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April 28, 2023

Ms. Cindy Koepke  
Hydrogeologist  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, WI 53711

Subject: Refuse Hideaway Landfill  
2022 Operation Monitoring and Maintenance Annual Report

Dear Cindy:

TRC performed operation, monitoring, and maintenance services at the Refuse Hideaway Landfill in Middleton, WI in 2022 in accordance with the WDNR's *Refuse Hideaway Landfill Operations and Maintenance Services Request for Bid*, issued on August 5, 2021. TRC has prepared this report to summarize operation and maintenance services performed from January through December 2022. These services were previously documented in monthly Operation Monitoring and Maintenance Activity Reports submitted to the WDNR.

## Gas Extraction System

### Operation Summary

The gas extraction system (GES) was shut down on December 14, 2021, and remained shut down through the beginning of 2022 due to cold weather and freezing conditions. Cold weather caused the air compressor motor overload contact associated with the leachate extraction system to trip, causing both the leachate and gas extraction systems to shut down. As a result of the shutdown, condensate within GES froze and blocked airflow.

The GES was restarted on January 17, 2022, and operated temporarily until it was shut down on January 27, 2022, when cold weather and freezing conditions caused low extraction vacuum and flow due to a buildup of frozen condensate within the GES.

The GES was restarted on April 8 once cold weather had subsided, and ran until May 15, 2022, when the GES blower shut down due to a Fault 3210 DC link overvoltage.

The GES was restarted on May 26, 2022, and was operational through June 29, 2022 when it was shut down due to an issue with the electrical service.

The GES was restarted on October 6, 2022 after electrical repairs/upgrades were made. The GES operated until December 15, 2022, when an overvoltage fault was observed and the system was shut down for the remainder of the 2022 calendar year until the Site electrical service is repaired.

### Observations and Findings

Gas probe monitoring was conducted monthly during 2022. Due to the intermittent operation of the GES in 2022 and seasonality of gas production/migration, it was not possible to determine if the operation of the GES resulted in any trends for results observed in the gas probes. When the GES is operating continuously, the gas probe data will be reviewed in more detail for identification of any

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trends. The 2022 Gas Probe Monitoring Data is summarized in Attachment 1, and highlighted rows in that table indicate the GES was operating at that time.

The GES operated effectively when it had adequate electric supply. The new equipment should operate as designed once the electrical service to the Site is repaired. GES inspection information and operating parameters were included in the monthly report submittals. Aside from the repair to the electrical service to the Site, there are no observations or findings related to the GES that require attention in 2023.

## Maintenance and Repairs

Between June 28 and June 30, 2022, heat trace and insulation were installed on the GES by Perennial Energy (PEI) in order to address the airflow blockages that had previously occurred due to condensate freezing within the GES during cold weather.

On June 30, 2022, Van Ert Electrical Company, Inc. (Van Ert) completed a site visit to assess the GES for an issue with the electrical service observed by TRC. Van Ert determined that at least one of the three onsite transformers was not functioning and the electrical service to the Site was not able to provide 480 voltage alternating current (VAC) three-phase as designed.

Between October 1 and October 6, 2022, Van Ert removed the existing transformers from the electrical system and one new Square D (Model EXN75T3H) transformer was installed as a replacement in order to provided 480 VAC, needed to operate both the GES and the leachate extraction system. Repairs and improvements including a new floor and roof were also made to the structure that houses the transformer. On October 6, 2022, Van Ert conducted startup of the system and adjustments were made to the transformer based on the output voltage reading 560 VAC. The system's output was adjusted and restarted, and the output voltage ranged between 497 and 501 VAC. Based on the initial system start up and output voltage observed following the installation of the new transformer, the system electrical upgrades/repairs were further evaluated by a TRC electrical engineer.

The GES operated from October 6 until December 15, 2022 when an overvoltage fault was observed and the system was shut down. The GES remained off through the remainder of 2022 until the Site electrical service is repaired.

A summary of the system upgrades, the electrical evaluation, and recommendations for further repairs/modifications of the system were submitted by TRC to the WDNR in a memorandum dated December 8, 2022. Based on TRC's recommendations, the WDNR agreed to the replacement of the Site transformer with an appropriately sized step-up transformer for 240 VAC input and 480 VAC output as well as the addition of a surge protector between the Madison Gas and Electric (MG&E) service and the new transformer. The maintenance and repairs are planned for 2023.

## Leachate Extraction System

### Operation Summary

The leachate extraction system (LES) was shutdown on December 14, 2021 and remained shut down through the beginning of 2022 due to cold weather and freezing conditions. Cold weather caused the air compressor motor overload contact associated with the LES to trip, causing both the leachate and

gas extraction systems to shut down. It was determined that the motor overload contact for the air compressor was undersized, and cold weather conditions caused the system to fault due to higher amperage draw on the motor.

Following maintenance and repairs, the air compressor system was restarted on April 26, 2022, however due to continued abnormal noise in the pump head, the compressor was shutdown for further assessment. Between June 28 and June 30, 2022, PEI installed a new pump head on the air compressor system, but due to the Site electrical supply issues, the system was still not operational.

The air compressor system was restarted on October 6, 2022 following electrical service upgrades (as described above under GES Maintenance and Repairs). On the air compressor, the electrical contactor for the motor starter failed during the start-up and the LES was inoperable. The LES was shutoff pending the repair of the Site electrical service and to further test the compressor system for issues.

Therefore, although several repairs were made to the air compressor, the LES did not operate in 2022.

## **Observations and Findings**

The air compressor operation and leachate tank level are used to monitor the functionality of the LES throughout the year. The LES did not operate in 2022 due to the issues with the air compressor. Leachate tank levels were monitored during bi-weekly and/or monthly inspections, as reported in monthly report submittals. WDNR pumped leachate from the tank on an as-needed basis throughout 2022.

A leachate sample was collected on April 12, 2022, from the leachate tank and analyzed by Pace Analytical for inductively coupled plasma (ICP) metals and mercury per the Section 2.01 of the Wastewater Discharge Permit NTO-5.11. The laboratory analytical report is provided in Attachment 2.

## **Maintenance and Repairs**

In April 2022, TRC changed the oil and repaired airline leaks (documented in 2021) between the air dryer and the buried main supply line to the well field. A quick disconnect coupler was added to the pipe section to allow for an air nozzle to be utilized for onsite maintenance (i.e., filter cleaning).

Between June 28 and June 30, 2022, PEI installed a new pump head on the air compressor system. An issue was observed with the Site electrical service upon startup, as described in the previous section of this report, and the system could not be operated following the pump head replacement.

On October 6, 2022, TRC observed that the air line for gas vent GV-4 was damaged during the September mowing event. TRC coordinated the repairs of the air line with J&R Underground (J&R) and the line was repaired between October 21 and 28, 2022. During the October 21 site visit, the airline was exposed, and it was found that the service line to GV-4 was broken off from a t-fitting installed on the main air supply line. J&R ordered a new t-fitting and installed the fitting along with a new service line to GV-4 on October 28, 2022. Photos of the repair were included in the October 2022 Operation Monitoring and Maintenance Activities Monthly Report, submitted by TRC on November 21, 2022.

The air compressor system was restarted on October 6, 2022 following the site electrical upgrades described in the previous section of this report. The electrical contactor for the motor starter failed during the start-up requiring replacement. Based on the previous issues with the system and the

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electrical service upgrades, the compressor system and electrical service were further evaluated by TRC's electrical engineer. This evaluation was summarized in a memorandum provided to the WDNR on December 8, 2022. Based on TRC's recommendations, the WDNR agreed to the replacement of the air compressor motor starter contactor and overload relay, and testing of the electrical motor. The maintenance, repairs, and testing are planned for 2023.

## Landfill Cap and Stormwater Drainage Features

### Summary

TRC inspected the landfill cap and stormwater conveyance features on a monthly basis throughout 2022 when the cap was not covered with snow. This included at minimum, the inspection of the cap integrity, the condition of drainage ways, the condition of vegetative cover, and the inspection of the sediment basin. Observations were previously documented and submitted to the WDNR in monthly Operation Monitoring and Maintenance Activity Reports.

### Observations and Findings

Based on TRC's monthly observations, the condition of the landfill cap and sediment basin remained in good condition in 2022. Minor erosion was observed at the eastern drainage way and minor areas of bare soil were observed throughout the landfill cap that had been previously seeded in 2021.

### Maintenance and Repairs

On October 20, 2022, TRC reseeded and placed erosion control, as needed, in select areas where bare soil was observed. TRC will continue to monitor these areas for vegetation growth in 2023.

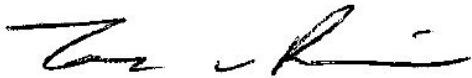
### Conclusions

TRC will continue to conduct scheduled Site visits for the 2023 calendar year and work with the WDNR and the selected electrical subcontractor to conduct necessary repairs to the electrical supply to the Site to support the operation of the GES and LES.

If you have any questions, please contact me at [astehn@trccompanies.com](mailto:astehn@trccompanies.com) or 608-807-8112.

Sincerely,

TRC



Tom Perkins  
Project Engineer



Andrew Stehn, PE  
Project Manager

Attachments: 1. Gas Probe Monitoring Summary Table  
2. Leachate Laboratory Analytical Report

