKI Eagle Instrument stopped working, reading could not be collected.
	14:44	7/14/2020	0.0	0.3	19.8	79.9	
	15:17	7/24/2020	0.0	0.1	20.0	79.9	
	13:35	8/7/2020	0.0	0.0	20.9	79.1	
	11:45	8/10/2020	0.0	0.6	20.3	79.1	
	14:13	8/19/2020	0.0	3.2	16.2	80.6	
	13:50	9/11/2020	0.0	3.6	14.9	81.5	
	8:09	9/23/2020	0.0	0.1	20.9	79.0	Intake valve added to blower to regulate overall system vacuum.
	--	9/23/2020	0.0	2.9	16.3	80.8	Reading collected after system modification made.
	13:23	9/25/2020	0.0	3.0	16.0	81.0	
GP-3	15:02	7/14/2020	0.0	0.1	20.6	79.3	
GP-4	15:05	7/14/2020	0.0	1.5	18.8	79.7	
GP-5	14:23	7/14/2020	0.0	7.1	12.2	80.7	
	11:31	8/10/2020	0.0	6.2	14.8	79.0	
	14:07	8/21/2020	0.0	4.4	17.0	78.6	
	14:41	8/31/2020	0.0	4.8	14.4	80.8	
	14:08	9/11/2020	0.0	7.8	11.8	80.4	
	8:25	9/23/2020	0.0	8.2	12.7	79.1	
GP-6	14:57	7/14/2020	0.0	1.3	18.6	80.1	
GP-7	14:54	7/14/2020	0.0	0.6	19.6	79.8	
GP-10	14:11	7/14/2020	0.0	4.3	12.8	82.9	
	8:06	9/23/2020	0.0	6.2	11.5	82.3	
GP-11	14:39	7/14/2020	0.0	3.1	17.3	79.6	
	8:03	9/23/2020	0.0	2.7	18.9	78.4	
GP-12	14:30	7/14/2020	0.0	1.6	18.3	80.1	
	11:28	8/10/2020	0.0	1.8	19.2	79.0	
	14:02	8/21/2020	0.0	1.8	20.1	78.1	
	14:34	8/31/2020	0.0	1.6	18.8	79.6	
	14:10	9/11/2020	0.0	2.2	18.5	79.3	
	8:29	9/23/2020	0.0	2.3	18.6	79.1	

Table 4: Landfill Gas Field Parameter Monitoring Results
FF/NN Landfill
Ripon, Wisconsin,
Third Quarter 2020

Monitoring Point	Time	Date	CH_4 (%)	CO_2 (%)	O_2 (%)	N (%)	Comments
Exhaust	13:04	7/9/2020	2.2	8.0	12.0	77.9	
	14:16	7/14/2020	2.3	9.3	11.2	77.3	
	15:11	7/24/2020	3.1	10.9	10.5	75.5	
	13:29	8/7/2020	2.5	10.4	11.4	75.8	
	11:39	8/10/2020	2.4	8.6	11.6	77.4	
	14:07	8/19/2020	2.5	8.8	11.6	77.1	
	13:44	9/11/2020	2.9	9.4	10.9	76.8	
	7:37	9/23/2020	2.4	9.7	11.6	76.3	
	13:16	9/25/2020	1.6	4.2	15.9	78.4	

Notes:

Updated By A. Stehn 10/29/2020

Checked by A. Sobbe 10/30/2020

-- = Data not recorded

LEL = Lower Explosive Limit

CH_4 = Methane

CO_2 = Carbon Dioxide

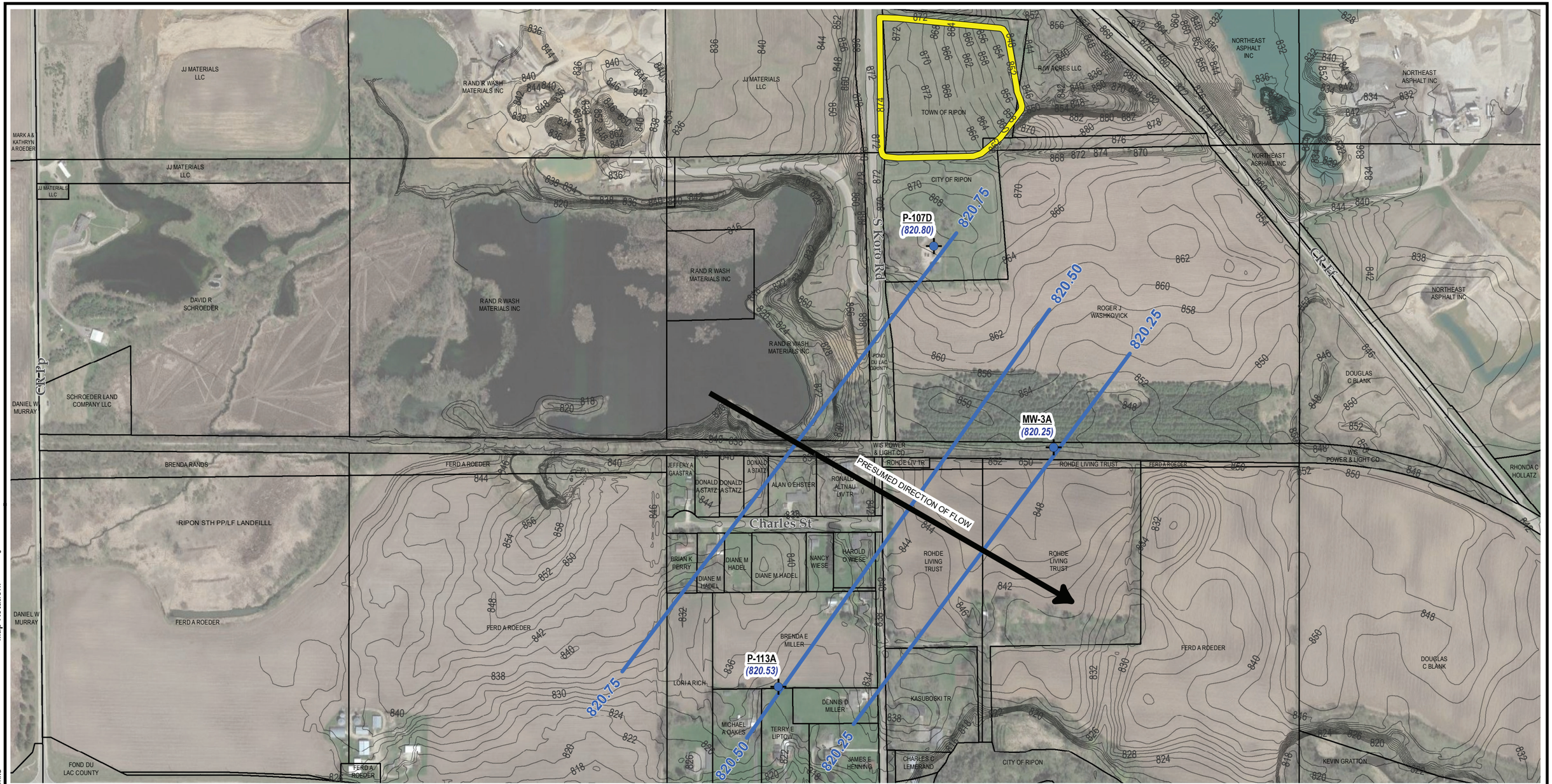
O_2 = Oxygen

N = Nitrogen

% = Percent

Ph = gas reading collected from the extraction header

Pw = gas reading collected from the extraction well



LEGEND

- **MW-112** *(821.71)* — MONITORING WELL, PIEZOMETER LOCATION WITH GROUNDWATER ELEVATION
- PRESUMED GROUNDWATER FLOW DIRECTION
- GROUNDWATER ELEVATION CONTOUR
- TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL 2')
- TAX PARCEL
- RIPON FF/NN LANDFILL

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO., (4/21/2017).

0 200 400 Feet

1 " = 400 '

1:4,800

PROJECT:
FF/NN LANDFILL NPL SITE
RIPON, WI
THIRD QUARTER 2020 REPORTING

TITLE:
GROUNDWATER ELEVATION MAP
QUARTER 3 LAYER 4 WELLS
JULY 13, 2020

DRAWN BY:	A. ADAIR	PROJ. NO.:	378957
CHECKED BY:	A. SOBBE		
APPROVED BY:	A. STEHN		**FIGURE 1**
DATE:	FEBRUARY 2021		

TRC
150 North Patrick Blvd., Suite 180
Brookfield, WI 53045
Phone: 262.879.1212
www.trcsolutions.com

FILE NO.: 2020_378957_Q3_Layer4.mxd

Plot Date: 2/2/2021, 13:02:11 PM by AADAIR -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\Ripon\2020_378957_Q3_Layer4.mxd
Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)
Map Rotation: 0

TRC - GIS

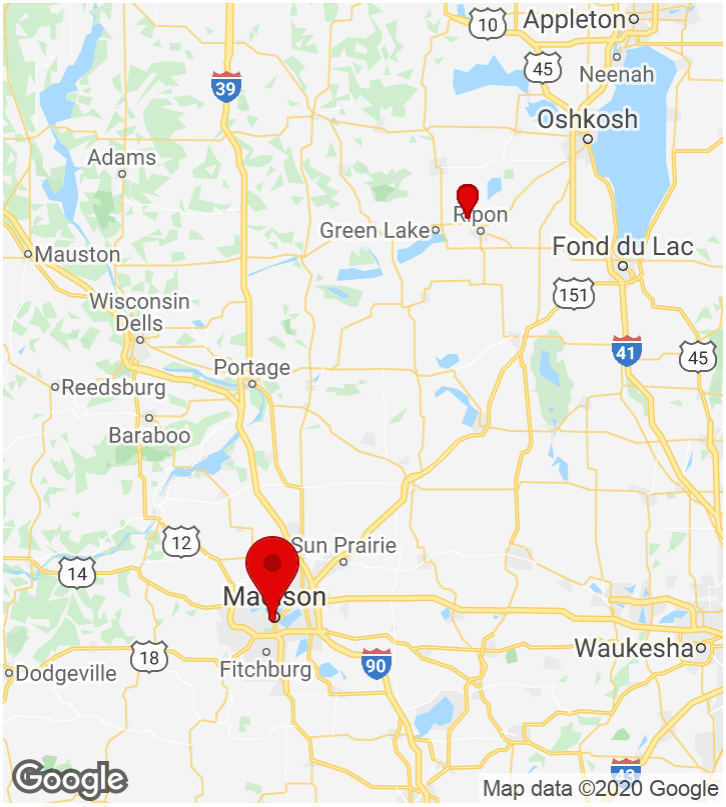
Appendix A: Site Inspection Reports

FF NN Landfill Field Notes

App for field documentation of landfill gas monitoring, monitoring well gauging, and weekly check-ins.

July 14, 2020, TRC, John Roelke, Gas Extraction System Monitoring, Gas Probe Monitoring, Monitoring Well Gauging

7/22/2020, 5:13:12 PM UTC



CREATED

7/9/2020, 10:11:35 PM UTC
by Lydia Auner

UPDATED

7/22/2020, 5:13:12 PM UTC
by John Roelke

STATUS

Complete

LOCATION

43.063418, -89.407674

PROJECT

No Project

ASSIGNED TO

No Assignment

Date	July 14, 2020
Personnel Names	John Roelke
Organization	TRC
Field Activities	Gas Extraction System Monitoring, Gas Probe Monitoring, Monitoring Well Gauging

Environmental Conditions

Weather	Sunny
Temperature	80
Temperature Units	°F
Ground Conditions	dry

Barometric Data

Barometric Pressure	29.62
Barometric Pressure Units	in Hg
Barometric Pressure Trend	falling

Gas Monitoring

Gas Monitoring Start Time	14:10
Is GES operating upon arrival?	Yes

Instrument Info

Gas/Instrument Type	GEM 2000
Serial Number	11668
Date Last Calibrated	July 14, 2020
Time Last Calibrated	13:45
Calibration Method	standard calibration gases
Bump check performed?	No
Bump Check Date	
Bump Check Time	
Pressure Instrument Type	Dwyer Manometer

Knockout Tank

Knockout Tank Water Level (in)	1.31
Water removed from knockout tank?	No

Volume of Water Removed from Knockout Tank (gal)	

Gas Monitoring Points

Gas Monitoring Point (23 Items)

Gas Monitoring Point - 1. GP-10, 14:11

Gas Monitoring Point ID	GP-10
Gas Monitoring Date	July 14, 2020
Time	14:11
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	4.3
Oxygen (% by vol.)	12.8
Comment	

Gas Monitoring Point - 2. Blower Inlet, 14:13

Gas Monitoring Point ID	Blower Inlet
Gas Monitoring Date	July 14, 2020
Time	14:13
Pressure (in. H2O)	-32.07
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	1.6
Carbon Dioxide (% by vol.)	6.9
Oxygen (% by vol.)	13.3
Comment	

Gas Monitoring Point - 3. Exhaust, 14:16

Gas Monitoring Point ID	Exhaust
Gas Monitoring Date	July 14, 2020
Time	14:16
Pressure (in. H2O)	-0.27
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	45
Carbon Dioxide (% by vol.)	9.3
Oxygen (% by vol.)	11.2
Comment	

Gas Monitoring Point - 4. GP-1, 14:19

Gas Monitoring Point ID	GP-1
Gas Monitoring Date	July 14, 2020
Time	14:19
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	10.1
Oxygen (% by vol.)	5.1
Comment	

Gas Monitoring Point - 5. GP-5, 14:23

Gas Monitoring Point ID	GP-5
Gas Monitoring Date	July 14, 2020
Time	14:23
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	7.1
Oxygen (% by vol.)	12.2
Comment	

Gas Monitoring Point - 6. GP-12, 14:30

Gas Monitoring Point ID	GP-12
Gas Monitoring Date	July 14, 2020
Time	14:30
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	1.6
Oxygen (% by vol.)	18.3
Comment	

Gas Monitoring Point - 7. GP-11, 14:39

Gas Monitoring Point ID	GP-11
Gas Monitoring Date	July 14, 2020
Time	14:39
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	3.1
Oxygen (% by vol.)	17.3
Comment	

Gas Monitoring Point - 8. GP-2, 14:44

Gas Monitoring Point ID	GP-2
Gas Monitoring Date	July 14, 2020
Time	14:44
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	0.3
Oxygen (% by vol.)	19.8

Comment	

Gas Monitoring Point - 9. GP-7, 14:54

Gas Monitoring Point ID	GP-7
Gas Monitoring Date	July 14, 2020
Time	14:54
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	0.6
Oxygen (% by vol.)	19.6

Comment	

Gas Monitoring Point - 10. GP-6, 14:57

Gas Monitoring Point ID	GP-6
Gas Monitoring Date	July 14, 2020
Time	14:57
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	1.3
Oxygen (% by vol.)	18.6
Comment	

Gas Monitoring Point - 11. GP-8, 14:58

Gas Monitoring Point ID	GP-8
Gas Monitoring Date	July 14, 2020
Time	14:58
Monitoring conducted?	No
Comment	Well Abandoned

Gas Monitoring Point - 12. GP-3, 15:02

Gas Monitoring Point ID	GP-3
Gas Monitoring Date	July 14, 2020
Time	15:02
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	0.1
Oxygen (% by vol.)	20.6
Comment	

Gas Monitoring Point - 13. GP-4, 15:05

Gas Monitoring Point ID	GP-4
Gas Monitoring Date	July 14, 2020
Time	15:05
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No

Methane (%LEL)	0.0
Carbon Dioxide (% by vol.)	1.5
Oxygen (% by vol.)	18.8
Comment	

Gas Monitoring Point - 14. MW-101, 15:09

Gas Monitoring Point ID	MW-101
Gas Monitoring Date	July 14, 2020
Time	15:09
Monitoring conducted?	No
Comment	Open to ATM bailer installed

Gas Monitoring Point - 15. MW-102, 15:10

Gas Monitoring Point ID	MW-102
Gas Monitoring Date	July 14, 2020
Time	15:10
Monitoring conducted?	No
Comment	Open to ATM bailer installed

Gas Monitoring Point - 16. MW-103, 15:10

Gas Monitoring Point ID	MW-103
Gas Monitoring Date	July 14, 2020
Time	15:10
Monitoring conducted?	No
Comment	Open ATM bailer installed

Gas Monitoring Point - 17. MW-104, 15:11

Gas Monitoring Point ID	MW-104
Gas Monitoring Date	July 14, 2020
Time	15:11
Monitoring conducted?	No
Comment	Open to ATM bailer installed

Gas Monitoring Point - 18. GP-9, 15:11

Gas Monitoring Point ID	GP-9
Gas Monitoring Date	July 14, 2020
Time	15:11
Monitoring conducted?	No
Comment	There is no GP-9

Gas Monitoring Point - 19. LC-2, 15:17

Gas Monitoring Point ID	LC-2
Gas Monitoring Date	July 14, 2020
Time	15:17
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	Yes
Methane (% by vol.)	21.9
Carbon Dioxide (% by vol.)	23.5
Oxygen (% by vol.)	.8
Leaks noted in wellhead?	No
Comment	Pheader:-13.54 Pwell:-13.51

Gas Monitoring Point - 20. GV-6, 15:25

Gas Monitoring Point ID	GV-6
Gas Monitoring Date	July 14, 2020
Time	15:25
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	53
Carbon Dioxide (% by vol.)	9.9
Oxygen (% by vol.)	10.8
Leaks noted in wellhead?	No
Comment	Pheader:-13.67 Pwell:-1.21 Valve: .25 turns open Pwell:-0.77

Gas Monitoring Point - 21. LC-3, 15:30

Gas Monitoring Point ID	LC-3
Gas Monitoring Date	July 14, 2020
Time	15:30
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	Yes
Methane (% by vol.)	9.8
Carbon Dioxide (% by vol.)	18.9
Oxygen (% by vol.)	2.2
Leaks noted in wellhead?	No
Comment	Pheader:-30.30 Pwell:-11.19

Gas Monitoring Point - 22. LC-1, 15:33

Gas Monitoring Point ID	LC-1
Gas Monitoring Date	July 14, 2020
Time	15:33
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	44
Carbon Dioxide (% by vol.)	16.0
Oxygen (% by vol.)	4.9
Leaks noted in wellhead?	No
Comment	Pheader :-23.86 Pwell :-23.82 Valve at .25 turns open Pwell:-2.40

Gas Monitoring Point - 23. GV-4, 15:41

Gas Monitoring Point ID	GV-4
Gas Monitoring Date	July 14, 2020
Time	15:41
Monitoring conducted?	Yes

Gas Monitoring Data

Is methane >100% LEL?	No
Methane (%LEL)	17
Carbon Dioxide (% by vol.)	8.0
Oxygen (% by vol.)	12.3
Leaks noted in wellhead?	No
Comment	Pheader:-22.61 Pwell:-2.80 valve is at 1.75 turns open Pwell:-1.18
Is GES operating upon departure?	Yes
Gas Monitoring End Time	15:55

Monitoring Well Gauging

Gauging Event	Q3
Gauging Start Time	08:40
Gauging Notes	

Well (15 Items)

Well - 1. MW-103, Yes, 49.03

Well ID	MW-103
Gauging Date	July 13, 2020
Gauging Time	17:30
Well gauged?	Yes
Well dry?	No
DTW	49.03
DTW unit	ft
Comment	

Well - 2. P-103D, Yes, 49.1

Well ID	P-103D
Gauging Date	July 13, 2020
Gauging Time	17:40
Well gauged?	Yes
Well dry?	No
DTW	49.1

DTW unit	ft
Comment	

Well - 3. P-103, Yes, 47.88

Well ID	P-103
Gauging Date	July 13, 2020
Gauging Time	17:36
Well gauged?	Yes
Well dry?	No
DTW	47.88
DTW unit	ft
Comment	

Well - 4. P-107D, Yes, 51.1

Well ID	P-107D
Gauging Date	July 13, 2020
Gauging Time	17:16
Well gauged?	Yes
Well dry?	No
DTW	51.1
DTW unit	ft
Comment	

Well - 5. P-111D, Yes, 34.14

Well ID	P-111D
Gauging Date	July 13, 2020
Gauging Time	16:38
Well gauged?	Yes
Well dry?	No
DTW	34.14
DTW unit	ft
Comment	

Well - 6. MW-112, Yes, 52.38

Well ID	MW-112
Gauging Date	July 13, 2020
Gauging Time	17:25
Well gauged?	Yes
Well dry?	No
DTW	52.38
DTW unit	ft
Comment	

Well - 7. P-113A, Yes, 12.63

Well ID	P-113A
Gauging Date	July 13, 2017
Gauging Time	09:38
Well gauged?	Yes
Well dry?	No
DTW	12.63
DTW unit	ft
Comment	

Well - 8. P-113B, Yes, 12.39

Well ID	P-113B
Gauging Date	July 13, 2020
Gauging Time	08:41
Well gauged?	Yes
Well dry?	No
DTW	12.39
DTW unit	ft
Comment	

Well - 9. P-114, Yes, 22.12

Well ID	P-114
Gauging Date	July 13, 2020
Gauging Time	13:09
Well gauged?	Yes
Well dry?	No

DTW	22.12
DTW unit	ft
Comment	

Well - 10. P-115 (WIESE), Yes, 18.82

Well ID	P-115 (WIESE)
Gauging Date	July 13, 2020
Gauging Time	12:08
Well gauged?	Yes
Well dry?	No
DTW	18.82
DTW unit	ft
Comment	

Well - 11. P-116 (HADEL), Yes, 25.79

Well ID	P-116 (HADEL)
Gauging Date	July 13, 2020
Gauging Time	11:01
Well gauged?	Yes
Well dry?	No
DTW	25.79
DTW unit	ft
Comment	

Well - 12. P-117, Yes, 14.71

Well ID	P-117
Gauging Date	July 13, 2020
Gauging Time	15:16
Well gauged?	Yes
Well dry?	No
DTW	14.71
DTW unit	ft
Comment	

Well - 13. P-118, Yes, 7.59

Well ID	P-118
Gauging Date	July 13, 2020
Gauging Time	15:52
Well gauged?	Yes
Well dry?	No
DTW	7.59
DTW unit	ft
Comment	

Well - 14. MW-003A, Yes, 30.35

Well ID	MW-003A
Gauging Date	July 13, 2020
Gauging Time	13:53
Well gauged?	Yes
Well dry?	No
DTW	30.35
DTW unit	ft
Comment	

Well - 15. MW-003B, Yes, 29.23

Well ID	MW-003B
Gauging Date	July 13, 2020
Gauging Time	14:29
Well gauged?	Yes
Well dry?	No
DTW	29.23
DTW unit	ft
Comment	
Gauging End Time	17:40

