

Bridgeton Landfill, LLC

Monthly Data Submittals

January 2020

**Required by Section IX.f of Final Consent Judgement, Case No. 13SL-
CC01088-01
Effective June 29, 2018**

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Provided Separately:

- Flare Raw Data Excel Spreadsheet
- Gas Wellfield Raw Data Excel Spreadsheet

February 20, 2020

Commentary on Data

February 20, 2020

The following observations and comments are offered during this time period:

Gas Volume

- As presented in Attachment B-1, the gas collection volumetric rate for this month averaged a total site flow of 1,059 SCFM, as normalized per the MDNR weekly flow and TRS sampling results.
- On October 8, 2019 all landfill gas from the North Quarry was directed to the FL-120 Flare (combined with the South Quarry Landfill Gas). Therefore, as of this date, there was no flare testing nor data from the Auxiliary Flare. For the January 2020 Monthly Report, this affected the Appendix A – Flare Data and Flare Graphs.

Gas Quality

- Attachments D and E present the monthly data related to gas quality as measured at the respective wellheads.
- Attachment E-1 presents vertical wells which exhibited oxygen levels at or greater than 5% during one (1) or more weekly monitoring events during this reporting period. These consisted of 18 GEW wells that are experiencing low or restricted flows, zero leachate collection sumps (LCS), and two (2) GIW wells that exhibit low gas flow due to the cooling loops that are installed in these wells. By the end of the month, 10 of the GEW wells still exhibited oxygen levels at or greater than 5% at the wellhead. All of these wells are low-flow/vacuum sensitive wells with valves that are only slightly open. On-going tuning, maintenance, and pump operation are being performed to manage the oxygen content.
- Attachment E-2 presents gas temperatures as measured at the wellheads. Six (6) vertical wells (excluding GIW wells) increased by 30°F or more during this reporting period. Additionally, seven (7) vertical wells (excluding GIW wells) decreased by 30°F or more. All wells that exhibited changes greater than 30°F are within the historical gas temperature norms for these wells or within the range of temperatures of nearby vertical wells.
- All gas wells in the North Quarry exhibited a maximum wellhead temperature less than 145°F during this reporting period, with the exception of GEW-054 (146.3°F). Carbon monoxide (CO) results were non-detect (ND) for North Quarry wells, with the exception of GEW-053 (66 ppm), consistent with past events. Carbon monoxide was detected in wells GEW-008 (48ppm) and GEW-051 (30ppm). Both wells were resampled and detected no carbon monoxide consistent with past events.
- Site personnel are performing a comprehensive wellfield investigation to optimize the landfill gas collection and control system (GCCS). Wells that have previously been decommissioned due to excessive moisture and/or dangerous conditions have been

reviewed and monitored to determine if the wells have obstructions that would prohibit pump installation and would therefore preclude leachate and landfill gas collection. Wells with no identified downhole integrity issues and which are no longer exhibiting excessive moisture and/or dangerous conditions have been brought back online. Wells with no identified downhole integrity issues but which still exhibit excessive moisture and/or dangerous conditions will remain decommissioned until conditions at the location improve. Wells with poor gas quality are planned to be decommissioned in the latter half of 2020. This investigation will continue through the remainder of the First Quarter 2020 and wellfield expansion and abandonment activities will be reported in the quarterly Landfill Gas Corrective Action Update.

Settlement

- The South Quarry exhibited monthly maximum settlement up to 0.25 feet over 29 days during this reporting period (see Attachment E).
- The North Quarry exhibited quarterly maximum settlement up to 0.15 feet over 89 days during this reporting period (see Attachment E).

Bird Monitoring and Mitigation

- Bridgeton Landfill conducted bird monitoring during this reporting period in accordance with the Approved Bird Hazard Monitoring and Mitigation Plan, last updated in December 2016. Birds noted on-site are dispersed using pyrotechnics, a cap gun, vehicles, or on foot. Logs of bird population observations are provided to the Airport and the USDA APHIS Wildlife Services on a weekly basis.

Natural Gas Usage

- Natural gas was used as a supplemental fuel for the destruction of landfill gas in the previous month. The requirements for landfill gas destruction under 40 CFR 60 Subpart WWW were achieved by meeting the provisions of 40 CFR 60 Subpart A under §60.18 for non-assisted flares. A total of 271,400 cubic feet of supplemental fuel was used between 1/15/20 to 1/22/20.

Slip Failure or Separation Assessment

- On December 16, 2019, an inspection of the Bridgeton Landfill was performed by P.J. Carey of P.J. Carey & Associates, P.C. to identify visual evidence of instability or incipient failure. This inspection included the north and south quarry fill areas. The findings of this inspection were discussed in a separate report which was submitted on 12/31/19. A copy of the Slip Failure or Separation Assessment is included in the monthly report.

ATTACHMENT A

DAILY FLARE MONITORING DATA

ATTACHMENT A-1

FLOW DATA TABLE

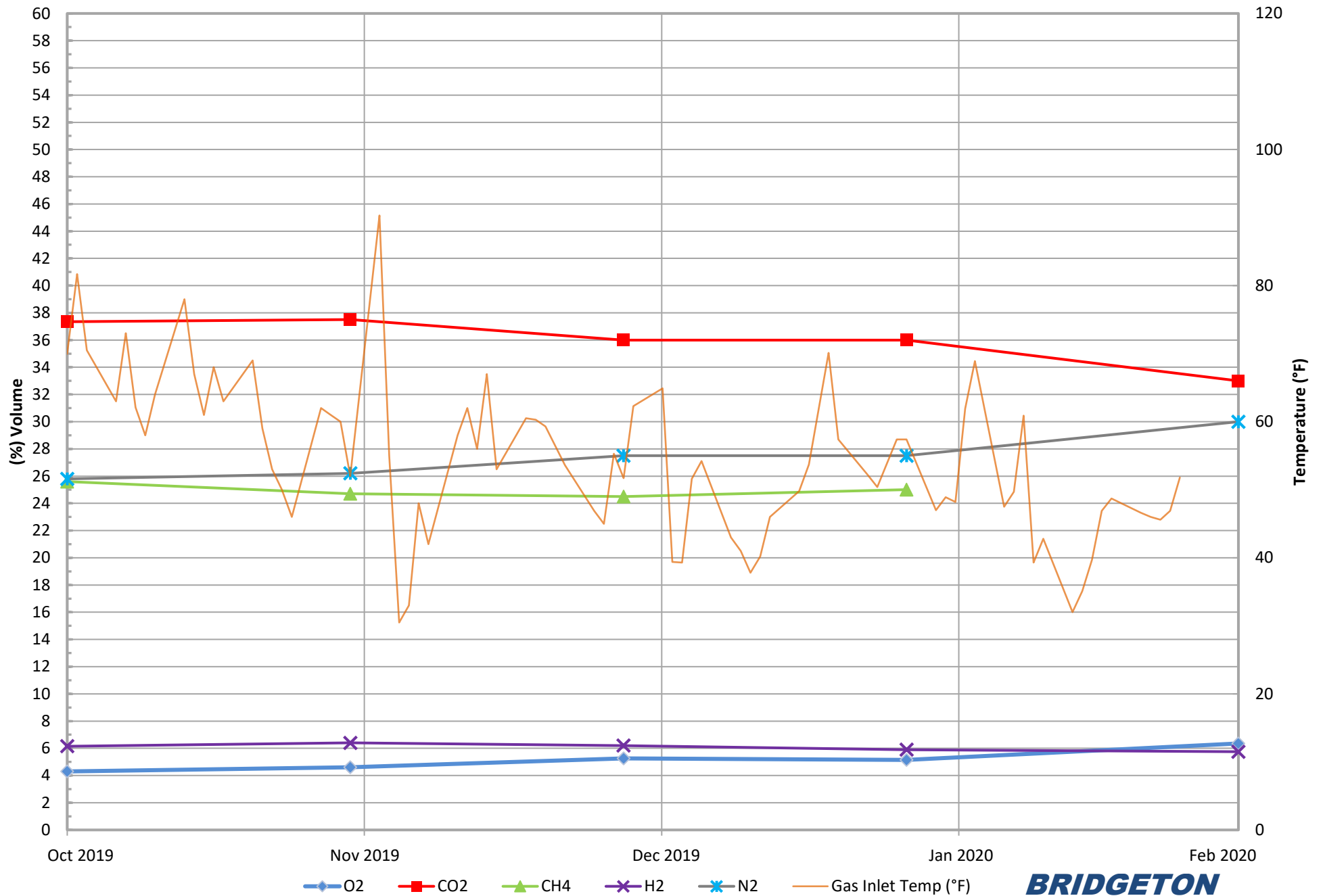
Daily Flare Monitoring Data - Bridgeton Landfill
January 2020

Date	Average Device Flow* (scfm)			Total Avg. Flow** (scfm)
	Utility Flare (FL-100)	Utility Flare (FL-120)	Utility Flare (FL-140)	
1/1/2020	0	1,047	0	1,047
1/2/2020	0	1,046	0	1,046
1/3/2020	0	1,038	0	1,038
1/4/2020	0	1,028	0	1,028
1/5/2020	0	1,039	0	1,039
1/6/2020	0	1,038	0	1,038
1/7/2020	0	1,033	0	1,034
1/8/2020	0	1,076	0	1,076
1/9/2020	0	1,129	0	1,129
1/10/2020	0	1,130	0	1,130
1/11/2020	0	1,076	0	1,076
1/12/2020	0	1,053	0	1,054
1/13/2020	0	1,071	0	1,071
1/14/2020	0	1,088	0	1,088
1/15/2020	0	1,100	0	1,100
1/16/2020	0	1,067	0	1,067
1/17/2020	0	1,064	0	1,065
1/18/2020	0	1,063	0	1,064
1/19/2020	0	1,023	0	1,024
1/20/2020	0	1,026	0	1,026
1/21/2020	0	1,054	0	1,055
1/22/2020	0	1,061	0	1,062
1/23/2020	0	1,056	0	1,056
1/24/2020	0	1,047	0	1,047
1/25/2020	0	1,039	0	1,040
1/26/2020	0	1,054	0	1,054
1/27/2020	0	1,054	0	1,054
1/28/2020	0	1,059	0	1,059
1/29/2020	0	1,053	0	1,053
1/30/2020	0	1,051	0	1,051
1/31/2020	0	1,052	0	1,053
AVERAGE	0	1,059	0	1,059
* Flows normalized to **Blower Outlet Flowmeter - EPA Method 2 measurement verified *** On 3/18/2016, the Bridgeton Landfill began separating the North Quarry gas to the Auxiliary Flare. On 10/8/19, the Bridgeton Landfill combined the North Quarry gas and the South Quarry Gas to the Main Flare				

ATTACHMENT A-2

FLOW DATA GRAPHS

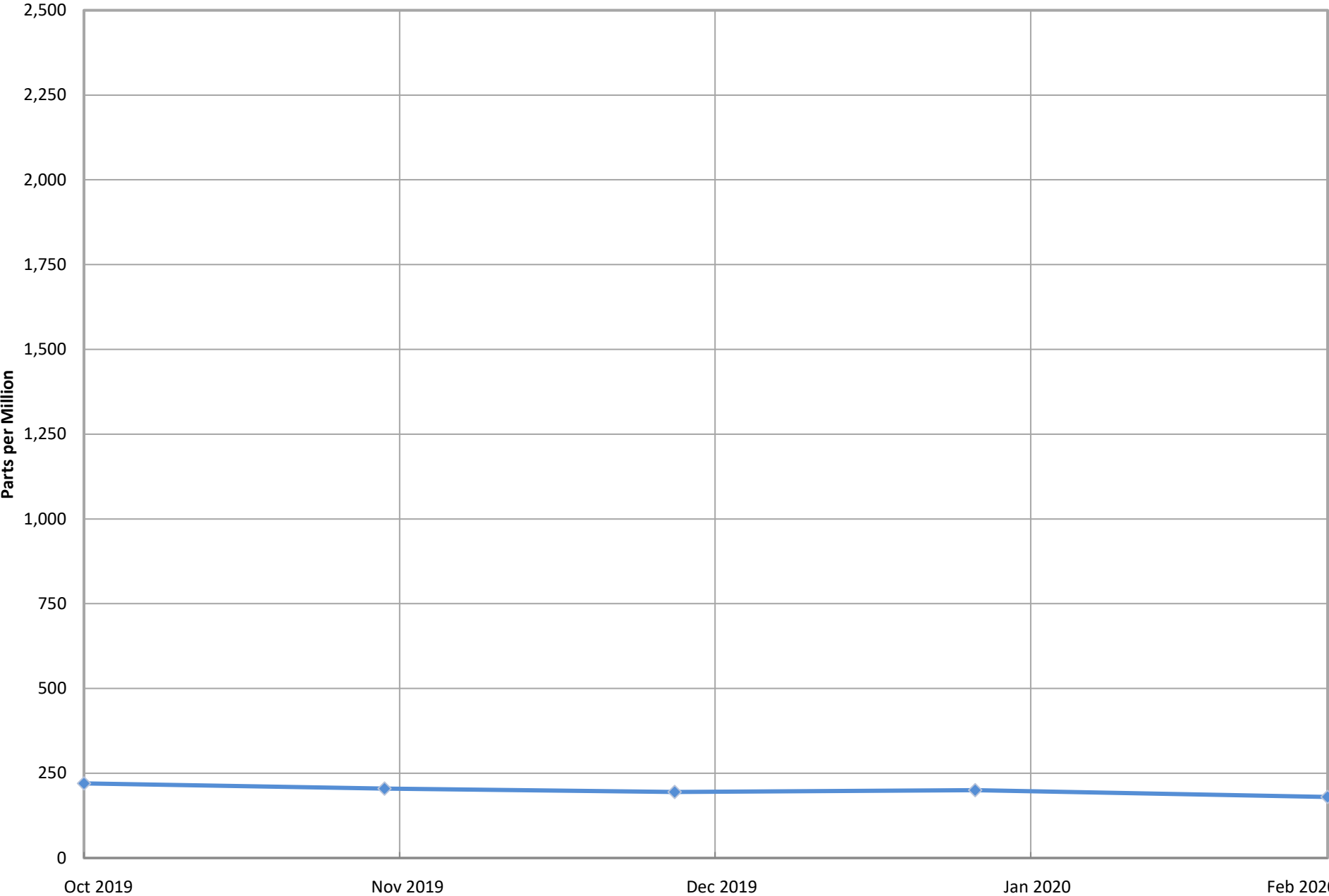
Combined Inlet Gas and Temperature*



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*Gas data collected from Laboratory Reports. Temperature data collected from field readings.