**Attachment 1**

**Gas Probe Monitoring Summary Table**

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-1D	1/3/2022	0.0	0.0	0.0	4.7	15.6
GP-1D	2/8/2022	0.0	0.0	0.0	0.7	20.1
GP-1D	3/1/2022	0.0	0.0	0.0	0.9	19.8
GP-1D	4/19/2022	0.0	0.0	0.0	2.0	18.1
GP-1D	5/5/2022	0.0	0.0	0.0	2.1	17.8
GP-1D	6/8/2022	0.0	0	0.0	2.4	17.5
GP-1D	7/18/2022	0.0	0.0	0.0	11.8	4.4
GP-1D	8/1/2022	0.04	4	2	13.5	3.1
GP-1D	9/19/2022	0.0	10.0	0.5	11.4	5.2
GP-1D	10/3/2022	-0.04	6.0	0.3	11.8	4.0
GP-1D	11/16/2022	0.03	0.0	0.0	5.4	13.9
GP-1D	12/5/2022	0.14	0.0	0.0	4.1	16.6
GP-1S	1/3/2022	0.0	0.0	0.0	0.1	20.7
GP-1S	2/8/2022	0.0	0.0	0.0	0.0	20.8
GP-1S	3/1/2022	0.0	0.0	0.0	0	20.8
GP-1S	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-1S	5/5/2022	0.0	0.0	0.0	0.1	20.7
GP-1S	6/8/2022	0.0	0	0.0	0.0	20.8
GP-1S	7/18/2022	0.0	0.0	0.0	9.2	3.1
GP-1S	8/1/2022	0.03	48	2.4	14.1	0.0
GP-1S	9/19/2022	0.0	>100	6.4	17.0	0.4
GP-1S	10/3/2022	0.00	4.9	9.9	14.4	2.3
GP-1S	11/16/2022	0.00	0.0	0.0	0.1	20.7
GP-1S	12/5/2022	0.00	0.0	0.0	0.1	20.7
GP-2D	1/3/2022	0.0	0.0	0.0	0.5	20.4
GP-2D	2/8/2022	0.1	0.0	0.0	0.3	20.5
GP-2D	3/1/2022	0.1	0.0	0.0	0.6	20.6
GP-2D	4/19/2022	0.0	0.0	0.0	0.3	20.6
GP-2D	5/5/2022	0.0	0.0	0.0	1.1	19
GP-2D	6/8/2022	0.0	0	0.0	0.8	19.9
GP-2D	7/18/2022	-0.2	0.0	0.0	7.3	11.1
GP-2D	8/1/2022	0.10	0	0	8.3	10.7
GP-2D	9/19/2022	0.0	14.0	0.7	10.9	7.1
GP-2D	10/3/2022	-0.14	0.0	0.0	5.4	15.0
GP-2D	11/16/2022	0.12	0.0	0.0	1.6	19.3
GP-2D	12/5/2022	0.00	0.0	0.0	1.3	19.6
GP-2S	1/3/2022	0.0	0.0	0.0	0.4	20.4
GP-2S	2/8/2022	0.0	0.0	0.0	0.2	20.5
GP-2S	3/1/2022	0.0	0.0	0.0	0.9	19.9
GP-2S	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-2S	5/5/2022	0.0	0.0	0.0	1.9	18.3
GP-2S	6/8/2022	0.0	0	0.0	2.2	18.0
GP-2S	7/18/2022	0.0	0.0	0.0	14.9	3.1
GP-2S	8/1/2022	0.00	6	0.3	12.4	5.4
G-2S	9/19/2022	0.0	12.0	0.6	11.0	10.2
GP-2S	10/3/2022	0.00	0.0	0.0	5.1	15.7
GP-2S	11/16/2022	0.00	0.0	0.0	0.6	20.1
GP-2S	12/5/2022	0.00	0.0	0.0	1.0	19.9
GP-3	1/3/2022	0.0	86.0	4.3	18.2	4.6
GP-3	2/8/2022	0.0	50.0	2.5	23.0	0.1
GP-3	3/1/2022	0.0	30.0	1.5	14.4	0.4
GP-3	4/19/2022	0.0	36.0	1.8	7.9	6.2
GP-3	5/5/2022	0.0	>100	6.1	7.6	0
GP-3	6/8/2022	0.0	>100	6.3	7.5	0.0
GP-3	7/18/2022	0.0	>100	7.3	11.4	8.9
GP-3	8/1/2022	-0.04	>100	8.4	7.9	9.1
GP-3	9/19/2022	0.0	>100	5.2	7.1	12.1
GP-3	10/3/2022	0.00	22.0	1.1	3.1	16.9
GP-3	11/16/2022	0.00	20.0	1.0	4.7	16.1
GP-3	12/5/2022	0.00	0.0	0.0	2.0	20.0

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-4	1/3/2022	0.0	0.0	0.0	2.2	19.1
GP-4	2/8/2022	0.0	0.0	0.0	2.1	18.9
GP-4	3/1/2022	0.0	0.0	0.0	2.2	17.9
GP-4	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-4	5/5/2022	0.0	0.0	0.0	1	18.4
GP-4	6/8/2022	0.0	0	0.0	1.2	18.3
GP-4	7/18/2022	0.0	0.0	0.0	6.2	14.4
GP-4	8/1/2022	-0.03	0	0	6.3	14.2
GP-4	9/19/2022	0.0	0.0	0.0	6.4	12.6
GP-4	10/3/2022	0.00	0.0	0.0	7.2	15.6
GP-4	11/16/2022	0.00	0.0	0.0	2.6	17.8
GP-4	12/5/2022	0.00	0.0	0.0	2.2	19.4
GP-5	1/3/2022	0.0	0.0	0.0	1.4	19.7
GP-5	2/8/2022	0.0	0.0	0.0	1.2	19.6
GP-5	3/1/2022	0.0	0.0	0.0	1.7	16.7
GP-5	4/19/2022	0.0	0.0	0.0	1.3	19.9
GP-5	5/5/2022	0.0	0.0	0.0	1.6	19.1
GP-5	6/8/2022	0.0	0	0.0	1.8	18.7
GP-5	7/18/2022	0.0	0.0	0.0	4.8	16.4
GP-5	8/1/2022	0.00	0	0	5.7	15.4
GP-5	9/19/2022	0.0	0.0	0.0	4.6	16.5
GP-5	10/3/2022	0.00	0.0	0.0	4.6	17.4
GP-5	11/16/2022	0.00	0.0	0.0	2.2	18.6
GP-5	12/5/2022	0.00	0.0	0.0	1.5	20.1
GP-6	1/3/2022	0.0	0.0	0.0	1.2	18.5
GP-6	2/8/2022	0.0	0.0	0.0	2.2	16.2
GP-6	3/1/2022	0.0	0.0	0.0	2.5	15
GP-6	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-6	5/5/2022	0.1	0.0	0.0	0	20.8
GP-6	6/8/2022	0.0	0	0.0	0.2	20.5
GP-6	7/18/2022	0.0	0.0	0.0	3.5	17.1
GP-6	8/1/2022	0.00	0	0	3.8	16.5
GP-6	9/19/2022	0.0	0.0	0.0	2.1	18.0
GP-6	10/3/2022	0.00	0.0	0.0	4.1	18.0
GP-6	11/16/2022	0.00	0.0	0.0	0.2	20.5
GP-6	12/5/2022	0.00	0.0	0.0	0.7	18.2
GP-7	1/3/2022	0.0	0.0	0.0	2.4	18.8
GP-7	2/8/2022	0.0	0.0	0.0	2.0	18.5
GP-7	3/1/2022	0.0	0.0	0.0	1.8	18
GP-7	4/19/2022	0.0	0.0	0.0	1.2	18.2
GP-7	5/5/2022	0.0	0.0	0.0	1.2	17.9
GP-7	6/8/2022	0.0	0	0.0	1.0	18.1
GP-7	7/18/2022	0.0	0.0	0.0	2.8	17.3
GP-7	8/1/2022	0.00	0	0	3.2	17.1
GP-7	9/19/2022	0.0	0.0	0.0	4.5	16.6
GP-7	10/3/2022	0.00	0.0	0.0	4.2	17.2
GP-7	11/16/2022	0.00	0.0	0.0	3.2	16.6
GP-7	12/5/2022	0.00	0.0	0.0	2.6	18.4
GP-8	1/3/2022	0.0	0.0	0.0	7.3	12.9
GP-8	2/8/2022	0.0	0.0	0.0	3.8	16.3
GP-8	3/1/2022	0.0	0.0	0.0	4	15.3
GP-8	4/19/2022	0.0	0.0	0.0	3.4	18.4
GP-8	5/5/2022	0.0	0.0	0.0	3.5	17.4
GP-8	6/8/2022	0.0	0	0.0	3.2	17.6
GP-8	7/18/2022	0.0	0.0	0.0	4.2	15.7
GP-8	8/1/2022	0.00	0	0	5.4	16.3
GP-8	9/19/2022	0.0	0.0	0.0	6.9	14.7
GP-8	10/3/2022	0.00	0.0	0.0	5.6	16.0
GP-8	11/16/2022	0.00	0.0	0.0	5.1	16.2
GP-8	12/5/2022	0.00	0.0	0.0	3.9	17.8

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-9	1/3/2022	0.0	0.0	0.0	2.0	18.9
GP-9	2/8/2022	0.0	0.0	0.0	1.8	18.6
GP-9	3/1/2022	0.0	0.0	0.0	2	17.7
GP-9	4/19/2022	0.0	0.0	0.0	1.7	19
GP-9	5/5/2022	0.0	0.0	0.0	1.9	18
GP-9	6/8/2022	0.0	0	0.0	1.7	18.8
GP-9	7/18/2022	0.0	0.0	0.0	4.8	16.0
GP-9	8/1/2022	0.00	0	0	4.3	17.1
GP-9	9/19/2022	0.0	0.0	0.0	5.1	15.0
GP-9	10/3/2022	0.00	0.0	0.0	4.5	16.5
GP-9	11/16/2022	0.00	0.0	0.0	3.3	17.2
GP-9	12/5/2022	0.00	0.0	0.0	2.4	18.7
GP-10	1/3/2022	0.0	0.0	0.0	2.2	19.1
GP-10	2/8/2022	0.0	0.0	0.0	2.1	19.1
GP-10	3/1/2022	0.0	0.0	0.0	2.9	17.4
GP-10	4/19/2022	0.0	0.0	0.0	1.9	18.3
GP-10	5/5/2022	0.0	0.0	0.0	2.1	17.3
GP-10	6/8/2022	0.0	0	0.0	2.3	17.0
GP-10	7/18/2022	-0.1	78.0	3.9	15.8	0.3
GP-10	8/1/2022	0.00	>100	8.9	19.7	1.1
GP-10	9/19/2022	0.0	0.0	0.0	8.5	13.3
GP-10	10/3/2022	0.00	0.0	0.0	6.1	15.2
GP-10	11/16/2022	0.00	0.0	0.0	5.1	15.6
GP-10	12/5/2022	0.00	0.0	0.0	7.3	11.5
GP-11D	1/3/2022	0.0	0.0	0.0	0.0	20.8
GP-11D	2/8/2022	0.0	0.0	0.0	0.0	20.8
GP-11D	3/1/2022	0.0	0.0	0.0	0.3	20.4
GP-11D	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-11D	5/5/2022	0.0	0.0	0.0	1.4	18
GP-11D	6/8/2022	0.0	0	0.0	1.1	18.5
GP-11D	7/18/2022	0.0	50.0	2.5	6.9	12.5
GP-11D	8/1/2022	0.06	82	4.1	16.1	0.3
GP-11D	9/19/2022	0.0	74.0	3.7	15.1	1.4
GP-11D	10/3/2022	0.00	39.0	1.9	9.9	8.0
GP-11D	11/16/2022	0.00	0.0	0.0	0.3	20.4
GP-11D	12/5/2022	-0.07	0.0	0.0	0.3	20.2
GP-11S	1/3/2022	0.0	0.0	0.0	0.5	20.5
GP-11S	2/8/2022	0.0	0.0	0.0	0.4	20.1
GP-11S	3/1/2022	0.0	0.0	0.0	0.2	20.5
GP-11S	4/19/2022	0.0	0.0	0.0	0.3	20.4
GP-11S	5/5/2022	0.0	0.0	0.0	1.8	17.4
GP-11S	6/8/2022	0.0	0	0.0	1.5	18.9
GP-11S	7/18/2022	0.0	0.0	0.0	7.2	11.1
GP-11S	8/1/2022	0.00	48	2.4	16.3	0.0
GP-11S	9/19/2022	0.0	32.0	1.6	12.9	14.1
GP-11S	10/3/2022	0.00	0.0	0.0	6.0	15.5
GP-11S	11/16/2022	0.00	0.0	0.0	0.0	20.7
GP-11S	12/5/2022	0.00	0.0	0.0	0.7	19.8
GP-12D	1/3/2022	0.0	18.0	0.9	1.8	19.0
GP-12D	2/8/2022	0.0	0.0	0.0	0.4	20.2
GP-12D	3/1/2022	0.0	0.0	0.0	0.4	20.2
GP-12D	4/19/2022	0.0	0.0	0.0	0.9	19.5
GP-12D	5/5/2022	0.0	22.0	1.1	2.4	17
GP-12D	6/8/2022	0.0	0.8	0.4	1.9	17.3
GP-12D	7/18/2022	0.0	5.0	0.2	7.4	10.3
GP-12D	8/1/2022	0.00	>100	9.2	18.4	1.8
GP-12D	9/19/2022	0.0	>100	5.9	14.9	5.7
GP-12D	10/3/2022	0.00	>100	5.9	11.2	9.5
GP-12D	11/16/2022	0.00	36.0	1.8	3.4	17.2
GP-12D	12/5/2022	-0.03	44.0	2.2	3.9	16.7