General Notes

Notes	
Photos	

Communications

-

TRC

PROJECT NAME:	FF/NN Ripon Landfill
PROJECT NUMBER:	378957.0000.0000 P1 T3
PROJECT MANAGER:	Marita Stollenwerk
SITE LOCATION:	Ripon, WI
DATES OF FIELDWORK:	7/13/20 TO 7/14/20
PURPOSE OF FIELDWORK:	Quarter 3 Groundwater Sampling
WORK PERFORMED BY:	J. Roelke

SIGNED 7/15/20 DATE

CHECKED BY DATE

REVISED 03/2008

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	FF/NN Ripon Landfill	MODEL: SMARTROLL MP	SAMPLER: JAR
PROJECT NO.:	378957.0000.0000 P1 T3	SERIAL #: 477459	DATE: 7/13/20

PH METER

CALIBRATION			POST SAMPLING CALIBRATION CHECK			
pH 4	pH 7	TIME	pH 4	pH 7	TIME	DATE
☐ WITHIN RANGE	☒ WITHIN RANGE	7:53		6.87	17:52	7/13/20
☒ WITHIN RANGE	☐ WITHIN RANGE	7:59	4.12	~~7.12~~	17:55	"
☐ WITHIN RANGE	☒ WITHIN RANGE	4:59		6.90	11:52	7/14/20
☒ WITHIN RANGE	☐ WITHIN RANGE	5:06	3.89		11:56	"
☐ WITHIN RANGE	☐ WITHIN RANGE					

SAR

CONDUCTIVITY METER

CALIBRATION		POST SAMPLING CALIBRATION CHECK			
STANDARD	TIME	SOLUTION CHECK	SOLUTION TEMP	TIME	DATE
µmhos/cm ☒ WITHIN RANGE	8:01	5097 µmhos/cm	26.35 °C	17:36	7/13/20
µmhos/cm ☒ WITHIN RANGE	5:11	4542 µmhos/cm	25.12 °C	11:58	7/14/20
µmhos/cm ☐ WITHIN RANGE		µmhos/cm	°C		
µmhos/cm ☐ WITHIN RANGE		µmhos/cm	°C		
µmhos/cm ☐ WITHIN RANGE		µmhos/cm	°C		

DO METER

CALIBRATION	TIME	CALIBRATION	TIME	DATE
☐ WITHIN RANGE		☐ WITHIN RANGE		
☐ WITHIN RANGE		☐ WITHIN RANGE		
☐ WITHIN RANGE		☐ WITHIN RANGE		
☐ WITHIN RANGE		☐ WITHIN RANGE		
☐ WITHIN RANGE		☐ WITHIN RANGE		

ORP METER

CALIBRATION	TIME	POST SAMPLING CALIBRATION CHECK			
		SOLUTION CHECK	SOLUTION TEMP	TIME	DATE
☒ WITHIN RANGE	8:02	205 mV	26.17 °C	18:00	7/13/20
☒ WITHIN RANGE	5:18	199 mV	24.26 °C	12:05	7/14/20
☐ WITHIN RANGE		mV	°C		
☐ WITHIN RANGE		mV	°C		
☐ WITHIN RANGE		mV	°C		

TURBIDITY CALIBRATION CHECK

METER TYPE: Hach 2100P

PRE-SAMPLING CALIBRATION CHECK				POST SAMPLING CALIBRATION CHECK				
GEL VALUE (NTU) 0-10	GEL VALUE (NTU) 0-100	GEL VALUE (NTU) 0-1000	TIME	GEL VALUE (NTU) 0-10	GEL VALUE (NTU) 0-100	GEL VALUE (NTU) 0-1000	TIME	DATE
NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA

Autocal Solution Lot#: QGB418 Exp Date: Feb 21

pH 7 Soultion Lot#: 9G1537 Exp Date: Sep 21

ORP Solution Lot#: 19K100403 Exp Date: 12/18/26

Parameters Calibrated: ☒ pH ☒ Conductivity ☐ Turbidity ☒ ORP ☒ Dissolved Oxygen

NOTES

D.O. cap Expired, couldn't calibrate.

DATE	PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

SIGNED 7/14/20 DATE

Checked DATE

TRC

WATER LEVEL DATA

PROJECT NAME: Ripon FF/NN Landfill				DATE: 7/13/20	
PROJECT NUMBER 378957.0000.0000 P1 T3				AUTHOR: J. Roelke	
WELL LOCATION	**TIME**	**REFERENCE**	**DEPTH TO WATER (FEET)**	**DEPTH TO BOTTOM (FEET)**	**WATER ELEVATION**
MW-101		884.73		64.50	
P-101		885.39		96.49	
MW-102		842.9		24.00	
P-102		842.85		61.15	
MW-103	17:30	872.30	49.03	53.69	
P-103	17:36	872.74	47.88	83.02	
P-103D	17:40	872.91	49.10	192.66	
MW-104		875.20		54.90	
P-104		875.40		92.80	
MW-106		878.90		57.35	
P-106		878.91		87.30	
MW-107		871.69		55.29	
P-107		871.33		87.13	
P-107D	17:16	871.9	51.10	322.7	
MW-108		845.08		30.28	
P-108		845.48		62.48	
MW-111		856.09		43.79	
P-111		856.28		82.68	
P-111D	16:38	855.56	34.14	148.46	
MW-112	17:25	874.7	52.38	60.47	
P-113A	9:38	833.16	12.63	325.31	
P-113B	8:41	833.16	12.39	198.9	
P-114	~~13:09~~	839.36	~~22.12~~	181.72	
P-115	~~12:08~~	842.67	~~18.82~~	179.57	
P-116	11:01	845.86	25.79	163.19	
P-117	15:16	833.96	14.71	165.54	
P-118	15:52	826.74	7.59	167.44	
MW-3A	13:53	850.60	30.35	280.10	
MW-3B	14:29	850.89	29.23	185.72	
Rohde		844.98		228.00	
LC-1		876.15		27.70	
LC-2		866.05		27.91	
LC-3		877.34		26.14	

12:08

13:09

18.82

22.12

The noted time and depth to water for P-114 and P-115 were accidentally swapped during note taking. A.Stehn 7/31/20

ALL WATER LEVELS MUST INCLUDE REFERENCE POINT AND TAPE CORRECTION FACTOR
(E.G., 1.1 + 0.00 T/PVC)

SIGNED 7/14/20 DATE: CHECKED DATE:

TRC

WATER SAMPLE LOG

PROJECT NAME:	FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER:	378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: MW-3A — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 13:53	DATE: 7/13/20	SAMPLE	TIME: 14:13	DATE: 7/14/20
PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER			PH: 7.41 SU	CONDUCTIVITY: 627.0 umhos/cm	
			DO: 0.16 mg/l	ORP: -9.8 mV	
DEPTH TO WATER: 30.35 T/ PVC			TURBIDITY: NM NTU		
DEPTH TO BOTTOM: 280.10 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: --- ☐ LITERS ☐ GALLONS			TEMPERATURE: 11.52 °C	OTHER: --	
VOLUME REMOVED: 7.5 ☐ LITERS ☑ ~~GALLONS~~			COLOR: Clear	ODOR: NONE	
COLOR: Clear	ODOR: NONE		FILTRATE (0.45 um) ☒ YES ☐ NO		
TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILT COLOR: clear	FILT ODOR: NONE	
			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS) (Liters)
13:53	300	11.75	621.1	0.75	7.53	-28.6	NA	30.35	1.5
13:58	300	11.54	625.9	0.36	7.51	-26.4	NA	32.44	3.0
14:03	300	11.43	626.9	0.21	7.46	-18.5	NA	32.44	4.5
14:08	300	11.47	625.7	0.17	7.43	-12.8	NA	32.44	6.0
14:13	300	11.52	627.0	0.16	7.41	-9.8	NA	32.44	7.5

* D.O. Cap Expired - couldn't cal.

Sampled @ 14:13

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: MW-3B — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 14:29	DATE: 7/13/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 29.23 T/ PVC

DEPTH TO BOTTOM: 185.72 T/ PVC

WELL VOLUME: --- ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ☒ LITERS ☑ ~~GALLONS~~

COLOR: Clear ODOR: None

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 14:58	DATE: 7/13/20

PH: 7.39 SU CONDUCTIVITY: 769.5 umhos/cm

DO: 0.13 mg/l ORP: -63.7 mV

TURBIDITY: NM NTU

☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 11.79 °C OTHER: --

COLOR: Clear ODOR: None

FILTRATE (0.45 um) ☑ YES ☐ NO

FILT COLOR: Clear FILT ODOR: None

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
14:29	300	11.84	681.2	0.25	7.57	-83.0	NM	29.23	1.5
14:34	300	11.87	752.3	0.21	7.50	-89.1	NM	29.24	3.0
14:39	300	11.64	782.0	0.16	7.46	-85.1	NM	29.24	4.5
14:44	300	11.66	778.7	0.15	7.45	-79.5	NM	29.24	6.0
		Low Flow	Program	started	over				
14:48	300	11.49	777.7	0.13	7.42	-72.4	NM	29.24	7.5
14:53	300	11.47	774.4	0.13	7.4	-66.0	NM	29.24	9.0
14:58	300	11.79	769.5	0.13	7.39	-63.7	NM	29.24	10.5

#D.O. Cap Expired - couldn't Cal.

Sampled @ 14:58

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

WATER SAMPLE LOG

PROJECT NAME:	FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER:	378957.0000.0000 P1 T3	BY: JAR DATE: 7/14/20	BY: DATE:

SAMPLE ID: MW-103 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 11:26	DATE: 7/14/20

PURGE METHOD: ☐ PUMP BLADDER PUMP (DEDICATED) ☑ BAILER

DEPTH TO WATER: 49.07 T/ PVC

DEPTH TO BOTTOM: 53.69 T/ PVC

WELL VOLUME: 0.658 ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 2.0 ☐ LITERS ☑ GALLONS

COLOR: cloudy ODOR: NONE

TURBIDITY

☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 11:43	DATE: 7/14/20

PH: 7.11 SU CONDUCTIVITY: 8738 umhos/cm

DO: 5.98 mg/l ORP: -12.6 mV

TURBIDITY: NM NTU

☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 15.67 °C OTHER: --

COLOR: Cloudy ODOR: NONE

FILTRATE (0.45 um) ☑ YES ☐ NO

FILT COLOR: Clear FILT ODOR: NONE

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O.* (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
11:43	N/A	15.67	8738	5.98	7.11	-12.6	NM	49.07	

* D.O. Cap Expired - Couldn't Cal.

Sampled @ 11:43

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/14/20	BY: DATE:

SAMPLE ID: P-103 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 10:43	DATE: 7/14/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 47.89 T/ PVC

DEPTH TO BOTTOM: 83.02 T/ PVC

WELL VOLUME: --- ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 7.5 ☒ LITERS ☑ ~~GALLONS~~ 5M

COLOR: Clear ODOR: NONE

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 11:03	DATE: 7/14/20

PH: 7.02 SU CONDUCTIVITY: 748.0 umhos/cm

DO: 0.52 mg/l ORP: mV

TURBIDITY: NM NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.72 °C OTHER: --

COLOR: Clear ODOR: NONE

FILTRATE (0.45 um) ☑ YES ☐ NO

FILT COLOR: Clear FILT ODOR: NONE

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L) *	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
10:43	300	12.54	755.8	2.14	7.04	2.7	NM	47.89	1.5
10:48	300	13.13	748.6	0.95	7.03	2.1	NM	48.01	3
10:53	300	12.72	748.5	0.75	7.03	1.1	NM	48.11	4.5
10:58	300	12.67	748.2	0.61	7.02	0.8	NM	48.11	6
11:03	300	12.72	748.0	0.52	7.02	-2.7	NM	48.11	7.5

* D.O. Cap Expired - Couldn't Cal.

Sampled @ 11:03

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/14/20	BY: DATE:

SAMPLE ID: P-103D — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 9:48	DATE: 7/14/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 49.03 T/ PVC

DEPTH TO BOTTOM: 192.66 T/ PVC

WELL VOLUME: --- ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 12.0 ☒ LITERS ☒ GALLONS

COLOR: Clear ODOR: NONE

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 10:23	DATE: 7/14/20

PH: 6.97 SU CONDUCTIVITY: 790.4 umhos/cm

DO: 0.2 mg/l ORP: 18.0 mV

TURBIDITY: NM NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.22 °C OTHER: --

COLOR: Clear ODOR: NONE

FILTRATE (0.45 um) ☑ YES ☐ NO

FILT COLOR: Clear FILT ODOR: NONE

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	# D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
9:48	300	13.81	741.1	5.19	7.23	67.6	NM	49.03	1.5
9:53	300	12.22	783.3	1.02	7.21	64.3	NM	49.24	3.0
9:58	300	12.03	791.8	0.34	7.14	55.6	NM	49.31	4.5
10:03	300	12.07	793.7	0.26	7.08	46.4	NM	49.31	6.0
10:08	300	12.21	789.3	0.23	7.03	38.3	NM	49.31	7.5
10:13	300	12.24	791.2	0.22	7.00	30.4	NM	49.31	9.0
10:18	300	12.26	792.0	0.21	6.98	23.9	NM	49.31	10.5
10:23	300	12.22	790.4	0.20	6.97	18.0	NM	49.31	12.0

D.O. Cap Expired - couldn't cal.

Sampled @ 10:23

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/14/20	BY: DATE:

SAMPLE ID: P-107D — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 7:50	DATE: 7/14/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 51.11 T/ PVC

DEPTH TO BOTTOM: 322.70 T/ PVC

WELL VOLUME: --- ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 15.0 ☒ LITERS ☑ GALLONS ~~5.0~~

COLOR: Clear ODOR: none

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 8:35	DATE: 7/14/20

PH: 6.56 SU CONDUCTIVITY: 623.12 umhos/cm

DO: 1.67 mg/l ORP: 82.3 mV

TURBIDITY: NM NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 11.20 °C OTHER: --

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☒ YES ☐ NO

FILT COLOR: Clear FILT ODOR: none

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O.* (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
7:50	300	11.84	604.3	2.53	5.35	111.6	NM	51.11	1.5
7:55	300	11.53	605.6	2.46	5.53	108.6	NM	51.03	3.0
8:00	300	11.42	601.5	2.27	5.81	102.3	NM	51.01	4.5
8:05	300	11.47	597.2	2.21	5.98	96.7	NM	50.96	6.0
8:10	300	11.38	608.6	2.16	6.12	94.5	NM	50.92	7.5
8:15	300	11.43	623.0	2.11	6.23	92.8	NM	50.90	9.0
8:20	300	11.38	667.0	2.04	6.33	90.5	NM	50.90	10.5
8:25	300	11.16	626.0	1.89	6.42	88.0	NM	50.90	12.0
8:30	300	11.23	696.7	1.83	6.49	85.0	NM	50.90	13.5
8:35	300	11.20	623.12	1.67	6.56	82.3	NM	50.90	15.0

* D.O. Cap Expired - could not Cal.

Sampled @ 8:35

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

REVISED 03/2008

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: P-111D	WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER				
WELL MATERIAL:	☑ PVC	☐ SS	☐ IRON	☐	☐ OTHER
SAMPLE TYPE:	☑ GW	☐ WW	☐ SW	☐ DI	☐ LEACHATE ☐ OTHER

PURGING	TIME: 16:38	DATE: 7/13/20	SAMPLE	TIME: 16:58	DATE: 7/13/20
PURGE METHOD:	☑ PUMP	BLADDER PUMP (DEDICATED)	PH: 7.34 SU	CONDUCTIVITY: 9580	umhos/cm
	☐ BAILER		DO: 0.60 mg/l	ORP: -67.4 mV	
DEPTH TO WATER: 34.14 T/ PVC			TURBIDITY: NM NTU		
DEPTH TO BOTTOM: 148.46 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: ---	☐ LITERS	☐ GALLONS	TEMPERATURE: °C	OTHER: --	
VOLUME REMOVED: 7.5	☒ LITERS	~~☑ GALLONS~~ SAR	COLOR: Clear	ODOR: None	
COLOR: Clear	ODOR: None		FILTRATE (0.45 um) ☑ YES ☐ NO		
TURBIDITY			FILT COLOR: Clear	FILT ODOR: None	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O.* (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
~~16:38~~	300	13.38	960.7	1.61	7.36	-62.6	NM	~~34.14~~	~~34.14~~ SAR 1.5
16:43	300	12.78	9686	1.15	7.37	-65.1	NM	34.34	3.0
16:48	300	12.45	958.2	0.81	7.37	-64.9	NM	34.34	4.5
16:53	300	12.35	956.0	0.66	7.35	-65.7	NM	34.34	6.0
16:58	300	12.42	958.0	0.60	7.34	-67.4	NM	34.34	7.5

* D.O. Cap Expired - Could'nt Cal.

Sampled @ 16:58

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/14/20	BY: DATE:

SAMPLE ID: MW-112 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 9:04	DATE: 7/14/20

PURGE METHOD: ☐ PUMP BLADDER PUMP (DEDICATED) ☑ BAILER

DEPTH TO WATER: 52.39 T/ PVC

DEPTH TO BOTTOM: 60.47 T/ PVC

WELL VOLUME: 1.33 * ☐ LITERS ☒ GALLONS

VOLUME REMOVED: ~4 ☐ LITERS ☑ GALLONS

COLOR: Cloudy ODOR: none

TURBIDITY

☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 9:17	DATE: 7/14/20

PH: 6.94 SU CONDUCTIVITY: 749.7 umhos/cm

DO: 3.67 mg/l ORP: 94.8 mV

TURBIDITY: NM NTU

☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 14.27 °C OTHER: --

COLOR: Cloudy ODOR: none

FILTRATE (0.45 um) ☑ YES ☐ NO

FILT COLOR: Clear FILT ODOR: none

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
9:17	NA	14.27	749.7	3.67	6.94	94.8	NM	52.39	
				- D.O. Cap Expired					
				- Couldn't Cal.					
		Sampled @ 9:17							

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: [signature] DATE SIGNED: 7/14/20

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: P-113A — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 9:38	DATE: 7/13/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 12.63 T/ PVC

DEPTH TO BOTTOM: 325.31 T/ PVC

WELL VOLUME: --- ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 7.5 ☒ LITERS ~~☑ GALLONS~~ SM

COLOR: Clear ODOR: NONE

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 10:03	DATE: 7/13/20

PH: 6.67 SU CONDUCTIVITY: 619.6 umhos/cm

DO: 0.39 mg/l ORP: 8.3 mV

TURBIDITY: NM NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.03 °C OTHER: --

COLOR: clear ODOR: NONE

FILTRATE (0.45 um) ☒ YES ☐ NO

FILT COLOR: Clear FILT ODOR: NONE

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
9:38	250	14.98	588.8	3.31	6.52	-7.6	NM	12.63	~~12.63~~ 1.25 SM
9:43	250	12.76	603.6	2.56	6.55	2.0	NM	13.62	~~3.0~~ 2.5
9:48	250	12.11	608.4	0.67	6.60	3.4	NM	13.79	~~4~~ 3.75
9:53	250	12.03	614.6	0.39	6.62	4.7	NM	13.91	5.0
9:58	250	12.07	617.8	0.28	6.65	6.8	NM	13.91	6.25
10:03	250	12.03	619.6	0.39	6.67	8.3	NM	13.91	7.5

* D.O. Cap Expired - Couldn't Cal.

Sampled @ 10:03

BOTTLES FILLED		PRESERVATIVE CODES: A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: P-113B — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 8:50	DATE: 7/13/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 12.39 T/ PVC

DEPTH TO BOTTOM: 198.90 T/ PVC

WELL VOLUME: ~~3 A~~ 8.0 ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ~~10.0~~ ☐ LITERS ~~☑ GALLONS~~

COLOR: Clear ODOR: NONE

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 9:26	DATE: 7/13/20

PH: 6.37 SU CONDUCTIVITY: 747.3 umhos/cm

DO: 0.19 mg/l ORP: 8.70 mV

TURBIDITY: NM NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: °C OTHER: --

COLOR: Clear ODOR: NONE

FILTRATE (0.45 um) ☑ YES ☐ NO

FILT COLOR: FILT ODOR:

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)	SAM
8:50	200	12.62	752.6	0.29	6.66	57.3	NM	12.39	~~1.25~~	1.0
8:56	200	12.33	751.3	0.26	6.13	50.4	NM	12.51	~~2.5~~	2.0
9:01	200	12.26	750.2	0.26	6.18	~~50.4~~ 43.3	NM	12.54	~~3.75~~	3.0
9:06	200	12.26	750.1	0.22	6.23	35.1	NM	12.54	~~5.0~~	4.0
9:11	200	12.40	748.1	0.21	6.27	28.0	NM	12.54	~~6.25~~	5.0
9:16	200	12.52	747.1	0.20	6.30	21.6	NM	12.54	~~7.5~~	6.0
9:21	200	12.30	747.9	0.20	6.34	15.3	NM	12.54	~~8.75~~	7.0
9:26	200	12.35	747.3	0.19	6.37	8.70	NM	12.54	~~10.0~~	8.0

Sampled @ 9:26

~~D.O. Cap Expired~~, couldn't cal

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

WATER SAMPLE LOG

P-115

P-114 and P-115 were accidentally swapped during note taking. A.Stehn 7/31/20.

179.57

PROJECT NAME:	FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER:	378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: ~~P-114~~ WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 13:09	DATE: 7/13/20	SAMPLE	TIME: 13:24	DATE: 7/13/20
PURGE METHOD:	☑ PUMP ☐ BAILER	BLADDER PUMP (DEDICATED)	PH: 7.46 SU	CONDUCTIVITY: 706.4	umhos/cm
			DO: 0.14 mg/l	ORP: -37.6 mV	
DEPTH TO WATER:	22.12 T/ PVC		TURBIDITY: NM NTU		
~~DEPTH TO BOTTOM:~~	~~181.72~~ T/ PVC		☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	--- ☐ LITERS ☐ GALLONS		TEMPERATURE: 11.72 °C	OTHER: --	
VOLUME REMOVED:	6 gl ☐ LITERS ☑ GALLONS	TR	COLOR: Clear/Blk specs	ODOR: Lt Sulfer	
COLOR:	Clear/blackspecs ODOR: Lt Sulfer		FILTRATE (0.45 um) ☑ YES ☐ NO		
TR	TURBIDITY		FILT COLOR: clear	FILT ODOR: None	
☒ NONE	☒ SLIGHT ☐ MODERATE ☐ VERY		QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD:	☐ GROUND ☐ DRUM ☑ OTHER		COMMENTS:		

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. * (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
13:09	300	13.35	682.8	0.62	7.56	-34.4	NM	22.12	1.5
13:14	300	11.81	701.4	0.25	7.55	-36.0	NM	22.36	3.0
13:19	300	11.66	707.5	0.16	7.51	-36.9	NM	22.36	4.5
13:24	300	11.72	706.4	0.14	7.46	-37.6	NM	22.36	6.0

* DO Cap Expired - couldn't Cal

Sampled @ 13:24

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

P-114

SAMPLE ID: ~~P-115~~ WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

P-114 and P-115 were accidentally swapped during note taking. A.Stehn 7/31/20.

