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May 30, 2025

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– Seattle and King County

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RE: Enumclaw Landfill – Landfill Gas Rebound Test Report – Final

The purpose of this letter is to transmit a copy of the King County Solid Waste Division's revised *Enumclaw Landfill – Landfill Gas Rebound Test Report Final* for your records, as required by Compliance Task #4 of the *2025 Post-Closure Maintenance Permit Enumclaw Closed Landfill PR0015724*.

If you have questions or need additional information, please contact me at 206-477-0458, or via email at marisa.baptiste@kingcounty.gov.

Enclosures

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ENUMCLAW LANDFILL LANDFILL GAS REBOUND TEST REPORT



King County

Department of
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Waste
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Resource
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**Final
May 2025**

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King County

Department of Natural Resources

Enumclaw Landfill

Landfill Gas Rebound Test Report

Prepared by:

King County Department of Natural Resources & Parks Solid
Waste Division, Facilities Engineering Services Section

May 2025

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List of Acronyms

Aspect	Aspect Consulting, LLC
BIOIN	Biofilter system inlet (bioberm)
CSC	CSE Corporation
Ecology	Washington State Department of Ecology
EMC	Emission monitoring chambers
Herrera	Herrera Environmental Consultants
KCEL	King County Environmental Laboratory
KCSWD	King County Solid Waste Division
LEL	Lower explosive limit
MCL	Maximum contaminant level
O&M	Operation and Maintenance
PH-SKC	Public Health – Seattle & King County
PSCAA	Puget Sound Clean Air Agency
PCC	Post-closure care
SCFM	Standard cubic feet per minute
SGWC	Water Quality Standards for Groundwaters of the State of Washington (WAC 173-200)
SQER	Small quantity emission rate
VOC	Volatile organic compound
USEPA	United States Environmental Protection Agency
WAC	Washington Administration Code

1 Background, Goals, and Objectives

The King County Solid Waste Division (KCSWD) has prepared this report to summarize the findings of the landfill gas rebound test performed at the Enumclaw Landfill between December 17, 2019, and July 31, 2022, and to recommend steps for the path forward.

1.1 Background

The Enumclaw Landfill is located at 1650 Battersby Avenue Enumclaw, Washington, 98022. Located 1.5 miles east of the City of Enumclaw (Figure 1). The Enumclaw Landfill began operation in the early 1950s under the informal supervision of the City of Enumclaw and Public Health - Seattle & King County (PH-SKC). The Enumclaw Landfill is 39 acres and contains approximately 725,000 tons of refuse without a bottom liner system (Figure 2). No refuse has been deposited in the landfill since April 4, 1993.

The environmental control system components remaining at the Enumclaw Landfill include:

- a geomembrane cover with a vegetated surface,
- stormwater sedimentation and infiltration ponds,
- a landfill gas collection system including the former landfill gas flare station, and
- a network of subsurface refuse monitoring probes, landfill gas monitoring wells and probes, and groundwater monitoring wells (Figure 3).

The Enumclaw Landfill was closed in two phases, phase I occurred in 1989 and phase II in 1993 (Figure 2). Both closure phases utilized similar cover systems that consisted of foundation material, geomembrane layer, drain material, separation geotextile, and topsoil with seeded and vegetates surface. The recent biannual settlement surveys suggest stable cover system at the Enumclaw Landfill, meeting the termination of post-closure criteria for little to no significant settlement. All three former leachate ponds (Figure 2) were decommissioned during the 1989 Phase I and the 1993 Phase II landfill closures, in compliance with the *Minimum Functional Standards for Solid Waste Handling* (Washington Administrative Code [WAC] 173-304). Historically, there has been no indication that a leachate plume has impacted the groundwater quality beneath the site.

The side slopes of the Enumclaw Landfill have been designed no steeper than 4:1 (horizontal:vertical) and no flatter than 3%, to minimize erosion and to divert stormwater to sedimentation and infiltration ponds (Figure 2). The sedimentation and infiltration ponds are adequately sized to capture the stormwater at the Enumclaw Landfill and eventually infiltrate and recharge the groundwater beneath the site (R.W. Beck, 1987). The landfill cover is visually inspected and there has been no surface exposure of the buried refuse and therefore no impact on stormwater at the site.

The Enumclaw Landfill groundwater is monitored through six compliance wells, monitoring wells MW-1, MW-2, MW-3, MW-6A, MW-9, and MW-10. The groundwater beneath the site

has historically had exceedances of *Water Quality Standards for Groundwater of the State of Washington* (WAC 173-200) for arsenic, manganese, vinyl chloride, and pH (previous rebound test evaluation reports incorrectly referred to these as constituents of concern). These exceedances are the result of past migration of landfill gas to groundwater, rather than landfill leachate migration. Typically, alkalinity concentrations are a good indicator of landfill gas impacts, while chloride concentrations are good indicator of landfill leachate impacts (Aspect, 2017). Up until 1995, the approximate peak of landfill gas generation at the Enumclaw Landfill, the average alkalinity in groundwater beneath the site was 217 mg/L while the average chloride was 16 mg/L.

In 1996, a Zink Flare was installed at Enumclaw Landfill, in order to treat landfill gas. In 2014, Aspect Consulting, LLC (Aspect) evaluated landfill gas collection and treatment system at the Enumclaw Landfill. As part of the evaluation, Aspect conducted a landfill gas analysis and concluded based on a flow rate of 300 scfm and there were two constituents that exceeded the small quantity emission rate (SQER) (WAC 173-460-150). The Zink Flare was determined to be oversized for a continuous operation at the site, based the long-term average landfill gas flowrate of 39 SCFM with average methane concentration ranging between 20 and 40 percent. Aspect recommended biofiltration for the future of the landfill gas treatment at Enumclaw Landfill (Aspect, 2014).

In 2015, Aspect also conducted a landfill gas influence test and observed no significant vacuum radius of influence under the active landfill gas collections system. Moreover, Aspect observed no pressure buildup while the landfill gas collection system was inactive, indicating limited landfill gas generation and little potential for offsite landfill gas migration (Aspect, 2015).

Due the SQER exceedances and the volume of methane Enumclaw Landfill was producing, the KCSWD decided to move forward with optimizing landfill gas collection and treatment with a smaller capacity flare, instead of the previously recommended biofiltration system. On July 19, 2016, PSCAA issued a Notice of Construction NO. 11073 to approve the use of the 140 SCFM trailer-mounted utility flare at Enumclaw Landfill, and in October 2017, Herrera Environmental Consultants (Herrera) commissioned the low flow utility flare at the site (Herrera, 2017).

In January 2019, Aspect and Herrera reevaluated the landfill gas system. During the first year of operation the trailer-mounted utility flare operated 67 percent of the time, which was a significant increase over the Zink Flare (12 percent of the time between late 2009 and 2013). Another landfill gas analysis was conducted and concluded with a flow rate of 20 scfm (operational flow rate with the trailer-mounted utility flare) there were no exceedances of the SQERs. Aspect and Herrera recommended pursuing discussions with Puget Sound Clean Air Agency about changing the system to active or passive direct vent (Aspect and Herrera, 2019a).

In December 2019, a bioberm was installed onsite at Enumclaw Landfill and landfill gas was redirected from the trailer-mounted utility flare to the bioberm and the active landfill gas system was switched to passive with no blower system. The trailer-mounted utility flare (Figure 3) has been kept in standby during rebound testing in case enhanced performance monitoring triggers were exceeded (Section 3). The KCSWD is currently in the process of hiring a consultant to

safely decommission the former 1996 Zink flare station and remove, reuse, or dispose of all aboveground and subsurface infrastructures. Any soil contamination encountered will be cleaned up before returning the site to match the existing surrounding areas.

1.2 Rebound Test Goals and Objectives

The goal of the landfill gas rebound test was to evaluate landfill gas production and to support the transition of the landfill gas collection from active system (using a blower) followed by combusting using a utility flare to passive system (using natural diffusive venting of landfill gas) through bioberm with no need for landfill gas combustion. A primary objective of the rebound test was to align the Enumclaw Landfill with the KCSWD's climate action plan for carbon neutrality through significant reduction of greenhouse gas emissions from the KCSWD's major emission source, landfills.

The *Landfill Gas Rebound Test Work Plan* was issued in 2019 by Aspect and Herrera and approved by the PH-SKC and the Washington State Department of Ecology (Ecology), (Aspect and Herrera 2019b). Aspect and Herrera produced the technical memorandum on the first six months of rebound testing at Enumclaw, which evaluated the results from December 2019 through June 2020 (Aspect and Herrera, 2020). The KCSWD conducted the evaluation on the first year of rebound testing, evaluating the results from December 2019 through December 2020 (KCSWD, 2021). After a year of rebound testing, it was recommended that the rebound test be extended for another year and the landfill gas monitoring remain unchanged with monthly monitoring, but the groundwater monitoring would be conducted quarterly and include constituents (arsenic, manganese, vinyl chloride, and pH) that have previously exceeded WAC 173-200 criteria.

This report will evaluate the rebound test results based on the recommendations made in the above-referenced memorandums. This report will also include recommendations, with plans to approach the termination of the post-closure care period both efficiently and effectively, in accordance with the criteria in WAC 173-304-407(7)(a) and Ecology's publication 11-07-006 *Preparing for Termination of Post-Closure Activities at Landfills Closed Under 173-304 WAC*.

2 Rebound Test and Monitoring

The rebound test and monitoring included data collection from 21 vertical landfill gas extraction wells (N-1 through N-21), 12 multilevel landfill gas compliance probes with up to three probes completed at different depths at each locations (GP-3, GP-6 through GP10, and GP15 through GP-20), 6 compliance groundwater monitoring wells (MW-1, MW-2, MW-3, MW-6A, MW-9, and MW-10), the Flo-wing assembly at the inlet to the bioberm (BIOIN; see Appendix C), and four emission monitoring chambers (EMCs) within the bioberm (EMC-01 through EMC-04). Refer to Figures 2 and 3 to see where the wells, probes, and bioberm inlet and chambers are located. The landfill gas monitoring equipment during the rebound test included manual and continuous devices.

After the landfill gas collection blower was turned off, the rebound test was started on December 17, 2019. At the start of the rebound test, the valves at all landfill gas extraction wells, which control and direct the landfill gas flow to the collection pipes, were fully opened. Passively collected landfill gas from the landfill gas collection system was routed and discharged through the constructed biofilter system (bioberm) for polishing treatment (see Figure C-1, Appendix C). The passive landfill gas collection and bioberm landfill gas treatment were evaluated monthly through landfill gas monitoring at BIOIN and the EMCs. The landfill gas wells and probes were monitored twice a month through June 2020 and then continued monthly through the end of the rebound test. The groundwater sampling was conducted monthly through December 2020 and quarterly thereafter. Aspect and the KCSWD performed landfill gas monitoring and groundwater sampling between December 17, 2019, and June 30, 2020, and then the KCSWD continued through July 31, 2022.

2.1 Landfill Gas Monitoring

Manual monitoring methods for landfill gas wells, landfill gas probes, and the bioberm system are described in Sections 2.1.1 through 2.1.3. Automated monitoring methods at selected locations are described in Section 2.1.4.

2.1.1 Compliance Probes

Landfill gas monitoring was conducted at all landfill gas compliance probes listed in Table 1. Manual measurements were collected using a calibrated Landtec GEM5000 (GEM5000) multi-gas meter in accordance with approved work plan (Aspect 2019b).

Measured concentrations at landfill gas perimeter probes with submerged screens were considered not representative of soil gas. Otherwise, monitoring data were collected from probes and compared with performance monitoring thresholds to determine whether measurements triggered the need to activate the utility flare's blower system to prevent landfill gas migration. Additional details for active landfill gas collection and notification triggers are included in Section 3. Landfill gas concentrations measured at monitoring probes are presented in Appendix A.

2.1.2 Collection System Wellfield

The landfill gas collection system was monitored at landfill gas extraction wells to evaluate changes in landfill gas conditions within the Enumclaw Landfill. Similar to landfill gas probe monitoring, manual measurements were collected using a calibrated GEM5000 in accordance with the work plan (Aspect, 2019b). Monitoring data recorded at the extraction wells are presented in Appendix A.

2.1.3 Bioberm System

Details for the bioberm system design are provided in the work plan (Aspect, 2019b). The KCSWD procured materials and constructed the bioberm, in accordance with the approved work plan. To evaluate methane treatment, measure emissions at the bioberm, and gauge methane loading rates, landfill gas flowrates and methane concentrations were monitored at a Flo-wing

assembly in the bioberm inlet and outlets, BIOIN and EMCs. The EMCs were installed by Aspect within the bioberm media, approximately 1-foot below the top surface of bioberm and fitted with monitoring ports that were capped between sampling events. The chambers consisted of a 1-gallon bucket, a barbed valve, and plastic tubing were capped outside the bioberm media. Purging and monitoring instructions for compliance probes were followed for monitoring the EMCs.

Monitoring at the bioberm inlet was conducted after purging the tubing, using a calibrated GEM5000. Monitoring data collected from the EMCs and bioberm inlet locations are also presented in Appendix A.

2.1.4 Automated Monitoring

Landfill gas monitoring data were recorded continuously through June 2020 at compliance probe GP-7S, landfill gas well N-21, and at the inlet to the bioberm to evaluate shorter-term trends in landfill gas conditions as barometric pressure fluctuated. A GasClam unit was used at both GP-7S and N-21, and a CSE Corporation (CSE) automated monitoring unit was used at the inlet of the bioberm. A Madgetech pressure/temperature data logger was also installed at the inlet to the bioberm.

Each GasClam was equipped with a methane sensor (0 to 100 percent, ± 2 percent), a carbon dioxide sensor (0 to 100 percent, ± 2 percent), and an oxygen sensor (0 to 25 percent, ± 0.5 percent). GasClams also provided information on probe pressure, barometric pressure, and sensor temperature. The GasClams were programmed to record measurements every two hours and were removed briefly to perform monthly maintenance service (i.e., data download, battery, and filter replacement, testing, and calibration). The GasClam units suffered data loss a few times during the rebound test due to low battery errors, or pump errors.

The CSE monitoring unit measured and recorded methane concentrations, barometric pressure, and temperature at 10-minute intervals. When there was sufficient signal for charged battery, data from the CSE unit could be viewed via a web-based portal.

Data from the automated monitoring instruments were recorded using the manufacturer's established methods and downloaded during each monitoring event. Automated readings were compared to manual readings at end of each month to assess the reliability of the instruments.

2.2 Groundwater Monitoring

2.2.1 Monitoring Frequency and Analysis

Groundwater monitoring was performed monthly from December 2019 through December 2020 (except July and August) and then quarterly through the end of the rebound test, to evaluate changes in groundwater quality and the landfill gas-to-groundwater migration pathway during the rebound test and passive landfill gas collection. Rebound test groundwater monitoring was conducted at three monitoring wells (MW-1, MW-2, and MW-9; Table 2).

The following field parameters and laboratory analytes were used for each groundwater sampling event:

- **Field parameters:** dissolved oxygen, oxidation reduction potential, pH, specific conductivity, temperature, and turbidity.
- **Laboratory analytes:** carbon dioxide, bicarbonate alkalinity, total alkalinity, chloride, dissolved calcium, and dissolved magnesium.

Groundwater samples were collected under a chain-of-custody and delivered to the laboratory for analysis. For groundwater samples collected on December 17, 2019, Aspect contracted directly with Fremont Analytical for the full analysis. The remaining groundwater samples collected through July 31, 2022, were delivered to the King County Environmental Laboratory (KCEL) for analysis. The KCEL subcontracted dissolved gas analytes first through Pace Analytical, later changing to Fremont Analytical in mid-2020 due to Pace's lack of availability. In addition to the investigation-specific samples, routine semiannual sampling of groundwater was also performed by the KCSWD and analyzed by the KCEL.

During the second year (May 2021 – July 2022) of the rebound test the following laboratory analytes were added to the quarterly rebound test groundwater monitoring events: dissolved arsenic, dissolved iron, and dissolved manganese. Vinyl chloride was also supposed to be monitored quarterly during this period; however, a miscommunication resulted in vinyl chloride only being sample for semiannually, as part of the compliance groundwater monitoring. Additionally, during the second year of rebound test sampling total metals (arsenic, iron, and manganese) were sampled during the three of the sampling events and during the final sampling event dissolved arsenic, iron, and manganese were not analyzed for. Groundwater monitoring data are presented in Appendix B.

The outcome of the sampling, analysis, and data review processes indicated that all data were suitable for use in evaluating groundwater quality. Data evaluation methods are applied to both the collected and historical groundwater data to make comparisons and form a basis for decision making activities.

2.2.2 Trend Analysis

The Mann-Kendall trend test was performed to compare groundwater trends before and during the rebound test. The trend comparison aimed to determine the impacts of a passive landfill gas collection system, by assessing whether the slopes of the comparison trend had changed showed to be statistically significant.

The Mann-Kendall trend test involves listing the observations in temporal order and computing all differences that may be formed between measurements and earlier measurements. The test statistic is the difference between the number of strictly positive differences and the number of strictly negative differences. The tabulated results presented in a table in this report are: number

of analyses, number of detections, direction of trend, probability, and significance of trend at a 95% confidence level. For the trend analysis, non-detects values are evaluated as half the method detection limit.

The trend test evaluates data for pre-rebound test trends, including historical data for the six years prior to the rebound test (January 2014 – November 2019), and for rebound trends using all sampling results during the rebound test (December 2019 – June 2022). The two trend test periods (pre-rebound and rebound) contain a similar number of data points for most analytes.

The trend test was performed on a select group of analytes. The analytes were selected for the following reasons:

1. Performance monitoring triggers and indicator analytes of landfill impacts: dissolved oxygen, specific conductance, carbon dioxide, methane, ammonia, bicarbonate alkalinity, chloride, nitrate, sulfate, total alkalinity, total dissolved solids, dissolved calcium, dissolved iron, and dissolved magnesium.
2. Exceedances of WAC 173-200 criteria in recent years: dissolved arsenic, dissolved manganese, vinyl chloride, and pH (exceedances the lower limit).

The following analytes do not have pre-rebound test results to compare to the rebound test results: carbon dioxide, methane, and bicarbonate alkalinity. These three analytes all have statistically significant increasing trend performance monitoring triggers (Section 3), so they were evaluated only for the rebound test period.

3 Enhanced Performance Monitoring Triggers

Active landfill gas collection triggers were established for the rebound test, in the event of landfill gas migration. Landfill gas polishing treatment expansion triggers were also established in case methane concentrations at the bioberm discharge were not protective of onsite worker health and safety. The active landfill gas collection triggers established for the rebound test are outlined below:

- Methane concentrations exceeding 2.5 percent by volume at a compliance probe during the rebound test (baseline methane concentrations at all compliance probes have been 0 percent by volume). This trigger was established in the rebound test work plan (Aspect, 2019b), in order to reduce potential risk of methane reaching the 5 percent compliance threshold and not be too conservative to stop the test for low level detections.
- Statistically significant increasing trends for analytes with recent WAC 173-200 exceedances (arsenic, manganese, and vinyl chloride) or indicator analytes of impacts of landfill gas (carbon dioxide, methane, bicarbonate alkalinity, chloride, total alkalinity, dissolved calcium, and dissolved magnesium).
- Statistically significant decreasing trend for pH and dissolved oxygen.

- Methane exceeds 5 percent by volume at the bioberm surface for 4 consecutive monitoring events.

Performance monitoring data were compared to the above-referenced trigger criteria during the rebound test.

4 Findings

Primary findings of the landfill gas rebound test are summarized below.

4.1 Landfill Gas Conditions

No performance monitoring triggers were exceeded during the rebound test between December 17, 2019, and July 31, 2022. Landfill gas monitoring results indicate that passive landfill gas collection adequately controlled lateral landfill gas migration during the rebound test based on the following observations:

- The average and maximum passive collection/flow rate at BIOIN during the rebound test, when barometric pressure was falling (i.e., when landfill gas flow is directed towards the bioberm), was approximately 1.5 standard SCFM and 8.0 SCFM, respectively (Appendix A). These flow rates suggest adequate diffusive flow through the bioberm. The detection of positive pressures in the BIOIN is another indication of flow through the bioberm. It should be noted that GEM5000 differential pressure of less than 0.1 inches of water column is the limitation of the GEM5000 in measuring low diffusive flow rates. In general, diffusive flowrates are difficult to measure by most instruments, unless a sensitive Magnehelic gauge in zero to 0.25 inches of water column is utilized.
- As shown in Figure 4 and Appendix A, the trends of landfill gas at BIOIN show decreasing trends for both methane and carbon dioxide and an increasing trend for oxygen, indicating a depleting landfill gas generation. The average concentrations of methane, carbon dioxide, and oxygen are 23.4, 11.6, and 11.5 percents by volume, respectively. During the peak of landfill gas generation at the landfill, the typical volumes of methane are mostly between 50 and 60 percent and carbon dioxide are at nearly 30 percent. This is further supported by a lack of landfill gas migration, indicated by the high presence of oxygen concentrations at background ambient air sampling locations (Figure 6.3b), low concentrations of carbon dioxide (Figure 6.2b), and only four minimal detections of methane in perimeter landfill gas probes, as shown in Figure 6.1.
- No methane was detected in any of ambient air monitoring locations in any sampling events conducted during the rebound test at Enumclaw Landfill (Figure 6.1 and Appendix A). No methane was detected in any of the landfill gas compliance probes at concentrations greater than 2.5 percent by volume of methane. The highest methane reading was measured at 0.8 percent by volume at GP-7S on November 2, 2021 (Figure 6.1 and Appendix A). Trace concentrations of methane were also detected at GP-7S at concentrations of 0.1 percent by volume and 0.4 percent by volume on January 15, 2020,

and February 11, 2021, respectively. A trace concentration of methane was detected on May 3, 2022, at GP-18 with a concentration of 0.2 percent by volume. These infrequent low detections of methane are a normal byproduct of indigenous microbial activity. Therefore, the passive landfill gas collection provided effective lateral landfill gas migration control during the rebound test.

- As expected, landfill gas concentrations across all landfill gas wells increased at the start of the rebound test, after shutting down the low-flow utility flare and blower and opening all wellhead valves. After the initial increase, landfill gas concentrations generally remained stable throughout the monitoring period, with fluctuations occurring due to barometric pressure influences creating varying flow to the bioberm. Methane, carbon dioxide, and oxygen concentrations measured at landfill extraction wells throughout the landfill can be found in Figure 7.1, 7.2, and 7.3 and Appendix A. With passive landfill gas collection, landfill gas concentrations are expected to remain elevated at extraction wells compared to when there was vacuum applied to the collection network. Concentrations will fluctuate with barometric pressure and over time are expected to decrease with diminishing of landfill gas generation.
- The bioberm was effective at providing a polishing treatment and keeping methane levels safe at the surface of the bioberm. For the most part, methane was not present at the end of purging in any of the EMCs (EMC-1 through EMC-4). The highest detected methane level of 2.6 percent by volume occurred at EMC-1 on February 13, 2020 (Figure 5.1). However, this methane detection was still below methane breakthrough limit of 5 percent by volume (Appendix A). While the higher methane detected at the bioberm inlet (BIOIN) was 63.1 percent by volume on February 11, 2021, the methane concentrations were measured at 0.2 percent by volume at EMC-01 and 0.1 percent by volume at EMC-02, EMC-03, and EMC-04. These methane detections are significantly below methane breakthrough limit of 5 percent by volume (Figure 5.2 and Appendix A).

4.2 Groundwater Conditions

The rebound test monitoring was conducted at three monitoring wells at the Enumclaw Landfill, MW-1, MW-2, and MW-9. These wells were selected because of historical impacts due to landfill gas to groundwater migration and are all downgradient of the landfill. Groundwater monitoring data for the rebound test period can be found in Appendix B. Figure 8 – Figure 15 contain time concentration plots for select analytes.

4.2.1 Groundwater Exceedances

Exceedances of the *Water Quality Standards for Groundwaters of the State of Washington* (SGWC; WAC 173-200; Appendix B) and *National Primary and Secondary Drinking Water Regulations* (MCL; Appendix B) are summarized in tables in Table 3. Historically, groundwater at the Enumclaw Landfill has had exceedances of the WAC 173-200 criteria for pH, arsenic, manganese, and vinyl chloride (KCSWD, 2023).

During the rebound test period dissolved arsenic exceeded the SGWC for each sampling event, where dissolved arsenic (Figure 11) was analyzed for, at all three monitoring wells. There were three sampling events during the rebound test, when total arsenic was also sample for and for those events total arsenic also exceeded the SGWC at all three monitoring wells. Monitoring well MW-1 had SGWC exceedances for dissolved manganese (Figure 14) for all rebound test sampling events, where dissolved manganese was analyzed for. Similarly, there were three sampling events, where total manganese was sampled for and two of those events had SGWC exceedances for monitoring well MW-1. There was one SGWC exceedance for vinyl chloride (Figure 15) during the rebound test.

The pH results (Appendix B) at Enumclaw Landfill continue to show the groundwater as slightly acidic and below the lower limit. The lower pH limit exceedances were not included in Table 3.

Groundwater exceedances are consistent with historical results, except for vinyl chloride, which had a decrease in the number of exceedances during the rebound test.

4.2.2 Trend Analyses

Trend analysis results for monitoring wells included in the rebound test are summarized in Table 4.

Monitoring well MW-1 had statistically significant increasing trends for specific conductance, total alkalinity, dissolved calcium (Figure 12), and dissolved magnesium (Figure 13) and statistically significant decreasing trends for nitrate and dissolved iron during the pre-rebound period. During the rebound test, all trends were stable for monitoring well MW-1, except for dissolved oxygen, which had a statistically significant increasing trend.

Monitoring well MW-2 had one statistically significant increasing trend for pH and statistically significant decreasing trends for ammonia, dissolved arsenic (Figure 11), dissolved iron, and dissolved manganese (Figure 14) during the pre-rebound period. During the rebound test there was one statistically decreasing trend for pH in monitoring well MW-2. There were no other statistically significant trends for monitoring well MW-2.

Monitoring well MW-9 had one statistically significant decreasing trend for dissolved arsenic (Figure 11) during the pre-rebound period. There was one statistically significant decreasing trend for sulfate during the rebound test for monitoring well MW-9.

4.2.3 Summary

Exceedances during the rebound test of WAC 173-200 groundwater criteria are consistent with historical groundwater exceedances for Enumclaw Landfill, except for the fewer exceedances of

vinyl chloride criteria, which indicates the continued improvement of groundwater quality during the rebound test.

During the rebound test most of the trends were stable, except monitoring well MW-1 with an increasing trend for dissolved oxygen, monitoring well MW-2 with a decreasing trend for pH, and for monitoring well MW-9 with a decreasing trend for sulfate. Increasing dissolved oxygen concentrations in monitoring well MW-1 may be a indication of improving conditions.

A statistically significant decreasing trend for pH was previous decided to be an enhanced performance trigger.

5 Conclusions/Recommendations

5.1 Landfill Gas

The passive landfill gas collection and biofilter treatment system has performed as expected for the rebound test. Application of the biofilter treatment system meets the goals and objectives of the KCSWD's climate action plan for carbon neutrality, to reduce and eliminate sources of greenhouse gas emissions from landfills. The bioberm is expected to continue being effective in treating the residual generation of landfill gas (methane). The KCSWD is making the following recommendations based on the successful outcome of the rebound test conducted between December 2019 to July 2022:

- Enumclaw Landfill will transition to passive landfill gas operation, indefinitely, using polishing treatment of landfill gas with bioberm. The KCSWD will continue the monthly evaluation of bioberm and for any indication of methane breakthrough and replace or replenish bioberm as needed.
- The KCSWD will continue with plans to decommission the former flare station to recycle, reuse, or properly dispose of any aboveground or subsurface infrastructures, and restore the station to match its native surroundings.
- The KCSWD will continue its effort to repurpose the existing utility flare, for potential use at Hobart Landfill through consultation with the PSCAA, as lead agency.
- One of the advantages of the passive landfill gas collection system is the significant reduction in condensate/leachate generation. Most of the condensate generated in the landfill gas collection and conveyance system should be collected by the three condensate sumps at the landfill. Therefore, there should be minimum to none of the condensate coming into the bioberms. Moreover, with the landfill gas collection operating passively, the accumulation of the condensate has been significantly reduced.
- The KCSWD will continue its monthly monitoring of the landfill gas.

5.2 Groundwater

The rebound test has demonstrated no adverse impacts to the groundwater beneath the site from turning off the active landfill extraction system. One enhanced performance monitoring indicator (decreasing pH trend in monitoring well MW-2) was triggered during the rebound test. The performance monitoring trigger for pH was added after the first year of rebound test monitoring, because pH had been incorrectly identified as a constituent of concern (there are no constituents of concern at Enumclaw Landfill). The groundwater beneath Enumclaw Landfill is slightly acidic, but the decreasing pH trend is not a strong enough indicator that there is landfill gas migrating to groundwater without other landfill gas indicators. In the most recent groundwater evaluation report, there were no decreasing trends for pH at Enumclaw Landfill (KCSWD, 2023).

The following recommendations are to ensure that operating the passive landfill system does not have negative impacts on human health and environment and to continue progress towards termination of post-closure care:

- The KCSWD will continue its semiannual monitoring of groundwater and summarize the monitoring results in a report, due to PHKSC and Ecology in October of each year.
- To address the presence of some groundwater exceedances, the KCSWD will collect total metals at the upgradient well (monitoring well MW-3) and calculate background groundwater levels for arsenic and manganese.

6 References

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- Aspect and Herrera Environmental Consultants (Herrera), 2019a, Landfill Gas System Evaluation Technical Memorandum, Enumclaw Closed Landfill, Final Memorandum, January 8, 2019.
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- Aspect and Herrera, 2020, Landfill Gas Rebound Test Technical Memorandum, Enumclaw Closed Landfill, Final Memorandum, August 2020.

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King County Solid Waste Division, 2021, Landfill Gas Rebound Test Technical Memorandum, Enumclaw Closed Landfill, Agency Review Draft, April 2021.

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R.W. Beck and Associates, and Sweet, Edwards, & Associates, September 19, 1987, *Geotechnical Report, Enumclaw Landfill*. Prepared for King County Solid Waste Division.

Washington Department of Ecology (Ecology), 2016, Natural Background Groundwater Arsenic Concentrations in Washington State, Publication No. 14-09-044, January 2022.

Washington State Department of Ecology (Ecology), 2013, Addendum to Preparing for Termination of Post-Closure Activities at Landfills Closed Under Chapter 173-304 WAC, Prepared August 2012, Revised January 2013.

Tables
and
Figures

Table 1
Landfill Gas Probe Construction Information

Probe ID (boring log)	Installation Date	Top of Screen Below Ground Surface (feet)	Bottom of Screen Below Ground Surface (feet)	Top of Casing Stickup (feet)	Measured Probe Depth from Top of Casing Stickup (feet)	Calculated Probe Depth Below Ground Surface (feet)	Probe ID (Report)
GP-3S	07/01/1986	11.00	14.00	--	--	--	GP-3S
GP-3D	07/01/1986	32.50	35.50	--	--	--	GP-3D
G-6S	02/14/1987	8.50	11.00	1.70	13.58	11.88	GP-6S
G-6I	02/14/1987	20.00	22.50	1.60	22.09	20.49	GP-6I
G-6D	02/14/1987	32.50	35.00	1.40	34.04	32.64	GP-6D
G-7S	02/15/1987	8.50	11.00	0.60	12.05	11.45	GP-7S
G-7I	02/15/1987	22.00	24.50	0.70	26.65	25.95	GP-7I
G-7D	02/15/1987	30.50	33.00	0.60	32.04	31.44	GP-7D
G-8S	01/16/1987	13.00	15.50	--	--	--	GP-8S
G-8I	01/16/1987	21.00	23.50	--	--	--	GP-8I
G-8D	01/16/1987	32.50	35.00	--	--	--	GP-8D
G-9S	11/18/1987	4.00	5.50	--	--	--	GP-9S
G-10S	11/21/1987	4.50	6.00	--	--	--	GP-10S
G-10I	11/21/1987	21.50	22.00	--	--	--	GP-10I
G-10D	11/21/1987	48.50	50.00	--	--	--	GP-10D
G-15S	11/19/1987	30.50	32.00	--	--	--	GP-15S
G-15D	11/19/1987	46.50	48.00	--	--	--	GP-15D
G-16S	02/13/1990	7.50	24.00	--	--	--	GP-16S
G-16I	02/13/1990	26.50	53.00	--	--	--	GP-16I
G-16D	02/13/1990	56.00	78.00	--	--	--	GP-16D
G-17	--	--	--	--	--	--	GP-17
G-18	--	--	--	--	--	--	GP-18
G-19S	10/01/1999	5.00	10.00	--	--	--	GP-19S
G-19D	10/01/1999	27.00	32.00	--	--	--	GP-19D
G-20S	10/21/1999	10.00	15.00	--	--	--	GP-20S
G-20D	10/21/1999	32.00	37.00	--	--	--	GP-20D

Notes:

Probe ID construction information from Table 1 of the 2014 Findings Report (Aspect, 2014)

There is no probe construction data available for G-17 and G-18.

Table 2
Groundwater Monitoring Well Completion Details

Well Number	Date Completed	Installed By	Top of PVC Casing Elevation (feet) ^a	Well Casing and Screen ¹	Well Dia. (inches)	Screen slot (inches)	Top of Screen Elevation ^a	Bottom of Screen Elevation ^a	Top of Seal Elevation ^a	Bottom of Seal Elevation ^a	Seal Type	Top of Sand Pack (feet elev.) ^a	Bottom of Sand Pack (feet elev.) ^a	Sand Type
MW-1	8/24/1983	Sweet Edwards	822.04	PVC	3	0.010	746.00	736.00	821.00	750.00	Bentonite	750.00	736.00	Gravel
MW-2	8/25/1983	Sweet Edwards	800.63	PVC	3	0.010	747.89	737.89	798.89	749.89	Bentonite	749.89	737.89	Sand
MW-9	9/30/1999	Associated Earth Sci.	829.70	SCH 40 PVC	2	0.010	747.58	737.58	825.58	752.58	Bentonite	752.58	737.58	10x20 Colorado silica sand

^aAll survey data in feet are relative to site NAVD88 datum.

¹ PVC type unspecified on well logs, unless otherwise noted.

Table 3
Monitoring Wells: Summary of Groundwater Quality Criteria Exceedances
December 1, 2019 - July 31, 2022

Parameter	Units	Well	Sample Date	Sample Value	Standard(s) Exceeded	Standard(s) Exceeded
Arsenic, Dissolved	ug/L	MW-1	06/03/2020	1.44	SGWC1	0.05
		MW-1	11/19/2020	6.44		
		MW-1	05/11/2021	1.68		
		MW-1	08/16/2021	5.18		
		MW-1	11/08/2021	8.97		
		MW-1	02/08/2022	2.32		
		MW-2	06/03/2020	0.111		
		MW-2	11/19/2020	0.124		
		MW-2	05/11/2021	0.133		
		MW-2	08/16/2021	0.114		
		MW-2	11/08/2021	0.161		
		MW-2	02/08/2022	0.169		
		MW-9	06/03/2020	0.146		
		MW-9	11/19/2020	0.126		
		MW-9	05/11/2021	0.156		
		MW-9	08/16/2021	0.149		
		MW-9	11/08/2021	0.175		
		MW-9	02/08/2022	0.193		
Arsenic, Total	ug/L	MW-1	05/11/2021	1.77 D	SGWC1	0.05
		MW-1	05/25/2022	1.68		
		MW-1	11/08/2021	9.40 S		
		MW-2	05/11/2021	0.159 D		
		MW-2	05/25/2022	0.199		
		MW-2	11/08/2021	0.179 S		
		MW-9	05/11/2021	0.158 D		
		MW-9	11/08/2021	0.154 S		
		MW-9	05/25/2022	0.190		
Manganese, Dissolved	ug/L	MW-1	06/03/2020	129	MCL2; SGWC2	50 ¹ ; 50 ¹
		MW-1	11/19/2020	795		
		MW-1	05/11/2021	86		
		MW-1	08/16/2021	787		
		MW-1	11/08/2021	676		
		MW-1	02/08/2022	272		
Manganese, Total	ug/L	MW-1	05/11/2021	93	MCL2; SGWC2	50 ¹ ; 50 ¹
		MW-1	11/08/2021	702 S		
Vinyl Chloride	ug/L	MW-1	11/19/2020	0.031	SGWC1	0.02

Notes:

¹MCL2 and SGWC2 for manganese are both 0.05 mg/L. Converted standards to µg/L in the table.

MCL2 = National Secondary Drinking Water Regulation Maximum Contaminant Level

SGWC1 = Washington State Primary Groundwater Quality Criteria

SGWC2 = Washington State Secondary Groundwater Quality Criteria

See Appendix B for laboratory qualifier definitions.

Table 4 Summary of Trend Analyses for Individual Groundwater Wells

Well Location Gradient Location Time Interval	MW-1		MW-2		MW-9	
	Down		Down		Down	
	Pre-Rebound	Rebound	Pre-Rebound	Rebound	Pre-Rebound	Rebound
Field Dissolved Oxygen, mg/L						
No. of Analyses	15	20	15	20	15	20
No. of Detections	15	20	15	20	15	20
Trend	--	I	--	--	--	--
S-value	21	73	9	-27	-15	-18
Probability	0.321	0.019	0.692	0.399	0.488	0.581
Significant	NO	YES	NO	NO	NO	NO
Field pH, pH units						
No. of Analyses	21	20	21	19	21	20
No. of Detections	21	20	21	19	21	20
Trend	--	--	I	D	--	--
S-value	29	-30	74	-58	-23	-34
Probability	0.398	0.346	0.027	0.046	0.506	0.284
Significant	NO	NO	YES	YES	NO	NO
Field Specific Conductance, umhos/cm						
No. of Analyses	21	20	21	19	21	20
No. of Detections	21	20	21	19	21	20
Trend	I	--	--	--	--	--
S-value	72	-56	20	27	9	-24
Probability	0.032	0.074	0.566	0.363	0.809	0.456
Significant	YES	NO	NO	NO	NO	NO
Carbon Dioxide, mg/L						
No. of Analyses	--	17	--	17	--	17
No. of Detections	--	17	--	17	--	17
Trend	--	--	--	--	--	--
S-value	--	48	--	16	--	20
Probability	--	0.053	--	0.537	--	0.433
Significant	--	NO	--	NO	--	NO
Methane, mg/L						
No. of Analyses	--	17	--	17	--	17
No. of Detections	--	12	--	5	--	2
Trend	--	--	--	--	--	--
S-value	--	18	--	-7	--	-1
Probability	--	0.482	--	0.797	--	ID
Significant	--	NO	--	NO	--	--

Table 4 Summary of Trend Analyses for Individual Groundwater Wells

Well Location Gradient Location Time Interval	MW-1		MW-2		MW-9	
	Down		Down		Down	
	Pre-Rebound	Rebound	Pre-Rebound	Rebound	Pre-Rebound	Rebound
Bicarbonate Alkalinity, mg/L						
No. of Analyses	--	19	--	19	--	19
No. of Detections	--	19	--	18	--	18
Trend	--	--	--	--	--	--
S-value	--	-35	--	52	--	11
Probability	--	0.234	--	0.074	--	0.726
Significant	--	NO	--	NO	--	NO
Total Alkalinity, mg/L						
No. of Analyses	21	19	21	19	21	19
No. of Detections	21	19	21	19	21	19
Trend	I	--	--	--	--	--
S-value	82	-13	2	26	-18	-13
Probability	0.014	0.675	0.976	0.381	0.608	0.675
Significant	YES	NO	NO	NO	NO	NO
Ammonia, mg/L						
No. of Analyses	21	5	21	5	21	5
No. of Detections	20	5	12	0	2	0
Trend	--	--	D	--	--	--
S-value	-12	-2	-161	ID	-103	ID
Probability	0.740	0.806	0.000	ID	ID	ID
Significant	NO	NO	YES	--	--	--
Chloride, mg/L						
No. of Analyses	21	20	20	20	21	20
No. of Detections	21	20	20	20	21	20
Trend	--	--	--	--	--	--
S-value	-7	-35	-61	25	19	-16
Probability	0.856	0.270	0.051	0.436	0.587	0.626
Significant	NO	NO	NO	NO	NO	NO
Nitrate, mg/L						
No. of Analyses	21	5	21	5	21	5
No. of Detections	21	4	21	5	21	5
Trend	D	--	--	--	--	--
S-value	-92	-2	0	2	-10	-2
Probability	0.006	0.806	1.000	0.806	0.786	0.806
Significant	YES	NO	NO	NO	NO	NO

Table 4 Summary of Trend Analyses for Individual Groundwater Wells

Well Location		MW-1		MW-2		MW-9	
Gradient Location		Down		Down		Down	
Time Interval		Pre-Rebound	Rebound	Pre-Rebound	Rebound	Pre-Rebound	Rebound
Sulfate, mg/L							
	No. of Analyses	21	5	21	5	21	5
	No. of Detections	21	5	21	5	21	5
	Trend	--	--	--	--	--	D
	S-value	24	0	-26	2	0	-10
	Probability	0.487	1.000	0.450	0.806	1.000	0.027
	Significant	NO	NO	NO	NO	NO	YES
Total Dissolved Solids, mg/L							
	No. of Analyses	21	5	21	5	21	5
	No. of Detections	21	5	21	5	21	5
	Trend	--	--	--	--	--	--
	S-value	64	-4	4	0	-2	-5
	Probability	0.057	0.462	0.928	1.000	0.976	0.312
	Significant	NO	NO	NO	NO	NO	NO
Dissolved Arsenic, ug/L							
	No. of Analyses	21	6	21	6	21	6
	No. of Detections	19	6	9	6	8	6
	Trend	--	--	D	--	D	--
	S-value	32	5	-114	11	-114	11
	Probability	0.349	0.452	0.000	0.060	0.000	0.060
	Significant	NO	NO	YES	NO	YES	NO
Dissolved Calcium, mg/L							
	No. of Analyses	21	19	21	19	21	19
	No. of Detections	21	19	21	19	21	19
	Trend	I	--	--	--	--	--
	S-value	90	-9	42	19	0	-18
	Probability	0.007	0.780	0.216	0.529	1.000	0.551
	Significant	YES	NO	NO	NO	NO	NO
Dissolved Iron, mg/L							
	No. of Analyses	21	6	21	6	21	6
	No. of Detections	21	4	17	3	1	0
	Trend	D	--	D	--	--	--
	S-value	-80	0	-108	0	-4	ID
	Probability	0.017	1.000	0.001	ID	ID	ID
	Significant	YES	NO	YES	--	--	--

Table 4 Summary of Trend Analyses for Individual Groundwater Wells

Well Location Gradient Location Time Interval	MW-1		MW-2		MW-9	
	Down		Down		Down	
	Pre-Rebound	Rebound	Pre-Rebound	Rebound	Pre-Rebound	Rebound
Dissolved Magnesium, mg/L						
No. of Analyses	21	19	21	19	21	19
No. of Detections	21	19	21	19	21	19
Trend	I	--	--	--	--	--
S-value	94	-23	49	32	9	-9
Probability	0.005	0.441	0.147	0.278	0.809	0.780
Significant	YES	NO	NO	NO	NO	NO
Dissolved Manganese, ug/L						
No. of Analyses	21	6	21	6	21	6
No. of Detections	21	6	21	6	13	6
Trend	--	--	D	--	--	--
S-value	-59	-1	-150	-8	-22	-5
Probability	0.080	1.000	0.000	0.181	0.513	0.452
Significant	NO	NO	YES	NO	NO	NO
Vinyl Chloride, ug/L						
No. of Analyses	21	5	21	5	21	5
No. of Detections	7	2	0	0	0	0
Trend	--	--	--	--	--	--
S-value	15	-1	ID	ID	ID	ID
Probability	0.652	ID	ID	ID	ID	ID
Significant	NO	--	--	--	--	--

NOTES:

Pre-Rebound - January 2014 - November 2019, monitoring results prior to start of rebound test

Rebound - December 2019 - June 2022, monitoring results during rebound test

D - decreasing trend

I - increasing trend

-- - no detectable trend, too few data point to determine significance, or analyte not sampled during period

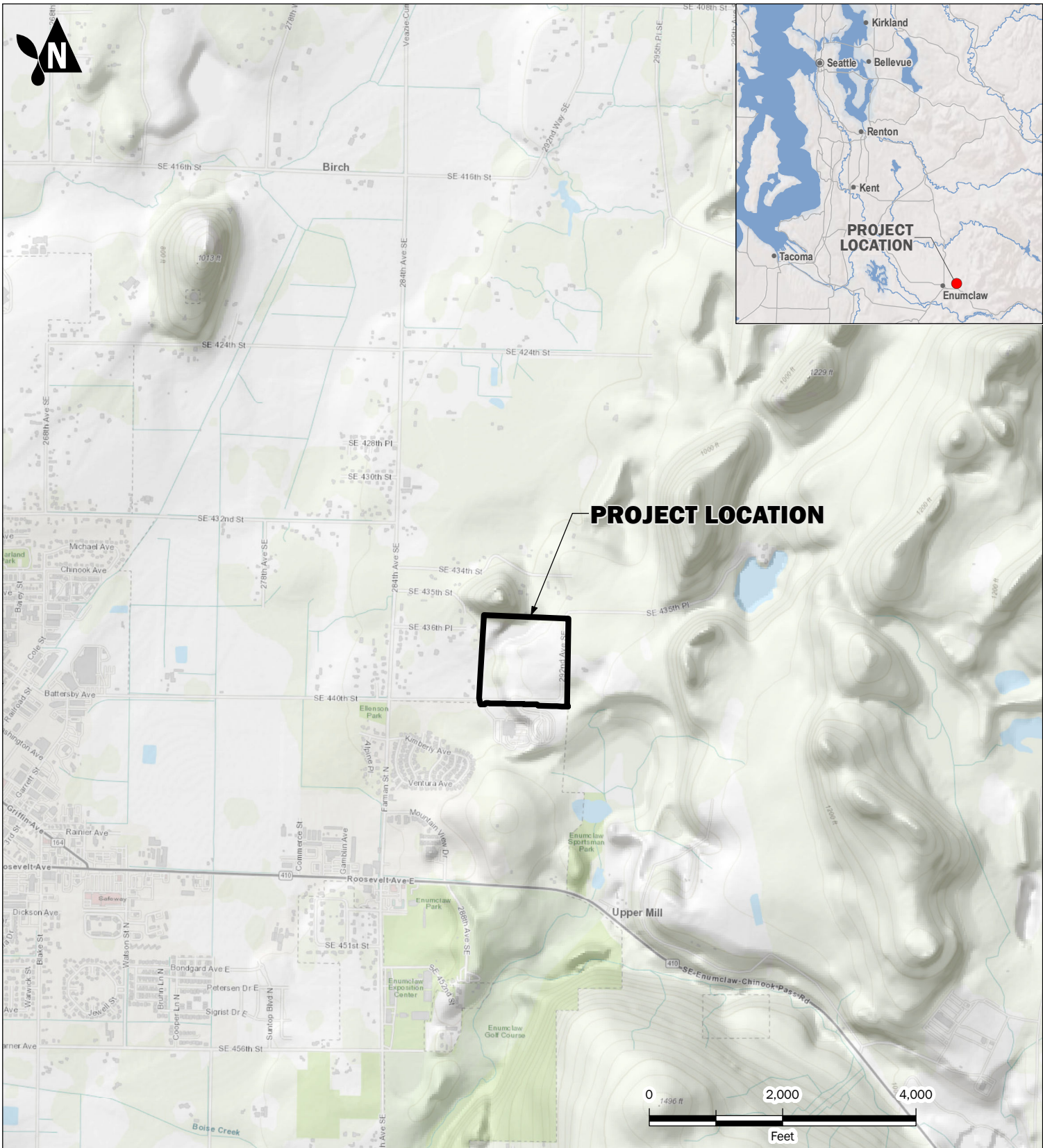
Probability - probability null hypothesis (i.e. 'No Trend') is true (aka p-value)

Significance - trend is significant at 0.05

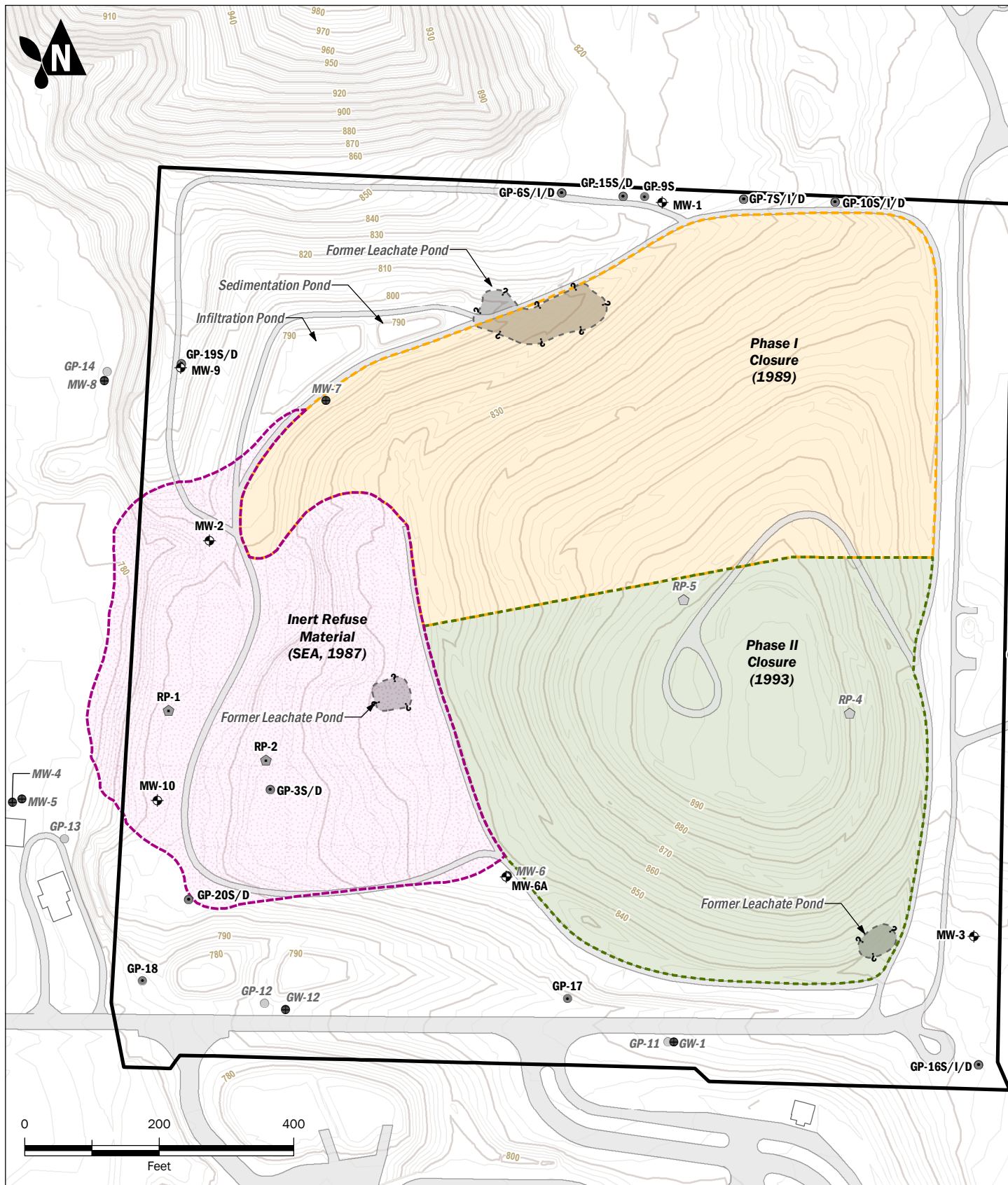
µmhos/cm - micorSiemens per centimeter

mg/L - milligram per liter

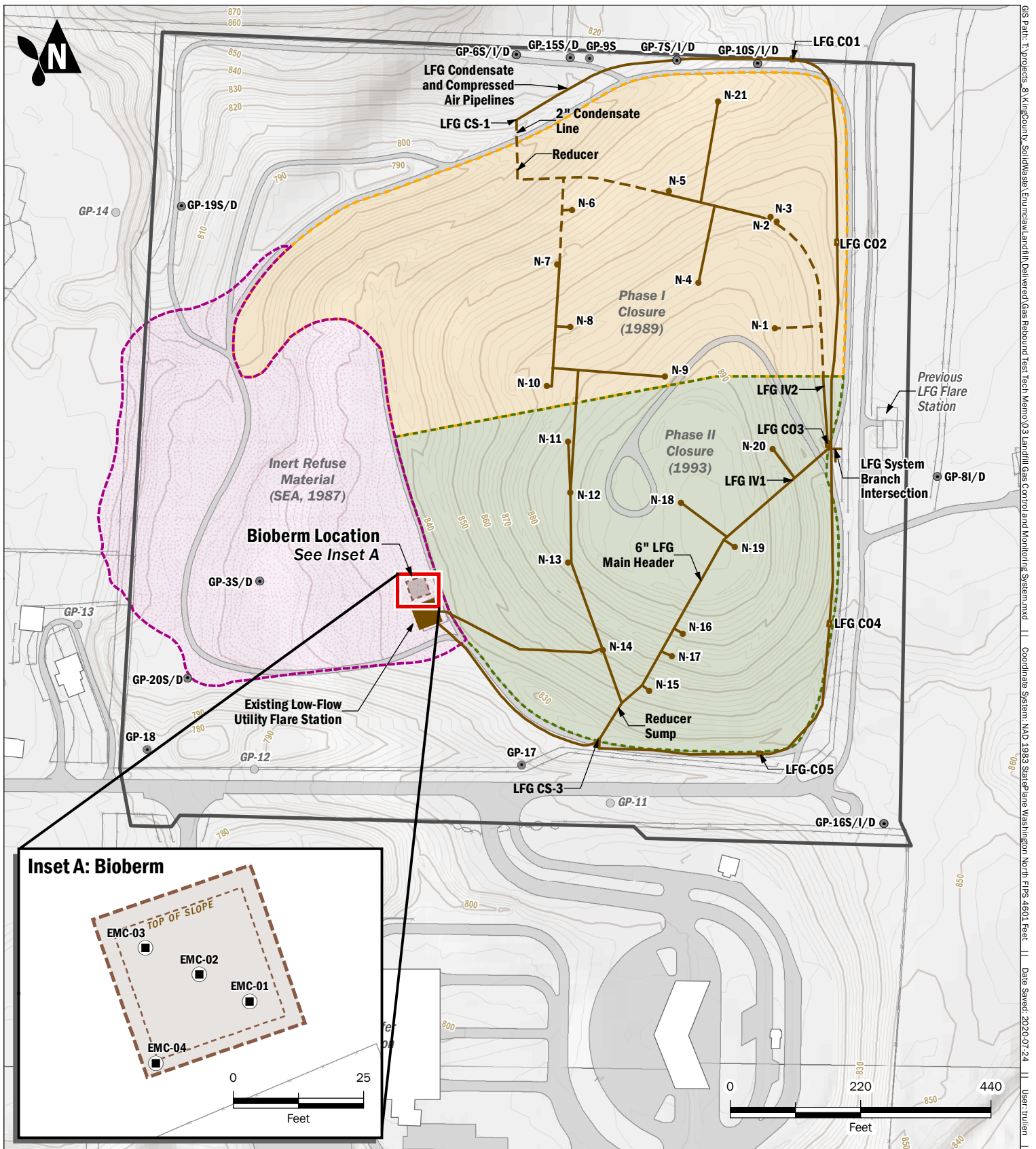
µg/L - microgram per liter



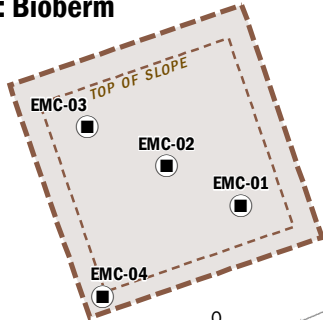
Project Location Enumclaw Landfill King County, Washington		
		FIGURE NO. 1



- Gas Probe - Monitoring Well - Phase I Closure (1989) - Phase II Closure (1993) - Inert Refuse Material	- Refuse Probe - Monitoring Well (Decommissioned) - Former Leachate Pond Approximate Location - Enumclaw Landfill Property	- Refuse Probe (Decommissioned) - Gas Probe (Decommissioned) - Building - Road	Site Features Enumclaw Landfill King County, Washington
Note: Topographic contours from King County survey dated May 18, 2016.			FIGURE NO. 2



Inset A: Bioherm



Existing Gas System
(dashed where as-built
unavailable)

Gas Valve

Gas Probe

Gas Probe
(Decommissioned)

Emission Chamber

Phase I Closure (1989)
Phase II Closure (1993)

Inert Refuse Material

Enumclaw Landfill Property

Building

Fence

Road

Note: Topographic contours from King County survey dated May 18, 2016.