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-12S	1/3/2022	0.0	0.0	0.0	0.9	20.1
GP-12S	2/8/2022	0.0	0.0	0.0	1.4	19.8
GP-12S	3/1/2022	0.0	0.0	0.0	0.6	20.3
GP-12S	4/19/2022	0.0	0.0	0.0	0.2	20.4
GP-12S	5/5/2022	0.0	0.0	0.0	0.6	20.1
GP-12S	6/8/2022	0.0	0	0.0	0.4	20.3
GP-12S	7/18/2022	0.0	0.0	0.0	7.3	9.4
GP-12S	8/1/2022	0.00	0	0	4.8	15.9
GP-12S	9/19/2022	0.0	0.0	0.0	4.6	15.6
GP-12S	10/3/2022	0.00	0.0	0.0	1.6	18.6
GP-12S	11/16/2022	0.00	0.0	0.0	1.1	19.7
GP-12S	12/5/2022	0.00	0.0	0.0	2.4	18.4
GP-13D	1/3/2022	0.0	0.0	0.0	0.1	20.6
GP-13D	2/8/2022	0.0	0.0	0.0	0.1	20.6
GP-13D	3/1/2022	0.0	0.0	0.0	0.2	20.4
GP-13D	4/19/2022	0.0	0.0	0.0	0.5	19.9
GP-13D	5/5/2022	0.0	0.0	0.0	0.9	18.9
GP-13D	6/8/2022	0.0	0	0.0	0.6	20.1
GP-13D	7/18/2022	0.0	0.0	0.0	6.8	14.1
GP-13D	8/1/2022	0.00	6	0.3	6.8	11.2
GP-13D	9/19/2022	0.0	12.0	0.6	10.3	7.8
GP-13D	10/3/2022	0.00	3.0	0.7	4.3	14.4
GP-13D	11/16/2022	0.00	2.0	0.1	1.2	19.1
GP-13D	12/5/2022	0.00	12.0	0.6	4.4	14.9
GP-13S	1/3/2022	0.0	0.0	0.0	0.2	20.6
GP-13S	2/8/2022	0.0	0.0	0.0	0.2	20.5
GP-13S	3/1/2022	0.0	0.0	0.0	0.3	20.3
GP-13S	4/19/2022	0.0	0.0	0.0	0.6	20
GP-13S	5/5/2022	0.0	0.0	0.0	0.9	18.7
GP-13S	6/8/2022	0.0	0	0.0	1.1	18.9
GP-13S	7/18/2022	0.0	0.0	0.0	7.5	13.7
GP-13S	8/1/2022	0.00	0	0	7.6	12.1
GP-13S	9/19/2022	0.0	0.0	0.0	5.9	13.8
GP-13S	10/3/2022	0.00	0.0	0.0	2.1	18.5
GP-13S	11/16/2022	0.00	0.0	0.0	0.5	20.2
GP-13S	12/5/2022	0.00	0.0	0.0	1.1	19.3
GP-16D	1/3/2022	0.0	0.0	0.0	7.2	9.8
GP-16D	2/8/2022	0.0	0.0	0.0	9.0	6.9
GP-16D	3/1/2022	0.0	0.0	0.0	0.8	19.6
GP-16D	4/19/2022	0.0	0.0	0.0	0.6	19.9
GP-16D	5/5/2022	0.0	0.0	0.0	0.7	19.8
GP-16D	6/8/2022	0.0	0	0.0	0.9	20.0
GP-16D	7/18/2022	0.0	0.0	0.0	1.5	19.1
GP-16D	8/1/2022	0.00	0	0	1.8	19.3
GP-16D	9/19/2022	0.0	0.0	0.0	1.8	19.2
GP-16D	10/3/2022	0.00	0.0	0.0	0.9	19.1
GP-16D	11/16/2022	0.00	0.0	0.0	4.7	14.5
GP-16D	12/5/2022	0.00	0.0	0.0	6.1	12.0
GP-16S	1/3/2022	0.0	0.0	0.0	0.3	20.4
GP-16S	2/8/2022	0.0	0.0	0.0	0.3	20.5
GP-16S	3/1/2022	0.0	0.0	0.0	0.3	20.5
GP-16S	4/19/2022	0.0	0.0	0.0	0.4	20.4
GP-16S	5/5/2022	0.0	0.0	0.0	0.5	20.3
GP-16S	6/8/2022	0.0	0	0.0	0.4	20.2
GP-16S	7/18/2022	0.0	0.0	0.0	3.4	17.9
GP-16S	8/1/2022	0.00	0	0	3.1	18.6
GP-16S	9/19/2022	0.0	0.0	0.0	3.4	17.5
GP-16S	10/3/2022	0.00	0.0	0.0	2.4	18.1
GP-16S	11/16/2022	0.00	0.0	0.0	0.5	20.2
GP-16S	12/5/2022	0.00	0.0	0.0	0.8	19.9

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-17D	1/3/2022	0.0	0.0	0.0	1.7	18.6
GP-17D	2/8/2022	0.0	0.0	0.0	1.4	18.7
GP-17D	3/1/2022	0.0	0.0	0.0	1.9	18.1
GP-17D	4/19/2022	0.0	0.0	0.0	2.3	17.6
GP-17D	5/5/2022	0.0	6.0	0.3	2.7	16.7
GP-17D	6/8/2022	0.0	0	0.0	2.9	16.9
GP-17D	7/18/2022	0.0	0.0	0.0	4.3	15.9
GP-17D	8/1/2022	0.00	0	0	4.7	15.9
GP-17D	9/19/2022	0.0	0.0	0.0	14.0	16.6
GP-17D	10/3/2022	0.00	0.0	0.0	3.2	16.8
GP-17D	11/16/2022	0.00	0.0	0.0	2.2	18.3
GP-17D	12/5/2022	0.00	0.0	0.0	2.2	18.3
GP-17M	1/3/2022	0.0	0.0	0.0	0.0	20.8
GP-17M	2/8/2022	0.0	0.0	0.0	0.1	20.5
GP-17M	3/1/2022	0.0	0.0	0.0	0.2	20.5
GP-17M	4/19/2022	0.0	0.0	0.0	0.4	20
GP-17M	5/5/2022	0.0	0.0	0.0	0.4	20.1
GP-17M	6/8/2022	0.0	0	0.0	0.2	20.6
GP-17M	7/18/2022	0.0	0.0	0.0	3.6	17.4
GP-17M	8/1/2022	0.00	0	0	4.1	17.3
GP-17M	9/19/2022	0.0	0.0	0.0	3.6	16.9
GP-17M	10/3/2022	0.00	0.0	0.0	1.6	18.5
GP-17M	11/16/2022	0.00	0.0	0.0	0.3	20.2
GP-17M	12/5/2022	0.00	0.0	0.0	0.3	20.2
GP-17S	1/3/2022	0.0	0.0	0.0	0.4	20.4
GP-17S	2/8/2022	0.0	0.0	0.0	0.2	20.4
GP-17S	3/1/2022	0.0	0.0	0.0	0.4	20.3
GP-17S	4/19/2022	0.0	0.0	0.0	0.3	20.2
GP-17S	5/5/2022	0.0	0.0	0.0	0.6	20
GP-17S	6/8/2022	0.0	0	0.0	0.8	20.1
GP-17S	7/18/2022	0.0	0.0	0.0	4.5	16.6
GP-17S	8/1/2022	0.00	0	0	4.2	17.2
GP-17S	9/19/2022	0.0	0.0	0.0	4.5	16.0
GP-17S	10/3/2022	0.00	0.0	0.0	3.9	16.6
GP-17S	11/16/2022	0.00	0.0	0.0	0.1	20.6
GP-17S	12/5/2022	0.00	0.0	0.0	0.5	20.1
GP-18D	1/3/2022	0.0	0.0	0.0	0.0	20.8
GP-18D	2/8/2022	0.1	0.0	0.0	0.4	20.3
GP-18D	3/1/2022	0.0	0.0	0.0	2.3	17.5
GP-18D	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-18D	5/5/2022	0.0	0.0	0.0	0.1	20.7
GP-18D	6/8/2022	0.0	0	0.0	0.0	20.8
GP-18D	7/18/2022	0.0	0.0	0.0	3.3	16.2
GP-18D	8/1/2022	0.00	0	0	4.9	14.6
GP-18D	9/19/2022	0.0	0.0	0.0	0.9	19.9
GP-18D	10/3/2022	0.00	0.0	0.0	0.2	19.9
GP-18D	11/16/2022	0.00	0.0	0.0	0.2	20.6
GP-18D	12/5/2022	0.00	0.0	0.0	0.4	20.5
GP-18M	1/3/2022	0.0	0.0	0.0	0.0	20.8
GP-18M	2/8/2022	0.0	0.0	0.0	0.1	20.7
GP-18M	3/1/2022	0.0	2.0	0.1	0.6	19.6
GP-18M	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-18M	5/5/2022	0.0	0.0	0.0	0	20.8
GP-18M	6/8/2022	0.0	0	0.0	0.0	20.8
GP-18M	7/18/2022	0.0	0.0	0.0	4.4	16.0
GP-18M	8/1/2022	0.00	0	0	4.3	16.8
GP-18M	9/19/2022	0.0	0.0	0.0	1.4	19.4
GP-18M	10/3/2022	0.00	0.0	0.0	0.3	19.8
GP-18M	11/16/2022	0.00	0.0	0.0	0.1	20.7
GP-18M	12/5/2022	0.00	0.0	0.0	0.2	20.6