PURGING	TIME: 12:08	DATE: 7/13/20	SAMPLE	TIME: 12:38	DATE: 7/13/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 18.82 T/ PVC

181.72

DEPTH TO BOTTOM: ~~179.57~~ T/ PVC

WELL VOLUME: --- ☐ LITERS ☐ GALLONS

VOLUME REMOVED: 10.5 ☒ LITERS ☒ ~~GALLONS~~

COLOR: Cloudy ODOR: Sulfur

TURBIDITY

☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: 7.27 SU CONDUCTIVITY: 874.8 umhos/cm

DO: 0.13 mg/l ORP: -15.80 mV

TURBIDITY: NM NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 11.41 °C OTHER: --

COLOR: Clear ODOR: Lt Sulfur

FILTRATE (0.45 um) ☑ YES ☐ NO

FILT COLOR: clear FILT ODOR: none

QC SAMPLE: ☐ MS/MSD ☒ DUP- 01

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O.* (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
12:08	300	13.31	843.0	0.39	7.38	24.0	NM	18.82	1.5
12:13	300	11.52	873.3	0.23	7.37	14.1	NM	18.88	3.0
12:18	300	11.38	874.2	0.18	7.35	5.30	NM	18.88	4.5
12:23	300	11.40	875.6	0.16	7.32	-0.70	NM	18.88	6.0
12:28	300	11.38	875.1	0.14	7.30	-5.90	NM	18.88	7.5
12:33	300	11.41	874.6	0.13	7.28	-11.10	NM	18.88	9.0
12:38	300	11.41	874.8	0.13	7.27	-15.80	NM	18.88	10.5

* D.O. Cap Expired - couldn't cal.

Sampled @ 12:38

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
6	40 mL	VOA	E	☐ Y ☑ N	2	250 mL	CLR PLST	B	☑ Y ☐ N
2	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
2	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: P-116 — WELL DIAMETER: [✓] 2" [ ] 4" [ ] 6" [ ] OTHER

WELL MATERIAL: [✓] PVC [ ] SS [ ] IRON [ ] [ ] OTHER

SAMPLE TYPE: [✓] GW [ ] WW [ ] SW [ ] DI [ ] LEACHATE [ ] OTHER

PURGING	TIME: 11:01	DATE: 7/13/20	SAMPLE	TIME: 11:30	DATE: 7/13/20
PURGE METHOD: [✓] PUMP BLADDER PUMP (DEDICATED) [ ] BAILER			PH: 7.31 SU	CONDUCTIVITY: 588.3 umhos/cm	
			DO: 0.32 mg/l	ORP: 16.3 mV	
DEPTH TO WATER: 25.79 T/ PVC			TURBIDITY: NM NTU		
DEPTH TO BOTTOM: 163.19 T/ PVC			[ ] NONE [ ] SLIGHT [ ] MODERATE [✓] VERY		
WELL VOLUME: --- [ ] LITERS [ ] GALLONS			TEMPERATURE: 12.81 °C	OTHER: --	
VOLUME REMOVED: 7.5 [✓] LITERS ~~GALLONS~~			COLOR: Redish/Brown	ODOR: NONE	
COLOR: Redish/Brown	ODOR: NONE		FILTRATE (0.45 um) [✓] YES [ ] NO		
TURBIDITY ZAA			FILT COLOR: Clear	FILT ODOR: NONE	
[ ] NONE [ ] SLIGHT [X] ~~MODERATE~~ [✓] VERY			QC SAMPLE: [ ] MS/MSD	[ ] DUP-	
DISPOSAL METHOD: [ ] GROUND [ ] DRUM [✓] OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
11:01	250	14.25	589.8	0.53	7.29	15.2	NM	25.79	1.25
11:07	250	13.31	588.3	1.12	7.30	14.9	NM	26.01	2.5
11:12	250	13.40	583.2	0.92	7.32	15.7	NM	26.01	3.75
11:17	250	12.49	587.3	0.43	7.30	14.8	NM	26.31	5.0
~~11:22~~	~~250~~						NM		
		Low Flow Program started over							
11:25	250	12.85	589.5	0.37	7.30	15.2	NM	26.35	6.25
11:30	250	12.81	588.3	0.32	7.31	16.3	NM	26.35	7.5

Sampled @ 11:30

* D.O. Cap Expired, Couldn't Calibrate

BOTTLES FILLED — PRESERVATIVE CODES: A - NONE, B - HNO3, C - H2SO4, D - NaOH, E - HCL, F -

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	[ ] Y [✓] N	1	250 mL	CLR PLST	B	[✓] Y [ ] N
1	125 mL	CLR PLST	A	[ ] Y [✓] N					[ ] Y [ ] N
1	125 mL	CLR PLST	C	[ ] Y [✓] N					[ ] Y [ ] N

SHIPPING METHOD: Fed Ex — DATE SHIPPED: 7/14/2020

SIGNATURE: [signature] — DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED		CHECKED	
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR	DATE: 7/ 13 /20	BY:	DATE:

SAMPLE ID: P-117	WELL DIAMETER: ☑ 2"	☐ 4"	☐ 6"	☐ OTHER		
WELL MATERIAL:	☑ PVC	☐ SS	☐ IRON	☐		☐ OTHER
SAMPLE TYPE:	☑ GW	☐ WW	☐ SW	☐ DI	☐ LEACHATE	☐ OTHER

PURGING	TIME: 15:16	DATE: 7/ 13 /20	SAMPLE	TIME: 15:36	DATE: 7/ 13 /20
PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER			PH: 7.32 SU CONDUCTIVITY: 840.9 umhos/cm DO: 0.20 mg/l ORP: -36.9 mV		
DEPTH TO WATER: 14.71 T/ PVC			TURBIDITY: NM NTU		
DEPTH TO BOTTOM: 165.54 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: --- ☐ LITERS ☐ GALLONS			TEMPERATURE: 11.47		OTHER: --
VOLUME REMOVED: 7.5 ☒ LITERS ☒ ~~GALLONS~~			COLOR: Clear		ODOR: None
COLOR: Clear ODOR: None			FILTRATE (0.45 um) ☒ YES		☐ NO
TURBIDITY			FILT COLOR: Clear		FILT ODOR: None
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD		☐ DUP-
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O.* (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
15:16	300	13.76	791.9	5.37	7.38	-31.7	NM	14.71	1.5
15:21	300	11.80	825.8	1.28	7.39	-28.8	NM	14.80	3.0
15:26	300	11.52	841.0	0.29	7.37	-32.3	NM	14.91	4.5
15:31	300	11.50	842.2	0.22	7.34	-34.9	NM	14.91	6.0
15:36	300	11.47	840.9	0.20	7.32	-36.9	NM	14.91	7.5

* DO. Cap Expired - Couldn't Cal

Sampled @ 15:36

BOTTLES FILLED — PRESERVATIVE CODES: A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: [signature] DATE SIGNED: 7/14/20

TRC

WATER SAMPLE LOG

PROJECT NAME: FF/NN Ripon Landfill	PREPARED	CHECKED
PROJECT NUMBER: 378957.0000.0000 P1 T3	BY: JAR DATE: 7/13/20	BY: DATE:

SAMPLE ID: P-118 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 15:52	DATE: 7/13/20

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 7.59 T/ PVC

DEPTH TO BOTTOM: 167.44 T/ PVC

WELL VOLUME: --- ☐ LITERS ☐ GALLONS

VOLUME REMOVED: ☐ LITERS ☑ GALLONS

COLOR: clear ODOR: none

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 16:12	DATE: 7/13/20

PH: 7.37 SU CONDUCTIVITY: 656.5 umhos/cm

DO: 0.23 mg/l ORP: -39.7 mV

TURBIDITY: NM NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 12.17 °C OTHER: --

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☒ YES ☐ NO

FILT COLOR: clear FILT ODOR: none

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	TEMPERATURE (°C)	CONDUCTIVITY (umhos/cm)	D.O. (mg/L)	pH (SU)	ORP (mV)	TURBIDITY (NTU)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
15:52	300	13.41	634.8	3.92	7.35	-35.3	NM	7.59	1.5
15:57	300	12.47	653.5	1.07	7.37	-33.3	NM	7.59	3.0
16:02	300	12.31	654.8	0.39	7.37	-33.5	NM	7.59	4.5
16:07	300	12.30	656.2	0.27	7.37	-36.5	NM	7.59	6.0
16:12	300	12.17	656.5	0.23	7.37	-39.7	NM	7.59	7.5

* D.O. Cap Expired - Cond'n Cal.

Sampled @ 16:12

BOTTLES FILLED		PRESERVATIVE CODES: A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F -							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	40 mL	VOA	E	☐ Y ☑ N	1	250 mL	CLR PLST	B	☑ Y ☐ N
1	125 mL	CLR PLST	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	CLR PLST	C	☐ Y ☑ N					☐ Y ☐ N

SHIPPING METHOD: Fed Ex DATE SHIPPED: 7/14/2020

SIGNATURE: DATE SIGNED: 7/14/20

REVISED 03/2008

19 of 20

Rev. 02/2017

CHAIN OF CUSTODY

Page 1 of 2

Company: TRC

Project Contact: Marita Stollenwerk

Telephone: (262) 901-2158

Project Name: Ripon FF/NW Landfill

Project #: 378957.0000.0000

Location: Ripon WI Phase 1 Task 3

Sampled By: J. Roelke

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO # 149832

Report To: Marita Stollenwerk
EMAIL: mstollenwerk@trccompanies.com
Company: TRC
Address: 150 W. Patrick Blvd. Suite 180

Invoice To:* Marita Stollenwerk
EMAIL: SAME
Company: TRC
Address: SAME

**Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions*

Client Special Instructions

—

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

ANALYSES REQUESTED

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered (Y/N)	VOC's (8260C) Low Level	Nitrate + Nitrite (EPA 353.2)	Sulfate (9056A)	Diss. Mn (6010C)	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
							Fill in Spaces with Bottles per Test						
7/13/20	9:26	GW	Grab	6	P-113B	Y	3	1	1	1			
	10:03				P-113A								
	11:30				P-116								
	12:38				P-115								
	13:24				P-114								
	14:13				MW-3A								
	14:58				MW-3B								
	15:36				P-117								
	16:12				P-118								
	16:58				P-111D								
↓	—	↓	↓	↓	DUP-01	↓	↓	↓	↓	↓			
7/14/20	8:35	↓	↓	↓	FB P-107D	↓	↓	↓	↓	↓			

Relinquished By:	Date/Time	Received By:	Date/Time	Lab Use Only
	7/14/20 17:35			Ice Present Yes No
Received by:	Date/Time	Received for Laboratory by:	Date/Time	Temp _____ IR Gun _____
				Cooler # _____

Rev. 02/2017

CHAIN OF CUSTODY

Page 2 of 2

Company: TRC
Project Contact: Marita Stollenwerk
Telephone: (262) 901-2158
Project Name: Ripon FF/NW Landfill
Project #: 378957.0000.0000 Phase 1 Task 3
Location: Ripon WI
Sampled By: J. Roelko

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO # 149832

Report To: Marita Stollenwerk
EMAIL: mstollenwerk@trccompanies.com
Company: TRC
Address: 150 W. Patrick Blvd. Suite 180

Invoice To:* Marita Stollenwerk
EMAIL: SAME
Company: TRC
Address: SAME

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	VOC's (8260C) Low Level	Nitrate + Nitrite (EPA 353.2)	Sulfate (9056A)	Diss. Mn (6010C)	Total # Containers	Designated MS/MSD
7/14/20	9:17	GW	Grab	6	MW-112	Y	3	1	1	1		
	10:23			1	P-103D							
	11:03			1	P-103							
	11:43			1	MW-103							
6/9/20	—			4	Trip Blank	N	4					

ANALYSES REQUESTED
Fill in Spaces with Bottles per Test

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

CT Lab ID #
Lab use only

Relinquished By:	Date/Time	Received By:	Date/Time
Received by:	Date/Time	Received for Laboratory by:	Date/Time

17:35 7/14/20

Lab Use Only
Ice Present Yes No
Temp _____ IR Gun _____
Cooler # _____

20 05 20

Appendix B: Analytical Data

CT LABORATORIES

delivering more than data from your environmental analyses

ANALYTICAL REPORT

This report at a minimum contains the following information:

- Analytical Report of Test Results
- Description of QC Qualifiers
- Chain of Custody (copy)
- Quality Control Summary
- Case Narrative (if applicable)
- Correspondence with Client (if applicable)

Data assessment (CT Laboratories, Baraboo, WI; Folder #: 154790):
All holding times, field and laboratory qc, and method blanks met criteria, except as specified below.

P-114 and P-115 were switched in the field; the switch was confirmed by the laboratory

Sample detections <5x blank value were flagged as nondetect ('u') at the reported limit.
- Analytes in method blanks: Acetone (0.859 µg/L, x5=4.295), carbon disulfide (0.0341 µg/L, x5=0.1705), chloromethane (0.0344 µg/L, x5=0.172), Methylene chloride (0.406 µg/L, x5=0.172), naphthalene (0.282 µg/L, x5=1.41)
- Analytes in trip blanks: 1,4-dioxane (13 µg/L, x5=65), carbon disulfide (0.021 µg/L, x5=0.105), chloromethane (0.037µg/L, x5=0.185), Methylene chloride (1.2 µg/L, x5=6)

Nitrate+Nitrite Nitrogen: MS and/or MSD recovery below control limits; possible low bias and detections qualified "j-"
Methylene chloride: MS and/or MSD recovery above control limits; possible high bias and detections qualified "j+"

Data has been reviewed per TRC data usability guidelines and is usable with the above notations.
P Popp, 8/4/2020

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

ANALYTICAL REPORT

TRC ENVIRONMENTAL
MARITA STOLLENWERK
708 HEARTLAND TRAIL
SUITE 3000
MADISON, WI 53717

Project Name: RIPON FF/NN LANDFILL
Project Phase: PHASE 1 TASK 3
Project #: 378957.0000.0000
Folder #: 154790
Purchase Order #: 149832
Contract #: 3276

Arrival Temperature: 1.4
Report Date: 07/31/2020
Date Received: 07/15/2020
Reprint Date: 07/31/2020

CT LAB#: 445402 Sample Description: P-113B License/Well #: 00467/138 Sampled: 07/13/2020 0926

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	74	mg/L	4.0	13	5			07/22/2020 22:44	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:38	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	34.5	ug/L	2.2	7.3	1			07/16/2020 21:22	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 12:43	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 12:43	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 12:43	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 12:43	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 12:43	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 12:43	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:43	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 12:43	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 12:43	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 12:43	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 12:43	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445402 Sample Description: P-113B License/Well #: 00467/138 Sampled: 07/13/2020 0926

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070		0.23	1			07/22/2020 12:43	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040		0.12	1			07/22/2020 12:43	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022		0.074	1			07/22/2020 12:43	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024		0.080	1			07/22/2020 12:43	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024		0.079	1			07/22/2020 12:43	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016		0.054	1			07/22/2020 12:43	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020		0.066	1			07/22/2020 12:43	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030		0.10	1			07/22/2020 12:43	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017		0.056	1			07/22/2020 12:43	RLD	EPA 8260C
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 12:43	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 12:43	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 12:43	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 12:43	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 12:43	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 12:43	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 12:43	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 12:43	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 12:43	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 12:43	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 12:43	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 12:43	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 12:43	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 12:43	RLD	EPA 8260C
Carbon disulfide	0.019	ug/L	0.014	*	0.046	1	B		07/22/2020 12:43	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 12:43	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 12:43	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023		0.077	1			07/22/2020 12:43	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445402 Sample Description: P-113B License/Well #: 00467/138 Sampled: 07/13/2020 0926

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 12:43	RLD	EPA 8260C
Chloromethane	0.033	ug/L	0.030 *	0.11	1	B		07/22/2020 12:43	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	ug/L	0.027	0.090	1			07/22/2020 12:43	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 12:43	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:43	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 12:43	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:43	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 12:43	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 12:43	RLD	EPA 8260C
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:43	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 12:43	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 12:43	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 12:43	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 12:43	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 12:43	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 12:43	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 12:43	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 12:43	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 12:43	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 12:43	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 12:43	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 12:43	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 12:43	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 12:43	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 12:43	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 12:43	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 12:43	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445402 Sample Description: P-113B License/Well #: 00467/138 Sampled: 07/13/2020 0926

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 12:43	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 12:43	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 12:43	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 12:43	RLD	EPA 8260C
1,2 Dichloroethane-d4	105	% Recovery	70.0	130	1			07/22/2020 12:43	RLD	EPA 8260C
Bromofluorobenzene	97	% Recovery	70.0	130	1			07/22/2020 12:43	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 12:43	RLD	EPA 8260C
Dibromofluoromethane	102	% Recovery	70.0	130	1			07/22/2020 12:43	RLD	EPA 8260C

CT LAB#: 445408 Sample Description: P-113A License/Well #: 00467/136 Sampled: 07/13/2020 1003

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	12	mg/L	0.80	2.5	1			07/22/2020 23:04	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:39	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	18.5	ug/L	2.2	7.3	1			07/16/2020 21:47	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 13:12	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 13:12	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 13:12	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 13:12	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 13:12	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 13:12	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 13:12	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 13:12	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 13:12	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 13:12	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 13:12	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 13:12	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 13:12	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 13:12	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 13:12	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 13:12	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 13:12	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 13:12	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 13:12	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 13:12	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445408 Sample Description: P-113A License/Well #: 00467/136 Sampled: 07/13/2020 1003

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 13:12	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 13:12	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 13:12	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 13:12	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 13:12	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 13:12	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 13:12	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 13:12	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 13:12	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 13:12	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 13:12	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 13:12	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 13:12	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 13:12	RLD	EPA 8260C
Carbon disulfide	0.031	ug/L	0.014	*	0.046	1	B		07/22/2020 13:12	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 13:12	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 13:12	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023		0.077	1			07/22/2020 13:12	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 13:12	RLD	EPA 8260C
Chloromethane	0.037	ug/L	0.030	*	0.11	1	B		07/22/2020 13:12	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	ug/L	0.027		0.090	1			07/22/2020 13:12	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 13:12	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 13:12	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 13:12	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 13:12	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 13:12	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 13:12	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445408 Sample Description: P-113A License/Well #: 00467/136 Sampled: 07/13/2020 1003

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 13:12	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 13:12	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 13:12	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 13:12	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 13:12	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 13:12	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 13:12	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 13:12	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 13:12	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 13:12	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 13:12	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 13:12	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 13:12	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 13:12	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 13:12	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 13:12	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 13:12	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 13:12	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 13:12	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 13:12	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 13:12	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 13:12	RLD	EPA 8260C
1,2 Dichloroethane-d4	102	% Recovery	70.0	130	1			07/22/2020 13:12	RLD	EPA 8260C
Bromofluorobenzene	105	% Recovery	70.0	130	1			07/22/2020 13:12	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 13:12	RLD	EPA 8260C
Dibromofluoromethane	102	% Recovery	70.0	130	1			07/22/2020 13:12	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445409 Sample Description: P-116 License/Well #: 00467/143 Sampled: 07/13/2020 1130

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	13	mg/L	0.80	2.5	1			07/23/2020 00:05	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:36	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	72.2	ug/L	2.2	7.3	1			07/16/2020 21:54	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 13:41	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 13:41	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 13:41	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 13:41	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 13:41	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 13:41	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 13:41	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 13:41	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 13:41	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 13:41	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 13:41	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 13:41	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 13:41	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 13:41	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 13:41	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 13:41	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 13:41	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 13:41	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 13:41	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 13:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445409 Sample Description: P-116 License/Well #: 00467/143 Sampled: 07/13/2020 1130

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 13:41	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 13:41	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 13:41	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 13:41	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 13:41	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 13:41	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 13:41	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 13:41	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 13:41	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 13:41	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 13:41	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 13:41	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 13:41	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 13:41	RLD	EPA 8260C
Carbon disulfide	0.018	ug/L	0.014	*	0.046	1	B		07/22/2020 13:41	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 13:41	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 13:41	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023		0.077	1			07/22/2020 13:41	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 13:41	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 13:41	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	ug/L	0.027		0.090	1			07/22/2020 13:41	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 13:41	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 13:41	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 13:41	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 13:41	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 13:41	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 13:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445409 Sample Description: P-116 License/Well #: 00467/143 Sampled: 07/13/2020 1130

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 13:41	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 13:41	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 13:41	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 13:41	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 13:41	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 13:41	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 13:41	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 13:41	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 13:41	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 13:41	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 13:41	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 13:41	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 13:41	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 13:41	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 13:41	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 13:41	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 13:41	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 13:41	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 13:41	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 13:41	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 13:41	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 13:41	RLD	EPA 8260C
1,2 Dichloroethane-d4	107	% Recovery	70.0	130	1			07/22/2020 13:41	RLD	EPA 8260C
Bromofluorobenzene	98	% Recovery	70.0	130	1			07/22/2020 13:41	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 13:41	RLD	EPA 8260C
Dibromofluoromethane	104	% Recovery	70.0	130	1			07/22/2020 13:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445410 Sample Description: P-114 License/Well #: 00467/140 Sampled: 07/13/2020 1238

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	66	mg/L	0.80	2.5	1			07/23/2020 01:26	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:37	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	61.8	ug/L	2.2	7.3	1			07/16/2020 22:00	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 14:09	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 14:09	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 14:09	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 14:09	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 14:09	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 14:09	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 14:09	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 14:09	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 14:09	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 14:09	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 14:09	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 14:09	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 14:09	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 14:09	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 14:09	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 14:09	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 14:09	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 14:09	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 14:09	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 14:09	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445410 Sample Description: P-114 License/Well #: 00467/140 Sampled: 07/13/2020 1238

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 14:09	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 14:09	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 14:09	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 14:09	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 14:09	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 14:09	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 14:09	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 14:09	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 14:09	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 14:09	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 14:09	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 14:09	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 14:09	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 14:09	RLD	EPA 8260C
Carbon disulfide	0.019	ug/L	0.014	*	0.046	1	B		07/22/2020 14:09	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 14:09	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 14:09	RLD	EPA 8260C
Chloroethane	0.34	ug/L	0.023		0.077	1			07/22/2020 14:09	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 14:09	RLD	EPA 8260C
Chloromethane	0.044	ug/L	0.030	*	0.11	1	B		07/22/2020 14:09	RLD	EPA 8260C
cis-1,2-Dichloroethene	2.0	ug/L	0.027		0.090	1			07/22/2020 14:09	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 14:09	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 14:09	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 14:09	RLD	EPA 8260C
Dichlorodifluoromethane	0.040	ug/L	0.030	*	0.10	1			07/22/2020 14:09	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 14:09	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 14:09	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445410 Sample Description: P-114 License/Well #: 00467/140 Sampled: 07/13/2020 1238