Landfill Gas Control and Monitoring System

Enumclaw Landfill
King County, Washington



FIGURE NO.

3

Figure 4 - Landfill Gas Concentrations at Bioberm During Rebound Test

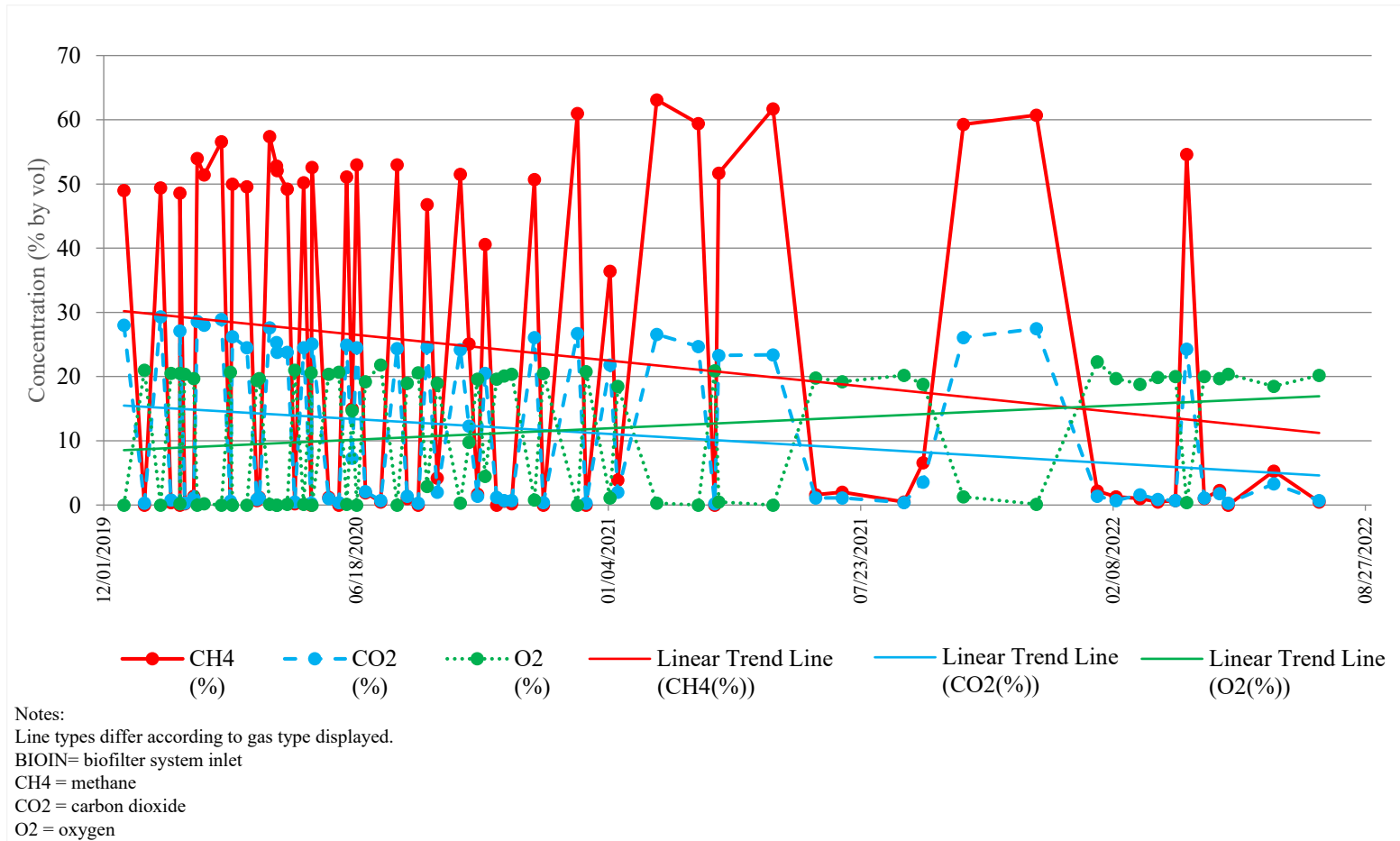
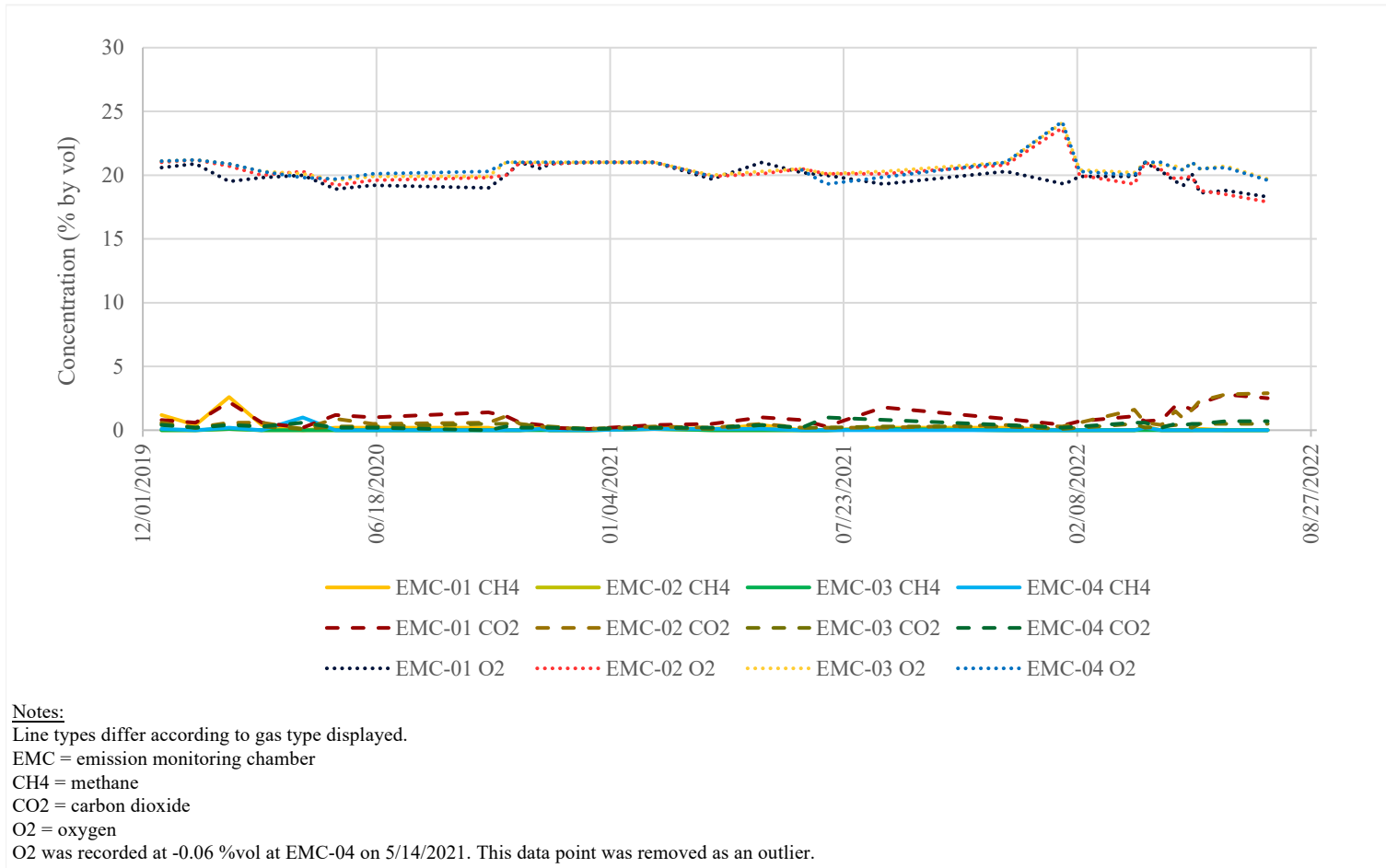
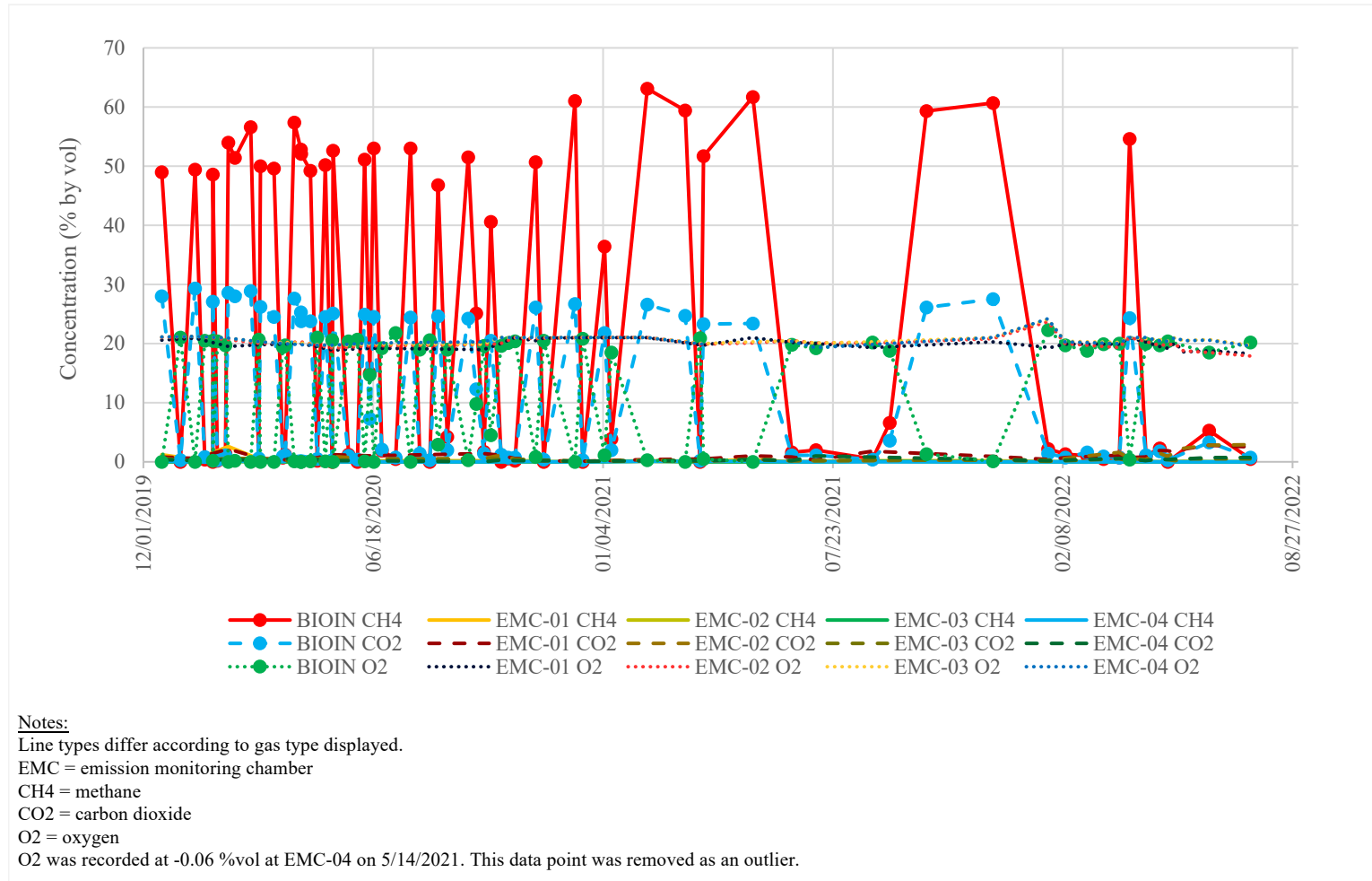


Figure 5.1 - Landfill Gas Concentrations at EMCs Locations During Rebound Test



**Figure 5.2 - Landfill Gas Concentrations at Bioerm and EMCs Locations
During Rebound Test**



**Figure 6.1- Methane Concentrations at All Landfill Gas Probes and Ambient locations
During Rebound Test**

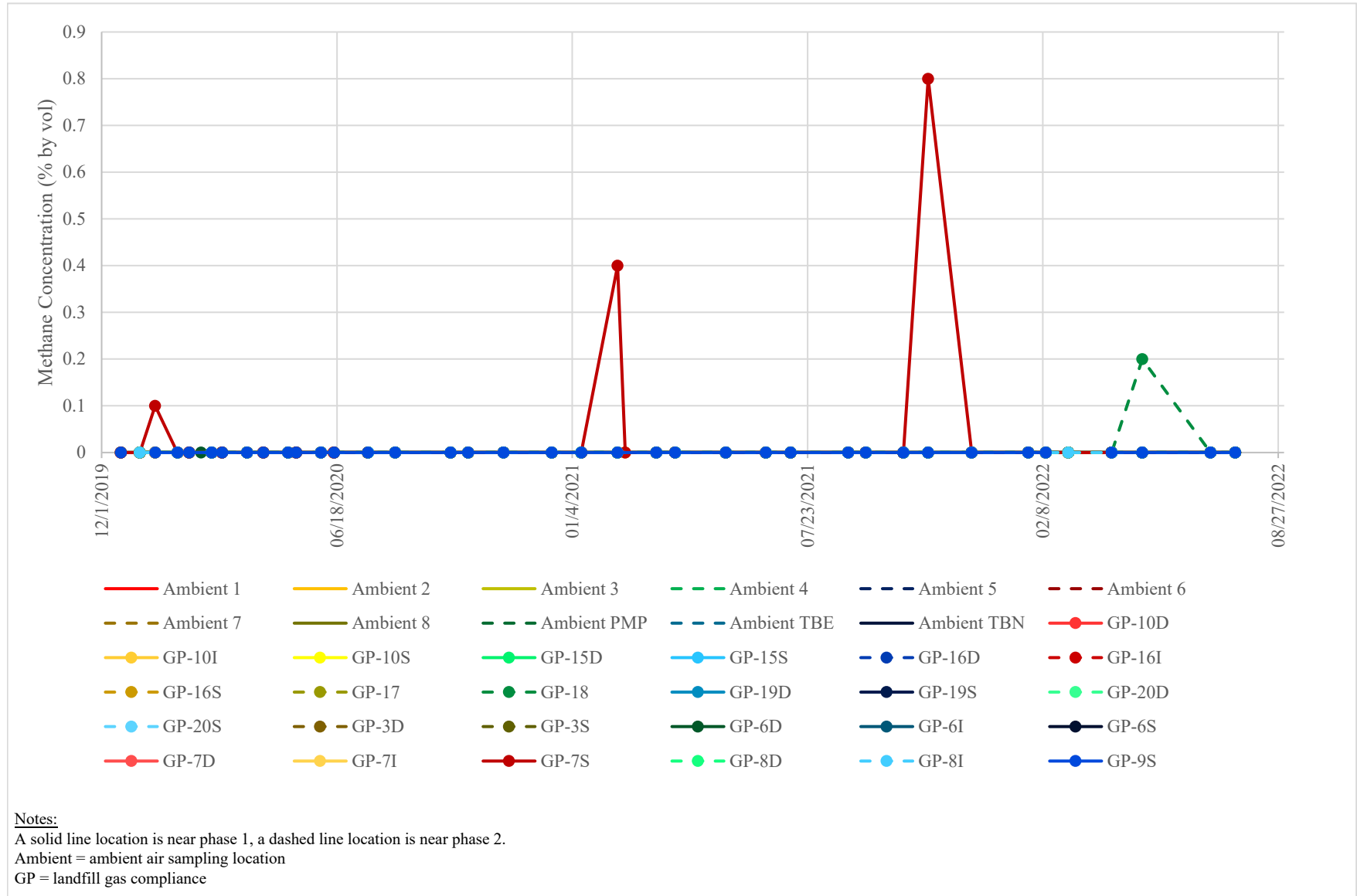
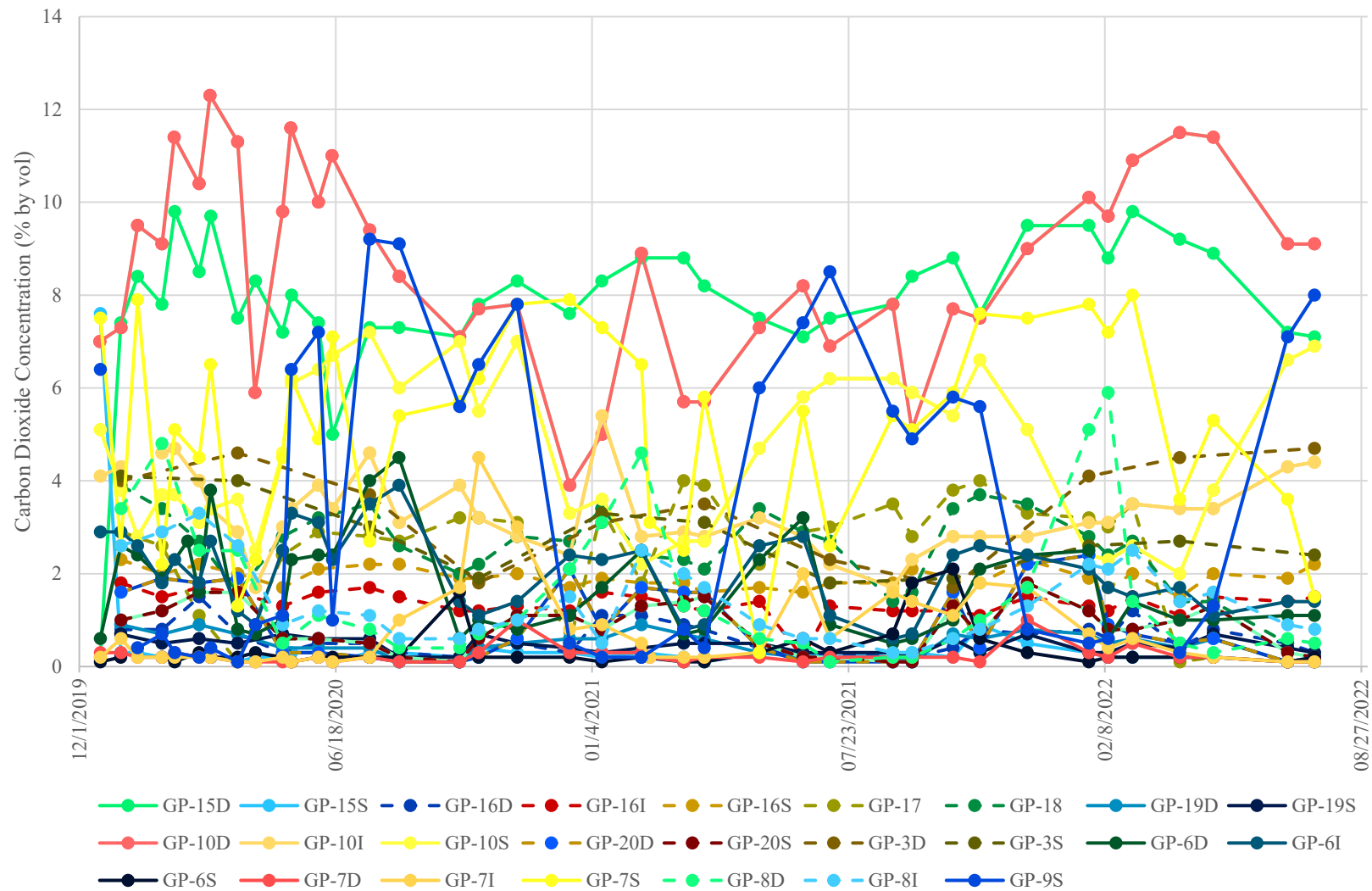


Figure 6.2a - Carbon Dioxide Concentrations at All Landfill Gas Probes During Rebound Test



Notes:

A solid line location is near phase 1, a dashed line location is near phase 2.
GP = landfill gas compliance probe

Figure 6.2b - Carbon Dioxide Concentrations at Ambient Locations During Rebound Test

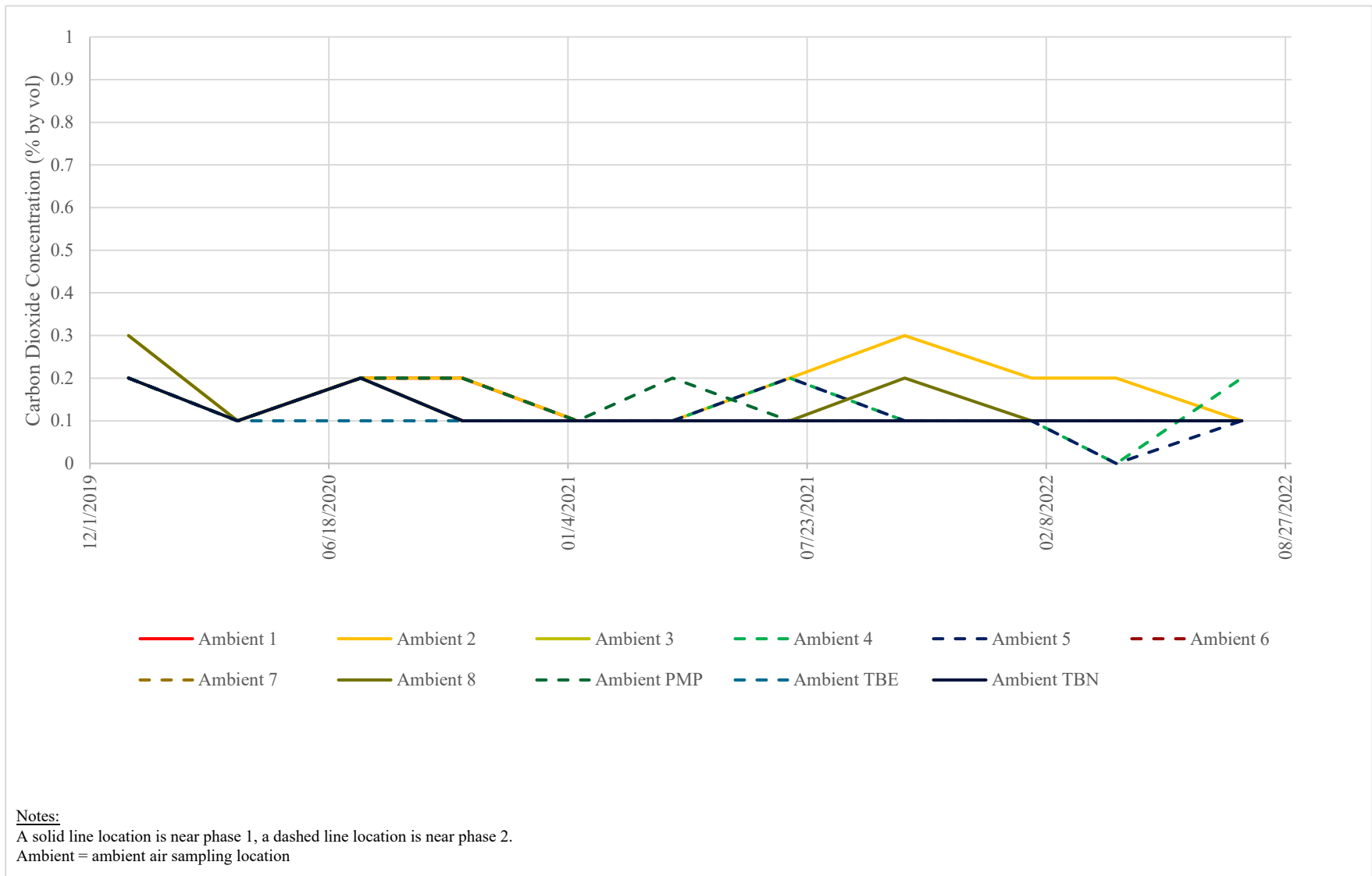
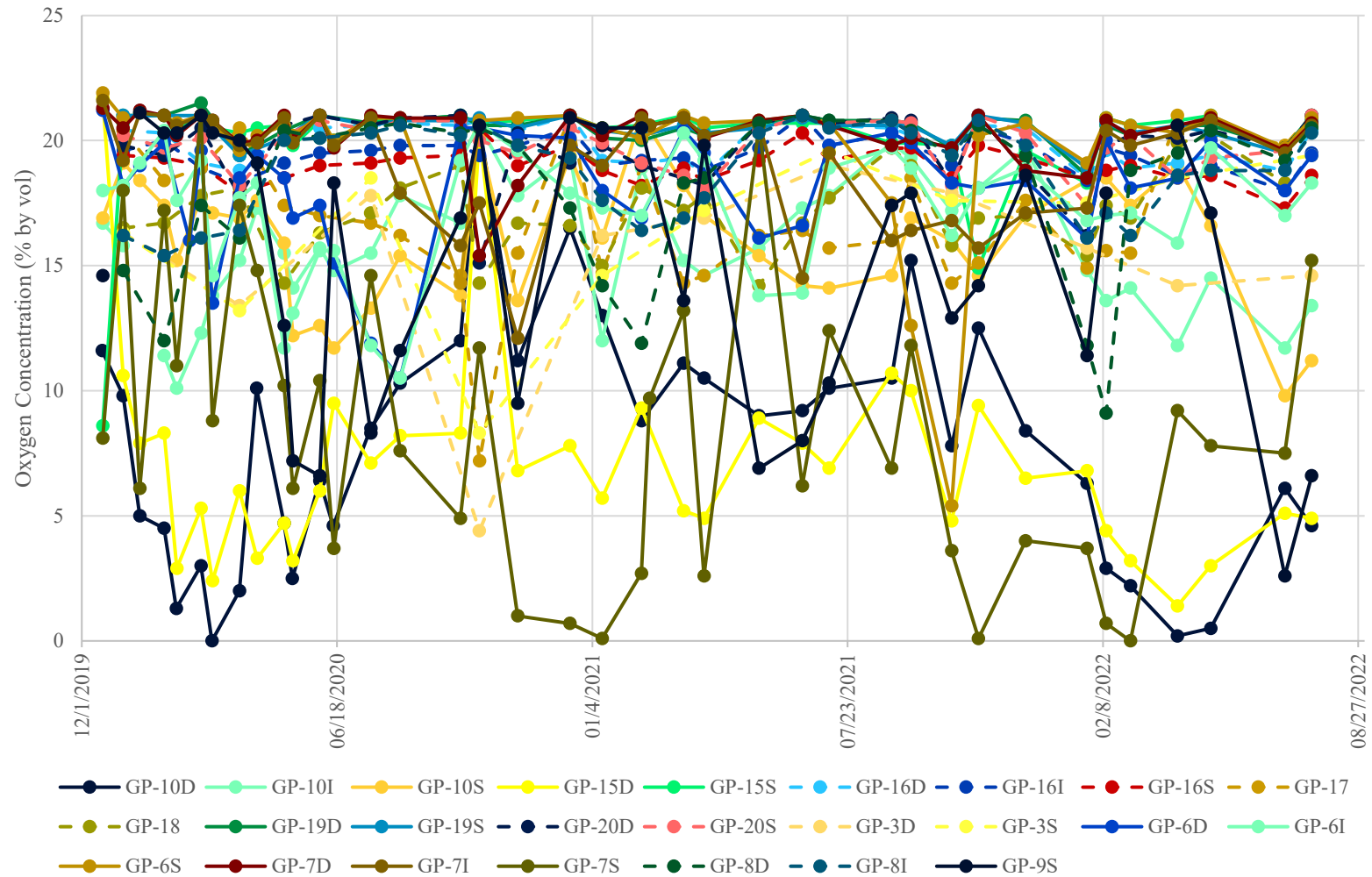


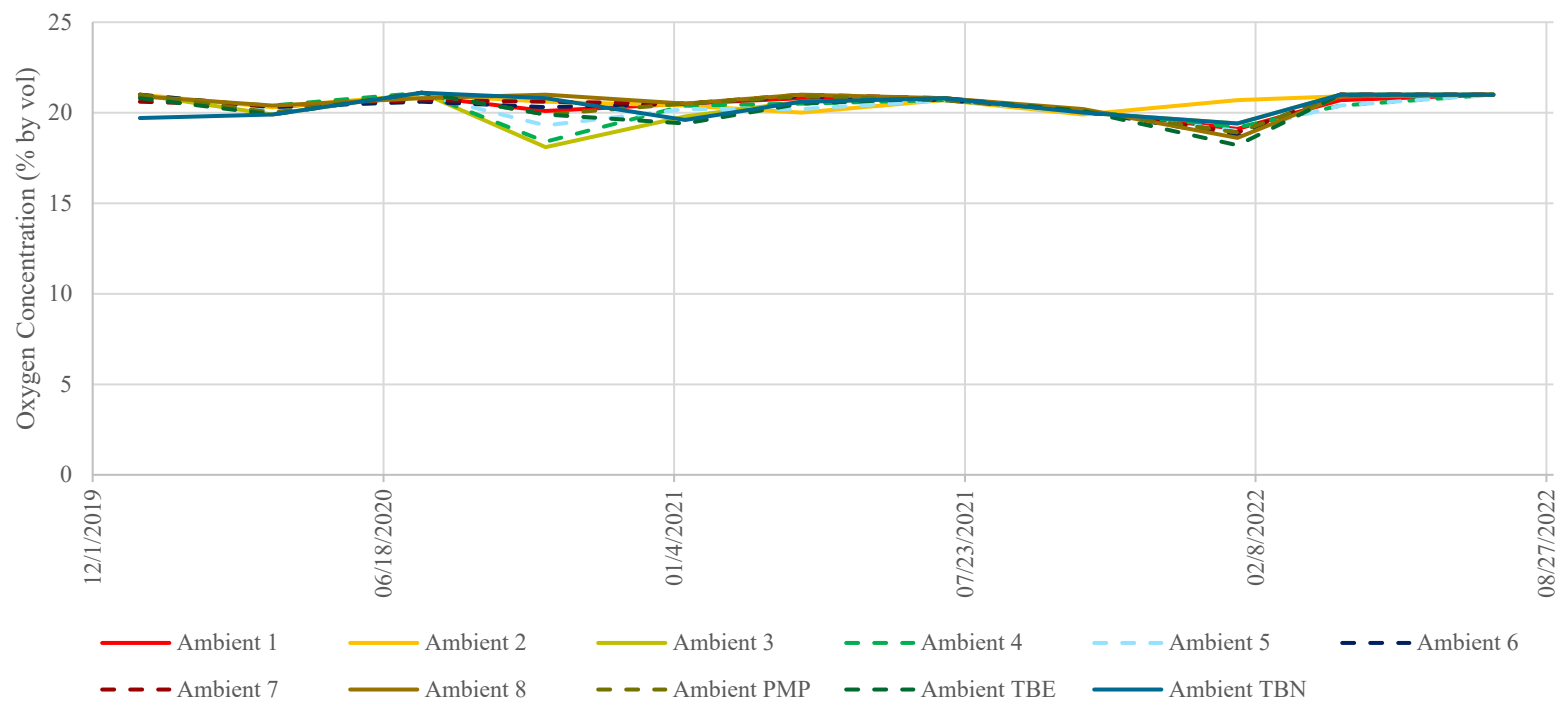
Figure 6.3a - Oxygen Concentrations at All Landfill Gas Probes During Rebound Test



Notes:

A solid line location is near phase 1, a dashed line location is near phase 2.
GP = landfill gas compliance probe

Figure 6.3b - Oxygen Concentrations at Ambient Locations During Rebound Test



Notes:

A solid line location is near phase 1, a dashed line location is near phase 2.
 Ambient = ambient air sampling location

Figure 7.1 - Methane Concentrations at All Landfill Gas Wells During Rebound Test

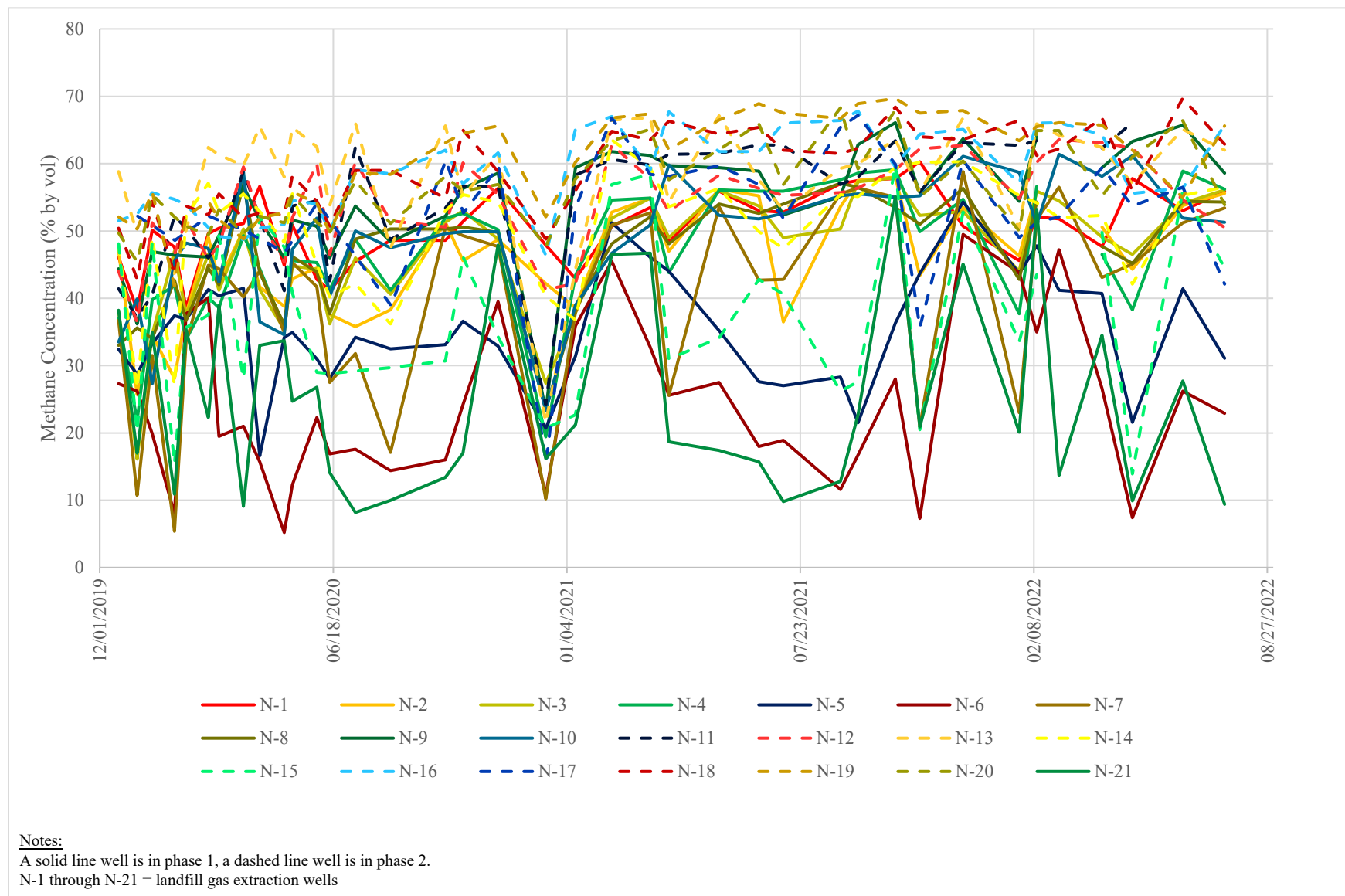
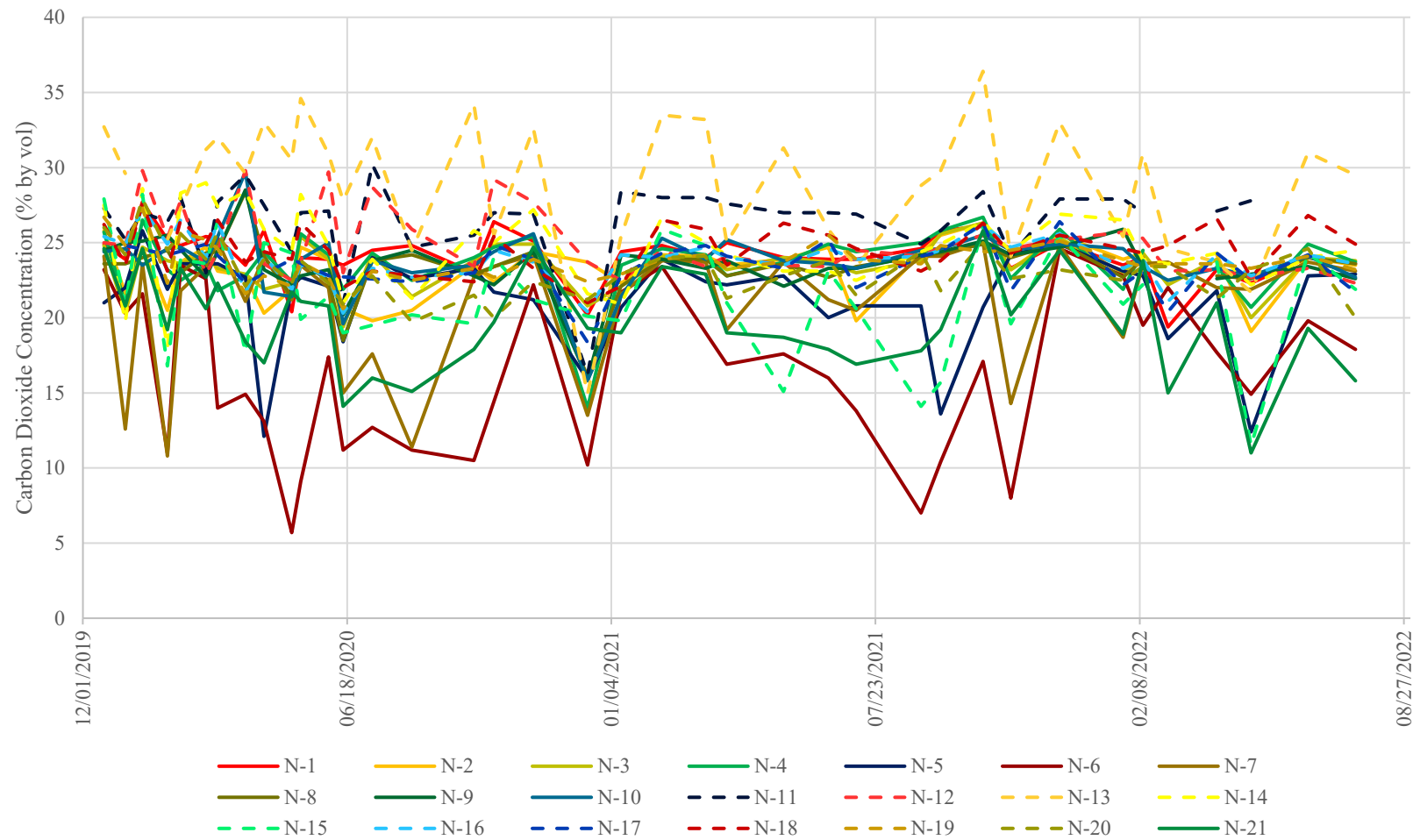


Figure 7.2 - Carbon Dioxide Concentrations at All Landfill Gas Wells During Rebound Test



Notes:

A solid line well is in phase 1, a dashed line well is in phase 2.