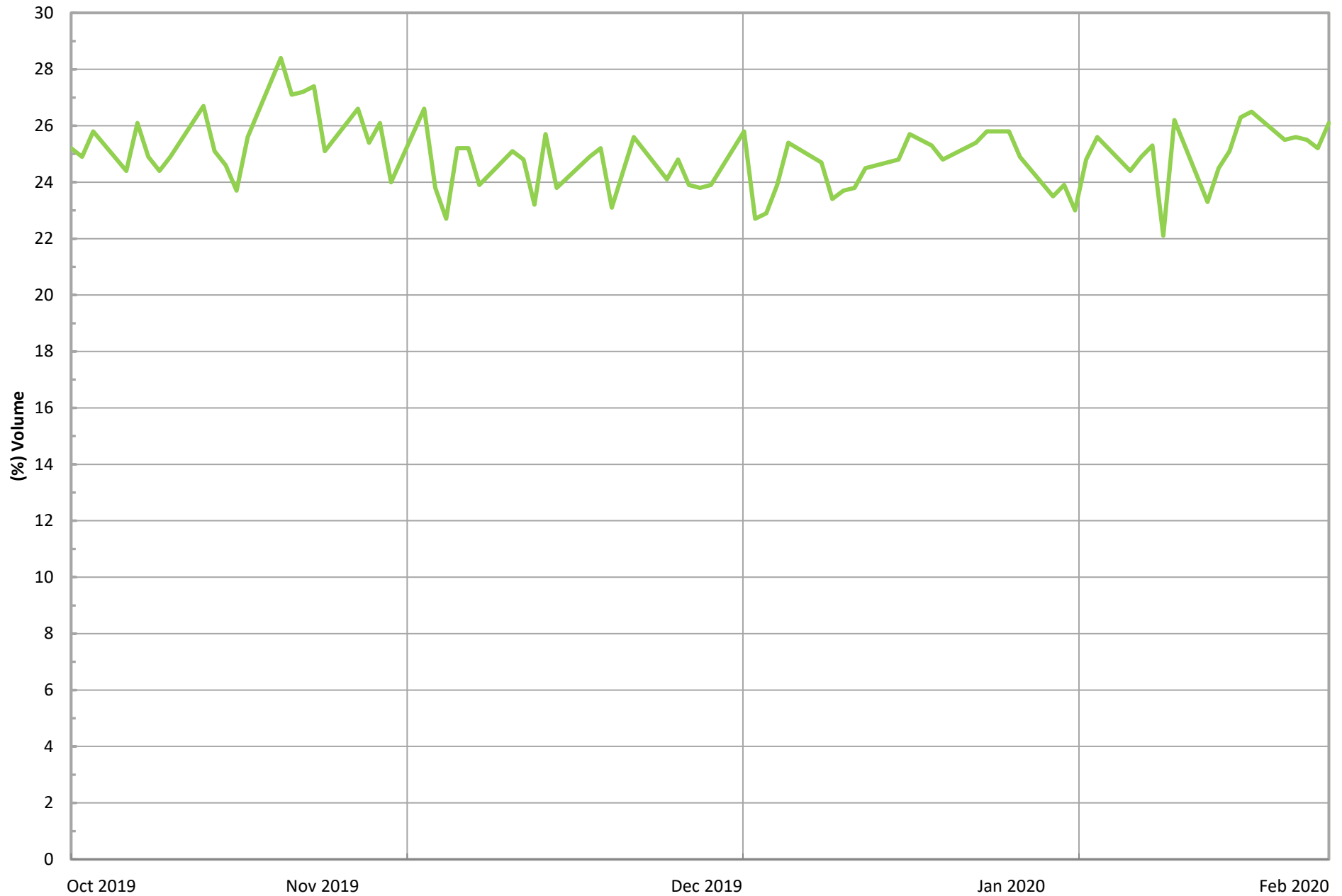
Combined Inlet Carbon Monoxide*



*Data collected from Laboratory Reports.

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Combined Inlet Methane (Field Data)*

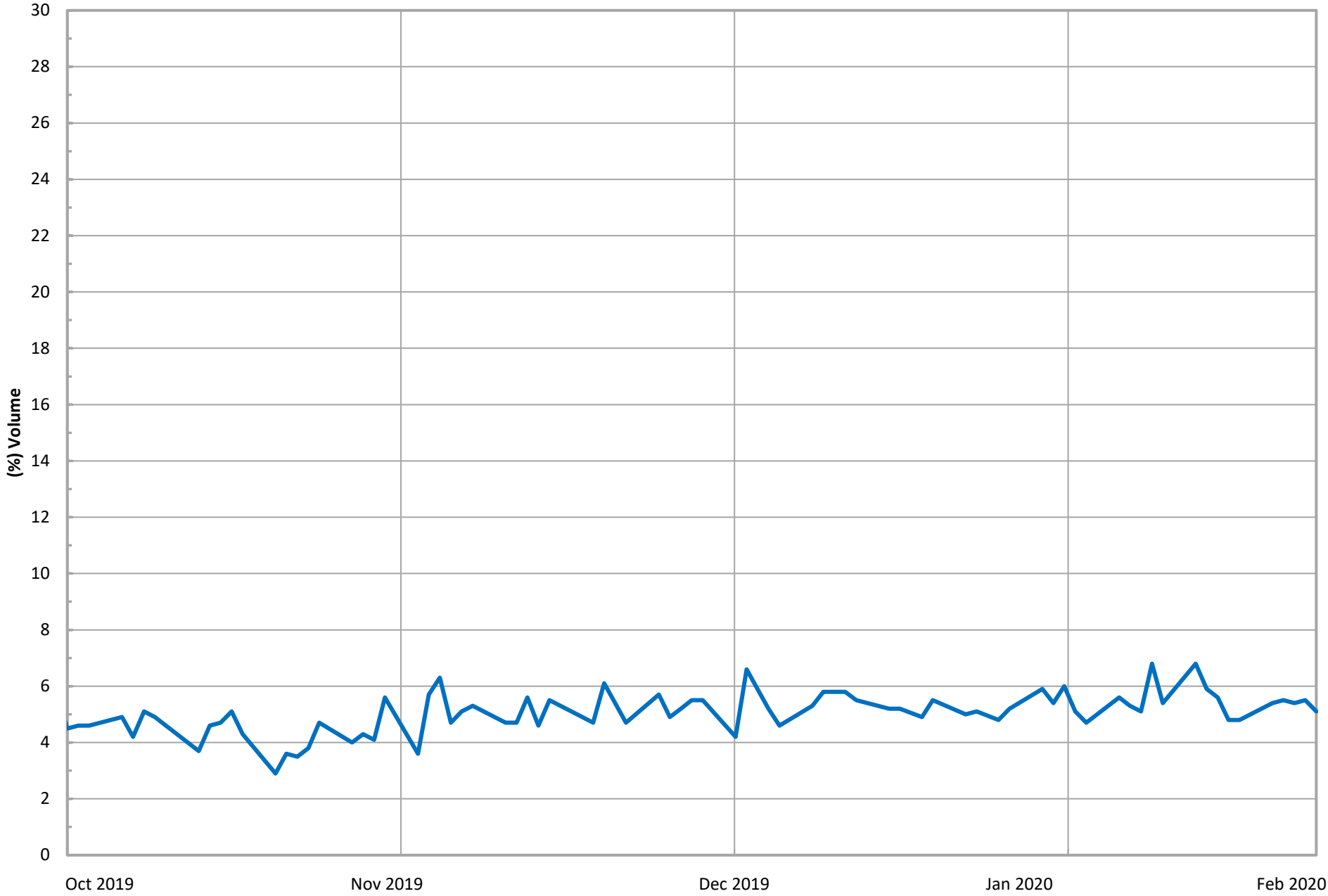


*Gas data collected from field monitoring data.

— Combined Inlet Methane (Field Data)*

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Combined Inlet Oxygen (Field Data)*

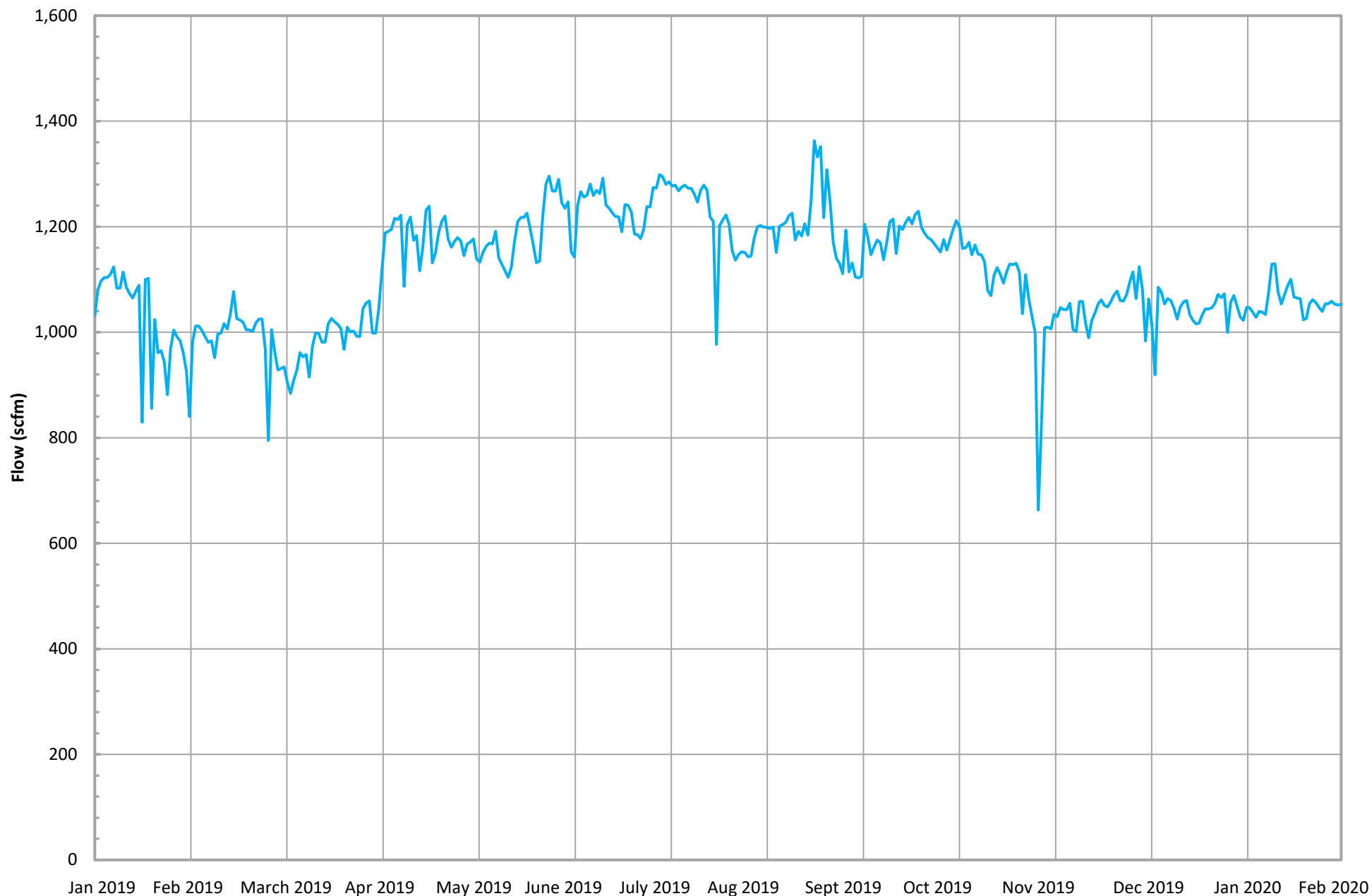


*Gas data collected from field monitoring data

— Combined Inlet Oxygen (Field Data)*

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Total Combined Flow (scfm)*



*Combined flow is based on tabulated flow data collected daily from FL-100, FL-120, FL-140, and the Auxillary Candlestick Flare. On 10/8/19, the Auxillary Candelstick Flare was redirected to the Main Flare.

— Total Combined Flow (scfm)*

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ATTACHMENT B

WELL CONDITON/STATUS REPORT

January 2020		
ID	Well Condition	Comments
GEW-2	Operational	
GEW-2S	Operational	
GEW-3	Operational	
GEW-4	Operational	
GEW-5	Operational	
GEW-6	Operational	
GEW-7	Operational	
GEW-8	Operational	
GEW-9	Operational	
GEW-10	Operational	
GEW-13A	Operational	
GEW-15	Operational	
GEW-16R	Operational	
GEW-18B	Operational	
GEW-19A	Operational	
GEW-39	Operational	
GEW-40	Operational	
GEW-41R	Operational	
GEW-42R	Operational	
GEW-43R	Operational	
GEW-44	Operational	
GEW-45R	Operational	
GEW-46R	Operational	
GEW-47R	Operational	
GEW-48	Operational	
GEW-49	Operational	
GEW-50	Operational	
GEW-51	Operational	
GEW-52	Operational	
GEW-53	Operational	
GEW-54	Operational	
GEW-55	Operational	
GEW-56R	Operational	
GEW-57B	Operational	
GEW-58A	Operational	
GEW-59R	Operational	
GEW-67A	Operational	
GEW-68A	Operational	
GEW-78R	Operational	
GEW-82R	Operational	
GEW-86	Operational	
GEW-87	Operational	
GEW-88	Operational	
GEW-90	Operational	

January 2020		
ID	Well Condition	Comments
GEW-91	Operational	
GEW-100	Operational	
GEW-101	Operational	
GEW-102	Operational	
GEW-104	Operational	
GEW-105	Operational	
GEW-106	Operational	
GEW-107	Operational	
GEW-108	Operational	
GEW-109	Operational	
GEW-110	Operational	
GEW-113	Operational	
GEW-116	Operational	
GEW-117	Operational	
GEW-118	Operational	
GEW-120	Operational	
GEW-121	Operational	
GEW-122	Operational	
GEW-123	Operational	
GEW-124	Operational	
GEW-125	Operational	
GEW-126	Operational	
GEW-127	Operational	
GEW-128	Non-Operational	Decommissioned
GEW-129	Operational	
GEW-130	Operational	
GEW-131	Operational	
GEW-132	Operational	
GEW-133	Operational	
GEW-134	Operational	
GEW-135	Operational	
GEW-137	Operational	
GEW-138	Operational	
GEW-139	Operational	
GEW-140	Operational	
GEW-144	Non-Operational	Decommissioned
GEW-145	Operational	
GEW-147	Operational	
GEW-148	Operational	
GEW-149	Operational	
GEW-150	Operational	
GEW-151	Operational	
GEW-152	Operational	
GEW-153	Operational	

January 2020		
ID	Well Condition	Comments
GEW-154	Non-Operational	Decommissioned
GEW-155	Non-Operational	Decommissioned
GEW-156	Operational	
GEW-157	Operational	
GEW-158	Operational	
GEW-159	Operational	
GEW-160	Operational	
GEW-161	Operational	
GEW-162	Operational	
GEW-163	Operational	
GEW-164	Operational	
GEW-165	Operational	
GEW-166	Operational	
GEW-167	Operational	
GEW-168	Operational	
GEW-169	Operational	
GEW-170	Operational	
GEW-171	Operational	
GEW-172	Operational	
GEW-173	Non-Operational	Decommissioned
GEW-174	Operational	
GEW-175	Operational	
GEW-176	Operational	
GEW-177	Operational	
GEW-178	Operational	
GEW-179	Operational	
GEW-180	Operational	
GEW-181	Operational	
GEW-182	Non-Operational	Decommissioned
GEW-184	Non-Operational	Decommissioned
GEW-185	Operational	
GEW-186	Operational	
GEW-187	Operational	
GEW-188	Non-Operational	Decommissioned
GEW-217	Operational	
GEW-218	Operational	
GEW-219	Operational	
GEW-220	Operational	
GEW-221	Operational	
GEW-222	Operational	
GEW-223	Operational	
GEW-224	Operational	
GEW-225	Operational	
GEW-226	Operational	