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 14:09	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 14:09	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 14:09	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 14:09	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 14:09	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 14:09	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 14:09	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 14:09	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 14:09	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 14:09	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 14:09	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 14:09	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 14:09	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 14:09	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 14:09	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 14:09	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 14:09	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 14:09	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 14:09	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 14:09	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 14:09	RLD	EPA 8260C
Vinyl chloride	7.7	ug/L	0.013	0.043	1			07/22/2020 14:09	RLD	EPA 8260C
1,2 Dichloroethane-d4	107	% Recovery	70.0	130	1			07/22/2020 14:09	RLD	EPA 8260C
Bromofluorobenzene	99	% Recovery	70.0	130	1			07/22/2020 14:09	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 14:09	RLD	EPA 8260C
Dibromofluoromethane	105	% Recovery	70.0	130	1			07/22/2020 14:09	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445411 Sample Description: P-115 License/Well #: 00467/142 Sampled: 07/13/2020 1324

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	37	mg/L	4.0	13	5			07/23/2020 01:47	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:41	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	107	ug/L	2.2	7.3	1			07/16/2020 22:07	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 14:38	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 14:38	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 14:38	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 14:38	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 14:38	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 14:38	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 14:38	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 14:38	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 14:38	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 14:38	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 14:38	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 14:38	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 14:38	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 14:38	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 14:38	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 14:38	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 14:38	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 14:38	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 14:38	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 14:38	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445411 Sample Description: P-115 License/Well #: 00467/142 Sampled: 07/13/2020 1324

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 14:38	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 14:38	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 14:38	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 14:38	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 14:38	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 14:38	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 14:38	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 14:38	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 14:38	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 14:38	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 14:38	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 14:38	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 14:38	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 14:38	RLD	EPA 8260C
Carbon disulfide	0.032	ug/L	0.014	*	0.046	1	B		07/22/2020 14:38	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 14:38	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 14:38	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023		0.077	1			07/22/2020 14:38	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 14:38	RLD	EPA 8260C
Chloromethane	0.041	ug/L	0.030	*	0.11	1	B		07/22/2020 14:38	RLD	EPA 8260C
cis-1,2-Dichloroethene	0.19	ug/L	0.027		0.090	1			07/22/2020 14:38	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 14:38	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 14:38	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 14:38	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 14:38	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 14:38	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 14:38	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445411 Sample Description: P-115 License/Well #: 00467/142 Sampled: 07/13/2020 1324

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 14:38	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 14:38	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 14:38	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 14:38	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 14:38	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 14:38	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 14:38	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 14:38	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 14:38	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 14:38	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 14:38	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 14:38	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 14:38	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 14:38	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 14:38	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 14:38	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 14:38	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 14:38	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 14:38	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 14:38	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 14:38	RLD	EPA 8260C
Vinyl chloride	0.85	ug/L	0.013	0.043	1			07/22/2020 14:38	RLD	EPA 8260C
1,2 Dichloroethane-d4	104	% Recovery	70.0	130	1			07/22/2020 14:38	RLD	EPA 8260C
Bromofluorobenzene	99	% Recovery	70.0	130	1			07/22/2020 14:38	RLD	EPA 8260C
d8-Toluene	100	% Recovery	70.0	130	1			07/22/2020 14:38	RLD	EPA 8260C
Dibromofluoromethane	107	% Recovery	70.0	130	1			07/22/2020 14:38	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445412 Sample Description: MW-3A License/Well #: 00467/133 Sampled: 07/13/2020 1413

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	21	mg/L	0.80	2.5	1			07/23/2020 02:07	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1	M		07/23/2020 14:44	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	413	ug/L	2.2	7.3	1			07/16/2020 22:14	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 15:07	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 15:07	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 15:07	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 15:07	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 15:07	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 15:07	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:07	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 15:07	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 15:07	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 15:07	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 15:07	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 15:07	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 15:07	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 15:07	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 15:07	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 15:07	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 15:07	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 15:07	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:07	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 15:07	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445412 Sample Description: MW-3A License/Well #: 00467/133 Sampled: 07/13/2020 1413

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0	22	1			07/22/2020 15:07	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015	0.050	1			07/22/2020 15:07	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50	1.6	1			07/22/2020 15:07	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024	0.080	1			07/22/2020 15:07	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30	1.0	1			07/22/2020 15:07	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017	0.057	1			07/22/2020 15:07	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22	0.74	1			07/22/2020 15:07	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80	2.6	1			07/22/2020 15:07	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019	0.062	1			07/22/2020 15:07	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018	0.060	1			07/22/2020 15:07	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040	0.15	1			07/22/2020 15:07	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028	0.093	1			07/22/2020 15:07	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:07	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060	0.19	1			07/22/2020 15:07	RLD	EPA 8260C
Carbon disulfide	0.025	ug/L	0.014 *	0.046	1	B		07/22/2020 15:07	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029	0.095	1			07/22/2020 15:07	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015	0.049	1			07/22/2020 15:07	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023	0.077	1			07/22/2020 15:07	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 15:07	RLD	EPA 8260C
Chloromethane	0.046	ug/L	0.030 *	0.11	1	B		07/22/2020 15:07	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	ug/L	0.027	0.090	1			07/22/2020 15:07	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 15:07	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:07	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 15:07	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:07	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 15:07	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 15:07	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445412 Sample Description: MW-3A License/Well #: 00467/133 Sampled: 07/13/2020 1413

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:07	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 15:07	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 15:07	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 15:07	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 15:07	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 15:07	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 15:07	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 15:07	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 15:07	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 15:07	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 15:07	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 15:07	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 15:07	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 15:07	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 15:07	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 15:07	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 15:07	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 15:07	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 15:07	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 15:07	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 15:07	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 15:07	RLD	EPA 8260C
1,2 Dichloroethane-d4	114	% Recovery	70.0	130	1			07/22/2020 15:07	RLD	EPA 8260C
Bromofluorobenzene	102	% Recovery	70.0	130	1			07/22/2020 15:07	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 15:07	RLD	EPA 8260C
Dibromofluoromethane	106	% Recovery	70.0	130	1			07/22/2020 15:07	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445413 Sample Description: MW-3B License/Well #: 00467/134 Sampled: 07/13/2020 1458

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	58	mg/L	4.0	13	5			07/23/2020 02:27	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:48	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	76.7	ug/L	2.2	7.3	1			07/16/2020 22:20	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 15:36	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 15:36	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 15:36	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 15:36	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 15:36	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 15:36	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:36	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 15:36	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 15:36	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 15:36	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 15:36	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 15:36	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 15:36	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 15:36	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 15:36	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 15:36	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 15:36	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 15:36	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:36	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 15:36	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445413 Sample Description: MW-3B License/Well #: 00467/134 Sampled: 07/13/2020 1458

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0	22	1			07/22/2020 15:36	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015	0.050	1			07/22/2020 15:36	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50	1.6	1			07/22/2020 15:36	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024	0.080	1			07/22/2020 15:36	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30	1.0	1			07/22/2020 15:36	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017	0.057	1			07/22/2020 15:36	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22	0.74	1			07/22/2020 15:36	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80	2.6	1			07/22/2020 15:36	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019	0.062	1			07/22/2020 15:36	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018	0.060	1			07/22/2020 15:36	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040	0.15	1			07/22/2020 15:36	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028	0.093	1			07/22/2020 15:36	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:36	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060	0.19	1			07/22/2020 15:36	RLD	EPA 8260C
Carbon disulfide	0.043	ug/L	0.014 *	0.046	1	B		07/22/2020 15:36	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029	0.095	1			07/22/2020 15:36	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015	0.049	1			07/22/2020 15:36	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023	0.077	1			07/22/2020 15:36	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 15:36	RLD	EPA 8260C
Chloromethane	0.037	ug/L	0.030 *	0.11	1	B		07/22/2020 15:36	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	ug/L	0.027	0.090	1			07/22/2020 15:36	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 15:36	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:36	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 15:36	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:36	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 15:36	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 15:36	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445413 Sample Description: MW-3B License/Well #: 00467/134 Sampled: 07/13/2020 1458

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 15:36	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 15:36	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 15:36	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 15:36	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 15:36	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 15:36	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 15:36	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 15:36	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 15:36	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 15:36	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 15:36	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 15:36	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 15:36	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 15:36	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 15:36	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 15:36	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 15:36	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 15:36	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 15:36	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 15:36	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 15:36	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 15:36	RLD	EPA 8260C
1,2 Dichloroethane-d4	108	% Recovery	70.0	130	1			07/22/2020 15:36	RLD	EPA 8260C
Bromofluorobenzene	97	% Recovery	70.0	130	1			07/22/2020 15:36	RLD	EPA 8260C
d8-Toluene	100	% Recovery	70.0	130	1			07/22/2020 15:36	RLD	EPA 8260C
Dibromofluoromethane	106	% Recovery	70.0	130	1			07/22/2020 15:36	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445414 Sample Description: P-117 License/Well #: 00467/144 Sampled: 07/13/2020 1536

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	58	mg/L	4.0	13	5			07/23/2020 02:47	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:52	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	198	ug/L	2.2	7.3	1			07/16/2020 22:27	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 16:05	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 16:05	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 16:05	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 16:05	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 16:05	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 16:05	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 16:05	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 16:05	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 16:05	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 16:05	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 16:05	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 16:05	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 16:05	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 16:05	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 16:05	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 16:05	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 16:05	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 16:05	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 16:05	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 16:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445414 Sample Description: P-117 License/Well #: 00467/144 Sampled: 07/13/2020 1536

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 16:05	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 16:05	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 16:05	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 16:05	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 16:05	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 16:05	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 16:05	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 16:05	RLD	EPA 8260C
Benzene	0.022	ug/L	0.019	*	0.062	1			07/22/2020 16:05	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 16:05	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 16:05	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 16:05	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 16:05	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 16:05	RLD	EPA 8260C
Carbon disulfide	0.034	ug/L	0.014	*	0.046	1	B		07/22/2020 16:05	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 16:05	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 16:05	RLD	EPA 8260C
Chloroethane	0.72	ug/L	0.023		0.077	1			07/22/2020 16:05	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 16:05	RLD	EPA 8260C
Chloromethane	0.040	ug/L	0.030	*	0.11	1	B		07/22/2020 16:05	RLD	EPA 8260C
cis-1,2-Dichloroethene	0.78	ug/L	0.027		0.090	1			07/22/2020 16:05	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 16:05	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 16:05	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 16:05	RLD	EPA 8260C
Dichlorodifluoromethane	0.041	ug/L	0.030	*	0.10	1			07/22/2020 16:05	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 16:05	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 16:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445414 Sample Description: P-117 License/Well #: 00467/144 Sampled: 07/13/2020 1536

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030		0.10	1			07/22/2020 16:05	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018		0.059	1			07/22/2020 16:05	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030		0.11	1			07/22/2020 16:05	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017		0.055	1			07/22/2020 16:05	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030		0.12	1			07/22/2020 16:05	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014		0.048	1			07/22/2020 16:05	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020		0.068	1			07/22/2020 16:05	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022		0.072	1			07/22/2020 16:05	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017		0.058	1			07/22/2020 16:05	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018		0.059	1			07/22/2020 16:05	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014		0.046	1			07/22/2020 16:05	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011		0.035	1			07/22/2020 16:05	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013		0.042	1			07/22/2020 16:05	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023		0.077	1			07/22/2020 16:05	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28		0.95	1			07/22/2020 16:05	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017		0.056	1			07/22/2020 16:05	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029		0.098	1			07/22/2020 16:05	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030		0.11	1			07/22/2020 16:05	RLD	EPA 8260C
Trichloroethene	0.063	ug/L	0.025	*	0.084	1			07/22/2020 16:05	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029		0.095	1			07/22/2020 16:05	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40		1.4	1	Y		07/22/2020 16:05	RLD	EPA 8260C
Vinyl chloride	1.4	ug/L	0.013		0.043	1			07/22/2020 16:05	RLD	EPA 8260C
1,2 Dichloroethane-d4	104	% Recovery	70.0		130	1			07/22/2020 16:05	RLD	EPA 8260C
Bromofluorobenzene	96	% Recovery	70.0		130	1			07/22/2020 16:05	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0		130	1			07/22/2020 16:05	RLD	EPA 8260C
Dibromofluoromethane	105	% Recovery	70.0		130	1			07/22/2020 16:05	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445415 Sample Description: P-118 License/Well #: 00467/145 Sampled: 07/13/2020 1612

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	25	mg/L	0.80	2.5	1			07/23/2020 03:08	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:53	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	63.1	ug/L	2.2	7.3	1			07/16/2020 22:34	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 16:35	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 16:35	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 16:35	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 16:35	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 16:35	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 16:35	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 16:35	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 16:35	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 16:35	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 16:35	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 16:35	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 16:35	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 16:35	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 16:35	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 16:35	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 16:35	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 16:35	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 16:35	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 16:35	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 16:35	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445415 Sample Description: P-118 License/Well #: 00467/145 Sampled: 07/13/2020 1612

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 16:35	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 16:35	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 16:35	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 16:35	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 16:35	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 16:35	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 16:35	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 16:35	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 16:35	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 16:35	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 16:35	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 16:35	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 16:35	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 16:35	RLD	EPA 8260C
Carbon disulfide	<0.014	ug/L	0.014		0.046	1			07/22/2020 16:35	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 16:35	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 16:35	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023		0.077	1			07/22/2020 16:35	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 16:35	RLD	EPA 8260C
Chloromethane	0.052	ug/L	0.030	*	0.11	1	B		07/22/2020 16:35	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	ug/L	0.027		0.090	1			07/22/2020 16:35	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 16:35	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 16:35	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 16:35	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 16:35	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 16:35	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 16:35	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445415 Sample Description: P-118 License/Well #: 00467/145 Sampled: 07/13/2020 1612

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 16:35	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 16:35	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 16:35	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 16:35	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 16:35	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 16:35	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 16:35	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 16:35	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 16:35	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 16:35	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 16:35	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 16:35	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 16:35	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 16:35	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 16:35	RLD	EPA 8260C
Toluene	0.023	ug/L	0.017 *	0.056	1			07/22/2020 16:35	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 16:35	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 16:35	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 16:35	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 16:35	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 16:35	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 16:35	RLD	EPA 8260C
1,2 Dichloroethane-d4	108	% Recovery	70.0	130	1			07/22/2020 16:35	RLD	EPA 8260C
Bromofluorobenzene	99	% Recovery	70.0	130	1			07/22/2020 16:35	RLD	EPA 8260C
d8-Toluene	98	% Recovery	70.0	130	1			07/22/2020 16:35	RLD	EPA 8260C
Dibromofluoromethane	105	% Recovery	70.0	130	1			07/22/2020 16:35	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445416 Sample Description: P-111D License/Well #: 00467/130 Sampled: 07/13/2020 1658

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	59	mg/L	4.0	13	5			07/23/2020 03:28	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:54	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	30.3	ug/L	2.2	7.3	1			07/16/2020 22:41	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 17:04	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 17:04	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 17:04	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 17:04	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 17:04	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 17:04	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 17:04	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 17:04	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 17:04	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 17:04	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 17:04	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 17:04	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 17:04	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 17:04	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 17:04	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 17:04	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 17:04	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 17:04	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 17:04	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 17:04	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445416 Sample Description: P-111D License/Well #: 00467/130 Sampled: 07/13/2020 1658

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 17:04	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 17:04	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 17:04	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 17:04	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 17:04	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 17:04	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 17:04	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 17:04	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 17:04	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 17:04	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 17:04	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 17:04	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 17:04	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 17:04	RLD	EPA 8260C
Carbon disulfide	0.021	ug/L	0.014	*	0.046	1	B		07/22/2020 17:04	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 17:04	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 17:04	RLD	EPA 8260C
Chloroethane	1.6	ug/L	0.023		0.077	1			07/22/2020 17:04	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 17:04	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 17:04	RLD	EPA 8260C
cis-1,2-Dichloroethene	3.1	ug/L	0.027		0.090	1			07/22/2020 17:04	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 17:04	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 17:04	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 17:04	RLD	EPA 8260C
Dichlorodifluoromethane	0.058	ug/L	0.030	*	0.10	1			07/22/2020 17:04	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 17:04	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 17:04	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445416 Sample Description: P-111D License/Well #: 00467/130 Sampled: 07/13/2020 1658

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 17:04	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 17:04	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 17:04	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 17:04	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 17:04	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 17:04	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 17:04	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 17:04	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 17:04	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 17:04	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 17:04	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 17:04	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 17:04	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 17:04	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 17:04	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 17:04	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 17:04	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 17:04	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 17:04	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 17:04	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 17:04	RLD	EPA 8260C
Vinyl chloride	3.7	ug/L	0.013	0.043	1			07/22/2020 17:04	RLD	EPA 8260C
1,2 Dichloroethane-d4	104	% Recovery	70.0	130	1			07/22/2020 17:04	RLD	EPA 8260C
Bromofluorobenzene	100	% Recovery	70.0	130	1			07/22/2020 17:04	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 17:04	RLD	EPA 8260C
Dibromofluoromethane	102	% Recovery	70.0	130	1			07/22/2020 17:04	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445417 Sample Description: DUP-01 License #:00467 Sampled: 07/13/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	66	mg/L	0.80	2.5	1			07/23/2020 03:48	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:55	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	61.6	ug/L	2.2	7.3	1			07/16/2020 22:47	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 17:33	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 17:33	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 17:33	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 17:33	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 17:33	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 17:33	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 17:33	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 17:33	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 17:33	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 17:33	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 17:33	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 17:33	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 17:33	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 17:33	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 17:33	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 17:33	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 17:33	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 17:33	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 17:33	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 17:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445417 Sample Description: DUP-01 License #:00467 Sampled: 07/13/2020

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 17:33	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 17:33	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 17:33	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 17:33	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 17:33	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 17:33	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 17:33	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 17:33	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 17:33	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 17:33	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 17:33	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 17:33	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 17:33	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 17:33	RLD	EPA 8260C
Carbon disulfide	0.018	ug/L	0.014	*	0.046	1	B		07/22/2020 17:33	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 17:33	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 17:33	RLD	EPA 8260C
Chloroethane	0.54	ug/L	0.023		0.077	1			07/22/2020 17:33	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 17:33	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 17:33	RLD	EPA 8260C
cis-1,2-Dichloroethene	2.1	ug/L	0.027		0.090	1			07/22/2020 17:33	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 17:33	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 17:33	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 17:33	RLD	EPA 8260C
Dichlorodifluoromethane	0.067	ug/L	0.030	*	0.10	1			07/22/2020 17:33	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 17:33	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 17:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445417 Sample Description: DUP-01 License #:00467 Sampled: 07/13/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 17:33	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 17:33	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 17:33	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 17:33	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 17:33	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 17:33	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 17:33	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 17:33	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 17:33	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 17:33	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 17:33	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 17:33	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 17:33	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 17:33	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 17:33	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 17:33	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 17:33	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 17:33	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 17:33	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 17:33	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 17:33	RLD	EPA 8260C
Vinyl chloride	8.0	ug/L	0.013	0.043	1			07/22/2020 17:33	RLD	EPA 8260C
1,2 Dichloroethane-d4	103	% Recovery	70.0	130	1			07/22/2020 17:33	RLD	EPA 8260C
Bromofluorobenzene	98	% Recovery	70.0	130	1			07/22/2020 17:33	RLD	EPA 8260C
d8-Toluene	100	% Recovery	70.0	130	1			07/22/2020 17:33	RLD	EPA 8260C
Dibromofluoromethane	107	% Recovery	70.0	130	1			07/22/2020 17:33	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445418 Sample Description: P-107D License/Well #: 00467/119 Sampled: 07/14/2020 0835

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	30	mg/L	0.80	2.5	1			07/23/2020 04:08	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 14:59	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	186	ug/L	2.2	7.3	1			07/16/2020 23:11	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 18:02	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 18:02	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 18:02	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 18:02	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 18:02	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 18:02	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:02	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 18:02	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 18:02	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 18:02	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 18:02	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 18:02	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 18:02	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 18:02	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 18:02	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 18:02	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 18:02	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 18:02	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:02	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 18:02	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445418 Sample Description: P-107D License/Well #: 00467/119 Sampled: 07/14/2020 0835

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0		22	1			07/22/2020 18:02	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015		0.050	1			07/22/2020 18:02	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50		1.6	1			07/22/2020 18:02	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024		0.080	1			07/22/2020 18:02	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30		1.0	1			07/22/2020 18:02	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017		0.057	1			07/22/2020 18:02	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22		0.74	1			07/22/2020 18:02	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80		2.6	1			07/22/2020 18:02	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019		0.062	1			07/22/2020 18:02	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018		0.060	1			07/22/2020 18:02	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040		0.15	1			07/22/2020 18:02	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028		0.093	1			07/22/2020 18:02	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030		0.10	1			07/22/2020 18:02	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060		0.19	1			07/22/2020 18:02	RLD	EPA 8260C
Carbon disulfide	0.024	ug/L	0.014	*	0.046	1	B		07/22/2020 18:02	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029		0.095	1			07/22/2020 18:02	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015		0.049	1			07/22/2020 18:02	RLD	EPA 8260C
Chloroethane	2.6	ug/L	0.023		0.077	1			07/22/2020 18:02	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023		0.076	1			07/22/2020 18:02	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 18:02	RLD	EPA 8260C
cis-1,2-Dichloroethene	1.7	ug/L	0.027		0.090	1			07/22/2020 18:02	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020		0.067	1			07/22/2020 18:02	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030		0.10	1			07/22/2020 18:02	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030		0.11	1			07/22/2020 18:02	RLD	EPA 8260C
Dichlorodifluoromethane	0.067	ug/L	0.030	*	0.10	1			07/22/2020 18:02	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02		0.05	1			07/22/2020 18:02	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016		0.053	1			07/22/2020 18:02	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445418 Sample Description: P-107D License/Well #: 00467/119 Sampled: 07/14/2020 0835

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:02	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 18:02	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 18:02	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 18:02	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 18:02	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 18:02	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 18:02	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 18:02	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 18:02	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 18:02	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 18:02	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 18:02	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 18:02	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 18:02	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 18:02	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 18:02	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 18:02	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 18:02	RLD	EPA 8260C
Trichloroethene	0.098	ug/L	0.025	0.084	1			07/22/2020 18:02	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 18:02	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 18:02	RLD	EPA 8260C
Vinyl chloride	5.8	ug/L	0.013	0.043	1			07/22/2020 18:02	RLD	EPA 8260C
1,2 Dichloroethane-d4	101	% Recovery	70.0	130	1			07/22/2020 18:02	RLD	EPA 8260C
Bromofluorobenzene	98	% Recovery	70.0	130	1			07/22/2020 18:02	RLD	EPA 8260C
d8-Toluene	98	% Recovery	70.0	130	1			07/22/2020 18:02	RLD	EPA 8260C
Dibromofluoromethane	102	% Recovery	70.0	130	1			07/22/2020 18:02	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445419 Sample Description: MW-112 License/Well #: 00467/121 Sampled: 07/14/2020 0917