N-1 through N-21 = landfill gas extraction wells

Figure 7.3 - Oxygen Concentrations at All Landfill Gas Wells During Rebound Test

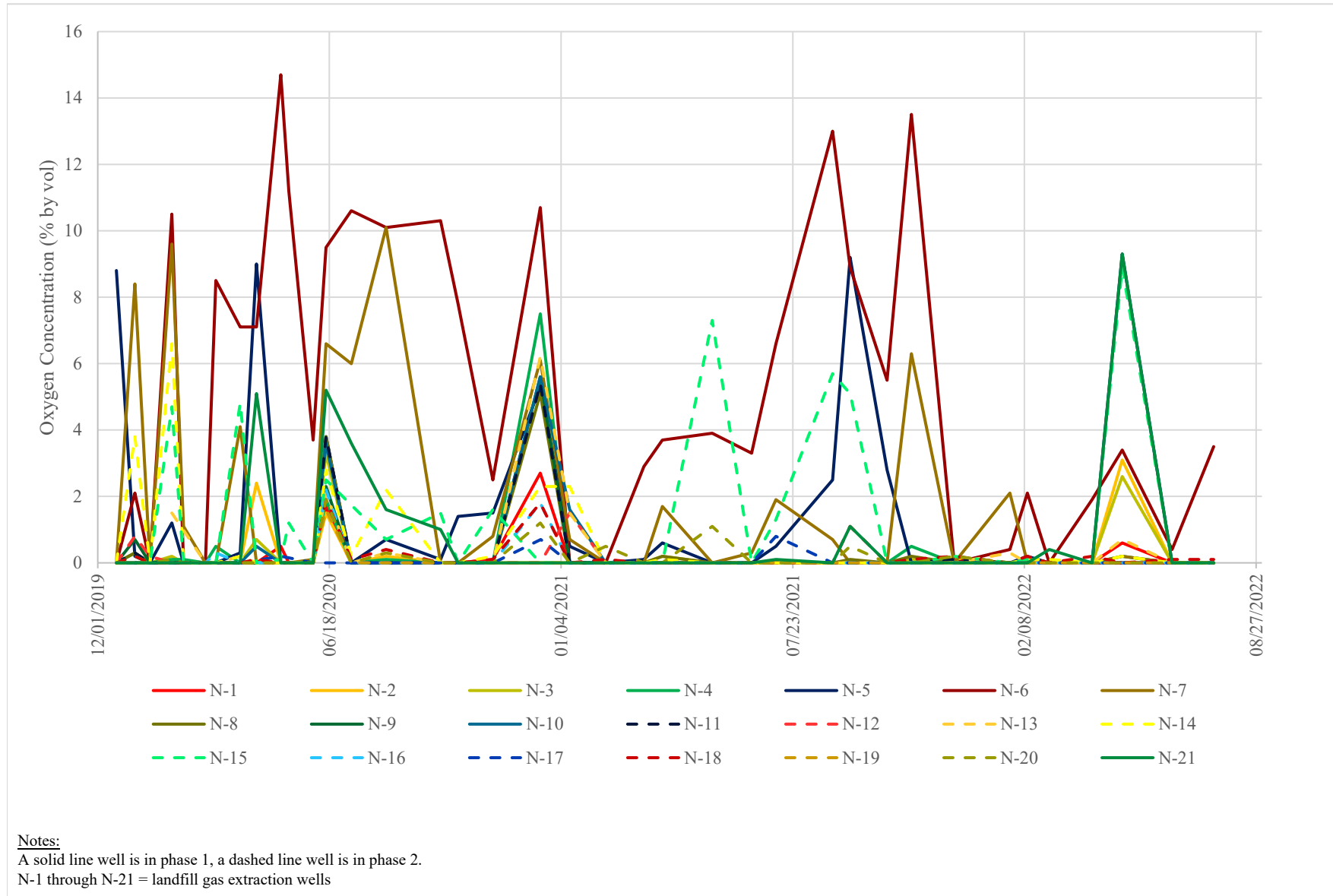


Figure 8 Groundwater Dissolved Oxygen Concentrations During Rebound Test

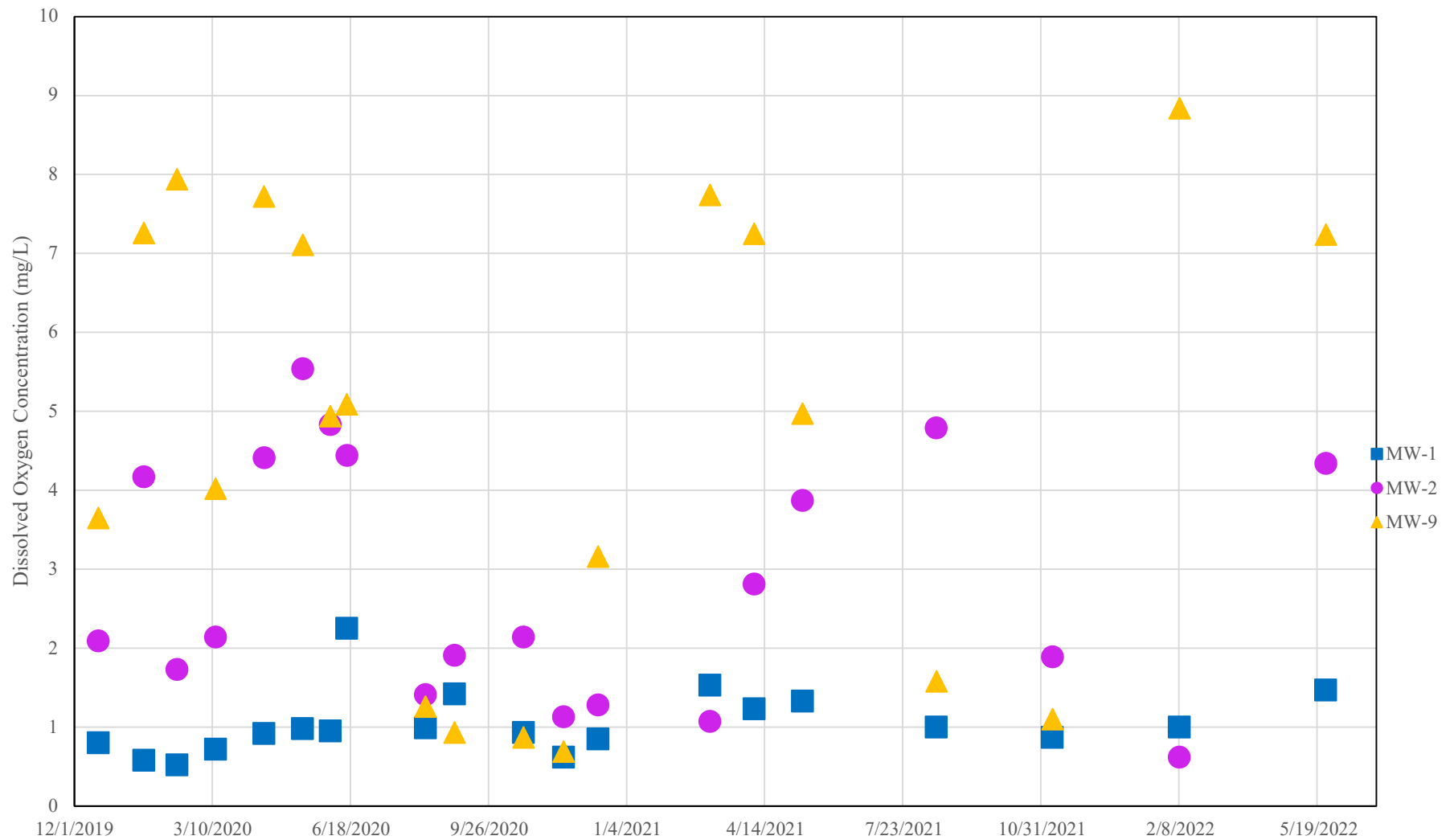


Figure 9 Groundwater Carbon Dioxide Concentrations During Rebound Test

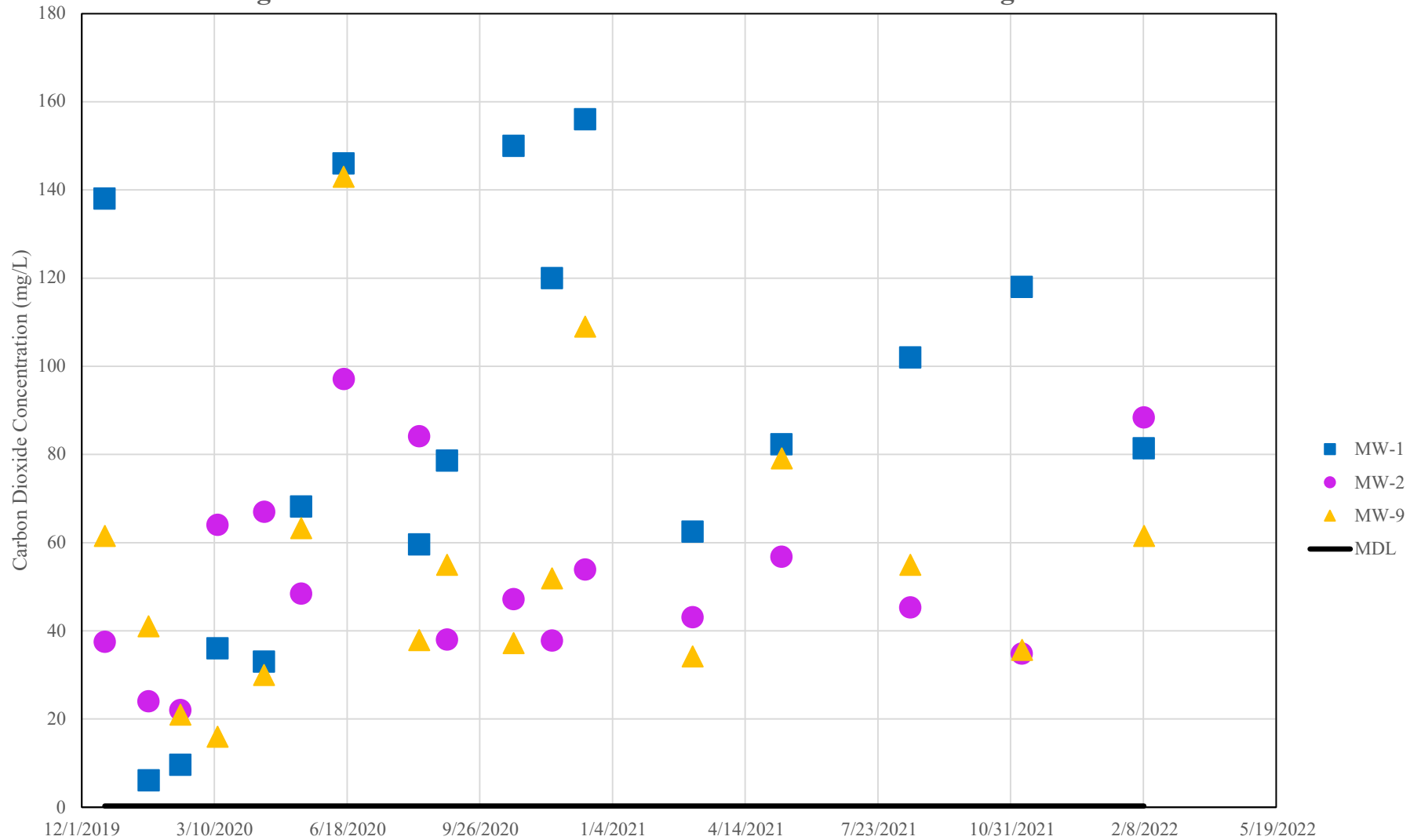


Figure 10 Groundwater Methane Concentrations During Rebound Test

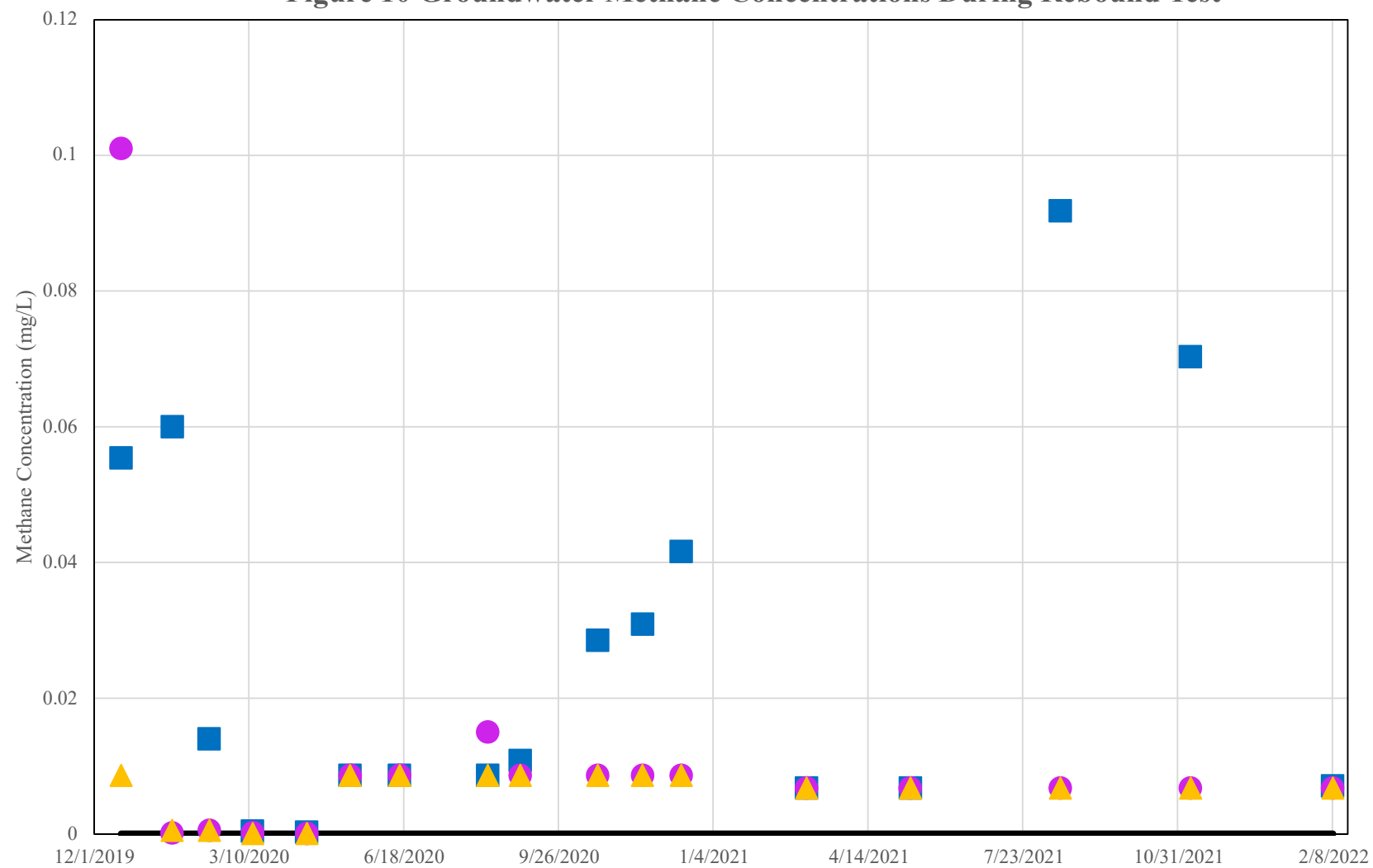


Figure 11 Groundwater Dissolved Arsenic Concentrations During Rebound Test

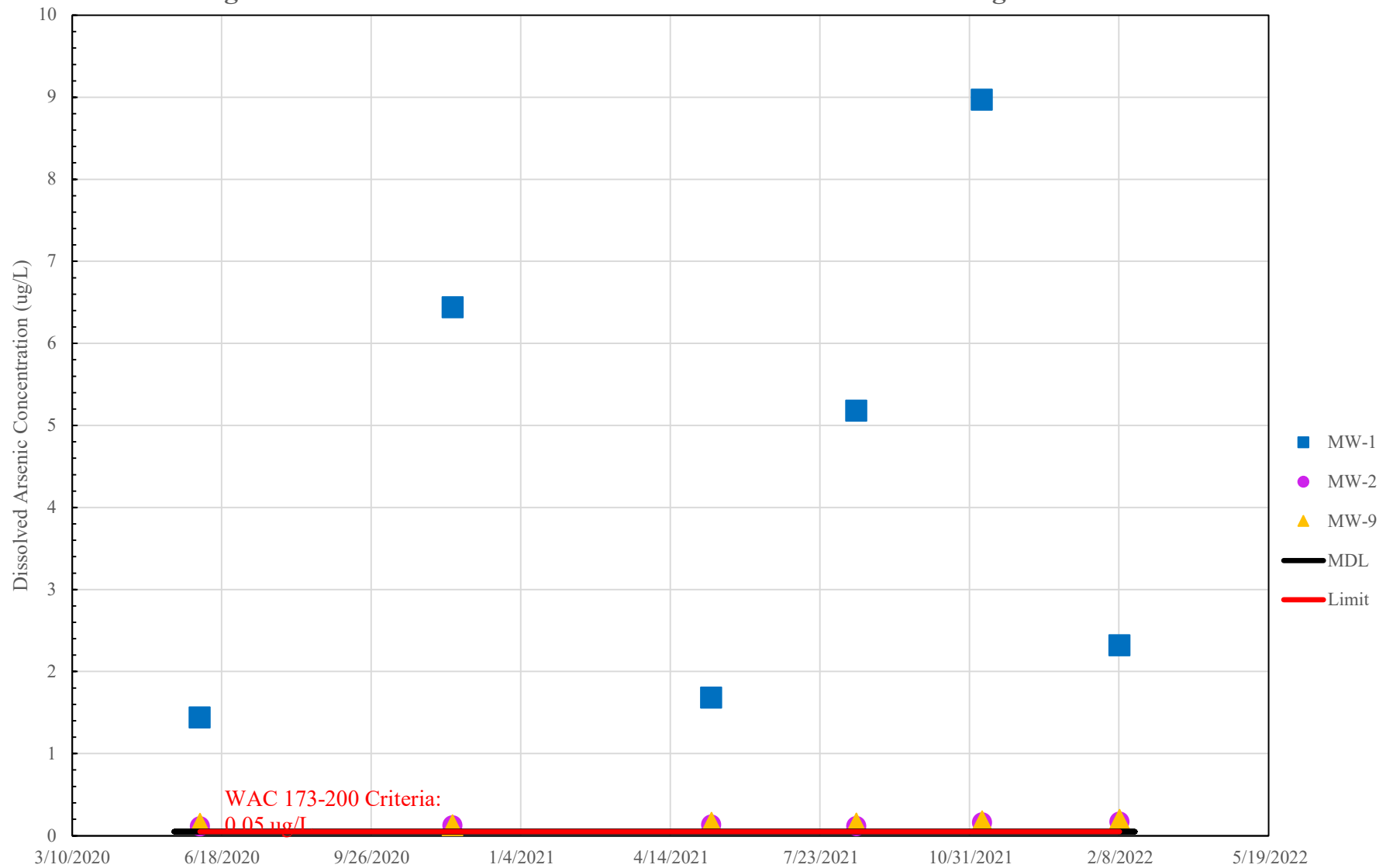


Figure 12 Groundwater Dissolved Calcium Concentrations During Rebound Test

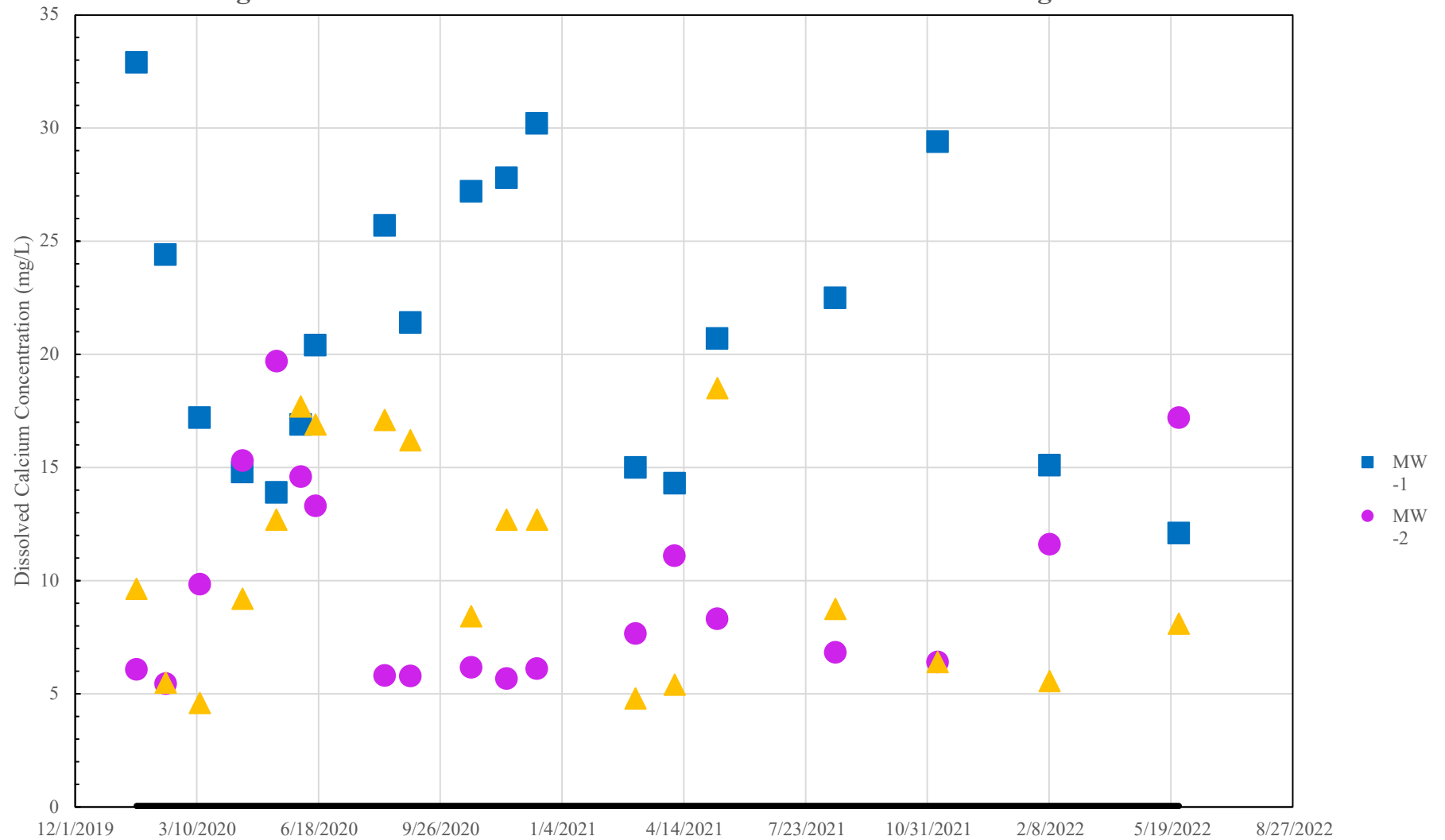


Figure 13 Groundwater Dissolved Magnesium Concentrations During Rebound Test

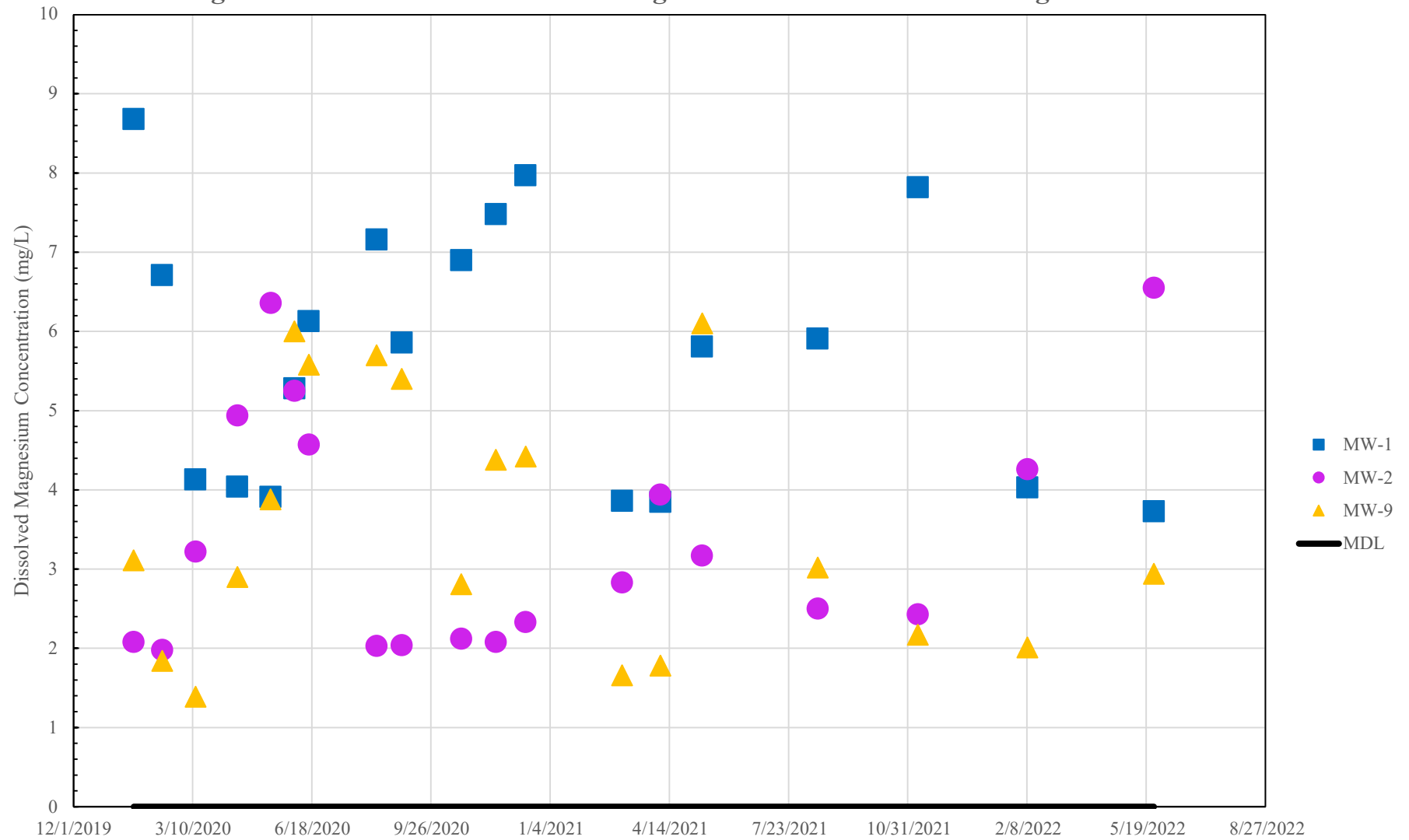


Figure 14 Groundwater Dissolved Manganese Concentrations During Rebound Test

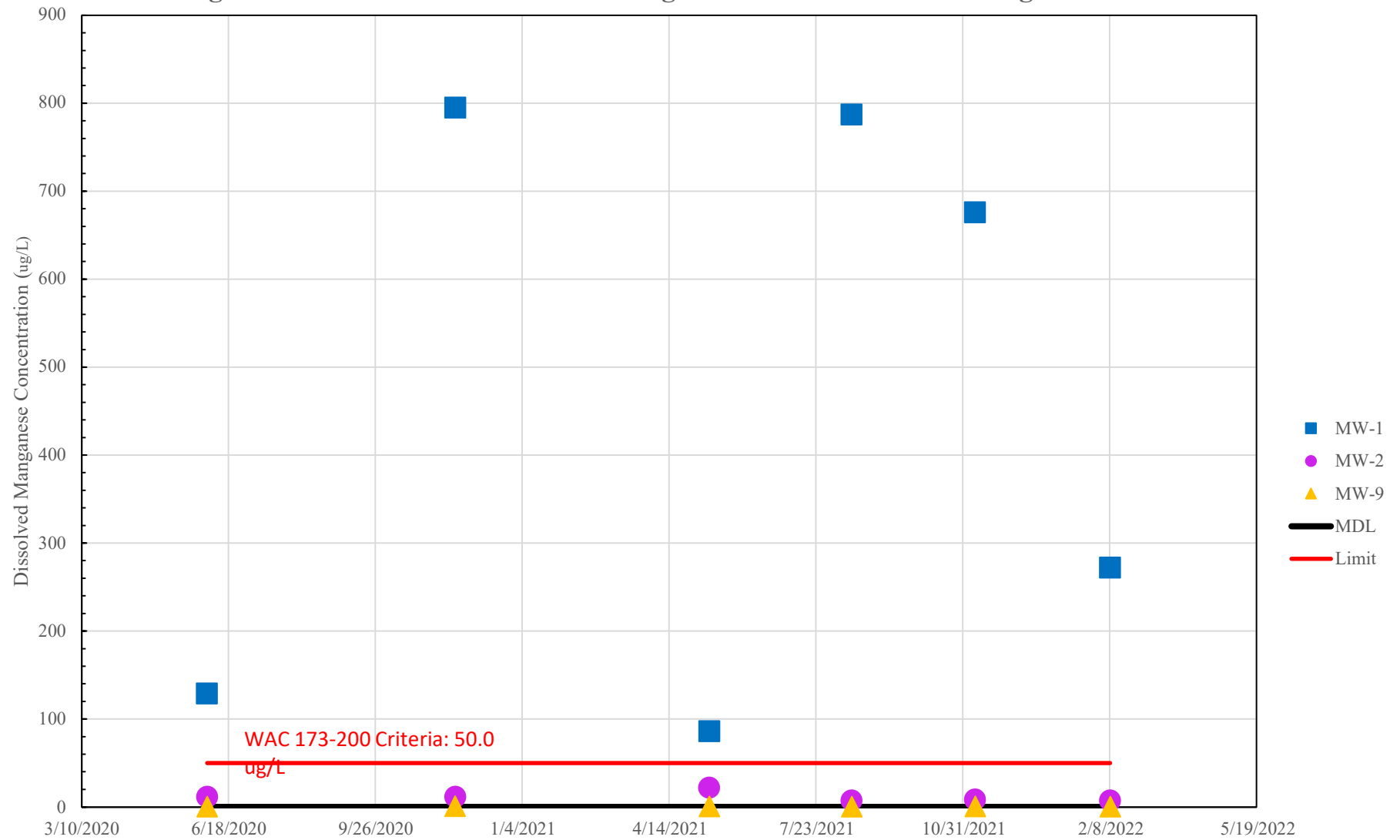
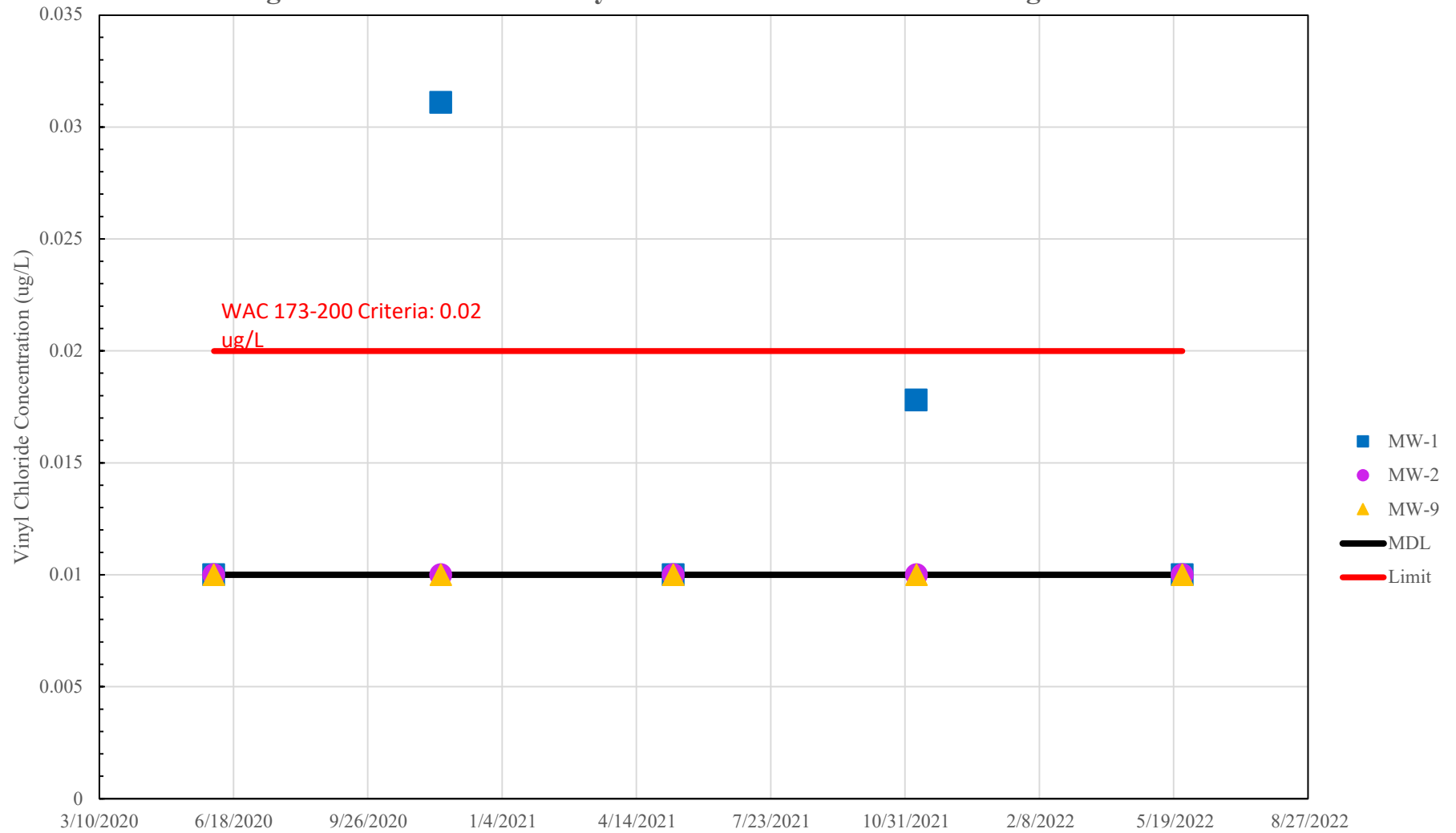


Figure 15 Groundwater Vinyl Chloride Concentrations During Rebound Test



Appendix A

Landfill Gas Data

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
Ambient 1	KCSWD	04/2/2020	0.00	0.10	20.30	--	-0.02
Ambient 1	KCSWD	07/14/2020	0.00	0.20	20.90	--	0.01
Ambient 1	KCSWD	10/7/2020	0.00	0.20	20.10	--	-0.07
Ambient 1	KCSWD	01/11/2021	0.00	0.10	20.50	--	0.00
Ambient 1	KCSWD	04/1/2021	0.00	0.10	20.80	--	0.02
Ambient 1	KCSWD	07/8/2021	0.00	0.10	20.80	--	0.00
Ambient 1	KCSWD	10/12/2021	0.00	0.10	20.10	--	0.01
Ambient 1	KCSWD	01/26/2022	0.00	0.10	19.10	--	0.00
Ambient 1	KCSWD	04/7/2022	0.00	0.10	20.70	--	-0.01
Ambient 1	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient 2	KCSWD	01/2/2020	0.00	0.30	21.00	--	-0.05
Ambient 2	KCSWD	04/2/2020	0.00	0.10	20.30	--	-0.11
Ambient 2	KCSWD	07/14/2020	0.00	0.20	21.00	--	0.03
Ambient 2	KCSWD	10/7/2020	0.00	0.20	20.60	--	-0.02
Ambient 2	KCSWD	01/11/2021	0.00	0.10	20.40	--	-0.02
Ambient 2	KCSWD	04/1/2021	0.00	0.10	20.00	--	0.07
Ambient 2	KCSWD	07/8/2021	0.00	0.20	20.70	--	0.00
Ambient 2	KCSWD	10/12/2021	0.00	0.30	19.90	--	0.04
Ambient 2	KCSWD	01/26/2022	0.00	0.20	20.70	--	0.00
Ambient 2	KCSWD	04/7/2022	0.00	0.20	20.90	--	0.00
Ambient 2	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient 3	KCSWD	01/2/2020	0.00	0.20	21.00	--	-0.02
Ambient 3	KCSWD	04/2/2020	0.00	0.10	19.90	--	-0.03
Ambient 3	KCSWD	07/14/2020	0.00	0.20	21.10	--	0.01
Ambient 3	KCSWD	10/7/2020	0.00	0.10	18.10	--	0.01
Ambient 3	KCSWD	01/11/2021	0.00	0.10	19.80	--	0.00
Ambient 3	KCSWD	04/1/2021	0.00	0.10	20.60	--	0.09
Ambient 3	KCSWD	07/8/2021	0.00	0.10	20.80	--	0.00
Ambient 3	KCSWD	10/12/2021	0.00	0.10	20.00	--	0.00
Ambient 3	KCSWD	01/26/2022	0.00	0.10	19.40	--	-0.01
Ambient 3	KCSWD	04/7/2022	0.00	0.10	21.00	--	0.01
Ambient 3	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient 4	KCSWD	01/2/2020	0.00	0.20	20.80	--	-0.03
Ambient 4	KCSWD	04/2/2020	0.00	0.10	20.40	--	-0.24
Ambient 4	KCSWD	07/14/2020	0.00	0.10	21.10	--	0.02
Ambient 4	KCSWD	10/7/2020	0.00	0.10	18.40	--	-0.05
Ambient 4	KCSWD	01/11/2021	0.00	0.10	20.40	--	0.00
Ambient 4	KCSWD	04/1/2021	0.00	0.10	20.50	--	0.04
Ambient 4	KCSWD	10/12/2021	0.00	0.10	20.10	--	0.02
Ambient 4	KCSWD	01/26/2022	0.00	0.10	19.20	--	0.00
Ambient 4	KCSWD	04/7/2022	0.00	0.00	20.40	--	0.00
Ambient 4	KCSWD	07/21/2022	0.00	0.20	21.00	--	0.00
Ambient 4	KCSWD	07/8/2021	0.00	0.20	20.70	--	0.00
Ambient 5	KCSWD	01/2/2020	0.00	0.20	20.80	--	0.01
Ambient 5	KCSWD	04/2/2020	0.00	0.10	20.10	--	0.01
Ambient 5	KCSWD	07/14/2020	0.00	0.20	21.00	--	0.03
Ambient 5	KCSWD	10/7/2020	0.00	0.10	19.30	--	0.07

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
Ambient 5	KCSWD	01/11/2021	0.00	0.10	20.20	--	0.00
Ambient 5	KCSWD	04/1/2021	0.00	0.10	20.20	--	0.06
Ambient 5	KCSWD	07/8/2021	0.00	0.20	20.70	--	0.00
Ambient 5	KCSWD	10/12/2021	0.00	0.10	20.00	--	-0.01
Ambient 5	KCSWD	01/26/2022	0.00	0.10	19.00	--	-0.03
Ambient 5	KCSWD	04/7/2022	0.00	0.00	20.40	--	-0.01
Ambient 5	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient 6	KCSWD	01/2/2020	0.00	0.20	21.00	--	-0.02
Ambient 6	KCSWD	04/2/2020	0.00	0.10	20.30	--	-0.12
Ambient 6	KCSWD	07/14/2020	0.00	0.20	20.60	--	-0.01
Ambient 6	KCSWD	10/7/2020	0.00	0.20	20.30	--	-0.10
Ambient 6	KCSWD	01/11/2021	0.00	0.10	20.50	--	0.08
Ambient 6	KCSWD	04/1/2021	0.00	0.10	20.90	--	0.07
Ambient 6	KCSWD	07/8/2021	0.00	0.10	20.70	--	0.00
Ambient 6	KCSWD	10/12/2021	0.00	0.10	20.10	--	-0.02
Ambient 6	KCSWD	01/26/2022	0.00	0.10	18.70	--	0.04
Ambient 6	KCSWD	04/7/2022	0.00	0.10	21.00	--	0.00
Ambient 6	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient 7	KCSWD	01/2/2020	0.00	0.20	20.60	--	-0.01
Ambient 7	KCSWD	04/2/2020	0.00	0.10	20.40	--	-0.26
Ambient 7	KCSWD	07/14/2020	0.00	0.20	20.70	--	0.03
Ambient 7	KCSWD	10/7/2020	0.00	0.20	20.60	--	-0.21
Ambient 7	KCSWD	01/11/2021	0.00	0.10	20.50	--	0.00
Ambient 7	KCSWD	04/1/2021	0.00	0.10	21.00	--	0.04
Ambient 7	KCSWD	07/8/2021	0.00	0.10	20.80	--	0.00
Ambient 7	KCSWD	10/12/2021	0.00	0.10	20.10	--	0.00
Ambient 7	KCSWD	01/26/2022	0.00	0.10	18.90	--	0.02
Ambient 7	KCSWD	04/7/2022	0.00	0.10	21.00	--	-0.01
Ambient 7	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient 8	KCSWD	01/2/2020	0.00	0.30	20.90	--	-0.07
Ambient 8	KCSWD	04/2/2020	0.00	0.10	20.40	--	-0.16
Ambient 8	KCSWD	07/14/2020	0.00	0.20	20.80	--	0.02
Ambient 8	KCSWD	10/7/2020	0.00	0.10	21.00	--	-0.08
Ambient 8	KCSWD	01/11/2021	0.00	0.10	20.50	--	-0.03
Ambient 8	KCSWD	04/1/2021	0.00	0.10	21.00	--	0.06
Ambient 8	KCSWD	07/8/2021	0.00	0.10	20.80	--	0.00
Ambient 8	KCSWD	10/12/2021	0.00	0.20	20.20	--	-0.02
Ambient 8	KCSWD	01/26/2022	0.00	0.10	18.60	--	0.02
Ambient 8	KCSWD	04/7/2022	0.00	0.10	20.90	--	-0.03
Ambient 8	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient PMP	KCSWD	01/2/2020	0.00	0.20	21.00	--	-0.05
Ambient PMP	KCSWD	04/2/2020	0.00	0.10	20.00	--	0.02
Ambient PMP	KCSWD	07/14/2020	0.00	0.20	21.10	--	0.01
Ambient PMP	KCSWD	10/7/2020	0.00	0.20	19.90	--	0.05
Ambient PMP	KCSWD	01/11/2021	0.00	0.10	20.50	--	0.03
Ambient PMP	KCSWD	04/1/2021	0.00	0.20	20.90	--	-0.02
Ambient PMP	KCSWD	07/8/2021	0.00	0.10	20.70	--	0.00

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
Ambient PMP	KCSWD	10/12/2021	0.00	0.10	20.10	--	0.03
Ambient PMP	KCSWD	01/26/2022	0.00	0.10	18.90	--	0.02
Ambient PMP	KCSWD	04/7/2022	0.00	0.10	21.00	--	-0.01
Ambient PMP	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient TBE	KCSWD	01/2/2020	0.00	0.20	20.80	--	-0.01
Ambient TBE	KCSWD	04/2/2020	0.00	0.10	19.90	--	0.02
Ambient TBE	KCSWD	07/14/2020	0.00	0.10	21.10	--	0.04
Ambient TBE	KCSWD	10/7/2020	0.00	0.10	19.90	--	0.10
Ambient TBE	KCSWD	01/11/2021	0.00	0.10	19.40	--	0.00
Ambient TBE	KCSWD	04/1/2021	0.00	0.10	20.50	--	0.11
Ambient TBE	KCSWD	07/8/2021	0.00	0.10	20.80	--	0.00
Ambient TBE	KCSWD	10/12/2021	0.00	0.10	20.10	--	0.02
Ambient TBE	KCSWD	01/26/2022	0.00	0.10	18.20	--	0.00
Ambient TBE	KCSWD	04/7/2022	0.00	0.10	21.00	--	-0.04
Ambient TBE	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
Ambient TBN	KCSWD	01/2/2020	0.00	0.20	19.70	--	0.00
Ambient TBN	KCSWD	04/2/2020	0.00	0.10	19.90	--	-0.05
Ambient TBN	KCSWD	07/14/2020	0.00	0.20	21.10	--	-0.01
Ambient TBN	KCSWD	10/7/2020	0.00	0.10	20.80	--	0.02
Ambient TBN	KCSWD	01/11/2021	0.00	0.10	19.60	--	-0.02
Ambient TBN	KCSWD	04/1/2021	0.00	0.10	20.60	--	0.08
Ambient TBN	KCSWD	07/8/2021	0.00	0.10	20.80	--	0.00
Ambient TBN	KCSWD	10/12/2021	0.00	0.10	20.00	--	0.02
Ambient TBN	KCSWD	01/26/2022	0.00	0.10	19.40	--	0.00
Ambient TBN	KCSWD	04/7/2022	0.00	0.10	21.00	--	-0.03
Ambient TBN	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
GP-10D	Aspect	12/17/2019	0.00	7.00	11.60	30.01	-10.28
GP-10D	KCSWD	01/2/2020	0.00	7.30	9.80	--	-10.28
GP-10D	Aspect	01/15/2020	0.00	9.50	5.00	30.12	-13.05
GP-10D	KCSWD	02/3/2020	0.00	9.10	4.50	--	-13.05
GP-10D	Aspect	02/13/2020	0.00	11.40	1.30	30.10	-3.02
GP-10D	KCSWD	03/3/2020	0.00	10.40	3.00	--	-3.02
GP-10D	Aspect	03/12/2020	0.00	12.30	0.00	30.06	-1.27
GP-10D	KCSWD	04/2/2020	0.00	11.30	2.00	--	-1.27
GP-10D	Aspect	04/16/2020	0.00	5.90	10.10	30.31	0.29
GP-10D	KCSWD	05/7/2020	0.00	9.80	4.70	--	0.29
GP-10D	Aspect	05/14/2020	0.00	11.60	2.50	30.02	-1.45
GP-10D	KCSWD	06/4/2020	0.00	10.00	6.40	--	-1.45
GP-10D	Aspect	06/15/2020	0.00	11.00	4.60	29.21	-0.08
GP-10D	KCSWD	07/14/2020	0.00	9.40	8.50	--	0.25
GP-10D	KCSWD	08/6/2020	0.00	8.40	10.30	--	-0.10
GP-10D	KCSWD	09/22/2020	0.00	7.10	12.00	--	0.08
GP-10D	KCSWD	10/7/2020	0.00	7.70	20.60	--	-0.03
GP-10D	KCSWD	11/6/2020	0.00	7.80	11.20	--	0.00
GP-10D	KCSWD	12/17/2020	0.00	3.90	16.50	--	0.06
GP-10D	KCSWD	01/11/2021	0.00	5.00	13.00	--	0.00
GP-10D	KCSWD	02/11/2021	0.00	8.90	8.80	--	0.04

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-10D	KCSWD	03/16/2021	0.00	5.70	11.10	--	0.01
GP-10D	KCSWD	04/1/2021	0.00	5.70	10.50	--	-0.06
GP-10D	KCSWD	05/14/2021	0.00	7.30	9.00	--	0.04
GP-10D	KCSWD	06/17/2021	0.00	8.20	9.20	--	-0.03
GP-10D	KCSWD	07/8/2021	0.00	6.90	10.10	--	0.02
GP-10D	KCSWD	08/26/2021	0.00	7.80	10.50	--	0.09
GP-10D	KCSWD	09/10/2021	0.00	5.10	15.20	--	-0.03
GP-10D	KCSWD	10/12/2021	0.00	7.70	7.80	--	-5.32
GP-10D	KCSWD	11/2/2021	0.00	7.50	12.50	--	-6.33
GP-10D	KCSWD	12/9/2021	0.00	9.00	8.40	--	-4.08
GP-10D	KCSWD	01/26/2022	0.00	10.10	6.30	--	0.04
GP-10D	KCSWD	02/10/2022	0.00	9.70	2.90	--	0.07
GP-10D	KCSWD	03/1/2022	0.00	10.90	2.20	--	-0.12
GP-10D	KCSWD	04/7/2022	0.00	11.50	0.20	--	-0.01
GP-10D	KCSWD	05/3/2022	0.00	11.40	0.50	--	-0.13
GP-10D	KCSWD	06/30/2022	0.00	9.10	6.10	--	-0.08
GP-10D	KCSWD	07/21/2022	0.00	9.10	4.60	--	0.03
GP-10I	Aspect	12/17/2019	0.00	4.10	16.70	30.01	-0.01
GP-10I	KCSWD	01/2/2020	0.00	4.30	15.80	--	-0.01
GP-10I	Aspect	01/15/2020	--	--	--	30.12	-0.02
GP-10I	KCSWD	02/3/2020	0.00	4.60	11.40	--	-0.02
GP-10I	Aspect	02/13/2020	0.00	4.70	10.10	30.10	0.07
GP-10I	KCSWD	03/3/2020	0.00	4.00	12.30	--	0.07
GP-10I	Aspect	03/12/2020	0.00	3.40	13.80	30.06	-0.09
GP-10I	KCSWD	04/2/2020	0.00	2.90	15.20	--	-0.09
GP-10I	Aspect	04/16/2020	0.00	1.70	17.30	30.31	0.13
GP-10I	KCSWD	05/7/2020	0.00	3.00	15.50	--	0.13
GP-10I	Aspect	05/14/2020	0.00	3.40	14.10	30.02	-0.07
GP-10I	KCSWD	06/4/2020	0.00	3.90	15.70	--	-0.07
GP-10I	Aspect	06/15/2020	0.00	3.40	14.80	29.19	-0.08
GP-10I	KCSWD	07/14/2020	0.00	4.60	15.50	--	0.02
GP-10I	KCSWD	08/6/2020	0.00	3.10	17.80	--	-0.05
GP-10I	KCSWD	09/22/2020	0.00	3.90	16.70	--	0.01
GP-10I	KCSWD	10/7/2020	0.00	3.20	20.60	--	-0.06
GP-10I	KCSWD	11/6/2020	0.00	2.80	17.80	--	0.01
GP-10I	KCSWD	12/17/2020	0.00	2.40	19.40	--	0.03
GP-10I	KCSWD	01/11/2021	0.00	5.40	12.00	--	0.00
GP-10I	KCSWD	02/11/2021	0.00	2.80	18.90	--	-0.01
GP-10I	KCSWD	03/16/2021	0.00	2.90	15.20	--	0.02
GP-10I	KCSWD	04/1/2021	0.00	2.80	14.60	--	0.13
GP-10I	KCSWD	05/14/2021	0.00	3.20	15.70	--	0.06
GP-10I	KCSWD	06/17/2021	0.00	2.80	17.30	--	0.02
GP-10I	KCSWD	07/8/2021	0.00	2.20	17.80	--	0.00
GP-10I	KCSWD	08/26/2021	0.00	1.70	19.90	--	0.08
GP-10I	KCSWD	09/10/2021	0.00	2.30	19.30	--	-0.04
GP-10I	KCSWD	10/12/2021	0.00	2.80	17.20	--	0.03
GP-10I	KCSWD	11/2/2021	0.00	2.80	18.10	--	0.00

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-10I	KCSWD	12/9/2021	0.00	2.80	19.70	--	-0.02
GP-10I	KCSWD	01/26/2022	0.00	3.10	14.80	--	-0.01
GP-10I	KCSWD	02/10/2022	0.00	3.10	13.60	--	-0.01
GP-10I	KCSWD	03/1/2022	0.00	3.50	14.10	--	0.06
GP-10I	KCSWD	04/7/2022	0.00	3.40	11.80	--	-0.03
GP-10I	KCSWD	05/3/2022	0.00	3.40	14.50	--	0.24
GP-10I	KCSWD	06/30/2022	0.00	4.30	11.70	--	-0.11
GP-10I	KCSWD	07/21/2022	0.00	4.40	13.40	--	0.20
GP-10S	Aspect	12/17/2019	0.00	5.10	16.90	30.01	0.02
GP-10S	KCSWD	01/2/2020	0.00	3.80	19.10	--	0.02
GP-10S	Aspect	01/15/2020	0.00	2.80	18.40	30.12	-0.04
GP-10S	KCSWD	02/3/2020	0.00	3.70	17.40	--	-0.04
GP-10S	Aspect	02/13/2020	0.00	3.70	15.20	30.10	0.08
GP-10S	KCSWD	03/3/2020	0.00	3.10	17.70	--	0.08
GP-10S	Aspect	03/12/2020	0.00	3.40	17.10	30.06	-0.04
GP-10S	KCSWD	04/2/2020	0.00	3.60	16.90	--	-0.04
GP-10S	Aspect	04/16/2020	0.00	2.50	17.60	30.31	0.10
GP-10S	KCSWD	05/7/2020	0.00	4.60	15.90	--	0.10
GP-10S	Aspect	05/14/2020	0.00	6.10	12.20	30.02	0.02
GP-10S	KCSWD	06/4/2020	0.00	6.40	12.60	--	0.02
GP-10S	Aspect	06/15/2020	0.00	6.70	11.70	29.26	0.00
GP-10S	KCSWD	07/14/2020	0.00	7.20	13.30	--	0.04
GP-10S	KCSWD	08/6/2020	0.00	6.00	15.40	--	-0.05
GP-10S	KCSWD	09/22/2020	0.00	7.00	13.80	--	-0.01
GP-10S	KCSWD	10/7/2020	0.00	5.50	20.10	--	-0.06
GP-10S	KCSWD	11/6/2020	0.00	7.00	13.60	--	0.04
GP-10S	KCSWD	12/17/2020	0.00	3.30	19.40	--	0.04
GP-10S	KCSWD	01/11/2021	0.00	3.60	16.10	--	-0.04
GP-10S	KCSWD	02/11/2021	0.00	2.20	21.00	--	0.01
GP-10S	KCSWD	03/16/2021	0.00	2.70	18.20	--	0.02
GP-10S	KCSWD	04/1/2021	0.00	2.70	17.00	--	0.04
GP-10S	KCSWD	05/14/2021	0.00	4.70	15.40	--	0.03
GP-10S	KCSWD	06/17/2021	0.00	5.80	14.20	--	0.01
GP-10S	KCSWD	07/8/2021	0.00	6.20	14.10	--	-0.01
GP-10S	KCSWD	08/26/2021	0.00	6.20	14.60	--	0.03
GP-10S	KCSWD	09/10/2021	0.00	5.90	16.90	--	-0.01
GP-10S	KCSWD	10/12/2021	0.00	5.40	16.00	--	-0.36
GP-10S	KCSWD	11/2/2021	0.00	6.60	14.60	--	0.08
GP-10S	KCSWD	12/9/2021	0.00	5.10	17.00	--	0.00
GP-10S	KCSWD	01/26/2022	0.00	2.40	18.40	--	0.03
GP-10S	KCSWD	02/10/2022	0.00	2.30	18.50	--	0.02
GP-10S	KCSWD	03/1/2022	0.00	2.60	17.40	--	0.00
GP-10S	KCSWD	04/7/2022	0.00	2.00	19.00	--	0.00
GP-10S	KCSWD	05/3/2022	0.00	3.80	16.60	--	-0.18
GP-10S	KCSWD	06/30/2022	0.00	6.60	9.80	--	0.08
GP-10S	KCSWD	07/21/2022	0.00	6.90	11.20	--	0.01
GP-15D	Aspect	12/17/2019	0.00	0.20	21.70	30.01	-0.03