January 2020		
ID	Well Condition	Comments
GEW-227	Operational	
GEW-228	Operational	
GEW-229	Operational	
GEW-230	Operational	
GEW-231	Operational	
GEW-232	Operational	
GEW-233	Operational	
GEW-234	Operational	
GEW-235	Operational	
GEW-236	Operational	
GEW-237	Operational	
GEW-238	Operational	
GEW-239	Operational	
GEW-240	Operational	
GIW-1	Operational	
GIW-2	Operational	
GIW-3	Operational	
GIW-4	Operational	
GIW-5	Operational	
GIW-6	Operational	
GIW-7	Operational	
GIW-8	Operational	
GIW-9	Operational	
GIW-10	Operational	
GIW-11	Operational	
GIW-12	Operational	
GIW-13	Operational	

ATTACHMENT C

LABORATORY DATA

ATTACHMENT C-1

LABORATORY ANALYSES SUMMARY

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
North Quarry								
GEW-002	9/6/2019	54	40	ND	5.5	ND	ND	
GEW-002	10/9/2019	53	40	ND	6.5	0.13	ND	
GEW-002	11/19/2019	53	40	ND	5.2	ND	ND	
GEW-002	12/11/2019	52	39	ND	8.5	ND	ND	
GEW-002	1/16/2020	53	38	ND	7.9	ND	ND	
GEW-02S	9/5/2019	57	34	ND	8.3	ND	ND	
GEW-02S	10/25/2019	56	33	1.5	10	ND	ND	
GEW-02S	10/31/2019	54	32	1.9	12	0.054	ND	
GEW-02S	11/19/2019	59	34	ND	6.0	ND	ND	
GEW-02S	12/10/2019	53	33	1.5	13	ND	ND	
GEW-02S	12/23/2019	53	32	2.2	13	ND	ND	
GEW-02S	1/15/2020	60	34	ND	5.3	ND	ND	
GEW-003	9/6/2019	53	39	ND	6.7	ND	ND	
GEW-003	10/9/2019	50	39	ND	9.5	0.035	ND	
GEW-003	11/19/2019	51	42	ND	6.7	ND	ND	
GEW-003	12/11/2019	53	41	ND	5.1	ND	ND	
GEW-003	1/16/2020	55	40	ND	4.9	ND	ND	
GEW-004	9/6/2019	53	38	1.7	7.5	ND	ND	
GEW-004	9/23/2019	54	39	ND	5.8	ND	ND	
GEW-004	10/16/2019	52	39	ND	7.7	0.096	ND	
GEW-004	11/19/2019	49	37	2.2	11	0.038	ND	
GEW-004	11/27/2019	55	40	ND	5.3	0.034	ND	
GEW-004	12/11/2019	54	40	ND	5.2	0.036	ND	
GEW-004	1/16/2020	52	38	ND	9.7	0.049	ND	
GEW-005	9/6/2019	56	37	ND	6.0	ND	ND	
GEW-005	10/16/2019	49	36	ND	14	ND	ND	
GEW-005	11/19/2019	54	37	ND	7.6	ND	ND	
GEW-005	12/11/2019	55	37	ND	7.7	ND	ND	
GEW-005	1/16/2020	48	34	ND	17	ND	ND	
GEW-006	9/6/2019	57	38	ND	4.6	ND	ND	
GEW-006	10/16/2019	51	37	ND	12	ND	ND	
GEW-006	11/19/2019	54	38	ND	7.3	ND	ND	
GEW-006	12/11/2019	55	37	ND	7.5	ND	ND	
GEW-006	1/16/2020	54	36	ND	9.1	ND	ND	
GEW-007	9/4/2019	56	39	ND	3.7	ND	ND	
GEW-007	10/8/2019	54	40	ND	4.6	0.050	ND	
GEW-007	11/18/2019	56	40	ND	3.5	ND	ND	
GEW-007	12/9/2019	55	40	ND	3.6	ND	ND	
GEW-007	1/15/2020	56	39	ND	4.5	ND	ND	
GEW-008	9/4/2019	53	41	ND	3.8	1.1	ND	
GEW-008	10/8/2019	52	42	ND	3.6	1.2	ND	
GEW-008	11/18/2019	53	43	ND	ND	1.4	ND	
GEW-008	12/9/2019	49	40	2.1	8.0	1.4	ND	
GEW-008	12/23/2019	52	42	ND	3.5	1.2	ND	
GEW-008	1/15/2020	54	41	ND	3.1	1.1	48	
GEW-008	1/31/2020	54	41	ND	3.4	1.2	ND	
GEW-009	9/4/2019	52	40	ND	6.1	0.61	ND	
GEW-009	10/8/2019	50	40	ND	7.7	0.61	ND	
GEW-009	11/18/2019	50	41	ND	7.7	0.60	ND	
GEW-009	12/9/2009	50	41	ND	7.3	0.68	ND	
GEW-009	1/15/2020	50	39	ND	9.3	0.63	ND	
GEW-040	9/5/2019	53	33	1.8	12	ND	ND	
GEW-040	9/23/2019	55	35	ND	9.2	ND	ND	
GEW-040	10/9/2019	48	31	2.8	18	0.034	ND	
GEW-040	10/30/2019	50	33	ND	16	0.030	ND	See Note 3

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-040	11/18/2019	59	35	ND	5.4	ND	ND	
GEW-040	12/9/2019	58	35	ND	6.9	ND	ND	
GEW-040	1/15/2020	61	34	ND	4.7	ND	ND	
GEW-041R	9/5/2019	56	36	ND	7.7	ND	ND	
GEW-041R	10/9/2019	49	35	ND	15	ND	ND	
GEW-041R	11/18/2019	53	35	ND	11	ND	ND	
GEW-041R	12/10/2019	53	35	ND	12	ND	ND	
GEW-041R	1/15/2020	49	32	1.7	17	ND	ND	
GEW-041R	1/31/2020	54	33	ND	12	ND	ND	
GEW-042R	9/5/2019	56	38	ND	5.2	ND	ND	
GEW-042R	10/9/2019	53	38	ND	8.3	0.045	ND	
GEW-042R	11/18/2019	54	37	ND	7.8	ND	ND	
GEW-042R	12/10/2019	53	36	1.5	9.1	ND	ND	
GEW-042R	12/23/2019	55	38	ND	5.4	ND	ND	
GEW-042R	1/15/2020	53	36	ND	9.0	ND	ND	
GEW-043R	9/5/2019	55	40	ND	3.5	0.14	ND	
GEW-043R	10/9/2019	54	41	ND	4.0	ND	ND	
GEW-043R	11/18/2019	54	40	ND	4.2	0.13	ND	
GEW-043R	12/10/2019	55	40	ND	3.8	0.13	ND	
GEW-043R	1/15/2020	55	40	ND	4.9	ND	ND	
GEW-044	9/5/2019	55	37	ND	7.4	ND	ND	
GEW-044	10/9/2019	48	37	ND	14	ND	ND	
GEW-044	11/18/2019	53	36	1.8	9.0	ND	ND	
GEW-044	11/27/2019	46	35	ND	19	ND	ND	
GEW-044	12/10/2019	45	34	ND	20	ND	ND	
GEW-044	1/15/2020	44	32	ND	23	ND	ND	
GEW-045R	9/5/2019	57	38	ND	4.2	ND	ND	
GEW-045R	10/9/2019	56	39	ND	3.9	0.038	ND	
GEW-045R	11/18/2019	56	40	ND	3.9	ND	ND	
GEW-045R	12/10/2019	57	39	ND	3.3	ND	ND	
GEW-045R	1/15/2020	56	38	ND	4.8	ND	ND	
GEW-046R	9/5/2019	55	37	ND	7.1	ND	ND	
GEW-046R	10/9/2019	54	38	ND	6.1	0.15	ND	
GEW-046R	11/18/2019	54	38	ND	6.0	ND	ND	
GEW-046R	12/10/2019	55	39	ND	4.8	0.047	ND	
GEW-046R	1/15/2020	54	37	ND	8.2	ND	ND	
GEW-047R	9/6/2019	53	39	ND	7.1	ND	ND	
GEW-047R	10/16/2019	47	39	ND	13	0.032	ND	
GEW-047R	11/19/2019	52	40	ND	7.4	ND	ND	
GEW-047R	12/11/2019	54	40	ND	5.7	ND	ND	
GEW-047R	1/16/2020	49	37	ND	14	ND	ND	
GEW-048	9/6/2019	56	38	ND	5.4	ND	ND	
GEW-048	10/16/2019	51	38	ND	9.7	ND	ND	
GEW-048	11/19/2019	54	39	ND	6.3	ND	ND	
GEW-048	12/11/2019	56	38	ND	5.1	ND	ND	
GEW-048	1/16/2020	55	38	ND	6.4	ND	ND	
GEW-049	9/5/2019	53	38	ND	7.5	0.078	ND	
GEW-049	10/9/2019	53	40	ND	6.8	ND	ND	
GEW-049	11/18/2019	53	40	ND	5.8	0.033	ND	
GEW-049	12/10/2019	48	36	ND	15	ND	ND	
GEW-049	1/15/2020	50	35	ND	14	ND	ND	
GEW-050	9/4/2019	55	37	ND	6.5	0.072	ND	
GEW-050	10/8/2019	51	36	1.6	11	0.097	ND	
GEW-050	10/30/2019	53	37	ND	8.6	0.034	ND	
GEW-050	11/18/2019	55	38	ND	6.0	ND	ND	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-050	12/9/2019	55	38	ND	6.4	ND	ND	
GEW-050	1/15/2020	52	36	ND	11	0.44	ND	
GEW-051	9/4/2019	54	39	ND	4.4	1.1	ND	
GEW-051	10/8/2019	54	40	ND	3.4	1.2	ND	
GEW-051	11/18/2019	54	40	ND	3.8	1.0	ND	
GEW-051	12/9/2019	54	41	ND	ND	1.1	ND	
GEW-051	1/15/2020	51	37	2.4	9.4	0.71	30	
GEW-051	1/31/2020	55	40	ND	4.1	0.88	ND	
GEW-052	9/4/2019	52	37	ND	9.2	0.043	ND	
GEW-052	10/8/2019	52	39	ND	8.5	0.064	ND	
GEW-052	11/18/2019	49	38	ND	12	ND	ND	
GEW-052	12/9/2019	50	38	ND	11	ND	ND	
GEW-052	1/15/2020	54	39	1.6	6.0	ND	ND	
GEW-052	1/31/2020	54	38	ND	6.3	ND	ND	
GEW-053	9/5/2019	49	41	ND	4.3	4.4	66	
GEW-053	10/9/2019	49	41	ND	4.5	4.2	68	
GEW-053	11/18/2019	50	42	ND	3.3	3.6	66	
GEW-053	12/9/2019	50	43	ND	ND	3.9	63	
GEW-053	1/15/2020	50	41	ND	4.7	3.3	66	
GEW-054	9/5/2019	52	41	ND	4.2	1.7	ND	
GEW-054	10/9/2019	51	41	ND	4.5	2.0	ND	
GEW-054	11/18/2019	48	39	2.3	8.8	1.7	ND	
GEW-054	11/27/2019	45	36	3.7	14	1.5	ND	See Note 3
GEW-054	12/9/2019	51	41	ND	4.9	1.7	ND	
GEW-054	1/15/2020	53	42	ND	ND	1.6	ND	
GEW-055	9/5/2019	49	40	1.8	6.8	1.9	ND	
GEW-055	9/23/2019	52	42	ND	3.5	1.9	ND	
GEW-055	10/9/2019	49	40	1.9	6.9	1.9	ND	
GEW-055	10/30/2019	52	41	ND	4.6	1.3	ND	
GEW-055	11/18/2019	52	42	ND	3.7	1.4	ND	
GEW-055	12/9/2019	52	42	ND	3.7	1.4	ND	
GEW-055	1/15/2020	52	41	ND	4.6	1.2	ND	
Flare Station ²	9/9/2019	49.2	36.7	2.1	11.7	0.32	ND	See Note 5
Flare Station ²	10/9/2019	25.6	37.4	4.3	25.8	6.2	220	See Note 9
Flare Station ²	11/7/2019	24.7	37.5	4.6	26.2	6.4	205	See Note 9
Flare Station ²	12/5/2019	24.5	36.0	5.3	27.5	6.2	195	See Note 9
Flare Station ²	1/3/2020	25.0	36.0	5.2	27.5	5.9	200	See Note 9

Notes: (1) Based on the comparison of field to laboratory readings, oxygen to balance gas ratios, and historical concentrations, the sample was determined to be suspect due to oxygen introduction which likely occurred during sample collection or laboratory analytical methods. (2) MDNR also collected duplicate LFG samples at these locations during this sampling period. (3) Based on the oxygen verification readings taken with an Envision meter, it was determined there is a sample train leak. (4) Based on the oxygen verification readings taken with an Envision meter, it was determined that the readings are accurate. (5) Flare station gas concentration data is an average of NQ EP14 A (or 1) and NQ EP14 B (or 2), located in the North Quarry. (6) Flare station gas concentration data is an average of Outlets 1 and 2 (A & B) or SQ OU 1 and OU 2, located in the South Quarry. (7) Sample not reported by lab due to canister leak. (8) Invalid sample due to canister leak; resampled. (9) On 10/8/19 the North Quarry and South Quarry Flares were combined.

ND = Analyte not detected in sample.