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	64	mg/L	4.0	13	5			07/23/2020 04:29	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	1.5	mg/L	0.057	0.19	1			07/23/2020 15:00	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	358	ug/L	2.2	7.3	1			07/16/2020 23:18	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 18:31	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 18:31	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 18:31	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 18:31	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 18:31	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 18:31	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:31	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 18:31	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 18:31	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 18:31	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 18:31	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 18:31	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 18:31	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 18:31	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 18:31	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 18:31	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 18:31	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 18:31	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:31	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 18:31	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445419 Sample Description: MW-112 License/Well #: 00467/121 Sampled: 07/14/2020 0917

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0	22	1			07/22/2020 18:31	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015	0.050	1			07/22/2020 18:31	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50	1.6	1			07/22/2020 18:31	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024	0.080	1			07/22/2020 18:31	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30	1.0	1			07/22/2020 18:31	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017	0.057	1			07/22/2020 18:31	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22	0.74	1			07/22/2020 18:31	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80	2.6	1			07/22/2020 18:31	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019	0.062	1			07/22/2020 18:31	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018	0.060	1			07/22/2020 18:31	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040	0.15	1			07/22/2020 18:31	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028	0.093	1			07/22/2020 18:31	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:31	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060	0.19	1			07/22/2020 18:31	RLD	EPA 8260C
Carbon disulfide	<0.014	ug/L	0.014	0.046	1			07/22/2020 18:31	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029	0.095	1			07/22/2020 18:31	RLD	EPA 8260C
Chlorobenzene	0.068	ug/L	0.015	0.049	1			07/22/2020 18:31	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023	0.077	1			07/22/2020 18:31	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 18:31	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 18:31	RLD	EPA 8260C
cis-1,2-Dichloroethene	0.15	ug/L	0.027	0.090	1			07/22/2020 18:31	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 18:31	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:31	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 18:31	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:31	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 18:31	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 18:31	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445419 Sample Description: MW-112 License/Well #: 00467/121 Sampled: 07/14/2020 0917

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 18:31	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 18:31	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 18:31	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 18:31	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 18:31	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 18:31	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 18:31	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 18:31	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 18:31	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 18:31	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 18:31	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 18:31	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 18:31	RLD	EPA 8260C
Tetrachloroethene	0.24	ug/L	0.023	0.077	1			07/22/2020 18:31	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 18:31	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 18:31	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 18:31	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 18:31	RLD	EPA 8260C
Trichloroethene	0.62	ug/L	0.025	0.084	1			07/22/2020 18:31	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 18:31	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 18:31	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 18:31	RLD	EPA 8260C
1,2 Dichloroethane-d4	100	% Recovery	70.0	130	1			07/22/2020 18:31	RLD	EPA 8260C
Bromofluorobenzene	96	% Recovery	70.0	130	1			07/22/2020 18:31	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 18:31	RLD	EPA 8260C
Dibromofluoromethane	105	% Recovery	70.0	130	1			07/22/2020 18:31	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445420 Sample Description: P-103D License/Well #: 00467/141 Sampled: 07/14/2020 1023

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	73	mg/L	4.0	13	5			07/23/2020 05:30	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 15:01	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	78.8	ug/L	2.2	7.3	1			07/16/2020 23:25	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 19:00	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 19:00	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 19:00	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 19:00	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 19:00	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 19:00	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:00	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 19:00	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 19:00	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 19:00	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 19:00	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 19:00	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 19:00	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 19:00	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 19:00	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 19:00	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 19:00	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 19:00	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:00	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 19:00	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445420 Sample Description: P-103D License/Well #: 00467/141 Sampled: 07/14/2020 1023

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0	22	1			07/22/2020 19:00	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015	0.050	1			07/22/2020 19:00	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50	1.6	1			07/22/2020 19:00	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024	0.080	1			07/22/2020 19:00	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30	1.0	1			07/22/2020 19:00	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017	0.057	1			07/22/2020 19:00	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22	0.74	1			07/22/2020 19:00	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80	2.6	1			07/22/2020 19:00	RLD	EPA 8260C
Benzene	0.029	ug/L	0.019 *	0.062	1			07/22/2020 19:00	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018	0.060	1			07/22/2020 19:00	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040	0.15	1			07/22/2020 19:00	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028	0.093	1			07/22/2020 19:00	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:00	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060	0.19	1			07/22/2020 19:00	RLD	EPA 8260C
Carbon disulfide	<0.014	ug/L	0.014	0.046	1			07/22/2020 19:00	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029	0.095	1			07/22/2020 19:00	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015	0.049	1			07/22/2020 19:00	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023	0.077	1			07/22/2020 19:00	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 19:00	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:00	RLD	EPA 8260C
cis-1,2-Dichloroethene	0.32	ug/L	0.027	0.090	1			07/22/2020 19:00	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 19:00	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:00	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:00	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:00	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 19:00	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 19:00	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445420 Sample Description: P-103D License/Well #: 00467/141 Sampled: 07/14/2020 1023

Analyte	Result	Units	LOD		LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030		0.10	1			07/22/2020 19:00	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018		0.059	1			07/22/2020 19:00	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030		0.11	1			07/22/2020 19:00	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017		0.055	1			07/22/2020 19:00	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030		0.12	1			07/22/2020 19:00	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014		0.048	1			07/22/2020 19:00	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020		0.068	1			07/22/2020 19:00	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022		0.072	1			07/22/2020 19:00	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017		0.058	1			07/22/2020 19:00	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018		0.059	1			07/22/2020 19:00	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014		0.046	1			07/22/2020 19:00	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011		0.035	1			07/22/2020 19:00	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013		0.042	1			07/22/2020 19:00	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023		0.077	1			07/22/2020 19:00	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28		0.95	1			07/22/2020 19:00	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017		0.056	1			07/22/2020 19:00	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029		0.098	1			07/22/2020 19:00	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030		0.11	1			07/22/2020 19:00	RLD	EPA 8260C
Trichloroethene	0.070	ug/L	0.025	*	0.084	1			07/22/2020 19:00	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029		0.095	1			07/22/2020 19:00	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40		1.4	1	Y		07/22/2020 19:00	RLD	EPA 8260C
Vinyl chloride	0.30	ug/L	0.013		0.043	1			07/22/2020 19:00	RLD	EPA 8260C
1,2 Dichloroethane-d4	112	% Recovery	70.0		130	1			07/22/2020 19:00	RLD	EPA 8260C
Bromofluorobenzene	98	% Recovery	70.0		130	1			07/22/2020 19:00	RLD	EPA 8260C
d8-Toluene	98	% Recovery	70.0		130	1			07/22/2020 19:00	RLD	EPA 8260C
Dibromofluoromethane	105	% Recovery	70.0		130	1			07/22/2020 19:00	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445421 Sample Description: P-103 License/Well #: 00467/114 Sampled: 07/14/2020 1103

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	65	mg/L	4.0	13	5			07/23/2020 05:50	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	<0.057	mg/L	0.057	0.19	1			07/23/2020 15:03	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	85.8	ug/L	2.2	7.3	1			07/16/2020 23:31	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 19:29	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 19:29	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 19:29	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 19:29	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 19:29	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 19:29	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:29	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 19:29	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 19:29	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 19:29	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 19:29	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 19:29	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 19:29	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 19:29	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 19:29	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 19:29	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 19:29	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 19:29	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:29	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 19:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445421 Sample Description: P-103 License/Well #: 00467/114 Sampled: 07/14/2020 1103

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0	22	1			07/22/2020 19:29	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015	0.050	1			07/22/2020 19:29	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50	1.6	1			07/22/2020 19:29	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024	0.080	1			07/22/2020 19:29	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30	1.0	1			07/22/2020 19:29	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017	0.057	1			07/22/2020 19:29	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22	0.74	1			07/22/2020 19:29	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80	2.6	1			07/22/2020 19:29	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019	0.062	1			07/22/2020 19:29	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018	0.060	1			07/22/2020 19:29	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040	0.15	1			07/22/2020 19:29	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028	0.093	1			07/22/2020 19:29	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:29	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060	0.19	1			07/22/2020 19:29	RLD	EPA 8260C
Carbon disulfide	<0.014	ug/L	0.014	0.046	1			07/22/2020 19:29	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029	0.095	1			07/22/2020 19:29	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015	0.049	1			07/22/2020 19:29	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023	0.077	1			07/22/2020 19:29	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 19:29	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:29	RLD	EPA 8260C
cis-1,2-Dichloroethene	0.043	ug/L	0.027 *	0.090	1			07/22/2020 19:29	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 19:29	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:29	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:29	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:29	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 19:29	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 19:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445421 Sample Description: P-103 License/Well #: 00467/114 Sampled: 07/14/2020 1103

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:29	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 19:29	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:29	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 19:29	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 19:29	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 19:29	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 19:29	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 19:29	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 19:29	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 19:29	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 19:29	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 19:29	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 19:29	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 19:29	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 19:29	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 19:29	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 19:29	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:29	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 19:29	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 19:29	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 19:29	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 19:29	RLD	EPA 8260C
1,2 Dichloroethane-d4	99	% Recovery	70.0	130	1			07/22/2020 19:29	RLD	EPA 8260C
Bromofluorobenzene	99	% Recovery	70.0	130	1			07/22/2020 19:29	RLD	EPA 8260C
d8-Toluene	99	% Recovery	70.0	130	1			07/22/2020 19:29	RLD	EPA 8260C
Dibromofluoromethane	102	% Recovery	70.0	130	1			07/22/2020 19:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445422 Sample Description: MW-103 License/Well #: 00467/112 Sampled: 07/14/2020 1143

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Sulfate	120	mg/L	4.0	13	5			07/23/2020 06:10	TMG	EPA 9056A
Nitrate+Nitrite Nitrogen Total	19	mg/L	0.29	0.95	5			07/23/2020 16:16	SRW	EPA 353.2
Metals Results										
Dissolved Manganese	<2.2	ug/L	2.2	7.3	1			07/16/2020 23:38	NAH	EPA 6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 19:58	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 19:58	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 19:58	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 19:58	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 19:58	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 19:58	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:58	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 19:58	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 19:58	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 19:58	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 19:58	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 19:58	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 19:58	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 19:58	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 19:58	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 19:58	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 19:58	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 19:58	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:58	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 19:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445422 Sample Description: MW-103 License/Well #: 00467/112 Sampled: 07/14/2020 1143

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dioxane	<7.0	ug/L	7.0	22	1			07/22/2020 19:58	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015	0.050	1			07/22/2020 19:58	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50	1.6	1			07/22/2020 19:58	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024	0.080	1			07/22/2020 19:58	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30	1.0	1			07/22/2020 19:58	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017	0.057	1			07/22/2020 19:58	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	ug/L	0.22	0.74	1			07/22/2020 19:58	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80	2.6	1			07/22/2020 19:58	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019	0.062	1			07/22/2020 19:58	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018	0.060	1			07/22/2020 19:58	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040	0.15	1			07/22/2020 19:58	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028	0.093	1			07/22/2020 19:58	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:58	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060	0.19	1			07/22/2020 19:58	RLD	EPA 8260C
Carbon disulfide	<0.014	ug/L	0.014	0.046	1			07/22/2020 19:58	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029	0.095	1			07/22/2020 19:58	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015	0.049	1			07/22/2020 19:58	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023	0.077	1			07/22/2020 19:58	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 19:58	RLD	EPA 8260C
Chloromethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:58	RLD	EPA 8260C
cis-1,2-Dichloroethene	0.24	ug/L	0.027	0.090	1			07/22/2020 19:58	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 19:58	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:58	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:58	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:58	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 19:58	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 19:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445422 Sample Description: MW-103 License/Well #: 00467/112 Sampled: 07/14/2020 1143

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 19:58	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 19:58	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:58	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 19:58	RLD	EPA 8260C
Methylene chloride	<0.030	ug/L	0.030	0.12	1			07/22/2020 19:58	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 19:58	RLD	EPA 8260C
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 19:58	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 19:58	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 19:58	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 19:58	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 19:58	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 19:58	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 19:58	RLD	EPA 8260C
Tetrachloroethene	0.24	ug/L	0.023	0.077	1			07/22/2020 19:58	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 19:58	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 19:58	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 19:58	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 19:58	RLD	EPA 8260C
Trichloroethene	1.5	ug/L	0.025	0.084	1			07/22/2020 19:58	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 19:58	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 19:58	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 19:58	RLD	EPA 8260C
1,2 Dichloroethane-d4	103	% Recovery	70.0	130	1			07/22/2020 19:58	RLD	EPA 8260C
Bromofluorobenzene	96	% Recovery	70.0	130	1			07/22/2020 19:58	RLD	EPA 8260C
d8-Toluene	100	% Recovery	70.0	130	1			07/22/2020 19:58	RLD	EPA 8260C
Dibromofluoromethane	107	% Recovery	70.0	130	1			07/22/2020 19:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445425 Sample Description: TRIP BLANK License/Well #: 00467/999 Sampled: 06/09/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.018	ug/L	0.018	0.059	1			07/22/2020 12:14	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	ug/L	0.018	0.060	1			07/22/2020 12:14	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.014	ug/L	0.014	0.048	1			07/22/2020 12:14	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.019	ug/L	0.019	0.062	1			07/22/2020 12:14	RLD	EPA 8260C
1,1-Dichloroethane	<0.015	ug/L	0.015	0.050	1			07/22/2020 12:14	RLD	EPA 8260C
1,1-Dichloroethene	<0.040	ug/L	0.040	0.12	1			07/22/2020 12:14	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:14	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 12:14	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.070	ug/L	0.070	0.24	1			07/22/2020 12:14	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.012	ug/L	0.012	0.040	1			07/22/2020 12:14	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.020	ug/L	0.020	0.065	1			07/22/2020 12:14	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.070	ug/L	0.070	0.23	1			07/22/2020 12:14	RLD	EPA 8260C
1,2-Dibromoethane	<0.040	ug/L	0.040	0.12	1			07/22/2020 12:14	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.022	ug/L	0.022	0.074	1			07/22/2020 12:14	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	ug/L	0.024	0.080	1			07/22/2020 12:14	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	ug/L	0.024	0.079	1			07/22/2020 12:14	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	ug/L	0.016	0.054	1			07/22/2020 12:14	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.020	ug/L	0.020	0.066	1			07/22/2020 12:14	RLD	EPA 8260C
1,3-Dichloropropane	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:14	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	ug/L	0.017	0.056	1			07/22/2020 12:14	RLD	EPA 8260C
1,4-Dioxane	13	ug/L	7.0 *	22	1			07/22/2020 12:14	RLD	EPA 8260C
2,2-Dichloropropane	<0.015	ug/L	0.015	0.050	1			07/22/2020 12:14	RLD	EPA 8260C
2-Butanone	<0.50	ug/L	0.50	1.6	1			07/22/2020 12:14	RLD	EPA 8260C
2-Chlorotoluene	<0.024	ug/L	0.024	0.080	1			07/22/2020 12:14	RLD	EPA 8260C
2-Hexanone	<0.30	ug/L	0.30	1.0	1			07/22/2020 12:14	RLD	EPA 8260C
4-Chlorotoluene	<0.017	ug/L	0.017	0.057	1			07/22/2020 12:14	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445425 Sample Description: TRIP BLANK License/Well #: 00467/999 Sampled: 06/09/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
4-Methyl-2-pentanone	<0.22	ug/L	0.22	0.74	1			07/22/2020 12:14	RLD	EPA 8260C
Acetone	<0.80	ug/L	0.80	2.6	1			07/22/2020 12:14	RLD	EPA 8260C
Benzene	<0.019	ug/L	0.019	0.062	1			07/22/2020 12:14	RLD	EPA 8260C
Bromobenzene	<0.018	ug/L	0.018	0.060	1			07/22/2020 12:14	RLD	EPA 8260C
Bromochloromethane	<0.040	ug/L	0.040	0.15	1			07/22/2020 12:14	RLD	EPA 8260C
Bromodichloromethane	<0.028	ug/L	0.028	0.093	1			07/22/2020 12:14	RLD	EPA 8260C
Bromoform	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:14	RLD	EPA 8260C
Bromomethane	<0.060	ug/L	0.060	0.19	1			07/22/2020 12:14	RLD	EPA 8260C
Carbon disulfide	0.021	ug/L	0.014 *	0.046	1	B		07/22/2020 12:14	RLD	EPA 8260C
Carbon tetrachloride	<0.029	ug/L	0.029	0.095	1			07/22/2020 12:14	RLD	EPA 8260C
Chlorobenzene	<0.015	ug/L	0.015	0.049	1			07/22/2020 12:14	RLD	EPA 8260C
Chloroethane	<0.023	ug/L	0.023	0.077	1			07/22/2020 12:14	RLD	EPA 8260C
Chloroform	<0.023	ug/L	0.023	0.076	1			07/22/2020 12:14	RLD	EPA 8260C
Chloromethane	0.037	ug/L	0.030 *	0.11	1	B		07/22/2020 12:14	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	ug/L	0.027	0.090	1			07/22/2020 12:14	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.020	ug/L	0.020	0.067	1			07/22/2020 12:14	RLD	EPA 8260C
Dibromochloromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:14	RLD	EPA 8260C
Dibromomethane	<0.030	ug/L	0.030	0.11	1			07/22/2020 12:14	RLD	EPA 8260C
Dichlorodifluoromethane	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:14	RLD	EPA 8260C
Diisopropyl ether	<0.02	ug/L	0.02	0.05	1			07/22/2020 12:14	RLD	EPA 8260C
Ethylbenzene	<0.016	ug/L	0.016	0.053	1			07/22/2020 12:14	RLD	EPA 8260C
Hexachlorobutadiene	<0.030	ug/L	0.030	0.10	1			07/22/2020 12:14	RLD	EPA 8260C
Isopropylbenzene	<0.018	ug/L	0.018	0.059	1			07/22/2020 12:14	RLD	EPA 8260C
m & p-Xylene	<0.030	ug/L	0.030	0.11	1			07/22/2020 12:14	RLD	EPA 8260C
Methyl tert-butyl ether	<0.017	ug/L	0.017	0.055	1			07/22/2020 12:14	RLD	EPA 8260C
Methylene chloride	1.2	ug/L	0.030	0.12	1	Q,Z,B		07/22/2020 12:14	RLD	EPA 8260C
n-Butylbenzene	<0.014	ug/L	0.014	0.048	1			07/22/2020 12:14	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 445425 Sample Description: TRIP BLANK License/Well #: 00467/999 Sampled: 06/09/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
n-Propylbenzene	<0.020	ug/L	0.020	0.068	1			07/22/2020 12:14	RLD	EPA 8260C
Naphthalene	<0.022	ug/L	0.022	0.072	1			07/22/2020 12:14	RLD	EPA 8260C
o-Xylene	<0.017	ug/L	0.017	0.058	1			07/22/2020 12:14	RLD	EPA 8260C
p-Isopropyltoluene	<0.018	ug/L	0.018	0.059	1			07/22/2020 12:14	RLD	EPA 8260C
sec-Butylbenzene	<0.014	ug/L	0.014	0.046	1			07/22/2020 12:14	RLD	EPA 8260C
Styrene	<0.011	ug/L	0.011	0.035	1			07/22/2020 12:14	RLD	EPA 8260C
tert-Butylbenzene	<0.013	ug/L	0.013	0.042	1			07/22/2020 12:14	RLD	EPA 8260C
Tetrachloroethene	<0.023	ug/L	0.023	0.077	1			07/22/2020 12:14	RLD	EPA 8260C
Tetrahydrofuran	<0.28	ug/L	0.28	0.95	1			07/22/2020 12:14	RLD	EPA 8260C
Toluene	<0.017	ug/L	0.017	0.056	1			07/22/2020 12:14	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.029	ug/L	0.029	0.098	1			07/22/2020 12:14	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.030	ug/L	0.030	0.11	1			07/22/2020 12:14	RLD	EPA 8260C
Trichloroethene	<0.025	ug/L	0.025	0.084	1			07/22/2020 12:14	RLD	EPA 8260C
Trichlorofluoromethane	<0.029	ug/L	0.029	0.095	1			07/22/2020 12:14	RLD	EPA 8260C
Vinyl acetate	<0.40	ug/L	0.40	1.4	1	Y		07/22/2020 12:14	RLD	EPA 8260C
Vinyl chloride	<0.013	ug/L	0.013	0.043	1			07/22/2020 12:14	RLD	EPA 8260C
1,2 Dichloroethane-d4	107	% Recovery	70.0	130	1			07/22/2020 12:14	RLD	EPA 8260C
Bromofluorobenzene	97	% Recovery	70.0	130	1			07/22/2020 12:14	RLD	EPA 8260C
d8-Toluene	98	% Recovery	70.0	130	1			07/22/2020 12:14	RLD	EPA 8260C
Dibromofluoromethane	102	% Recovery	70.0	130	1			07/22/2020 12:14	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes regarding entire Chain of Custody:

Notes: * Indicates Value in between the LOD (limit of detection) and the LOQ (limit of quantitation). All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached. This report has been specifically prepared to satisfy project or program requirements.