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-15D	KCSWD	01/2/2020	0.00	7.40	10.60	--	-0.03
GP-15D	Aspect	01/15/2020	0.00	8.40	7.90	30.12	0.09
GP-15D	KCSWD	02/3/2020	0.00	7.80	8.30	--	0.09
GP-15D	Aspect	02/13/2020	0.00	9.80	2.90	30.10	-0.01
GP-15D	KCSWD	03/3/2020	0.00	8.50	5.30	--	-0.01
GP-15D	Aspect	03/12/2020	0.00	9.70	2.40	30.06	-0.01
GP-15D	KCSWD	04/2/2020	0.00	7.50	6.00	--	-0.01
GP-15D	Aspect	04/16/2020	0.00	8.30	3.30	30.31	0.11
GP-15D	KCSWD	05/7/2020	0.00	7.20	4.70	--	0.11
GP-15D	Aspect	05/14/2020	0.00	8.00	3.20	30.02	0.14
GP-15D	KCSWD	06/4/2020	0.00	7.40	6.00	--	0.14
GP-15D	Aspect	06/15/2020	0.00	5.00	9.50	29.26	-0.04
GP-15D	KCSWD	07/14/2020	0.00	7.30	7.10	--	0.02
GP-15D	KCSWD	08/6/2020	0.00	7.30	8.20	--	-0.02
GP-15D	KCSWD	09/22/2020	0.00	7.10	8.30	--	0.00
GP-15D	KCSWD	10/7/2020	0.00	7.80	20.30	--	0.38
GP-15D	KCSWD	11/6/2020	0.00	8.30	6.80	--	-0.01
GP-15D	KCSWD	12/17/2020	0.00	7.60	7.80	--	0.03
GP-15D	KCSWD	01/11/2021	0.00	8.30	5.70	--	-0.04
GP-15D	KCSWD	02/11/2021	0.00	8.80	9.30	--	0.05
GP-15D	KCSWD	03/16/2021	0.00	8.80	5.20	--	0.00
GP-15D	KCSWD	04/1/2021	0.00	8.20	4.90	--	0.32
GP-15D	KCSWD	05/14/2021	0.00	7.50	8.90	--	0.00
GP-15D	KCSWD	06/17/2021	0.00	7.10	7.90	--	0.07
GP-15D	KCSWD	07/8/2021	0.00	7.50	6.90	--	-0.01
GP-15D	KCSWD	08/26/2021	0.00	7.80	10.70	--	0.10
GP-15D	KCSWD	09/10/2021	0.00	8.40	10.00	--	-0.02
GP-15D	KCSWD	10/12/2021	0.00	8.80	4.80	--	0.04
GP-15D	KCSWD	11/2/2021	0.00	7.60	9.40	--	0.03
GP-15D	KCSWD	12/9/2021	0.00	9.50	6.50	--	0.00
GP-15D	KCSWD	01/26/2022	0.00	9.50	6.80	--	0.02
GP-15D	KCSWD	02/10/2022	0.00	8.80	4.40	--	0.00
GP-15D	KCSWD	03/1/2022	0.00	9.80	3.20	--	0.03
GP-15D	KCSWD	04/7/2022	0.00	9.20	1.40	--	0.01
GP-15D	KCSWD	05/3/2022	0.00	8.90	3.00	--	-0.03
GP-15D	KCSWD	06/30/2022	0.00	7.20	5.10	--	-0.06
GP-15D	KCSWD	07/21/2022	0.00	7.10	4.90	--	0.03
GP-15S	Aspect	12/17/2019	0.00	7.60	8.60	30.01	-0.02
GP-15S	KCSWD	01/2/2020	0.00	0.30	20.70	--	-0.02
GP-15S	Aspect	01/15/2020	0.00	0.30	21.10	30.12	0.09
GP-15S	KCSWD	02/3/2020	0.00	0.20	21.00	--	0.09
GP-15S	Aspect	02/13/2020	0.00	0.30	20.40	30.10	0.03
GP-15S	KCSWD	03/3/2020	0.00	0.20	21.00	--	0.03
GP-15S	Aspect	03/12/2020	0.00	0.20	20.50	30.06	-2.54
GP-15S	KCSWD	04/2/2020	0.00	0.10	20.30	--	-2.54
GP-15S	Aspect	04/16/2020	0.00	0.20	20.50	30.31	0.18
GP-15S	KCSWD	05/7/2020	0.00	0.20	20.60	--	0.18

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-15S	Aspect	05/14/2020	0.00	0.30	19.80	30.02	0.17
GP-15S	KCSWD	06/4/2020	0.00	0.30	20.80	--	0.17
GP-15S	Aspect	06/15/2020	0.00	0.10	20.00	29.25	-0.05
GP-15S	KCSWD	07/14/2020	0.00	0.30	20.80	--	0.01
GP-15S	KCSWD	08/6/2020	0.00	0.30	20.80	--	-0.13
GP-15S	KCSWD	09/22/2020	0.00	0.20	21.00	--	0.01
GP-15S	KCSWD	10/7/2020	0.00	0.40	20.70	--	-0.15
GP-15S	KCSWD	11/6/2020	0.00	0.30	20.80	--	-0.02
GP-15S	KCSWD	12/17/2020	0.00	0.30	21.00	--	0.04
GP-15S	KCSWD	01/11/2021	0.00	0.20	20.50	--	0.08
GP-15S	KCSWD	02/11/2021	0.00	0.30	20.60	--	0.04
GP-15S	KCSWD	03/16/2021	0.00	0.20	21.00	--	0.03
GP-15S	KCSWD	04/1/2021	0.00	0.10	20.50	--	0.09
GP-15S	KCSWD	05/14/2021	0.00	0.30	20.70	--	0.09
GP-15S	KCSWD	06/17/2021	0.00	0.30	20.70	--	0.07
GP-15S	KCSWD	07/8/2021	0.00	0.20	20.70	--	-0.02
GP-15S	KCSWD	08/26/2021	0.00	0.30	19.90	--	0.07
GP-15S	KCSWD	09/10/2021	0.00	0.30	19.90	--	0.03
GP-15S	KCSWD	10/12/2021	0.00	0.20	19.80	--	0.13
GP-15S	KCSWD	11/2/2021	0.00	0.90	14.90	--	0.03
GP-15S	KCSWD	12/9/2021	0.00	0.50	19.60	--	0.02
GP-15S	KCSWD	01/26/2022	0.00	0.30	18.30	--	0.00
GP-15S	KCSWD	02/10/2022	0.00	0.20	20.90	--	0.00
GP-15S	KCSWD	03/1/2022	0.00	0.20	20.60	--	-0.01
GP-15S	KCSWD	04/7/2022	0.00	0.20	20.80	--	0.03
GP-15S	KCSWD	05/3/2022	0.00	0.20	21.00	--	-0.03
GP-15S	KCSWD	06/30/2022	0.00	0.10	19.60	--	-0.03
GP-15S	KCSWD	07/21/2022	0.00	0.20	20.80	--	0.01
GP-16D	KCSWD	01/2/2020	0.00	0.80	20.40	--	0.04
GP-16D	KCSWD	02/3/2020	0.00	0.80	20.30	--	0.01
GP-16D	KCSWD	03/3/2020	0.00	1.50	19.10	--	-0.01
GP-16D	KCSWD	04/2/2020	0.00	0.70	18.80	--	0.71
GP-16D	KCSWD	05/7/2020	0.00	0.30	20.20	--	0.14
GP-16D	KCSWD	06/4/2020	0.00	0.50	20.50	--	-0.03
GP-16D	KCSWD	07/14/2020	0.00	0.50	20.60	--	0.03
GP-16D	KCSWD	08/6/2020	0.00	0.30	20.70	--	-0.02
GP-16D	KCSWD	09/22/2020	0.00	0.20	20.60	--	0.09
GP-16D	KCSWD	10/7/2020	0.00	0.40	20.80	--	-0.03
GP-16D	KCSWD	11/6/2020	0.00	0.50	20.40	--	0.01
GP-16D	KCSWD	12/17/2020	0.00	0.30	21.00	--	0.06
GP-16D	KCSWD	01/11/2021	0.00	1.10	19.20	--	0.11
GP-16D	KCSWD	02/11/2021	0.00	1.10	19.10	--	-0.02
GP-16D	KCSWD	03/16/2021	0.00	0.90	19.30	--	0.03
GP-16D	KCSWD	04/1/2021	0.00	0.80	18.60	--	0.10
GP-16D	KCSWD	05/14/2021	0.00	0.40	20.70	--	0.06
GP-16D	KCSWD	06/17/2021	0.00	0.20	21.00	--	-0.03
GP-16D	KCSWD	07/8/2021	0.00	0.30	20.60	--	0.00

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-16D	KCSWD	08/26/2021	0.00	0.20	20.50	--	0.04
GP-16D	KCSWD	09/10/2021	0.00	0.20	20.20	--	0.00
GP-16D	KCSWD	10/12/2021	0.00	0.40	19.60	--	0.01
GP-16D	KCSWD	11/2/2021	0.00	0.80	20.60	--	0.00
GP-16D	KCSWD	12/9/2021	0.00	0.70	20.50	--	0.01
GP-16D	KCSWD	01/26/2022	0.00	0.80	18.50	--	0.01
GP-16D	KCSWD	02/10/2022	0.00	0.60	19.60	--	0.01
GP-16D	KCSWD	03/1/2022	0.00	1.20	18.90	--	-0.04
GP-16D	KCSWD	04/7/2022	0.00	0.40	19.10	--	0.07
GP-16D	KCSWD	05/3/2022	0.00	0.80	19.40	--	0.02
GP-16D	KCSWD	06/30/2022	0.00	0.50	18.80	--	-0.05
GP-16D	KCSWD	07/21/2022	0.00	0.30	20.40	--	-0.03
GP-16I	KCSWD	01/2/2020	0.00	1.80	19.60	--	0.01
GP-16I	KCSWD	02/3/2020	0.00	1.50	20.00	--	0.03
GP-16I	KCSWD	03/3/2020	0.00	1.70	18.90	--	0.00
GP-16I	KCSWD	04/2/2020	0.00	1.60	18.30	--	0.02
GP-16I	KCSWD	05/7/2020	0.00	1.30	19.10	--	0.13
GP-16I	KCSWD	06/4/2020	0.00	1.60	19.50	--	-0.05
GP-16I	KCSWD	07/14/2020	0.00	1.70	19.60	--	0.00
GP-16I	KCSWD	08/6/2020	0.00	1.50	19.80	--	-0.02
GP-16I	KCSWD	09/22/2020	0.00	1.20	19.80	--	0.04
GP-16I	KCSWD	10/7/2020	0.00	1.20	19.40	--	0.00
GP-16I	KCSWD	11/6/2020	0.00	1.30	19.80	--	-0.01
GP-16I	KCSWD	12/17/2020	0.00	1.20	20.50	--	0.03
GP-16I	KCSWD	01/11/2021	0.00	1.60	19.00	--	0.08
GP-16I	KCSWD	02/11/2021	0.00	1.50	19.20	--	0.06
GP-16I	KCSWD	03/16/2021	0.00	1.30	19.30	--	0.05
GP-16I	KCSWD	04/1/2021	0.00	1.20	18.80	--	0.09
GP-16I	KCSWD	05/14/2021	0.00	1.40	19.70	--	0.04
GP-16I	KCSWD	06/17/2021	0.00	0.20	21.00	--	-0.02
GP-16I	KCSWD	07/8/2021	0.00	1.30	19.80	--	0.02
GP-16I	KCSWD	08/26/2021	0.00	1.20	20.30	--	0.03
GP-16I	KCSWD	09/10/2021	0.00	1.20	19.90	--	0.01
GP-16I	KCSWD	10/12/2021	0.00	1.20	19.00	--	-0.01
GP-16I	KCSWD	11/2/2021	0.00	1.10	20.50	--	0.02
GP-16I	KCSWD	12/9/2021	0.00	1.50	19.90	--	-0.02
GP-16I	KCSWD	01/26/2022	0.00	1.30	18.40	--	0.00
GP-16I	KCSWD	02/10/2022	0.00	1.20	19.70	--	0.02
GP-16I	KCSWD	03/1/2022	0.00	1.50	19.40	--	0.07
GP-16I	KCSWD	04/7/2022	0.00	1.10	18.60	--	0.01
GP-16I	KCSWD	05/3/2022	0.00	1.50	19.00	--	-0.01
GP-16I	KCSWD	06/30/2022	0.00	1.40	18.00	--	-0.11
GP-16I	KCSWD	07/21/2022	0.00	1.50	19.50	--	0.09
GP-16S	KCSWD	01/2/2020	0.00	2.30	19.40	--	-0.02
GP-16S	KCSWD	02/3/2020	0.00	2.00	19.30	--	0.00
GP-16S	KCSWD	03/3/2020	0.00	2.20	19.00	--	0.00
GP-16S	KCSWD	04/2/2020	0.00	2.00	17.90	--	0.05

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-16S	KCSWD	05/7/2020	0.00	1.70	18.50	--	0.14
GP-16S	KCSWD	06/4/2020	0.00	2.10	19.00	--	-0.02
GP-16S	KCSWD	07/14/2020	0.00	2.20	19.10	--	0.03
GP-16S	KCSWD	08/6/2020	0.00	2.20	19.30	--	0.00
GP-16S	KCSWD	09/22/2020	0.00	1.90	19.40	--	-0.01
GP-16S	KCSWD	10/7/2020	0.00	1.90	20.50	--	0.10
GP-16S	KCSWD	11/6/2020	0.00	2.00	19.00	--	0.83
GP-16S	KCSWD	12/17/2020	0.00	1.70	19.80	--	0.04
GP-16S	KCSWD	01/11/2021	0.00	1.90	18.80	--	0.10
GP-16S	KCSWD	02/11/2021	0.00	1.80	18.20	--	0.00
GP-16S	KCSWD	03/16/2021	0.00	1.80	18.90	--	0.04
GP-16S	KCSWD	04/1/2021	0.00	1.60	18.40	--	0.11
GP-16S	KCSWD	05/14/2021	0.00	1.70	19.20	--	0.00
GP-16S	KCSWD	06/17/2021	0.00	1.60	20.30	--	-0.03
GP-16S	KCSWD	07/8/2021	0.00	1.80	19.20	--	-0.01
GP-16S	KCSWD	08/26/2021	0.00	1.80	19.70	--	0.02
GP-16S	KCSWD	09/10/2021	0.00	2.10	19.70	--	0.02
GP-16S	KCSWD	10/12/2021	0.00	1.90	18.50	--	0.01
GP-16S	KCSWD	11/2/2021	0.00	1.80	19.80	--	0.02
GP-16S	KCSWD	12/9/2021	0.00	2.30	19.30	--	0.01
GP-16S	KCSWD	01/26/2022	0.00	1.90	18.50	--	0.00
GP-16S	KCSWD	02/10/2022	0.00	1.70	18.80	--	0.00
GP-16S	KCSWD	03/1/2022	0.00	2.00	19.00	--	0.03
GP-16S	KCSWD	04/7/2022	0.00	1.50	18.50	--	0.07
GP-16S	KCSWD	05/3/2022	0.00	2.00	18.60	--	0.01
GP-16S	KCSWD	06/30/2022	0.00	1.90	17.30	--	-0.11
GP-16S	KCSWD	07/21/2022	0.00	2.20	18.60	--	0.02
GP-17	KCSWD	01/2/2020	0.00	2.90	20.40	--	0.02
GP-17	KCSWD	02/3/2020	0.00	2.60	18.40	--	0.01
GP-17	KCSWD	03/3/2020	0.00	1.10	18.90	--	0.02
GP-17	KCSWD	04/2/2020	0.00	0.10	20.50	--	-0.09
GP-17	KCSWD	05/7/2020	0.00	2.40	17.40	--	0.09
GP-17	KCSWD	06/4/2020	0.00	2.90	17.00	--	0.14
GP-17	KCSWD	07/14/2020	0.00	2.80	16.70	--	-0.02
GP-17	KCSWD	08/6/2020	0.00	2.70	16.20	--	0.00
GP-17	KCSWD	09/22/2020	0.00	3.20	14.60	--	0.07
GP-17	KCSWD	10/7/2020	0.00	3.20	7.20	--	0.07
GP-17	KCSWD	11/6/2020	0.00	3.10	15.50	--	0.03
GP-17	KCSWD	12/17/2020	0.00	0.50	21.00	--	0.00
GP-17	KCSWD	01/11/2021	0.00	3.40	14.70	--	-0.06
GP-17	KCSWD	02/11/2021	0.00	1.80	19.00	--	0.02
GP-17	KCSWD	03/16/2021	0.00	4.00	14.30	--	0.06
GP-17	KCSWD	04/1/2021	0.00	3.90	14.60	--	0.08
GP-17	KCSWD	05/14/2021	0.00	2.20	16.20	--	0.01
GP-17	KCSWD	06/17/2021	0.00	2.90	16.40	--	0.06
GP-17	KCSWD	07/8/2021	0.00	3.00	15.70	--	-0.03
GP-17	KCSWD	08/26/2021	0.00	3.50	16.00	--	0.01

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-17	KCSWD	09/10/2021	0.00	2.80	18.50	--	0.01
GP-17	KCSWD	10/12/2021	0.00	3.80	14.30	--	0.00
GP-17	KCSWD	11/2/2021	0.00	4.00	15.10	--	0.03
GP-17	KCSWD	12/9/2021	0.00	3.30	17.60	--	0.01
GP-17	KCSWD	01/26/2022	0.00	3.20	14.90	--	-0.07
GP-17	KCSWD	02/10/2022	0.00	3.00	15.60	--	0.03
GP-17	KCSWD	03/1/2022	0.00	3.50	15.50	--	0.06
GP-17	KCSWD	04/7/2022	0.00	0.10	21.00	--	0.03
GP-17	KCSWD	05/3/2022	0.00	0.20	20.60	--	-0.07
GP-17	KCSWD	06/30/2022	0.00	0.10	19.80	--	0.08
GP-17	KCSWD	07/21/2022	0.00	0.20	21.00	--	-0.02
GP-18	KCSWD	01/2/2020	0.00	3.90	16.50	--	0.01
GP-18	KCSWD	02/3/2020	0.00	3.40	16.70	--	-0.03
GP-18	KCSWD	03/3/2020	0.00	2.70	17.80	--	0.01
GP-18	KCSWD	04/2/2020	0.00	1.60	18.10	--	-0.08
GP-18	KCSWD	05/7/2020	0.00	2.80	14.30	--	0.04
GP-18	KCSWD	06/4/2020	0.00	3.20	16.30	--	0.11
GP-18	KCSWD	07/14/2020	0.00	3.50	17.10	--	0.00
GP-18	KCSWD	08/6/2020	0.00	2.60	18.10	--	-0.02
GP-18	KCSWD	09/22/2020	0.00	2.00	19.00	--	0.02
GP-18	KCSWD	10/7/2020	0.00	2.20	14.30	--	0.09
GP-18	KCSWD	11/6/2020	0.00	2.80	16.70	--	0.00
GP-18	KCSWD	12/17/2020	0.00	2.70	16.60	--	0.04
GP-18	KCSWD	01/11/2021	0.00	3.40	15.00	--	0.00
GP-18	KCSWD	02/11/2021	0.00	2.40	18.10	--	0.02
GP-18	KCSWD	03/16/2021	0.00	2.30	17.20	--	-0.01
GP-18	KCSWD	04/1/2021	0.00	2.10	17.80	--	0.06
GP-18	KCSWD	05/14/2021	0.00	3.40	14.20	--	0.01
GP-18	KCSWD	06/17/2021	0.00	2.90	16.70	--	0.04
GP-18	KCSWD	07/8/2021	0.00	2.70	17.70	--	-0.04
GP-18	KCSWD	08/26/2021	0.00	1.40	19.70	--	0.08
GP-18	KCSWD	09/10/2021	0.00	1.60	19.00	--	0.01
GP-18	KCSWD	10/12/2021	0.00	3.40	15.80	--	-0.02
GP-18	KCSWD	11/2/2021	0.00	3.70	16.90	--	0.06
GP-18	KCSWD	12/9/2021	0.00	3.50	17.00	--	0.03
GP-18	KCSWD	01/26/2022	0.00	2.80	15.40	--	-0.08
GP-18	KCSWD	02/10/2022	0.00	2.40	17.40	--	0.07
GP-18	KCSWD	03/1/2022	0.00	2.70	16.90	--	-0.03
GP-18	KCSWD	04/7/2022	0.00	1.40	19.90	--	0.65
GP-18	KCSWD	05/3/2022	0.20	1.40	20.20	--	0.05
GP-18	KCSWD	06/30/2022	0.00	0.50	18.30	--	0.45
GP-18	KCSWD	07/21/2022	--	--	--	--	0.00
GP-19D	KCSWD	01/2/2020	0.00	0.90	21.00	--	0.01
GP-19D	KCSWD	02/3/2020	0.00	0.70	21.00	--	0.01
GP-19D	KCSWD	03/3/2020	0.00	0.90	21.50	--	-0.01
GP-19D	KCSWD	04/2/2020	0.00	0.70	19.40	--	-0.07
GP-19D	KCSWD	05/7/2020	0.00	0.40	20.40	--	0.06

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-19D	KCSWD	06/4/2020	0.00	0.40	21.00	--	0.09
GP-19D	KCSWD	07/14/2020	0.00	0.40	20.70	--	0.04
GP-19D	KCSWD	08/6/2020	0.00	0.10	20.80	--	-0.01
GP-19D	KCSWD	09/22/2020	0.00	0.10	21.00	--	0.00
GP-19D	KCSWD	10/7/2020	0.00	0.40	20.60	--	-0.02
GP-19D	KCSWD	11/6/2020	0.00	0.50	20.60	--	0.05
GP-19D	KCSWD	12/17/2020	0.00	0.60	21.00	--	0.04
GP-19D	KCSWD	01/11/2021	0.00	0.60	20.10	--	0.04
GP-19D	KCSWD	02/11/2021	0.00	0.90	20.00	--	-0.06
GP-19D	KCSWD	03/16/2021	0.00	0.70	20.50	--	-0.05
GP-19D	KCSWD	04/1/2021	0.00	0.60	20.20	--	0.04
GP-19D	KCSWD	05/14/2021	0.00	0.30	20.70	--	0.10
GP-19D	KCSWD	06/17/2021	0.00	0.20	21.00	--	-0.01
GP-19D	KCSWD	07/8/2021	0.00	0.20	20.80	--	-0.03
GP-19D	KCSWD	08/26/2021	0.00	0.20	20.80	--	0.06
GP-19D	KCSWD	09/10/2021	0.00	0.10	20.70	--	0.00
GP-19D	KCSWD	10/12/2021	0.00	0.70	19.70	--	-0.02
GP-19D	KCSWD	11/2/2021	0.00	0.60	20.90	--	0.04
GP-19D	KCSWD	12/9/2021	0.00	0.80	20.80	--	0.06
GP-19D	KCSWD	01/26/2022	0.00	0.70	18.60	--	-0.03
GP-19D	KCSWD	02/10/2022	0.00	0.50	20.60	--	0.01
GP-19D	KCSWD	03/1/2022	0.00	0.60	20.20	--	-0.10
GP-19D	KCSWD	04/7/2022	0.00	0.40	20.60	--	-0.01
GP-19D	KCSWD	05/3/2022	0.00	0.60	20.60	--	0.01
GP-19D	KCSWD	06/30/2022	0.00	0.10	19.70	--	0.00
GP-19D	KCSWD	07/21/2022	0.00	0.10	21.00	--	0.00
GP-19S	KCSWD	01/2/2020	0.00	0.70	21.00	--	1.35
GP-19S	KCSWD	02/3/2020	0.00	0.50	21.00	--	-0.04
GP-19S	KCSWD	03/3/2020	0.00	0.60	21.00	--	-0.01
GP-19S	KCSWD	04/2/2020	0.00	0.50	19.40	--	-0.11
GP-19S	KCSWD	05/7/2020	0.00	0.70	20.10	--	0.07
GP-19S	KCSWD	06/4/2020	0.00	0.60	21.00	--	0.10
GP-19S	KCSWD	07/14/2020	0.00	0.60	20.60	--	0.02
GP-19S	KCSWD	08/6/2020	0.00	0.20	20.80	--	-0.08
GP-19S	KCSWD	09/22/2020	0.00	0.20	20.80	--	-0.01
GP-19S	KCSWD	10/7/2020	0.00	0.70	20.90	--	0.04
GP-19S	KCSWD	11/6/2020	0.00	0.50	20.50	--	0.03
GP-19S	KCSWD	12/17/2020	0.00	0.40	21.00	--	0.03
GP-19S	KCSWD	01/11/2021	0.00	0.30	20.40	--	-0.01
GP-19S	KCSWD	02/11/2021	0.00	0.40	20.20	--	0.05
GP-19S	KCSWD	03/16/2021	0.00	0.50	20.60	--	0.03
GP-19S	KCSWD	04/1/2021	0.00	0.50	20.30	--	0.10
GP-19S	KCSWD	05/14/2021	0.00	0.50	20.50	--	0.07
GP-19S	KCSWD	06/17/2021	0.00	0.30	20.90	--	0.02
GP-19S	KCSWD	07/8/2021	0.00	0.30	20.60	--	-0.05
GP-19S	KCSWD	08/26/2021	0.00	0.30	20.60	--	0.03
GP-19S	KCSWD	09/10/2021	0.00	0.20	20.60	--	-0.03

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-19S	KCSWD	10/12/2021	0.00	0.60	19.80	--	-0.02
GP-19S	KCSWD	11/2/2021	0.00	0.30	21.00	--	-0.05
GP-19S	KCSWD	12/9/2021	0.00	0.70	20.70	--	0.00
GP-19S	KCSWD	01/26/2022	0.00	0.30	18.90	--	0.01
GP-19S	KCSWD	02/10/2022	0.00	0.30	20.70	--	-0.02
GP-19S	KCSWD	03/1/2022	0.00	0.50	20.30	--	0.03
GP-19S	KCSWD	04/7/2022	0.00	0.40	20.60	--	0.02
GP-19S	KCSWD	05/3/2022	0.00	0.70	20.30	--	0.03
GP-19S	KCSWD	06/30/2022	0.00	0.40	19.50	--	-0.02
GP-19S	KCSWD	07/21/2022	0.00	0.30	20.80	--	0.00
GP-20D	KCSWD	01/2/2020	0.00	1.60	19.80	--	-0.01
GP-20D	KCSWD	02/3/2020	0.00	1.90	19.40	--	-0.07
GP-20D	KCSWD	03/3/2020	0.00	1.80	20.50	--	-0.18
GP-20D	KCSWD	04/2/2020	0.00	1.90	17.80	--	-0.10
GP-20D	KCSWD	05/7/2020	0.00	0.30	20.60	--	0.01
GP-20D	KCSWD	06/4/2020	0.00	0.30	21.00	--	0.17
GP-20D	KCSWD	07/14/2020	0.00	0.20	20.60	--	0.05
GP-20D	KCSWD	08/6/2020	0.00	0.10	20.90	--	-0.04
GP-20D	KCSWD	09/22/2020	0.00	0.10	21.00	--	0.09
GP-20D	KCSWD	10/7/2020	0.00	0.20	15.10	--	0.04
GP-20D	KCSWD	11/6/2020	0.00	0.60	20.30	--	0.05
GP-20D	KCSWD	12/17/2020	0.00	2.10	19.10	--	0.02
GP-20D	KCSWD	01/11/2021	0.00	0.80	19.80	--	0.04
GP-20D	KCSWD	02/11/2021	0.00	1.70	19.00	--	0.01
GP-20D	KCSWD	03/16/2021	0.00	1.60	18.50	--	-0.03
GP-20D	KCSWD	04/1/2021	0.00	1.60	18.20	--	0.05
GP-20D	KCSWD	05/14/2021	0.00	0.40	20.70	--	0.03
GP-20D	KCSWD	06/17/2021	0.00	0.10	21.00	--	0.02
GP-20D	KCSWD	07/8/2021	0.00	0.10	20.70	--	-0.03
GP-20D	KCSWD	08/26/2021	0.00	0.10	20.90	--	0.06
GP-20D	KCSWD	09/10/2021	0.00	0.10	20.80	--	0.03
GP-20D	KCSWD	10/12/2021	0.00	1.60	18.30	--	-0.02
GP-20D	KCSWD	11/2/2021	0.00	0.40	21.00	--	0.01
GP-20D	KCSWD	12/9/2021	0.00	2.20	18.80	--	0.03
GP-20D	KCSWD	01/26/2022	0.00	2.40	16.20	--	0.04
GP-20D	KCSWD	02/10/2022	0.00	0.90	19.80	--	0.01
GP-20D	KCSWD	03/1/2022	0.00	0.70	20.20	--	-0.01
GP-20D	KCSWD	04/7/2022	0.00	0.50	20.10	--	0.03
GP-20D	KCSWD	05/3/2022	0.00	0.60	20.40	--	0.01
GP-20D	KCSWD	06/30/2022	0.00	0.10	19.70	--	0.03
GP-20D	KCSWD	07/21/2022	0.00	0.10	21.00	--	-0.03
GP-20S	KCSWD	01/2/2020	0.00	1.00	20.20	--	0.05
GP-20S	KCSWD	02/3/2020	0.00	1.20	19.70	--	-0.04
GP-20S	KCSWD	03/3/2020	0.00	1.60	20.10	--	0.02
GP-20S	KCSWD	04/2/2020	0.00	1.60	18.20	--	-0.14
GP-20S	KCSWD	05/7/2020	0.00	0.60	20.20	--	0.02
GP-20S	KCSWD	06/4/2020	0.00	0.60	20.80	--	0.14

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-20S	KCSWD	07/14/2020	0.00	0.50	20.40	--	0.02
GP-20S	KCSWD	08/6/2020	0.00	0.20	20.80	--	-0.02
GP-20S	KCSWD	09/22/2020	0.00	0.10	20.80	--	0.07
GP-20S	KCSWD	10/7/2020	0.00	0.60	20.00	--	-0.16
GP-20S	KCSWD	11/6/2020	0.00	1.10	19.50	--	0.03
GP-20S	KCSWD	12/17/2020	0.00	1.10	20.50	--	0.04
GP-20S	KCSWD	01/11/2021	0.00	0.80	19.90	--	0.08
GP-20S	KCSWD	02/11/2021	0.00	1.30	19.10	--	0.03
GP-20S	KCSWD	03/16/2021	0.00	1.40	18.60	--	0.01
GP-20S	KCSWD	04/1/2021	0.00	1.50	18.10	--	0.04
GP-20S	KCSWD	05/14/2021	0.00	0.50	20.40	--	0.03
GP-20S	KCSWD	06/17/2021	0.00	0.20	21.00	--	0.03
GP-20S	KCSWD	07/8/2021	0.00	0.20	20.70	--	-0.02
GP-20S	KCSWD	08/26/2021	0.00	0.10	20.80	--	0.06
GP-20S	KCSWD	09/10/2021	0.00	0.10	20.70	--	-0.01
GP-20S	KCSWD	10/12/2021	0.00	1.30	18.20	--	-0.04
GP-20S	KCSWD	11/2/2021	0.00	0.70	21.00	--	0.03
GP-20S	KCSWD	12/9/2021	0.00	1.80	20.30	--	0.04
GP-20S	KCSWD	01/26/2022	0.00	1.20	17.40	--	0.01
GP-20S	KCSWD	02/10/2022	0.00	0.80	19.70	--	0.08
GP-20S	KCSWD	03/1/2022	0.00	0.80	20.20	--	0.05
GP-20S	KCSWD	04/7/2022	0.00	1.00	18.50	--	0.06
GP-20S	KCSWD	05/3/2022	0.00	1.30	19.30	--	0.33
GP-20S	KCSWD	06/30/2022	0.00	0.30	19.60	--	0.02
GP-20S	KCSWD	07/21/2022	0.00	0.20	21.00	--	-0.01
GP-3D	KCSWD	01/2/2020	0.00	4.00	16.30	--	-0.06
GP-3D	KCSWD	04/2/2020	0.00	4.60	13.40	--	0.03
GP-3D	KCSWD	07/14/2020	0.00	3.70	17.80	--	0.01
GP-3D	KCSWD	10/7/2020	0.00	1.80	4.40	--	-0.02
GP-3D	KCSWD	01/11/2021	0.00	3.10	16.20	--	0.02
GP-3D	KCSWD	04/1/2021	0.00	3.50	16.90	--	0.44
GP-3D	KCSWD	07/8/2021	0.00	2.30	19.00	--	-0.01
GP-3D	KCSWD	10/12/2021	0.00	1.70	17.90	--	-0.59
GP-3D	KCSWD	01/26/2022	0.00	4.10	15.70	--	-0.93
GP-3D	KCSWD	04/7/2022	0.00	4.50	14.20	--	-0.01
GP-3D	KCSWD	07/21/2022	0.00	4.70	14.60	--	-0.42
GP-3S	KCSWD	01/2/2020	0.00	4.10	16.30	--	0.01
GP-3S	KCSWD	04/2/2020	0.00	4.00	13.20	--	0.06
GP-3S	KCSWD	07/14/2020	0.00	3.00	18.50	--	0.07
GP-3S	KCSWD	10/7/2020	0.00	1.90	8.30	--	0.06
GP-3S	KCSWD	01/11/2021	0.00	3.30	14.60	--	-0.01
GP-3S	KCSWD	04/1/2021	0.00	3.10	17.20	--	0.26
GP-3S	KCSWD	07/8/2021	0.00	1.80	19.60	--	-0.01
GP-3S	KCSWD	10/12/2021	0.00	1.90	17.60	--	-0.01
GP-3S	KCSWD	01/26/2022	0.00	2.60	17.50	--	0.02
GP-3S	KCSWD	04/7/2022	0.00	2.70	18.50	--	-0.03
GP-3S	KCSWD	07/21/2022	0.00	2.40	19.40	--	-0.02

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-6D	Aspect	12/17/2019	0.00	0.60	21.20	30.01	0.00
GP-6D	KCSWD	01/2/2020	0.00	2.60	18.20	--	0.00
GP-6D	Aspect	01/15/2020	0.00	2.40	19.00	30.12	0.12
GP-6D	KCSWD	02/3/2020	0.00	1.90	19.90	--	0.12
GP-6D	Aspect	02/23/2020	0.00	2.70	16.00	30.10	-0.01
GP-6D	KCSWD	03/3/2020	0.00	1.60	19.60	--	-0.01
GP-6D	Aspect	03/12/2020	0.00	3.80	13.50	30.06	-0.04
GP-6D	KCSWD	04/2/2020	0.00	0.80	18.50	--	-0.04
GP-6D	Aspect	04/16/2020	0.00	0.70	19.40	30.31	0.10
GP-6D	KCSWD	05/7/2020	0.00	1.00	18.50	--	0.10
GP-6D	Aspect	05/14/2020	0.00	2.30	16.90	30.02	0.15
GP-6D	KCSWD	06/4/2020	0.00	2.40	17.40	--	0.15
GP-6D	Aspect	06/15/2020	0.00	2.40	15.10	29.26	-0.04
GP-6D	KCSWD	07/14/2020	0.00	4.00	11.90	--	0.01
GP-6D	KCSWD	08/6/2020	0.00	4.50	10.50	--	-0.05
GP-6D	KCSWD	09/22/2020	0.00	0.60	20.50	--	-0.02
GP-6D	KCSWD	10/7/2020	0.00	1.00	20.50	--	-0.02
GP-6D	KCSWD	11/6/2020	0.00	0.80	20.20	--	0.05
GP-6D	KCSWD	12/17/2020	0.00	1.10	20.10	--	0.02
GP-6D	KCSWD	01/11/2021	0.00	1.70	18.00	--	0.00
GP-6D	KCSWD	02/11/2021	0.00	2.50	16.90	--	0.06
GP-6D	KCSWD	03/16/2021	0.00	0.70	20.40	--	0.03
GP-6D	KCSWD	04/1/2021	0.00	0.80	19.50	--	0.07
GP-6D	KCSWD	05/14/2021	0.00	2.30	16.10	--	0.09
GP-6D	KCSWD	06/17/2021	0.00	3.20	16.60	--	0.02
GP-6D	KCSWD	07/8/2021	0.00	0.90	19.80	--	-0.03
GP-6D	KCSWD	08/26/2021	0.00	0.50	20.30	--	0.03
GP-6D	KCSWD	09/10/2021	0.00	0.60	19.90	--	0.00
GP-6D	KCSWD	10/12/2021	0.00	1.00	18.30	--	0.00
GP-6D	KCSWD	11/2/2021	0.00	2.10	18.10	--	-0.02
GP-6D	KCSWD	12/9/2021	0.00	2.40	18.40	--	-0.06
GP-6D	KCSWD	01/26/2022	0.00	2.50	16.10	--	-0.02
GP-6D	KCSWD	02/10/2022	0.00	0.60	20.00	--	0.01
GP-6D	KCSWD	03/1/2022	0.00	1.40	18.10	--	0.03
GP-6D	KCSWD	04/7/2022	0.00	1.00	18.50	--	0.03
GP-6D	KCSWD	05/3/2022	0.00	1.00	20.00	--	-0.05
GP-6D	KCSWD	06/30/2022	0.00	1.10	18.00	--	0.00
GP-6D	KCSWD	07/21/2022	0.00	1.10	19.40	--	-0.04
GP-6I	Aspect	12/17/2019	0.00	2.90	18.00	30.01	-0.02
GP-6I	KCSWD	01/2/2020	0.00	2.90	18.20	--	-0.02
GP-6I	Aspect	01/15/2020	0.00	2.60	19.10	30.12	0.05
GP-6I	KCSWD	02/3/2020	0.00	1.80	20.40	--	0.05
GP-6I	Aspect	02/13/2020	0.00	2.30	17.60	30.10	0.04
GP-6I	KCSWD	03/3/2020	0.00	1.80	19.20	--	0.04
GP-6I	Aspect	03/12/2020	0.00	2.70	14.60	30.06	-0.09
GP-6I	KCSWD	04/2/2020	0.00	1.20	17.70	--	-0.09
GP-6I	Aspect	04/16/2020	0.00	0.90	18.30	30.31	0.09

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-6I	KCSWD	05/7/2020	0.00	2.50	11.70	--	0.09
GP-6I	Aspect	05/14/2020	0.00	3.30	13.10	30.02	0.14
GP-6I	KCSWD	06/4/2020	0.00	3.10	15.60	--	0.14
GP-6I	Aspect	06/15/2020	0.00	2.30	15.60	29.26	-0.23
GP-6I	KCSWD	07/14/2020	0.00	3.50	11.80	--	0.05
GP-6I	KCSWD	08/6/2020	0.00	3.90	10.50	--	-0.01
GP-6I	KCSWD	09/22/2020	0.00	1.40	19.20	--	0.00
GP-6I	KCSWD	10/7/2020	0.00	1.10	20.70	--	0.17
GP-6I	KCSWD	11/6/2020	0.00	1.40	19.60	--	0.01
GP-6I	KCSWD	12/17/2020	0.00	2.40	17.90	--	0.03
GP-6I	KCSWD	01/11/2021	0.00	2.30	17.30	--	0.00
GP-6I	KCSWD	02/11/2021	0.00	2.50	17.00	--	0.01
GP-6I	KCSWD	03/16/2021	0.00	0.80	20.30	--	-0.08
GP-6I	KCSWD	04/1/2021	0.00	0.90	19.20	--	0.23
GP-6I	KCSWD	05/14/2021	0.00	2.60	13.80	--	-0.06
GP-6I	KCSWD	06/17/2021	0.00	2.80	13.90	--	0.01
GP-6I	KCSWD	07/8/2021	0.00	1.10	18.90	--	-0.01
GP-6I	KCSWD	08/26/2021	0.00	0.60	19.70	--	0.02
GP-6I	KCSWD	09/10/2021	0.00	0.70	18.90	--	-0.08
GP-6I	KCSWD	10/12/2021	0.00	2.40	16.20	--	0.01
GP-6I	KCSWD	11/2/2021	0.00	2.60	18.10	--	-0.02
GP-6I	KCSWD	12/9/2021	0.00	2.40	18.90	--	0.03
GP-6I	KCSWD	01/26/2022	0.00	2.10	16.80	--	0.02
GP-6I	KCSWD	02/10/2022	0.00	1.70	17.00	--	-0.02
GP-6I	KCSWD	03/1/2022	0.00	1.50	17.10	--	0.07
GP-6I	KCSWD	04/7/2022	0.00	1.70	15.90	--	0.04
GP-6I	KCSWD	05/3/2022	0.00	1.10	19.70	--	-0.03
GP-6I	KCSWD	06/30/2022	0.00	1.40	17.00	--	-0.01
GP-6I	KCSWD	07/21/2022	0.00	1.40	18.30	--	-0.12
GP-6S	Aspect	12/17/2019	0.00	0.10	21.90	30.01	0.00
GP-6S	KCSWD	01/2/2020	0.00	0.20	20.90	--	0.00
GP-6S	Aspect	01/15/2020	FF	FF	FF	30.12	0.00
GP-6S	KCSWD	02/3/2020	0.00	0.20	21.00	--	0.00
GP-6S	Aspect	02/13/2020	0.00	0.10	20.70	30.10	0.01
GP-6S	KCSWD	03/3/2020	0.00	0.30	21.00	--	0.01
GP-6S	Aspect	03/12/2020	0.00	0.20	20.70	30.06	1.14
GP-6S	KCSWD	04/2/2020	0.00	0.20	19.60	--	1.14
GP-6S	Aspect	04/16/2020	0.00	0.30	20.20	30.31	0.08
GP-6S	KCSWD	05/7/2020	0.00	0.20	20.60	--	0.08
GP-6S	Aspect	05/14/2020	0.00	0.10	20.20	30.02	0.15
GP-6S	KCSWD	06/4/2020	0.00	0.20	21.00	--	0.15
GP-6S	Aspect	06/15/2020	0.00	0.20	20.00	29.24	-0.02
GP-6S	KCSWD	07/14/2020	0.00	0.20	20.90	--	-1.54
GP-6S	KCSWD	08/6/2020	0.00	0.20	20.90	--	-0.04
GP-6S	KCSWD	09/22/2020	0.00	1.60	14.30	--	0.00
GP-6S	KCSWD	10/7/2020	0.00	0.20	20.80	--	-0.01
GP-6S	KCSWD	11/6/2020	0.00	0.20	20.90	--	0.00

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-6S	KCSWD	12/17/2020	0.00	0.20	21.00	--	0.03
GP-6S	KCSWD	01/11/2021	0.00	0.10	20.50	--	0.00
GP-6S	KCSWD	02/11/2021	0.00	0.20	20.10	--	0.03
GP-6S	KCSWD	03/16/2021	0.00	0.10	21.00	--	0.07
GP-6S	KCSWD	04/1/2021	0.00	0.10	20.70	--	0.09
GP-6S	KCSWD	05/14/2021	0.00	0.30	20.80	--	0.06
GP-6S	KCSWD	06/17/2021	0.00	0.60	21.00	--	0.05
GP-6S	KCSWD	07/8/2021	0.00	0.30	20.70	--	-0.03
GP-6S	KCSWD	08/26/2021	0.00	0.70	17.50	--	0.09
GP-6S	KCSWD	09/10/2021	0.00	1.80	12.60	--	0.04
GP-6S	KCSWD	10/12/2021	0.00	2.10	5.40	--	0.01
GP-6S	KCSWD	11/2/2021	0.00	0.60	20.20	--	-0.03
GP-6S	KCSWD	12/9/2021	0.00	0.30	20.70	--	0.00
GP-6S	KCSWD	01/26/2022	0.00	0.10	19.10	--	0.00
GP-6S	KCSWD	02/10/2022	0.00	0.20	20.90	--	-0.03
GP-6S	KCSWD	03/1/2022	0.00	0.20	20.60	--	0.04
GP-6S	KCSWD	04/7/2022	0.00	0.20	20.30	--	0.02
GP-6S	KCSWD	05/3/2022	0.00	0.20	21.00	--	-0.09
GP-6S	KCSWD	06/30/2022	0.00	0.10	19.70	--	0.00
GP-6S	KCSWD	07/21/2022	0.00	0.20	20.90	--	0.00
GP-7D	Aspect	12/17/2019	0.00	0.30	21.30	30.01	0.01
GP-7D	KCSWD	01/2/2020	0.00	0.30	20.50	--	0.01
GP-7D	Aspect	01/15/2020	0.00	0.20	21.20	30.12	0.08
GP-7D	KCSWD	02/3/2020	0.00	0.20	21.00	--	0.08
GP-7D	Aspect	02/13/2020	0.00	0.30	20.20	30.10	-0.05
GP-7D	KCSWD	03/3/2020	0.00	0.20	21.00	--	-0.05
GP-7D	Aspect	03/12/2020	0.00	0.20	20.80	30.06	-0.02
GP-7D	KCSWD	04/2/2020	0.00	0.10	19.90	--	-0.02
GP-7D	Aspect	04/16/2020	0.00	0.10	20.00	30.31	0.09
GP-7D	KCSWD	05/7/2020	0.00	0.10	21.00	--	0.09
GP-7D	Aspect	05/14/2020	0.00	0.10	20.00	30.02	-0.03
GP-7D	KCSWD	06/4/2020	0.00	0.20	21.00	--	-0.03
GP-7D	Aspect	06/15/2020	0.00	0.10	19.70	29.25	-0.21
GP-7D	KCSWD	07/14/2020	0.00	0.20	21.00	--	0.01
GP-7D	KCSWD	08/6/2020	0.00	0.10	20.90	--	-0.08
GP-7D	KCSWD	09/22/2020	0.00	0.10	20.90	--	-0.03
GP-7D	KCSWD	10/7/2020	0.00	0.30	15.40	--	-0.09
GP-7D	KCSWD	11/6/2020	0.00	1.00	18.20	--	0.01
GP-7D	KCSWD	12/17/2020	0.00	0.30	21.00	--	0.04
GP-7D	KCSWD	01/11/2021	0.00	0.30	20.20	--	0.00
GP-7D	KCSWD	02/11/2021	0.00	0.30	21.00	--	0.04
GP-7D	KCSWD	02/18/2021	0.00	0.20	20.60	30.02	-0.10
GP-7D	KCSWD	03/16/2021	0.00	0.10	20.90	--	0.05
GP-7D	KCSWD	04/1/2021	0.00	0.20	20.10	--	0.15
GP-7D	KCSWD	05/14/2021	0.00	0.20	20.80	--	0.01
GP-7D	KCSWD	06/17/2021	0.00	0.10	21.00	--	0.08
GP-7D	KCSWD	07/8/2021	0.00	0.20	20.60	--	-0.01

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-7D	KCSWD	08/26/2021	0.00	0.20	19.80	--	0.04
GP-7D	KCSWD	09/10/2021	0.00	0.20	20.10	--	0.02
GP-7D	KCSWD	10/12/2021	0.00	0.20	19.70	--	0.03
GP-7D	KCSWD	11/2/2021	0.00	0.10	21.00	--	0.03
GP-7D	KCSWD	12/9/2021	0.00	1.00	18.80	--	0.14
GP-7D	KCSWD	01/26/2022	0.00	0.30	18.50	--	0.04
GP-7D	KCSWD	02/10/2022	0.00	0.20	20.80	--	0.01
GP-7D	KCSWD	03/1/2022	0.00	0.50	20.20	--	0.05
GP-7D	KCSWD	04/7/2022	0.00	0.20	20.60	--	-0.03
GP-7D	KCSWD	05/3/2022	0.00	0.20	20.90	--	-0.04
GP-7D	KCSWD	06/30/2022	0.00	0.10	19.60	--	-0.02
GP-7D	KCSWD	07/21/2022	0.00	0.10	20.70	--	-0.05
GP-7I	Aspect	12/17/2019	0.00	0.20	21.60	30.01	-0.04
GP-7I	KCSWD	01/2/2020	0.00	0.60	19.20	--	-0.04
GP-7I	Aspect	01/15/2020	0.00	0.20	21.10	30.12	0.08
GP-7I	KCSWD	02/3/2020	0.00	0.20	21.00	--	0.08
GP-7I	Aspect	02/13/2020	0.00	0.20	20.60	30.10	-0.02
GP-7I	KCSWD	03/3/2020	0.00	0.20	21.00	--	-0.02
GP-7I	Aspect	03/12/2020	0.00	0.20	20.80	30.06	-0.02
GP-7I	KCSWD	04/2/2020	0.00	0.10	19.80	--	-0.02
GP-7I	Aspect	04/16/2020	0.00	0.10	19.90	30.31	0.04
GP-7I	KCSWD	05/7/2020	0.00	0.20	20.90	--	0.04
GP-7I	Aspect	05/14/2020	0.00	0.10	19.90	30.02	-0.01
GP-7I	KCSWD	06/4/2020	0.00	0.20	21.00	--	-0.01
GP-7I	Aspect	06/15/2020	0.00	0.10	19.80	29.25	-0.02
GP-7I	KCSWD	07/14/2020	0.00	0.20	20.90	--	0.00
GP-7I	KCSWD	08/6/2020	0.00	1.00	17.90	--	-0.74
GP-7I	KCSWD	09/22/2020	0.00	1.70	15.80	--	-0.06
GP-7I	KCSWD	10/7/2020	0.00	4.50	17.50	--	-0.07
GP-7I	KCSWD	11/6/2020	0.00	3.00	12.10	--	-0.05
GP-7I	KCSWD	12/17/2020	0.00	0.80	19.80	--	0.31
GP-7I	KCSWD	01/11/2021	0.00	0.90	19.00	--	-0.50
GP-7I	KCSWD	02/11/2021	0.00	0.50	20.90	--	-0.03
GP-7I	KCSWD	02/18/2021	0.00	0.20	20.60	30.02	-0.31
GP-7I	KCSWD	03/16/2021	0.00	0.20	20.90	--	-0.07
GP-7I	KCSWD	04/1/2021	0.00	0.20	20.20	--	-0.34
GP-7I	KCSWD	05/14/2021	0.00	0.30	20.70	--	0.03
GP-7I	KCSWD	06/17/2021	0.00	2.00	14.50	--	-0.22
GP-7I	KCSWD	07/8/2021	0.00	0.60	19.50	--	-0.13
GP-7I	KCSWD	08/26/2021	0.00	1.60	16.00	--	-0.14
GP-7I	KCSWD	09/10/2021	0.00	1.40	16.40	--	-0.02
GP-7I	KCSWD	10/12/2021	0.00	1.10	16.80	--	-0.01
GP-7I	KCSWD	11/2/2021	0.00	1.80	15.70	--	-0.03
GP-7I	KCSWD	12/9/2021	0.00	1.70	17.10	--	-0.98
GP-7I	KCSWD	01/26/2022	0.00	0.70	17.30	--	0.00
GP-7I	KCSWD	02/10/2022	0.00	0.40	20.40	--	-0.03
GP-7I	KCSWD	03/1/2022	0.00	0.60	19.80	--	-0.27