² = Flare Station measured at EPA Method 2 flow port (blower outlet)

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
South Quarry								
GEW-010	9/4/2019	53	41	ND	4.4	0.45	ND	
GEW-010	10/16/2019	54	42	ND	ND	0.46	ND	
GEW-010	11/13/2019	54	41	ND	3.1	0.34	ND	
GEW-010	12/5/2019	54	41	ND	3.6	0.18	ND	
GEW-010	1/3/2020	54	40	ND	5.0	0.14	ND	
GEW-013A	10/4/2019	5.8	62	ND	6.2	23	760	
GEW-013A	1/16/2020	9.5	61	ND	ND	25	860	
GEW-015	10/7/2019	19	44	ND	11	24	720	
GEW-015	1/16/2020	26	46	ND	8.4	18	610	
GEW-016R	10/7/2019	5.2	53	ND	5.2	34	1,000	
GEW-016R	1/16/2020	9.2	54	ND	8.1	27	880	
GEW-018B	10/9/2019	6.1	35	3.9	37	18	480	
GEW-018B	1/21/2020	7.1	33	4.4	37	18	670	
GEW-019A	10/9/2019	0.66	55	4.5	16	22	1,000	
GEW-019A	1/21/2020	1.8	57	3.7	12	25	1,200	
GEW-039	9/16/2019	34	37	ND	28	ND	ND	
GEW-039	10/16/2019	39	42	ND	17	ND	ND	
GEW-039	11/15/2019	45	41	ND	13	ND	ND	
GEW-039	12/9/2019	28	32	2.8	37	ND	ND	
GEW-039	1/14/2020	30	31	2.7	36	ND	ND	
GEW-056R	9/4/2019	44	39	ND	11	4.7	86	
GEW-056R	10/16/2019	45	40	ND	9.3	4.8	76	
GEW-056R	11/13/2019	46	42	ND	5.2	6.4	85	
GEW-056R	12/5/2019	41	40	ND	15	3.2	55	
GEW-056R	1/3/2020	44	39	ND	13	3.3	73	
GEW-057B	10/14/2019	3.7	44	3.8	14	34	660	
GEW-057B	1/13/2020	5.2	52	ND	2.8	38	870	
GEW-058A	10/4/2019	6.9	33	1.7	37	21	680	
GEW-058A	1/10/2020	0.52	38	3.9	23	34	1,500	
GEW-059R	10/4/2019	21	42	ND	6.4	29	630	
GEW-059R	1/9/2020	20	38	ND	19	22	640	
GEW-067A	10/4/2019	4.5	37	6.3	22	29	390	See Note 4
GEW-067A	1/16/2020	7.8	54	ND	4.2	33	670	
GEW-068A	10/15/2019	11	50	2.1	7.7	28	1,000	
GEW-068A	1/14/2020	1.0	54	ND	ND	38	1,400	
GEW-078R	10/7/2019	12	31	1.6	42	13	390	
GEW-078R	1/20/2020	8.0	25	1.9	53	12	470	
GEW-082R	10/7/2019	9.4	38	ND	28	22	660	
GEW-082R	1/20/2020	7.6	32	1.4	39	20	680	
GEW-086	10/7/2019	6.2	23	7.6	55	8.0	160	See Note 3
GEW-086	1/16/2020	7.1	23	9.5	48	12	300	See Note 4
GEW-087	10/7/2019	11	44	3.0	26	15	420	
GEW-087	1/16/2020	10	38	5.6	32	13	360	See Note 4
GEW-088	10/7/2019	1.9	34	3.2	35	25	700	
GEW-088	1/16/2020	1.9	40	3.3	19	35	1,100	
GEW-090	10/4/2019	1.4	33	7.6	27	29	530	See Note 3
GEW-090	1/16/2020	18	37	ND	26	17	420	
GEW-091	9/6/2019	64	13	3.3	19	ND	ND	
GEW-091	10/16/2019	6.6	50	ND	ND	39	260	
GEW-091	11/13/2019	2.8	49	2.2	8.3	36	310	
GEW-091	12/9/2019	3.0	51	ND	4.0	39	320	
GEW-091	1/3/2020	2.8	53	ND	3.8	37	400	
GEW-100	10/15/2019	2.5	52	3.4	12	29	720	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-100	1/14/2020	9.7	51	2.9	9.9	26	740	
GEW-101	10/15/2019	38	50	2.3	9.0	0.23	ND	
GEW-101	1/14/2020	47	49	ND	3.0	ND	ND	
GEW-102	10/14/2019	25	48	ND	ND	22	150	
GEW-102	1/13/2020	21	36	6.0	20	16	110	See Note 4
GEW-104	10/14/2019	21	45	ND	18	15	330	
GEW-104	1/13/2020	22	38	ND	28	10	270	
GEW-105	10/14/2019	27	41	2.9	15	14	430	
GEW-105	1/10/2020	35	44	ND	6.1	14	440	
GEW-106	10/14/2019	19	54	ND	4.2	21	450	
GEW-106	1/10/2020	14	46	ND	18	20	620	
GEW-107	10/4/2019	18	49	1.9	6.8	23	860	
GEW-107	1/9/2020	19	49	2.5	8.6	21	770	
GEW-108	9/6/2019	32	44	1.7	6.4	15	340	
GEW-108	10/16/2019	36	44	1.9	12	6.2	140	
GEW-108	11/15/2019	31	42	2.4	12	13	290	
GEW-108	12/9/2019	24	50	ND	ND	22	490	
GEW-108	1/14/2020	33	46	ND	3.8	16	380	
GEW-109	9/6/2019	43	39	ND	15	2.0	42	
GEW-109	10/16/2019	48	47	ND	3.7	0.31	ND	
GEW-109	11/15/2019	48	48	ND	ND	0.084	ND	
GEW-109	12/9/2019	39	39	2.1	19	0.77	ND	
GEW-109	1/14/2020	39	37	2.4	21	0.89	ND	
GEW-110	9/4/2019	27	30	3.1	37	2.3	51	
GEW-110	10/25/2019	31	36	3.9	23	6.7	140	
GEW-110	11/13/2019	32	49	ND	ND	16	290	
GEW-110	12/5/2019	31	35	3.5	26	3.5	74	
GEW-110	1/3/2020	26	36	6.2	22	8.8	190	See Note 4
GEW-113	10/7/2019	11	56	ND	5.5	25	1,000	
GEW-113	1/16/2020	10	54	1.7	13	21	910	
GEW-116	10/7/2019	22	53	1.8	18	4.8	330	
GEW-116	1/21/2020	18	43	4.7	28	5.7	430	
GEW-117	10/9/2019	26	45	4.8	17	6.5	270	
GEW-117	1/21/2020	44	45	2.2	7.8	0.61	66	
GEW-118	10/9/2019	5.8	45	2.7	17	28	910	
GEW-118	1/21/2020	3.1	41	ND	29	26	1,300	
GEW-120	10/9/2019	43	49	ND	3.9	3.1	ND	
GEW-120	1/21/2020	35	35	3.5	26	0.12	52	
GEW-121	10/9/2019	25	57	ND	3.6	13	410	
GEW-121	1/21/2020	29	46	ND	17	6.5	240	
GEW-122	10/10/2019	36	38	ND	15	10.0	360	
GEW-122	1/20/2020	32	33	ND	26	7.4	330	
GEW-123	10/10/2019	27	56	ND	13	3.6	360	
GEW-123	1/21/2020	26	51	ND	17	4.0	590	
GEW-124	1/20/2020	41	32	6.2	21	ND	ND	See Note 3
GEW-125	10/10/2019	35	57	ND	ND	3.8	200	
GEW-125	1/10/2020	35	61	ND	ND	1.1	170	
GEW-126	10/11/2019	19	49	1.8	15	16	930	
GEW-126	1/15/2020	16	45	1.8	24	14	1,000	
GEW-127	10/11/2019	6.6	36	7.3	37	13	880	See Note 4
GEW-127	1/13/2020	13	56	ND	6.2	23	1,800	
GEW-129	10/15/2019	25	56	ND	8.4	8.2	640	
GEW-129	1/13/2020	32	52	ND	11	3.8	410	
GEW-130	10/11/2019	23	44	ND	16	16	920	
GEW-130	1/10/2020	21	43	ND	17	17	1,200	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-131	10/11/2019	44	42	ND	3.0	11	540	
GEW-131	1/10/2020	44	42	ND	ND	11	540	
GEW-132	10/10/2019	17	32	3.2	36	12	520	
GEW-132	1/21/2020	11	24	4.0	52	8.7	430	
GEW-133	10/7/2019	6.7	48	ND	26	16	870	
GEW-133	1/21/2020	13	31	2.1	51	2.1	540	
GEW-134	10/7/2019	14	37	2.8	42	4.5	220	
GEW-134	1/21/2020	5.9	28	4.3	55	6.4	250	
GEW-135	10/7/2019	2.9	36	2.6	39	18	610	
GEW-135	1/20/2020	2.4	31	4.6	48	14	560	
GEW-137	10/7/2019	30	40	ND	28	0.053	ND	
GEW-137	1/20/2020	38	40	ND	21	ND	ND	
GEW-138	10/7/2019	9.4	38	ND	29	22	660	
GEW-138	1/20/2020	7.9	16	6.2	66	3.7	220	See Note 4
GEW-139	10/11/2019	15	50	ND	6.5	27	1,100	
GEW-139	1/14/2020	5.5	53	ND	3.5	36	1,900	
GEW-140	10/11/2019	23	44	ND	13	19	420	
GEW-140	1/14/2020	23	38	ND	23	15	380	
GEW-145	1/13/2020	23	48	ND	3.5	24	400	
GEW-147	10/7/2019	16	46	ND	8.3	28	910	
GEW-147	1/16/2020	17	40	4.2	23	15	480	
GEW-148	10/7/2019	11	52	ND	4.2	31	1,500	
GEW-148	1/16/2020	16	52	ND	ND	27	1,400	
GEW-149	10/4/2019	11	31	ND	54	2.3	78	
GEW-149	1/16/2020	7.0	19	2.2	71	0.81	61	
GEW-150	10/14/2019	26	44	1.6	12	15	430	
GEW-150	1/10/2020	32	45	ND	5.2	15	490	
GEW-151	10/4/2019	9.4	48	ND	4.6	35	810	
GEW-151	1/16/2020	6.1	29	5.3	41	18	500	See Note 4
GEW-152	10/4/2019	18	48	ND	6.4	25	870	
GEW-152	1/13/2020	19	48	ND	10	22	760	
GEW-153	10/4/2019	31	34	1.8	29	4.1	77	
GEW-153	1/9/2020	26	28	2.1	41	2.7	120	
GEW-155	10/7/2019	5.0	27	6.4	52	8.3	220	See Note 4
GEW-156	10/14/2019	29	44	ND	12	13	310	
GEW-156	1/9/2020	22	31	6.7	31	9.3	250	See Note 3
GEW-157	10/14/2019	34	42	1.6	6.0	16	390	
GEW-157	1/10/2020	21	28	9.0	31	10	240	See Note 3
GEW-158	10/14/2019	31	47	ND	3.5	17	440	
GEW-158	1/10/2020	23	44	ND	17	15	440	
GEW-159	9/6/2019	46	41	ND	10	1.9	120	
GEW-159	10/16/2019	45	41	ND	10	1.8	100	
GEW-159	11/15/2019	34	30	6.6	27	1.6	51	See Note 4
GEW-159	12/9/2019	29	32	5.6	31	1.5	36	See Note 4
GEW-159	1/20/2020	2.0	5.6	19	71	3.1	240	See Note 4
GEW-160	9/4/2019	2.9	16	14	55	12	600	See Note 4
GEW-160	10/16/2019	12	27	8.7	36	17	400	See Note 4
GEW-160	11/13/2019	14	27	8.1	34	16	400	See Note 4
GEW-160	12/9/2019	15	31	5.8	34	14	310	See Note 4
GEW-160	1/3/2020	17	39	2.4	22	18	570	
GEW-161	9/4/2019	1.0	53	ND	4.3	39	1,800	
GEW-161	10/16/2019	1.3	54	ND	ND	41	1,600	
GEW-161	11/13/2019	1.9	53	ND	ND	41	1,400	
GEW-161	12/5/2019	1.8	51	1.6	5.9	39	1,300	
GEW-161	1/3/2020	2.1	51	2.6	9.2	35	1,300	
GEW-162	9/4/2019	12	57	ND	17	12	530	