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-18S	1/3/2022	0.0	0.0	0.0	0.1	20.7
GP-18S	2/8/2022	0.0	0.0	0.0	0.0	20.8
GP-18S	3/1/2022	0.0	0.0	0.0	0.1	20.6
GP-18S	4/19/2022	0.0	0.0	0.0	0.2	20.5
GP-18S	5/5/2022	0.0	0.0	0.0	0.2	20.5
GP-18S	6/8/2022	0.0	0	0.0	0.3	20.4
GP-18S	7/18/2022	0.0	0.0	0.0	5.2	14.0
GP-18S	8/1/2022	0.00	0	0	6.6	13.3
GP-18S	9/19/2022	0.0	0.0	0.0	5.2	16.7
GP-18S	10/3/2022	0.00	0.0	0.0	0.2	19.9
GP-18S	11/16/2022	0.00	0.0	0.0	0.0	20.8
GP-18S	12/5/2022	0.00	0.0	0.0	0.2	20.6
GP-19 <sup>85-100</sup>	1/3/2022	0.0	0.0	0.0	3.8	16.1
GP-19 <sup>85-100</sup>	2/8/2022	0.0	0.0	0.0	5.9	12.6
GP-19 <sup>85-100</sup>	3/1/2022	0.0	0.0	0.0	0.8	19.8
GP-19 <sup>85-100</sup>	4/19/2022	0.0	0.0	0.0	1.0	19.9
GP-19 <sup>85-100</sup>	5/5/2022	0.0	0.0	0.0	0.3	20.4
GP-19 <sup>85-100</sup>	6/8/2022	0.0	0	0.0	0.2	20.5
GP-19 <sup>85-100</sup>	7/18/2022	0.0	0.0	0.0	0.0	20.8
GP-19 <sup>85-100</sup>	8/1/2022	0.00	0	0	0	20.8
GP-19 <sup>85-100</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-19 <sup>85-100</sup>	10/3/2022	0.00	0.0	0.0	1.1	19.8
GP-19 <sup>85-100</sup>	11/16/2022	0.00	0.0	0.0	0.6	19.8
GP-19 <sup>85-100</sup>	12/5/2022	0.00	0.0	0.0	4.5	15.6
GP-19 <sup>50-70</sup>	1/3/2022	0.0	0.0	0.0	2.4	18.5
GP-19 <sup>50-70</sup>	2/8/2022	0.0	0.0	0.0	2.7	17.6
GP-19 <sup>50-70</sup>	3/1/2022	0.0	0.0	0.0	2.4	17.8
GP-19 <sup>50-70</sup>	4/19/2022	0.0	0.0	0.0	2.1	18.4
GP-19 <sup>50-70</sup>	5/5/2022	0.0	0.0	0.0	1.7	18.8
GP-19 <sup>50-70</sup>	6/8/2022	0.0	0	0.0	1.9	18.7
GP-19 <sup>50-70</sup>	7/18/2022	0.0	0.0	0.0	0.7	20.0
GP-19 <sup>50-70</sup>	8/1/2022	0.00	0	0	0.9	19.9
GP-19 <sup>50-70</sup>	9/19/2022	0.0	0.0	0.0	0.7	20.1
GP-19 <sup>50-70</sup>	10/3/2022	0.00	0.0	0.0	1.3	19.5
GP-19 <sup>50-70</sup>	11/16/2022	0.00	0.0	0.0	0.4	19.7
GP-19 <sup>50-70</sup>	12/5/2022	0.00	0.0	0.0	1.7	19.0
GP-19 <sup>25-40</sup>	1/3/2022	0.0	0.0	0.0	3.1	17.3
GP-19 <sup>25-40</sup>	2/8/2022	0.0	0.0	0.0	3.6	16.9
GP-19 <sup>25-40</sup>	3/1/2022	0.0	0.0	0.0	3.1	17.1
GP-19 <sup>25-40</sup>	4/19/2022	0.0	0.0	0.0	2.0	18.9
GP-19 <sup>25-40</sup>	5/5/2022	0.0	0.0	0.0	1.2	19.6
GP-19 <sup>25-40</sup>	6/8/2022	0.0	0	0.0	1.0	19.8
GP-19 <sup>25-40</sup>	7/18/2022	0.0	0.0	0.0	0.2	20.4
GP-19 <sup>25-40</sup>	8/1/2022	0.00	0	0	0.3	20.4
GP-19 <sup>25-40</sup>	9/19/2022	0.0	0.0	0.0	0.4	20.3
GP-19 <sup>25-40</sup>	10/3/2022	0.00	0.0	0.0	1.2	19.5
GP-19 <sup>25-40</sup>	11/16/2022	0.00	0.0	0.0	1.3	19.1
GP-19 <sup>25-40</sup>	12/5/2022	0.00	0.0	0.0	2.1	18.9

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP19 <sup>2-15</sup>	1/3/2022	0.0	0.0	0.0	1.1	20.0
GP19 <sup>2-15</sup>	2/8/2022	0.0	0.0	0.0	1.9	17.8
GP19 <sup>2-15</sup>	3/1/2022	0.0	0.0	0.0	0.9	19.7
GP19 <sup>2-15</sup>	4/19/2022	0.0	0.0	0.0	1.1	19.8
GP19 <sup>2-15</sup>	5/5/2022	0.0	0.0	0.0	1	19.7
GP19 <sup>2-15</sup>	6/8/2022	0.0	0	0.0	0.5	20.2
GP19 <sup>2-15</sup>	7/18/2022	0.0	0.0	0.0	0.0	20.8
GP19 <sup>2-15</sup>	8/1/2022	0.00	0	0	0	20.8
GP19 <sup>2-15</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP19 <sup>2-15</sup>	10/3/2022	0.00	0.0	0.0	1.9	18.9
GP19 <sup>2-15</sup>	11/16/2022	0.00	0.0	0.0	1.7	18.7
GP19 <sup>2-15</sup>	12/5/2022	0.00	0.0	0.0	1.3	18.0
GP-20 <sup>85-100</sup>	1/3/2022	0.0	0.0	0.0	0.5	20.2
GP-20 <sup>85-100</sup>	2/8/2022	0.2	0.0	0.0	2.5	16.7
GP-20 <sup>85-100</sup>	3/1/2022	0.0	0.0	0.0	1.7	18
GP-20 <sup>85-100</sup>	4/19/2022	0.0	0.0	0.0	0.3	20.3
GP-20 <sup>85-100</sup>	5/5/2022	0.0	0.0	0.0	0.3	20.4
GP-20 <sup>85-100</sup>	6/8/2022	0.0	0	0.0	0.5	20.1
GP-20 <sup>85-100</sup>	7/18/2022	0.0	0.0	0.0	0.1	20.6
GP-20 <sup>85-100</sup>	8/1/2022	0.00	0	0	0.2	20.7
GP-20 <sup>85-100</sup>	9/19/2022	0.0	0.0	0.0	0.1	20.6
GP-20 <sup>85-100</sup>	10/3/2022	0.00	0.0	0.0	0.1	20.7
GP-20 <sup>85-100</sup>	11/16/2022	0.00	0.0	0.0	0.0	20.8
GP-20 <sup>85-100</sup>	12/5/2022	0.00	0.0	0.0	0.5	20.2
GP-20 <sup>50-70</sup>	1/3/2022	0.0	0.0	0.0	1.7	18.8
GP-20 <sup>50-70</sup>	2/8/2022	0.0	0.0	0.0	2.7	17.8
GP-20 <sup>50-70</sup>	3/1/2022	0.0	0.0	0.0	2.3	17.9
GP-20 <sup>50-70</sup>	4/19/2022	0.0	0.0	0.0	1.0	19.8
GP-20 <sup>50-70</sup>	5/5/2022	0.0	0.0	0.0	0.5	20.3
GP-20 <sup>50-70</sup>	6/8/2022	0.0	0	0.0	0.4	20.3
GP-20 <sup>50-70</sup>	7/18/2022	0.0	0.0	0.0	0.1	20.7
GP-20 <sup>50-70</sup>	8/1/2022	0.00	0	0	0	20.8
GP-20 <sup>50-70</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-20 <sup>50-70</sup>	10/3/2022	0.00	0.0	0.0	0.3	20.5
GP-20 <sup>50-70</sup>	11/16/2022	0.00	0.0	0.0	0.4	20.4
GP-20 <sup>50-70</sup>	12/5/2022	0.00	0.0	0.0	1.1	19.9
GP-20 <sup>25-40</sup>	1/3/2022	0.0	0.0	0.0	1.8	18.7
GP-20 <sup>25-40</sup>	2/8/2022	0.0	0.0	0.0	2.4	17.9
GP-20 <sup>25-40</sup>	3/1/2022	0.0	0.0	0.0	1.8	18.4
GP-20 <sup>25-40</sup>	4/19/2022	0.0	0.0	0.0	1.2	19.7
GP-20 <sup>25-40</sup>	5/5/2022	0.0	0.0	0.0	0.7	20
GP-20 <sup>25-40</sup>	6/8/2022	0.0	0	0.0	0.8	20.0
GP-20 <sup>25-40</sup>	7/18/2022	0.0	0.0	0.0	0.2	20.5
GP-20 <sup>25-40</sup>	8/1/2022	0.00	0	0	0.4	20.5
GP-20 <sup>25-40</sup>	9/19/2022	0.0	0.0	0.0	0.3	20.4
GP-20 <sup>25-40</sup>	10/3/2022	0.00	0.0	0.0	0.7	20.1
GP-20 <sup>25-40</sup>	11/16/2022	0.00	0.0	0.0	0.9	20.0
GP-20 <sup>25-40</sup>	12/5/2022	0.00	0.0	0.0	1.5	19.7