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-7I	KCSWD	04/7/2022	0.00	0.30	20.30	--	0.00
GP-7I	KCSWD	05/3/2022	0.00	0.20	20.80	--	-0.32
GP-7I	KCSWD	06/30/2022	0.00	0.10	19.50	--	-0.27
GP-7I	KCSWD	07/21/2022	0.00	0.10	20.60	--	-0.10
GP-7S	Aspect	12/17/2019	0.00	7.50	8.10	30.01	0.12
GP-7S	KCSWD	01/2/2020	0.00	2.60	18.00	--	0.12
GP-7S	Aspect	01/15/2020	0.10	7.90	6.10	30.12	0.07
GP-7S	KCSWD	02/3/2020	0.00	2.20	17.20	--	0.07
GP-7S	Aspect	02/13/2020	0.00	5.10	11.00	30.10	-0.01
GP-7S	KCSWD	03/3/2020	0.00	4.50	21.00	--	-0.01
GP-7S	Aspect	03/12/2020	0.00	6.50	8.80	30.06	-0.05
GP-7S	KCSWD	04/2/2020	0.00	1.30	17.40	--	-0.05
GP-7S	Aspect	04/16/2020	0.00	2.30	14.80	30.31	0.10
GP-7S	KCSWD	05/7/2020	0.00	4.50	10.20	--	0.10
GP-7S	Aspect	05/14/2020	0.00	6.20	6.10	30.02	-0.13
GP-7S	KCSWD	06/4/2020	0.00	4.90	10.40	--	-0.13
GP-7S	Aspect	06/15/2020	0.00	7.10	3.70	29.25	-0.04
GP-7S	KCSWD	07/14/2020	0.00	2.70	14.60	--	-0.12
GP-7S	KCSWD	08/6/2020	0.00	5.40	7.60	--	-0.11
GP-7S	KCSWD	09/22/2020	0.00	5.70	4.90	--	-0.03
GP-7S	KCSWD	10/7/2020	0.00	6.20	11.70	--	0.00
GP-7S	KCSWD	11/6/2020	0.00	7.80	1.00	--	0.01
GP-7S	KCSWD	12/17/2020	0.00	7.90	0.70	--	4.56
GP-7S	KCSWD	01/11/2021	0.00	7.30	0.10	--	17.47
GP-7S	KCSWD	02/11/2021	0.40	6.50	2.70	--	2.39
GP-7S	KCSWD	02/18/2021	0.00	3.10	9.70	30.02	0.38
GP-7S	KCSWD	03/16/2021	0.00	2.50	13.20	--	0.08
GP-7S	KCSWD	04/1/2021	0.00	5.80	2.60	--	-0.12
GP-7S	KCSWD	05/14/2021	0.00	0.30	20.60	--	-0.01
GP-7S	KCSWD	06/17/2021	0.00	5.50	6.20	--	0.03
GP-7S	KCSWD	07/8/2021	0.00	2.60	12.40	--	-0.23
GP-7S	KCSWD	08/26/2021	0.00	5.40	6.90	--	0.06
GP-7S	KCSWD	09/10/2021	0.00	5.10	11.80	--	-0.03
GP-7S	KCSWD	10/12/2021	0.00	5.90	3.60	--	0.03
GP-7S	KCSWD	11/2/2021	0.80	7.60	0.10	--	0.03
GP-7S	KCSWD	12/9/2021	0.00	7.50	4.00	--	0.58
GP-7S	KCSWD	01/26/2022	0.00	7.80	3.70	--	0.03
GP-7S	KCSWD	02/10/2022	0.00	7.20	0.70	--	0.50
GP-7S	KCSWD	03/1/2022	0.00	8.00	0.00	--	0.05
GP-7S	KCSWD	04/7/2022	0.00	3.60	9.20	--	0.68
GP-7S	KCSWD	05/3/2022	0.00	5.30	7.80	--	0.30
GP-7S	KCSWD	06/30/2022	0.00	3.60	7.50	--	0.12
GP-7S	KCSWD	07/21/2022	0.00	1.50	15.20	--	0.05
GP-8D	KCSWD	01/2/2020	0.00	3.40	14.80	--	0.04
GP-8D	KCSWD	02/3/2020	0.00	4.80	12.00	--	0.03
GP-8D	KCSWD	03/3/2020	0.00	2.50	17.40	--	0.05
GP-8D	KCSWD	04/2/2020	0.00	2.50	16.10	--	0.00

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Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-8D	KCSWD	05/7/2020	0.00	0.50	20.40	--	0.12
GP-8D	KCSWD	06/4/2020	0.00	1.10	20.10	--	-0.05
GP-8D	KCSWD	07/14/2020	0.00	0.80	20.50	--	0.06
GP-8D	KCSWD	08/6/2020	0.00	0.40	20.70	--	-0.02
GP-8D	KCSWD	09/22/2020	0.00	0.40	20.30	--	-0.03
GP-8D	KCSWD	10/7/2020	0.00	0.70	20.50	--	0.15
GP-8D	KCSWD	11/6/2020	0.00	1.00	19.80	--	0.08
GP-8D	KCSWD	12/17/2020	0.00	2.10	17.30	--	0.05
GP-8D	KCSWD	01/11/2021	0.00	3.10	14.20	--	-4.09
GP-8D	KCSWD	02/11/2021	0.00	4.60	11.90	--	-0.01
GP-8D	KCSWD	03/16/2021	0.00	1.30	18.30	--	0.04
GP-8D	KCSWD	04/1/2021	0.00	1.20	18.50	--	0.10
GP-8D	KCSWD	05/14/2021	0.00	0.60	20.70	--	0.07
GP-8D	KCSWD	06/17/2021	0.00	0.50	21.00	--	0.01
GP-8D	KCSWD	07/8/2021	0.00	0.10	20.80	--	0.00
GP-8D	KCSWD	08/26/2021	0.00	0.20	20.80	--	0.12
GP-8D	KCSWD	09/10/2021	0.00	0.20	20.40	--	-0.03
GP-8D	KCSWD	10/12/2021	0.00	0.60	19.40	--	0.00
GP-8D	KCSWD	11/2/2021	0.00	1.00	20.60	--	-0.03
GP-8D	KCSWD	12/9/2021	0.00	1.70	19.40	--	0.04
GP-8D	KCSWD	01/26/2022	0.00	5.10	11.80	--	0.01
GP-8D	KCSWD	02/10/2022	0.00	5.90	9.10	--	0.00
GP-8D	KCSWD	03/1/2022	0.00	1.40	18.80	--	-0.11
GP-8D	KCSWD	04/7/2022	0.00	0.50	19.50	--	0.01
GP-8D	KCSWD	05/3/2022	0.00	0.30	20.40	--	0.02
GP-8D	KCSWD	06/30/2022	0.00	0.60	19.20	--	-0.08
GP-8D	KCSWD	07/21/2022	0.00	0.50	20.50	--	-0.03
GP-8I	KCSWD	01/2/2020	0.00	2.60	16.20	--	0.05
GP-8I	KCSWD	02/3/2020	0.00	2.90	15.40	--	0.03
GP-8I	KCSWD	03/3/2020	0.00	3.30	16.10	--	0.02
GP-8I	KCSWD	04/2/2020	0.00	2.60	16.40	--	0.08
GP-8I	KCSWD	05/7/2020	0.00	0.90	20.00	--	0.11
GP-8I	KCSWD	06/4/2020	0.00	1.20	20.10	--	0.00
GP-8I	KCSWD	07/14/2020	0.00	1.10	20.30	--	0.01
GP-8I	KCSWD	08/6/2020	0.00	0.60	20.60	--	-0.04
GP-8I	KCSWD	09/22/2020	0.00	0.60	20.20	--	0.02
GP-8I	KCSWD	10/7/2020	0.00	0.80	20.60	--	0.08
GP-8I	KCSWD	11/6/2020	0.00	1.00	19.80	--	-0.01
GP-8I	KCSWD	12/17/2020	0.00	1.50	19.30	--	0.04
GP-8I	KCSWD	01/11/2021	0.00	0.50	17.60	--	-2.59
GP-8I	KCSWD	02/11/2021	0.00	2.50	16.40	--	0.05
GP-8I	KCSWD	03/16/2021	0.00	2.00	16.90	--	-0.01
GP-8I	KCSWD	04/1/2021	0.00	1.70	17.70	--	0.15
GP-8I	KCSWD	05/14/2021	0.00	0.90	20.30	--	0.01
GP-8I	KCSWD	06/17/2021	0.00	0.60	21.00	--	0.02
GP-8I	KCSWD	07/8/2021	0.00	0.60	20.50	--	0.04
GP-8I	KCSWD	08/26/2021	0.00	0.30	20.80	--	0.07

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-8I	KCSWD	09/10/2021	0.00	0.30	20.30	--	0.03
GP-8I	KCSWD	10/12/2021	0.00	0.60	19.40	--	0.00
GP-8I	KCSWD	11/2/2021	0.00	0.80	20.80	--	0.05
GP-8I	KCSWD	12/9/2021	0.00	1.30	19.80	--	-0.06
GP-8I	KCSWD	01/26/2022	0.00	2.20	16.10	--	-0.02
GP-8I	KCSWD	02/10/2022	0.00	2.10	17.10	--	0.03
GP-8I	KCSWD	03/1/2022	0.00	2.50	16.20	--	0.08
GP-8I	KCSWD	04/7/2022	0.00	1.40	18.60	--	-0.03
GP-8I	KCSWD	05/3/2022	0.00	1.60	18.80	--	0.00
GP-8I	KCSWD	06/30/2022	0.00	0.90	18.80	--	0.09
GP-8I	KCSWD	07/21/2022	0.00	0.80	20.30	--	-0.04
GP-9S	Aspect	12/17/2019	0.00	6.40	14.60	30.01	0.00
GP-9S	KCSWD	01/2/2020	--	--	--	--	0.00
GP-9S	Aspect	01/15/2020	0.00	0.40	21.10	30.12	0.06
GP-9S	KCSWD	02/3/2020	0.00	0.70	20.30	--	0.06
GP-9S	Aspect	02/13/2020	0.00	0.30	20.30	30.10	0.07
GP-9S	KCSWD	03/3/2020	0.00	0.20	21.00	--	0.07
GP-9S	Aspect	03/12/2020	0.00	0.40	20.30	30.06	-0.01
GP-9S	KCSWD	04/2/2020	0.00	0.10	20.00	--	-0.01
GP-9S	Aspect	04/16/2020	0.00	0.90	19.10	30.31	0.24
GP-9S	KCSWD	05/7/2020	0.00	1.10	12.60	--	0.24
GP-9S	Aspect	05/14/2020	0.00	6.40	7.20	30.02	0.11
GP-9S	KCSWD	06/4/2020	0.00	7.20	6.60	--	0.11
GP-9S	Aspect	06/15/2020	0.00	1.00	18.30	--	--
GP-9S	KCSWD	07/14/2020	0.00	9.20	8.30	--	0.20
GP-9S	KCSWD	08/6/2020	0.00	9.10	11.60	--	-0.05
GP-9S	KCSWD	09/22/2020	0.00	5.60	16.90	--	-0.03
GP-9S	KCSWD	10/7/2020	0.00	6.50	20.60	--	-0.01
GP-9S	KCSWD	11/6/2020	0.00	7.80	9.50	--	0.02
GP-9S	KCSWD	12/17/2020	0.00	0.50	20.90	--	0.03
GP-9S	KCSWD	01/11/2021	0.00	0.20	20.50	--	0.07
GP-9S	KCSWD	02/11/2021	0.00	0.20	20.50	--	0.02
GP-9S	KCSWD	03/16/2021	0.00	0.80	13.60	--	0.02
GP-9S	KCSWD	04/1/2021	0.00	0.40	19.80	--	0.30
GP-9S	KCSWD	05/14/2021	0.00	6.00	6.90	--	0.05
GP-9S	KCSWD	06/17/2021	0.00	7.40	8.00	--	0.04
GP-9S	KCSWD	07/8/2021	0.00	8.50	10.30	--	-0.04
GP-9S	KCSWD	08/26/2021	0.00	5.50	17.40	--	-0.14
GP-9S	KCSWD	09/10/2021	0.00	4.90	17.90	--	0.03
GP-9S	KCSWD	10/12/2021	0.00	5.80	12.90	--	0.07
GP-9S	KCSWD	11/2/2021	0.00	5.60	14.20	--	-0.04
GP-9S	KCSWD	12/9/2021	0.00	0.80	18.60	--	0.24
GP-9S	KCSWD	01/26/2022	0.00	0.50	11.40	--	0.01
GP-9S	KCSWD	02/10/2022	0.00	0.60	17.90	--	-0.24
GP-9S	KCSWD	03/1/2022	--	--	--	--	0.00
GP-9S	KCSWD	04/7/2022	0.00	0.30	20.60	--	0.03
GP-9S	KCSWD	05/3/2022	0.00	1.30	17.10	--	-0.08

Table A-1
Landfill Gas Probe and Ambient Station Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Barometer ("Hg)	Static Pressure ("H2O)
GP-9S	KCSWD	06/30/2022	0.00	7.10	2.60	--	-0.05
GP-9S	KCSWD	07/21/2022	0.00	8.00	6.60	--	0.24

Notes:

-- = Not measured or error during monitoring.

FF = Indicated flow fault occurred during monitoring.

CH4 = Methane

CO2 = Carbon dioxide

O2 = Oxygen

H2S = Hydrogen sulfide

% = percent by volume

ppm = Parts per million

"Hg = Inches of mercury

"H2O = Inches of water column.

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-1	Aspect	12/17/2019	46.10	24.90	0.00	-0.10	--	--	--	--	Rising
N-1	KCSWD	01/02/2020	38.20	23.90	0.00	0.44	46.00	8.46	12.00	28.81	Rising
N-1	Aspect	01/15/2020	50.10	27.70	0.00	-0.40	--	--	--	--	Rising
N-1	KCSWD	02/03/2020	47.60	25.20	0.00	-0.52	44.00	0.00	1.00	29.04	Rising
N-1	Aspect	02/13/2020	38.60	24.80	0.00	0.10	--	--	--	--	Rising
N-1	KCSWD	03/03/2020	49.60	25.40	0.00	0.09	47.00	8.64	3.00	29.34	Rising
N-1	Aspect	03/12/2020	50.40	25.30	0.00	-0.10	--	--	--	--	Rising
N-1	KCSWD	04/02/2020	51.10	23.50	0.00	-0.01	42.00	8.78	19.00	29.38	Rising
N-1	Aspect	04/16/2020	56.60	25.80	0.00	0.30	--	--	--	--	Rising
N-1	KCSWD	05/07/2020	44.90	20.40	0.50	0.03	67.00	16.92	0.00	29.03	Rising
N-1	Aspect	05/14/2020	50.90	24.00	0.00	0.20	--	--	--	--	Rising
N-1	KCSWD	06/04/2020	42.80	23.90	0.00	0.03	68.00	16.56	1.00	28.93	Rising
N-1	Aspect	06/15/2020	41.20	23.50	1.70	0.10	--	--	--	--	Rising
N-1	KCSWD	07/07/2020	45.50	24.50	0.00	-0.10	65.00	11.82	--	--	Rising
N-1	KCSWD	08/06/2020	48.60	24.80	0.00	0.10	59.00	8.46	--	--	Rising
N-1	KCSWD	09/22/2020	48.60	23.00	0.00	0.00	67.00	11.90	--	--	Rising
N-1	KCSWD	10/07/2020	51.40	26.40	0.00	0.10	64.00	0.00	--	--	Rising
N-1	KCSWD	11/06/2020	56.30	25.10	0.10	-0.10	52.00	0.00	--	--	Rising
N-1	KCSWD	12/17/2020	47.90	20.20	2.70	-0.04	47.00	0.00	9.00	29.17	Rising
N-1	KCSWD	01/11/2021	42.90	24.40	0.00	0.10	46.00	0.00	--	--	Rising
N-1	KCSWD	02/11/2021	50.70	24.80	0.00	0.10	36.00	23.24	--	--	Falling
N-1	KCSWD	03/16/2021	53.50	24.00	0.00	0.00	56.00	0.00	--	--	Falling
N-1	KCSWD	04/01/2021	48.40	25.00	0.00	0.00	54.00	8.52	--	--	Falling
N-1	KCSWD	05/14/2021	55.90	24.00	0.00	0.30	64.00	19.21	--	--	Falling
N-1	KCSWD	06/17/2021	53.00	23.90	0.00	0.20	67.00	14.73	--	--	Falling
N-1	KCSWD	07/08/2021	52.80	23.90	0.00	0.00	65.00	0.00	--	--	Falling
N-1	KCSWD	08/26/2021	57.00	24.60	0.00	0.10	71.00	12.02	--	--	Falling
N-1	KCSWD	09/10/2021	57.50	25.80	0.00	0.10	64.00	8.56	--	--	Falling
N-1	KCSWD	10/12/2021	57.80	26.10	0.00	-0.10	49.00	0.00	--	--	Falling
N-1	KCSWD	11/02/2021	60.30	23.30	0.00	-0.10	53.00	0.00	--	--	Falling
N-1	KCSWD	12/09/2021	50.70	25.00	0.10	0.10	39.00	0.00	--	--	Falling
N-1	KCSWD	01/26/2022	45.60	23.50	0.00	0.00	39.00	0.00	--	--	Falling
N-1	KCSWD	02/10/2022	52.10	24.00	0.00	-0.10	52.00	0.00	--	--	Falling
N-1	KCSWD	03/01/2022	51.80	19.40	0.00	-0.10	54.00	0.00	--	--	Falling
N-1	KCSWD	04/07/2022	47.70	23.20	0.00	0.20	59.00	0.00	--	--	Falling
N-1	KCSWD	05/03/2022	57.80	22.30	0.60	-0.10	54.00	0.00	--	--	Falling
N-1	KCSWD	06/15/2022	53.00	24.00	0.00	0.20	66.00	12.01	--	--	Falling
N-1	KCSWD	07/21/2022	55.90	23.60	0.00	0.00	73.00	8.47	--	--	Falling
N-10	Aspect	12/17/2019	33.50	24.40	0.00	-0.10	--	--	--	--	Falling
N-10	KCSWD	01/02/2020	39.90	24.60	0.00	0.43	47.00	11.97	1.00	28.81	Falling
N-10	Aspect	01/15/2020	27.30	23.50	0.00	-0.40	--	--	--	--	Falling
N-10	KCSWD	02/03/2020	45.60	24.60	0.00	0.09	44.00	0.00	1.00	29.01	Falling
N-10	Aspect	02/13/2020	48.20	24.70	0.00	-0.10	--	--	--	--	Falling
N-10	KCSWD	03/03/2020	47.40	23.70	0.00	0.09	48.00	40.50	0.00	29.35	Falling
N-10	Aspect	03/12/2020	42.40	25.40	0.00	-0.10	--	--	--	--	Falling
N-10	KCSWD	04/02/2020	58.80	29.70	0.00	0.06	47.00	12.32	2.00	29.35	Falling
N-10	Aspect	04/16/2020	36.50	21.70	0.50	0.20	--	--	--	--	Falling
N-10	KCSWD	05/07/2020	34.60	21.40	0.00	0.03	61.00	11.76	0.00	29.02	Falling
N-10	Aspect	05/14/2020	47.30	23.90	0.00	0.10	--	--	--	--	Falling
N-10	KCSWD	06/04/2020	51.90	25.00	0.00	0.00	67.00	11.94	1.00	28.93	Falling
N-10	Aspect	06/15/2020	40.30	19.60	3.60	0.10	--	--	--	--	Falling
N-10	KCSWD	07/07/2020	50.00	23.80	0.00	0.00	6.00	9.12	--	--	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-10	KCSWD	08/06/2020	47.50	23.00	0.00	0.10	65.00	0.00	--	--	Falling
N-10	KCSWD	09/22/2020	49.60	23.50	0.00	0.00	68.00	8.41	--	--	Falling
N-10	KCSWD	10/07/2020	49.90	24.40	0.00	0.10	61.00	0.00	--	--	Falling
N-10	KCSWD	11/06/2020	49.90	25.60	0.00	-0.10	54.00	0.00	--	--	Falling
N-10	KCSWD	12/17/2020	23.40	15.80	5.60	0.02	47.00	0.00	2.00	29.14	Falling
N-10	KCSWD	01/11/2021	39.00	21.40	1.60	0.00	45.00	17.06	--	--	Falling
N-10	KCSWD	02/11/2021	46.70	25.30	0.00	-0.10	38.00	37.80	--	--	Falling
N-10	KCSWD	03/16/2021	50.90	23.90	0.00	-0.20	45.00	23.09	--	--	Falling
N-10	KCSWD	04/01/2021	59.80	25.20	0.00	-0.20	50.00	34.05	--	--	Falling
N-10	KCSWD	05/14/2021	52.30	23.80	0.00	0.20	56.00	14.94	--	--	Falling
N-10	KCSWD	06/17/2021	51.80	23.60	0.00	0.20	70.00	14.63	--	--	Falling
N-10	KCSWD	07/08/2021	52.60	23.30	0.00	0.00	68.00	0.00	--	--	Rising
N-10	KCSWD	08/26/2021	55.20	24.50	0.00	0.10	69.00	12.01	--	--	Rising
N-10	KCSWD	09/10/2021	55.50	24.60	0.00	0.10	66.00	0.00	--	--	Rising
N-10	KCSWD	10/12/2021	55.00	25.50	0.00	-0.20	52.00	0.00	--	--	Rising
N-10	KCSWD	11/02/2021	55.20	24.50	0.00	-0.10	53.00	0.00	--	--	Rising
N-10	KCSWD	12/09/2021	61.10	24.90	0.00	-0.10	44.00	0.00	--	--	Rising
N-10	KCSWD	01/26/2022	58.70	24.60	0.00	-0.20	39.00	0.00	--	--	Rising
N-10	KCSWD	02/10/2022	51.00	23.40	0.00	-0.10	46.00	0.00	--	--	Rising
N-10	KCSWD	03/01/2022	61.40	22.50	0.00	-0.20	48.00	12.65	--	--	Rising
N-10	KCSWD	04/07/2022	58.10	23.30	0.00	0.00	49.00	0.00	--	--	Rising
N-10	KCSWD	05/03/2022	61.20	22.80	0.00	-0.10	56.00	0.00	--	--	Rising
N-10	KCSWD	06/15/2022	51.90	24.10	0.00	0.20	63.00	12.03	--	--	Rising
N-10	KCSWD	07/21/2022	51.30	22.70	0.00	0.10	73.00	8.40	--	--	Rising
N-11	Aspect	12/17/2019	41.40	27.30	0.00	-0.10	--	--	--	--	Rising
N-11	KCSWD	01/02/2020	37.10	25.20	0.30	-0.44	47.00	0.00	1.00	28.81	Rising
N-11	Aspect	01/15/2020	40.50	27.00	0.00	-0.40	--	--	--	--	Rising
N-11	KCSWD	02/03/2020	52.20	26.40	0.00	0.15	43.00	45.35	0.00	28.99	Rising
N-11	Aspect	02/13/2020	50.40	28.00	0.00	0.10	--	--	--	--	Rising
N-11	KCSWD	03/03/2020	46.00	23.00	0.00	0.11	49.00	51.67	0.00	29.34	Rising
N-11	Aspect	03/12/2020	48.20	27.70	0.00	-0.10	--	--	--	--	Rising
N-11	KCSWD	04/02/2020	58.90	29.50	0.00	0.06	50.00	52.81	1.00	29.34	Rising
N-11	Aspect	04/16/2020	52.00	27.50	0.00	0.20	--	--	--	--	Falling
N-11	KCSWD	05/07/2020	41.10	24.40	0.00	0.05	57.00	11.90	0.00	29.01	Falling
N-11	Aspect	05/14/2020	53.70	27.00	0.00	0.10	--	--	--	--	Falling
N-11	KCSWD	06/04/2020	54.50	27.10	0.00	0.01	64.00	22.43	0.00	28.92	Falling
N-11	Aspect	06/15/2020	42.60	20.90	3.80	0.10	--	--	--	--	Falling
N-11	KCSWD	07/07/2020	62.50	30.20	0.00	0.00	65.00	8.54	--	--	Falling
N-11	KCSWD	08/06/2020	48.70	24.70	0.00	0.10	67.00	0.00	--	--	Falling
N-11	KCSWD	09/22/2020	53.40	25.50	0.00	0.00	68.00	11.93	--	--	Falling
N-11	KCSWD	10/07/2020	56.70	27.00	0.00	0.10	60.00	0.00	--	--	Falling
N-11	KCSWD	11/06/2020	56.50	26.90	0.00	-0.10	54.00	0.00	--	--	Falling
N-11	KCSWD	12/17/2020	24.20	16.20	5.40	-1.03	47.00	24.96	1.00	29.13	Falling
N-11	KCSWD	01/11/2021	58.30	28.40	0.00	-0.10	45.00	0.00	--	--	Falling
N-11	KCSWD	02/11/2021	60.60	28.00	0.00	0.00	39.00	60.80	--	--	Falling
N-11	KCSWD	03/16/2021	59.80	28.00	0.00	-0.30	45.00	76.72	--	--	Falling
N-11	KCSWD	04/01/2021	61.40	27.60	0.00	0.00	48.00	50.43	--	--	Falling
N-11	KCSWD	05/14/2021	61.50	27.00	0.00	0.30	65.00	31.04	--	--	Falling
N-11	KCSWD	06/17/2021	62.80	27.00	0.00	0.20	66.00	36.62	--	--	Falling
N-11	KCSWD	07/08/2021	62.70	26.90	0.00	0.00	69.00	0.00	--	--	Falling
N-11	KCSWD	08/26/2021	56.90	24.90	0.00	0.00	72.00	22.43	--	--	Falling
N-11	KCSWD	09/10/2021	58.00	25.80	0.00	0.00	70.00	0.00	--	--	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-11	KCSWD	10/12/2021	63.40	28.40	0.00	0.10	54.00	0.00	--	--	Falling
N-11	KCSWD	11/02/2021	55.80	24.10	0.00	-0.10	55.00	8.70	--	--	Falling
N-11	KCSWD	12/09/2021	63.10	27.90	0.10	0.00	46.00	8.82	--	--	Falling
N-11	KCSWD	01/26/2022	62.70	27.90	0.00	-0.10	39.00	0.00	--	--	Falling
N-11	KCSWD	02/10/2022	63.40	27.00	0.00	-0.20	48.00	0.00	--	--	Falling
N-11	KCSWD	03/01/2022	NA	NA	NA	NA	NA	NA	--	--	Falling
N-11	KCSWD	04/07/2022	62.30	27.10	0.00	-0.10	50.00	0.00	--	--	Falling
N-11	KCSWD	05/03/2022	66.10	27.80	0.00	-0.20	55.00	41.43	--	--	Falling
N-11	KCSWD	06/15/2022	64.90	26.40	0.00	0.20	63.00	42.67	--	--	Falling
N-11	KCSWD	07/21/2022	63.20	25.90	0.00	0.10	72.00	14.85	--	--	Falling
N-12	Aspect	12/17/2019	44.00	25.00	0.00	0.00	--	--	--	--	Falling
N-12	KCSWD	01/02/2020	36.40	24.80	0.80	-0.48	44.00	14.59	0.00	28.81	Falling
N-12	Aspect	01/15/2020	51.20	29.80	0.20	-0.40	--	--	--	--	Falling
N-12	KCSWD	02/03/2020	46.60	25.30	0.00	0.22	38.00	0.00	0.00	28.96	Falling
N-12	Aspect	02/13/2020	51.70	27.80	0.00	0.10	--	--	--	--	Falling
N-12	KCSWD	03/03/2020	45.90	22.90	0.00	0.22	40.00	0.00	2.00	29.33	Falling
N-12	Aspect	03/12/2020	47.90	24.40	0.00	-0.20	--	--	--	--	Falling
N-12	KCSWD	04/02/2020	59.50	29.80	0.00	0.10	46.00	12.35	3.00	29.34	Falling
N-12	Aspect	04/16/2020	51.70	23.60	0.00	0.30	--	--	--	--	Falling
N-12	KCSWD	05/07/2020	45.40	22.50	0.00	0.06	59.00	12.05	2.00	29.01	Falling
N-12	Aspect	05/14/2020	52.00	23.70	0.00	0.10	--	--	--	--	Rising
N-12	KCSWD	06/04/2020	60.00	29.70	0.00	0.02	68.00	14.66	1.00	28.91	Rising
N-12	Aspect	06/15/2020	46.50	23.00	1.90	0.00	--	--	--	--	Rising
N-12	KCSWD	07/07/2020	60.30	28.70	0.00	0.00	63.00	8.56	--	--	Rising
N-12	KCSWD	08/06/2020	51.50	25.90	0.00	-0.10	61.00	0.00	--	--	Rising
N-12	KCSWD	09/22/2020	50.60	23.40	0.00	0.10	68.00	44.64	--	--	Rising
N-12	KCSWD	10/07/2020	60.10	29.20	0.00	-0.10	65.00	0.00	--	--	Rising
N-12	KCSWD	11/06/2020	55.40	27.70	0.00	-0.10	50.00	43.97	--	--	Rising
N-12	KCSWD	12/17/2020	41.30	23.70	0.00	0.10	47.00	0.00	2.00	29.14	Rising
N-12	KCSWD	01/11/2021	42.20	22.50	1.50	-0.20	45.00	8.57	--	--	Rising
N-12	KCSWD	02/11/2021	62.80	24.50	0.00	0.00	36.00	37.32	--	--	Rising
N-12	KCSWD	03/16/2021	57.70	23.40	0.00	0.00	52.00	0.00	--	--	Rising
N-12	KCSWD	04/01/2021	52.90	24.10	0.00	-0.10	53.00	37.67	--	--	Rising
N-12	KCSWD	05/14/2021	58.30	23.50	0.00	0.20	59.00	19.50	--	--	Rising
N-12	KCSWD	06/17/2021	56.30	23.40	0.00	0.20	66.00	14.89	--	--	Rising
N-12	KCSWD	07/08/2021	55.30	24.50	0.00	0.00	66.00	0.00	--	--	Rising
N-12	KCSWD	08/26/2021	55.70	24.10	0.00	0.20	71.00	8.49	--	--	Rising
N-12	KCSWD	09/10/2021	56.40	24.70	0.00	0.10	64.00	0.00	--	--	Rising
N-12	KCSWD	10/12/2021	59.10	25.50	0.00	0.10	46.00	0.00	--	--	Rising
N-12	KCSWD	11/02/2021	62.20	24.60	0.00	-0.10	52.00	12.53	--	--	Rising
N-12	KCSWD	12/09/2021	62.70	25.20	0.00	-0.10	41.00	28.30	--	--	Rising
N-12	KCSWD	01/26/2022	54.80	25.70	0.00	-0.10	44.00	0.00	--	--	Rising
N-12	KCSWD	02/10/2022	60.20	25.30	0.00	-0.10	49.00	0.00	--	--	Rising
N-12	KCSWD	03/01/2022	63.60	23.10	0.00	0.10	57.00	15.35	--	--	Rising
N-12	KCSWD	04/07/2022	63.10	23.20	0.00	0.00	57.00	0.00	--	--	Rising
N-12	KCSWD	05/03/2022	62.30	22.70	0.00	0.00	53.00	0.00	--	--	Rising
N-12	KCSWD	06/15/2022	54.60	23.30	0.00	0.20	70.00	12.00	--	--	Rising
N-12	KCSWD	07/21/2022	50.50	22.30	0.00	0.20	69.00	14.64	--	--	Rising
N-13	Aspect	12/17/2019	58.80	32.70	0.00	0.00	--	--	--	--	Rising
N-13	KCSWD	01/02/2020	49.60	29.60	0.00		49.00	0.00	--	--	Rising
N-13	Aspect	01/15/2020	--	--	--	-0.40	--	--	--	--	Rising
N-13	KCSWD	02/03/2020	43.70	25.20	1.50	0.05	46.00	0.00	0.00	28.98	Rising

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-13	Aspect	02/13/2020	59.40	31.80	0.00	0.10	--	--	--	--	Rising
N-13	KCSWD	03/03/2020	62.40	31.20	0.00	0.11	50.00	0.00	2.00	29.34	Rising
N-13	Aspect	03/12/2020	61.30	32.00	0.00	-0.10	--	--	--	--	Rising
N-13	KCSWD	04/02/2020	59.70	29.60	0.20	0.09	51.00	17.37	1.00	29.34	Rising
N-13	Aspect	04/16/2020	65.50	33.00	0.00	0.20	--	--	--	--	Rising
N-13	KCSWD	05/07/2020	58.00	30.50	0.00	0.07	57.00	12.13	0.00	29.02	Rising
N-13	Aspect	05/14/2020	65.40	34.60	0.00	0.10	--	--	--	--	Rising
N-13	KCSWD	06/04/2020	62.50	30.90	0.00	0.02	64.00	12.07	1.00	28.92	Rising
N-13	Aspect	06/15/2020	53.80	27.80	2.10	0.10	--	--	--	--	Falling
N-13	KCSWD	07/07/2020	66.00	32.00	0.00	0.00	65.00	14.83	--	--	Falling
N-13	KCSWD	08/06/2020	47.50	24.50	0.30	0.10	68.00	0.00	--	--	Falling
N-13	KCSWD	09/22/2020	65.60	34.20	0.00	-0.10	71.00	8.40	--	--	Falling
N-13	KCSWD	10/07/2020	55.10	25.50	0.00	0.10	65.00	0.00	--	--	Falling
N-13	KCSWD	11/06/2020	61.50	32.60	0.00	-0.10	56.00	0.00	--	--	Falling
N-13	KCSWD	12/17/2020	21.50	14.90	6.20	0.03	49.00	0.00	1.00	29.17	Falling
N-13	KCSWD	01/11/2021	44.30	25.40	1.50	0.00	48.00	0.00	--	--	Falling
N-13	KCSWD	02/11/2021	66.50	33.50	0.00	0.10	42.00	36.30	--	--	Falling
N-13	KCSWD	03/16/2021	66.80	33.20	0.00	0.00	48.00	0.00	--	--	Falling
N-13	KCSWD	04/01/2021	54.30	25.00	0.00	0.00	51.00	15.02	--	--	Falling
N-13	KCSWD	05/14/2021	67.10	31.30	0.00	0.30	56.00	15.10	--	--	Falling
N-13	KCSWD	06/17/2021	57.60	25.90	0.00	0.20	67.00	12.08	--	--	Falling
N-13	KCSWD	07/08/2021	53.10	23.40	0.00	0.00	72.00	0.00	--	--	Falling
N-13	KCSWD	08/26/2021	59.30	28.80	0.00	0.10	75.00	8.38	--	--	Falling
N-13	KCSWD	09/10/2021	60.00	29.80	0.00	0.10	73.00	0.00	--	--	Falling
N-13	KCSWD	10/12/2021	63.60	36.40	0.00	0.10	54.00	0.00	--	--	Falling
N-13	KCSWD	11/02/2021	55.80	24.10	0.00	-0.10	55.00	8.70	--	--	Falling
N-13	KCSWD	12/09/2021	66.80	33.00	0.00	0.10	46.00	0.00	--	--	Falling
N-13	KCSWD	01/26/2022	50.40	25.40	0.30	-0.10	44.00	0.00	--	--	Falling
N-13	KCSWD	02/10/2022	65.90	30.90	0.00	-0.10	49.00	0.00	--	--	No data
N-13	KCSWD	03/01/2022	64.20	24.60	0.00	0.00	53.00	0.00	--	--	No data
N-13	KCSWD	04/07/2022	62.40	23.70	0.00	0.10	51.00	0.00	--	--	No data
N-13	KCSWD	05/03/2022	57.00	21.70	0.70	-0.20	56.00	0.00	--	--	No data
N-13	KCSWD	06/15/2022	65.10	31.00	0.00	0.20	63.00	8.58	--	--	No data
N-13	KCSWD	07/21/2022	62.00	29.50	0.00	0.20	72.00	14.63	--	--	No data
N-14	Aspect	12/17/2019	47.90	27.50	0.00	0.00	--	--	--	--	No data
N-14	KCSWD	01/02/2020	26.70	19.70	3.80	-0.01	50.00	11.72	1.00	28.81	No data
N-14	Aspect	01/15/2020	49.10	28.60	0.00	-0.60	--	--	--	--	No data
N-14	KCSWD	02/03/2020	27.10	18.00	6.60	0.10	46.00	23.73	0.00	29.00	No data
N-14	Aspect	02/13/2020	52.20	28.30	0.00	-0.10	--	--	--	--	No data
N-14	KCSWD	03/03/2020	57.10	29.00	0.00	0.01	51.00	8.65	1.00	29.38	No data
N-14	Aspect	03/12/2020	52.70	27.40	0.00	-0.20	--	--	--	--	No data
N-14	KCSWD	04/02/2020	55.50	28.40	0.20	0.03	49.00	43.27	2.00	29.37	No data
N-14	Aspect	04/16/2020	52.90	25.90	0.00	0.20	--	--	--	--	No data
N-14	KCSWD	05/07/2020	48.30	24.40	0.00	0.00	60.00	12.04	0.00	29.06	No data
N-14	Aspect	05/14/2020	55.50	28.20	0.00	0.10	--	--	--	--	No data
N-14	KCSWD	06/04/2020	45.00	24.80	0.00	0.02	64.00	11.81	1.00	28.94	No data
N-14	Aspect	06/15/2020	40.20	21.00	2.80	0.00	--	--	--	--	No data
N-14	KCSWD	07/07/2020	42.20	23.90	0.20	-0.10	65.00	8.31	--	--	No data
N-14	KCSWD	08/06/2020	36.20	21.30	2.20	0.10	68.00	11.59	--	--	No data
N-14	KCSWD	09/22/2020	53.00	25.80	0.00	0.00	69.00	8.40	--	--	No data
N-14	KCSWD	10/07/2020	55.40	25.00	0.00	0.00	65.00	0.00	--	--	No data
N-14	KCSWD	11/06/2020	54.30	27.20	0.20	-0.10	56.00	0.00	--	--	No data

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-14	KCSWD	12/17/2020	40.30	21.60	2.30	0.01	49.00	0.00	2.00	29.18	No data
N-14	KCSWD	01/11/2021	36.80	20.90	2.30	0.10	49.00	8.45	--	--	No data
N-14	KCSWD	02/11/2021	63.50	26.70	0.00	0.00	42.00	0.00	--	--	No data
N-14	KCSWD	03/16/2021	59.40	25.00	0.00	0.00	48.00	0.00	--	--	No data
N-14	KCSWD	04/01/2021	53.60	24.20	0.10	-0.10	51.00	8.68	--	--	No data
N-14	KCSWD	05/14/2021	56.30	23.10	0.00	0.20	56.00	17.45	--	--	No data
N-14	KCSWD	06/17/2021	49.90	23.10	0.00	0.10	66.00	11.99	--	--	No data
N-14	KCSWD	07/08/2021	47.40	22.50	0.00	0.00	71.00	0.00	--	--	No data
N-14	KCSWD	08/26/2021	55.40	24.40	0.00	0.10	70.00	8.49	--	--	No data
N-14	KCSWD	09/10/2021	55.10	24.90	0.00	0.10	70.00	0.00	--	--	No data
N-14	KCSWD	10/12/2021	59.40	26.40	0.00	-0.10	56.00	37.92	--	--	No data
N-14	KCSWD	11/02/2021	60.20	24.40	0.00	-0.10	56.00	0.00	--	--	No data
N-14	KCSWD	12/09/2021	60.30	26.90	0.00	0.00	49.00	0.00	--	--	No data
N-14	KCSWD	01/26/2022	55.30	26.50	0.00	-0.20	42.00	8.80	--	--	No data
N-14	KCSWD	02/10/2022	54.20	23.90	0.10	-0.10	51.00	0.00	--	--	No data
N-14	KCSWD	03/01/2022	52.00	23.60	0.10	-0.20	52.00	0.00	--	--	No data
N-14	KCSWD	04/07/2022	52.30	24.30	0.00	-0.10	51.00	0.00	--	--	No data
N-14	KCSWD	05/03/2022	42.10	22.20	0.20	0.00	55.00	0.00	--	--	No data
N-14	KCSWD	06/15/2022	55.30	24.00	0.00	0.20	62.00	12.15	--	--	No data
N-14	KCSWD	07/21/2022	56.50	24.50	0.00	0.20	73.00	14.65	--	--	No data
N-15	Aspect	12/17/2019	48.10	27.90	0.00	0.00	--	--	--	--	No data
N-15	KCSWD	01/02/2020	20.20	20.80	0.20	0.12	49.00	14.17	1.00	28.81	No data
N-15	Aspect	01/15/2020	48.40	28.20	0.00	-0.30	--	--	--	--	No data
N-15	KCSWD	02/03/2020	15.40	16.80	4.70	0.09	46.00	0.00	3.00	29.01	No data
N-15	Aspect	02/13/2020	35.70	23.90	0.00	0.00	--	--	--	--	No data
N-15	KCSWD	03/03/2020	37.50	23.60	0.00	0.02	50.00	8.42	0.00	29.39	No data
N-15	Aspect	03/12/2020	49.30	26.40	0.00	-0.10	--	--	--	--	No data
N-15	KCSWD	04/02/2020	28.10	17.70	4.80	0.00	5.00	17.67	2.00	29.39	No data
N-15	Aspect	04/16/2020	52.10	25.00	0.00	0.10	--	--	--	--	No data
N-15	KCSWD	05/07/2020	47.60	24.30	0.10	0.01	59.00	12.04	1.00	29.05	No data
N-15	Aspect	05/14/2020	40.80	19.90	1.20	0.10	--	--	--	--	No data
N-15	KCSWD	06/04/2020	29.00	21.40	0.00	0.00	64.00	11.52	3.00	28.94	No data
N-15	Aspect	06/15/2020	28.80	19.00	2.50	0.00	--	--	--	--	No data
N-15	KCSWD	07/07/2020	21.10	20.00	0.00	-0.10	63.00	11.39	--	--	No data
N-15	KCSWD	08/06/2020	29.70	20.20	0.70	0.10	65.00	0.00	--	--	No data
N-15	KCSWD	09/22/2020	30.70	19.60	1.50	0.00	68.00	8.15	--	--	No data
N-15	KCSWD	10/07/2020	46.20	24.00	0.00	0.00	62.00	0.00	--	--	No data
N-15	KCSWD	11/06/2020	34.30	21.20	1.60	-0.10	57.00	0.00	--	--	No data
N-15	KCSWD	12/17/2020	20.70	20.10	0.00	0.05	51.00	0.00	59.00	29.15	No data
N-15	KCSWD	01/11/2021	22.70	19.80	0.00	0.00	48.00	14.29	--	--	No data
N-15	KCSWD	02/11/2021	56.90	25.90	0.00	0.00	42.00	0.00	--	--	No data
N-15	KCSWD	03/16/2021	58.40	24.80	0.00	0.00	45.00	0.00	--	--	No data
N-15	KCSWD	04/01/2021	31.00	21.00	0.00	-0.10	50.00	8.34	--	--	No data
N-15	KCSWD	05/14/2021	34.10	15.10	7.30	0.20	62.00	22.15	--	--	No data
N-15	KCSWD	06/17/2021	42.80	23.10	0.00	0.10	68.00	11.75	--	--	No data
N-15	KCSWD	07/08/2021	40.60	20.60	1.30	0.00	68.00	0.00	--	--	No data
N-15	KCSWD	08/26/2021	26.20	14.10	5.70	0.10	68.00	8.18	--	--	No data
N-15	KCSWD	09/10/2021	27.60	15.70	5.10	0.00	69.00	0.00	--	--	No data
N-15	KCSWD	10/12/2021	59.80	26.10	0.00	-0.10	56.00	0.00	--	--	No data
N-15	KCSWD	11/02/2021	20.50	19.60	0.00	0.00	57.00	8.13	--	--	No data
N-15	KCSWD	12/09/2021	52.80	25.50	0.20	-0.10	47.00	0.00	--	--	No data
N-15	KCSWD	01/26/2022	33.50	20.90	0.00	-0.10	42.00	0.00	--	--	No data