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Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-162	10/16/2019	14	63	ND	8.6	14	510	
GEW-162	11/13/2019	15	62	ND	10	12	480	
GEW-162	12/5/2019	13	62	ND	12	12	500	
GEW-162	1/3/2020	15	64	ND	6.6	13	620	
GEW-163	10/10/2019	24	50	1.6	17	7.1	190	
GEW-163	1/21/2020	30	55	ND	6.1	7.6	210	
GEW-164	10/10/2019	33	51	ND	14	0.63	66	
GEW-164	1/20/2020	28	44	1.7	26	0.40	140	
GEW-165	10/10/2019	16	54	2.7	13	14	560	
GEW-165	1/20/2020	12	31	9.0	40	6.7	320	See Note 4
GEW-166	10/10/2019	2.2	54	ND	3.6	38	2,400	
GEW-166	1/20/2020	5.5	55	ND	ND	36	2,500	
GEW-167	10/10/2019	4.6	46	1.8	9.9	37	1,700	
GEW-167	1/20/2020	11	43	ND	12	32	1,600	
GEW-168	10/11/2019	31	51	ND	9.7	6.2	240	
GEW-168	1/10/2020	30	51	ND	14	3.9	230	
GEW-169	10/11/2019	12	44	3.0	25	15	760	
GEW-169	1/13/2020	9.4	42	4.4	28	16	860	
GEW-170	10/15/2019	11	40	5.3	29	15	960	See Note 4
GEW-170	1/13/2020	12	38	6.1	29	15	1,000	See Note 4
GEW-171	10/15/2019	11	38	7.4	29	14	640	See Note 4
GEW-171	1/14/2020	43	32	4.7	16	3.7	150	
GEW-172	10/15/2019	24	44	3.0	11	16	790	
GEW-172	1/14/2020	18	43	3.5	14	21	1,100	
GEW-174	10/11/2019	18	36	ND	33	12	300	
GEW-174	1/13/2020	13	36	2.1	34	15	490	
GEW-175	10/14/2019	20	42	4.7	23	9.2	220	
GEW-175	1/10/2020	25	33	5.5	33	3.4	150	See Note 4
GEW-176	10/14/2019	23	26	8.7	42	0.73	ND	See Note 4
GEW-176	1/10/2020	40	33	3.6	22	1.2	ND	
GEW-177	10/15/2019	9.7	53	ND	15	20	1,700	
GEW-177	1/13/2020	11	46	1.8	23	17	1,600	
GEW-178	10/14/2019	38	49	2.1	10	0.099	ND	
GEW-178	1/13/2020	24	26	7.2	43	0.035	ND	See Note 4
GEW-179	10/14/2019	32	63	ND	4.4	ND	ND	
GEW-179	1/13/2020	42	55	ND	ND	ND	ND	
GEW-180	10/15/2019	25	49	5.3	19	0.38	58	See Note 3
GEW-180	1/14/2020	32	60	1.7	6.0	0.19	110	
GEW-181	10/15/2019	27	67	ND	4.8	ND	ND	
GEW-181	1/15/2020	25	71	ND	ND	ND	ND	
GEW-185	10/10/2019	34	53	2.7	9.9	0.13	ND	
GEW-185	1/21/2020	35	47	ND	16	ND	ND	
GEW-186	10/15/2019	20	29	8.2	39	3.2	210	See Note 4
GEW-186	1/13/2020	21	25	9.8	43	1.2	110	See Note 4
GEW-187	9/6/2019	37	52	ND	3.4	5.6	220	
GEW-187	10/16/2019	35	50	2.2	7.9	4.5	170	
GEW-187	11/15/2019	38	53	ND	ND	4.8	170	
GEW-187	12/9/2019	38	54	ND	ND	4.1	140	
GEW-187	1/14/2020	40	53	ND	ND	3.3	130	
GEW-217	10/14/2019	11	52	ND	ND	32	770	
GEW-217	1/13/2020	25	47	ND	2.9	23	480	
GEW-218	10/14/2019	20	39	2.2	26	13	380	
GEW-218	1/13/2020	16	33	4.9	37	9.1	330	
GEW-219	10/14/2019	4.6	22	11	51	11	350	See Note 4
GEW-219	1/13/2020	3.5	19	13	51	13	450	See Note 4
GEW-220	10/15/2019	13	43	3.0	22	19	750	
GEW-220	1/13/2020	26	46	2.0	14	12	560	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-221	10/15/2019	20	53	1.6	6.5	18	460	
GEW-221	1/14/2020	25	45	ND	21	7.3	150	
GEW-222	10/15/2019	2.3	62	ND	3.3	30	1,600	
GEW-222	1/14/2020	31	45	ND	8.7	14	390	
GEW-223	10/15/2019	17	61	ND	ND	17	1,100	
GEW-223	1/14/2020	25	58	ND	3.2	13	790	
GEW-224	10/15/2019	15	60	ND	ND	20	1,500	
GEW-224	1/13/2020	25	58	ND	ND	14	1,100	
GEW-225	10/15/2019	26	47	ND	3.8	22	890	
GEW-225	1/14/2020	9.1	53	ND	4.1	32	2,700	
GEW-226	10/11/2019	8.6	39	2.8	27	22	1,100	
GEW-226	1/14/2020	9.0	37	ND	32	20	1,100	
GEW-227	10/7/2019	5.0	27	6.3	52	8.5	220	See Note 4
GEW-227	1/20/2020	1.8	36	5.4	32	25	570	See Note 4
GEW-228	10/7/2019	1.5	46	1.6	5.8	43	670	
GEW-228	1/20/2020	6.8	33	3.6	26	30	490	
GEW-229	10/7/2019	1.6	11	12	75	0.28	54	See Note 4
GEW-229	1/20/2020	2.0	11	11	75	0.86	30	See Note 4
GEW-230	10/7/2019	2.3	18	11	62	7.2	180	See Note 4
GEW-230	1/16/2020	0.57	9.4	15	72	3.2	200	See Note 4
GEW-231	10/15/2019	9.8	23	12	51	3.1	260	See Note 4
GEW-231	1/13/2020	11	23	13	51	2.7	260	See Note 4
GEW-232	10/4/2019	28	54	1.6	9.0	6.8	240	
GEW-232	1/16/2020	18	48	2.9	14	16	720	
GEW-233	10/2/2019	8.1	44	1.7	29	16	440	
GEW-233	1/21/2020	6.9	40	ND	35	16	510	
GEW-234	10/15/2019	6.0	33	4.6	37	19	1,000	
GEW-234	1/16/2020	3.4	31	4.7	43	17	810	
GEW-235	10/2/2019	11	49	3.6	13	21	430	
GEW-235	1/21/2020	24	49	ND	9.6	16	440	
GEW-236	10/2/2019	9.7	41	1.8	23	22	240	
GEW-236	1/20/2020	2.8	38	4.1	17	37	470	
GEW-237	10/2/2019	29	40	2.9	24	3.9	150	
GEW-237	1/10/2020	24	34	5.9	32	4.2	150	See Note 4
GEW-238	10/2/2019	7.5	59	ND	5.1	26	920	
GEW-238	1/16/2020	13	54	ND	14	18	730	
GEW-239	10/2/2019	1.1	51	ND	4.5	40	1,300	
GEW-239	1/16/2020	0.78	34	7.3	29	29	950	See Note 4
GEW-240	10/2/2019	11	49	ND	12	25	1,000	
GEW-240	1/14/2020	8.5	23	5.6	52	10	460	See Note 4
GIW-01	9/4/2019	15	48	3.1	19	15	600	
GIW-01	10/16/2019	9.9	50	3.7	15	20	720	
GIW-01	11/13/2019	13	57	1.8	7.2	21	750	
GIW-01	12/9/2019	12	58	2.0	7.7	20	660	
GIW-01	1/3/2020	12	53	3.6	13	18	790	
GIW-02	9/5/2019	1.1	16	11	67	4.6	310	See Note 4
GIW-02	10/16/2019	3.6	23	7.5	62	4.2	270	See Note 4
GIW-02	11/13/2019	3.6	29	5.5	53	8.7	440	See Note 4
GIW-02	12/9/2019	1.7	32	7.2	48	11	560	See Note 4
GIW-02	1/15/2020	3.8	57	2.2	17	19	1,100	
GIW-03	9/5/2019	15	38	2.3	33	11	450	
GIW-03	10/16/2019	16	43	ND	26	14	480	
GIW-03	11/14/2019	18	43	1.6	24	12	410	
GIW-03	12/9/2019	17	45	ND	23	12	400	
GIW-03	1/15/2020	19	45	ND	22	13	470	
GIW-04	9/5/2019	9.8	38	4.0	21	27	700	
GIW-04	10/16/2019	12	45	2.5	14	26	690	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GIW-04	11/14/2019	14	50	ND	3.8	31	1,000	
GIW-04	12/9/2019	14	48	1.7	11	25	780	
GIW-04	1/15/2020	13	49	ND	8.4	28	1,000	
GIW-05	9/5/2019	0.47	8.0	18	67	7.0	95	See Note 4
GIW-05	10/16/2019	14	29	7.2	38	12	140	See Note 4
GIW-05	11/14/2019	0.16	0.86	21	78	ND	ND	See Note 4
GIW-05	12/9/2019	0.26	0.52	22	77	0.22	ND	See Note 4
GIW-05	1/15/2020	0.12	1.0	23	76	ND	ND	See Note 4
GIW-06	9/5/2019	34	39	2.2	20	4.8	44	
GIW-06	10/16/2019	39	42	ND	13	4.1	42	
GIW-06	11/15/2019	40	42	ND	13	3.3	34	
GIW-06	12/9/2019	29	36	1.6	30	3.4	37	
GIW-06	1/15/2020	34	39	ND	21	3.9	45	
GIW-07	9/5/2019	51	44	ND	4.4	0.097	ND	
GIW-07	10/16/2019	50	44	ND	4.9	0.11	ND	
GIW-07	11/15/2019	48	42	1.8	7.7	ND	ND	
GIW-07	12/9/2019	49	41	1.9	7.2	ND	ND	
GIW-07	1/15/2020	54	42	ND	3.5	ND	ND	
GIW-08	9/6/2019	45	39	2.9	13	ND	ND	
GIW-08	10/16/2019	51	44	ND	4.4	ND	ND	
GIW-08	11/15/2019	50	43	ND	6.1	ND	ND	
GIW-08	12/9/2019	47	43	ND	8.9	ND	ND	
GIW-08	1/15/2020	48	43	ND	8.8	ND	ND	
GIW-09	9/6/2019	20	39	ND	29	10	100	
GIW-09	10/16/2019	25	41	ND	22	11	120	
GIW-09	11/15/2019	24	37	1.9	29	7.6	85	
GIW-09	12/9/2019	14	32	2.2	42	8.6	78	
GIW-09	1/15/2020	21	35	1.6	35	7.8	86	
GIW-10	9/6/2019	21	32	ND	34	11	190	
GIW-10	10/16/2019	23	32	ND	33	9.9	160	
GIW-10	11/15/2019	26	32	ND	32	8.1	150	
GIW-10	12/9/2019	17	31	ND	42	8.6	180	
GIW-10	1/15/2020	21	30	ND	39	8.4	210	
GIW-11	9/6/2019	21	32	2.1	42	3.1	110	
GIW-11	10/16/2019	21	33	1.9	40	3.9	150	
GIW-11	11/15/2019	23	32	2.0	39	3.3	220	
GIW-11	12/9/2019	19	31	2.1	44	3.3	260	
GIW-11	1/15/2020	22	29	2.5	43	2.9	310	
GIW-12	9/6/2019	28	34	2.3	32	3.6	150	
GIW-12	10/16/2019	29	35	2.3	29	4.5	170	
GIW-12	11/15/2019	32	35	2.6	25	4.9	150	
GIW-12	12/9/2019	28	33	3.3	32	3.4	130	
GIW-12	1/15/2020	30	32	3.2	30	3.6	170	
GIW-13	9/6/2019	32	43	ND	13	10	200	
GIW-13	10/16/2019	34	44	ND	10	10	200	
GIW-13	11/15/2019	34	47	ND	5.8	12	210	
GIW-13	12/9/2019	31	49	ND	7.1	12	190	
GIW-13	1/15/2020	41	45	ND	4.0	9.0	140	
Flare Station ²	9/9/2019	17.4	37.4	5.5	30.7	7.9	290	See Note 6
Flare Station ²	9/13/2019	17.4	37.2	5.6	30.5	8.1	290	See Note 6

Notes: (1) Based on the comparison of field to laboratory readings, oxygen to balance gas ratios, and historical concentrations, the sample was determined to be suspect due to oxygen introduction which likely occurred during sample collection or laboratory analytical methods. (2) MDNR also collected duplicate LFG samples at these locations during this sampling period. (3) Based on the oxygen verification readings taken with an Envision meter, it was determined there is a sample train leak. (4) Based on the oxygen verification readings taken with an Envision meter, it was determined that the readings are accurate. (5) Flare station gas concentration data is an average of NQ EP14 A (or 1) and NQ EP14 B (or 2), located in the North Quarry. (6) Flare station gas concentration data is an average of Outlets 1 and 2 (A & B) or SQ OU 1 and OU 2, located in the South Quarry. (7) Sample not reported by lab due to canister leak. (8) Invalid sample due to canister leak; resampled.

ND = Analyte not detected in sample.

² = Flare Station Inlet measured at EPA Method 2 flow port (blower outlet)

ATTACHMENT C-2

LABORATORY ANALYSES REPORTS



January 31, 2020

Republic Services
ATTN: Mike Lambrich
13570 St. Charles Rock Rd.
Bridgeton, MO 63044



LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: L012203-01/50

Enclosed are results for sample(s) received 1/22/20 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; Michele Clark, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 1/30/20.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

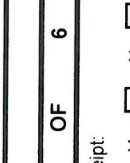
Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.



18501 E. Gale Ave., Suite 130
City of Industry, CA 91748
Ph: 626-964-4032
Fx: 626-964-5832

Project No.: _____

Project Name: Bridgeton Landfill

Report To: Mike Lambrich

Company: Republic Services

Street: 13570 St. Charles Rock Rd.

City/State/Zip: Bridgeton, MO 63044

Phone & Fax: 314-683-3921

e-mail: Mlambrich@republicservices.com

CHAIN OF CUSTODY RECORD

TURNAROUND TIME

Standard ☐ 48 hours ☐ EDD ☒ Condition upon receipt: Sealed Yes ☐ No ☐
Same Day ☐ 72 hours ☐ EDF ☐ Intact Yes ☐ No ☐
24 hours ☐ 96 hours ☐ Level 3 ☐ Chilled _____ deg C
Other: 5 Day ☐ Level 4 ☐

PAGE: 1 OF 6

ANALYSIS REQUEST

BILLING

P.O. No.: PO7112802

Bill to: Republic Services

Attn: Mike Lambrich

13570 St. Charles Rock Rd.

Bridgeton, MO 63044

LAB USE ONLY	Cannister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST				
1012203-01	5308	-21	-5	GEW 50	1/15/2020	9:34	C	LFG	NA	X				4
1012203-02	3132	-20.4	-5	GEW 52	1/15/2020	9:44	C	LFG	NA	X				4
1012203-03	3441	-21	-5	GEW 7	1/15/2020	9:57	C	LFG	NA	X				4
1012203-04	A7654	-21	-5	GEW 8	1/15/2020	10:07	C	LFG	NA	X				4
1012203-05	A8082	-21.2	-5	GEW 9	1/15/2020	10:17	C	LFG	NA	X				4
1012203-06	6146	-20	-5	GEW 51	1/15/2020	10:29	C	LFG	NA	X				4
1012203-07	A7818	-20.8	-5	GEW 53	1/15/2020	10:40	C	LFG	NA	X				4
1012203-08	A7798	-21	-5	GEW 54	1/15/2020	10:49	C	LFG	NA	X				4
1012203-09	A7649	-20.8	-5	GEW 55	1/15/2020	11:00	C	LFG	NA	X				4
1012203-10	5901	-21	-5	GEW 40	1/15/2020	11:08	C	LFG	NA	X				4

COMMENTS

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis DATE/TIME: 1/15/2020

RELINQUISHED BY: [Signature] DATE/TIME: 1/15/2020

RELINQUISHED BY: [Signature] DATE/TIME: 1/15/2020

RELINQUISHED BY: [Signature] DATE/TIME: 1/15/2020

METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other

DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy

Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09

AIRTECHNOLOGY Laboratories, Inc. 18501 E. Gale Ave., Suite 130 City of Industry, CA 91748 Ph: 626-964-4032 Fx: 626-964-5832				CHAIN OF CUSTODY RECORD									
				TURNAROUND TIME Standard ☐ 48 hours Same Day ☐ 72 hours 24 hours ☐ 96 hours Other: <u>5 Day</u>		DELIVERABLES EDD ☒ EDF ☐ Level 3 ☐ Level 4 ☐		Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled _____ deg C		PAGE: 2 OF 6			
Project No.: Project Name: Bridgeton Landfill Report To: Mike Lambrich Company: Republic Services Street: 13570 St. Charles Rock Rd. City/State/Zip: Bridgeton, MO 63044 Phone & Fax: 314-683-3921 e-mail: Mlambrich@republicservices.com				BILLING P.O. No.: PO7112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044									
LAB USE ONLY				Cannister Pressure ("hg) Cannister ID Sample Start Sample End		SAMPLE IDENTIFICATION		SAMPLE DATE SAMPLE TIME CONTAINER QTY/TYPE MATRIX PRESERVATION		D1946 + CO ₂ H ₂		ANALYSIS REQUEST	
L012203-11 -12 -13 -14 -15 -16 -17 -18 -19 -20				5271 -20.7 -5 5837 -20.7 -5 A8055 -20.8 -5 5916 -21 -5 5920 -20.9 -5 A7809 -20.9 -5 4655 -20.8 -5 5830 -20.8 -5 A7759 -21.9 -5 A7815 -22.4 -5		GEW 41R GEW 42R GEW 43R GEW 44 GEW 49 GEW 45R GEW 46R GEW 2S GEW 2 GEW 3		1/15/2020 11:17 C LFG NA 1/15/2020 11:26 C LFG NA 1/15/2020 11:36 C LFG NA 1/15/2020 13:47 C LFG NA 1/15/2020 13:59 C LFG NA 1/15/2020 14:30 C LFG NA 1/15/2020 14:39 C LFG NA 1/15/2020 14:51 C LFG NA 1/16/2020 14:18 C LFG NA 1/16/2020 14:29 C LFG NA		X X X X X X X X X X		4 4 4 4 4 4 4 2 2	
AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services													
SAMPLED BY: Anthony Kimutis COMPANY: Republic Services													
RELINQUISHED BY: <u>Anthony Kimutis</u> DATE/TIME: <u>1/15/2020</u>				RECEIVED BY: <u>[Signature]</u> DATE/TIME: <u>1/15/2020</u>				DATE/TIME: <u>1/15/2020</u>					
RELINQUISHED BY: <u>FEL EX</u> DATE/TIME: <u>1/22/20</u>				RECEIVED BY: <u>[Signature]</u> DATE/TIME: <u>1/22/20</u>				DATE/TIME: <u>1/22/20</u>					
RELINQUISHED BY: _____ DATE/TIME: _____				RECEIVED BY: _____ DATE/TIME: _____				DATE/TIME: _____					
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other _____													
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09													

[illegible]