Submitted by: Brett M. Szymanski
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 289
Louisiana NELAP (primary) ID# ACC20190002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20190002

Preventative Action Limit (PAL) Exceedances

Location/Landfill: RIPON FF/NN LANDFILL **License #: 00467**

Well Description: *MW-103*	**Well #: *112***	GROUND WATER			**Sample Date**	**07/14/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Nitrate+Nitrite Nitrogen Total	00630	19	2	10	0.29	mg/L
Trichloroethene	39180	1.5	0.5	5	0.025	ug/L

Well Description: *MW-112*	**Well #: *121***	GROUND WATER			**Sample Date**	**07/14/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	358	60	300	2.2	ug/L
Trichloroethene	39180	0.62	0.5	5	0.025	ug/L

Well Description: *MW-3A*	**Well #: *133***	GROUND WATER			**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	413	60	300	2.2	ug/L

Well Description: *MW-3B*	**Well #: *134***	GROUND WATER			**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	76.7	60	300	2.2	ug/L

Well Description: *P-103*	**Well #: *114***	GROUND WATER			**Sample Date**	**07/14/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	85.8	60	300	2.2	ug/L

Well Description: *P-103D*	**Well #: *141***	GROUND WATER			**Sample Date**	**07/14/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	78.8	60	300	2.2	ug/L
Vinyl chloride	39175	0.30	0.02	0.20	0.013	ug/L

Well Description: *P-107D*	**Well #: *119***	GROUND WATER			**Sample Date**	**07/14/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	186	60	300	2.2	ug/L
Vinyl chloride	39175	5.8	0.02	0.20	0.013	ug/L

Well Description: *P-111D*	**Well #: *130***	GROUND WATER			**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Vinyl chloride	39175	3.7	0.02	0.20	0.013	ug/L

Well Description: *P-114*	**Well #: *140***	GROUND WATER			**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	61.8	60	300	2.2	ug/L

Preventative Action Limit (PAL) Exceedances

Location/Landfill: RIPON FF/NN LANDFILL **License #: 00467**

Well Description: *P-114*	**Well #: *140***	GROUND WATER		**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Vinyl chloride	39175	7.7	0.02	0.20	0.013	ug/L

Well Description: *P-115*	**Well #: *142***	GROUND WATER		**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	107	60	300	2.2	ug/L
Vinyl chloride	39175	0.85	0.02	0.20	0.013	ug/L

Well Description: *P-116*	**Well #: *143***	GROUND WATER		**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	72.2	60	300	2.2	ug/L

Well Description: *P-117*	**Well #: *144***	GROUND WATER		**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	198	60	300	2.2	ug/L
Vinyl chloride	39175	1.4	0.02	0.20	0.013	ug/L

Well Description: *P-118*	**Well #: *145***	GROUND WATER		**Sample Date**	**07/13/2020**
Parameter	DNR Parameter #	Result	PAL	ES	LOD	Units
Dissolved Manganese	01056	63.1	60	300	2.2	ug/L

Well Description: ***MW-103*** **Well #:** ***112***

Parameter	Sample Date			
	7/14/2020	4/28/2020	7/22/2019	5/22/2019
Acetone		1.1	0.88	3.3
Carbon disulfide		0.022		
Chloromethane		0.061		
cis-1,2-Dichloroethene	0.24	0.24	0.31	0.34
Tetrachloroethene	0.24	0.25	0.29	0.27
trans-1,2-Dichloroethene			0.052	0.040
Trichloroethene	1.5	1.4	1.6	1.4

Well Description: ***MW-104*** **Well #:** ***113***

Parameter	Sample Date
	5/22/2019
1,4-Dichlorobenzene	1.6
Acetone	2.2
Benzene	0.15
Carbon disulfide	0.16
Chlorobenzene	3.6
cis-1,2-Dichloroethene	0.20
Isopropylbenzene	0.17
Methyl tert-butyl ether	0.054
sec-Butylbenzene	0.061
Toluene	0.041
Trichloroethene	0.054
Vinyl chloride	0.72

Well Description: ***P-103*** **Well #:** ***114***

Parameter	Sample Date			
	7/14/2020	4/27/2020	7/23/2019	5/22/2019
Acetone			0.40	0.36
Carbon disulfide		0.029		
cis-1,2-Dichloroethene	0.043	0.040		
Trichloroethene		0.035		
Vinyl chloride		0.027	0.038	0.036

Well Description: ***MW-104*** **Well #:** ***115***

Parameter	Sample Date
	4/28/2020
1,4-Dichlorobenzene	1.6
Acetone	1.5
Benzene	0.12
Carbon disulfide	0.16
Chlorobenzene	3.7
Chloromethane	0.032
cis-1,2-Dichloroethene	0.094
Diisopropyl ether	0.047
Isopropylbenzene	0.19
m & p-Xylene	0.032
Methyl tert-butyl ether	0.068
sec-Butylbenzene	0.065
tert-Butylbenzene	0.015
Toluene	0.024
Trichloroethene	0.041

Well Description: ***P-106*** **Well #:** ***116***

Parameter	Sample Date 4/27/2020	5/22/2019
Carbon disulfide	0.021	
Chloromethane	0.034	
cis-1,2-Dichloroethene	0.059	
Trichloroethene	0.14	0.15

Well Description: ***MW-107*** **Well #:** ***117***

Parameter	Sample Date	
	4/28/2020	5/21/2019
Acetone		1.3
Carbon disulfide	0.018	
Tetrachloroethene	0.036	
Trichloroethene	0.029	

Well Description: ***P-107*** **Well #:** ***118***

Parameter	Sample Date 4/28/2020	5/21/2019
Acetone		0.60
Benzene	0.021	
Carbon disulfide	0.019	
Chloroethane	0.21	0.081
Chloromethane	0.049	
cis-1,2-Dichloroethene	0.26	0.28
Dichlorodifluoromethane	0.035	
Trichloroethene	0.065	0.074
Vinyl chloride	0.84	0.95

Well Description: ***P-107D*** **Well #:** ***119***

Parameter	Sample Date					
	7/14/2020	4/28/2020	2/25/2020	10/21/2019	7/23/2019	5/21/2019
1,1-Dichloroethane				0.029		
1,2,4-Trimethylbenzene		0.021				
Acetone					0.61	0.87
Carbon disulfide	0.024	0.044	0.044	0.036		
Chloroethane	2.6		0.45	2.0	1.4	1.3
Chloromethane			0.053			
cis-1,2-Dichloroethene	1.7	0.81	0.66	2.1	1.9	1.7
Dichlorodifluoromethane	0.067			0.17		
Trichloroethene	0.098	0.037	0.043	0.12	0.14	0.12
Vinyl chloride	5.8	2.8	2.1	7.6	4.4	5.2

Well Description: ***MW-112*** **Well #:** ***121***

Parameter	Sample Date			
	7/14/2020	4/28/2020	7/22/2019	5/22/2019
Acetone		0.93		0.64
Chlorobenzene	0.068	0.047	0.10	0.058
Chloromethane		0.056		
cis-1,2-Dichloroethene	0.15	0.16	0.21	0.28
Dichlorodifluoromethane		0.032		
Tetrachloroethene	0.24	0.28	0.16	0.25
Trichloroethene	0.62	1.0	0.74	0.99
Vinyl chloride		0.025	0.040	0.031

Well Description: ***P-111D*** **Well #:** ***130***

Parameter	Sample Date					
	7/13/2020	4/28/2020	2/25/2020	10/21/2019	7/23/2019	5/22/2019
Acetone					0.63	0.45
Carbon disulfide	0.021	0.026	0.018	0.043		
Chloroethane	1.6	1.5	0.89	0.86	0.89	0.93
Chloromethane		0.047	0.11		0.040	
cis-1,2-Dichloroethene	3.1	3.3	2.8	2.9	3.3	2.8
Dichlorodifluoromethane	0.058	0.052		0.16		0.066
trans-1,2-Dichloroethene		0.042	0.035	0.042		
Vinyl chloride	3.7	3.6	3.0	4.6	4.6	4.2

Well Description: ***MW-3A*** **Well #:** ***133***

Parameter	Sample Date				
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019
Acetone					0.35
Carbon disulfide	0.025	0.024		0.025	
Chloromethane	0.046	0.047	0.084	0.030	

Well Description: ***MW-3B*** **Well #:** ***134***

Parameter	Sample Date					
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019	5/21/2019
Acetone					0.84	0.44
Carbon disulfide	0.043	0.022		0.027		
Chloromethane	0.037		0.073			
Vinyl chloride			0.035	0.051	0.065	0.058

Well Description: ***P-113A*** **Well #:** ***136***

Parameter	Sample Date		
	7/13/2020	4/27/2020	2/26/2020
Carbon disulfide	0.031	0.017	
Chloromethane	0.037		0.037

Well Description: ***P-113B*** **Well #:** ***138***

Parameter	Sample Date					
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019	5/21/2019
Acetone		0.93			0.32	0.33
Carbon disulfide	0.019	0.019		0.025		
Chloromethane	0.033	0.046	0.048	0.030		

Well Description: ***P-114*** **Well #:** ***140***

Parameter	Sample Date					
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019	5/22/2019
Acetone		0.84			0.72	0.47
Carbon disulfide	0.019	0.024		0.021		
Chloroethane	0.34	0.52	0.27	0.24	0.29	0.27
Chloromethane	0.044	0.042	0.039			
cis-1,2-Dichloroethene	2.0	2.1	1.8	1.6	2.1	1.7
Dichlorodifluoromethane	0.040	0.047		0.15		
p-Isopropyltoluene						0.15
Tetrahydrofuran		0.63				
trans-1,2-Dichloroethene		0.036				
Vinyl chloride	7.7	7.7	7.4	8.0	6.9	7.3

Well Description: ***P-103D*** **Well #:** ***141***

Parameter	Sample Date					
	7/14/2020	4/27/2020	2/26/2020	10/21/2019	7/23/2019	5/22/2019
Acetone					0.41	0.32
Benzene	0.029	0.022	0.022		0.042	
Carbon disulfide		0.018	0.017			
Chloromethane		0.045	0.082			
cis-1,2-Dichloroethene	0.32	0.26	0.25	0.25	0.24	0.30
Trichloroethene	0.070	0.054	0.062	0.050	0.10	0.086
Vinyl chloride	0.30	0.25	0.22	0.27	0.17	0.31

Well Description: ***P-115*** **Well #:** ***142***

Parameter	Sample Date					
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019	5/22/2019
Acetone		0.93			0.71	0.55
Carbon disulfide	0.032	0.052	0.047	0.025		0.074
Chloromethane	0.041	0.042	0.040			
cis-1,2-Dichloroethene	0.19	0.19	0.17	0.15	0.14	0.14
Vinyl chloride	0.85	0.83	0.72	0.96	0.91	0.94

Well Description: ***P-116*** **Well #:** ***143***

Parameter	Sample Date					
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019	5/22/2019
Acetone					0.59	0.75
Carbon disulfide	0.018	0.039	0.028	0.049		
Chloromethane		0.050	0.062			
Toluene						0.040

Well Description: ***P-117*** **Well #:** ***144***

Parameter	Sample Date					
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019	5/21/2019
Acetone						0.55
Benzene	0.022	0.024	0.022			
Carbon disulfide	0.034	0.019	0.017			
Chloroethane	0.72	0.55	0.35	0.38	0.36	0.32
Chloromethane	0.040		0.084			
cis-1,2-Dichloroethene	0.78	0.77	0.69	0.78	0.84	0.76
Dichlorodifluoromethane	0.041			0.12		
Naphthalene		0.025	0.034			
Trichloroethene	0.063	0.046	0.047	0.061	0.061	
Vinyl chloride	1.4	1.2	1.1	1.5	1.3	1.2

Well Description: ***P-118*** **Well #:** ***145***

Parameter	Sample Date					
	7/13/2020	4/27/2020	2/25/2020	10/21/2019	7/22/2019	5/21/2019
Acetone						0.57
Carbon disulfide		0.023	0.028	0.054		
Chloromethane	0.052	0.053	0.084			
Naphthalene				0.026		0.044
Toluene	0.023	0.033	0.020	0.038	0.055	0.040
Vinyl chloride		0.047	0.024	0.079	0.064	0.057

Well Description: ***LC-1*** **Well #:** ***301***

Parameter	Sample Date 4/28/2020	5/21/2019
1,1,2,2-Tetrachloroethane		30
1,2,4-Trimethylbenzene	33	110
1,3,5-Trimethylbenzene		44
2-Butanone	2100	
Acetone	780	
Ethylbenzene		29
Isopropylbenzene		11
m & p-Xylene	89	200
Naphthalene	37	100
o-Xylene		8.5
p-Isopropyltoluene		41
sec-Butylbenzene		11
Tetrahydrofuran	840	130

Well Description: ***LC-2*** **Well #:** ***302***

Parameter	Sample Date 4/28/2020	5/21/2019
1,2,4-Trimethylbenzene	73	85
1,3,5-Trimethylbenzene	15	19
1,4-Dichlorobenzene	16	23
2-Butanone	2200	
Acetone	900	94
Benzene	14	18
Chlorobenzene	88	170
Ethylbenzene	14	8.5
Isopropylbenzene	9.7	13
m & p-Xylene	360	430
Naphthalene	9.9	16
n-Propylbenzene	8.1	10
p-Isopropyltoluene		9.8
Tetrahydrofuran	1000	110
Toluene		3.2

Well Description: ***LC-3*** **Well #:** ***303***

Parameter	Sample Date 4/28/2020	5/21/2019
1,2,4-Trimethylbenzene		5.8
1,3,5-Trimethylbenzene		5.0
2-Butanone	23000	280
Acetone	7400	1800
Benzene		4.1
Bromomethane		8.9
Carbon disulfide		75
cis-1,2-Dichloroethene	28	170
Ethylbenzene	6.8	69
m & p-Xylene	32	310
o-Xylene	9.7	78
Tetrahydrofuran		82
Toluene	15	260
Trichloroethene	3.1	14
Vinyl chloride	4.1	

Well Description: ***TRIP BLANK*** **Well #:** ***999***

Parameter	Sample Date						
	6/9/2020	4/28/2020	1/20/2020	10/21/2019	7/21/2019	7/2/2019	5/22/2019
1,4-Dioxane	13						
Acetone		1.3		3.3	1.1	1.2	0.57
Carbon disulfide	0.021			0.021			
Chloromethane	0.037		0.49	0.046			
Methylene chloride	1.2	0.92	0.40	0.20	1.3	1.1	

CT LABORATORIES
delivering more than data from your environmental analyses

1230 Lange Court • Baraboo, WI 53913 • 608-356-2760
www.ctlaboratories.com

QC SUMMARY REPORT

TRC ENVIRONMENTAL **Project Name: RIPON FF/NN LANDFILL**

SDG #: 0 **Folder #: 154790** **Project #: 378957.0000.0000**

Duplicate

Analytical Run #:	173357	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	GROUND WATER
CTLab #:	450145	Analysis Time:	23:25	Prep Date/Time:		Method:	SW9056A
Parent Sample #:	445408	Analyst:	TMG	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Total Sulfate	11.6	mg/L	12					3	10

Lab Control Spike Water

Analytical Run #:	173357	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	450148	Analysis Time:	00:46	Prep Date/Time:		Method:	SW9056A
Parent Sample #:		Analyst:	TMG	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Sulfate	25.86	mg/L			25.00	103	80 --- 120		

Method Blank Water

Analytical Run #:	173357	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	450149	Analysis Time:	01:06	Prep Date/Time:		Method:	SW9056A
Parent Sample #:		Analyst:	TMG	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Sulfate	0.8	mg/L		U	0		0.8		

Matrix Spike Water

Analytical Run #:	173357	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	GROUND WATER
CTLab #:	450146	Analysis Time:	23:45	Prep Date/Time:		Method:	SW9056A
Parent Sample #:	445408	Analyst:	TMG	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Total Sulfate	19.0	mg/L	12		8.00	88	49 --- 120		20

Lab Control Spike Water

Analytical Run #:	173407	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	449484	Analysis Time:	14:29	Prep Date/Time:		Method:	
Parent Sample #:		Analyst:	SRW	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Nitrate+Nitrite Nitrogen Total	5.180	mg/L			5.000	104	90 --- 110		
Nitrate+Nitrite Nitrogen,Diss	5.180	mg/L			5.000	104	90 --- 110		

Method Blank Water

Analytical Run #:	173407	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	449485	Analysis Time:	14:31	Prep Date/Time:		Method:	
Parent Sample #:		Analyst:	SRW	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Nitrate+Nitrite Nitrogen	0.057	mg/L		U	0		0.057		

Matrix Spike Duplicate Water

Analytical Run #:	173407	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	GROUND WATER
CTLab #:	449864	Analysis Time:	14:47	Prep Date/Time:		Method:	
Parent Sample #:	449863	Analyst:	SRW	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Nitrate+Nitrite Nitrogen	1.76	mg/L	BDL		2.00	88	90 --- 110	11	20

Matrix Spike Duplicate Water

Analytical Run #:	173407	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	GROUND WATER
CTLab #:	449866	Analysis Time:	14:50	Prep Date/Time:		Method:	
Parent Sample #:	449865	Analyst:	SRW	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Nitrate+Nitrite Nitrogen	1.89	mg/L	BDL		2.00	94	90 --- 110	4	20

Matrix Spike Water

Analytical Run #:	173407	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	GROUND WATER
CTLab #:	449863	Analysis Time:	14:46	Prep Date/Time:		Method:	
Parent Sample #:	445412	Analyst:	SRW	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Nitrate+Nitrite Nitrogen	1.96	mg/L	BDL		2.00	98	90 --- 110		20

Matrix Spike Water

Analytical Run #:	173407	Analysis Date:	07/23/2020	Prep Batch #:		Matrix:	GROUND WATER
CTLab #:	449865	Analysis Time:	14:49	Prep Date/Time:		Method:	
Parent Sample #:	445413	Analyst:	SRW	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Nitrate+Nitrite Nitrogen	1.96	mg/L	BDL		2.00	98	90 --- 110		20

Lab Control Spike Duplicate Water

Analytical Run #:	173120	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	449210	Analysis Time:	20:56	Prep Date/Time:		Method:	SW8260C
Parent Sample #:	448838	Analyst:	RLD	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.19	ug/L	4.04		4.00	105	78 --- 121	4	20
1,1,1-Trichloroethane	4.25	ug/L	4.27		4.00	106	82 --- 122	0	20
1,1,2,2-Tetrachloroethane	3.82	ug/L	4.12		4.00	96	68 --- 128	8	20
1,1,2-Trichloroethane	4.20	ug/L	4.22		4.00	105	84 --- 114	0	20
1,1-Dichloroethane	4.30	ug/L	4.31		4.00	108	76 --- 122	0	20
1,1-Dichloroethene	4.34	ug/L	4.38		4.00	108	83 --- 123	1	20
1,1-Dichloropropene	4.26	ug/L	4.28		4.00	106	85 --- 120	0	20
1,2 Dichloroethane-d4	95.0	% Recovery			100	95.0	87 --- 107		
1,2,3-Trichlorobenzene	3.56	ug/L	4.07		4.00	89	78 --- 121	13	20
1,2,3-Trichloropropane	3.63	ug/L	3.87		4.00	91	62 --- 129	6	20
1,2,4-Trichlorobenzene	3.52	ug/L	3.86		4.00	88	80 --- 120	9	20
1,2,4-Trimethylbenzene	3.99	ug/L	4.07		4.00	100	76 --- 125	2	20
1,2-Dibromo-3-chloropropane	3.59	ug/L	3.86		4.00	90	69 --- 125	7	20
1,2-Dibromoethane	4.04	ug/L	4.02		4.00	101	80 --- 118	0	20
1,2-Dichlorobenzene	4.02	ug/L	4.19		4.00	100	80 --- 117	4	20
1,2-Dichloroethane	4.06	ug/L	4.22		4.00	102	78 --- 118	4	20
1,2-Dichloropropane	4.27	ug/L	4.36		4.00	107	78 --- 121	2	20
1,3,5-Trimethylbenzene	4.51	ug/L	4.58		4.00	113	76 --- 126	2	20
1,3-Dichlorobenzene	4.25	ug/L	4.33		4.00	106	78 --- 119	2	20
1,3-Dichloropropane	4.07	ug/L	4.28		4.00	102	82 --- 117	5	20
1,4-Dichlorobenzene	4.18	ug/L	4.15		4.00	104	77 --- 118	1	20
1,4-Dioxane	225	ug/L	200		200	112	11 --- 220	12	20
2,2-Dichloropropane	3.58	ug/L	4.21		4.00	90	71 --- 133	16	20
2-Butanone	38.7	ug/L	39.9		40.0	97	80 --- 120	3	20
2-Chlorotoluene	4.33	ug/L	4.46		4.00	108	73 --- 124	3	20
2-Hexanone	41.8	ug/L	44.3		40.0	104	73 --- 127	6	20
4-Chlorotoluene	4.39	ug/L	4.48		4.00	110	74 --- 125	2	20
4-Methyl-2-pentanone	42.8	ug/L	45.8		40.0	107	77 --- 125	7	20
Acetone	33.8	ug/L	37.5		40.0	84	72 --- 117	10	20
Benzene	4.30	ug/L	4.26		4.00	108	82 --- 118	1	20
Bromobenzene	3.96	ug/L	4.29		4.00	99	77 --- 118	8	20
Bromochloromethane	4.50	ug/L	4.35		4.00	112	81 --- 116	3	20
Bromodichloromethane	4.13	ug/L	4.19		4.00	103	80 --- 122	1	20
Bromofluorobenzene	97.0	% Recovery			100	97.0	90 --- 108		
Bromoform	3.65	ug/L	3.77		4.00	91	72 --- 124	3	20
Bromomethane	3.83	ug/L	4.66		4.00	96	25 --- 156	20	20
Carbon disulfide	8.50	ug/L	8.57		8.00	106	81 --- 124	1	20
Carbon tetrachloride	4.36	ug/L	4.44		4.00	109	87 --- 129	2	20
Chlorobenzene	4.11	ug/L	4.07		4.00	103	78 --- 118	1	20
Chloroethane	4.49	ug/L	4.33		4.00	112	73 --- 126	4	20
Chloroform	4.16	ug/L	4.15		4.00	104	76 --- 119	0	20
Chloromethane	3.80	ug/L	3.84		4.00	95	70 --- 121	1	20

Lab Control Spike Duplicate Water

Analytical Run #:	173120	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	449210	Analysis Time:	20:56	Prep Date/Time:		Method:	SW8260C
Parent Sample #:	448838	Analyst:	RLD	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	4.18	ug/L	4.35		4.00	104	82 --- 118	4	20
cis-1,3-Dichloropropene	3.95	ug/L	4.25		4.00	99	81 --- 123	7	20
d8-Toluene	100	% Recovery			100	100	93 --- 108		
Dibromochloromethane	4.25	ug/L	4.19		4.00	106	76 --- 124	1	20
Dibromofluoromethane	98.0	% Recovery			100	98.0	93 --- 106		
Dibromomethane	4.07	ug/L	4.22		4.00	102	83 --- 115	4	20
Dichlorodifluoromethane	4.25	ug/L	4.33		4.00	106	78 --- 126	2	20
Diisopropyl ether	4.35	ug/L	4.47		4.00	109	75 --- 125	3	20
Ethylbenzene	4.39	ug/L	4.26		4.00	110	78 --- 125	3	20
Hexachlorobutadiene	4.05	ug/L	4.39		4.00	101	79 --- 123	8	20
Isopropylbenzene	4.57	ug/L	4.67		4.00	114	81 --- 124	2	20
m & p-Xylene	9.01	ug/L	8.71		8.00	113	80 --- 123	3	20
Methyl tert-butyl ether	4.22	ug/L	4.35		4.00	106	82 --- 116	3	20
Methylene chloride	6.35	ug/L	6.23		4.00	159	73 --- 128	2	20
n-Butylbenzene	4.32	ug/L	4.60		4.00	108	76 --- 127	6	20
n-Propylbenzene	4.42	ug/L	4.48		4.00	110	75 --- 129	1	20
Naphthalene	3.32	ug/L	3.87		4.00	83	64 --- 129	15	20
o-Xylene	4.35	ug/L	4.32		4.00	109	81 --- 121	1	20
p-Isopropyltoluene	4.00	ug/L	4.21		4.00	100	79 --- 126	5	20
sec-Butylbenzene	4.51	ug/L	4.77		4.00	113	76 --- 128	6	20
Styrene	4.52	ug/L	4.39		4.00	113	81 --- 122	3	20
tert-Butylbenzene	3.98	ug/L	4.27		4.00	100	76 --- 125	7	20
Tetrachloroethene	4.12	ug/L	4.27		4.00	103	82 --- 123	4	20
Tetrahydrofuran	39.2	ug/L	40.5		40.0	98	69 --- 122	3	20
Toluene	4.26	ug/L	4.35		4.00	106	82 --- 119	2	20
trans-1,2-Dichloroethene	4.26	ug/L	4.32		4.00	106	80 --- 122	1	20
trans-1,3-Dichloropropene	4.02	ug/L	4.17		4.00	100	83 --- 119	4	20
Trichloroethene	4.47	ug/L	4.28		4.00	112	82 --- 120	4	20
Trichlorofluoromethane	4.58	ug/L	4.46		4.00	114	78 --- 130	3	20
Vinyl acetate	33.6	ug/L	46.1		40.0	84	63 --- 136	31	20
Vinyl chloride	4.62	ug/L	4.49		4.00	116	73 --- 127	3	20