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-15	KCSWD	02/10/2022	43.50	22.20	0.10	-0.10	50.00	0.00	--	--	No data
N-15	KCSWD	03/01/2022	NA	NA	NA	NA	NA	NA	--	--	No data
N-15	KCSWD	04/07/2022	49.80	23.70	0.00	0.10	50.00	0.00	--	--	No data
N-15	KCSWD	05/03/2022	13.90	11.50	8.90	-0.30	56.00	0.00	--	--	No data
N-15	KCSWD	06/15/2022	56.10	24.30	0.00	0.10	62.00	8.60	--	--	No data
N-15	KCSWD	07/21/2022	44.50	21.90	0.00	0.10	71.00	8.32	--	--	No data
N-16	Aspect	12/17/2019	51.50	25.40	0.00	0.10	--	--	--	--	Rising
N-16	KCSWD	01/02/2020	52.50	24.90	0.00	0.07	50.00	12.26	197.00	28.81	Rising
N-16	Aspect	01/15/2020	55.70	27.30	0.00	-0.20	--	--	--	--	Rising
N-16	KCSWD	02/03/2020	54.70	24.90	0.00	0.11	47.00	0.00	15.00	28.99	Rising
N-16	Aspect	02/13/2020	53.90	26.50	0.00	0.10	--	--	--	--	Rising
N-16	KCSWD	03/03/2020	50.50	24.00	0.00	0.11	45.00	46.15	3.00	29.34	Rising
N-16	Aspect	03/12/2020	49.20	26.40	0.30	0.00	--	--	--	--	Rising
N-16	KCSWD	04/02/2020	48.70	21.70	0.00	0.05	49.00	42.61	10.00	29.36	Rising
N-16	Aspect	04/16/2020	50.40	24.10	0.00	0.20	--	--	--	--	Rising
N-16	KCSWD	05/07/2020	51.00	21.90	0.00	0.07	60.00	8.63	25.00	29.03	Rising
N-16	Aspect	05/14/2020	54.60	23.50	0.00	0.10	--	--	--	--	Rising
N-16	KCSWD	06/04/2020	54.00	22.70	0.00	0.01	66.00	62.32	7.00	28.93	Rising
N-16	Aspect	06/15/2020	49.90	20.30	2.20	0.00	--	--	--	--	Rising
N-16	KCSWD	07/07/2020	59.10	23.30	0.00	0.00	69.00	62.09	--	--	Rising
N-16	KCSWD	08/06/2020	58.50	22.70	0.00	0.10	72.00	0.00	--	--	Rising
N-16	KCSWD	09/22/2020	62.00	23.00	0.00	-0.10	72.00	0.00	--	--	Rising
N-16	KCSWD	10/07/2020	57.00	24.50	0.00	0.10	66.00	45.22	--	--	Rising
N-16	KCSWD	11/06/2020	61.60	23.70	0.00	0.00	56.00	0.00	--	--	Rising
N-16	KCSWD	12/17/2020	46.40	20.40	1.80	-0.20	49.00	63.45	--	--	Rising
N-16	KCSWD	01/11/2021	65.10	24.20	0.00	0.00	48.00	68.88	--	--	Rising
N-16	KCSWD	02/11/2021	67.00	24.00	0.00	0.10	42.00	20.33	--	--	Rising
N-16	KCSWD	03/16/2021	59.00	24.70	0.00	0.10	47.00	48.47	--	--	Rising
N-16	KCSWD	04/01/2021	67.70	24.00	0.00	0.00	51.00	0.00	--	--	Rising
N-16	KCSWD	05/14/2021	61.80	23.50	0.00	0.30	61.00	19.60	--	--	Rising
N-16	KCSWD	06/17/2021	61.80	24.60	0.00	0.20	70.00	43.12	--	--	Rising
N-16	KCSWD	07/08/2021	66.00	23.90	0.00	0.10	72.00	0.00	--	--	Rising
N-16	KCSWD	08/26/2021	66.40	24.10	0.00	0.20	72.00	26.10	--	--	Rising
N-16	KCSWD	09/10/2021	67.80	24.50	0.00	0.10	71.00	0.00	--	--	Rising
N-16	KCSWD	10/12/2021	59.50	26.20	0.00	0.10	60.00	34.62	--	--	Rising
N-16	KCSWD	11/02/2021	64.40	24.70	0.00	0.00	57.00	55.95	--	--	Rising
N-16	KCSWD	12/09/2021	65.10	25.60	0.00	0.00	49.00	0.00	--	--	Rising
N-16	KCSWD	01/26/2022	57.10	23.30	0.00	0.00	42.00	0.00	--	--	Rising
N-16	KCSWD	02/10/2022	66.00	23.90	0.00	-0.10	50.00	0.00	--	--	Rising
N-16	KCSWD	03/01/2022	66.10	21.10	0.00	-0.20	50.00	0.00	--	--	Rising
N-16	KCSWD	04/07/2022	64.30	24.20	0.00	0.10	51.00	0.00	--	--	Rising
N-16	KCSWD	05/03/2022	55.60	22.80	0.00	-0.10	56.00	40.04	--	--	Rising
N-16	KCSWD	06/15/2022	56.40	24.20	0.00	0.20	63.00	63.15	--	--	Rising
N-16	KCSWD	07/21/2022	65.70	23.60	0.00	0.10	76.00	12.21	--	--	Rising
N-17	KCSWD	01/02/2020	52.20	24.80	0.00	0.00	49.00	15.03	--	--	Rising
N-17	KCSWD	02/03/2020	48.60	24.20	0.00	-0.30	47.00	0.00	--	--	Rising
N-17	KCSWD	03/03/2020	52.20	24.90	0.00	0.10	50.00	8.67	--	--	Falling
N-17	KCSWD	04/02/2020	50.10	22.30	0.00	0.00	47.00	19.53	--	--	Falling
N-17	KCSWD	05/07/2020	46.80	23.90	0.20	0.10	57.00	12.07	--	--	Falling
N-17	KCSWD	06/04/2020	54.20	22.80	0.00	0.10	64.00	14.88	17.00	29.12	Falling
N-17	KCSWD	07/07/2020	47.60	23.20	0.10	0.00	65.00	11.92	--	--	Falling
N-17	KCSWD	08/06/2020	38.90	22.40	0.00	-0.10	64.00	8.28	--	--	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-17	KCSWD	09/22/2020	60.50	23.00	0.00	0.00	69.00	8.64	--	--	Falling
N-17	KCSWD	10/07/2020	52.70	24.80	0.00	-0.20	64.00	0.00	--	--	Falling
N-17	KCSWD	11/06/2020	59.60	23.90	0.00	0.10	55.00	0.00	--	--	Falling
N-17	KCSWD	12/17/2020	15.60	18.30	0.70	-0.10	52.00	0.00	--	--	Falling
N-17	KCSWD	01/11/2021	53.40	22.80	0.00	-0.10	49.00	8.75	--	--	Falling
N-17	KCSWD	02/11/2021	66.80	24.30	0.00	0.10	41.00	0.00	--	--	Falling
N-17	KCSWD	03/16/2021	58.40	24.80	0.00	0.00	47.00	0.00	--	--	Falling
N-17	KCSWD	04/01/2021	58.10	24.10	0.00	0.00	51.00	0.00	--	--	Falling
N-17	KCSWD	05/14/2021	59.70	23.30	0.00	0.20	62.00	8.72	--	--	Falling
N-17	KCSWD	06/17/2021	56.90	25.20	0.00	0.10	67.00	12.09	--	--	Falling
N-17	KCSWD	07/08/2021	51.90	22.00	0.80	0.00	67.00	0.00	--	--	Falling
N-17	KCSWD	08/26/2021	65.40	24.10	0.00	0.10	69.00	8.72	--	--	Falling
N-17	KCSWD	09/10/2021	67.20	24.40	0.00	0.10	69.00	0.00	--	--	Falling
N-17	KCSWD	10/12/2021	59.90	26.30	0.00	0.00	55.00	0.00	--	--	Falling
N-17	KCSWD	11/02/2021	35.70	21.80	0.00	-0.10	56.00	0.00	--	--	Falling
N-17	KCSWD	12/09/2021	60.50	26.40	0.00	0.00	48.00	0.00	--	--	Falling
N-17	KCSWD	01/26/2022	49.00	22.20	0.00	-0.10	42.00	8.78	--	--	Falling
N-17	KCSWD	02/10/2022	51.30	23.10	0.00	-0.10	50.00	0.00	--	--	Falling
N-17	KCSWD	03/01/2022	52.10	20.40	0.00	0.00	53.00	12.36	--	--	Falling
N-17	KCSWD	04/07/2022	59.40	24.30	0.00	0.10	49.00	0.00	--	--	Falling
N-17	KCSWD	05/03/2022	53.70	22.50	0.00	-0.10	54.00	0.00	--	--	Falling
N-17	KCSWD	06/15/2022	56.50	24.20	0.00	0.20	61.00	8.62	--	--	Falling
N-17	KCSWD	07/21/2022	42.10	21.70	0.00	0.10	67.00	14.43	--	--	Falling
N-18	Aspect	12/17/2019	50.40	26.20	0.00	0.10	--	--	--	--	Falling
N-18	KCSWD	01/02/2020	42.80	23.50	0.20	-0.60	45.00	0.00	22.00	28.81	Falling
N-18	Aspect	01/15/2020	54.40	27.60	0.00	-0.20	--	--	--	--	Falling
N-18	KCSWD	02/03/2020	43.50	23.10	0.00	0.12	41.00	0.00	11.00	29.00	Falling
N-18	Aspect	02/13/2020	53.70	26.50	0.00	0.10	--	--	--	--	Falling
N-18	KCSWD	03/03/2020	52.40	24.90	0.00	-0.02	55.00	0.00	30.00	29.33	Falling
N-18	Aspect	03/12/2020	55.50	26.50	0.00	0.10	--	--	--	--	Falling
N-18	KCSWD	04/02/2020	52.00	23.70	0.00	0.01	43.00	17.56	35.00	29.36	Falling
N-18	Aspect	04/16/2020	52.70	24.40	0.10	0.20	--	--	--	--	Falling
N-18	KCSWD	05/07/2020	52.40	23.90	0.00	0.09	63.00	8.57	8.00	29.02	Falling
N-18	Aspect	05/14/2020	58.20	26.30	0.00	0.20	--	--	--	--	Falling
N-18	KCSWD	06/04/2020	54.40	24.50	0.00	0.11	76.00	16.76	3.00	28.91	Falling
N-18	Aspect	06/15/2020	50.70	22.00	1.90	0.10	--	--	--	--	Falling
N-18	KCSWD	07/07/2020	59.00	23.10	0.10	0.00	64.00	12.27	--	--	Falling
N-18	KCSWD	08/06/2020	59.00	22.80	0.40	0.10	62.00	0.00	--	--	Falling
N-18	KCSWD	09/22/2020	54.90	22.40	0.00	0.00	70.00	0.00	--	--	Falling
N-18	KCSWD	10/07/2020	65.00	25.40	0.00	0.10	62.00	0.00	--	--	Falling
N-18	KCSWD	11/06/2020	58.80	23.30	0.10	0.00	59.00	0.00	--	--	Falling
N-18	KCSWD	12/17/2020	48.80	21.00	1.80	0.07	46.00	0.00	11.00	29.14	Falling
N-18	KCSWD	01/11/2021	56.00	22.10	0.00	0.10	46.00	8.85	--	--	Falling
N-18	KCSWD	02/11/2021	64.80	26.50	0.10	0.20	37.00	0.00	--	--	Falling
N-18	KCSWD	03/16/2021	63.50	25.90	0.00	0.10	46.00	0.00	--	--	Falling
N-18	KCSWD	04/01/2021	66.30	23.50	0.00	0.10	51.00	8.97	--	--	Falling
N-18	KCSWD	05/14/2021	64.40	26.30	0.00	0.20	55.00	17.64	--	--	Falling
N-18	KCSWD	06/17/2021	65.40	25.50	0.00	0.10	82.00	12.02	--	--	Falling
N-18	KCSWD	07/08/2021	62.00	24.60	0.00	0.10	67.00	8.65	--	--	Falling
N-18	KCSWD	08/26/2021	61.50	23.10	0.00	0.20	67.00	8.69	--	--	Falling
N-18	KCSWD	09/10/2021	62.30	23.80	1.10	0.00	65.00	0.00	--	--	Falling
N-18	KCSWD	10/12/2021	68.40	26.30	0.00	0.20	54.00	0.00	--	--	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-18	KCSWD	11/02/2021	64.00	24.30	0.10	0.10	49.00	0.00	--	--	Falling
N-18	KCSWD	12/09/2021	63.60	25.50	0.20	0.10	44.00	0.00	--	--	Falling
N-18	KCSWD	01/26/2022	66.40	24.60	0.00	-0.10	30.00	0.00	--	--	Falling
N-18	KCSWD	02/10/2022	61.20	24.30	0.20	0.00	49.00	0.00	--	--	Falling
N-18	KCSWD	03/01/2022	62.20	24.80	0.00	-0.10	55.00	12.46	--	--	Falling
N-18	KCSWD	04/07/2022	66.80	26.60	0.20	0.10	61.00	0.00	--	--	Falling
N-18	KCSWD	05/03/2022	55.90	22.70	0.00	-0.20	52.00	38.34	--	--	Falling
N-18	KCSWD	06/15/2022	69.70	26.80	0.10	0.20	68.00	8.74	--	--	Falling
N-18	KCSWD	07/21/2022	62.90	24.90	0.10	0.10	77.00	17.04	--	--	Falling
N-19	Aspect	12/17/2019	52.10	26.70	0.00	0.10	--	--	--	--	Falling
N-19	KCSWD	01/02/2020	50.30	24.80	0.00	0.24	47.00	8.66	117.00	28.81	Falling
N-19	Aspect	01/15/2020	55.80	27.30	0.00	-0.20	--	--	--	--	Falling
N-19	KCSWD	02/03/2020	41.80	22.30	0.00	0.09	44.00	0.00	32.00	28.96	Falling
N-19	Aspect	02/13/2020	52.20	25.70	0.00	0.10	--	--	--	--	Falling
N-19	KCSWD	03/03/2020	54.40	25.20	0.00	0.10	48.00	21.39	49.00	29.33	Falling
N-19	Aspect	03/12/2020	51.70	24.60	0.00	0.10	--	--	--	--	Falling
N-19	KCSWD	04/02/2020	48.80	21.60	0.00	0.07	46.00	17.47	13.00	29.35	Falling
N-19	Aspect	04/16/2020	52.00	22.80	0.00	0.20	--	--	--	--	Falling
N-19	KCSWD	05/07/2020	52.70	22.10	0.00	0.10	58.00	8.69	32.00	29.01	Falling
N-19	Aspect	05/14/2020	55.80	23.70	0.00	0.10	--	--	--	--	Falling
N-19	KCSWD	06/04/2020	54.10	22.70	0.00	0.04	21.00	12.84	24.00	28.90	Falling
N-19	Aspect	06/15/2020	49.80	20.60	1.60	0.00	--	--	--	--	Falling
N-19	KCSWD	07/07/2020	58.60	23.10	0.00	0.10	64.00	12.26	--	--	Falling
N-19	KCSWD	08/06/2020	58.40	22.50	0.00	0.10	64.00	0.00	--	--	Falling
N-19	KCSWD	09/22/2020	63.10	23.30	0.00	0.00	66.00	0.00	--	--	Falling
N-19	KCSWD	10/07/2020	64.50	22.70	0.00	0.10	62.00	0.00	--	--	Falling
N-19	KCSWD	11/06/2020	65.60	23.90	0.00	0.00	55.00	0.00	--	--	Falling
N-19	KCSWD	12/17/2020	52.10	22.40	0.00	0.01	48.00	8.72	13.00	29.15	Falling
N-19	KCSWD	01/11/2021	60.20	22.90	0.00	0.00	47.00	12.60	--	--	Falling
N-19	KCSWD	02/11/2021	66.80	23.90	0.00	0.20	41.00	0.00	--	--	Falling
N-19	KCSWD	03/16/2021	67.40	24.20	0.00	0.10	44.00	0.00	--	--	Falling
N-19	KCSWD	04/01/2021	62.10	23.30	0.00	0.10	48.00	8.92	--	--	Falling
N-19	KCSWD	05/14/2021	66.50	23.70	0.00	0.30	58.00	15.42	--	--	Falling
N-19	KCSWD	06/17/2021	68.90	25.50	0.00	0.30	68.00	17.56	--	--	Falling
N-19	KCSWD	07/08/2021	67.50	23.90	0.00	0.10	68.00	0.00	--	--	Falling
N-19	KCSWD	08/26/2021	66.70	23.60	0.00	0.10	72.00	8.72	--	--	Falling
N-19	KCSWD	09/10/2021	68.90	24.80	0.00	0.10	69.00	0.00	--	--	Falling
N-19	KCSWD	10/12/2021	69.70	24.40	0.00	0.20	55.00	0.00	--	--	Falling
N-19	KCSWD	11/02/2021	67.50	24.50	0.00	-0.10	55.00	8.95	--	--	Falling
N-19	KCSWD	12/09/2021	67.90	25.10	0.00	0.10	48.00	0.00	--	--	Falling
N-19	KCSWD	01/26/2022	63.40	23.80	0.00	-0.10	41.00	0.00	--	--	Falling
N-19	KCSWD	02/10/2022	65.50	23.40	0.00	0.00	47.00	12.83	--	--	Falling
N-19	KCSWD	03/01/2022	66.10	23.60	0.00	-0.10	49.00	9.00	--	--	Falling
N-19	KCSWD	04/07/2022	65.70	23.60	0.00	0.00	48.00	15.63	--	--	Falling
N-19	KCSWD	05/03/2022	62.00	23.30	0.00	-0.10	54.00	0.00	--	--	Falling
N-19	KCSWD	06/15/2022	55.00	24.10	0.00	0.10	64.00	30.85	--	--	Falling
N-19	KCSWD	07/21/2022	65.60	23.20	0.00	0.20	72.00	15.07	--	--	Falling
N-2	Aspect	12/17/2019	47.10	25.80	0.00	-0.10	--	--	--	--	Falling
N-2	KCSWD	01/02/2020	25.70	21.60	0.00	0.34	48.00	8.27	1.00	28.81	Falling
N-2	Aspect	01/15/2020	34.60	24.70	0.00	-0.40	--	--	--	--	Falling
N-2	KCSWD	02/03/2020	28.10	20.50	0.00	0.15	45.00	0.00	1.00	29.05	Falling
N-2	Aspect	02/13/2020	37.70	23.70	0.00	0.00	--	--	--	--	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-2	KCSWD	03/03/2020	49.10	24.70	0.00	0.58	47.00	28.70	11.00	29.36	Falling
N-2	Aspect	03/12/2020	42.60	23.10	0.00	-0.10	--	--	--	--	Falling
N-2	KCSWD	04/02/2020	50.10	22.80	0.00	-0.01	47.00	46.96	1.00	29.39	Falling
N-2	Aspect	04/16/2020	41.70	20.30	2.40	0.20	--	--	--	--	Falling
N-2	KCSWD	05/07/2020	38.80	21.90	0.00	0.02	59.00	11.89	0.00	29.04	Falling
N-2	Aspect	05/14/2020	42.90	24.70	0.00	0.10	--	--	--	--	Falling
N-2	KCSWD	06/04/2020	44.50	23.90	0.00	0.02	65.00	14.47	0.00	28.96	Falling
N-2	Aspect	06/15/2020	37.60	20.60	1.50	0.00	--	--	--	--	Falling
N-2	KCSWD	07/07/2020	35.80	19.80	0.00	-0.10	65.00	11.73	--	--	Falling
N-2	KCSWD	08/06/2020	38.30	20.50	0.20	0.10	76.00	8.15	--	--	Falling
N-2	KCSWD	09/22/2020	51.30	23.50	0.00	-0.10	70.00	11.90	--	--	Falling
N-2	KCSWD	10/07/2020	45.60	22.40	0.00	0.10	63.00	8.41	--	--	Falling
N-2	KCSWD	11/06/2020	48.70	24.40	0.00	-0.10	56.00	0.00	--	--	Falling
N-2	KCSWD	12/17/2020	42.20	23.70	0.00	-0.03	47.00	0.00	2.00	29.17	Falling
N-2	KCSWD	01/11/2021	38.60	22.30	0.00	0.10	46.00	0.00	--	--	Falling
N-2	KCSWD	02/11/2021	52.80	24.20	0.00	0.00	41.00	0.00	--	--	Falling
N-2	KCSWD	03/16/2021	54.90	24.10	0.00	0.00	45.00	0.00	--	--	Rising
N-2	KCSWD	04/01/2021	47.00	23.50	0.00	0.00	49.00	0.00	--	--	Rising
N-2	KCSWD	05/14/2021	56.20	23.90	0.00	0.20	56.00	15.07	--	--	Rising
N-2	KCSWD	06/17/2021	55.20	24.70	0.00	0.00	68.00	39.01	--	--	Rising
N-2	KCSWD	07/08/2021	36.50	19.80	0.00	0.00	71.00	0.00	--	--	Rising
N-2	KCSWD	08/26/2021	53.60	24.30	0.00	0.10	69.00	11.97	--	--	Rising
N-2	KCSWD	09/10/2021	57.50	25.50	0.00	0.10	67.00	8.53	--	--	Rising
N-2	KCSWD	10/12/2021	58.00	26.30	0.00	-0.10	58.00	0.00	--	--	Rising
N-2	KCSWD	11/02/2021	43.40	23.20	0.00	-0.30	54.00	48.80	--	--	Rising
N-2	KCSWD	12/09/2021	53.50	25.50	0.10	-0.10	48.00	0.00	--	--	Rising
N-2	KCSWD	01/26/2022	46.30	23.90	0.00	-0.10	41.00	0.00	--	--	Rising
N-2	KCSWD	02/10/2022	55.90	24.30	0.00	-0.20	47.00	0.00	--	--	Rising
N-2	KCSWD	03/01/2022	NA	NA	NA	NA	NA	NA	--	--	Rising
N-2	KCSWD	04/07/2022	50.60	24.20	0.00	-0.10	49.00	0.00	--	--	Rising
N-2	KCSWD	05/03/2022	44.30	19.10	3.10	0.00	56.00	52.22	--	--	Rising
N-2	KCSWD	06/15/2022	53.80	24.00	0.00	0.10	61.00	35.34	--	--	Rising
N-2	KCSWD	07/21/2022	55.60	23.50	0.00	0.00	74.00	0.00	--	--	Rising
N-20	Aspect	12/17/2019	49.70	26.00	0.00	0.10	--	--	--	--	Rising
N-20	KCSWD	01/02/2020	45.40	24.20	0.00	0.37	49.00	0.00	20.00	28.81	Rising
N-20	Aspect	01/15/2020	55.40	27.90	0.00	-0.10	--	--	--	--	Rising
N-20	KCSWD	02/03/2020	52.10	24.50	0.10	0.11	44.00	0.00	15.00	28.98	Rising
N-20	Aspect	02/13/2020	50.70	25.60	0.00	0.10	--	--	--	--	Falling
N-20	KCSWD	03/03/2020	49.40	23.90	0.00	0.05	49.00	0.00	24.00	29.35	Falling
N-20	Aspect	03/12/2020	53.20	25.70	0.00	0.00	--	--	--	--	Falling
N-20	KCSWD	04/02/2020	49.60	22.10	0.00	0.01	44.00	12.39	31.00	29.37	Falling
N-20	Aspect	04/16/2020	52.20	23.90	0.00	0.10	--	--	--	--	Falling
N-20	KCSWD	05/07/2020	51.20	22.30	0.00	0.06	58.00	8.65	26.00	29.02	Falling
N-20	Aspect	05/14/2020	55.30	23.80	0.00	0.10	--	--	--	--	Falling
N-20	KCSWD	06/04/2020	51.30	22.30	0.00	0.04	63.00	8.56	22.00	28.93	Falling
N-20	Aspect	06/15/2020	49.70	20.90	1.90	0.10	--	--	--	--	Falling
N-20	KCSWD	07/07/2020	57.50	22.80	0.00	0.00	64.00	8.66	--	--	Falling
N-20	KCSWD	08/06/2020	51.10	19.70	0.30	0.00	63.00	0.00	--	--	Falling
N-20	KCSWD	09/22/2020	58.10	21.50	0.00	0.00	66.00	0.00	--	--	Falling
N-20	KCSWD	10/07/2020	55.90	20.00	0.00	0.10	61.00	0.00	--	--	Falling
N-20	KCSWD	11/06/2020	56.90	22.40	0.00	0.00	54.00	0.00	--	--	Falling
N-20	KCSWD	12/17/2020	47.70	21.20	1.20	-0.44	48.00	8.66	1.00	29.20	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-20	KCSWD	01/11/2021	57.70	22.90	0.00	0.00	48.00	12.51	--	--	Falling
N-20	KCSWD	02/11/2021	63.40	24.00	0.50	0.10	42.00	0.00	--	--	Falling
N-20	KCSWD	03/16/2021	65.10	24.10	0.00	0.00	46.00	0.00	--	--	Falling
N-20	KCSWD	04/01/2021	57.60	21.30	0.00	0.00	48.00	8.88	--	--	Falling
N-20	KCSWD	05/14/2021	62.10	22.80	1.10	0.20	66.00	8.72	--	--	Falling
N-20	KCSWD	06/17/2021	65.90	23.80	0.00	0.10	65.00	0.00	--	--	Falling
N-20	KCSWD	07/08/2021	56.90	21.50	0.00	0.00	64.00	0.00	--	--	Falling
N-20	KCSWD	08/26/2021	68.30	24.40	0.00	0.10	66.00	0.00	--	--	Falling
N-20	KCSWD	09/10/2021	59.20	21.80	0.50	0.10	66.00	0.00	--	--	Falling
N-20	KCSWD	10/12/2021	68.00	25.00	0.00	0.10	54.00	0.00	--	--	Falling
N-20	KCSWD	11/02/2021	55.10	22.60	0.00	0.00	55.00	0.00	--	--	Falling
N-20	KCSWD	12/09/2021	60.40	23.20	0.20	0.10	49.00	0.00	--	--	Falling
N-20	KCSWD	01/26/2022	50.00	22.50	0.00	-0.10	43.00	0.00	--	--	Falling
N-20	KCSWD	02/10/2022	64.90	23.40	0.00	0.00	49.00	9.03	--	--	Falling
N-20	KCSWD	03/01/2022	64.90	23.40	0.00	0.10	48.00	0.00	--	--	Falling
N-20	KCSWD	04/07/2022	55.20	21.30	0.00	0.10	50.00	0.00	--	--	Falling
N-20	KCSWD	05/03/2022	61.00	23.20	0.00	0.10	56.00	12.50	--	--	Falling
N-20	KCSWD	06/15/2022	66.40	24.60	0.00	0.20	63.00	12.44	--	--	Falling
N-20	KCSWD	07/21/2022	53.90	20.00	0.00	0.10	73.00	12.06	--	--	Falling
N-21	Aspect	12/17/2019	38.20	24.60	0.00	-0.10	--	--	--	--	Falling
N-21	KCSWD	01/02/2020	17.00	20.80	0.00	-0.01	52.00	31.36	1.00	28.81	Falling
N-21	Aspect	01/15/2020	35.00	24.60	0.00	-0.40	--	--	--	--	Falling
N-21	KCSWD	02/03/2020	10.90	19.20	0.00	0.02	43.00	0.00	2.00	29.03	Falling
N-21	Aspect	02/13/2020	35.30	23.30	0.00	0.00	--	--	--	--	Falling
N-21	KCSWD	03/03/2020	22.30	20.60	0.00	0.03	49.00	8.23	1.00	29.44	Falling
N-21	Aspect	03/12/2020	38.90	22.30	0.00	-0.10	--	--	--	--	Falling
N-21	KCSWD	04/02/2020	9.10	18.40	0.00	0.04	49.00	11.40	2.00	29.36	Falling
N-21	Aspect	04/16/2020	33.00	17.00	5.10	0.20	--	--	--	--	Falling
N-21	KCSWD	05/07/2020	33.70	21.70	0.00	0.02	60.00	11.75	0.00	29.06	Falling
N-21	Aspect	05/14/2020	24.70	21.10	0.00	0.10	--	--	--	--	Falling
N-21	KCSWD	06/04/2020	26.80	20.80	0.00	0.00	66.00	14.02	1.00	28.96	Falling
N-21	Aspect	06/15/2020	14.10	14.10	5.20	0.00	--	--	--	--	Falling
N-21	KCSWD	07/07/2020	8.20	16.00	3.60	-0.10	66.00	7.87	--	--	Falling
N-21	KCSWD	08/06/2020	10.00	15.10	1.60	-0.10	66.00	7.91	--	--	Falling
N-21	KCSWD	09/22/2020	13.40	17.90	1.00	0.00	69.00	0.00	--	--	Falling
N-21	KCSWD	10/07/2020	17.00	19.70	0.00	0.00	64.00	0.00	--	--	Falling
N-21	KCSWD	11/06/2020	47.90	24.70	0.00	-0.10	55.00	0.00	--	--	Falling
N-21	KCSWD	12/17/2020	16.20	19.30	0.00	-6.45	49.00	0.00	0.00	29.21	Falling
N-21	KCSWD	01/11/2021	21.20	19.00	0.00	0.00	50.00	0.00	--	--	Falling
N-21	KCSWD	02/11/2021	46.50	23.40	0.00	-0.10	39.00	0.00	--	--	Falling
N-21	KCSWD	03/16/2021	46.70	22.90	0.00	-0.10	45.00	42.47	--	--	Falling
N-21	KCSWD	04/01/2021	18.70	19.00	0.00	0.00	48.00	8.19	--	--	Falling
N-21	KCSWD	05/14/2021	17.40	18.70	0.00	0.20	62.00	11.36	--	--	Falling
N-21	KCSWD	06/17/2021	15.70	17.90	0.00	0.10	72.00	13.69	--	--	Falling
N-21	KCSWD	07/08/2021	9.80	16.90	0.10	0.00	69.00	0.00	--	--	Falling
N-21	KCSWD	08/26/2021	12.80	17.80	0.00	0.00	68.00	11.17	--	--	Falling
N-21	KCSWD	09/10/2021	22.70	19.20	1.10	0.00	68.00	0.00	--	--	Falling
N-21	KCSWD	10/12/2021	55.10	25.80	0.00	-0.10	51.00	0.00	--	--	Falling
N-21	KCSWD	11/02/2021	20.90	20.20	0.00	0.00	54.00	8.16	--	--	Falling
N-21	KCSWD	12/09/2021	45.10	24.50	0.00	0.00	45.00	0.00	--	--	Falling
N-21	KCSWD	01/26/2022	20.10	18.90	0.00	-0.10	40.00	16.69	--	--	Rising
N-21	KCSWD	02/10/2022	53.20	23.80	0.00	-0.20	48.00	0.00	--	--	Rising

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-21	KCSWD	03/01/2022	13.70	15.00	0.40	-1.10	49.00	0.00	--	--	Rising
N-21	KCSWD	04/07/2022	34.50	21.00	0.00	0.10	49.00	0.00	--	--	Rising
N-21	KCSWD	05/03/2022	9.90	11.00	9.30	-0.10	55.00	18.17	--	--	Rising
N-21	KCSWD	06/15/2022	27.70	19.30	0.00	0.10	65.00	14.11	--	--	Rising
N-21	KCSWD	07/21/2022	9.40	15.80	0.00	-0.10	80.00	7.72	--	--	Rising
N-3	Aspect	12/17/2019	38.10	24.80	0.00	-0.10	--	--	--	--	Rising
N-3	KCSWD	01/02/2020	16.10	20.30	0.00	0.30	47.00	11.52	1.00	28.81	Rising
N-3	Aspect	01/15/2020	34.70	24.70	0.00	-0.40	--	--	--	--	Rising
N-3	KCSWD	02/03/2020	47.00	23.80	0.20	0.04	45.00	0.00	2.00	29.02	Rising
N-3	Aspect	02/13/2020	37.50	23.60	0.00	0.00	--	--	--	--	Rising
N-3	KCSWD	03/03/2020	46.60	24.30	0.00	0.09	48.00	8.60	3.00	29.35	Rising
N-3	Aspect	03/12/2020	41.20	23.30	0.00	-0.10	--	--	--	--	Rising
N-3	KCSWD	04/02/2020	50.30	22.90	0.00	-0.05	47.00	12.33	5.00	29.39	Rising
N-3	Aspect	04/16/2020	41.30	21.90	0.70	0.20	--	--	--	--	Rising
N-3	KCSWD	05/07/2020	35.40	22.40	0.00	0.03	60.00	14.41	0.00	29.05	Rising
N-3	Aspect	05/14/2020	44.80	25.40	0.00	0.10	--	--	--	--	Rising
N-3	KCSWD	06/04/2020	44.30	23.90	0.00	0.01	64.00	14.49	0.00	28.95	Rising
N-3	Aspect	06/15/2020	36.20	19.40	3.30	-0.10	--	--	--	--	Rising
N-3	KCSWD	07/07/2020	46.00	24.30	0.00	-0.20	68.00	11.79	--	--	Rising
N-3	KCSWD	08/06/2020	40.60	21.40	0.00	0.10	68.00	0.00	--	--	Rising
N-3	KCSWD	09/22/2020	51.30	23.80	0.00	0.00	68.00	11.93	--	--	Rising
N-3	KCSWD	10/07/2020	53.00	24.90	0.00	0.00	60.00	0.00	--	--	Rising
N-3	KCSWD	11/06/2020	48.80	24.90	0.00	-0.20	55.00	0.00	--	--	Rising
N-3	KCSWD	12/17/2020	27.40	20.80	0.00	0.05	47.00	0.00	1.00	29.16	Rising
N-3	KCSWD	01/11/2021	37.80	22.10	0.00	0.10	46.00	0.00	--	--	Rising
N-3	KCSWD	02/11/2021	51.90	24.10	0.00	0.10	42.00	0.00	--	--	Rising
N-3	KCSWD	03/16/2021	54.90	24.00	0.00	0.00	46.00	0.00	--	--	Rising
N-3	KCSWD	04/01/2021	49.00	23.20	0.20	-0.20	48.00	12.23	--	--	Rising
N-3	KCSWD	05/14/2021	56.00	24.00	0.00	0.20	63.00	24.34	--	--	Rising
N-3	KCSWD	06/17/2021	53.70	23.70	0.00	0.20	70.00	14.69	--	--	Rising
N-3	KCSWD	07/08/2021	49.00	23.00	0.00	-0.10	69.00	0.00	--	--	Rising
N-3	KCSWD	08/26/2021	50.30	23.80	0.00	0.00	69.00	11.90	--	--	Rising
N-3	KCSWD	09/10/2021	57.30	25.60	0.00	0.10	68.00	0.00	--	--	Rising
N-3	KCSWD	10/12/2021	57.90	26.30	0.00	0.00	55.00	0.00	--	--	Rising
N-3	KCSWD	11/02/2021	52.30	23.20	0.10	-0.10	54.00	17.34	--	--	Rising
N-3	KCSWD	12/09/2021	52.90	25.30	0.00	0.00	46.00	0.00	--	--	Rising
N-3	KCSWD	01/26/2022	44.00	23.00	0.00	-0.10	41.00	0.00	--	--	Rising
N-3	KCSWD	02/10/2022	55.90	24.30	0.00	-0.20	47.00	0.00	--	--	Rising
N-3	KCSWD	03/01/2022	54.50	22.20	0.00	0.00	49.00	0.00	--	--	Rising
N-3	KCSWD	04/07/2022	49.10	23.90	0.00	0.20	49.00	0.00	--	--	Rising
N-3	KCSWD	05/03/2022	46.50	20.00	2.60	0.00	55.00	0.00	--	--	Rising
N-3	KCSWD	06/15/2022	54.10	24.00	0.00	0.10	63.00	12.09	--	--	Rising
N-3	KCSWD	07/21/2022	56.10	23.80	0.00	0.00	73.00	0.00	--	--	Rising
N-4	Aspect	12/17/2019	37.00	25.70	0.00	-0.20	--	--	--	--	Rising
N-4	KCSWD	01/02/2020	21.80	20.90	0.30	-1.03	47.00	26.03	1.00	28.81	Rising
N-4	Aspect	01/15/2020	39.80	26.50	0.00	-0.40	--	--	--	--	Rising
N-4	KCSWD	02/03/2020	41.90	23.20	0.10	0.05	45.00	50.06	2.00	28.99	Rising
N-4	Aspect	02/13/2020	33.90	22.50	0.10	0.10	--	--	--	--	Rising
N-4	KCSWD	03/03/2020	40.10	23.60	0.00	0.02	49.00	16.96	1.00	29.38	Rising
N-4	Aspect	03/12/2020	38.60	21.80	0.50	-0.10	--	--	--	--	Rising
N-4	KCSWD	04/02/2020	49.30	22.80	0.00	-0.01	46.00	50.82	1.00	29.38	Rising
N-4	Aspect	04/16/2020	44.40	24.40	0.00	0.30	--	--	--	--	Rising

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-4	KCSWD	05/07/2020	35.50	22.40	0.00	0.02	57.00	14.47	0.00	29.03	Rising
N-4	Aspect	05/14/2020	45.60	25.60	0.00	0.20	--	--	--	--	Rising
N-4	KCSWD	06/04/2020	45.30	24.20	0.00	0.01	62.00	14.55	0.00	28.95	Rising
N-4	Aspect	06/15/2020	41.30	21.90	1.90	0.10	--	--	--	--	Rising
N-4	KCSWD	07/07/2020	48.70	24.30	0.00	-0.10	61.00	14.68	--	--	Rising
N-4	KCSWD	08/06/2020	41.20	22.50	0.10	0.20	63.00	8.33	--	--	Rising
N-4	KCSWD	09/22/2020	51.90	24.00	0.00	-0.10	63.00	12.03	--	--	Rising
N-4	KCSWD	10/07/2020	52.60	24.70	0.00	0.10	61.00	0.00	--	--	Rising
N-4	KCSWD	11/06/2020	50.20	25.40	0.00	-0.10	58.00	0.00	--	--	Rising
N-4	KCSWD	12/17/2020	19.40	14.00	7.50	-0.05	47.00	11.70	0.00	29.18	Rising
N-4	KCSWD	01/11/2021	43.40	23.50	0.00	0.10	54.00	23.95	--	--	Falling
N-4	KCSWD	02/11/2021	54.60	24.60	0.00	0.10	47.00	0.00	--	--	Falling
N-4	KCSWD	03/16/2021	54.90	24.20	0.00	0.10	51.00	0.00	--	--	Falling
N-4	KCSWD	04/01/2021	43.80	22.80	0.00	0.10	51.00	22.54	--	--	Falling
N-4	KCSWD	05/14/2021	56.10	23.70	0.00	0.30	58.00	12.27	--	--	Falling
N-4	KCSWD	06/17/2021	55.90	24.90	0.00	0.20	62.00	17.20	--	--	Falling
N-4	KCSWD	07/08/2021	55.90	24.40	0.00	0.00	63.00	0.00	--	--	Falling
N-4	KCSWD	08/26/2021	57.60	25.00	0.00	0.10	66.00	12.12	--	--	Falling
N-4	KCSWD	09/10/2021	58.60	25.80	0.00	0.10	63.00	0.00	--	--	Falling
N-4	KCSWD	10/12/2021	59.10	26.70	0.00	0.00	56.00	22.98	--	--	Falling
N-4	KCSWD	11/02/2021	49.90	22.60	0.50	-0.10	55.00	27.26	--	--	Falling
N-4	KCSWD	12/09/2021	54.70	25.90	0.00	0.00	42.00	0.00	--	--	Falling
N-4	KCSWD	01/26/2022	37.70	21.90	0.00	-0.40	42.00	0.00	--	--	Falling
N-4	KCSWD	02/10/2022	56.60	24.50	0.00	-0.10	54.00	0.00	--	--	Falling
N-4	KCSWD	03/01/2022	NA	NA	NA	NA	NA	NA	--	--	Falling
N-4	KCSWD	04/07/2022	46.50	23.40	0.00	0.20	52.00	0.00	--	--	Falling
N-4	KCSWD	05/03/2022	38.30	20.70	0.20	-0.10	54.00	34.92	--	--	Falling
N-4	KCSWD	06/15/2022	58.90	24.90	0.00	0.20	63.00	12.20	--	--	Falling
N-4	KCSWD	07/21/2022	56.20	23.70	0.00	0.00	66.00	8.57	--	--	Falling
N-5	Aspect	12/17/2019	32.40	21.00	8.80	-0.10	--	--	--	--	Falling
N-5	KCSWD	01/02/2020	28.70	22.00	0.20	0.25	48.00	14.40	1.00	28.81	Falling
N-5	Aspect	01/15/2020	33.30	25.80	0.00	-0.40	--	--	--	--	Rising
N-5	KCSWD	02/03/2020	37.40	21.90	1.20	0.01	43.00	0.00	2.00	29.06	Rising
N-5	Aspect	02/13/2020	36.90	23.60	0.00	0.00	--	--	--	--	Rising
N-5	KCSWD	03/03/2020	41.30	23.60	0.00	0.08	48.00	8.52	1.00	29.34	Rising
N-5	Aspect	03/12/2020	40.40	23.60	0.00	-0.10	--	--	--	--	Rising
N-5	KCSWD	04/02/2020	41.50	22.70	0.30	0.04	46.00	8.56	1.00	29.36	Rising
N-5	Aspect	04/16/2020	16.60	12.10	9.00	0.20	--	--	--	--	Rising
N-5	KCSWD	05/07/2020	34.20	22.00	0.00	0.03	57.00	11.80	0.00	29.05	Rising
N-5	Aspect	05/14/2020	34.90	22.70	0.00	0.10	--	--	--	--	Rising
N-5	KCSWD	06/04/2020	31.00	22.10	0.00	0.01	64.00	14.14	0.00	28.96	Rising
N-5	Aspect	06/15/2020	28.10	18.40	3.80	0.00	--	--	--	--	Rising
N-5	KCSWD	07/07/2020	34.20	24.00	0.00	0.00	64.00	11.56	--	--	Rising
N-5	KCSWD	08/06/2020	32.50	22.60	0.70	0.10	62.00	8.18	--	--	Rising
N-5	KCSWD	09/22/2020	33.10	23.30	0.10	0.00	68.00	11.47	--	--	Rising
N-5	KCSWD	10/07/2020	36.60	21.70	1.40	0.10	60.00	8.29	--	--	Rising
N-5	KCSWD	11/06/2020	32.90	21.20	1.50	-0.10	55.00	0.00	--	--	Rising
N-5	KCSWD	12/17/2020	20.70	15.90	5.30	0.02	47.00	0.00	0.00	29.21	Rising
N-5	KCSWD	01/11/2021	31.40	20.70	0.50	0.00	46.00	0.00	--	--	Rising
N-5	KCSWD	02/11/2021	51.20	23.90	0.00	0.00	39.00	0.00	--	--	Rising
N-5	KCSWD	03/16/2021	46.10	22.40	0.10	0.00	47.00	0.00	--	--	Rising
N-5	KCSWD	04/01/2021	44.00	22.20	0.60	0.00	47.00	8.58	--	--	Rising

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-5	KCSWD	05/14/2021	35.20	22.80	0.00	0.20	61.00	23.36	--	--	Rising
N-5	KCSWD	06/17/2021	27.60	20.00	0.00	0.10	69.00	14.02	--	--	Rising
N-5	KCSWD	07/08/2021	27.00	20.80	0.50	-0.10	69.00	0.00	--	--	Rising
N-5	KCSWD	08/26/2021	28.30	20.80	2.50	0.10	70.00	11.39	--	--	Rising
N-5	KCSWD	09/10/2021	21.50	13.60	9.20	0.10	68.00	0.00	--	--	Rising
N-5	KCSWD	10/12/2021	36.30	20.70	2.80	0.00	52.00	0.00	--	--	Rising
N-5	KCSWD	11/02/2021	43.70	24.20	0.00	0.00	53.00	0.00	--	--	Rising
N-5	KCSWD	12/09/2021	54.30	24.90	0.00	0.00	48.00	0.00	--	--	Rising
N-5	KCSWD	01/26/2022	43.70	23.10	0.00	-0.10	40.00	0.00	--	--	Rising
N-5	KCSWD	02/10/2022	47.80	22.80	0.20	-0.20	47.00	0.00	--	--	Rising
N-5	KCSWD	03/01/2022	41.20	18.60	0.00	-0.10	52.00	12.13	--	--	Rising
N-5	KCSWD	04/07/2022	40.70	21.80	0.00	0.10	49.00	0.00	--	--	Rising
N-5	KCSWD	05/03/2022	21.60	12.40	9.30	0.00	55.00	0.00	--	--	Rising
N-5	KCSWD	06/15/2022	41.40	22.80	0.00	0.10	64.00	11.77	--	--	Rising
N-5	KCSWD	07/21/2022	31.10	22.90	0.00	0.00	76.00	0.00	--	--	Rising
N-6	Aspect	12/17/2019	27.30	23.20	0.00	-0.10	--	--	--	--	Rising
N-6	KCSWD	01/02/2020	26.20	20.30	2.10	0.28	46.00	8.32	1.00	28.81	Rising
N-6	Aspect	01/15/2020	19.90	21.60	0.00	-0.40	--	--	--	--	Rising
N-6	KCSWD	02/03/2020	8.00	11.00	10.50	0.02	43.00	0.00	1.00	29.03	Rising
N-6	Aspect	02/13/2020	37.70	23.50	0.00	0.00	--	--	--	--	Rising
N-6	KCSWD	03/03/2020	40.10	22.60	0.00	0.05	48.00	14.76	0.00	29.39	Rising
N-6	Aspect	03/12/2020	19.50	14.00	8.50	-0.20	--	--	--	--	Rising
N-6	KCSWD	04/02/2020	21.00	14.90	7.10	0.10	46.00	8.33	1.00	29.38	Falling
N-6	Aspect	04/16/2020	15.70	13.10	7.10	0.20	--	--	--	--	Falling
N-6	KCSWD	05/07/2020	5.20	5.70	14.70	0.02	58.00	11.48	0.00	29.06	Falling
N-6	Aspect	05/14/2020	12.30	9.10	11.20	0.10	--	--	--	--	Falling
N-6	KCSWD	06/04/2020	22.30	17.40	3.70	-0.01	65.00	14.01	0.00	28.96	Falling
N-6	Aspect	06/15/2020	16.90	11.20	9.50	0.00	--	--	--	--	Falling
N-6	KCSWD	07/07/2020	17.60	12.70	10.60	-0.10	67.00	8.05	--	--	Falling
N-6	KCSWD	08/06/2020	14.40	11.20	10.10	0.00	66.00	8.03	--	--	Falling
N-6	KCSWD	09/22/2020	16.00	10.50	10.30	0.00	66.00	11.42	--	--	Falling
N-6	KCSWD	10/07/2020	24.20	14.40	7.80	0.00	58.00	0.00	--	--	Falling
N-6	KCSWD	11/06/2020	39.50	22.20	2.50	-0.10	57.00	0.00	--	--	Falling
N-6	KCSWD	12/17/2020	10.80	10.20	10.70	-0.01	45.00	0.00	0.00	29.19	Falling
N-6	KCSWD	01/11/2021	35.90	21.70	0.00	0.00	45.00	0.00	--	--	Falling
N-6	KCSWD	02/11/2021	45.50	23.40	0.00	0.00	37.00	0.00	--	--	Falling
N-6	KCSWD	03/16/2021	32.80	19.00	2.90	-0.20	45.00	0.00	--	--	Falling
N-6	KCSWD	04/01/2021	25.60	16.90	3.70	-0.10	47.00	18.67	--	--	Falling
N-6	KCSWD	05/14/2021	27.50	17.60	3.90	0.20	64.00	23.15	--	--	Falling
N-6	KCSWD	06/17/2021	18.00	16.00	3.30	0.10	69.00	13.87	--	--	Falling
N-6	KCSWD	07/08/2021	18.90	13.80	6.60	-0.10	70.00	0.00	--	--	Falling
N-6	KCSWD	08/26/2021	11.60	7.00	13.00	0.10	69.00	8.04	--	--	Falling
N-6	KCSWD	09/10/2021	16.70	10.40	8.90	0.00	68.00	0.00	--	--	Falling
N-6	KCSWD	10/12/2021	28.00	17.10	5.50	0.10	49.00	0.00	--	--	Falling
N-6	KCSWD	11/02/2021	7.30	8.00	13.50	0.00	52.00	14.11	--	--	Falling
N-6	KCSWD	12/09/2021	49.50	24.60	0.00	0.00	45.00	0.00	--	--	Falling
N-6	KCSWD	01/26/2022	43.80	22.80	0.40	-0.10	38.00	0.00	--	--	Falling
N-6	KCSWD	02/10/2022	35.00	19.50	2.10	-0.20	47.00	0.00	--	--	Falling
N-6	KCSWD	03/01/2022	47.20	22.00	0.00	-0.10	49.00	8.64	--	--	Falling
N-6	KCSWD	04/07/2022	26.60	17.70	1.90	0.10	49.00	0.00	--	--	Falling
N-6	KCSWD	05/03/2022	7.40	14.90	3.40	0.00	55.00	0.00	--	--	Falling
N-6	KCSWD	06/15/2022	26.20	19.80	0.40	0.10	65.00	14.04	--	--	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-6	KCSWD	07/21/2022	22.90	17.90	3.50	0.10	75.00	13.77	--	--	Falling
N-7	Aspect	12/17/2019	36.70	24.10	0.00	-0.10	--	--	--	--	Falling
N-7	KCSWD	01/02/2020	10.70	12.60	8.40	0.46	48.00	14.16	1.00	28.81	Falling
N-7	Aspect	01/15/2020	31.50	23.60	0.00	-0.40	--	--	--	--	Falling
N-7	KCSWD	02/03/2020	5.40	10.80	9.60	0.07	46.00	0.00	0.00	29.02	Falling
N-7	Aspect	02/13/2020	33.50	21.80	1.10	0.00	--	--	--	--	Falling
N-7	KCSWD	03/03/2020	44.90	23.40	0.00	0.13	49.00	12.14	0.00	29.37	Falling
N-7	Aspect	03/12/2020	44.40	25.10	0.00	-0.20	--	--	--	--	Falling
N-7	KCSWD	04/02/2020	40.20	21.10	4.10	0.07	48.00	8.53	1.00	29.38	Falling
N-7	Aspect	04/16/2020	44.10	24.10	0.00	0.20	--	--	--	--	Falling
N-7	KCSWD	05/07/2020	34.90	21.20	0.00	0.03	60.00	11.79	0.00	29.05	Falling
N-7	Aspect	05/14/2020	45.30	23.50	0.00	0.10	--	--	--	--	Falling
N-7	KCSWD	06/04/2020	41.70	22.00	0.10	0.00	65.00	14.46	0.00	28.95	Rising
N-7	Aspect	06/15/2020	27.50	15.00	6.60	0.00	--	--	--	--	Rising
N-7	KCSWD	07/07/2020	31.80	17.60	6.00	0.00	67.00	11.61	--	--	Rising
N-7	KCSWD	08/06/2020	17.10	11.40	10.10	0.00	69.00	0.00	--	--	Rising
N-7	KCSWD	09/22/2020	50.50	22.70	0.00	0.00	68.00	8.45	--	--	Rising
N-7	KCSWD	10/07/2020	49.30	23.40	0.00	0.10	63.00	0.00	--	--	Rising
N-7	KCSWD	11/06/2020	47.70	24.20	0.80	-0.10	55.00	0.00	--	--	Rising
N-7	KCSWD	12/17/2020	10.20	13.50	6.10	0.03	47.00	0.00	0.00	29.17	Rising
N-7	KCSWD	01/11/2021	37.90	21.60	0.70	0.00	46.00	0.00	--	--	Rising
N-7	KCSWD	02/11/2021	50.90	23.80	0.00	-0.10	40.00	0.00	--	--	Rising
N-7	KCSWD	03/16/2021	52.70	23.70	0.00	-0.10	46.00	0.00	--	--	Rising
N-7	KCSWD	04/01/2021	25.60	19.20	1.70	0.00	50.00	8.27	--	--	Rising
N-7	KCSWD	05/14/2021	53.60	23.70	0.00	0.20	59.00	17.23	--	--	Rising
N-7	KCSWD	06/17/2021	42.70	21.20	0.30	0.20	69.00	14.45	--	--	Rising
N-7	KCSWD	07/08/2021	42.80	20.50	1.90	0.00	71.00	0.00	--	--	Rising
N-7	KCSWD	08/26/2021	55.50	24.10	0.70	0.10	70.00	8.49	--	--	Rising
N-7	KCSWD	09/10/2021	56.40	24.10	0.00	0.00	68.00	0.00	--	--	Rising
N-7	KCSWD	10/12/2021	55.00	25.00	0.00	0.10	56.00	0.00	--	--	Rising
N-7	KCSWD	11/02/2021	20.90	14.30	6.30	-0.10	54.00	8.26	--	--	Rising
N-7	KCSWD	12/09/2021	58.80	24.80	0.00	0.00	46.00	0.00	--	--	Rising
N-7	KCSWD	01/26/2022	23.00	18.70	2.10	-0.10	40.00	8.39	--	--	Rising
N-7	KCSWD	02/10/2022	51.70	23.60	0.00	-0.20	47.00	0.00	--	--	Rising
N-7	KCSWD	03/01/2022	56.50	23.70	0.00	-0.10	51.00	12.40	--	--	Rising
N-7	KCSWD	04/07/2022	43.10	22.00	0.00	0.10	55.00	0.00	--	--	Rising
N-7	KCSWD	05/03/2022	45.10	21.90	0.20	0.00	56.00	0.00	--	--	Rising
N-7	KCSWD	06/15/2022	51.20	23.70	0.00	0.10	64.00	8.49	--	--	Rising
N-7	KCSWD	07/21/2022	53.40	23.10	0.00	0.00	75.00	16.81	--	--	Rising
N-8	Aspect	12/17/2019	33.00	23.60	0.00	-0.10	--	--	--	--	Rising
N-8	KCSWD	01/02/2020	35.60	23.60	0.30	0.39	49.00	26.53	1.00	28.81	Rising
N-8	Aspect	01/15/2020	34.00	24.00	0.00	-0.40	--	--	--	--	Rising
N-8	KCSWD	02/03/2020	42.70	24.50	0.00	-0.23	46.00	33.14	0.00	29.00	Rising
N-8	Aspect	02/13/2020	36.70	23.00	0.00	0.10	--	--	--	--	Rising
N-8	KCSWD	03/03/2020	44.50	24.30	0.00	0.06	49.00	29.61	1.00	29.35	Rising
N-8	Aspect	03/12/2020	42.00	24.40	0.00	-0.10	--	--	--	--	Rising
N-8	KCSWD	04/02/2020	57.00	28.40	0.00	0.06	50.00	30.05	1.00	29.36	Rising
N-8	Aspect	04/16/2020	43.80	24.10	0.00	0.20	--	--	--	--	Rising
N-8	KCSWD	05/07/2020	36.10	21.40	0.00	0.03	54.00	8.43	0.00	29.03	Rising
N-8	Aspect	05/14/2020	46.20	23.70	0.00	0.10	--	--	--	--	Rising
N-8	KCSWD	06/04/2020	43.90	22.50	0.00	0.01	59.00	11.96	0.00	28.93	Rising
N-8	Aspect	06/15/2020	37.70	18.50	3.80	0.00	--	--	--	--	Rising

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-8	KCSWD	07/07/2020	48.80	23.80	0.00	-0.10	62.00	8.48	--	--	Rising
N-8	KCSWD	08/06/2020	50.30	24.20	0.00	0.00	62.00	8.48	--	--	Rising
N-8	KCSWD	09/22/2020	50.30	22.90	0.00	-0.10	62.00	8.52	--	--	Rising
N-8	KCSWD	10/07/2020	50.60	23.40	0.00	0.00	59.00	0.00	--	--	Rising
N-8	KCSWD	11/06/2020	49.80	24.40	0.00	-0.10	53.00	0.00	--	--	Rising
N-8	KCSWD	12/17/2020	23.50	16.10	5.10	0.13	41.00	38.39	1.00	29.14	Rising
N-8	KCSWD	01/11/2021	38.40	22.10	0.00	0.10	52.00	29.20	--	--	Rising
N-8	KCSWD	02/11/2021	48.10	23.90	0.00	0.00	46.00	50.42	--	--	Rising
N-8	KCSWD	03/16/2021	52.10	23.90	0.00	0.00	44.00	21.46	--	--	Rising
N-8	KCSWD	04/01/2021	48.10	22.80	0.20	-0.10	47.00	28.69	--	--	Rising
N-8	KCSWD	05/14/2021	54.00	23.60	0.00	0.20	59.00	12.20	--	--	Rising
N-8	KCSWD	06/17/2021	52.60	22.70	0.00	0.20	61.00	14.90	--	--	Rising
N-8	KCSWD	07/08/2021	54.00	23.40	0.00	0.00	67.00	0.00	--	--	Rising
N-8	KCSWD	08/26/2021	57.10	24.10	0.00	0.10	73.00	12.00	--	--	Rising
N-8	KCSWD	09/10/2021	56.50	24.30	0.10	0.10	64.00	0.00	--	--	Rising
N-8	KCSWD	10/12/2021	53.50	24.90	0.00	0.00	52.00	0.00	--	--	Rising
N-8	KCSWD	11/02/2021	51.00	24.00	0.20	-0.10	56.00	0.00	--	--	Rising
N-8	KCSWD	12/09/2021	56.30	25.00	0.00	0.10	45.00	0.00	--	--	Rising
N-8	KCSWD	01/26/2022	42.80	22.70	0.00	-0.10	43.00	25.91	--	--	Rising
N-8	KCSWD	02/10/2022	54.30	23.90	0.00	-0.10	52.00	0.00	--	--	Rising
N-8	KCSWD	03/01/2022	NA	NA	NA	NA	NA	NA	--	--	Rising
N-8	KCSWD	04/07/2022	47.70	22.80	0.00	0.10	47.00	0.00	--	--	Rising
N-8	KCSWD	05/03/2022	45.20	22.60	0.00	-0.20	53.00	12.12	--	--	Rising
N-8	KCSWD	06/15/2022	54.40	24.00	0.00	0.20	58.00	12.19	--	--	Falling
N-8	KCSWD	07/21/2022	54.30	23.60	0.00	0.10	64.00	14.83	--	--	Falling
N-9	Aspect	12/17/2019	44.40	24.50	0.00	-0.10	--	--	--	--	Falling
N-9	KCSWD	01/02/2020	36.20	25.00	0.70	-0.12	49.00	41.81	2.00	28.81	Falling
N-9	Aspect	01/15/2020	46.90	25.10	0.00	-0.40	--	--	--	--	Falling
N-9	KCSWD	02/03/2020	46.40	25.50	0.00	0.12	46.00	66.63	0.00	28.99	Falling
N-9	Aspect	02/13/2020	52.70	27.90	0.00	0.10	--	--	--	--	Falling
N-9	KCSWD	03/03/2020	46.10	22.70	0.00	0.12	50.00	45.56	2.00	29.33	Falling
N-9	Aspect	03/12/2020	47.30	23.40	0.00	-0.10	--	--	--	--	Falling
N-9	KCSWD	04/02/2020	56.70	28.50	0.00	0.01	47.00	60.90	5.00	29.37	Falling
N-9	Aspect	04/16/2020	51.60	23.20	0.00	0.30	--	--	--	--	Falling
N-9	KCSWD	05/07/2020	46.00	22.20	0.00	0.01	57.00	14.83	3.00	29.05	Falling
N-9	Aspect	05/14/2020	51.60	22.80	0.00	0.20	--	--	--	--	Falling
N-9	KCSWD	06/04/2020	50.70	23.20	0.00	0.07	63.00	14.75	0.00	28.94	Falling
N-9	Aspect	06/15/2020	46.00	20.20	2.30	0.10	--	--	--	--	Falling
N-9	KCSWD	07/07/2020	53.70	23.80	0.00	-0.10	64.00	12.09	--	--	Falling
N-9	KCSWD	08/06/2020	48.40	24.50	0.00	0.20	68.00	8.35	--	--	Falling
N-9	KCSWD	09/22/2020	52.20	22.80	0.00	0.10	69.00	14.67	--	--	Falling
N-9	KCSWD	10/07/2020	56.30	22.20	0.00	0.10	62.00	0.00	--	--	Falling
N-9	KCSWD	11/06/2020	58.60	24.40	0.00	-0.10	56.00	0.00	--	--	Falling
N-9	KCSWD	12/17/2020	23.30	15.90	5.60	0.05	49.00	45.40	0.00	29.17	Falling
N-9	KCSWD	01/11/2021	59.40	24.20	0.00	0.00	55.00	56.77	--	--	Falling
N-9	KCSWD	02/11/2021	61.80	23.90	0.00	0.10	50.00	65.29	--	--	Falling
N-9	KCSWD	03/16/2021	61.20	23.30	0.00	0.10	51.00	56.22	--	--	Falling
N-9	KCSWD	04/01/2021	59.70	23.80	0.00	0.10	53.00	69.78	--	--	Falling
N-9	KCSWD	05/14/2021	59.40	22.10	0.00	0.40	62.00	17.48	--	--	Falling
N-9	KCSWD	06/17/2021	58.90	23.30	0.00	0.30	66.00	14.99	--	--	Falling
N-9	KCSWD	07/08/2021	52.40	23.30	0.00	0.00	69.00	0.00	--	--	Falling
N-9	KCSWD	08/26/2021	55.10	24.20	0.00	0.10	67.00	12.06	--	--	Falling

Table A-2
Landfill Gas Extraction Well Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temperature (°F)	Flow Rate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometric Pressure (Rising or Falling)
N-9	KCSWD	09/10/2021	62.80	24.40	0.00	0.10	68.00	0.00	--	--	Falling
N-9	KCSWD	10/12/2021	66.10	25.10	0.00	0.00	60.00	0.00	--	--	Falling
N-9	KCSWD	11/02/2021	55.70	24.20	0.00	-0.10	57.00	0.00	--	--	Falling
N-9	KCSWD	12/09/2021	63.70	24.70	0.00	0.10	47.00	0.00	--	--	Falling
N-9	KCSWD	01/26/2022	54.40	25.90	0.00	-0.10	43.00	0.00	--	--	Falling
N-9	KCSWD	02/10/2022	64.00	23.30	0.00	-0.10	55.00	0.00	--	--	Falling
N-9	KCSWD	03/01/2022	NA	NA	NA	NA	NA	NA	--	--	Falling
N-9	KCSWD	04/07/2022	59.40	22.60	0.00	0.00	57.00	23.29	--	--	Falling
N-9	KCSWD	05/03/2022	63.30	22.90	0.00	0.00	54.00	0.00	--	--	Falling
N-9	KCSWD	06/15/2022	65.70	23.40	0.00	0.00	67.00	42.03	--	--	Falling
N-9	KCSWD	07/21/2022	58.60	22.60	0.00	0.00	93.00	8.24	--	--	Falling

Notes:

CH4 = Methane

CO2 = Carbon dioxide

O2 = Oxygen

H2S = Hydrogen sulfide

"H2O = Inches of water column.