				CHAIN OF CUSTODY RECORD															
				TURNAROUND TIME Standard ☐ 48 hours Same Day ☐ 72 hours 24 hours ☐ 96 hours Other: <u>5 Day</u>		DELIVERABLES EDD ☒ EDF ☐ Level 3 ☐ Level 4 ☐		Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled _____ deg C		PAGE: 4 OF 6									
18501 E. Gale Ave., Suite 130 City of Industry, CA 91748 Ph: 626-964-4032 Fx: 626-964-5832				BILLING P.O. No.: PO7112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044															
LAB USE ONLY				SAMPLE IDENTIFICATION		SAMPLE DATE		SAMPLE TIME		CONTAINER QTY/TPE		MATRIX		PRESERVA-TION		ANALYSIS REQUEST			
				Cannister Pressure ("hg) Sample Start Sample End		GEW 10 GEW 56R GEW 110 GEW 162 GEW 161 GEW 160 GEW 91 GIW 1 GEW 108 GEW 187		1/3/2020 1/3/2020 1/3/2020 1/3/2020 1/3/2020 1/3/2020 1/3/2020 1/3/2020 1/14/2020 1/14/2020		8:46 8:58 9:09 9:20 9:32 9:44 9:56 10:57 13:46 13:58		C C C C C C C C C C		LFG LFG LFG LFG LFG LFG LFG LFG LFG LFG				NA NA NA NA NA NA NA NA NA NA	
L012203-26 -27 -28 -29 -30 -31 -32 -33 -34 -35				A8063 -20.9 -5		GEW 10		1/3/2020 8:46		C		LFG		NA		X		3	
				3839 -21.2 -5		GEW 56R		1/3/2020 8:58		C		LFG		NA		X		4	
				A7772 -21.2 -5		GEW 110		1/3/2020 9:09		C		LFG		NA		X		4	
				A7808 -21.3 -5		GEW 162		1/3/2020 9:20		C		LFG		NA		X		4	
				A8090 -20.3 -5		GEW 161		1/3/2020 9:32		C		LFG		NA		X		4	
				A7793 -21.1 -5		GEW 160		1/3/2020 9:44		C		LFG		NA		X		3	
				3131 -21.2 -5		GEW 91		1/3/2020 9:56		C		LFG		NA		X		3	
				5268 -20.8 -5		GIW 1		1/3/2020 10:57		C		LFG		NA		X		4	
				5302 -20.4 -5		GEW 108		1/14/2020 13:46		C		LFG		NA		X		4	
				A8095 -21.2 -5		GEW 187		1/14/2020 13:58		C		LFG		NA		X		4	
COMMENTS														Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09					
AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services																			
SAMPLED BY: Andy Guthrie COMPANY: Hunt Vac Services DATE/TIME: 1/3/2020 - 1/14/2020																			
RELINQUISHED BY: [Signature] RECEIVED BY: [Signature] DATE/TIME: 1/3/2020 DATE/TIME: 1/20/2020																			
RELINQUISHED BY: [Signature] RECEIVED BY: [Signature] DATE/TIME: 1/20/2020 DATE/TIME: 1/20/2020																			
RELINQUISHED BY: [Signature] RECEIVED BY: [Signature] DATE/TIME: 1/20/2020 DATE/TIME: 1/20/2020														METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other _____					
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy																			

		CHAIN OF CUSTODY RECORD											
		TURNAROUND TIME Standard ☐ 48 hours Same Day ☐ 72 hours 24 hours ☐ 96 hours Other: <u>5 Day</u>	DELIVERABLES EDD ☒ EDF ☐ Level 3 ☐ Level 4 ☐	Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled _____ deg C	PAGE: 5 OF 6								
Project No.: Project Name: Bridgeton Landfill Report To: Mike Lambrich Company: Republic Services Street: 13570 St. Charles Rock Rd. City/State/Zip: Bridgeton, MO 63044 Phone& Fax: 314-683-3921 e-mail: Mlambrich@republicservices.com		BILLING P.O. No.: PO7112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044											
LAB USE ONLY L012203-36 -37 -38 -39 -40 -41 -42 -43 -44 -45		SAMPLE IDENTIFICATION		Cannister Pressure ("hg) Sample Start Sample End		SAMPLE DATE SAMPLE TIME CONTAINER QTY/TPE MATRIX PRESERVA-TION		D1946 + CO ₂ H ₂			ANALYSIS REQUEST		
		Cannister ID		GEW 109 GEW 39 GIW 2 GIW 3 GIW 4 GIW 5 GIW 6 GIW 7 GIW 8 GIW 9		6138 -20.7 -5 1532 -21 -4.85 A8102 -21 -5 R1352 -20.9 -5 5918 -21.3 -5 1614 -21.1 -5 R1348 -20.8 -5 R1156 -20.9 -5 R1372 -20.8 -5 R2480 -21.1 -5							
AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services		COMMENTS											
SAMPLED BY: Andy Guthrie DATE/TIME: 1/14/2020 11:15 AM		RECEIVED BY: [Signature] DATE/TIME: 1/15/2020 11:00 AM											
RELINQUISHED BY: [Signature] DATE/TIME: 1/14/2020 11:20 AM		RECEIVED BY: [Signature] DATE/TIME: 1/15/2020 11:00 AM											
RELINQUISHED BY: [Signature] DATE/TIME: 1/14/2020 11:20 AM		RECEIVED BY: [Signature] DATE/TIME: 1/15/2020 11:00 AM											
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other													
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy													
Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other													

[illegible]

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-01		L012203-02		L012203-03		L012203-04	
Client Sample I.D.:	GEW 50		GEW 52		GEW 7		GEW 8	
Date/Time Sampled:	1/15/20 9:34		1/15/20 9:44		1/15/20 9:57		1/15/20 10:07	
Date/Time Analyzed:	1/23/20 17:50		1/23/20 18:05		1/23/20 18:19		1/23/20 18:34	
QC Batch No.:	200123GC8A2		200123GC8A2		200123GC8A2		200123GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.44 d	0.030	ND d	0.030	ND d	0.030	1.1 d	0.030
Carbon Dioxide	36	0.030	39	0.030	39	0.030	41	0.030
Oxygen/Argon	ND	1.5	1.6	1.5	ND	1.5	ND	1.5
Nitrogen	11	3.0	6.0	3.0	4.5	3.0	3.1	3.0
Methane	52	0.0030	54	0.0030	56	0.0030	54	0.0030
Carbon Monoxide	ND	0.0030	ND	0.0030	ND	0.0030	0.0048	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A2

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-05		L012203-06		L012203-07		L012203-08	
Client Sample I.D.:	GEW 9		GEW 51		GEW 53		GEW 54	
Date/Time Sampled:	1/15/20 10:17		1/15/20 10:29		1/15/20 10:40		1/15/20 10:49	
Date/Time Analyzed:	1/23/20 18:48		1/23/20 19:03		1/23/20 19:18		1/23/20 19:32	
QC Batch No.:	200123GC8A2		200123GC8A2		200123GC8A2		200123GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.63 d	0.030	0.71 d	0.030	3.3 d	0.030	1.6 d	0.030
Carbon Dioxide	39	0.030	37	0.030	41	0.030	42	0.030
Oxygen/Argon	ND	1.5	2.4	1.5	ND	1.5	ND	1.5
Nitrogen	9.3	3.0	9.4	3.0	4.7	3.0	ND	3.0
Methane	50	0.0030	51	0.0030	50	0.0030	53	0.0030
Carbon Monoxide	ND	0.0030	0.0030	0.0030	0.0066	0.0030	ND	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A2

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-09		L012203-10		L012203-11		L012203-12	
Client Sample I.D.:	GEW 55		GEW 40		GEW 41R		GEW 42R	
Date/Time Sampled:	1/15/20 11:00		1/15/20 11:08		1/15/20 11:17		1/15/20 11:26	
Date/Time Analyzed:	1/23/20 19:47		1/23/20 20:01		1/23/20 20:15		1/23/20 20:30	
QC Batch No.:	200123GC8A2		200123GC8A2		200123GC8A2		200123GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	1.2 d	0.030	ND d	0.030	ND d	0.030	ND d	0.030
Carbon Dioxide	41	0.030	34	0.030	32	0.030	36	0.030
Oxygen/Argon	ND	1.5	ND	1.5	1.7	1.5	ND	1.5
Nitrogen	4.6	3.0	4.7	3.0	17	3.0	9.0	3.0
Methane	52	0.0030	61	0.0030	49	0.0030	53	0.0030
Carbon Monoxide	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A2

Reviewed/Approved By: Mark Johnson
 Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-13		L012203-14		L012203-15		L012203-16	
Client Sample I.D.:	GEW 43R		GEW 44		GEW 49		GEW 45R	
Date/Time Sampled:	1/15/20 11:36		1/15/20 13:47		1/15/20 13:59		1/15/20 14:30	
Date/Time Analyzed:	1/23/20 20:44		1/23/20 20:59		1/23/20 21:13		1/23/20 21:28	
QC Batch No.:	200123GC8A2		200123GC8A2		200123GC8A2		200123GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.030	ND d	0.030	ND d	0.030	ND d	0.030
Carbon Dioxide	40	0.030	32	0.030	35	0.030	38	0.030
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	4.9	3.0	23	3.0	14	3.0	4.8	3.0
Methane	55	0.0030	44	0.0030	50	0.0030	56	0.0030
Carbon Monoxide	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A2

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____

1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-17		L012203-18		L012203-19		L012203-20	
Client Sample I.D.:	GEW 46R		GEW 2S		GEW 2		GEW 3	
Date/Time Sampled:	1/15/20 14:39		1/15/20 14:51		1/16/20 14:18		1/16/20 14:29	
Date/Time Analyzed:	1/23/20 21:42		1/23/20 21:57		1/23/20 22:11		1/23/20 22:26	
QC Batch No.:	200123GC8A2		200123GC8A2		200123GC8A2		200123GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.030	ND d	0.030	ND d	0.027	ND d	0.027
Carbon Dioxide	37	0.030	34	0.030	38	0.027	40	0.027
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.3	ND	1.3
Nitrogen	8.2	3.0	5.3	3.0	7.9	2.7	4.9	2.7
Methane	54	0.0030	60	0.0030	53	0.0027	55	0.0027
Carbon Monoxide	ND	0.0030	ND	0.0030	ND	0.0027	ND	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

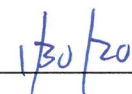
RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A2, 200130GC8A2

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____


1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-21		L012203-22		L012203-23		L012203-24	
Client Sample I.D.:	GEW 4		GEW 47R		GEW 5		GEW 48	
Date/Time Sampled:	1/16/20 14:39		1/16/20 14:58		1/16/20 15:15		1/16/20 15:25	
Date/Time Analyzed:	1/25/20 15:29		1/25/20 15:45		1/25/20 16:00		1/25/20 16:14	
QC Batch No.:	200125GC8A1		200125GC8A1		200125GC8A1		200125GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.049 d	0.027	ND d	0.027	ND d	0.027	ND d	0.027
Carbon Dioxide	38	0.027	37	0.027	34	0.027	38	0.027
Oxygen/Argon	ND	1.3	ND	1.3	ND	1.3	ND	1.3
Nitrogen	9.7	2.7	14	2.7	17	2.7	6.4	2.7
Methane	52	0.0027	49	0.0027	48	0.0027	55	0.0027
Carbon Monoxide	ND	0.0027	ND	0.0027	ND	0.0027	ND	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-25		L012203-26		L012203-27		L012203-28	
Client Sample I.D.:	GEW 6		GEW 10		GEW 56R		GEW 110	
Date/Time Sampled:	1/16/20 15:39		1/3/20 8:46		1/3/20 8:58		1/3/20 9:09	
Date/Time Analyzed:	1/25/20 16:29		1/25/20 16:43		1/25/20 16:58		1/25/20 17:12	
QC Batch No.:	200125GC8A1		200125GC8A1		200125GC8A1		200125GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.8		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.027	0.14 d	0.028	3.3 d	0.030	8.8	3.0
Carbon Dioxide	36	0.027	40	0.028	39	0.030	36	0.030
Oxygen/Argon	ND	1.3	ND	1.4	ND	1.5	6.2	1.5
Nitrogen	9.1	2.7	5.0	2.8	13	3.0	22	3.0
Methane	54	0.0027	54	0.0028	44	0.0030	26	0.0030
Carbon Monoxide	ND	0.0027	ND	0.0028	0.0073	0.0030	0.019	0.0030

Results normalized including non-methane hydrocarbons

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d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-29		L012203-30		L012203-31		L012203-32	
Client Sample I.D.:	GEW 162		GEW 161		GEW 160		GEW 91	
Date/Time Sampled:	1/3/20 9:20		1/3/20 9:32		1/3/20 9:44		1/3/20 9:56	
Date/Time Analyzed:	1/25/20 17:27		1/25/20 17:41		1/25/20 17:56		1/25/20 18:10	
QC Batch No.:	200125GC8A1		200125GC8A1		200125GC8A1		200125GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	13	3.0	35	3.0	18	2.8	37	2.8
Carbon Dioxide	64	0.030	51	0.030	39	0.028	53	0.028
Oxygen/Argon	ND	1.5	2.6	1.5	2.4	1.4	ND	1.4
Nitrogen	6.6	3.0	9.2	3.0	22	2.8	3.8	2.8
Methane	15	0.0030	2.1	0.0030	17	0.0028	2.8	0.0028
Carbon Monoxide	0.062	0.0030	0.13	0.0030	0.057	0.0028	0.040	0.0028

Results normalized including non-methane hydrocarbons

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RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-33		L012203-34		L012203-35		L012203-36	
Client Sample I.D.:	GIW 1		GEW 108		GEW 187		GEW 109	
Date/Time Sampled:	1/3/20 10:57		1/14/20 13:46		1/14/20 13:58		1/14/20 14:11	
Date/Time Analyzed:	1/25/20 18:24		1/25/20 18:39		1/25/20 18:53		1/25/20 19:08	
QC Batch No.:	200125GC8A1		200125GC8A1		200125GC8A1		200125GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	18	3.0	16	3.0	3.3 d	0.030	0.89 d	0.030
Carbon Dioxide	53	0.030	46	0.030	53	0.030	37	0.030
Oxygen/Argon	3.6	1.5	ND	1.5	ND	1.5	2.4	1.5
Nitrogen	13	3.0	3.8	3.0	ND	3.0	21	3.0
Methane	12	0.0030	33	0.0030	40	0.0030	39	0.0030
Carbon Monoxide	0.079	0.0030	0.038	0.0030	0.013	0.0030	ND	0.0030

Results normalized including non-methane hydrocarbons

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d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-37		L012203-38		L012203-39		L012203-40	
Client Sample I.D.:	GEW 39		GIW 2		GIW 3		GIW 4	
Date/Time Sampled:	1/14/20 14:22		1/15/20 9:03		1/15/20 9:12		1/15/20 9:22	
Date/Time Analyzed:	1/25/20 19:23		1/25/20 19:37		1/25/20 19:52		1/25/20 20:06	
QC Batch No.:	200125GC8A1		200125GC8A1		200125GC8A1		200125GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.030	19	3.0	13	3.0	28	3.0
Carbon Dioxide	31	0.030	57	0.030	45	0.030	49	0.030
Oxygen/Argon	2.7	1.5	2.2	1.5	ND	1.5	ND	1.5
Nitrogen	36	3.0	17	3.0	22	3.0	8.4	3.0
Methane	30	0.0030	3.8	0.0030	19	0.0030	13	0.0030
Carbon Monoxide	ND	0.0030	0.11	0.0030	0.047	0.0030	0.10	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: Mark Johnson
 Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-41		L012203-42		L012203-43		L012203-44	
Client Sample I.D.:	GIW 5		GIW 6		GIW 7		GIW 8	
Date/Time Sampled:	1/15/20 9:32		1/15/20 9:41		1/15/20 9:51		1/15/20 10:00	
Date/Time Analyzed:	1/27/20 12:19		1/26/20 10:19		1/26/20 10:34		1/26/20 10:48	
QC Batch No.:	200127GC8A1		200126GC8A1		200126GC8A1		200126GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.030	3.9 d	0.030	ND d	0.030	ND d	0.030
Carbon Dioxide	1.0	0.030	39	0.030	42	0.030	43	0.030
Oxygen/Argon	23	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	76	3.0	21	3.0	3.5	3.0	8.8	3.0
Methane	0.12	0.0030	34	0.0030	54	0.0030	48	0.0030
Carbon Monoxide	ND	0.0030	0.0045	0.0030	ND	0.0030	ND	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

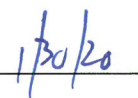
RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____