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-20 <sup>2-15</sup>	1/3/2022	0.0	0.0	0.0	1.6	18.8
GP-20 <sup>2-15</sup>	2/8/2022	0.0	0.0	0.0	1.7	18.7
GP-20 <sup>2-15</sup>	3/1/2022	0.0	0.0	0.0	1.4	19
GP-20 <sup>2-15</sup>	4/19/2022	0.0	0.0	0.0	1.3	19.4
GP-20 <sup>2-15</sup>	5/5/2022	0.0	0.0	0.0	0.9	19.9
GP-20 <sup>2-15</sup>	6/8/2022	0.0	0	0.0	1.1	19.7
GP-20 <sup>2-15</sup>	7/18/2022	0.0	0.0	0.0	0.5	20.3
GP-20 <sup>2-15</sup>	8/1/2022	0.00	0	0	0	20.8
GP-20 <sup>2-15</sup>	9/19/2022	0.0	0.0	0.0	0.5	20.3
GP-20 <sup>2-15</sup>	10/3/2022	0.00	0.0	0.0	2.1	18.8
GP-20 <sup>2-15</sup>	11/16/2022	0.00	0.0	0.0	2.3	18.5
GP-20 <sup>2-15</sup>	12/5/2022	0.00	0.0	0.0	1.8	19.5
GP-21 <sup>85-100</sup>	1/3/2022	0.2	0.0	0.0	0.4	20.4
GP-21 <sup>85-100</sup>	2/8/2022	0.4	0.0	0.0	0.8	19.3
GP-21 <sup>85-100</sup>	3/1/2022	0.0	0.0	0.0	0.6	19.6
GP-21 <sup>85-100</sup>	4/19/2022	-0.1	0.0	0.0	0.3	20.5
GP-21 <sup>85-100</sup>	5/5/2022	0.2	0.0	0.0	0.3	20.2
GP-21 <sup>85-100</sup>	6/8/2022	0.1	0	0.0	0.5	20.2
GP-21 <sup>85-100</sup>	7/18/2022	0.0	0.0	0.0	0.2	20.6
GP-21 <sup>85-100</sup>	8/1/2022	-0.14	0	0	0.3	20.6
GP-21 <sup>85-100</sup>	9/19/2022	0.0	0.0	0.0	0.2	20.6
GP-21 <sup>85-100</sup>	10/3/2022	0.00	0.0	0.0	0.2	20.3
GP-21 <sup>85-100</sup>	11/16/2022	0.00	0.0	0.0	0.2	20.5
GP-21 <sup>85-100</sup>	12/5/2022	-0.10	0.0	0.0	0.6	19.9
GP-21 <sup>50-70</sup>	1/3/2022	0.1	0.0	0.0	0.2	20.6
GP-21 <sup>50-70</sup>	2/8/2022	0.2	0.0	0.0	2.8	16.6
GP-21 <sup>50-70</sup>	3/1/2022	0.0	0.0	0.0	2.3	17.1
GP-21 <sup>50-70</sup>	4/19/2022	0.0	0.0	0.0	0.8	20
GP-21 <sup>50-70</sup>	5/5/2022	0.0	0.0	0.0	0.3	20.4
GP-21 <sup>50-70</sup>	6/8/2022	0.0	0	0.0	0.4	20.4
GP-21 <sup>50-70</sup>	7/18/2022	0.0	0.0	0.0	0.0	20.8
GP-21 <sup>50-70</sup>	8/1/2022	-0.02	0	0	0	20.8
GP-21 <sup>50-70</sup>	9/19/2022	0.0	0.0	0.0	0.1	20.7
GP-21 <sup>50-70</sup>	10/3/2022	0.00	0.0	0.0	0.0	20.8
GP-21 <sup>50-70</sup>	11/16/2022	0.00	0.0	0.0	0.3	20.5
GP-21 <sup>50-70</sup>	12/5/2022	-0.07	0.0	0.0	1.5	19.3
GP-21 <sup>25-40</sup>	1/3/2022	0.0	0.0	0.0	1.8	19.0
GP-21 <sup>25-40</sup>	2/8/2022	0.0	0.0	0.0	2.4	17.6
GP-21 <sup>25-40</sup>	3/1/2022	0.0	0.0	0.0	1.9	18.2
GP-21 <sup>25-40</sup>	4/19/2022	0.0	0.0	0.0	0.6	20.3
GP-21 <sup>25-40</sup>	5/5/2022	0.0	0.0	0.0	0	20.8
GP-21 <sup>25-40</sup>	6/8/2022	0.0	0	0.0	0.1	20.7
GP-21 <sup>25-40</sup>	7/18/2022	0.0	0.0	0.0	0.0	20.8
GP-21 <sup>25-40</sup>	8/1/2022	-0.03	0	0	0.1	20.7
GP-21 <sup>25-40</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-21 <sup>25-40</sup>	10/3/2022	0.00	0.0	0.0	0.2	20.5
GP-21 <sup>25-40</sup>	11/16/2022	0.00	0.0	0.0	0.4	20.4
GP-21 <sup>25-40</sup>	12/5/2022	0.00	0.0	0.0	2.3	18.5

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-21 <sup>2-15</sup>	1/3/2022	0.0	0.0	0.0	1.1	19.8
GP-21 <sup>2-15</sup>	2/8/2022	0.0	0.0	0.0	1.1	19.6
GP-21 <sup>2-15</sup>	3/1/2022	0.0	0.0	0.0	0.7	20
GP-21 <sup>2-15</sup>	4/19/2022	0.0	0.0	0.0	0.7	20.4
GP-21 <sup>2-15</sup>	5/5/2022	0.0	0.0	0.0	0.5	20.4
GP-21 <sup>2-15</sup>	6/8/2022	0.0	0	0.0	0.6	20.0
GP-21 <sup>2-15</sup>	7/18/2022	0.0	0.0	0.0	0.5	20.4
GP-21 <sup>2-15</sup>	8/1/2022	0.00	0	0	0.7	20.2
GP-21 <sup>2-15</sup>	9/19/2022	0.0	0.0	0.0	0.5	20.3
GP-21 <sup>2-15</sup>	10/3/2022	0.00	0.0	0.0	0.6	20.2
GP-21 <sup>2-15</sup>	11/16/2022	0.00	0.0	0.0	0.8	20.1
GP-21 <sup>2-15</sup>	12/5/2022	0.00	0.0	0.0	1.2	19.9
GP-22 <sup>85-100</sup>	1/3/2022	0.0	0.0	0.0	1.2	19.8
GP-22 <sup>85-100</sup>	2/8/2022	0.1	0.0	0.0	7.5	7.6
GP-22 <sup>85-100</sup>	3/1/2022	0.0	0.0	0.0	4.6	12.3
GP-22 <sup>85-100</sup>	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-22 <sup>85-100</sup>	5/5/2022	0.0	0.0	0.0	1.5	19.2
GP-22 <sup>85-100</sup>	6/8/2022	0.0	0	0.0	1.8	18.7
GP-22 <sup>85-100</sup>	7/18/2022	0.0	0.0	0.0	2.8	18.1
GP-22 <sup>85-100</sup>	8/1/2022	0.00	0	0	2.6	18.4
GP-22 <sup>85-100</sup>	9/19/2022	0.0	0.0	0.0	3.5	17.4
GP-22 <sup>85-100</sup>	10/3/2022	0.00	0.0	0.0	2.9	18.0
GP-22 <sup>85-100</sup>	11/16/2022	0.00	0.0	0.0	3.1	17.8
GP-22 <sup>85-100</sup>	12/5/2022	0.00	0.0	0.0	3.8	17.0
GP-22 <sup>50-70</sup>	1/3/2022	0.0	0.0	0.0	0.6	20.2
GP-22 <sup>50-70</sup>	2/8/2022	0.1	0.0	0.0	3.6	15.6
GP-22 <sup>50-70</sup>	3/1/2022	0.0	0.0	0.0	0.8	19.9
GP-22 <sup>50-70</sup>	4/19/2022	0.0	0.0	0.0	0.6	20
GP-22 <sup>50-70</sup>	5/5/2022	0.0	0.0	0.0	0.4	20.3
GP-22 <sup>50-70</sup>	6/8/2022	0.0	0	0.0	0.6	20.1
GP-22 <sup>50-70</sup>	7/18/2022	0.0	0.0	0.0	0.6	20.0
GP-22 <sup>50-70</sup>	8/1/2022	0.00	0	0	1.1	19.4
GP-22 <sup>50-70</sup>	9/19/2022	0.0	0.0	0.0	0.9	19.9
GP-22 <sup>50-70</sup>	10/3/2022	0.00	0.0	0.0	0.6	19.9
GP-22 <sup>50-70</sup>	11/16/2022	0.00	0.0	0.0	0.4	20.2
GP-22 <sup>50-70</sup>	12/5/2022	0.09	0.0	0.0	2.8	18.3
GP-22 <sup>25-40</sup>	1/3/2022	0.0	0.0	0.0	1.7	19.4
GP-22 <sup>25-40</sup>	2/8/2022	0.0	0.0	0.0	2.0	18.4
GP-22 <sup>25-40</sup>	3/1/2022	0.0	0.0	0.0	1.9	18.5
GP-22 <sup>25-40</sup>	4/19/2022	0.0	0.0	0.0	0.9	19.6
GP-22 <sup>25-40</sup>	5/5/2022	0.0	0.0	0.0	0.6	20.1
GP-22 <sup>25-40</sup>	6/8/2022	0.0	0	0.0	0.9	19.8
GP-22 <sup>25-40</sup>	7/18/2022	0.0	0.0	0.0	0.2	20.4
GP-22 <sup>25-40</sup>	8/1/2022	0.00	0	0	1.8	19.0
GP-22 <sup>25-40</sup>	9/19/2022	0.0	0.0	0.0	1.3	19.3
GP-22 <sup>25-40</sup>	10/3/2022	0.00	0.0	0.0	1.5	19.0
GP-22 <sup>25-40</sup>	11/16/2022	0.00	0.0	0.0	1.7	18.8
GP-22 <sup>25-40</sup>	12/5/2022	0.00	0.0	0.0	1.7	19.7

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**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-22 <sup>2-15</sup>	1/3/2022	0.0	0.0	0.0	1.3	19.9
GP-22 <sup>2-15</sup>	2/8/2022	0.0	0.0	0.0	1.1	19.6
GP-22 <sup>2-15</sup>	3/1/2022	0.0	0.0	0.0	1	19.8
GP-22 <sup>2-15</sup>	4/19/2022	0.0	0.0	0.0	1.1	19.2
GP-22 <sup>2-15</sup>	5/5/2022	0.0	0.0	0.0	1.2	19.4
GP-22 <sup>2-15</sup>	6/8/2022	0.0	0	0.0	1.4	19.1
GP-22 <sup>2-15</sup>	7/18/2022	0.0	0.0	0.0	2.5	18.3
GP-22 <sup>2-15</sup>	8/1/2022	0.00	0	0	2.6	18.4
GP-22 <sup>2-15</sup>	9/19/2022	0.0	0.0	0.0	3.4	17.6
GP-22 <sup>2-15</sup>	10/3/2022	0.00	0.0	0.0	3.9	17.3
GP-22 <sup>2-15</sup>	11/16/2022	0.00	0.0	0.0	4.2	17.0
GP-22 <sup>2-15</sup>	12/5/2022	0.00	0.0	0.0	2.2	19.3
GP-23 <sup>85-100</sup>	1/3/2022	0.0	0.0	0.0	0.3	20.4
GP-23 <sup>85-100</sup>	2/8/2022	0.1	0.0	0.0	6.2	10.2
GP-23 <sup>85-100</sup>	3/1/2022	0.0	0.0	3.1	7.2	9.6
GP-23 <sup>85-100</sup>	4/19/2022	0.0	0.0	0.0	0.3	19.9
GP-23 <sup>85-100</sup>	5/5/2022	0.0	0.0	0.0	0	20.8
GP-23 <sup>85-100</sup>	6/8/2022	0.0	0	0.0	0.2	20.7
GP-23 <sup>85-100</sup>	7/18/2022	0.0	0.0	0.0	0.7	20.0
GP-23 <sup>85-100</sup>	8/1/2022	0.00	0	0	0	20.8
GP-23 <sup>85-100</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-23 <sup>85-100</sup>	10/3/2022	0.00	0.0	0.0	0.3	20.2
GP-23 <sup>85-100</sup>	11/16/2022	0.00	0.0	0.0	0.4	20.3
GP-23 <sup>85-100</sup>	12/5/2022	0.00	0.0	0.0	1.5	19.1
GP-23 <sup>50-70</sup>	1/3/2022	0.0	0.0	0.0	0.1	20.7
GP-23 <sup>50-70</sup>	2/8/2022	0.0	27.0	1.3	14.3	0.0
GP-23 <sup>50-70</sup>	3/1/2022	0.0	0.0	0.0	0.1	20.5
GP-23 <sup>50-70</sup>	4/19/2022	0.0	0.0	0.0	0.0	20.7
GP-23 <sup>50-70</sup>	5/5/2022	0.0	0.0	0.0	0	20.8
GP-23 <sup>50-70</sup>	6/8/2022	0.0	0	0.0	0.3	20.5
GP-23 <sup>50-70</sup>	7/18/2022	0.0	0.0	0.0	0.3	20.4
GP-23 <sup>50-70</sup>	8/1/2022	0.00	0	0	0.4	20.3
GP-23 <sup>50-70</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-23 <sup>50-70</sup>	10/3/2022	0.00	0.0	0.0	0.2	20.5
GP-23 <sup>50-70</sup>	11/16/2022	0.00	0.0	0.0	0.6	20.1
GP-23 <sup>50-70</sup>	12/5/2022	-0.03	0.0	0.0	1.0	19.6
GP-23 <sup>25-40</sup>	1/3/2022	0.0	0.0	0.0	0.0	20.8
GP-23 <sup>25-40</sup>	2/8/2022	0.0	36.0	1.8	18.1	0.0
GP-23 <sup>25-40</sup>	3/1/2022	0.0	0.0	0.0	0	20.8
GP-23 <sup>25-40</sup>	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-23 <sup>25-40</sup>	5/5/2022	0.0	0.0	0.0	0	20.8
GP-23 <sup>25-40</sup>	6/8/2022	0.0	0	0.0	0.0	20.8
GP-23 <sup>25-40</sup>	7/18/2022	0.0	0.0	0.0	0.1	20.6
GP-23 <sup>25-40</sup>	8/1/2022	0.00	0	0	0.3	20.4
GP-23 <sup>25-40</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-23 <sup>25-40</sup>	10/3/2022	0.00	0.0	0.0	0.0	20.8
GP-23 <sup>25-40</sup>	11/16/2022	0.00	0.0	0.0	0.2	20.6
GP-23 <sup>25-40</sup>	12/5/2022	0.00	0.0	0.0	5.7	15.2