°F = Degrees Fahrenheit

SCFM = Standard cubic feet per minute

ppm = Parts per million

"Hg = Inches of mercury

Aspect = Aspect Consulting, LLC

KCSWD = King County Solid Waste Division

-- = Not measured or error during monitoring.

NA = On March 1, 2022, there was a reporting error for six extraction wells, which resulted in all data being reported as 0.

Table A-3
Landfill Gas Bioherm Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temp (°F)	Flowrate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometer (Rising or Falling)
BIOIN	Aspect	12/17/2019	49.00	28.00	0.00	0.01	--	--	1.00	29.19	Rising
BIOIN	KCSWD	01/02/2020	0.00	0.30	21.00	0.00	37.00	2.45	30.01	--	Rising
BIOIN	Aspect	01/15/2020	49.40	29.30	0.00	0.04	--	--	1.00	28.81	Rising
BIOIN	KCSWD	01/23/2020	0.40	0.80	20.50	0.10	54.00	0.00	29.89	--	Rising
BIOIN	KCSWD	01/30/2020	0.00	0.40	20.50	0.00	47.00	2.49	30.15	--	Rising
BIOIN	KCSWD	01/30/2020	48.60	27.10	0.20	0.10	47.00	0.00	30.15	--	Falling
BIOIN	KCSWD	02/03/2020	0.20	0.30	20.40	(0.10)	37.00	0.00	30.12	--	Falling
BIOIN	KCSWD	02/10/2020	1.40	1.10	19.70	0.00	41.00	0.00	30.29	--	Falling
BIOIN	Aspect	02/13/2020	54.00	28.60	0.00	0.06	--	--	0.00	29.06	Falling
BIOIN	KCSWD	02/18/2020	51.40	28.00	0.20	0.00	55.00	0.00	30.24	--	Falling
BIOIN	KCSWD	03/03/2020	56.60	28.90	0.00	0.00	52.00	2.52	30.1	--	Falling
BIOIN	KCSWD	03/10/2020	0.40	0.60	20.70	(0.10)	54.00	3.58	30.12	--	Falling
BIOIN	Aspect	03/12/2020	50.00	26.20	0.00	0.06	--	--	2.00	29.39	Rising
BIOIN	KCSWD	03/23/2020	49.60	24.50	0.00	0.10	55.00	5.67	29.78	--	Falling
BIOIN	KCSWD	03/31/2020	0.70	0.90	19.40	0.10	16.00	4.68	29.9	--	Rising
BIOIN	KCSWD	04/02/2020	1.20	1.10	19.70	(0.10)	50.00	5.61	30.06	--	Falling
BIOIN	KCSWD	04/10/2020	57.40	27.60	0.10	0.00	50.00	0.00	30.01	--	Falling
BIOIN	Aspect	04/16/2020	52.80	25.30	0.00	-0.06	--	--	3.00	29.37	Falling
BIOIN	KCSWD	04/16/2020	52.10	23.80	0.00	(0.10)	70.00	0.00	30.15	--	Falling
BIOIN	KCSWD	04/24/2020	49.20	23.80	0.10	0.00	60.00	0.00	30.11	--	Falling
BIOIN	KCSWD	04/30/2020	0.20	0.50	21.00	(0.30)	56.00	0.00	30	--	Falling
BIOIN	KCSWD	05/07/2020	50.20	24.50	0.10	0.00	76.00	3.73	30.31	--	Falling
BIOIN	KCSWD	05/13/2020	0.00	0.30	20.60	0.00	58.00	0.00	29.81	--	Falling
BIOIN	Aspect	05/14/2020	52.60	25.10	0.00	0.01	--	--	0.00	29.07	Rising
BIOIN	KCSWD	05/27/2020	1.20	1.00	20.40	0.00	88.00	0.00	30.08	--	Rising
BIOIN	KCSWD	06/04/2020	0.00	0.40	20.70	0.00	68.00	2.60	30.02	--	Rising
BIOIN	KCSWD	06/10/2020	51.10	24.90	0.10	0.10	70.00	5.22	30.02	--	Rising
BIOIN	Aspect	06/15/2020	15.00	7.30	14.70	0.04	--	--	0.00	28.98	Rising
BIOIN	KCSWD	06/18/2020	53.00	24.50	0.00	0.00	72.00	3.70	30.1	--	Rising
BIOIN	KCSWD	06/25/2020	1.90	2.10	19.20	0.00	79.00	3.75	30	--	Rising
BIOIN	KCSWD	07/07/2020	0.50	0.70	21.80	0.00	69.00	2.60	30	--	Rising
BIOIN	KCSWD	07/20/2020	53.00	24.40	0.00	0.00	101.00	0.00	29.98	--	Rising
BIOIN	KCSWD	07/28/2020	1.00	1.40	19.00	0.10	97.00	4.75	29.87	--	Falling
BIOIN	KCSWD	08/06/2020	0.00	0.30	20.60	(0.10)	62.00	0.00	29.8	--	Falling
BIOIN	KCSWD	08/13/2020	46.80	24.60	2.90	(0.30)	75.00	0.00	30.01	--	Falling
BIOIN	KCSWD	08/21/2020	4.20	2.00	19.00	0.00	84.00	0.00	29.77	--	Falling
BIOIN	KCSWD	09/08/2020	51.50	24.20	0.30	0.00	90.00	0.00	30.2	--	Falling
BIOIN	KCSWD	09/15/2020	25.10	12.30	9.80	0.00	89.00	0.00	29.88	--	Falling
BIOIN	KCSWD	09/22/2020	1.70	1.40	19.60	(0.10)	67.00	0.00	29.92	29.92	Falling
BIOIN	KCSWD	09/28/2020	40.60	20.50	4.50	(0.30)	68.00	0.00	30.21	--	Falling
BIOIN	KCSWD	10/07/2020	0.00	1.20	19.60	(0.30)	60.00	0.00	29.8	29.80	Falling
BIOIN	KCSWD	10/13/2020	0.60	0.70	20.10	(0.30)	58.00	0.00	29.7	--	No data
BIOIN	KCSWD	10/19/2020	0.20	0.70	20.40	(0.10)	56.00	0.00	30	--	No data
BIOIN	KCSWD	11/06/2020	50.70	26.10	0.80	(0.30)	55.00	0.00	29.81	--	No data
BIOIN	KCSWD	11/13/2020	0.00	0.40	20.50	(0.10)	50.00	4.35	29.32	--	No data
BIOIN	KCSWD	12/10/2020	61.00	26.70	0.00	0.00	52.00	7.97	29.93	--	No data
BIOIN	KCSWD	12/17/2020	0.00	0.30	20.80	(0.10)	44.00	0.00	29.72	--	No data
BIOIN	KCSWD	01/05/2021	36.40	21.80	1.10	0.00	44.00	0.00	29.98	--	No data
BIOIN	KCSWD	01/11/2021	3.90	2.00	18.50	(0.10)	51.00	3.56	30.02	--	No data
BIOIN	KCSWD	02/11/2021	63.10	26.60	0.30	(0.10)	37.00	0.00	29.98	--	No data
BIOIN	KCSWD	03/16/2021	59.40	24.70	0.00	(0.10)	45.00	0.00	30.1	--	No data
BIOIN	KCSWD	03/29/2021	0.00	0.20	20.90	(0.20)	44.00	4.30	30.13	--	No data
BIOIN	KCSWD	04/01/2021	51.70	23.30	0.50	0.00	75.00	6.45	29.84	--	No data

Table A-3
Landfill Gas Bioherm Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temp (°F)	Flowrate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometer (Rising or Falling)
BIOIN	KCSWD	05/14/2021	61.70	23.40	0.00	(0.20)	66.00	3.66	30.04	--	No data
BIOIN	KCSWD	06/17/2021	1.60	1.10	19.80	0.00	89.00	0.00	30.08	--	No data
BIOIN	KCSWD	07/08/2021	2.00	1.10	19.20	0.00	64.00	0.00	29.95	--	No data
BIOIN	KCSWD	08/26/2021	0.50	0.40	20.20	0.00	73.00	5.87	29.99	--	No data
BIOIN	KCSWD	09/10/2021	6.60	3.60	18.80	(0.10)	65.00	0.00	29.89	--	No data
BIOIN	KCSWD	10/12/2021	59.30	26.10	1.30	0.00	44.00	0.00	30.09	--	Rising
BIOIN	KCSWD	12/09/2021	60.70	27.50	0.10	0.00	38.00	0.00	29.82	--	Falling
BIOIN	KCSWD	01/26/2022	2.20	1.40	22.30	(0.20)	29.00	3.41	30.15	--	Rising
BIOIN	KCSWD	02/10/2022	1.30	0.70	19.70	0.00	48.00	2.50	30.32	--	Rising
BIOIN	KCSWD	03/01/2022	1.00	1.60	18.80	(0.10)	55.00	0.00	29.92	--	Rising
BIOIN	KCSWD	03/15/2022	0.50	0.90	19.90	(0.10)	52.00	0.00	29.9	--	Falling
BIOIN	KCSWD	03/29/2022	0.70	0.70	20.00	(0.20)	55.00	0.00	29.89	--	Falling
BIOIN	KCSWD	04/07/2022	54.60	24.30	0.40	(0.10)	52.00	0.00	30.12	--	Rising
BIOIN	KCSWD	04/21/2022	1.00	1.10	20.00	0.10	51.00	0.00	29.62	--	Falling
BIOIN	KCSWD	05/03/2022	2.30	1.80	19.70	(0.10)	63.00	0.00	30.1	--	Falling
BIOIN	KCSWD	05/10/2022	0.00	0.30	20.40	(0.30)	48.00	0.00	30.08	--	Falling
BIOIN	KCSWD	06/15/2022	5.30	3.30	18.50	0.00	69.00	0.00	29.95	--	Falling
BIOIN	KCSWD	07/21/2022	0.50	0.70	20.20	0.00	89.00	0.00	29.96	--	Falling
EMC-01	Aspect	12/17/2019	1.20	0.80	20.60	0.04	--	--	--	28.81	Rising
EMC-01	Aspect	01/15/2020	0.40	0.60	20.90	0.08	--	--	--	29.03	Falling
EMC-01	Aspect	02/13/2020	2.60	2.20	19.50	0.00	--	--	--	29.40	Falling
EMC-01	Aspect	03/12/2020	0.40	0.60	19.80	-0.10	--	--	--	29.41	Falling
EMC-01	Aspect	04/16/2020	0.00	0.20	20.00	0.00	--	--	--	29.13	Falling
EMC-01	Aspect	05/14/2020	0.20	1.20	18.90	0.01	--	--	--	28.99	Falling
EMC-01	Aspect	06/15/2020	0.20	1.00	19.20	0.09	--	--	--	29.92	Falling
EMC-01	KCSWD	09/22/2020	0.20	1.40	19.00	-0.06	--	--	--	29.80	Rising
EMC-01	KCSWD	10/07/2020	0.00	1.10	20.00	0.00	--	--	--	30.00	Rising
EMC-01	KCSWD	10/19/2020	0.00	0.60	21.00	-0.31	--	--	--	29.81	Rising
EMC-01	KCSWD	11/06/2020	0.30	0.40	20.50	-0.01	--	--	--	29.32	Rising
EMC-01	KCSWD	11/13/2020	0.00	0.20	20.90	-0.01	--	--	--	29.80	Rising
EMC-01	KCSWD	12/17/2020	0.00	0.10	21.00	-0.04	--	--	--	29.98	Falling
EMC-01	KCSWD	02/11/2021	0.20	0.40	21.00	-0.01	--	--	--	29.84	Falling
EMC-01	KCSWD	04/01/2021	0.10	0.50	19.70	-0.05	--	--	--	30.04	Falling
EMC-01	KCSWD	05/14/2021	0.40	1.00	21.00	0.02	--	--	--	30.08	Falling
EMC-01	KCSWD	06/17/2021	0.00	0.80	20.20	0.02	--	--	--	29.97	Falling
EMC-01	KCSWD	07/08/2021	0.00	0.30	20.00	-0.10	--	--	--	30.00	Falling
EMC-01	KCSWD	08/26/2021	0.20	1.80	19.30	--	--	--	--	29.18	Falling
EMC-01	KCSWD	12/09/2021	0.20	0.90	20.30	0.01	--	--	--	29.82	Falling
EMC-01	KCSWD	01/28/2022	0.00	0.40	19.30	-0.03	--	--	--	30.15	Falling
EMC-01	KCSWD	02/10/2022	0.00	0.70	19.90	0.00	--	--	--	30.30	Falling
EMC-01	KCSWD	03/29/2022	0.00	1.10	19.90	0.00	--	--	--	29.89	Falling
EMC-01	KCSWD	04/07/2022	0.30	0.70	21.00	0.02	--	--	--	30.12	Falling
EMC-01	KCSWD	04/21/2022	0.00	0.80	20.30	0.09	--	--	--	29.62	Falling
EMC-01	KCSWD	05/03/2022	0.00	1.90	19.50	0.05	--	--	--	30.10	Falling
EMC-01	KCSWD	05/10/2022	0.00	1.90	19.20	-0.25	--	--	--	30.08	Falling
EMC-01	KCSWD	05/17/2022	0.00	1.60	20.10	0.04	--	--	--	30.11	Falling
EMC-01	KCSWD	05/24/2022	0.10	2.11	18.60	0.08	--	--	--	30.01	Rising
EMC-01	KCSWD	06/15/2022	0.00	2.80	18.80	0.08	--	--	--	29.95	Falling
EMC-01	KCSWD	07/21/2022	0.00	2.50	18.30	0.00	--	--	--	29.96	Falling
EMC-02	Aspect	12/17/2019	0.00	0.60	21.00	0.02	--	--	--	28.81	Falling
EMC-02	Aspect	01/15/2020	0.00	0.20	21.20	0.08	--	--	--	29.04	Falling
EMC-02	Aspect	02/13/2020	0.10	0.60	20.70	0.00	--	--	--	29.41	Falling
EMC-02	Aspect	03/12/2020	0.00	0.60	20.00	-0.10	--	--	--	29.41	Falling

Table A-3
Landfill Gas Bioberm Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temp (°F)	Flowrate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometer (Rising or Falling)
EMC-02	Aspect	04/16/2020	0.00	0.10	20.30	-0.02	--	--	--	29.08	Rising
EMC-02	Aspect	05/14/2020	0.00	0.90	19.20	0.03	--	--	--	28.99	Rising
EMC-02	Aspect	06/15/2020	0.00	0.50	19.60	0.00	--	--	--	29.92	Falling
EMC-02	KCSWD	09/22/2020	0.00	0.60	19.80	-0.06	--	--	--	29.80	Falling
EMC-02	KCSWD	10/07/2020	0.00	1.10	20.00	-0.02	--	--	--	30.00	Falling
EMC-02	KCSWD	10/19/2020	0.00	0.50	21.00	-0.30	--	--	--	29.81	Falling
EMC-02	KCSWD	11/06/2020	0.10	0.30	20.80	-0.02	--	--	--	29.32	Falling
EMC-02	KCSWD	11/13/2020	0.00	0.20	20.90	-0.01	--	--	--	29.80	Falling
EMC-02	KCSWD	12/17/2020	0.00	0.10	21.00	-0.36	--	--	--	29.98	Falling
EMC-02	KCSWD	02/11/2021	0.10	0.30	21.00	0.13	--	--	--	29.84	Falling
EMC-02	KCSWD	04/01/2021	0.00	0.20	19.90	-0.04	--	--	--	30.04	Falling
EMC-02	KCSWD	05/14/2021	0.00	0.50	20.10	0.06	--	--	--	30.08	Falling
EMC-02	KCSWD	06/17/2021	0.00	0.20	20.50	-0.10	--	--	--	29.97	Falling
EMC-02	KCSWD	07/08/2021	0.00	0.20	20.10	0.00	--	--	--	30.00	Falling
EMC-02	KCSWD	08/26/2021	0.10	0.20	20.10	--	--	--	--	29.19	Falling
EMC-02	KCSWD	12/09/2021	0.00	0.40	20.80	0.01	--	--	--	29.82	Falling
EMC-02	KCSWD	01/26/2022	0.00	0.30	23.70	-0.28	--	--	--	30.15	Falling
EMC-02	KCSWD	02/10/2022	0.00	0.60	20.00	0.00	--	--	--	30.30	Rising
EMC-02	KCSWD	03/29/2022	0.00	1.60	19.30	0.00	--	--	--	29.89	Rising
EMC-02	KCSWD	04/07/2022	0.10	0.60	21.00	-0.03	--	--	--	30.12	Rising
EMC-02	KCSWD	04/21/2022	0.00	0.40	20.40	0.12	--	--	--	29.62	Rising
EMC-02	KCSWD	05/03/2022	0.00	1.50	19.70	-0.03	--	--	--	30.10	Rising
EMC-02	KCSWD	05/10/2022	0.00	0.90	19.80	-0.01	--	--	--	30.08	Rising
EMC-02	KCSWD	05/17/2022	0.00	1.60	19.90	0.04	--	--	--	30.11	Rising
EMC-02	KCSWD	05/24/2022	0.00	2.30	18.80	0.03	--	--	--	30.01	Rising
EMC-02	KCSWD	06/15/2022	0.00	2.80	18.50	0.09	--	--	--	29.95	Rising
EMC-02	KCSWD	07/21/2022	0.00	2.90	17.90	0.00	--	--	--	29.96	Rising
EMC-03	Aspect	12/17/2019	0.00	0.50	21.10	0.03	--	--	--	28.81	Rising
EMC-03	Aspect	01/15/2020	0.00	0.20	21.20	0.07	--	--	--	29.05	Falling
EMC-03	Aspect	02/13/2020	0.10	0.50	20.90	0.00	--	--	--	29.39	Rising
EMC-03	Aspect	03/12/2020	0.00	0.30	20.30	-0.10	--	--	--	29.40	Rising
EMC-03	Aspect	04/16/2020	0.00	0.10	20.10	-0.01	--	--	--	29.07	Rising
EMC-03	Aspect	05/14/2020	0.00	0.30	19.60	0.00	--	--	--	28.98	Rising
EMC-03	Aspect	06/15/2020	0.00	0.30	19.90	0.11	--	--	--	29.92	Rising
EMC-03	KCSWD	09/22/2020	0.00	0.50	19.90	-0.07	--	--	--	29.80	Falling
EMC-03	KCSWD	10/07/2020	0.00	0.50	21.00	--	--	--	--	--	Falling
EMC-03	KCSWD	12/17/2020	0.00	0.10	21.00	-0.20	--	--	--	29.98	Falling
EMC-03	KCSWD	02/11/2021	0.10	0.20	21.00	0.04	--	--	--	29.84	Falling
EMC-03	KCSWD	04/01/2021	0.00	0.10	20.00	-0.03	--	--	--	30.04	Falling
EMC-03	KCSWD	05/14/2021	0.00	0.40	20.30	0.00	--	--	--	30.08	Falling
EMC-03	KCSWD	06/17/2021	0.00	0.20	20.50	-0.03	--	--	--	29.97	Falling
EMC-03	KCSWD	07/08/2021	0.00	0.20	20.10	-0.05	--	--	--	30.00	Falling
EMC-03	KCSWD	08/26/2021	0.10	0.30	20.30	--	--	--	--	29.18	Falling
EMC-03	KCSWD	12/09/2021	0.00	0.30	21.00	0.00	--	--	--	29.82	Falling
EMC-03	KCSWD	01/26/2022	0.00	0.10	24.10	-0.18	--	--	--	30.15	Rising
EMC-03	KCSWD	02/10/2022	0.00	0.20	20.40	0.00	--	--	--	30.30	No data
EMC-03	KCSWD	03/29/2022	0.00	0.50	20.20	0.00	--	--	--	29.89	Rising
EMC-03	KCSWD	04/07/2022	0.00	0.20	21.00	0.02	--	--	--	30.12	Rising
EMC-03	KCSWD	04/21/2022	0.00	0.30	20.80	0.11	--	--	--	29.62	Rising
EMC-03	KCSWD	05/03/2022	0.00	0.40	20.70	-0.09	--	--	--	30.10	Rising
EMC-03	KCSWD	05/10/2022	0.00	0.40	20.40	-0.33	--	--	--	30.08	Rising
EMC-03	KCSWD	05/17/2022	0.00	0.20	21.00	0.04	--	--	--	30.11	Rising
EMC-03	KCSWD	05/24/2022	0.00	0.50	20.50	0.04	--	--	--	30.01	Rising

Table A-3
Landfill Gas Bioherm Monitoring Data
December 2019 – July 2022

Location ID	Monitoring Completed By	Date	CH4 (%)	CO2 (%)	O2 (%)	Static Pressure ("H2O)	Temp (°F)	Flowrate (SCFM)	H2S (ppm)	Barometer ("Hg)	Barometer (Rising or Falling)
EMC-03	KCSWD	06/15/2022	0.00	0.50	20.70	0.09	--	--	--	29.95	Rising
EMC-03	KCSWD	07/21/2022	0.00	0.50	19.70	0.00	--	--	--	29.96	Rising
EMC-03 (broken)	KCSWD	10/19/2020	--	--	--	--	--	--	--	--	Rising
EMC-03 (broken)	KCSWD	11/06/2020	--	--	--	--	--	--	--	--	Rising
EMC-03 (broken)	KCSWD	11/13/2020	--	--	--	--	--	--	--	29.80	Rising
EMC-04	Aspect	12/17/2019	0.10	0.40	21.10	0.03	--	--	--	28.81	Rising
EMC-04	Aspect	01/15/2020	0.00	0.20	21.20	0.07	--	--	--	29.03	Rising
EMC-04	Aspect	02/13/2020	0.20	0.40	20.90	0.00	--	--	--	29.39	Rising
EMC-04	Aspect	03/12/2020	0.00	0.30	20.30	-0.11	--	--	--	29.40	Rising
EMC-04	Aspect	04/16/2020	1.00	0.60	19.80	-0.02	--	--	--	29.07	Rising
EMC-04	Aspect	05/14/2020	0.00	0.20	19.70	0.00	--	--	--	28.99	Rising
EMC-04	Aspect	06/15/2020	0.00	0.20	20.10	0.10	--	--	--	29.92	Rising
EMC-04	KCSWD	09/22/2020	0.00	0.00	20.30	-0.06	--	--	--	29.80	Rising
EMC-04	KCSWD	10/07/2020	0.00	0.30	21.00	-0.20	--	--	--	30.00	Rising
EMC-04	KCSWD	10/19/2020	0.00	0.20	21.00	-0.27	--	--	--	29.81	Rising
EMC-04	KCSWD	11/06/2020	0.10	0.20	21.00	-0.01	--	--	--	29.32	Rising
EMC-04	KCSWD	11/13/2020	0.00	0.20	21.00	0.00	--	--	--	29.80	Rising
EMC-04	KCSWD	12/17/2020	0.00	0.10	21.00	-0.10	--	--	--	29.98	Rising
EMC-04	KCSWD	02/11/2021	0.10	0.20	21.00	0.07	--	--	--	29.84	Rising
EMC-04	KCSWD	04/01/2021	0.10	0.20	19.90	-0.04	--	--	--	30.04	Rising
EMC-04	KCSWD	05/14/2021	0.10	0.40	NA	0.04	--	--	--	30.08	Rising
EMC-04	KCSWD	06/17/2021	0.00	0.20	20.40	0.05	--	--	--	29.97	Rising
EMC-04	KCSWD	07/08/2021	0.00	1.00	19.30	--	--	--	--	--	Falling
EMC-04	KCSWD	12/09/2021	0.00	0.40	21.00	0.00	--	--	--	29.82	Falling
EMC-04	KCSWD	01/26/2022	0.00	0.20	24.20	-0.49	--	--	--	30.15	Falling
EMC-04	KCSWD	02/10/2022	0.00	0.30	20.30	0.00	--	--	--	30.30	Falling
EMC-04	KCSWD	03/29/2022	0.00	0.60	20.00	0.00	--	--	--	29.89	Falling
EMC-04	KCSWD	04/07/2022	0.20	0.60	21.00	-0.14	--	--	--	30.12	Falling
EMC-04	KCSWD	04/21/2022	0.00	0.20	21.00	0.16	--	--	--	29.62	Falling
EMC-04	KCSWD	05/03/2022	0.00	0.50	20.50	0.00	--	--	--	30.10	Falling
EMC-04	KCSWD	05/10/2022	0.00	0.40	20.40	-0.32	--	--	--	30.08	Falling
EMC-04	KCSWD	05/17/2022	0.00	0.50	21.00	0.05	--	--	--	30.11	Falling
EMC-04	KCSWD	05/24/2022	0.00	0.50	20.50	0.01	--	--	--	30.01	Falling
EMC-04	KCSWD	06/15/2022	0.00	0.70	20.60	0.08	--	--	--	29.92	Falling
EMC-04	KCSWD	07/21/2022	0.00	0.70	19.60	0.00	--	--	--	29.96	Falling
EMC-04 (broken)	KCSWD	08/26/2021	--	--	--	0.05	--	--	--	29.15	Falling

Notes:

CH4 = Methane

CO2 = Carbon dioxide

O2 = Oxygen

H2S = Hydrogen sulfide

"H2O = Inches of water column.

°F = Degrees Fahrenheit

SCFM = Standard cubic feet per minute

ppm = Parts per million

"Hg = Inches of mercury

Aspect = Aspect Consulting, LLC

KCSWD = King County Solid Waste Division

-- = Not measured or error during monitoring.

NA = On May 14, 2021, there was a reporting error for EMC-04, which resulted oxygen being reported as -0.06 %.

Appendix B

Groundwater Monitoring Data

Water Quality Standards

		National Drinking Water Regulation			Washington State Groundwater Quality Criteria		
Analyte	CAS No.	MCL	Eff. Date	Ref.	Criterion*	Eff. Date	Ref.
Primary Standards							
A. Inorganics							
Antimony	7440-36-0	0.006 mg/L	17-Jan-94	FR v. 57 No.138	0.006 mg/L	17-Jan-94	WAC 173-200
Arsenic c	7440-38-2	0.01 mg/L	23-Jan-06	66 FR 28342	0.05 ug/L	01-Dec-90	WAC 173-200
Asbestos	132207-33-1	7 mf/L	30-Jul-92	FR v. 56 No. 20	7 mf/L	30-Jul-92	WAC 173-200
Barium	7440-39-3	2.0 mg/L	1-Jan-93	FR v. 56 No. 126	1.0 mg/L	01-Dec-90	WAC 173-200
Beryllium	7440-41-7	0.004 mg/L	17-Jan-94	FR v. 57 No.138	0.004 mg/L	17-Jan-94	WAC 173-200
Cadmium	7440-43-9	0.005 mg/L	30-Jul-92	FR v. 56 No. 20	0.005 mg/L	01-Dec-90	WAC 173-200
Chromium	7440-47-3	0.1 mg/L	30-Jul-92	FR v. 56 No. 20	0.05 mg/L	01-Dec-90	WAC 173-200
Copper	7440-50-8	1.3** mg/L	7-Dec-92	FR v. 57 No. 125	1.0 mg/L	01-Dec-90	WAC 173-200
Cyanide	57-12-5	0.2 mg/L	17-Jan-94	FR v. 57 No.138	0.2 mg/L	17-Jan-94	WAC 173-200
Fluoride	16984-48-8	4.0 mg/L	2-Oct-87	40 CFR 141	4.0 mg/L	01-Dec-90	WAC 173-200
Lead	7439-92-1	0.015** mg/L	7-Dec-92	FR v. 57 No. 125	0.015 mg/L	01-Dec-90	WAC 173-200
Mercury	7439-97-6	0.002 mg/L	2-Apr-86	40 CFR 141	0.002 mg/L	01-Dec-90	WAC 173-200
Nickel	7440-02-0	0.1 mg/L	17-Jan-94	FR v. 57 No.138	0.1 mg/L	17-Jan-94	WAC 173-200
Nitrate	14797-55-8	10.0 mg/L	2-Apr-86	FR v. 56 No. 20	10.0 mg/L	01-Dec-90	WAC 173-200
Nitrate and Nitrite	14797-55-8+14797-65-0	10.0 mg/L	30-Jul-92	FR v. 56 No. 20	10.0 mg/L	30-Jul-92	WAC 173-200
Nitrite	14797-65-0	1 mg/L	30-Jul-92	FR v. 56 No. 20	1.0 mg/L	30-Jul-92	WAC 173-200
Selenium	7782-49-2	0.05 mg/L	30-Jul-92	FR v. 56 No. 20	0.01 mg/L	01-Dec-90	WAC 173-200
Silver	7440-22-4	--			0.05 mg/L	01-Dec-90	WAC 173-200
Sodium	7440-23-5	20*** mg/L	20-Sep-04		20*** mg/L	03-Jul-04	WAC 246-290
Thallium	7440-28-0	0.002 mg/L	17-Jan-94	FR v. 57 No.138	0.002 mg/L	17-Jan-94	WAC 173-200
Total Coliforms		1/100 mL	24-Dec-75	40 CFR 141	1/100 mL	01-Dec-90	WAC 173-200
Turbidity		1 NTU	24-Dec-75	40 CFR 141	--	--	--
B. Organic Chemicals							
Alachlor	15972-60-8	2 µg/L	30-Jul-92	FR v. 56 No. 20	2 µg/L	30-Jul-92	WAC 173-200
Atrazine	1912-24-9	3 µg/L	30-Jul-92	FR v. 56 No. 20	3 µg/L	30-Jul-92	WAC 173-200
Benzene c	71-43-2	5 µg/L	9-Jan-89	40 CFR 141	1 µg/L	01-Dec-90	WAC 173-200
Bis(2-ethylhexyl)phthalate	117-81-7	6 µg/L	17-Jan-94	FR v. 57 No.138	6 µg/L	01-Dec-90	WAC 173-200
Bromodichloromethane c	75-27-4	--			0.3 µg/L	01-Dec-90	WAC 173-200
Bromoform c	75-25-2	--			5 µg/L	01-Dec-90	WAC 173-200
Carbofuran	1563-66-2	40 µg/L	30-Jul-92	FR v. 56 No. 20	40 µg/L	30-Jul-92	WAC 173-200
Carbon Tetrachloride c	56-23-5	5 µg/L	9-Jan-89	40 CFR 141	0.3 µg/L	01-Dec-90	WAC 173-200
Chlordane c	5103-71-9	2 µg/L	30-Jul-92	FR v. 56 No. 20	0.06 µg/L	01-Dec-90	WAC 173-200
Chlorobenzene	108-90-7	100 µg/L	30-Jul-92	FR v. 56 No. 20	100 µg/L	30-Jul-92	WAC 173-200
Chlorodibromomethane c	124-48-1	--			0.5 µg/L	01-Dec-90	WAC 173-200
Chloroform c	67-66-3	--			7 µg/L	01-Dec-90	WAC 173-200
2,4-D	94-75-7	70 µg/L	30-Jul-92	FR v. 56 No. 20	70 µg/L	01-Dec-90	WAC 173-200
Dalapon	75-99-0	200 µg/L	17-Jan-94	FR v. 57 No.138	200 µg/L	17-Jan-94	WAC 173-200
1,2-Dibromo-3-chloropropane	96-12-8	0.2 µg/L	30-Jul-92	FR v. 56 No. 20	0.2 µg/L	30-Jul-92	WAC 173-200
1,2-Dichlorobenzene	95-50-1	600 µg/L	30-Jul-92	FR v. 56 No. 20	600 µg/L	30-Jul-92	WAC 173-200
1,4-Dichlorobenzene c	106-46-7	75 µg/L	9-Jan-89	40 CFR 141	4 µg/L	01-Dec-90	WAC 173-200
1,1-Dichloroethane c	75-34-3	--			1 µg/L	01-Dec-90	WAC 173-200
1,2-Dichloroethane c	107-06-2	5 µg/L	9-Jan-89	40 CFR 141	0.5 µg/L	01-Dec-90	WAC 173-200
1,1-Dichloroethene	75-35-4	7 µg/L	9-Jan-89	40 CFR 141	7 µg/L	01-Dec-90	WAC 173-200
c-1,2-Dichloroethene	156-59-2	70 µg/L	30-Jul-92	FR v. 56 No. 20	70 µg/L	30-Jul-92	WAC 173-200
t-1,2-Dichloroethene	156-60-5	100 µg/L	30-Jul-92	FR v. 56 No. 20	100 µg/L	30-Jul-92	WAC 173-200
1,2-Dichloropropane c	78-87-5	5 µg/L	30-Jul-92	FR v. 56 No. 20	0.6 µg/L	01-Dec-90	WAC 173-200
1,3-Dichloropropene tot. c	542-75-6	--			0.2 µg/L	01-Dec-90	WAC 173-200
Di(ethylhexyl)adipate	103-23-1	400 µg/L	17-Jan-94	FR v. 57 No.138	400 µg/L	17-Jan-94	WAC 173-200
Dinoseb	88-85-7	7 µg/L	17-Jan-94	FR v. 57 No.138	7 µg/L	17-Jan-94	WAC 173-200
Diquat	231-36-7	20 µg/L	17-Jan-94	FR v. 57 No.138	20 µg/L	17-Jan-94	WAC 173-200
Endothall	145-73-3	100 µg/L	17-Jan-94	FR v. 57 No.138	100 µg/L	17-Jan-94	WAC 173-200
Endrin	72-20-8	2 µg/L	17-Jan-94	40 CFR 141	0.2 µg/L	01-Dec-90	WAC 173-200
Ethylbenzene	100-41-4	700 µg/L	30-Jul-92	FR v. 56 No. 20	700 µg/L	30-Jul-92	WAC 173-200
Ethylene dibromide c	106-93-4	0.05 µg/L	30-Jul-92	FR v. 56 No. 20	0.001 µg/L	01-Dec-90	WAC 173-200
Glyphosate	1071-83-6	70 µg/L	17-Jan-94	FR v. 57 No.138	70 µg/L	17-Jan-94	WAC 173-200
Heptachlor c	76-44-8	0.4 µg/L	30-Jul-92	FR v. 56 No. 20	0.02 µg/L	01-Dec-90	WAC 173-200
Heptachlor epoxide c	1024-57-3	0.2 µg/L	30-Jul-92	FR v. 56 No. 20	0.009 µg/L	01-Dec-90	WAC 173-200
Hexachlorobenzene	118-74-1	1 µg/L	17-Jan-94	FR v. 57 No.138	0.05 µg/L	01-Dec-90	WAC 173-200
Hexachlorocyclopentadiene (HEX)	77-47-4	50 µg/L	17-Jan-94	FR v. 57 No.138	50 µg/L	17-Jan-94	WAC 173-200
Lindane c	58-89-9	0.2 µg/L	30-Jul-92	FR v. 56 No. 20	0.06 µg/L	01-Dec-90	WAC 173-200

Water Quality Standards

Analyte	CAS No.	National Drinking Water Regulation			Washington State Groundwater Quality Criteria			
		MCL		Eff. Date	Ref.	Criterion*	Eff. Date	Ref.
Methoxychlor	72-43-5	40	µg/L	30-Jul-92	FR v. 56 No. 20	40	µg/L	30-Jul-92
Methylene Chloride c	75-09-2	5	µg/L	17-Jan-94	FR v. 57 No.138	5	µg/L	17-Jan-94
Oxamyl (vydate)	23135-22-0	200	µg/L	17-Jan-94	FR v. 57 No.138	200	µg/L	17-Jan-94
PAHs [Benzo(a)pyrene]		0.2	µg/L	17-Jan-94	FR v. 57 No.138	0.01	µg/L	17-Jan-94
PCBs c	27323-18-8	0.5	µg/L	30-Jul-92	FR v. 56 No. 20	0.01	µg/L	01-Dec-90
Pentachlorophenol	87-86-5	1	µg/L	1-Jan-93	FR v. 56 No. 126	1	µg/L	01-Jan-93
Picloram	1918-02-1	500	µg/L	17-Jan-94	FR v. 57 No.138	500	µg/L	17-Jan-94
Simazine	122-34-9	4	µg/L	17-Jan-94	FR v. 57 No.138	4	µg/L	17-Jan-94
Styrene	100-42-5	100	µg/L	30-Jul-92	FR v. 56 No. 20	100	µg/L	30-Jul-92
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	3E-05	µg/L	17-Jan-94	FR v. 57 No.138	0.0000006	µg/L	01-Dec-90
Tetrachloroethylene c	127-18-4	5	µg/L	30-Jul-92	FR v. 56 No. 20	0.8	µg/L	30-Jul-92
Toluene	108-88-3	1000	µg/L	30-Jul-92	FR v. 56 No. 20	1000	µg/L	30-Jul-92
Total Trihalomethanes c	75-27-4, 75-25-2, 124-48-1, 67-66-3	100	µg/L	29-Nov-79	40 CFR 141	--	--	--
Toxaphene c	8001-35-2	3	µg/L	30-Jul-92	FR v. 56 No. 20	0.08	µg/L	01-Dec-90
2,4,5-TP	93-72-1	50	µg/L	30-Jul-92	FR v. 56 No. 20	10	µg/L	01-Dec-90
1,2,4-Trichlorobenzene	120-82-1	70	µg/L	17-Jan-94	FR v. 57 No.138	70	µg/L	17-Jan-94
1,1,1-Trichloroethane	71-55-6	200	µg/L	9-Jan-89	40 CFR 141	200	µg/L	01-Dec-90
1,1,2-Trichloroethane	79-00-5	5	µg/L	17-Jan-94	FR v. 57 No.138	5	µg/L	17-Jan-94
Trichloroethylene (TCE) c	79-01-6	5	µg/L	9-Jan-89	40 CFR 141	3	µg/L	01-Dec-90
Vinyl chloride c	75-01-4	2	µg/L	9-Jan-89	40 CFR 141	0.02	µg/L	01-Dec-90
Xylenes (total)	1330-20-7	10000	µg/L	30-Jul-92	FR v. 56 No. 20	10000	µg/L	30-Jul-92
C. Radionuclides and Radioactivity								
Radium 226 & Radium 228		5	pCi/L	9-Jul-76	FR v. 41 No. 133	5	pCi/L	01-Dec-90
Radium 226	13982-63-3	--				3	pCi/L	01-Dec-90
Radium 228	15262-20-1	--				5	pCi/L	01-Dec-90
Gross Alpha particle activity		15	pCi/L	9-Jul-76	FR v. 41 No. 133	15	pCi/L	01-Dec-90
Tritium	10028-17-8	20,000	pCi/L	9-Jul-76	FR v. 41 No. 133	20,000	pCi/L	01-Dec-90
Strontium	7440-24-6	8	pCi/L	9-Jul-76	FR v. 41 No. 133	8	pCi/L	01-Dec-90
Gross Beta particle activity		50	pCi/L	9-Jul-76	FR v. 41 No. 133	50	pCi/L	01-Dec-90
D. Additional Carcinogens Listed in Groundwater Criteria								
Acrylamide	79-06-1	--				0.02	µg/L	01-Dec-90
Acrylonitrile	107-13-1	--				0.07	µg/L	01-Dec-90
Aldrin	309-00-2	--				0.005	µg/L	01-Dec-90
Aniline	62-53-3	--				14	µg/L	01-Dec-90
Aramite	140-57-8	--				3	µg/L	01-Dec-90
Azobenzene	103-33-3	--				0.7	µg/L	01-Dec-90
Benzidine	92-87-5	--				0.0004	µg/L	01-Dec-90
Benzo(a)pyrene	50-32-8	--				0.008	µg/L	01-Dec-90
Benzo(b)fluoranthene	205-99-2	--				0.007	µg/L	01-Dec-90
Benzo(k)fluoranthene	205-99-2	--				0.007	µg/L	01-Dec-90
Benzyl chloride	100-44-7	--				0.5	µg/L	01-Dec-90
Bis(chloroethyl)ether	111-44-4	--				0.07	µg/L	01-Dec-90
Bis(chloromethyl)ether	542-88-1	--				0.0004	µg/L	01-Dec-90
Carbazole	86-74-8	--				5	µg/L	01-Dec-90
4-Chloro-2-methyl aniline	95-69-2	--				0.1	µg/L	01-Dec-90
4-Chloro-2-methyl aniline hydrochloride	3165-93-3	--				0.2	µg/L	01-Dec-90
o-Chloronitrobenzene	88-73-3	--				3	µg/L	01-Dec-90
p-Chloronitrobenzene	100-00-5	--				5	µg/L	01-Dec-90
Chlorthalonil	1897-45-6	--				30	µg/L	01-Dec-90
Diallate	2303-16-4	--				1	µg/L	01-Dec-90
DDT (includes DDE and DDD)	50-29-3, 72-55-9, 72-54-8	--				0.3	µg/L	01-Dec-90
1,2-Dibromomethane	106-93-4	--				0.001	µg/L	01-Dec-90
3,3'-Dichlorobenzidine	91-94-1	--				0.2	µg/L	01-Dec-90
Dichlorovos	62-73-7	--				0.3	µg/L	01-Dec-90
Dieldrin	60-57-1	--				0.005	µg/L	01-Dec-90
3,3'-Dimethoxybenzidine	119-90-4	--				6.0	µg/L	01-Dec-90
3,3'-Dimethylbenzidine	119-93-7	--				0.007	µg/L	01-Dec-90
1,2-Dimethylhydrazine	540-73-8	--				60	µg/L	01-Dec-90
2,4-Dinitrotoluene	121-14-2	--				0.1	µg/L	01-Dec-90
2,6-Dinitrotoluene	606-20-2	--				0.1	µg/L	01-Dec-90
1,4-Dioxane	123-91-1	--				7	µg/L	01-Dec-90
1,2-Diphenylhydrazine	122-66-7	--				0.09	µg/L	01-Dec-90