1/30/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-45	L012203-46	L012203-47	L012203-48				
Client Sample I.D.:	GIW 9	GIW 10	GIW 11	GIW 12				
Date/Time Sampled:	1/15/20 10:11	1/15/20 10:45	1/15/20 10:54	1/15/20 11:04				
Date/Time Analyzed:	1/26/20 11:03	1/26/20 11:17	1/26/20 11:32	1/26/20 11:46				
QC Batch No.:	200126GC8A1	200126GC8A1	200126GC8A1	200126GC8A1				
Analyst Initials:	CM	CM	CM	CM				
Dilution Factor:	3.0	3.0	3.0	3.0				
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	7.8	3.0	8.4	3.0	2.9 d	0.030	3.6 d	0.030
Carbon Dioxide	35	0.030	30	0.030	29	0.030	32	0.030
Oxygen/Argon	1.6	1.5	ND	1.5	2.5	1.5	3.2	1.5
Nitrogen	35	3.0	39	3.0	43	3.0	30	3.0
Methane	21	0.0030	21	0.0030	22	0.0030	30	0.0030
Carbon Monoxide	0.0086	0.0030	0.021	0.0030	0.031	0.0030	0.017	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: Mark Johnson
Operations Manager

Date: 1/20/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/22/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012203-49	L012203-50						
Client Sample I.D.:	GIW 13	GEW 159						
Date/Time Sampled:	1/15/20 11:14	1/20/20 13:29						
Date/Time Analyzed:	1/26/20 12:01	1/26/20 12:15						
QC Batch No.:	200126GC8A1	200126GC8A1						
Analyst Initials:	CM	CM						
Dilution Factor:	3.0	2.7						
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	9.0	3.0	3.1	d 0.027				
Carbon Dioxide	45	0.030	5.6	0.027				
Oxygen/Argon	ND	1.5	19	1.3				
Nitrogen	4.0	3.0	71	2.7				
Methane	41	0.0030	2.0	0.0027				
Carbon Monoxide	0.014	0.0030	0.024	0.0027				

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch 200129GC8A3

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

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QC Batch No: 200123GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/23/20 15:39			1/23/20 17:21		1/23/20 17:36					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
									Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	5.04	101	4.94	99	2.0	70	130	30
Carbon Dioxide	ND	0.010	10	9.95	99	9.94	99	0.1	70	130	30
Oxygen/Argon	ND	0.50	15	17.6	119	17.6	119	0.2	70	130	30
Nitrogen	ND	1.0	70	76.9	110	76.9	110	0.0	70	130	30
Methane	ND	0.0010	0.10	0.109	109	0.109	109	0.0	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.109	109	0.109	109	0.1	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

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AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

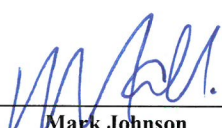
QC Batch No: 200125GC8A1
Matrix: Air
Reporting Units: % v/v

**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/25/20 14:45			1/25/20 15:00		1/25/20 15:14					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Limits		
									Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	5.40	108	5.37	107	0.5	70	130	30
Carbon Dioxide	ND	0.010	10	9.87	98	9.88	99	0.1	70	130	30
Oxygen/Argon	ND	0.50	15	17.5	118	17.5	118	0.1	70	130	30
Nitrogen	ND	1.0	70	76.5	109	76.5	109	0.1	70	130	30
Methane	ND	0.0010	0.10	0.107	107	0.107	107	0.1	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.108	108	0.108	108	0.1	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: 
Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 200126GC8A1
Matrix: Air
Reporting Units: % v/v

**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/26/20 9:42			1/25/20 21:47		1/25/20 22:02					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Limits		
									Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	5.31	106	5.32	106	0.1	70	130	30
Carbon Dioxide	ND	0.010	10	9.75	97	9.74	97	0.1	70	130	30
Oxygen/Argon	ND	0.50	15	17.4	118	17.5	118	0.1	70	130	30
Nitrogen	ND	1.0	70	76.1	109	76.2	109	0.0	70	130	30
Methane	ND	0.0010	0.10	0.112	112	0.111	111	0.7	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.112	112	0.111	111	0.2	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date: 1/30/20

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 200127GC8A1
Matrix: Air
Reporting Units: % v/v

**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/27/20 10:42			1/27/20 11:11		1/27/20 11:26					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Limits		
									Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	5.03	101	5.02	100	0.2	70	130	30
Carbon Dioxide	ND	0.010	10	9.12	91	9.02	90	1.2	70	130	30
Oxygen/Argon	ND	0.50	15	16.1	109	16.1	109	0.0	70	130	30
Nitrogen	ND	1.0	70	70.2	100	70.2	100	0.0	70	130	30
Methane	ND	0.0010	0.10	0.111	111	0.111	111	0.6	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.114	114	0.113	113	0.8	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

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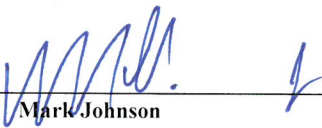
QC Batch No: 200129GC8A2
Matrix: Air
Reporting Units: % v/v

**ASTM D1946 Low Level Hydrogen
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/29/20 16:45			1/29/20 16:50		1/29/20 16:54					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
									Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	0.010	1.0	0.901	90	0.884	88	1.9	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: 
Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



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QC Batch No: 200129GC8A3
Matrix: Air
Reporting Units: % v/v

**ASTM D1946 Low Level Hydrogen
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCS D					
Date Analyzed:	1/29/20 19:16			1/29/20 19:26		1/29/20 19:31					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
									Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	0.010	1.0	0.779	78	0.772	77	0.9	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 1/30/20

The cover letter is an integral part of this analytical report



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QC Batch No: 200130GC8A2
Matrix: Air
Reporting Units: % v/v

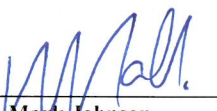
**ASTM D1946 Low Level Hydrogen
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/30/20 10:42			1/30/20 11:02		1/30/20 11:06					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
			Limits								
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	0.010	1.0	0.878	88	0.901	90	2.5	70	130	30

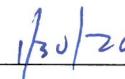
ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____


1/30/20

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832



January 31, 2020

Republic Services
ATTN: Mike Lambrich
13570 St. Charles Rock Rd.
Bridgeton, MO 63044



LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: L012301-01/101

Enclosed are results for sample(s) received 1/23/20 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; Michele Clark, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 1/31/20.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

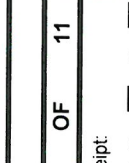
Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.



AIRTECHNOLOGY
 Laboratories, Inc.

18501 E. Gale Ave., Suite 130
 City of Industry, CA 91748
 Ph: 626-964-4032
 Fx: 626-964-5832

CHAIN OF CUSTODY RECORD
 PAGE: 1 OF 11

Condition upon receipt:
 Sealed Yes ☐ No ☐
 Intact Yes ☐ No ☐
 Chilled _____ deg C

TURNAROUND TIME
 Standard ☐ 48 hours ☐
 Same Day ☐ 72 hours ☐
 24 hours ☒ 96 hours ☐
 Other: **5 Day**

DELIVERABLES
 EDD ☒
 EDF ☐
 Level 3 ☐
 Level 4 ☐

BILLING
 P.O. No.: PO7112802
 Bill to: Republic Services
 Attn: Mike Lambrich
 13570 St. Charles Rock Rd.
 Bridgeton, MO 63044

ANALYSIS REQUEST
 D1946 + CO, H2

LAB USE ONLY
 Cannister Pressure ("hg)
 Cannister ID Sample Start Sample End
 A7795 -19.8 -5 GEW 156
 5274 -20.7 -5 GEW 59R
 A7800 -20.5 -5 GEW 153
 A7797 -20.6 -5 GEW 107
 A7778 -20.2 -5 GEW 58A
 5813 -20.9 -5 GEW 106
 A7671 -20.7 -5 GEW 158
 5310 -20.8 -5 GEW 105
 5270 -20.4 -5 GEW 176
 6152 -20.4 -5 GEW 237

SAMPLE IDENTIFICATION
 SAMPLE DATE SAMPLE TIME CONTAINER QTY/TPE MATRIX PRESERVA-TION
 1/9/2020 13:49 C LFG NA
 1/9/2020 14:02 C LFG NA
 1/9/2020 14:12 C LFG NA
 1/9/2020 14:22 C LFG NA
 1/10/2020 8:27 C LFG NA
 1/10/2020 8:40 C LFG NA
 1/10/2020 8:51 C LFG NA
 1/10/2020 9:02 C LFG NA
 1/10/2020 10:58 C LFG NA
 1/10/2020 13:30 C LFG NA

0.75"
 -4"
 -4"
 -4"
 -4"
 -4"
 -3.5"
 -4"
 -4.5"

COMMENTS
 Dave Penoyer
 COMPANY: Republic Services
 SAMPLED BY: Andy Guthrie
 RELINQUISHED BY: [Signature] DATE/TIME: 1/31/2020
 RECEIVED BY: [Signature] DATE/TIME: 1/31/2020
 RECEIVED BY: [Signature] DATE/TIME: 1/31/2020
 RECEIVED BY: [Signature] DATE/TIME: 1/31/2020

METHOD OF TRANSPORT (circle one): Walk-In ☒ UPS ☐ Courier ☐ ATLI ☐ Other ☐
 DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy

Preservation: H=HCL N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09

 AIRTECHNOLOGY Laboratories, Inc.		18501 E. Gale Ave., Suite 130 City of Industry, CA 91748 Ph: 626-964-4032 Fx: 626-964-5832		CHAIN OF CUSTODY RECORD				PAGE: 2 OF 11											
		Project No.: Project Name: Bridgeton Landfill Report To: Mike Lambrich Company: Republic Services Street: 13570 St. Charles Rock Rd. City/State/Zip: Bridgeton, MO 63044 Phone& Fax: 314-683-3921 e-mail: Mlambrich@republicservices.com		TURNAROUND TIME Standard ☐ 48 hours Same Day ☐ 72 hours 24 hours ☐ 96 hours Other: <u>5 Day</u>		DELIVERABLES EDD ☒ EDF ☐ Level 3 ☐ Level 4 ☐		Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled ☐ deg C											
LAB USE ONLY L012301-11 -12 -13 -14 -15 -16 -17 -18 -19 -20		Cannister Pressure ("hg) Sample Start Sample End		SAMPLE IDENTIFICATION		SAMPLE DATE SAMPLE TIME CONTAINER QTY/TYPE MATRIX PRESERVATION		ANALYSIS REQUEST D1946 + CO ₂ H2											
		5272 -20.6 -5 5309 -20.6 -5 5320 -19.9 -5 5903 -21.7 -5 3436 -21.7 -5 4645 -21.7 -5 6158 -21.7 -5 5905 -21.8 -5 5835 -21.4 -5 5840 -21.4 -5		GEW 150 GEW 175 GEW 157 GEW 152 GEW 104 GEW 57B GEW 217 GEW 218 GEW 220 GEW 145		1/10/2020 13:39 1/10/2020 13:49 1/10/2020 14:00 1/13/2020 8:46 1/13/2020 9:40 1/13/2020 9:52 1/13/2020 10:07 1/13/2020 10:20 1/13/2020 13:29 1/13/2020 13:43				C C C C C C C C C		LFG LFG LFG LFG LFG LFG LFG LFG LFG		NA NA NA NA NA NA NA NA NA NA		X X X X X X X X X X		-4 -4 -4.5 -2.5 -2.5 -3 -2.5 -3 -3	
AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services										COMMENTS									
SAMPLED BY: Andy Guthrie					COMPANY: Hunt Vac Services					DATE/TIME: 1/10/2020 - 1/13/2020									
RELINQUISHED BY: <u>Andy Guthrie</u>					RECEIVED BY:					DATE/TIME:									
RELINQUISHED BY:					RECEIVED BY:					DATE/TIME:									
RELINQUISHED BY:					RECEIVED BY: <u>Mike Lambrich</u>					DATE/TIME: 1/25/20 10:50									
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other										PRESERVATION: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09									

[illegible]

[illegible]

 AIRTECHNOLOGY Laboratories, Inc.		CHAIN OF CUSTODY RECORD									
		TURNAROUND TIME	DELIVERABLES			PAGE: 5 OF 11					
Project No.: Project Name: Bridgeton Landfill Report To: Mike Lambrich Company: Republic Services Street: 13570 St. Charles Rock Rd. City/State/Zip: Bridgeton, MO 63044 Phone & Fax: 314-683-3921 e-mail: Mlambrich@republicservices.com		Standard ☐ 48 hours ☐ Same Day ☐ 72 hours ☐ 24 hours ☐ 96 hours ☐ Other: <u>5 Day</u>		EDD ☒ EDF ☐ Level 3 ☐ Level 4 ☐		Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled _____ deg C					
		BILLING									
		P.O. No.: PO7112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044									
		ANALYSIS REQUEST									
LAB USE ONLY		SAMPLE IDENTIFICATION		SAMPLE DATE CONTAINER QTY/TYPE MATRIX PRESERVATION		D1946 + CO ₂ H2					
Cannister Pressure ("hg)		Sample Start Sample End		SAMPLE DATE CONTAINER QTY/TYPE MATRIX PRESERVATION							
L012301 -41		A7782 -22 -5		1/16/2020 17:00 C LFG NA		-2					
-42		A8072 -22.6 -5		1/16/2020 17:11 C LFG NA		-2					
-43		3164 -22.2 -5		1/16/2020 17:24 C LFG NA		-2					
-44		A7665 -22.2 -5		1/20/2020 10:51 C LFG NA		-2					
-45		R2210 -22 -5		1/20/2020 11:16 C LFG NA		-2					
-46		3825 -22.4 -5		1/20/2020 13:56 C LFG NA		-2					
-47		5834 -22 -5		1/20/2020 14:07 C LFG NA		-2					
-48		A7650 -21.9 -5		1/20/2020 14:18 C LFG NA		-2					
-49		5307 -22.2 -5		1/20/2020 14:33 C LFG NA		-2					
-50		A7744 -21.2 -5		1/20/2020 14:43 C LFG NA		-2					
COMMENTS											
AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services											
SAMPLED BY: Andy Guthrie DATE/TIME: 1/16/2020 - 1/20/2020											
RELINQUISHED BY: <u>Andy Guthrie</u> RECEIVED BY: DATE/TIME:											
RELINQUISHED BY: DATE/TIME: RECEIVED BY: DATE/TIME:											
RELINQUISHED BY: DATE/TIME: RECEIVED BY: DATE/TIME:											
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other											
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09											