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**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-23 <sup>2-15</sup>	1/3/2022	0.0	0.0	0.0	2.6	16.3
GP-23 <sup>2-15</sup>	2/8/2022	0.0	0.0	0.0	12.4	5.1
GP-23 <sup>2-15</sup>	3/1/2022	0.0	0.0	0.0	0.7	19.5
GP-23 <sup>2-15</sup>	4/19/2022	0.0	0.0	0.0	0.1	20.7
GP-23 <sup>2-15</sup>	5/5/2022	0.0	0.0	0.0	0	20.8
GP-23 <sup>2-15</sup>	6/8/2022	0.0	0	0.0	0.1	20.7
GP-23 <sup>2-15</sup>	7/18/2022	0.0	0.0	0.0	1.5	19.5
GP-23 <sup>2-15</sup>	8/1/2022	0.00	0	0	3.1	18.2
GP-23 <sup>2-15</sup>	9/19/2022	0.0	0.0	0.0	0.8	20.1
GP-23 <sup>2-15</sup>	10/3/2022	0.00	0.0	0.0	0.6	20.1
GP-23 <sup>2-15</sup>	11/16/2022	0.00	0.0	0.0	0.4	20.4
GP-23 <sup>2-15</sup>	12/5/2022	0.00	0.0	0.0	3.2	17.3
GP-24 <sup>85-100</sup>	1/3/2022	0.0	0.0	0.0	10.1	8.7
GP-24 <sup>85-100</sup>	2/8/2022	0.1	0.0	0.0	15.3	2.8
GP-24 <sup>85-100</sup>	3/1/2022	0.0	0.0	0.0	0	20.8
GP-24 <sup>85-100</sup>	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-24 <sup>85-100</sup>	5/5/2022	0.0	0.0	0.0	0	20.8
GP-24 <sup>85-100</sup>	6/8/2022	0.0	0	0.0	0.2	20.6
GP-24 <sup>85-100</sup>	7/18/2022	0.0	0.0	0.0	0.2	20.6
GP-24 <sup>85-100</sup>	8/1/2022	0.00	0	0	0	20.8
GP-24 <sup>85-100</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-24 <sup>85-100</sup>	10/3/2022	0.00	0.0	0.0	3.5	16.4
GP-24 <sup>85-100</sup>	11/16/2022	0.00	0.0	0.0	3.7	16.5
GP-24 <sup>85-100</sup>	12/5/2022	-0.06	0.0	0.0	11.2	8.3
GP-24 <sup>50-70</sup>	1/3/2022	0.0	0.0	0.0	0.4	19.9
GP-24 <sup>50-70</sup>	2/8/2022	0.0	0.0	0.0	5.1	14.2
GP-24 <sup>50-70</sup>	3/1/2022	0.0	0.0	0.0	4.8	15.1
GP-24 <sup>50-70</sup>	4/19/2022	0.0	0.0	0.0	0.6	20
GP-24 <sup>50-70</sup>	5/5/2022	0.0	0.0	0.0	0.9	20.1
GP-24 <sup>50-70</sup>	6/8/2022	0.0	0	0.0	1.3	19.7
GP-24 <sup>50-70</sup>	7/18/2022	0.0	0.0	0.0	1.1	19.6
GP-24 <sup>50-70</sup>	8/1/2022	0.00	0	0	1.7	18.2
GP-24 <sup>85-100</sup>	9/19/2022	0.0	0.0	0.0	0.0	20.8
GP-24 <sup>50-70</sup>	10/3/2022	0.00	0.0	0.0	1.0	19.5
GP-24 <sup>50-70</sup>	11/16/2022	0.00	0.0	0.0	0.8	19.7
GP-24 <sup>50-70</sup>	12/5/2022	0.00	0.0	0.0	1.8	19.1
GP-24 <sup>25-40</sup>	1/3/2022	0.0	0.0	0.0	0.2	20.6
GP-24 <sup>25-40</sup>	2/8/2022	0.0	0.0	0.0	9.6	6.5
GP-24 <sup>25-40</sup>	3/1/2022	0.0	0.0	0.0	0.3	20.3
GP-24 <sup>25-40</sup>	4/19/2022	0.0	0.0	0.0	0.0	20.8
GP-24 <sup>25-40</sup>	5/5/2022	0.0	0.0	0.0	0	20.8
GP-24 <sup>25-40</sup>	6/8/2022	0.0	0	0.0	0.3	20.4
GP-24 <sup>25-40</sup>	7/18/2022	0.0	0.0	0.0	0.3	20.5
GP-24 <sup>25-40</sup>	8/1/2022	0.00	0	0	3.9	16.1
GP-24 <sup>25-40</sup>	9/19/2022	0.0	0.0	0.0	0.1	20.6
GP-24 <sup>25-40</sup>	10/3/2022	0.00	0.0	0.0	0.2	20.3
GP-24 <sup>25-40</sup>	11/16/2022	0.00	0.0	0.0	0.3	20.4
GP-24 <sup>25-40</sup>	12/5/2022	0.00	0.0	0.0	5.7	15.2

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
GP-24 <sup>2-15</sup>	1/3/2022	0.0	0.0	0.0	0.7	20.2
GP-24 <sup>2-15</sup>	2/8/2022	0.0	45.0	2.2	16.4	1.1
GP-24 <sup>2-15</sup>	3/1/2022	0.0	0.0	0.0	4.9	14.8
GP-24 <sup>2-15</sup>	4/19/2022	0.0	0.0	0.0	0.7	20.1
GP-24 <sup>2-15</sup>	5/5/2022	0.0	0.0	0.0	1.1	19.8
GP-24 <sup>2-15</sup>	6/8/2022	0.0	0	0.0	1.5	19.4
GP-24 <sup>2-15</sup>	7/18/2022	0.0	0.0	0.0	1.6	19.4
GP-24 <sup>2-15</sup>	8/1/2022	0.00	0	0	3.5	17.2
GP-24 <sup>2-15</sup>	9/19/2022	0.0	0.0	0.0	2.2	19.1
GP-24 <sup>2-15</sup>	10/3/2022	0.00	0.0	0.0	1.9	19.0
GP-24 <sup>2-15</sup>	11/16/2022	0.00	0.0	0.0	2.3	18.7
GP-24 <sup>2-15</sup>	12/5/2022	0.00	0.0	0.0	4.7	15.1
GPW-1D	1/3/2022	0.4	0.0	0.0	1.5	19.2
GPW-1D	2/8/2022	1.2	0.0	0.0	1.6	18.1
GPW-1D	3/1/2022	0.1	0.0	0.0	1.4	18.9
GPW-1D	4/19/2022	-0.1	0.0	0.0	0.5	20.1
GPW-1D	5/5/2022	0.4	0.0	0.0	1.6	18.5
GPW-1D	6/8/2022	0.4	0	0.0	1.3	19.4
GPW-1D	7/18/2022	-0.2	0.0	0.0	1.9	18.1
GPW-1D	8/1/2022	-0.03	0	0	2.1	18.0
GPW-1D	9/19/2022	-0.1	0.0	0.0	0.7	19.5
GPW-1D	10/3/2022	0.29	0.0	0.0	3.5	16.1
GPW-1D	11/16/2022	0.23	0.0	0.0	2.1	18.1
GPW-1D	12/5/2022	0.44	0.0	0.0	1.9	17.0
GPW-1M	1/3/2022	0.4	0.0	0.0	1.4	18.8
GPW-1M	2/8/2022	1.1	0.0	0.0	1.7	17.2
GPW-1M	3/1/2022	0.2	0.0	0.0	0	20.8
GPW-1M	4/19/2022	0.0	0.0	0.0	0.0	20.8
GPW-1M	5/5/2022	0.4	0.0	0.0	1.5	18.6
GPW-1M	6/8/2022	0.4	0	0.0	1.6	19.1
GPW-1M	7/18/2022	-0.2	0.0	0.0	0.2	20.2
GPW-1M	8/1/2022	-0.04	0	0	0	20.8
GPW-1M	9/19/2022	0.0	0.0	0.0	0.0	20.8
GPW-1M	10/3/2022	0.30	0.0	0.0	0.4	19.8
GPW-1M	11/16/2022	0.24	0.0	0.0	1.8	18.0
GPW-1M	12/5/2022	0.45	0.0	0.0	1.8	17.3
GPW-1S	1/3/2022	0.0	0.0	0.0	1.0	19.8
GPW-1S	2/8/2022	0.0	0.0	0.0	0.9	19.2
GPW-1S	3/1/2022	0.0	0.0	0.0	0.8	20.4
GPW-1S	4/19/2022	0.0	0.0	0.0	0.8	20.1
GPW-1S	5/5/2022	0.0	0.0	0.0	0.8	19.4
GPW-1S	6/8/2022	0.1	0	0.0	1.1	19.7
GPW-1S	7/18/2022	0.0	0.0	0.0	0.9	19.4
GPW-1S	8/1/2022	0.00	0	0	1.4	18.7
GPW-1S	9/19/2022	0.0	0.0	0.0	1.7	18.4
GPW-1S	10/3/2022	0.00	0.0	0.0	2.2	17.8
GPW-1S	11/16/2022	0.00	0.0	0.0	1.3	19.5
GPW-1S	12/5/2022	0.02	0.0	0.0	1.5	18.3
G-1D	1/3/2022	0.0	0.0	0.0	0.0	20.8
G-1D	2/8/2022	0.0	0.0	0.0	0.0	20.8
G-1D	3/1/2022	0.0	0.0	0.0	0	20.8
G-1D	4/19/2022	0.0	0.0	0.0	0.0	20.8
G-1D	5/5/2022	0.0	0.0	0.0	0	20.8
G-1D	6/8/2022	0.0	0	0.0	0.0	20.8
G-1D	7/18/2022	0.0	55.0	2.7	17.4	0.1
G-1D	8/1/2022	0.00	70	3.5	18.1	0.0
G-1D	9/19/2022	0.0	94.0	4.7	17.8	0.0
G-1D	10/3/2022	0.00	0.0	0.0	0.1	20.7
G-1D	11/16/2022	0.02	0.0	0.0	0.0	20.8
G-1D	12/5/2022	-0.05	0.0	0.0	0.0	20.8