Water Quality Standards

Analyte	CAS No.	National Drinking Water Regulation			Washington State Groundwater Quality Criteria		
		MCL	Eff. Date	Ref.	Criterion*	Eff. Date	Ref.
Direct Black 38	1937-37-7	--			0.009 µg/L	01-Dec-90	WAC 173-200
Direct Blue 6	2602-46-2	--			0.009 µg/L	01-Dec-90	WAC 173-200
Direct Brown 95	16071-86-6	--			0.009 µg/L	01-Dec-90	WAC 173-200
Epichlorohydrin	106-89-8	--			8 µg/L	01-Dec-90	WAC 173-200
Ethyl acrylate	140-88-5	--			2 µg/L	01-Dec-90	WAC 173-200
Ethylene thiourea	96-45-7	--			2 µg/L	01-Dec-90	WAC 173-200
Folpet	133-07-3	--			20 µg/L	01-Dec-90	WAC 173-200
Furazolidone	67-45-8	--			0.02 µg/L	01-Dec-90	WAC 173-200
Furium	531-82-8	--			0.002 µg/L	01-Dec-90	WAC 173-200
Furmecyclox	60568-05-0	--			3 µg/L	01-Dec-90	WAC 173-200
Hexachlorocyclohexane (alpha)	319-84-6	--			0.001 µg/L	01-Dec-90	WAC 173-200
Hexachlorocyclohexane (technical)	608-73-1	--			0.05 µg/L	01-Dec-90	WAC 173-200
Hexachlorodibenzo-p-dioxin, mix	34465-46-8	--			0.00001 µg/L	01-Dec-90	WAC 173-200
Hydrazine/hydrazine sulfate	302-01-2/10034-93-2	--			0.03 µg/L	01-Dec-90	WAC 173-200
2-Methoxy-5-nitroaniline	99-59-2	--			2.0 µg/L	01-Dec-90	WAC 173-200
2-Methylaniline	95-53-4	--			0.2 µg/L	01-Dec-90	WAC 173-200
2-Methylaniline hydrochloride	636-21-5	--			0.5 µg/L	01-Dec-90	WAC 173-200
4,4'-Methylene bis(N,N'-dimethyl) aniline	101-61-1	--			2.0 µg/L	01-Dec-90	WAC 173-200
Mirex	2385-85-5	--			0.05 µg/L	01-Dec-90	WAC 173-200
Nitrofurazone	59-87-0	--			0.06 µg/L	01-Dec-90	WAC 173-200
N-Nitrosodiethanolamine	1116-54-7	--			0.03 µg/L	01-Dec-90	WAC 173-200
N-Nitrosodiethylamine	55-18-5	--			0.0005 µg/L	01-Dec-90	WAC 173-200
N-Nitrosodimethylamine	62-75-9	--			0.002 µg/L	01-Dec-90	WAC 173-200
N-Nitrosodiphenylamine	86-30-6	--			17.0 µg/L	01-Dec-90	WAC 173-200
N-Nitroso-di-n-propylamine	621-64-7	--			0.01 µg/L	01-Dec-90	WAC 173-200
N-Nitrosopyrrolidine	930-55-2	--			0.04 µg/L	01-Dec-90	WAC 173-200
N-Nitroso-di-n-butylamine	924-16-3	--			0.02 µg/L	01-Dec-90	WAC 173-200
N-Nitroso-N-methylethylamine	10595-95-6	--			0.004 µg/L	01-Dec-90	WAC 173-200
PBBs	59536-65-1	--			0.01 µg/L	01-Dec-90	WAC 173-200
o-Phenylenediamine	95-54-5	--			0.005 µg/L	01-Dec-90	WAC 173-200
Propylene oxide	75-56-9	--			0.01 µg/L	01-Dec-90	WAC 173-200
p,a,a,a-Tetrachlorotoluene	5216-25-1	--			0.004 µg/L	01-Dec-90	WAC 173-200
2,4-Toluenediamine	95-80-7	--			0.002 µg/L	01-Dec-90	WAC 173-200
o-Toluidine	95-53-4	--			0.2 µg/L	01-Dec-90	WAC 173-200
2,4,6-Trichlorophenol	88-06-2	--			4.0 µg/L	01-Dec-90	WAC 173-200
Trimethyl phosphate	512-56-1	--			2.0 µg/L	01-Dec-90	WAC 173-200
Secondary Standards							
Aluminum	7429-90-5	0.05-0.2 mg/L	30-Jul-92	FR v. 56 No. 20	0.05-0.2 mg/L	30-Jul-92	WAC 173-200
Copper	7440-50-8	1.0 mg/L	7-Dec-92	FR v. 57 No. 125	1.0 mg/L	01-Dec-90	WAC 173-200
Iron	7439-89-6	0.3 mg/L	2-Apr-86	40 CFR 143	0.3 mg/L	01-Dec-90	WAC 173-200
Manganese	7439-96-5	0.05 mg/L	2-Apr-86	40 CFR 143	50 ug/L	01-Dec-90	WAC 173-200
Color		15 units	2-Apr-86	40 CFR 143	15 units	01-Dec-90	WAC 173-200
pH	12408-02-5	6.5-8.5 units	2-Apr-86	40 CFR 143	6.5-8.5 units	01-Dec-90	WAC 173-200
Specific Conductivity		--			700 µS/cm		WAC 246-290
Total Dissolved Solids		500 mg/L	2-Apr-86	40 CFR 143	500 mg/L	01-Dec-90	WAC 173-200
Chloride	16887-00-6	250 mg/L	2-Apr-86	40 CFR 143	250 mg/L	01-Dec-90	WAC 173-200
Fluoride	16984-48-8	2.0 mg/L	2-Apr-86	40 CFR 143	p		
Silver	7440-22-4	0.1 mg/L	30-Jul-92	FR v. 56 No. 20	p		
Sulfate	14808-79-8	250 mg/L	2-Apr-86	40 CFR 143	250 mg/L	01-Dec-90	WAC 173-200
Surfactants		0.5 mg/L	2-Apr-86	40 CFR 143	0.5 mg/L	01-Dec-90	WAC 173-200
Corrosivity		non-corrosive	2-Apr-86	40 CFR 143	non-corrosive	01-Dec-90	WAC 173-200
Odor-Threshold		3 units	2-Apr-86	40 CFR 143	3 units	01-Dec-90	WAC 173-200
Zinc	7440-66-6	5.0 mg/L	2-Apr-86	40 CFR 143	5.0 mg/L	01-Dec-90	WAC 173-200
NOTES:					mg/L = milligrams per liter		
p = Listed as a primary standard					m/L = million fibers per liter		
c = Listed as a carcinogen in the Washington State Groundwater Quality Criteria					mL = milliliter		
-- = no standard established					NTU = Nephelometric Turbidity Unit		
* = Criteria shall be the most stringent concentration of the Federal MCLG, MCL, or State MCL					µg/L = micrograms per liter		
** = treatment technique in lieu of an MCL					pCi/L = per liter		
*** = A Drinking Water Advisory, not an enforceable standard.					µS/cm = microSiemen per centimeter		
National Primary and Secondary Drinking Water Regulations (40 CFR Parts 141 and 143)					units = standard unit for either color, pH, or odor		
Washington State Groundwater Quality Criteria = Water Quality Standards for Groundwaters of the State of Washington (WAC 173-200)					MCL = Maximum Contaminant Level		
					MCLG = Maximum Contaminant Level Goal		

Compiled by KCSWD 01/12/1994. Revised 3/15/2023

King County Environmental Laboratory Qualifier Definitions

(Effective 8/27/2015)

QUAL	QUALIFIER DESCRIPTION
U	Undetected; Analyte Concentration Less than Method Detection Limit (< MDL)
T	Estimated; Less than Reporting Detection Limit (<RDL) but Greater than Method Detection Limit (> MDL)
J	Reported Value is an Estimate
B	Matrix Target Analyte Present in Blank, AND, Sample Result Less than or Equal to 10x Blank Detection
C	Confluent Growth
E	Estimated; Outside Expected Accuracy
H	Exceeds Holding Time
R	Data Rejected
S	Sample Handling Errors
X	Too Numerous to Count
D	Re-analysis Due to Dilution
P	PASS – Qualitative Result Acceptable
F	FAIL – Qualitative Result is not Acceptable
G	Estimated with Low Bias (Coliform; BOD; All Other Chemistry Parameters)
L	Estimated with High Bias (BOD; All Other Chemistry Parameters)

Pace Analytical Laboratory Qualifiers

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quantitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

Table B-1
Groundwater - Static Water Levels

Groundwater - Static Water Levels		Top of PVC Casing Elevation	Depth to Groundwater	Groundwater Elevation
Well #	Measurement Date	(feet)	(feet)	(feet above MSL)
MW-1	6/3/2020	822.04	54.11	767.93
MW-1	11/19/2020	822.04	63.40	758.64
MW-1	5/11/2021	822.04	55.06	766.98
MW-1	11/4/2021	822.04	64.71	757.33
MW-1	11/8/2021	822.04	64.78	757.26
MW-1	5/25/2022	822.04	49.35	772.69
MW-2	6/3/2020	800.63	44.41	756.22
MW-2	11/19/2020	800.63	49.25	751.38
MW-2	5/11/2021	800.63	45.05	755.58
MW-2	11/4/2021	800.63	50.20	750.43
MW-2	11/8/2021	800.63	50.18	750.45
MW-2	5/25/2022	800.63	41.60	759.03
MW-9	6/3/2020	829.70	75.49	754.21
MW-9	11/19/2020	829.70	79.73	749.97
MW-9	5/11/2021	829.70	76.09	753.61
MW-9	11/4/2021	829.70	80.65	749.05
MW-9	11/8/2021	829.70	80.67	749.03
MW-9	5/25/2022	829.70	72.95	756.75

Table B-2
Groundwater - Sampling Water Levels

Groundwater - Sampling Water Levels		Top of PVC Casing Elevation	Depth to Groundwater	Groundwater Elevation
Well #	Measurement Date	(feet)	(feet)	(feet above MSL)
MW-1	1/20/2020	822.04	60.96	761.08
MW-1	2/13/2020	822.04	53.27	768.77
MW-1	3/12/2020	822.04	49.64	772.40
MW-1	5/14/2020	822.04	52.94	769.10
MW-1	6/15/2020	822.04	55.01	767.03
MW-1	9/1/2020	822.04	60.55	761.49
MW-1	10/21/2020	822.04	62.98	759.06
MW-1	11/19/2020	822.04	63.40	758.64
MW-1	12/14/2020	822.04	62.81	759.23
MW-1	3/5/2021	822.04	53.82	768.22
MW-1	4/6/2021	822.04	53.25	768.79
MW-1	5/11/2021	822.04	55.06	766.98
MW-1	8/16/2021	822.04	60.25	761.79
MW-1	2/8/2022	822.04	53.39	768.65
MW-2	12/18/2019	800.63	50.64	749.99
MW-2	1/20/2020	800.63	48.86	751.77
MW-2	2/13/2020	800.63	44.74	755.89
MW-2	3/12/2020	800.63	43.11	757.52
MW-2	4/16/2020	800.63	42.81	757.82
MW-2	5/14/2020	800.63	43.65	756.98
MW-2	6/15/2020	800.63	44.88	755.75
MW-2	9/1/2020	800.63	48.13	752.50
MW-2	10/21/2020	800.63	49.31	751.32
MW-2	11/19/2020	800.63	49.25	751.38
MW-2	12/14/2020	800.63	49.17	751.46
MW-2	3/5/2021	800.63	44.75	755.88
MW-2	4/6/2021	800.63	44.32	756.31
MW-2	5/11/2021	800.63	45.05	755.58
MW-2	8/16/2021	800.63	48.54	752.09
MW-2	11/8/2021	800.63	50.18	750.45
MW-2	2/8/2022	800.63	45.11	755.52
MW-2	5/25/2022	800.63	41.68	758.95
MW-9	12/18/2019	829.70	80.97	748.73
MW-9	1/20/2020	829.70	79.24	750.46
MW-9	2/13/2020	829.70	75.12	754.58
MW-9	3/12/2020	829.70	74.29	755.41
MW-9	4/16/2020	829.70	74.10	755.60
MW-9	5/14/2020	829.70	74.81	754.89
MW-9	6/15/2020	829.70	75.93	753.77
MW-9	8/11/2020	829.70	78.20	751.51
MW-9	9/1/2020	829.70	79.94	749.76
MW-9	10/21/2020	829.70	79.86	749.84
MW-9	11/19/2020	829.70	79.73	749.97
MW-9	12/14/2020	829.70	79.63	754.89
MW-9	4/6/2021	829.70	75.38	754.32
MW-9	5/11/2021	829.70	76.09	753.61
MW-9	8/16/2021	829.70	79.36	750.34
MW-9	11/8/2021	829.70	80.67	749.03
MW-9	2/8/2022	829.70	76.11	753.59
MW-9	5/25/2022	829.70	73.02	756.68

Table B-3
Groundwater - Field Parameters

Groundwater - Field Parameters			Dissolved Oxygen (DO) (Field)	Oxidation- Reduction Potential (ORP) (Field)	pH (Field)	Specific Conductance (Field)	Temperature (Field)	Turbidity (Field)	Volume Purged
Well #	Sample Date	Sample ID	(mg/L)	(mV)	(std. units)	(µmhos/cm)	(°C)	(NTU)	(gal)
Monitoring Wells									
MW-1	12/18/2019	MW-1-121819	0.80	76.3	7.47	269.5	9.900	1.61	1.50
MW-1	1/20/2020	DUP-012020	0.58	77.8	7.42	268.0	9.800	0.45	1.75
MW-1	1/20/2020	MW-1-012020	0.58	77.8	7.42	268.0	9.800	0.45	1.75
MW-1	2/13/2020	DUP-021320	0.52	69.7	7.05	221.8	9.500	0.15	2.50
MW-1	2/13/2020	MW-1-021320	0.52	69.7	7.05	221.8	9.500	0.15	2.50
MW-1	3/12/2020	DUP-031220	0.72	63.4	6.37	147.7	9.900	0.24	1.50
MW-1	3/12/2020	MW-1-031220	0.72	63.4	6.37	147.7	9.900	0.24	1.50
MW-1	4/16/2020	DUP-041620	0.92	32.6	6.41	123.8	10.700	2.39	1.80
MW-1	4/16/2020	MW-1-041620	0.92	32.6	6.41	123.8	10.700	2.39	1.80
MW-1	5/14/2020	DUP-051420	0.98	54.2	6.05	117.5	10.300	0.69	2.50
MW-1	5/14/2020	MW-1-051420	0.98	54.2	6.05	117.5	10.300	0.69	2.50
MW-1	6/3/2020	WE1-200603-	0.95	168.4	6.13	138.7	10.240	0.64	3.25
MW-1	6/15/2020	DUP-061520	2.25	57.9	6.52	172.2	10.800	0.19	1.25
MW-1	6/15/2020	MW-1-061520	2.25	57.9	6.52	172.2	10.800	0.19	1.25
MW-1	8/11/2020	WE1-200811-	0.99	197.8	6.10	219.7	10.150	0.31	3.00
MW-1	9/1/2020	WE1-200901-	1.42	75.1	6.18	170.9	10.857	0.15	5.00
MW-1	10/21/2020	WE1-201021-	0.93	76.5	7.00	230.0	10.050	0.43	3.00
MW-1	11/19/2020	WE1-201119-	0.62	-21.0	7.21	230.8	10.150	0.21	3.00
MW-1	12/14/2020	WE1-201214-	0.85	176.3	7.23	226.4	10.000	0.36	2.50
MW-1	3/5/2021	WE1-210305I	1.53	159.9	6.00	117.4	9.880	0.23	5.50
MW-1	4/6/2021	WE1-210406-	1.23	208.7	6.31	116.1	10.090	0.20	4.75
MW-1	5/11/2021	WE1-210511-	1.33	387.4	6.18	132.2	10.430	0.26	2.50
MW-1	8/16/2021	WE1-210816-	1.00	115.8	7.11	195.0	11.500	1.17	3.00
MW-1	11/8/2021	WE1-211108-	0.87	-28.5	7.11	221.5	10.160	2.01	2.50
MW-1	2/8/2022	WE1-220208-	1.00	282.3	6.38	120.6	9.320	0.34	3.50
MW-1	5/25/2022	WE1-220525-	1.47	179.7	6.09	101.4	10.209	0.33	4.50
MW-2	12/18/2019	MW-2-121819	2.09	74.0	6.24	69.8	9.600	0.81	1.50
MW-2	1/20/2020	MW-2-012020	4.17	74.6	5.97	66.8	10.000	0.71	1.50
MW-2	2/13/2020	MW-2-021320	1.73	58.5	6.21	65.7	9.600	0.15	1.25
MW-2	3/12/2020	MW-2-031220	2.14	54.2	6.13	100.2	9.900	0.22	1.50
MW-2	4/16/2020	MW-2-041620	4.41	57.4	6.09	14.1	11.500	0.29	1.80
MW-2	5/14/2020	MW-2-051420	5.54	74.1	5.77	192.3	10.700	0.65	1.50
MW-2	6/3/2020	WE2-200603-	4.83	291.8	5.74	144.3	10.410	1.17	1.50
MW-2	6/15/2020	MW-2-061520	4.44	56.9	6.27	136.4	10.900	0.33	1.00
MW-2	8/11/2020	WE2-200811-	1.41	214.0	5.99	65.1	10.660	0.38	3.50

Table B-3
Groundwater - Field Parameters

Groundwater - Field Parameters			Dissolved Oxygen (DO) (Field)	Oxidation- Reduction Potential (ORP) (Field)	pH (Field)	Specific Conductance (Field)	Temperature (Field)	Turbidity (Field)	Volume Purged
Well #	Sample Date	Sample ID	(mg/L)	(mV)	(std. units)	(µmhos/cm)	(°C)	(NTU)	(gal)
Monitoring Wells									
MW-2	9/1/2020	WE2-200901-	1.91	227.3	5.82	63.0	10.823	0.57	1.75
MW-2	10/21/2020	WE2-201021-	2.14	266.0	5.70	67.1	10.460	0.35	2.00
MW-2	11/19/2020	WE2-201119-	1.13	246.1	5.94	62.0	10.240	0.94	2.25
MW-2	12/14/2020	WE2-201214-	1.28	376.6	5.92	62.1	10.251	0.64	2.75
MW-2	3/5/2021	WE2-210305I	1.07	175.0	5.63	73.1	10.240	0.27	5.50
MW-2	4/6/2021	WE2-210406-	2.81	198.0	5.92	106.6	10.160	0.39	6.00
MW-2	5/11/2021	WE2-210511-	3.87	395.5	5.71	73.8	10.420	0.28	4.50
MW-2	8/16/2021	WE2-210816-	4.79	221.0	6.95	74.0	11.400	0.48	2.50
MW-2	11/8/2021	WE2-211108-	1.89	200.4	6.02	63.5	9.990	0.74	2.75
MW-2	2/8/2022	WE2-220208-	0.62	342.1	5.95	105.0	9.856	0.89	3.00
MW-2	5/25/2022	WE2-220525-	4.34	205.9	5.66	160.6	10.481	0.33	3.50
MW-9	12/18/2019	MW-9-121819	3.65	85.3	6.21	101.5	9.700	0.68	1.50
MW-9	1/20/2020	MW-9-012020	7.26	66.5	6.09	88.7	10.300	0.41	1.25
MW-9	2/13/2020	MW-9-021320	7.94	52.4	6.20	58.7	9.300	1.31	1.75
MW-9	3/12/2020	MW-9-031220	4.02	45.7	6.29	48.7	8.900	6.12	1.50
MW-9	4/16/2020	MW-9-041620	7.72	62.4	5.88	78.2	9.500	2.12	2.10
MW-9	5/14/2020	MW-9-051420	7.11	61.5	5.94	102.1	10.600	1.36	1.00
MW-9	6/3/2020	WE9-200603-	4.94	235.7	5.95	149.1	9.690	0.50	2.80
MW-9	6/15/2020	MW-9-061520	5.09	53.2	6.35	145.1	10.800	0.27	1.25
MW-9	8/11/2020	WE9-200811-	1.26	441.2	5.75	160.2	10.659	0.58	3.00
MW-9	9/1/2020	WE9-200901-	0.93	237.1	5.48	140.5	10.690	0.25	2.75
MW-9	10/21/2020	WE9-201021-	0.87	432.4	5.90	86.8	10.319	0.72	3.00
MW-9	11/19/2020	WE9-201119-	0.69	267.2	5.66	119.3	10.040	0.29	3.10
MW-9	12/14/2020	WE9-201214-	3.16	446.4	5.92	110.4	10.078	0.38	1.50
MW-9	3/5/2021	WE9-210305I	7.74	265.5	5.58	48.1	8.680	1.27	2.90
MW-9	4/6/2021	WE9-210406-	7.25	266.2	6.02	53.7	7.990	1.00	2.00
MW-9	5/11/2021	WE9-210511-	4.97	416.9	5.84	129.0	9.710	0.52	2.25
MW-9	8/16/2021	WE9-210816-	1.58	202.8	6.96	94.3	12.000	0.65	2.25
MW-9	11/8/2021	WE9-211108-	1.10	280.5	5.93	62.4	9.880	0.62	2.75
MW-9	2/8/2022	WE9-220208-	8.84	336.5	6.18	54.7	9.760	1.65	1.75
MW-9	5/25/2022	WE9-220525-	7.24	191.4	5.79	66.4	9.601	0.36	2.50

Table B-4
Groundwater - Dissolved Gases

Groundwater - Dissolved Gases			Methane	Carbon Dioxide
Well #	Sample Date	Sample ID	(mg/L)	(mg/L)
Monitoring Wells				
MW-1	2019-12-18	MW-1-121819	0.0554	138.0
MW-1	2020-01-20	DUP-012020	0.055 n	6.2 n
MW-1	2020-01-20	MW-1-012020	0.06 n	6.1 n
MW-1	2020-02-13	DUP-021320	0.014 n	11.0 n
MW-1	2020-02-13	MW-1-021320	0.014 n	9.6 n
MW-1	2020-03-12	DUP-031220	0.00041 Jn	35.0 n
MW-1	2020-03-12	MW-1-031220	0.00038 Jn	36.0 n
MW-1	2020-04-16	DUP-041620	0.00021 Jn	32.0 n
MW-1	2020-04-16	MW-1-041620	0.00023 Jn	33.0 n
MW-1	2020-05-14	DUP-051420	0.00863 U	60.8
MW-1	2020-05-14	MW-1-051420	0.00863 U	68.2
MW-1	2020-06-15	MW-1-061520	0.00863 U	146.0
MW-1	2020-08-11	WE1-200811-	0.00863 U	59.6
MW-1	2020-09-01	WE1-200901-	0.0108	78.6
MW-1	2020-10-21	WE1-201021-	0.0285	150.0
MW-1	2020-11-19	WE1-201119-	0.0309	120.0
MW-1	2020-12-14	WE1-201214-	0.0416	156.0
MW-1	2021-03-05	WE1-210305I	0.00675 U	62.5
MW-1	2021-05-11	WE1-210511-	0.00675 U	82.3
MW-1	2021-08-16	WE1-210816-	0.0918	102.0
MW-1	2021-11-08	WE1-211108-	0.0703	118.0
MW-1	2022-02-08	WE1-220208-	0.00705	81.4
MW-2	2019-12-18	MW-2-121819	0.101	37.5
MW-2	2020-01-20	MW-2-012020	0.00014 Jn	24.0 n
MW-2	2020-02-13	MW-2-021320	0.0005 Un	22.0 n
MW-2	2020-03-12	MW-2-031220	0.00015 Jn	64.0 n
MW-2	2020-04-16	MW-2-041620	0.000058 Jn	67.0 n
MW-2	2020-05-14	MW-2-051420	0.00863 U	48.4
MW-2	2020-06-15	MW-2-061520	0.00863 U	97.1
MW-2	2020-08-11	WE2-200811-	0.015	84.1
MW-2	2020-09-01	WE2-200901-	0.00863 U	38
MW-2	2020-10-21	WE2-201021-	0.00863 U	47.2
MW-2	2020-11-19	WE2-201119-	0.00863 U	37.8
MW-2	2020-12-14	WE2-201214-	0.00863 U	53.9
MW-2	2021-03-05	WE2-210305I	0.00675 U	43.1
MW-2	2021-05-11	WE2-210511-	0.00675 U	56.8
MW-2	2021-08-16	WE2-210816-	0.00675 U	45.3
MW-2	2021-11-08	WE2-211108-	0.00675 U	34.8

Table B-4
Groundwater - Dissolved Gases

Groundwater - Dissolved Gases			Methane	Carbon Dioxide
Well #	Sample Date	Sample ID	(mg/L)	(mg/L)
Monitoring Wells				
MW-2	2022-02-08	WE2-220208-	0.00675 U	88.4
MW-9	2019-12-18	MW-9-121819	0.00863 U	61.5
MW-9	2020-01-20	MW-9-012020	0.0005 Un	41.0 n
MW-9	2020-02-13	MW-9-021320	0.0005 Un	21.0 n
MW-9	2020-03-12	MW-9-031220	0.000047 Jn	16.0 n
MW-9	2020-04-16	MW-9-041620	0.000031 Jn	30.0 n
MW-9	2020-05-14	MW-9-051420	0.00863 U	63.3
MW-9	2020-06-15	MW-9-061520	0.00863 U	143.0
MW-9	2020-08-11	WE9-200811-	0.00863 U	37.9
MW-9	2020-09-01	WE9-200901-	0.00863 U	55.0
MW-9	2020-10-21	WE9-201021-	0.00863 U	37.2
MW-9	2020-11-19	WE9-201119-	0.00863 U	51.9
MW-9	2020-12-14	WE9-201214-	0.00863 U	109.0
MW-9	2021-03-05	WE9-210305I	0.00675 U	34.2
MW-9	2021-05-11	WE9-210511-	0.00675 U	79.1
MW-9	2021-08-16	WE9-210816-	0.00675 U	55.0
MW-9	2021-11-08	WE9-211108-	0.00675 U	35.7
MW-9	2022-02-08	WE9-220208-	0.00675 U	61.5

Table B-5
Groundwater - Conventionals

Groundwater - Conventionals			Chloride	Alkalinity, Bicarbonate	Alkalinity, Total	Ammonia	Specific Conductance	Total Solids	Total Dissolved Solids	Total Suspended Solids	Sulfate	Nitrate	Total Organic Carbon
Well #	Sample Date	Sample ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umhos/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Monitoring Wells													
MW-1	2019-12-18	MW-1-121819	1.90	141.0	--	--	--	--	--	--	--	--	--
MW-1	2020-01-20	DUP-012020	1.96	127.0	127.0	--	--	--	--	--	--	--	--
MW-1	2020-01-20	MW-1-012020	1.98	127.0	127.0	--	--	--	--	--	--	--	--
MW-1	2020-02-13	DUP-021320	1.50	100.0	100.0	--	--	--	--	--	--	--	--
MW-1	2020-02-13	MW-1-021320	1.52	103.0	103.0	--	--	--	--	--	--	--	--
MW-1	2020-03-12	DUP-031220	1.55	65.9	65.9	--	--	--	--	--	--	--	--
MW-1	2020-03-12	MW-1-031220	1.53	66.9	66.9	--	--	--	--	--	--	--	--
MW-1	2020-04-16	DUP-041620	1.62	58.6	58.6	--	--	--	--	--	--	--	--
MW-1	2020-04-16	MW-1-041620	1.63	58.8	58.8	--	--	--	--	--	--	--	--
MW-1	2020-05-14	DUP-051420	1.41	57.3	57.3	--	--	--	--	--	--	--	--
MW-1	2020-05-14	MW-1-051420	1.41	56.5	56.5	--	--	--	--	--	--	--	--
MW-1	2020-06-03	WE1-200603-	1.61	--	61.2	0.0142	163.0	103.0	114.0	0.5 U	5.29	0.348	0.5 U
MW-1	2020-06-15	DUP-061520	1.92	67.8	67.8	--	--	--	--	--	--	--	--
MW-1	2020-06-15	MW-1-061520	1.87	68.3	68.3	--	--	--	--	--	--	--	--
MW-1	2020-08-11	WE1-200811-	1.91	92.6	92.6	--	--	--	--	--	--	--	--
MW-1	2020-09-01	WE1-200901-	1.64	82.3	82.3	--	--	--	--	--	--	--	--
MW-1	2020-10-21	WE1-201021-	1.61	105.0	105.0	--	--	--	--	--	--	--	--
MW-1	2020-11-19	WE1-201119-	1.72	115.0	115.0	0.0816	247.0	159.0	160.0	0.5 U	5.74	0.023 T	0.5 U
MW-1	2020-12-14	WE1-201214-	1.70	120.0	120.0	--	--	--	--	--	--	--	--
MW-1	2021-03-05	WE1-210305I	1.49	58.4	58.4	--	--	--	--	--	--	--	--
MW-1	2021-04-06	WE1-210406-	1.46	55.0	55.0	--	--	--	--	--	--	--	--
MW-1	2021-05-11	WE1-210511-	1.89	74.4	74.4	0.0065 T	170.0	109.0	108.0	0.5 U	6.52	0.478	0.56 T
MW-1	2021-08-16	WE1-210816-	1.67	91.2	91.2	--	--	--	--	--	--	--	--
MW-1	2021-11-08	WE1-211108-	1.85	119.0	119.0	0.138	249.0	137.0	142.0	0.5 U	6.15	0.01 U	0.5 U
MW-1	2022-02-08	WE1-220208-	1.36	59.1	59.1	--	--	--	--	--	--	--	--
MW-1	2022-05-25	WE1-220525-	1.39	55.9 L	55.9 L	0.0023 T	111.0	78.7	78.7	0.5 U	3.75	0.254	0.5 U
MW-2	2019-12-18	MW-2-121819	1.32	2.5 U	--	--	--	--	--	--	--	--	--
MW-2	2020-01-20	MW-2-012020	1.33	25.0	25.0	--	--	--	--	--	--	--	--
MW-2	2020-02-13	MW-2-021320	1.29	25.1	25.1	--	--	--	--	--	--	--	--
MW-2	2020-03-12	MW-2-031220	1.41	40.8	40.8	--	--	--	--	--	--	--	--
MW-2	2020-04-16	MW-2-041620	3.41	42.9	42.9	--	--	--	--	--	--	--	--
MW-2	2020-05-14	MW-2-051420	6.54	40.2	40.2	--	--	--	--	--	--	--	--
MW-2	2020-06-03	WE2-200603-	3.49	--	38.4	0.002 U	155.0	111.0	107.0	0.5 U	11.30	3.1	0.5 U

Table B-5
Groundwater - Conventionals

Groundwater - Conventionals			Chloride	Alkalinity, Bicarbonate	Alkalinity, Total	Ammonia	Specific Conductance	Total Solids	Total Dissolved Solids	Total Suspended Solids	Sulfate	Nitrate	Total Organic Carbon
Well #	Sample Date	Sample ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umhos/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Monitoring Wells													
MW-2	2020-06-15	MW-2-061520	2.45	41.3	41.3	--	--	--	--	--	--	--	--
MW-2	2020-08-11	WE2-200811-	1.24	23.2	23.2	--	--	--	--	--	--	--	--
MW-2	2020-09-01	WE2-200901-	1.23	23.9	23.9	--	--	--	--	--	--	--	--
MW-2	2020-10-21	WE2-201021-	1.26	23.9	23.9	--	--	--	--	--	--	--	--
MW-2	2020-11-19	WE2-201119-	1.45	25.9	25.9	0.002 U	68.2	65.9	55.4	0.5 U	2.47	0.0967	0.5 U
MW-2	2020-12-14	WE2-201214-	2.15	25.8	25.8	--	--	--	--	--	--	--	--
MW-2	2021-03-05	WE2-210305I	1.80	35.7	35.7	--	--	--	--	--	--	--	--
MW-2	2021-04-06	WE2-210406-	1.72	37.1	37.1	--	--	--	--	--	--	--	--
MW-2	2021-05-11	WE2-210511-	1.38	34.3	34.3	0.002 U	93.6	69.3	68.7	0.54 U	5.79	0.762	0.5 U
MW-2	2021-08-16	WE2-210816-	1.44	26.2	26.2	--	--	--	--	--	--	--	--
MW-2	2021-11-08	WE2-211108-	1.44	27.3	27.3	0.002 U	71.0	42.0	38.0	0.5 U	2.62	0.197	0.5 U
MW-2	2022-02-08	WE2-220208-	1.68	44.7	44.7	--	--	--	--	--	--	--	--
MW-2	2022-05-25	WE2-220525-	6.65	43.8 L	43.8 L	0.002 U	175.0	140.0	139.0	0.5 U	11.7	6.25	0.5 U
MW-9	2019-12-18	MW-9-121819	1.55	2.5 U	--	--	--	--	--	--	--	--	--
MW-9	2020-01-20	MW-9-012020	0.624	41.1	41.1	--	--	--	--	--	--	--	--
MW-9	2020-02-13	MW-9-021320	0.410	25.3	25.3	--	--	--	--	--	--	--	--
MW-9	2020-03-12	MW-9-031220	0.313	20.9	20.9	--	--	--	--	--	--	--	--
MW-9	2020-04-16	MW-9-041620	1.33	31.4	31.4	--	--	--	--	--	--	--	--
MW-9	2020-05-14	MW-9-051420	0.788	51.8	51.8	--	--	--	--	--	--	--	--
MW-9	2020-06-03	WE9-200603-	1.55	--	62.2	0.002 U	163.0	109.0	107.0	0.5 U	7.44	0.541	1.07
MW-9	2020-06-15	MW-9-061520	1.48	62.1	62.1	--	--	--	--	--	--	--	--
MW-9	2020-08-11	WE9-200811-	11.70	47.7	47.7	--	--	--	--	--	--	--	--
MW-9	2020-09-01	WE9-200901-	5.68	56.0	56.0	--	--	--	--	--	--	--	--
MW-9	2020-10-21	WE9-201021-	1.54	28.6	28.6	--	--	--	--	--	--	--	--
MW-9	2020-11-19	WE9-201119-	4.10	44.7	44.7	0.002 U	130.0	105.0	98.1	0.5 U	7.02	0.713	0.5 U
MW-9	2020-12-14	WE9-201214-	3.05	48.8	48.8	--	--	--	--	--	--	--	--
MW-9	2021-03-05	WE9-210305I	0.231	24.7	24.7	--	--	--	--	--	--	--	--
MW-9	2021-04-06	WE9-210406-	0.435	25.4	25.4	--	--	--	--	--	--	--	--
MW-9	2021-05-11	WE9-210511-	1.65	68.5	68.5	0.002 U	163.0	108.0	107.0	0.5 U	6.33	0.938	0.87 T
MW-9	2021-08-16	WE9-210816-	1.48	34.1	34.1	--	--	--	--	--	--	--	--
MW-9	2021-11-08	WE9-211108-	1.47	24.6	24.6	0.002 U	70.4	55.3	52.7	0.5 U	2.85	0.711	0.5 U
MW-9	2022-02-08	WE9-220208-	0.394	26.4	26.4	--	--	--	--	--	--	--	--
MW-9	2022-05-25	WE9-220525-	0.074 T	40.8 L	40.8 L	0.002 U	73.5	60.7	60.0	1.0 U	1.46	0.0912	1.73

Notes:

-- = parameter not sampled for.

Table B-6
Groundwater - Metals (Dissolved & Total)

Groundwater - Metals (Dissolved & Total)			Arsenic, Dissolved (µg/L)	Arsenic, Total (µg/L)	Calcium, Dissolved (mg/L)	Calcium, Total (mg/L)	Iron, Dissolved (mg/L)	Iron, Total (mg/L)	Magnesium, Dissolved (mg/L)	Magnesium, Total (mg/L)	Manganese, Dissolved (µg/L)	Manganese, Total (µg/L)	Potassium Dissolved (mg/L)	Sodium Dissolved (mg/L)
Well #	Sample Date	Sample ID												
Monitoring Wells														
MW-1	2019-12-18	MW-1-121819	--	--	--	34.4	--	--	--	7.49	--	--	--	--
MW-1	2020-01-20	DUP-012020	--	--	32.40	--	--	--	8.56	--	--	--	--	--
MW-1	2020-01-20	MW-1-012020	--	--	32.90	--	--	--	8.68	--	--	--	--	--
MW-1	2020-02-13	DUP-021320	--	--	24.00	--	--	--	6.71	--	--	--	--	--
MW-1	2020-02-13	MW-1-021320	--	--	24.40	--	--	--	6.71	--	--	--	--	--
MW-1	2020-03-12	DUP-031220	--	--	17 D	--	--	--	4.08	--	--	--	--	--
MW-1	2020-03-12	MW-1-031220	--	--	17.20 D	--	--	--	4.13	--	--	--	--	--
MW-1	2020-04-16	DUP-041620	--	--	14.70	--	--	--	4.06	--	--	--	--	--
MW-1	2020-04-16	MW-1-041620	--	--	14.80	--	--	--	4.04	--	--	--	--	--
MW-1	2020-05-14	DUP-051420	--	--	14.00	--	--	--	3.93	--	--	--	--	--
MW-1	2020-05-14	MW-1-051420	--	--	13.90	--	--	--	3.91	--	--	--	--	--
MW-1	2020-06-03	WE1-200603-	1.44	--	16.90	--	0.0178	--	5.28	--	129	--	1.28	6.9
MW-1	2020-06-15	DUP-061520	--	--	20.60	--	--	--	6.26	--	--	--	--	--
MW-1	2020-06-15	MW-1-061520	--	--	20.40	--	--	--	6.13	--	--	--	--	--
MW-1	2020-08-11	WE1-200811-	--	--	25.70	--	--	--	7.16	--	--	--	--	--
MW-1	2020-09-01	WE1-200901-	--	--	21.40	--	--	--	5.86	--	--	--	--	--
MW-1	2020-10-21	WE1-201021-	--	--	27.20	--	--	--	6.90	--	--	--	--	--
MW-1	2020-11-19	WE1-201119-	6.44	--	27.80	--	0.0977	--	7.48	--	795	--	1.74	11
MW-1	2020-12-14	WE1-201214-	--	--	30.20	--	--	--	7.97	--	--	--	--	--
MW-1	2021-03-05	WE1-210305I	--	--	15.00	--	--	--	3.86	--	--	--	--	--
MW-1	2021-04-06	WE1-210406-	--	--	14.30	--	--	--	3.85	--	--	--	--	--
MW-1	2021-05-11	WE1-210511-	1.68	1.77 D	20.70	--	0.01 U	0.021	5.81	--	86	93	1.53	7.02
MW-1	2021-08-16	WE1-210816-	5.18	--	22.50	--	0.262	--	5.91	--	787	--	--	--
MW-1	2021-11-08	WE1-211108-	8.97	9.4 S	29.40	--	0.167	0.21 S	7.82	--	676	702 S	2.01	11.5
MW-1	2022-02-08	WE1-220208-	2.32	--	15.10	--	0.01 U	--	4.03	--	272	--	--	--
MW-1	2022-05-25	WE1-220525-	--	1.68	12.10	--	--	0.0169	3.73	--	--	25.8	--	--
MW-2	2020-01-20	MW-2-012020	--	--	6.08	--	--	--	2.08	--	--	--	--	--
MW-2	2020-02-13	MW-2-021320	--	--	5.45	--	--	--	1.98	--	--	--	--	--
MW-2	2020-03-12	MW-2-031220	--	--	9.84 D	--	--	--	3.22	--	--	--	--	--
MW-2	2020-04-16	MW-2-041620	--	--	15.30	--	--	--	4.94	--	--	--	--	--
MW-2	2020-05-14	MW-2-051420	--	--	19.70	--	--	--	6.36	--	--	--	--	--
MW-2	2020-06-03	WE2-200603-	0.111	--	14.60	--	0.01 U	--	5.25	--	11.6	--	1.37	6.32
MW-2	2020-06-15	MW-2-061520	--	--	13.30	--	--	--	4.57	--	--	--	--	--
MW-2	2020-08-11	WE2-200811-	--	--	5.81	--	--	--	2.03	--	--	--	--	--

Table B-6
Groundwater - Metals (Dissolved & Total)

Groundwater - Metals (Dissolved & Total)			Arsenic, Dissolved (µg/L)	Arsenic, Total (µg/L)	Calcium, Dissolved (mg/L)	Calcium, Total (mg/L)	Iron, Dissolved (mg/L)	Iron, Total (mg/L)	Magnesium, Dissolved (mg/L)	Magnesium, Total (mg/L)	Manganese, Dissolved (µg/L)	Manganese, Total (µg/L)	Potassium Dissolved (mg/L)	Sodium Dissolved (mg/L)
Well #	Sample Date	Sample ID	Monitoring Wells											
MW-2	2020-09-01	WE2-200901-	--	--	5.78	--	--	--	2.04	--	--	--	--	--
MW-2	2020-10-21	WE2-201021-	--	--	6.17	--	--	--	2.12	--	--	--	--	--
MW-2	2020-11-19	WE2-201119-	0.124	--	5.67	--	0.0113	--	2.08	--	11.6	--	0.871	4.28
MW-2	2020-12-14	WE2-201214-	--	--	6.11	--	--	--	2.33	--	--	--	--	--
MW-2	2021-03-05	WE2-210305I	--	--	7.66	--	--	--	2.83	--	--	--	--	--
MW-2	2021-04-06	WE2-210406-	--	--	11.10	--	--	--	3.94	--	--	--	--	--
MW-2	2021-05-11	WE2-210511-	0.133	.159 D	8.31	--	0.0185	0.0356	3.17	--	22	24.8	1.13	5.07
MW-2	2021-08-16	WE2-210816-	0.114	--	6.83	--	0.01 U	--	2.50	--	7.43	--	--	--
MW-2	2021-11-08	WE2-211108-	0.161	.179 S	6.40	--	0.0115	0.0214 S	2.43	--	8.52	12.3 S	0.988	4.12
MW-2	2022-02-08	WE2-220208-	0.169	--	11.60	--	0.01 U	--	4.26	--	7.35	--	--	--
MW-2	2022-05-25	WE2-220525-	--	0.199	17.20	--	--	0.0509	6.55	--	--	28.2	--	--
MW-9	2020-01-20	MW-9-012020	--	--	9.64	--	--	--	3.11	--	--	--	--	--
MW-9	2020-02-13	MW-9-021320	--	--	5.49	--	--	--	1.84	--	--	--	--	--
MW-9	2020-03-12	MW-9-031220	--	--	4.59 D	--	--	--	1.39	--	--	--	--	--
MW-9	2020-04-16	MW-9-041620	--	--	9.20	--	--	--	2.90	--	--	--	--	--
MW-9	2020-05-14	MW-9-051420	--	--	12.70	--	--	--	3.88	--	--	--	--	--
MW-9	2020-06-03	WE9-200603-	0.146	--	17.70	--	0.01 U	--	6.00	--	0.446	--	0.945	5.1
MW-9	2020-06-15	MW-9-061520	--	--	16.90	--	--	--	5.58	--	--	--	--	--
MW-9	2020-08-11	WE9-200811-	--	--	17.10	--	--	--	5.70	--	--	--	--	--
MW-9	2020-09-01	WE9-200901-	--	--	16.20	--	--	--	5.40	--	--	--	--	--
MW-9	2020-10-21	WE9-201021-	--	--	8.42	--	--	--	2.81	--	--	--	--	--
MW-9	2020-11-19	WE9-201119-	0.126	--	12.70	--	0.01 U	--	4.38	--	0.933	--	0.935	5.48
MW-9	2020-12-14	WE9-201214-	--	--	12.70	--	--	--	4.42	--	--	--	--	--
MW-9	2021-03-05	WE9-210305I	--	--	4.80	--	--	--	1.66	--	--	--	--	--
MW-9	2021-04-06	WE9-210406-	--	--	5.40	--	--	--	1.78	--	--	--	--	--
MW-9	2021-05-11	WE9-210511-	0.156	.158 D	18.50	--	0.01 U	0.01 U	6.10	--	0.652	0.742	1.19	6.13
MW-9	2021-08-16	WE9-210816-	0.149	--	8.75	--	0.01 U	--	3.02	--	0.453	--	--	--
MW-9	2021-11-08	WE9-211108-	0.175	.154 S	6.40	--	0.01 U	0.0111 S	2.17	--	0.553	.772 S	0.781	3.8
MW-9	2022-02-08	WE9-220208-	0.193	--	5.56	--	0.01 U	--	2.01	--	0.224	--	--	--
MW-9	2022-05-25	WE9-220525-	--	0.19	8.10	--	--	0.01 U	2.94	--	--	0.477	--	--

Notes:

-- = parameter not sampled for.

Table B-7
Groundwater - Volatile Organic Compounds

Groundwater - Volatile Organic Compounds			Vinyl Chloride
CAS #			75-01-4
Well #	Sample Date	Sample ID	(µg/L)
Monitoring Wells			
MW-1	2020-06-03	WE1-200603-	0.01 U
MW-1	2020-11-19	WE1-201119-	0.0311
MW-1	2021-05-11	WE1-210511-	0.01 U
MW-1	2021-11-08	WE1-211108-	0.0178 JT
MW-1	2022-05-25	WE1-220525-	0.01 U
MW-2	2020-06-03	WE2-200603-	0.01 U
MW-2	2020-11-19	WE2-201119-	0.01 U
MW-2	2021-05-11	WE2-210511-	0.01 U
MW-2	2021-11-08	WE2-211108-	0.01 U
MW-2	2022-05-25	WE2-220525-	0.01 U
MW-9	2020-06-03	WE9-200603-	0.01 U
MW-9	2020-11-19	WE9-201119-	0.01 U
MW-9	2021-05-11	WE9-210511-	0.01 U
MW-9	2021-11-08	WE9-211108-	0.01 U
MW-9	2022-05-25	WE9-220525-	0.01 U

Appendix C

Bioberm Configuration

FLO-WING ASSEMBLY

PIPE TO TRAILER-MOUNTED UTILITY FLARE

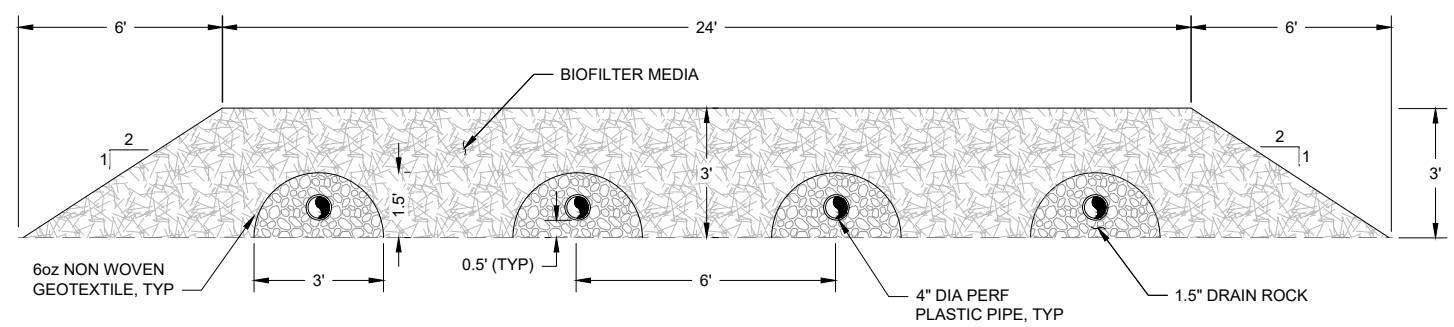
LANDFILL GAS FROM LANDFILL REROUTED TO BIOBERM (TRAILER-MOUNTED UTILITY FLARE AND CLOSED VALVE NOT SHOWN)



BIOIN - BIOBERM INLET MONITORING LOCATION

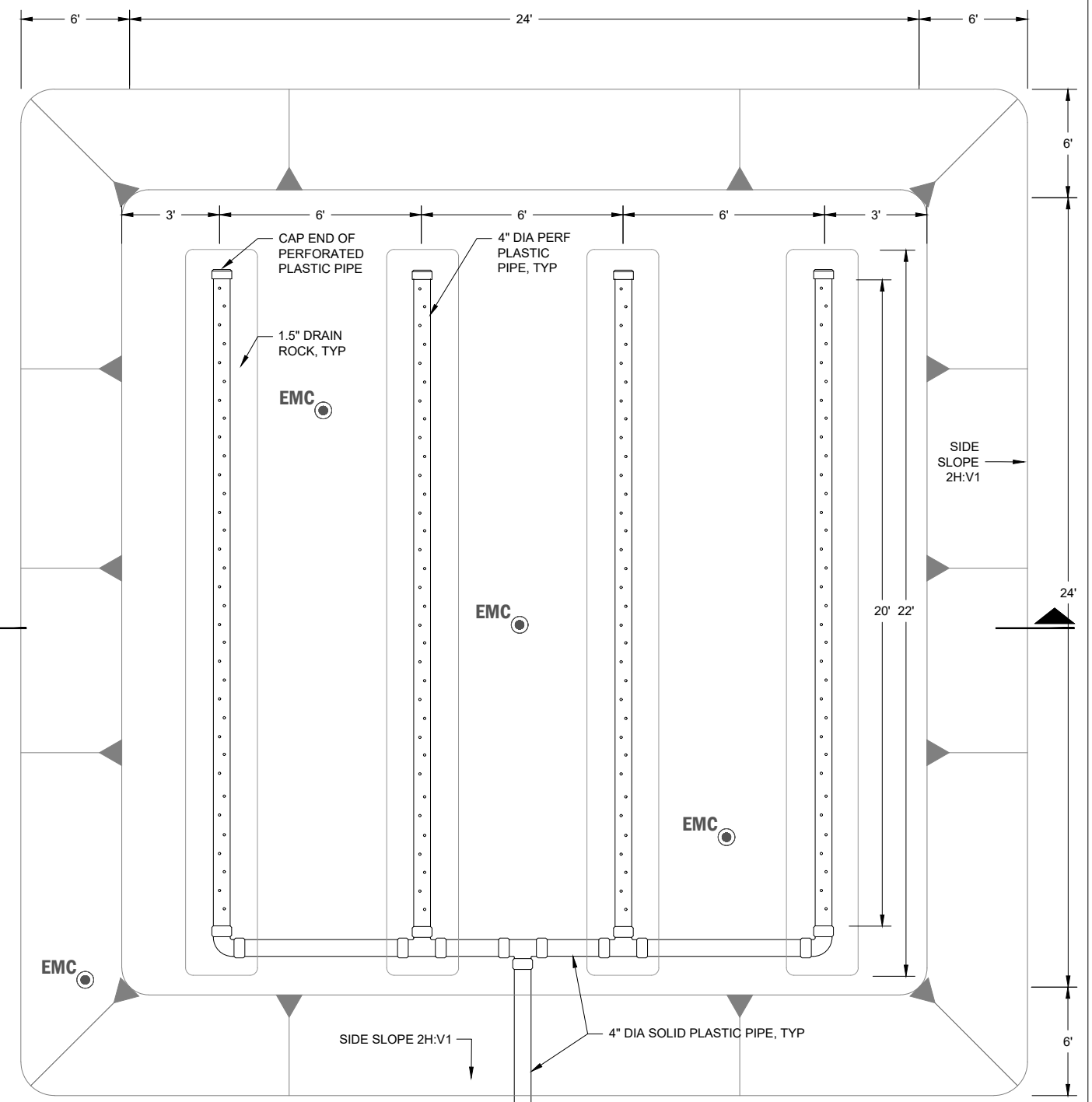
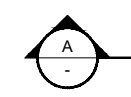
BIOBERM INLET DETAIL

SCALE: NTS



BIOBERM SECTION

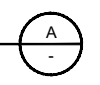
SCALE: NTS



CONNECT TO FLO-WING MONITORING DEVICE

BIOBERM PLAN

SCALE: NTS



Bioberm Details

Enumclaw Landfill
King County, Washington



Apr-2024

FIGURE NO.
C-1

CAD Path: Q:\King County\090057 Enumclaw Landfill\2019-05 LFG Rebound Test Work Plan\090057-03 Bioberm and Discharge Stack Details.dwg C-1 || Date Saved: Jun 19, 2019 4:06pm || User: scudd