Lab Control Spike Water

Analytical Run #:	173120	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	448838	Analysis Time:	10:19	Prep Date/Time:		Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.04	ug/L			4.00	101	78 --- 121		20
1,1,1-Trichloroethane	4.27	ug/L			4.00	107	82 --- 122		20
1,1,2,2-Tetrachloroethane	4.12	ug/L			4.00	103	68 --- 128		20
1,1,2-Trichloroethane	4.22	ug/L			4.00	106	84 --- 114		20
1,1-Dichloroethane	4.31	ug/L			4.00	108	76 --- 122		20
1,1-Dichloroethene	4.38	ug/L			4.00	110	83 --- 123		20
1,1-Dichloropropene	4.28	ug/L			4.00	107	85 --- 120		20
1,2 Dichloroethane-d4	100	% Recovery			100	100	87 --- 107		
1,2,3-Trichlorobenzene	4.07	ug/L			4.00	102	78 --- 121		20
1,2,3-Trichloropropane	3.87	ug/L			4.00	97	62 --- 129		20
1,2,4-Trichlorobenzene	3.86	ug/L			4.00	96	80 --- 120		20
1,2,4-Trimethylbenzene	4.07	ug/L			4.00	102	76 --- 125		20
1,2-Dibromo-3-chloropropane	3.86	ug/L			4.00	96	69 --- 125		20
1,2-Dibromoethane	4.02	ug/L			4.00	100	80 --- 118		20
1,2-Dichlorobenzene	4.19	ug/L			4.00	105	80 --- 117		20
1,2-Dichloroethane	4.22	ug/L			4.00	106	78 --- 118		20
1,2-Dichloropropane	4.36	ug/L			4.00	109	78 --- 121		20
1,3,5-Trimethylbenzene	4.58	ug/L			4.00	114	76 --- 126		20
1,3-Dichlorobenzene	4.33	ug/L			4.00	108	78 --- 119		20
1,3-Dichloropropane	4.28	ug/L			4.00	107	82 --- 117		20
1,4-Dichlorobenzene	4.15	ug/L			4.00	104	77 --- 118		20
1,4-Dioxane	200	ug/L			200	100	11 --- 220		20
2,2-Dichloropropane	4.21	ug/L			4.00	105	71 --- 133		20
2-Butanone	39.9	ug/L			40.0	100	80 --- 120		20
2-Chlorotoluene	4.46	ug/L			4.00	112	73 --- 124		20
2-Hexanone	44.3	ug/L			40.0	111	73 --- 127		20
4-Chlorotoluene	4.48	ug/L			4.00	112	74 --- 125		20
4-Methyl-2-pentanone	45.8	ug/L			40.0	114	77 --- 125		20
Acetone	37.5	ug/L			40.0	94	72 --- 117		20
Benzene	4.26	ug/L			4.00	106	82 --- 118		20
Bromobenzene	4.29	ug/L			4.00	107	77 --- 118		20
Bromochloromethane	4.35	ug/L			4.00	109	81 --- 116		20
Bromodichloromethane	4.19	ug/L			4.00	105	80 --- 122		20
Bromofluorobenzene	101	% Recovery			100	101	90 --- 108		
Bromoform	3.77	ug/L			4.00	94	72 --- 124		20
Bromomethane	4.66	ug/L			4.00	116	25 --- 156		20
Carbon disulfide	8.57	ug/L			8.00	107	81 --- 124		20
Carbon tetrachloride	4.44	ug/L			4.00	111	87 --- 129		20
Chlorobenzene	4.07	ug/L			4.00	102	78 --- 118		20
Chloroethane	4.33	ug/L			4.00	108	73 --- 126		20
Chloroform	4.15	ug/L			4.00	104	76 --- 119		20
Chloromethane	3.84	ug/L			4.00	96	70 --- 121		20

Lab Control Spike Water

Analytical Run #:	173120	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	448838	Analysis Time:	10:19	Prep Date/Time:		Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	4.35	ug/L			4.00	109	82 --- 118		20
cis-1,3-Dichloropropene	4.25	ug/L			4.00	106	81 --- 123		20
d8-Toluene	100	% Recovery			100	100	93 --- 108		
Dibromochloromethane	4.19	ug/L			4.00	105	76 --- 124		20
Dibromofluoromethane	97.0	% Recovery			100	97.0	93 --- 106		
Dibromomethane	4.22	ug/L			4.00	106	83 --- 115		20
Dichlorodifluoromethane	4.33	ug/L			4.00	108	78 --- 126		20
Diisopropyl ether	4.47	ug/L			4.00	112	75 --- 125		20
Ethylbenzene	4.26	ug/L			4.00	106	78 --- 125		20
Hexachlorobutadiene	4.39	ug/L			4.00	110	79 --- 123		20
Isopropylbenzene	4.67	ug/L			4.00	117	81 --- 124		20
m & p-Xylene	8.71	ug/L			8.00	109	80 --- 123		20
Methyl tert-butyl ether	4.35	ug/L			4.00	109	82 --- 116		20
Methylene chloride	6.23	ug/L			4.00	156	73 --- 128		20
n-Butylbenzene	4.60	ug/L			4.00	115	76 --- 127		20
n-Propylbenzene	4.48	ug/L			4.00	112	75 --- 129		20
Naphthalene	3.87	ug/L			4.00	97	64 --- 129		20
o-Xylene	4.32	ug/L			4.00	108	81 --- 121		20
p-Isopropyltoluene	4.21	ug/L			4.00	105	79 --- 126		20
sec-Butylbenzene	4.77	ug/L			4.00	119	76 --- 128		20
Styrene	4.39	ug/L			4.00	110	81 --- 122		20
tert-Butylbenzene	4.27	ug/L			4.00	107	76 --- 125		20
Tetrachloroethene	4.27	ug/L			4.00	107	82 --- 123		20
Tetrahydrofuran	40.5	ug/L			40.0	101	69 --- 122		20
Toluene	4.35	ug/L			4.00	109	82 --- 119		20
trans-1,2-Dichloroethene	4.32	ug/L			4.00	108	80 --- 122		20
trans-1,3-Dichloropropene	4.17	ug/L			4.00	104	83 --- 119		20
Trichloroethene	4.28	ug/L			4.00	107	82 --- 120		20
Trichlorofluoromethane	4.46	ug/L			4.00	112	78 --- 130		20
Vinyl acetate	46.1	ug/L			40.0	115	63 --- 136		20
Vinyl chloride	4.49	ug/L			4.00	112	73 --- 127		20

Method Blank Water

Analytical Run #:	173120	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	449070	Analysis Time:	11:45	Prep Date/Time:		Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.018	ug/L		U	0		0.018		
1,1,1-Trichloroethane	0.018	ug/L		U	0		0.018		
1,1,2,2-Tetrachloroethane	0.014	ug/L		U	0		0.014		
1,1,2-Trichloroethane	0.019	ug/L		U	0		0.019		
1,1-Dichloroethane	0.015	ug/L		U	0		0.015		
1,1-Dichloroethene	0.04	ug/L		U	0		0.04		
1,1-Dichloropropene	0.03	ug/L		U	0		0.03		
1,2 Dichloroethane-d4	105	% Recovery			100	105	68 --- 120		
1,2,3-Trichlorobenzene	0.012	ug/L		U	0		0.012		
1,2,3-Trichloropropane	0.07	ug/L		U	0		0.07		
1,2,4-Trichlorobenzene	0.012	ug/L		U	0		0.012		
1,2,4-Trimethylbenzene	0.020	ug/L		U	0		0.020		
1,2-Dibromo-3-chloropropane	0.07	ug/L		U	0		0.07		
1,2-Dibromoethane	0.04	ug/L		U	0		0.04		
1,2-Dichlorobenzene	0.022	ug/L		U	0		0.022		
1,2-Dichloroethane	0.024	ug/L		U	0		0.024		
1,2-Dichloropropane	0.024	ug/L		U	0		0.024		
1,3,5-Trimethylbenzene	0.016	ug/L		U	0		0.016		
1,3-Dichlorobenzene	0.020	ug/L		U	0		0.020		
1,3-Dichloropropane	0.09	ug/L		U	0		0.09		
1,4-Dichlorobenzene	0.017	ug/L		U	0		0.017		
1,4-Dioxane	7	ug/L		U	0		7		
2,2-Dichloropropane	0.015	ug/L		U	0		0.015		
2-Butanone	0.5	ug/L		U	0		0.5		
2-Chlorotoluene	0.024	ug/L		U	0		0.024		
2-Hexanone	0.3	ug/L		U	0		0.3		
4-Chlorotoluene	0.017	ug/L		U	0		0.017		
4-Methyl-2-pentanone	0.22	ug/L		U	0		0.22		
Acetone	0.859	ug/L			0		0.8		
Benzene	0.019	ug/L		U	0		0.019		
Bromobenzene	0.018	ug/L		U	0		0.018		
Bromochloromethane	0.04	ug/L		U	0		0.04		
Bromodichloromethane	0.028	ug/L		U	0		0.028		
Bromofluorobenzene	95.0	% Recovery			100	95.0	68 --- 120		
Bromoform	0.03	ug/L		U	0		0.03		
Bromomethane	0.06	ug/L		U	0		0.06		
Carbon disulfide	0.0341	ug/L			0		0.014		
Carbon tetrachloride	0.029	ug/L		U	0		0.029		
Chlorobenzene	0.015	ug/L		U	0		0.015		
Chloroethane	0.023	ug/L		U	0		0.023		
Chloroform	0.023	ug/L		U	0		0.023		
Chloromethane	0.0344	ug/L			0		0.03		

Method Blank Water

Analytical Run #:	173120	Analysis Date:	07/22/2020	Prep Batch #:		Matrix:	LIQUID
CTLab #:	449070	Analysis Time:	11:45	Prep Date/Time:		Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:			

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.027	ug/L		U	0		0.027		
cis-1,3-Dichloropropene	0.020	ug/L		U	0		0.020		
d8-Toluene	97.0	% Recovery			100	97.0	71 --- 117		
Dibromochloromethane	0.03	ug/L		U	0		0.03		
Dibromofluoromethane	101	% Recovery			100	101	67 --- 122		
Dibromomethane	0.03	ug/L		U	0		0.03		
Dichlorodifluoromethane	0.03	ug/L		U	0		0.03		
Diisopropyl ether	0.016	ug/L		U	0		0.016		
Ethylbenzene	0.016	ug/L		U	0		0.016		
Hexachlorobutadiene	0.03	ug/L		U	0		0.03		
Isopropylbenzene	0.018	ug/L		U	0		0.018		
m & p-Xylene	0.03	ug/L		U	0		0.03		
Methyl tert-butyl ether	0.017	ug/L		U	0		0.017		
Methylene chloride	0.406	ug/L			0		0.03		
n-Butylbenzene	0.014	ug/L		U	0		0.014		
n-Propylbenzene	0.020	ug/L		U	0		0.020		
Naphthalene	0.282	ug/L			0		0.022		
o-Xylene	0.017	ug/L		U	0		0.017		
p-Isopropyltoluene	0.018	ug/L		U	0		0.018		
sec-Butylbenzene	0.014	ug/L		U	0		0.014		
Styrene	0.011	ug/L		U	0		0.011		
tert-Butylbenzene	0.013	ug/L		U	0		0.013		
Tetrachloroethene	0.023	ug/L		U	0		0.023		
Tetrahydrofuran	0.28	ug/L		U	0		0.28		
Toluene	0.017	ug/L		U	0		0.017		
trans-1,2-Dichloroethene	0.029	ug/L		U	0		0.029		
trans-1,3-Dichloropropene	0.03	ug/L		U	0		0.03		
Trichloroethene	0.025	ug/L		U	0		0.025		
Trichlorofluoromethane	0.029	ug/L		U	0		0.029		
Vinyl acetate	0.4	ug/L		U	0		0.4		
Vinyl chloride	0.013	ug/L		U	0		0.013		

CT LABORATORIES
delivering more than data from your environmental analyses

Sample Condition Report

Folder #: 154790
Client: TRC ENVIRONMENTAL

Print Date / Time: 07/15/2020 14:04
Received Date / Time / By: 07/15/2020 10:45 JLS

Project Name: RIPON FF/NN LANDFILL
Project Phase: PHASE 1 TASK 3

Log-In Date / Time / By: 07/15/2020 14:05 EKB
Project #: 378957.0000.0000 PM: BMS

Coolers: 6295,6329
Custody Seals Present :

Temperature: 1.4 C On Ice: **Y**
COC Present:? **Y** Complete? **Y**

Seal Intact?
Ship Method: FEDEX EXPRESS
Adequate Packaging: **Y**

Numbers: N/A
Tracking Number: 394835874789,813681216680
Temp Blank Enclosed? **Y**

Notes: THE SAMPLES WERE RECEIVED IN GOOD CONDITION ON ICE.

AFTER REVIEW OF THE FIELD DATA AND THE ANALYTICAL DATA, THE CLIENT CONFIRMED THAT SAMPLING AT LOCATIONS P-114 AND P-115 WERE SWITCHED IN THE FIELD. THE SAMPLE DESCRIPTIONS WERE UPDATED IN LIMS TO REFLECT THIS.

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445402 P-113B	UNPRES PL	1	N /	Anions
	Total # of Containers of Type	(***UNPRES PL***) = **1**		
445402 P-113B	HNO3	1	Y /	ICP
	Total # of Containers of Type	(***HNO3***) = **1**		
445402 P-113B	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type	(***H2SO4 PL***) = **1**		
445402 P-113B	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type	(***VOA HCL***) = **3**		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445408 P-113A	UNPRES PL	1	N /	Anions
	Total # of Containers of Type	(***UNPRES PL***) = **1**		
445408 P-113A	HNO3	1	Y /	ICP
	Total # of Containers of Type	(***HNO3***) = **1**		
445408 P-113A	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type	(***H2SO4 PL***) = **1**		
445408 P-113A	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type	(***VOA HCL***) = **3**		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445409 P-116				
	UNPRES PL	1	N /	Anions
	Total # of Containers of Type		(***UNPRES PL***) = **1**	
445409 P-116				
	HNO3	1	Y /	ICP
	Total # of Containers of Type		(***HNO3***) = **1**	
445409 P-116				
	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type		(***H2SO4 PL***) = **1**	
445409 P-116				
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type		(***VOA HCL***) = **3**	

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445410 P-114				
	UNPRES PL	1	N /	Anions
	Total # of Containers of Type		(***UNPRES PL***) = **1**	
445410 P-114				
	HNO3	1	Y /	ICP
	Total # of Containers of Type		(***HNO3***) = **1**	
445410 P-114				
	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type		(***H2SO4 PL***) = **1**	
445410 P-114				
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type		(***VOA HCL***) = **3**	

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445411 P-115				
	UNPRES PL	1	N /	Anions
	Total # of Containers of Type		(***UNPRES PL***) = **1**	
445411 P-115				
	HNO3	1	Y /	ICP
	Total # of Containers of Type		(***HNO3***) = **1**	
445411 P-115				
	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type		(***H2SO4 PL***) = **1**	
445411 P-115				
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type		(***VOA HCL***) = **3**	

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

445412 MW-3A

UNPRES PL	1	N	/	Anions

Total # of Containers of Type (***UNPRES PL***) = **1**

445412 MW-3A

HNO3	1	Y	/	ICP

Total # of Containers of Type (***HNO3***) = **1**

445412 MW-3A

H2SO4 PL	1	Y	/	NO23

Total # of Containers of Type (***H2SO4 PL***) = **1**

445412 MW-3A

VOA HCL	1		/	VOC
VOA HCL	1		/	VOC
VOA HCL	1		/	VOC

Total # of Containers of Type (***VOA HCL***) = **3**

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

445413 MW-3B

UNPRES PL	1	N	/	Anions

Total # of Containers of Type (***UNPRES PL***) = **1**

445413 MW-3B

HNO3	1	Y	/	ICP

Total # of Containers of Type (***HNO3***) = **1**

445413 MW-3B

H2SO4 PL	1	Y	/	NO23

Total # of Containers of Type (***H2SO4 PL***) = **1**

445413 MW-3B

VOA HCL	1		/	VOC
VOA HCL	1		/	VOC
VOA HCL	1		/	VOC

Total # of Containers of Type (***VOA HCL***) = **3**

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

445414 P-117

UNPRES PL	1		/	Anions

Total # of Containers of Type (***UNPRES PL***) = **1**

445414 P-117

HNO3	1	Y	/	ICP

Total # of Containers of Type (***HNO3***) = **1**

445414 P-117

H2SO4 PL	1	Y	/	NO23

Total # of Containers of Type (***H2SO4 PL***) = **1**

445414 P-117

VOA HCL	1		/	VOC
VOA HCL	1		/	VOC
VOA HCL	1		/	VOC

Total # of Containers of Type (***VOA HCL***) = **3**

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

445415 P-118

UNPRES PL	1		/	Anions

Total # of Containers of Type (***UNPRES PL***) = **1**

445415	P-118				
		HNO3	1	Y /	ICP
		Total # of Containers of Type	(***HNO3***) = **1**		
445415	P-118				
		H2SO4 PL	1	Y /	NO23
		Total # of Containers of Type	(***H2SO4 PL***) = **1**		
445415	P-118				
		VOA HCL	1	/	VOC
		VOA HCL	1	/	VOC
		VOA HCL	1	/	VOC
		Total # of Containers of Type	(***VOA HCL***) = **3**		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445416 P-111D				
	UNPRES PL	1	/	Anions
	Total # of Containers of Type	(***UNPRES PL***) = **1**		
445416 P-111D				
	HNO3	1	Y /	ICP
	Total # of Containers of Type	(***HNO3***) = **1**		
445416 P-111D				
	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type	(***H2SO4 PL***) = **1**		
445416 P-111D				
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type	(***VOA HCL***) = **3**		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445417 DUP-01				
	UNPRES PL	1	/	Anions
	Total # of Containers of Type	(***UNPRES PL***) = **1**		
445417 DUP-01				
	HNO3	1	Y /	ICP
	Total # of Containers of Type	(***HNO3***) = **1**		
445417 DUP-01				
	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type	(***H2SO4 PL***) = **1**		
445417 DUP-01				
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type	(***VOA HCL***) = **3**		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445418 P-107D				
	UNPRES PL	1	/	Anions
	Total # of Containers of Type	(***UNPRES PL***) = **1**		
445418 P-107D				
	HNO3	1	Y /	ICP

Total # of Containers of Type (*HNO3*) = 1

445418 P-107D

H2SO4 PL	1	Y	/	NO23

Total # of Containers of Type (*H2SO4 PL*) = 1

445418 P-107D

VOA HCL	1		/	VOC
VOA HCL	1		/	VOC
VOA HCL	1		/	VOC

Total # of Containers of Type (*VOA HCL*) = 3

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

445419 MW-112

UNPRES PL	1		/	Anions

Total # of Containers of Type (*UNPRES PL*) = 1

445419 MW-112

HNO3	1	Y	/	ICP

Total # of Containers of Type (*HNO3*) = 1

445419 MW-112

H2SO4 PL	1	Y	/	NO23

Total # of Containers of Type (*H2SO4 PL*) = 1

445419 MW-112

VOA HCL	1		/	VOC
VOA HCL	1		/	VOC
VOA HCL	1		/	VOC

Total # of Containers of Type (*VOA HCL*) = 3

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

445420 P-103D

UNPRES PL	1		/	Anions

Total # of Containers of Type (*UNPRES PL*) = 1

445420 P-103D

HNO3	1	Y	/	ICP

Total # of Containers of Type (*HNO3*) = 1

445420 P-103D

H2SO4 PL	1	Y	/	NO23

Total # of Containers of Type (*H2SO4 PL*) = 1

445420 P-103D

VOA HCL	1		/	VOC
VOA HCL	1		/	VOC
VOA HCL	1		/	VOC

Total # of Containers of Type (*VOA HCL*) = 3

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

445421 P-103

UNPRES PL	1		/	Anions

Total # of Containers of Type (*UNPRES PL*) = 1

445421 P-103

HNO3	1	Y	/	ICP

Total # of Containers of Type (*HNO3*) = 1

445421 P-103

		H2SO4 PL	1	Y /	NO23
		Total # of Containers of Type	(***H2SO4 PL***) = **1**		
445421	P-103				
		VOA HCL	1	/	VOC
		VOA HCL	1	/	VOC
		VOA HCL	1	/	VOC
		Total # of Containers of Type	(***VOA HCL***) = **3**		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445422 MW-103				
	UNPRES PL	1	/	Anions
	Total # of Containers of Type	(***UNPRES PL***) = **1**		
445422 MW-103				
	HNO3	1	Y /	ICP
	Total # of Containers of Type	(***HNO3***) = **1**		
445422 MW-103				
	H2SO4 PL	1	Y /	NO23
	Total # of Containers of Type	(***H2SO4 PL***) = **1**		
445422 MW-103				
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type	(***VOA HCL***) = **3**		

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
445425 TRIP BLANK				
	Trip Blank	1	/	VOC
	Trip Blank	1	/	VOC
	Trip Blank	1	/	VOC
	TRIP BLANK	1	/	VOC
	Total # of Containers of Type	(***TRIP BLANK***) = **4**		

Condition Code	*Condition Description*
1	Sample Received OK

Rev. 02/2017

CHAIN OF CUSTODY

Page 1 of 2

Company: TRC
Project Contact: Marita Stollenwerk
Telephone: (262) 901-2158
Project Name: Ripon FF/NW Landfill
Project #: 378957.0000.0000 Phase 1 Task 3
Location: Ripon WI
Sampled By: S. Roelke

CT LABORATORIES
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:
154790

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO # 149832

Report To: Marita Stollenwerk
EMAIL: mstollenwerk@trccompanies.com
Company: TRC
Address: 150 N. Patrick Blvd. Suite 120

Invoice To:* Marita Stollenwerk
EMAIL: SAME
Company: TRC
Address: SAME

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	VOC's (8260 Low Level)	Nitrate + Nitrite (EPA 353.2)	Sulfate (9056A)	Diss. Mn (6010C)	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
						Fill in Spaces with Bottles per Test							
7/13/20	9:26	GW	Grab	6	P-113B	Y	3	1	1	1			445402
	10:03				P-113A								445408
	11:30				P-116								445409
	12:38				P-115 ★								445410
↓	13:24				P-114 ★								445411
	14:13				MW-3A								445412
	14:58				MW-3B								445413
	15:36				P-117								445414
	16:12				P-118								445415
	16:58				P-111D								445416
↓	—				DUP-01								445417
7/14/20	8:35	↓	↓	↓	~~P-107D~~ P-107D	↓	↓	↓	↓	↓			445418

Relinquished By:	Date/Time	Received By:	Date/Time	Lab Use Only
	7/14/20 17:35	ells for JLS	7-15-2020 10:45	Ice Present (Yes) No
Received by:	Date/Time	Received for Laboratory by:	Date/Time	Temp 1.4 IR Gun 39
		ells	7-15-2020 14:05	Cooler # 6295, 6329

★ The client confirmed that samples P-114 + P-115 were switched in the field.