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
G-1S	1/3/2022	0.0	0.0	0.0	0.0	20.7
G-1S	2/8/2022	0.0	0.0	0.0	0.0	20.8
G-1S	3/1/2022	0.0	0.0	0.0	0.1	20.8
G-1S	4/19/2022	0.0	0.0	0.0	0.2	20.7
G-1S	5/5/2022	0.0	0.0	0.0	1	19.9
G-1S	6/8/2022	0.0	0	0.0	0.8	20.0
G-1S	7/18/2022	0.0	24.0	1.2	14.1	0.0
G-1S	8/1/2022	0.00	68	3.4	16.2	0.0
G-1S	9/19/2022	0.0	>100	9.7	17.4	1.3
G-1S	10/3/2022	0.00	93.0	4.6	12.8	5.4
G-1S	11/16/2022	0.03	0.0	0.0	0.3	20.6
G-1S	12/5/2022	-0.03	0.0	0.0	0.4	20.5
G-2D	1/3/2022	0.0	0.0	0.0	0.1	20.7
G-2D	2/8/2022	0.0	0.0	0.0	0.0	20.8
G-2D	3/1/2022	0.0	0.0	0.0	0	20.8
G-2D	4/19/2022	0.0	0.0	0.0	0.3	20.6
G-2D	5/5/2022	0.0	0.0	0.0	0.8	20
G-2D	6/8/2022	0.0	0	0.0	1.1	19.7
G-2D	7/18/2022	0.0	0.0	0.0	1.3	19.4
G-2D	8/1/2022	0.00	0	0	1.4	18.7
G-2D	9/19/2022	0.0	>100	6.5	18.9	0.0
G-2D	10/3/2022	0.00	0.0	0.0	2.3	18.0
G-2D	11/16/2022	0.00	0.0	0.0	0.3	20.4
G-2D	12/5/2022	0.00	0.0	0.0	0.1	20.6
G-2S	1/3/2022	0.0	0.0	0.0	0.1	20.6
G-2S	2/8/2022	0.0	0.0	0.0	0.0	20.8
G-2S	3/1/2022	0.0	0.0	0.0	0	20.8
G-2S	4/19/2022	0.0	0.0	0.0	0.1	20.7
G-2S	5/5/2022	0.0	0.0	0.0	0.1	20.7
G-2S	6/8/2022	0.0	0	0.0	0.3	20.5
G-2S	7/18/2022	0.0	>100	5.5	18.8	0.0
G-2S	8/1/2022	0.00	5.4	2.6	15.9	2.4
G-2S	9/19/2022	0.0	0.0	0.0	2.9	17.8
G-2S	10/3/2022	0.00	>100	6.1	18.1	0.0
G-2S	11/16/2022	0.00	0.0	0.0	0.0	20.8
G-2S	12/5/2022	0.00	0.0	0.0	0.2	20.4
G-5	1/3/2022	0.0	0.0	0.0	3.5	16.9
G-5	2/8/2022	0.0	0.0	0.0	3.3	16.6
G-5	3/1/2022	0.0	0.0	0.0	4.4	12.9
G-5	4/19/2022	0.0	0.0	0.0	3.2	16.2
G-5	5/5/2022	0.0	0.0	0.0	2.9	17.7
G-5	6/8/2022	0.0	0	0.0	2.4	18.1
G-5	7/18/2022	0.0	0.0	0.0	7.8	14.1
G-5	8/1/2022	0.00	0	0	7.4	15.4
G-5	9/19/2022	0.0	0.0	0.0	6.6	13.2
G-5	10/3/2022	0.00	0.0	0.0	6.8	14.0
G-5	11/16/2022	0.00	0.0	0.0	5.1	16.4
G-5	12/5/2022	0.00	0.0	0.0	3.0	18.4
G-6	1/3/2022	0.0	0.0	0.0	1.5	16.2
G-6	2/8/2022	0.0	0.0	0.0	0.4	20.5
G-6	3/1/2022	0.0	0.0	0.0	0	20.8
G-6	4/19/2022	0.0	0.0	0.0	0.0	20.8
G-6	5/5/2022	0.0	0.0	0.0	0	20.8
G-6	6/8/2022	0.0	0	0.0	0.0	20.8
G-6	7/18/2022	0.0	0.0	0.0	0.5	20.0
G-6	8/1/2022	0.00	0	0	0.6	19.9
G-6	9/19/2022	0.0	0.0	0.0	0.5	20.3
G-6	10/3/2022	0.00	0.0	0.0	0.0	20.8
G-6	11/16/2022	0.00	0.0	0.0	0.0	20.8
G-6	12/5/2022	0.00	0.0	0.0	1.1	19.5

**Attachment 1**  
**Gas Probe Monitoring Data Summary - 2022**  
**Wisconsin Department of Natural Resources - Refuse Hideaway Landfill**  
**Madison, Dane County, Wisconsin**

Location	Date	Pressure (in. WC)	Methane (% LEL)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)
G-8	1/3/2022	0.0	0.0	0.0	0.0	20.8
G-8	2/8/2022	0.0	0.0	0.0	0.0	20.8
G-8	3/1/2022	0.0	0.0	0.0	0	20.8
G-8	4/19/2022	0.0	0.0	0.0	0.0	20.8
G-8	5/5/2022	0.0	0.0	0.0	0	20.8
G-8	6/8/2022	0.0	0	0.0	0.0	20.8
G-8	7/18/2022	0.0	0.0	0.0	0.0	20.8
G-8	8/1/2022	0.00	0	0	0	20.8
G-8	9/19/2022	0.0	0.0	0.0	0.0	20.8
G-8	10/3/2022	0.00	0.0	0.0	0.0	20.8
G-8	11/16/2022	0.00	0.0	0.0	0.0	20.8
G-8	12/5/2022	0.00	0.0	0.0	0.0	20.8
G-9	1/3/2022	0.0	0.0	0.0	0.0	20.8
G-9	2/8/2022	0.0	0.0	0.0	1.6	16.5
G-9	3/1/2022	0.0	0.0	0.0	1.6	16.4
G-9	4/19/2022	0.0	0.0	0.0	1.0	17.4
G-9	5/5/2022	0.0	0.0	0.0	0.6	18.9
G-9	6/8/2022	0.0	0	0.0	0.7	20.4
G-9	7/18/2022	0.0	0.0	0.0	0.0	20.8
G-9	8/1/2022	0.00	0	0	0	20.8
G-9	9/19/2022	0.0	0.0	0.0	0.1	20.6
G-9	10/3/2022	0.00	0.0	0.0	0.1	19.4
G-9	11/16/2022	0.00	0.0	0.0	1.1	17.0
G-9	12/5/2022	0.00	0.0	0.0	1.3	17.4
G-10	1/3/2022	0.0	0.0	0.0	0.0	20.8
G-10	2/8/2022	0.9	0.0	0.0	1.3	17.5
G-10	3/1/2022	-0.1	0.0	0.0	0	20.8
G-10	4/19/2022	-0.4	0.0	0.0	0.0	20.8
G-10	5/5/2022	0.5	0.0	0.0	0	20.8
G-10	6/8/2022	0.4	0	0.0	0.0	20.8
G-10	7/18/2022	-0.1	0.0	0.0	0.2	20.4
G-10	8/1/2022	0.00	0	0	0	20.8
G-10	9/19/2022	-0.4	0.0	0.0	0.0	20.8
G-10	10/3/2022	-0.04	0.0	0.0	0.3	20.4
G-10	11/16/2022	0.00	0.0	0.0	0.5	20.2
G-10	12/5/2022	-0.53	0.0	0.0	0.1	20.6
Speedway Office	1/3/2022	0.0	0.0	0.0	0.0	20.8
Speedway Office	2/8/2022	0.0	0.0	0.0	0.0	20.8
Speedway Office	3/1/2022	0.0	0.0	0.0	0	20.8
Speedway Office	4/19/2022	0.0	0.0	0.0	0.0	20.8
Speedway Office	5/5/2022	0.0	0.0	0.0	0	20.8
Speedway Office	6/8/2022	0.0	0	0.0	0.0	20.8
Speedway Office	7/18/2022	0.0	0.0	0.0	0.0	20.8
Speedway Office	8/1/2022	0.00	0	0	0	20.8
Speedway Office	9/19/2022	0.0	0.0	0.0	0.0	20.8
Speedway Office	10/3/2022	0.00	0.0	0.0	0.0	20.8
Speedway Office	11/16/2022	0.00	0.0	0.0	0.0	20.8
Speedway Office	12/5/2022	0.00	0.0	0.0	0.0	20.8

Notes:

GES was in operation

**Attachment 2**

**Leachate Laboratory Analytical Report**

April 20, 2022

Andrew Stehn  
TRC Madison  
708 Heartland Trail  
Madison, WI 53717

RE: Project: RHL  
Pace Project No.: 40243245

Dear Andrew Stehn:

Enclosed are the analytical results for sample(s) received by the laboratory on April 11, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tod Noltemeyer  
tod.noltemeyer@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Peggy Popp, TRC - Madison  
JOHN ROELKE, TRC - Madison



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: RHL  
Pace Project No.: 40243245

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### **Pace Analytical Services Green Bay**

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: RHL  
Pace Project No.: 40243245

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40243245001	LEACHATE TANK	Water	04/08/22 09:30	04/11/22 10:25

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: RHL  
Pace Project No.: 40243245

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40243245001	LEACHATE TANK	EPA 6010D	TXW	9
		EPA 7470	AJT	1

PASI-G = Pace Analytical Services - Green Bay

## REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: RHL  
 Pace Project No.: 40243245

Lab Sample ID	Client Sample ID	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40243245001</b>	<b>LEACHATE TANK</b>						
EPA 6010D	Chromium		4.6J	ug/L	10.0	04/13/22 12:55	
EPA 6010D	Copper		4.9J	ug/L	10.0	04/13/22 12:55	
EPA 6010D	Nickel		12.6	ug/L	10.0	04/13/22 12:55	
EPA 6010D	Zinc		12.3J	ug/L	40.0	04/13/22 12:55	

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: RHL  
Pace Project No.: 40243245

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**Method:** EPA 6010D  
**Description:** 6010D MET ICP  
**Client:** TRC - MADISON  
**Date:** April 20, 2022

### General Information:

1 sample was analyzed for EPA 6010D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: RHL  
Pace Project No.: 40243245

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**Method:** EPA 7470  
**Description:** 7470 Mercury  
**Client:** TRC - MADISON  
**Date:** April 20, 2022

### General Information:

1 sample was analyzed for EPA 7470 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: RHL  
Pace Project No.: 40243245

Sample: LEACHATE TANK      Lab ID: 40243245001      Collected: 04/08/22 09:30      Received: 04/11/22 10:25      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D MET ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Cadmium	<1.3	ug/L	5.0	1.3	1	04/12/22 06:28	04/13/22 12:55	7440-43-9	
Chromium	4.6J	ug/L	10.0	2.5	1	04/12/22 06:28	04/13/22 12:55	7440-47-3	
Copper	4.9J	ug/L	10.0	3.4	1	04/12/22 06:28	04/13/22 12:55	7440-50-8	
Lead	<5.9	ug/L	20.0	5.9	1	04/12/22 06:28	04/13/22 12:55	7439-92-1	
Molybdenum	<2.4	ug/L	10.0	2.4	1	04/12/22 06:28	04/13/22 12:55	7439-98-7	
Nickel	12.6	ug/L	10.0	2.6	1	04/12/22 06:28	04/13/22 12:55	7440-02-0	
Selenium	<12.2	ug/L	40.0	12.2	1	04/12/22 06:28	04/13/22 12:55	7782-49-2	
Silver	<3.2	ug/L	10.0	3.2	1	04/12/22 06:28	04/13/22 12:55	7440-22-4	
Zinc	12.3J	ug/L	40.0	11.6	1	04/12/22 06:28	04/13/22 12:55	7440-66-6	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury	<0.066	ug/L	0.20	0.066	1	04/19/22 10:15	04/20/22 09:17	7439-97-6	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: RHL  
Pace Project No.: 40243245

QC Batch: 413516	Analysis Method: EPA 7470
QC Batch Method: EPA 7470	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40243245001	

METHOD BLANK: 2380937 Matrix: Water

Associated Lab Samples: 40243245001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	04/20/22 08:43	

LABORATORY CONTROL SAMPLE: 2380938

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2380939 2380940

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	40243315001	<0.066	5	5	5.3	5.0	106	101	85-115	5 20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## **QUALITY CONTROL DATA**

Project: RHL  
Pace Project No.: 40243245

QC Batch:	412836	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D MET
Associated Lab Samples:		Laboratory:	Pace Analytical Services - Green Bay
			40243245001

METHOD BLANK: 2377302 Matrix: Water

Associated Lab Samples: 40243245001

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Cadmium	ug/L	<1.3	5.0	04/13/22 12:21	
Chromium	ug/L	<2.5	10.0	04/13/22 12:21	
Copper	ug/L	<3.4	10.0	04/13/22 12:21	
Lead	ug/L	<5.9	20.0	04/13/22 12:21	
Molybdenum	ug/L	<2.4	10.0	04/13/22 12:21	
Nickel	ug/L	<2.6	10.0	04/13/22 12:21	
Selenium	ug/L	<12.2	40.0	04/13/22 12:21	
Silver	ug/L	<3.2	10.0	04/13/22 12:21	
Zinc	ug/L	<11.6	40.0	04/13/22 12:21	

LABORATORY CONTROL SAMPLE: 2377303

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	250	263	105	80-120	
Chromium	ug/L	250	256	102	80-120	
Copper	ug/L	250	262	105	80-120	
Lead	ug/L	250	266	106	80-120	
Molybdenum	ug/L	250	262	105	80-120	
Nickel	ug/L	250	266	107	80-120	
Selenium	ug/L	250	270	108	80-120	
Silver	ug/L	125	132	105	80-120	
Zinc	ug/L	250	265	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2377304 2377305

Parameter	Units	Result	MS		MSD		MS		MSD		% Rec		Max RPD	Qual
			Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	Limits	RPD				
Cadmium	ug/L	<1.3	250	250	264	256	106	102	75-125	3	20			
Chromium	ug/L	9.3J	250	250	268	259	104	100	75-125	4	20			
Copper	ug/L	<3.4	250	250	259	248	104	99	75-125	4	20			
Lead	ug/L	<5.9	250	250	266	255	105	100	75-125	4	20			
Molybdenum	ug/L	10.8	250	250	271	260	104	100	75-125	4	20			
Nickel	ug/L	5.4J	250	250	269	258	105	101	75-125	4	20			
Selenium	ug/L	<12.2	250	250	266	259	106	104	75-125	3	20			
Silver	ug/L	<3.2	125	125	133	127	106	102	75-125	4	20			
Zinc	ug/L	<11.6	250	250	267	259	106	103	75-125	3	20			

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## **REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: RHL  
Pace Project No.: 40243245

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RHL  
 Pace Project No.: 40243245

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40243245001	LEACHATE TANK	EPA 3010A	412836	EPA 6010D	412945
40243245001	LEACHATE TANK	EPA 7470	413516	EPA 7470	413556

## REPORT OF LABORATORY ANALYSIS

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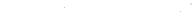
**CHAIN-OF-CUSTODY Analytical Request Document**

**Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields**

Company: <b>TRC</b>		Billing Information: <b>708 Heartland Trail Suite 3000 Madison WI 53717</b>		
Address: <del>106</del> <b>708 Heartland Trail</b>				
Report To: <b>Andrew Steln</b>		Email To: <b>astechn@trccompanies.com</b>		
Copy To: <b>—</b>		Site Collection Info/Address: <b>Middleton</b>		
Customer Project Name/Number: <b>RHL</b>		State: <b>WI</b> County/City: <b>Dane / Middleton</b> Time Zone Collected: <b>EST [ ] CPT [ ] MT [ ] MDT [ ] CT [ ] ET</b>		
Phone:	Site/Facility ID #: <b>Refuse Hideaway LF</b>		Compliance Monitoring? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Email:				
Collected By (print): <b>Steln, K/S</b>	Purchase Order #: <b>457573 ph. 2</b>		DW PWS ID #: DW Location Code:	
Collected By (signature): <b>Det. Miller</b>	Turnaround Date Required: <b>Standard</b>		Immediately Packed on Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Disposal: <input checked="" type="checkbox"/> Dispose as appropriate <input type="checkbox"/> Return <input type="checkbox"/> Archive: _____ <input type="checkbox"/> Hold: _____	Rush: <input type="checkbox"/> Same Day <input type="checkbox"/> Next Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 4 Day <input type="checkbox"/> 5 Day (Expedite Charges Apply)		Field Filtered (if applicable): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Analysis: _____	

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Remarks / Special Conditions / Possible Hazards:  <i>Sample is leachate</i>	Type of Ice Used:	<input checked="" type="checkbox"/> Wet	<input type="checkbox"/> Blue	<input type="checkbox"/> Dry	<input type="checkbox"/> None
	Packing Material Used:				
	Radchem sample(s) screened (<500 cpm):	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	<input type="checkbox"/> N	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)
	13:00 4/8/22	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)
	4/11/22 1025	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)

**LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or  
MTJL Log-in Number Here**

Werk der Nummer 5  
40243245

**ALL SHADED AREAS are for LAB USE ONLY**

Container Preservative Type \*\* Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other \_\_\_\_\_

**Analyses**      **Lab Profile/Line:**  
**Lab Sample Receipt Checklist:**

### Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA  
Custody Signatures Present Y N NA  
Collector Signature Present Y N NA  
Bottles Intact Y N NA  
Correct Bottles Y N NA  
Sufficient Volume Y N NA  
Samples Received on Ice Y N NA  
VOA - Headspace Acceptable Y N NA  
USDA Regulated Spoils Y N NA  
Samples in Holding Time Y N NA  
Residual Chlorine Present Y N NA  
CL Strips: \_\_\_\_\_ Y N NA  
Sample pH Acceptable Y N NA  
pH Strips: \_\_\_\_\_ Y N NA  
Sulfide Present Y N NA  
Lead Acetate Strips: \_\_\_\_\_ Y N NA

LAB USE ONLY:  
Lab Sample # / Comments:

"Sub Sample", 30 minutes.

009

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#:

Cooler 1 Temp Upon Receipt: ✓ °C

Cooler 1 Therm Corr. Factor: 1.0 - 8C

Cooler 1 Corrected Temp: 102 °C

**Comments:**

Digitized by srujanika@gmail.com

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Page 1

Non Conformance(s): Page: \_\_\_\_\_  
\_\_\_\_\_

YES / NO      of: \_\_\_\_\_

### Sample Preservation Receipt Form

Client Name: TRC

Project # U0243245

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper: 10D3112 Lab Std #ID of preservation (if pH adjusted):

Initial when completed: 10/11/12

Date/  
Time:

Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																													2.5 / 5 / 10				
002																													2.5 / 5 / 10				
003																													2.5 / 5 / 10				
004																													2.5 / 5 / 10				
005																													2.5 / 5 / 10				
006																													2.5 / 5 / 10				
007																													2.5 / 5 / 10				
008																													2.5 / 5 / 10				
009																													2.5 / 5 / 10				
010																													2.5 / 5 / 10				
011																													2.5 / 5 / 10				
012																													2.5 / 5 / 10				
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014																													2.5 / 5 / 10				
015																													2.5 / 5 / 10				
016																													2.5 / 5 / 10				
017																													2.5 / 5 / 10				
018																													2.5 / 5 / 10				
019																													2.5 / 5 / 10				
020																													2.5 / 5 / 10				

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: \_\_\_\_\_ Headspace in VOA Vials (>6mm):  Yes  No  N/A \*If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

DC#\_Title: ENV-FRM-GBAY-0014 v02\_SCUR  
Revision: 3 | Effective Date: | Issued by: Green Bay

### Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40243245

Client Name: TRC

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Waltco  
 Client  Pace Other: \_\_\_\_\_

Tracking #: 776533033940

40243245



Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Custody Seal on Samples Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - N/A Type of Ice:  Wet  Blue  Dry  None

Samples on ice, cooling process has begun

Cooler Temperature Uncorr: N/A /Corr:

Person examining contents:

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Date: 4/11/22 Initials: OA

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Labeled By Initials: NK

Chain of Custody Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. pg # <i>(Ans 411122)</i>
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		8.
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <i>W</i>	12.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample login

Page 2 of 2