Rev. 02/2017

CHAIN OF CUSTODY

Page 2 of 2

Company: TRC
Project Contact: Marita Stollenwerk
Telephone: (262) 901-2158
Project Name: Ripon FF/NW Landfill
Project #: 378957.0000.0000 Phase I Task 3
Location: Ripon WI
Sampled By: J. Roelko

CT LABORATORIES
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:
154790

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO # 149832

Report To: Marita Stollenwerk
EMAIL: mstollenwerk@trccompanies.com
Company: TRC
Address: 150 N. Patrick Blvd. Suite 120

Invoice To:* Marita Stollenwerk
EMAIL: SAME
Company: TRC
Address: SAME

**Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions*

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	VOCs (8260C) Low Level	Nitrate+Nitrite (EPA 353.2)	Sulfate (9056A)	Diss. Mn (6010C)	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
						Fill in Spaces with Bottles per Test							
7/14/20	9:17	GW	Grab	6	MW-112	Y	3	1	1	1			445419
	10:23				P-103D								445420
	11:03				P-103								445421
	11:43				MW-103								445422
7/9/20	—			4	Trip Blank	N	4						445425

Relinquished by:	Date/Time	Received By:	Date/Time	Lab Use Only
	7/14/20 17:35	ellb for JLS	7-15-2020 10:45	Ice Present (Yes) No
Received by:	Date/Time	Received for Laboratory by:	Date/Time	Temp 1-4 IR Gun 28
		ellb	7-15-2020 14:01	Cooler # 6291, 6324

Cooler Receipt Form

Ice Present (YES) NO

Temperature 1.4

IR Gun # 28

Initials JB

Date 7/15/2020 Time 1045

Cooler #: 6329

ORIGIN ID:MSNA (608) 444-7465
JOHN ROELKE
708 HEARTLAND TRL STE 3000
MADISON, WI 53717
UNITED STATES US

SHIP DATE: 14JUL20
ACTWGT: 55.10 LB
CAD: 6994589/SSFE2110
DIMS: 23x13x13 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
SAMPLE RECEIVING
1230 LANGE CT

BARABOO WI 53913
(608) 356-2760 REF:
INV:
PO: DEPT:

FedEx Express

TRK# 0215 8136 8121 6680

WED - 15 JUL 10:30A
PRIORITY OVERNIGHT

55 LNRA

53913
WI-US MSN

Cooler Receipt Form

Ice Present YES NO

Temperature 1.4

IR Gun # 28

Initials JS

Date 7/15/2020 Time 1045

Cooler #: 6295

ORIGIN ID:MSNA (608) 444-7465
JOHN ROELKE

708 HEARTLAND TRL STE 3000

MADISON, WI 53717
UNITED STATES US

SHIP DATE: 14JUL20
ACTWGT: 55.10 LB
CAD: 6994589/SSFE2110
DIMS: 23x13x13 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
SAMPLE RECEIVING
1230 LANGE CT

BARABOO WI 53913
(608) 356-2760

INV:
PO:
REF:
DEPT:

FedEx Express

TRK# 0201 3948 3587 4789

WED - 15 JUL 10:30A
PRIORITY OVERNIGHT

55 LNRA

53913
WI-US MSN

CUSTODY SEAL
DATE
SIGNATURE
QEC
Quality Environmental Containers
800-356-3969 • www.qecusa.com

Appendix C: Solberg Filter Silencer Specification Sheet

SOLBERG®
Filtration • Separation• Silencing

Miniature Filter Silencers

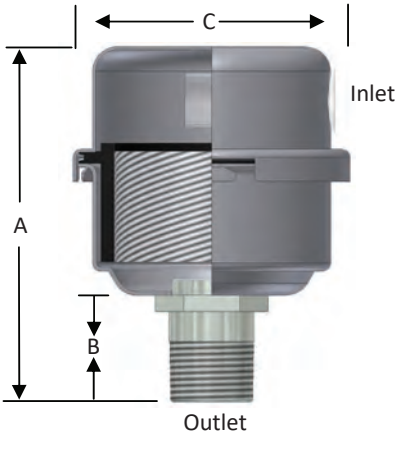
FS Series 1/4” - 1”

Features

- High grade filter element with integrated gasket seal
- Fully drawn weatherhood
- Tubular silencing design: tube maximizes attenuation and air flow while minimizing pressure drop
- Corrosive resistant black powder coat carbon steel
- Ability to mount vertically and horizontally

Technical Specifications

- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20” H_2O over initial Δ P
- Polyester: 99%+ removal efficiency standard to 10 micron
- Paper: 99%+ removal efficiency standard to 2 micron
- Pressure drop graphs available upon request



Options

- Various media for different environments
- Straight through configuration
- Various nonstandard finishes and connection styles

MPT Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service Ht. inches	No. of Silencing Tubes	Approx. Weight lbs	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C				Polyester	Paper	
¼”	4	FS-05-025	FS-04-025	2 ¾	11/16	2 ½	1	1	0.25	05	04	8
⅜”	8	FS-05-038	FS-04-038	2 ¾	11/16	2 ½	1	1	0.25	05	04	8
⅜”	8	FS-07-038	FS-06-038	3 9/16	11/16	3 ¼	2	1	0.50	07	06	12
½”	8	FS-05-050	FS-04-050	3	⅞	2 ½	1	1	0.25	05	04	8
½”	12	FS-07-050	FS-06-050	3 ¾	⅞	3 ¼	2	1	0.50	07	06	12
½”	12	FS-11-050	FS-10-050	4 3/16	⅞	4 ¼	2	1	1	11	10	35
¾”	12	FS-07-075	FS-06-075	4 ⅛	1 ¼	3 ¼	2	1	0.50	07	06	12
¾”	25	FS-11-075	FS-10-075	4 ½	1 ¼	4 3/16	2	1	1	11	10	35
1”	35	FS-11-100	FS-10-100	4 ½	1 ¼	4 3/16	2	1	1	11	10	35

See Filter Silencer Technical Data for sizing guidelines.

Rev: FS .25-US1905K

Sales/Service: 630.773.1363
sales@solbergmfg.com

www.solbergmfg.com

SOLBERG®
Filtration • Separation• Silencing

Compact Filter Silencers

FS Series 1/2” - 6”

Features

- Fully drawn weatherhood
- Tubular silencing design - tubes are positioned to maximize attenuation and air flow while minimizing pressure drop
- Corrosive resistant gray powder coat carbon steel

Technical Specifications

- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20” H_2O over initial Δ P
- Pressure drop graphs available upon request
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

ATEX Available

- Tap holes available
- Pressure drop indicator
- Various media for different environments
- Stainless steel construction
- Various nonstandard finishes and connection styles
- Side Access Silencer Filters (LQB Series) for space restricted enclosures (select models)

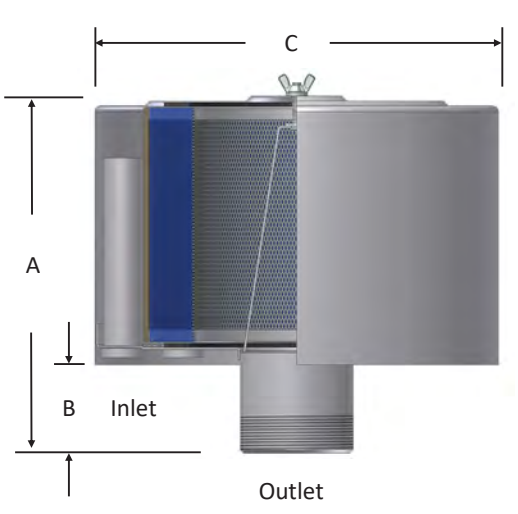
Threaded Outlet Assembly

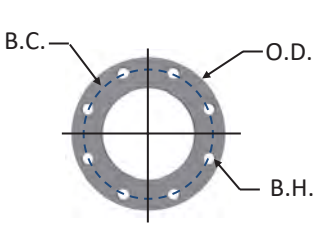
Flange Outlet Assembly

Rev: FS .5-6-US1903K

Sales/Service: 630.773.1363
sales@solbergmfg.com

FS Series 1/2” - 6”





O.D.: Outside Diameter
B.C.: Bolt Circle
B.H.: Bolt Hole

125/150# Pattern Flange	Dimensions - inches			No. of Holes	Flange Thickness
	O.D.	B.C.	B.H.		
4”	9	7 ½	0.75	8	0.5
5”	10	8 ½	0.88	8	0.5
6”	11	9 ½	0.88	8	0.5

MPT Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	No. of Silencing Tubes	Approx. Weight lbs.	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C				Polyester	Paper	
½”	10	FS-15-050	FS-14-050	3 7/16	1	6	3	1	2	15	14	35
¾”	25	FS-15-075	FS-14-075	4	1 ¼	6	3	2	2	15	14	35
1”	35	FS-15-100	FS-14-100	4	1 5/16	6	3	3	2	15	14	35
1”	55	FS-19P-100	FS-18P-100	6 ⅜	1 4/16	6	5	3	3	19P	18P	100
1 ¼”	70	FS-19P-125	FS-18P-125	6 ¾	1 ⅝	6	5	5	3	19P	18P	100
1 ½”	85	FS-19P-150	FS-18P-150	6 ¾	1 ⅝	6	5	5	4	19P	18P	100
2”	135	FS-31P-200	FS-30P-200	7 ½	2 ¼	10	5	5	8	31P	30P	195
2”	135	FS-231P-200	FS-230P-200	12	2 ⅜	10	10	5	14	231P	230P	300
2 ½”	195	FS-31P-250	FS-30P-250	7 ½	2 ½	10	5	5	8	31P	30P	195
2 ½”	195	FS-231P-250	FS-230P-250	12 ⅜	2 ⅝	10	10	9	15	231P	230P	300
3”	300	FS-231P-300	FS-230P-300	12 ¾	3 ⅛	10 ¼	10	9	15	231P	230P	300
3”	300	FS(12)-235P-300	FS(12)-234P-300	12 ⅞	2 11/16	12 ¼	10	3	29	235P	234P	570
3”	300	FS-275P-300	FS-274P-300	13	3	16	10	9	33	275P	274P	1100
4”	520	FS(12)-235P-400	FS(12)-234P-400	13 ⅞	3 11/16	12 ¼	10	6	29	235P	234P	570
4”	520	FS-275P-400	FS-274P-400	14	4	16	10	9	34	275P	274P	1100
5”	800	FS-245P-500	FS-244P-500	14	4 ⅛	16	10	14	33	245P	244P	880
5”	800	FS-275P-500	FS-274P-500	14	4 ⅛	16	10	14	36	275P	274P	1100
6”	1100	FS-275P-600	FS-274P-600	15	5 ⅛	16	10	18	38	275P	274P	1100

Flange Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	No. of Silencing Tubes	Approx. Weight lbs.	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C				Polyester	Paper	
4”	520	FS(12)-235P-400F	FS(12)-234P-400F	13 ⅞	3 11/16	12 ¼	10	6	32	235P	234P	570
4”	520	FS-275P-400F	FS-274P-400F	14	4	16	10	9	39	275P	274P	1100
5”	800	FS-245P-500F	FS-244P-500F	14	4 ⅛	16	10	14	38	245P	244P	880
5”	800	FS-275P-500F	FS-274P-500F	14	4 ⅛	16	10	14	41	275P	274P	1100
6”	1100	FS-275P-600F	FS-274P-600F	15	5 ⅛	16	10	18	42	275P	274P	1100

See Filter Silencer Technical Data for sizing guidelines.

SOLBERG®
Filtration • Separation• Silencing

Big Boy Filter Silencers

FS Series 6” - 14”

Features

- Tubular silencing design - tubes are positioned to maximize attenuation and air flow while minimizing pressure drop
- Corrosive resistant gray powder coat carbon steel
- Low pressure drop center bracket & outlet pipe design

Technical Specifications

- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20” H_2O over initial Δ P
- Pressure drop graphs available upon request
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

ATEX Available

- Tap holes available
- Pressure drop indicator
- Various media for different environments
- Stainless steel construction
- Various nonstandard finishes and connection styles
- Side Access Silencer Filters (LQB Series) for space restricted enclosures (select models)

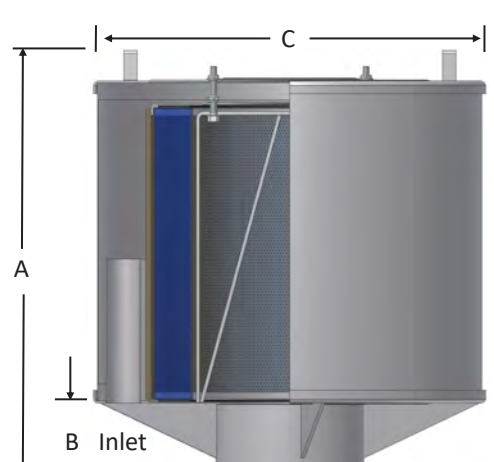
Sumo Class Features

- Single barrel filter design allows for large airflows in space restricted work areas
- 16” to 24” flange connections available
- Designed for airflows up to 8000 SCFM

Rev: FS 6-14-US1903K

Sales/Service: 630.773.1363
sales@solbergmfg.com

FS Series 6” - 14”



Flange Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	No. of Silencing Tubes	Approx. Weight lbs	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C				Polyester	Paper	
6"	1100	FS-377P-600F	FS-376P-600F	22 11/16	5 1/4	21 7/8	15	6	95	377P	376P	1825
8"	1800	FS-377P-800F	FS-376P-800F	23 1/2	6	21 7/8	15	12	105	377P	376P	1825
8"	1800	FS-385P-800F	FS-384P-800F	24	6	28 5/16	15	12	125	385P	384P	3295
10"	3300	FS-385P-1000F	FS-384P-1000F	23 1/2	6	28 5/16	15	16	130	385P	384P	3295
10"	3300	FS-485P-1000F	FS-484P-1000F	31 1/2	6	28 5/16	22	16	143	485P	484P	4705
12"	4700	FS-485P-1200F	FS-484P-1200F	31 1/2	6	28 5/16	22	24	155	485P	484P	4705
12"	4700	FS-685P-1200F	FS-384P(2)-1200F	38 1/2	6	28 5/16	29	24	175	685P	384P (2)	6600
14"	6000	FS-485P(2)-1400F	FS-484P(2)-1400F	53 5/16	6	28 5/16	22	18	245	485P (2)	484P (2)	9410

Flange Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	Replacement Element Part No.	
		Polyester	Paper	A	B	C		Polyester	Paper
18"	5500	FS-391-1800F	FS-390-1800F	23 1/2	6	44	15	391	390
18"	8000	FS-491-1800F	FS-490-1800F	30 1/2	6	44	22	491	490
20"	8000	FS-491-2000F	FS-490-2000F	30 1/2	6	44	22	491	490
24"	8000	FS-491-2400F	FS-490-2400F	30 1/2	6	44	22	491	490

125/150# Pattern Flange	Dimensions - inches			No. of Holes	Flange Thickness
	O.D.	B.C.	B.H.		
6"	11	9 1/2	0.88	8	0.5
8"	13 1/2	11 3/4	0.88	8	0.5
10"	16	14 1/4	1	12	0.5
12"	19	17	1	12	0.5
14"	21	18 3/4	1 1/8	12	0.5
18"	25	22 3/4	1 1/4	16	0.5
20"	27 1/2	25	1 1/4	20	0.5
24"	32	29 1/2	1 3/8	20	1.18

O.D.: Outside Diameter
B.C.: Bolt Circle
B.H.: Bolt Hole

See Filter Silencer Technical Data section for sizing guidelines.

SOLBERG®
Filtration • Separation• Silencing

Technical Data

Inlet Filter Silencers, Silencers

Applications & Equipment

- Industrial & Severe Duty
- Blowers - Side Channel & P.D.
- Breathers
- Fuel Cells
- Piston Compressors
- Screw Compressors
- Centrifugal Compressors
- Hydraulic Breathers – fine filtration
- Engines
- Fans
- Vacuum Pumps & Systems
- Construction\Contractor Industry
- Medical
- Pneumatic Conveying
- Waste Water Aeration
- Sparging
- Factory Air
- Vacuum Vent Breathers
- Cement Processing
- Power Plants
- Centralized Air Intakes

Identification

Standard Solberg assemblies should have an identification label/nameplate that gives the following information:

- Assembly Model #
- Replacement Element #

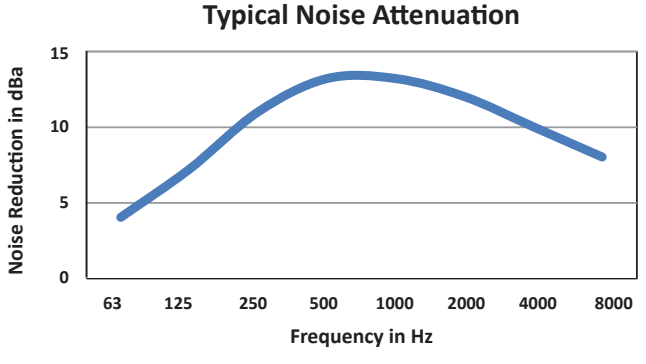
The part number designates the filter type, the element configuration and housing connection size. For example, the following part number identifies the filter as being an “FS” design filter with a “275” element, “P” prefilter and 3” MPT connection size.

FS-275P-300

- Connection Size and Type
- Replacement Element Part Number
- Filter Type

Typical Noise Attenuation

See chart for typical noise attenuation for filter silencers. It may vary due to the wide range of applications, installations, and machines.



Sales/Service: 630.773.1363
sales@solbergmfg.com

Choosing the Best Filter for Your Equipment

A. When the connection & airflow is known:

1. select the appropriate connection style. (i.e.: MPT, Flange, NPSC, etc.)
2. check assembly SCFM (flow) rating. Compare with your required airflow.

(Note: Assembly flow ratings are based on 6,000 FPM or 30m/sec for a given connection size to achieve low pressure drop performance. When required flow exceeds assembly flow rating, the pressure drop through the outlet connection will increase. In such cases select by element SCFM (flow) rating.)

3. when required flow rating matches connection size; skip to "C. Selecting Elements".

B. When the connection size is unknown, flexible, or the required flow rating exceeds assembly flow rating:

1. match required flow rating with the element flow rating.
2. choose related connection size.

C. Selecting Elements: The filter performance is influenced by the actual application duty and the equipment it is installed on. Regular maintenance checks and proper servicing is required.

Application Duty Descriptions:

Industrial Duty: clean workshop or clean outdoor environment - small element sizing is sufficient.

Severe Duty: dirty workshop, wastewater – medium to large element is recommended.

Extreme Duty: cement, steel making, plastics or dusty material conveying – largest element sizing is recommended.

1. Select media required by your application. Options include:
    a. Standard media
        1. Polyester: all purpose; withstands pulses, moisture, and oily air
        2. Paper: mostly dry, smooth flow applications
    b. Special media: for a variety of micron levels and media types, see the "Filter Media Specifications" in the Replacement Element Section or contact Solberg.
2. Select element size by matching the element with the anticipated duty and upsize accordingly.

Filter Assembly Maintenance

Request the appropriate maintenance manual for more in-depth information from your Solberg representative or on our website www.solbergmfg.com.

Element Maintenance

Solberg elements should be replaced once the pressure drop reaches 15-20" H_2O above the initial pressure drop of the installation. Cleaning the element is also an option.

Solberg recommends replacing dirty elements for optimal performance. Any damage which results from by-pass or additional pressure drop created by element cleaning is the sole responsibility of the operator.

Note: The overall performance of a filter element is altered once cleaned. The initial pressure drop after subsequent cleanings will be greater than the original, clean pressure drop of the element. After each cleaning, the pressure drop will continue to increase. Under all circumstances, the initial pressure drop of the element needs to be maintained at less than 15" H_2O.

If the pressure drop exceeds 20" H_2O at start-up; it should be replaced with a new element. With many types of equipment, the maximum pressure drop allowed will be dictated by the ability of the equipment to perform to its rated capacity. Under all circumstances, the operator should avoid exceeding the manufacturer's recommended maximum pressure drop for their specific equipment.

Appendix D: Photo Documentation Log

Photographic Log

Client Name:	Site Location:	Project No.:
FF/NN Landfill Group	FF/NN Landfill, Ripon WI	421748.0000

Photo No.	Date
1	9/23/2020

Description:
Intake valve assembly.
Photo depicts gate valve and connection point.

Photo No.	Date
2	9/23/2020

Description:
Solberg FS-230P-200 Filter Silencer for the intake valve assembly.

Photographic Log

Client Name:	Site Location:	Project No.:
FF/NN Landfill Group	FF/NN Landfill, Ripon WI	378957

Photo No.	Date
3	9/23/2020

Description:
Excavation near drainage pipe outlet to reduce ponding.

Photo taken facing east.

Photo No.	Date
4	9/23/2020

Description:
Excavation near drainage pipe outlet to reduce ponding.

Photo taken facing west.

Photographic Log

Client Name:	Site Location:	Project No.:
FF/NN Landfill Group	FF/NN Landfill, Ripon WI	378957

Photo No.	Date
5	9/23/2020

Description:
Drainage swale with topsoil and erosion mat installed.

Photo taken facing east.

Photo No.	Date
6	11/11/2020

Description:
Drainage swale after vegetative growth has started.

Photo taken facing east.