 18501 E. Gale Ave., Suite 130 City of Industry, CA 91748 Ph: 626-964-4032 Fax: 626-964-5832		CHAIN OF CUSTODY RECORD									
		TURNAROUND TIME	DELIVERABLES			PAGE: 6 OF 11					
Project No.: Project Name: Bridgeton Landfill Report To: Mike Lambrich Company: Republic Services Street: 13570 St. Charles Rock Rd. City/State/Zip: Bridgeton, MO 63044 Phone& Fax: 314-683-3921 e-mail: Mlambrich@republicservices.com		Standard ☐ 48 hours Same Day ☐ 72 hours 24 hours ☐ 96 hours Other: <u>5 Day</u>		EDD ☒ EDF ☐ Level 3 ☐ Level 4 ☐		Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled _____ deg C					
Cannister Pressure ("hg) 5816 -22 A7799 -21.9 A8103 -21.9 5839 -22.4 A8099 -21.8 A7816 -22.4 3159 -22.3 5304 -21.7 6149 -22.1 5904 -21.9		BILLING		ANALYSIS REQUEST							
		P.O. No.: PO7112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044									
LAB USE ONLY		SAMPLE IDENTIFICATION		SAMPLE DATE		SAMPLE TIME		CONTAINER QTY/TYPE		MATRIX PRESERVATION	
L012301 -51		GEW 227		1/20/2020		15:21		C		LFG NA	
-52		GEW 135		1/20/2020		15:33		C		LFG NA	
-53		GEW 116		1/21/2020		8:34		C		LFG NA	
-54		GEW 18B		1/21/2020		8:47		C		LFG NA	
-55		GEW 133		1/21/2020		9:03		C		LFG NA	
-56		GEW 233		1/21/2020		9:16		C		LFG NA	
-57		GEW 134		1/21/2020		9:29		C		LFG NA	
-58		GEW 117		1/21/2020		9:46		C		LFG NA	
-59		GEW 19A		1/21/2020		9:58		C		LFG NA	
-60		GEW 118		1/21/2020		10:32		C		LFG NA	
COMMENTS											
AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services SAMPLED BY: Andy Guthrie COMPANY: Hunt Vac Services RELINQUISHED BY: <u>[Signature]</u> DATE/TIME: 1/20/2020 1/21/2020 RELINQUISHED BY: <u>[Signature]</u> DATE/TIME: 1/21/2020 RELINQUISHED BY: <u>[Signature]</u> DATE/TIME: 1/21/2020 10:50 METHOD OF TRANSPORT (circle one): Walk-In ☐ FedEx ☒ UPS ☐ Courier ☐ ATLI ☐ Other ☐ DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy											

[illegible]

AIRTECHNOLOGY Laboratories, Inc. 18501 E. Gale Ave., Suite 130 City of Industry, CA 91748 Ph: 626-964-4032 Fx: 626-964-5832				CHAIN OF CUSTODY RECORD																	
				TURNAROUND TIME Standard ☐ 48 hours Same Day ☐ 72 hours 24 hours ☐ 96 hours Other: <u>5 Day</u>		DELIVERABLES EDD ☐ EDF ☐ Level 3 ☐ Level 4 ☐		PAGE: 8 OF 11		Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled _____ deg C											
Project No.: Project Name: Report To: Bridgeton Landfill Company: Mike Lambrich Republic Services Street: 13570 St. Charles Rock Rd. City/State/Zip: Bridgeton, MO 63044 Phone & Fax: 314-683-3921 e-mail: Mlambrich@republicservices.com				BILLING P.O. No.: PO7112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044																	
LAB USE ONLY Cannister Pressure ("hg)				SAMPLE IDENTIFICATION		SAMPLE DATE SAMPLE TIME CONTAINER QTY/TYPE MATRIX PRESERVATION		ANALYSIS REQUEST D1946 + CO ₂ H2													
L012301 -65		A8076		-20.6		-5		1/10/2020		13:46		C		LFG		NA		X		-4	
-66		A8075		-20.5		-5		1/10/2020		13:58		C		LFG		NA		X		-4	
-67		A7775		-20.7		-5		1/10/2020		14:09		C		LFG		NA		X		-4	
-68		A7663		-20.7		-5		1/10/2020		14:33		C		LFG		NA		X		-4.5	
-69		A7667		-21.7		-5		1/13/2020		10:00		C		LFG		NA		X		-3	
-70		A7770		-21.8		-5		1/13/2020		10:12		C		LFG		NA		X		-3	
-71		4648		-21.2		-5		1/13/2020		11:51		C		LFG		NA		X		-3	
-72		A7773		-21.3		-5		1/13/2020		14:17		C		LFG		NA		X		-3	
-73		3157		-21.2		-5		1/13/2020		14:30		C		LFG		NA		X		-3	
-74		A8080		-21.6		-5		1/13/2020		14:41		C		LFG		NA		X		-3	
AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services																					
SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME: 1/10/2020 - 1/13/2020																					
RELINQUISHED BY: <u>Anthony Kimutis</u> DATE/TIME: 1/21/2020 RECEIVED BY: <u>Anthony Kimutis</u> DATE/TIME: 1/21/2020																					
RELINQUISHED BY: <u>Anthony Kimutis</u> DATE/TIME: 1/21/2020 RECEIVED BY: <u>Anthony Kimutis</u> DATE/TIME: 1/21/2020																					
RELINQUISHED BY: <u>Anthony Kimutis</u> DATE/TIME: 1/21/2020 RECEIVED BY: <u>Anthony Kimutis</u> DATE/TIME: 1/21/2020																					
METHOD OF TRANSPORT (circle one): Walk-In ☒ UPS ☐ Courier ☐ ATL ☐ Other ☐																					
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09																					

AIRTECHNOLOGY Laboratories, Inc. 18501 E. Gale Ave., Suite 130 City of Industry, CA 91748 Ph: 626-964-4032 Fax: 626-964-5832				CHAIN OF CUSTODY RECORD																																																																
				TURNAROUND TIME Standard ☐ 48 hours Same Day ☐ 72 hours 24 hours ☐ 96 hours Other: <u>5 Day</u>					DELIVERABLES EDD ☒ EDF ☐ Level 3 ☐ Level 4 ☐ Condition upon receipt: Sealed Yes ☐ No ☐ Intact Yes ☐ No ☐ Chilled _____ deg C																																																											
Project No.: Project Name: Bridgeton Landfill Report To: Mike Lambrich Company: Republic Services Street: 13570 St. Charles Rock Rd. City/State/Zip: Bridgeton, MO 63044 Phone& Fax: 314-683-3921 e-mail: Mlambrich@republicservices.com				BILLING P.O. No.: PO7112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044																																																																
LAB USE ONLY Cannister Pressure ("hg)				SAMPLE IDENTIFICATION		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>SAMPLE DATE</th> <th>SAMPLE TIME</th> <th>CONTAINER QTY/TYPE</th> <th>MATRIX</th> <th>PRESERVATION</th> </tr> <tr> <td>1/13/2020</td> <td>14:54</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/13/2020</td> <td>15:05</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>9:50</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>10:01</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>10:12</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>10:25</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>11:34</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>11:45</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>13:42</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> <tr> <td>1/14/2020</td> <td>13:54</td> <td>C</td> <td>LFG</td> <td>NA</td> </tr> </table>								SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	1/13/2020	14:54	C	LFG	NA	1/13/2020	15:05	C	LFG	NA	1/14/2020	9:50	C	LFG	NA	1/14/2020	10:01	C	LFG	NA	1/14/2020	10:12	C	LFG	NA	1/14/2020	10:25	C	LFG	NA	1/14/2020	11:34	C	LFG	NA	1/14/2020	11:45	C	LFG	NA	1/14/2020	13:42	C	LFG	NA	1/14/2020	13:54	C	LFG	NA
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ANALYSIS REQUEST D1946 + CO ₂ H ₂																																																																				
Dave Penoyer COMPANY: Republic Services				COMMENTS AUTHORIZATION TO PERFORM WORK:																																																																
Anthony Kimutis COMPANY: Republic Services				RECEIVED BY: <u>1/13/2020 - 1/14/2020</u> RECEIVED BY: <u>1/21/2020</u> RECEIVED BY: <u>1/21/2020 10:50</u> RECEIVED BY: <u>1/21/2020 10:50</u>																																																																
METHOD OF TRANSPORT (circle one): Walk-In (FedEx) UPS Courier ATLI Other				DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy																																																																

18501 E. Gale Ave., Suite 130 City of Industry, CA 91748 Ph: 626-964-4032 Fx: 626-964-5832 CHAIN OF CUSTODY RECORD PAGE: 10 OF 11				TURNAROUND TIME ☐ 48 hours ☐ 72 hours ☐ 96 hours Other: <u>5 Day</u>		DELIVERABLES ☒ EDD ☐ EDF ☐ Level 3 ☐ Level 4		Condition upon receipt: Sealed ☐ Yes ☐ No Intact ☐ Yes ☐ No Chilled ☐ Yes ☐ No	
				BILLING P.O. No.: P07112802 Bill to: Republic Services Attn: Mike Lambrich 13570 St. Charles Rock Rd. Bridgeton, MO 63044		ANALYSIS REQUEST D1946 + CO ₂ H2			

SAMPLE IDENTIFICATION			SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION		
LAB USE ONLY	Cannister ID	Sample Start	Sample End	1/14/2020	14:06	C	LFG	NA	X
	6154	-20.6	-5	1/14/2020	14:17	C	LFG	NA	X
	A8078	-20.8	-5	1/14/2020	14:44	C	LFG	NA	X
	A7748	-20.7	-5	1/14/2020	14:58	C	LFG	NA	X
	3435	-21	-5	1/14/2020	15:12	C	LFG	NA	X
	A7780	-20.7	-5	1/14/2020	15:21	C	LFG	NA	X
	A8066	-20.7	-5	1/15/2020	8:58	C	LFG	NA	X
	5836	-20.8	-5	1/16/2020	16:29	C	LFG	NA	X
	5902	-22.2	-5	1/20/2020	10:30	C	LFG	NA	X
	R2496	-22.5	-5	1/20/2020	10:41	C	LFG	NA	X
A7666	-22.3	-5							

Project No.: _____

Project Name: Bridgeton Landfill

Report To: Mike Lambrich

Company: Republic Services

Street: 13570 St. Charles Rock Rd.

City/State/Zip: Bridgeton, MO 63044

Phone& Fax: 314-683-3921

e-mail: Mlambrich@republicservices.com

LABORATORY USE ONLY

Sample ID **Sample Start** **Sample End** **Sample Pressure (\"hg)**

L012301 -85 -20.6 -5 _____

-86 -20.8 -5 _____

-87 -20.7 -5 _____

-88 -21 -5 _____

-89 -20.7 -5 _____

-90 -20.7 -5 _____

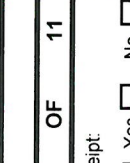
-91 -20.8 -5 _____

-92 -22.2 -5 _____

-93 -22.5 -5 _____

-94 -22.3 -5 _____

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services		COMMENTS	
SAMPLED BY: <u>Anthony Kimutis</u>	COMPANY: Republic Services	DATE/TIME: 1/14/2020 11:20:00	DATE/TIME: 1/20/2020
RELINQUISHED BY: <u>[Signature]</u>	RECEIVED BY: _____	DATE/TIME: 1/14/2020	DATE/TIME: _____
RELINQUISHED BY: _____	RECEIVED BY: _____	DATE/TIME: _____	DATE/TIME: _____
RELINQUISHED BY: _____	RECEIVED BY: <u>[Signature]</u>	DATE/TIME: 1/20/2020 10:50	DATE/TIME: _____
METHOD OF TRANSPORT (circle one): Walk-In ☒ FedEx ☐ UPS ☐ Courier ☐ ATLI ☐ Other _____			
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09			



AIR TECHNOLOGY
Laboratories, Inc.

18501 E. Gale Ave., Suite 130
City of Industry, CA 91748
Ph: 626-964-4032
Fx: 626-964-5832

CHAIN OF CUSTODY RECORD

TURNAROUND TIME: ☐ 48 hours ☐ 72 hours ☐ 96 hours
Standard ☐ Same Day ☐ 24 hours ☐ Other: 5 Day

DELIVERABLES: ☒ EDD ☐ EDF ☐ Level 3 ☐ Level 4

PAGE: 11 OF 11

Condition upon receipt: Sealed Yes ☐ No ☐
Intact Yes ☐ No ☐
Chilled _____ deg C

ANALYSIS REQUEST

P.O. No.: PO7112802
Bill to: Republic Services
Attn: Mike Lambrich
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LAB USE ONLY

Cannister Pressure ("hg)

Cannister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION				
L012301-95	A7753	-22.5	-5	GEW 166	1/20/2020	10:52	C	LFG	NA	X	D1946 + CO, H2	-2
-96	3826	-22.2	-5	GEW 165	1/20/2020	11:25	C	LFG	NA	X		-2
-97	5829	-22.1	-5	GEW 124	1/20/2020	11:41	C	LFG	NA	X		-2
-98	A7751	-22.4	-5	GEW 164	1/20/2020	11:56	C	LFG	NA	X		-2
-99	A7802	-22	-5	GEW 132	1/21/2020	11:02	C	LFG	NA	X		-2
-100	5928	-22	-5	GEW 185	1/21/2020	11:14	C	LFG	NA	X		-2
-101	5825	-21.8	-5	GEW 120	1/21/2020	11:25	C	LFG	NA	X		-2

BILLING

P.O. No.: PO7112802
Bill to: Republic Services
Attn: Mike Lambrich
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY INFORMATION

Project No.:
Project Name: Bridgeton Landfill
Report To: Mike Lambrich
Company: Republic Services
Street: 13570 St. Charles Rock Rd.
City/State/Zip: Bridgeton, MO 63044
Phone& Fax: 314-683-3921
e-mail: Mlambrich@republicservices.com

COMPANY INFORMATION

Company: Republic Services
Contact: Dave Penoyer
Address: 18501 E. Gale Ave., Suite 130, City of Industry, CA 91748
Phone: 626-964-4032, Fax: 626-964-5832

RECEIPT INFORMATION

SAMPLED BY: Anthony Kimutis
RELINQUISHED BY: Ado Yob
RELINQUISHED BY: Ado Yob
RELINQUISHED BY: Ado Yob

DATE/TIME

DATE/TIME: 1/20/2020
DATE/TIME: 1/21/2020
DATE/TIME: 1/21/2020

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RECEIVED BY: Ado Yob

DATE/TIME

DATE/TIME: 1/20/2020
DATE/TIME: 1/21/2020
DATE/TIME: 1/21/2020

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-01	L012301-02	L012301-03	L012301-04				
Client Sample I.D.:	GEW 156	GEW 59R	GEW 153	GEW 107				
Date/Time Sampled:	1/9/20 13:49	1/9/20 14:02	1/9/20 14:12	1/9/20 14:22				
Date/Time Analyzed:	1/26/20 12:30	1/26/20 12:44	1/26/20 12:59	1/26/20 13:13				
QC Batch No.:	200126GC8A1	200126GC8A1	200126GC8A1	200126GC8A1				
Analyst Initials:	CM	CM	CM	CM				
Dilution Factor:	2.4	3.0	3.0	3.0				
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	9.3	2.4	22	3.0	2.7 d	0.030	21	3.0
Carbon Dioxide	31	0.024	38	0.030	28	0.030	49	0.030
Oxygen/Argon	6.7	1.2	ND	1.5	2.1	1.5	2.5	1.5
Nitrogen	31	2.4	19	3.0	41	3.0	8.6	3.0
Methane	22	0.0024	20	0.0030	26	0.0030	19	0.0030
Carbon Monoxide	0.025	0.0024	0.064	0.0030	0.012	0.0030	0.077	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: A. SL for
Mark Johnson
Operations Manager

Date 1/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-05		L012301-06		L012301-07		L012301-08	
Client Sample I.D.:	GEW 58A		GEW 106		GEW 158		GEW 105	
Date/Time Sampled:	1/10/20 8:27		1/10/20 8:40		1/10/20 8:51		1/10/20 9:02	
Date/Time Analyzed:	1/26/20 13:28		1/26/20 13:42		1/26/20 13:56		1/26/20 14:11	
QC Batch No.:	200126GC8A1		200126GC8A1		200126GC8A1		200126GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		2.9	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	34	3.0	20	3.0	15	3.0	14	2.9
Carbon Dioxide	38	0.030	46	0.030	44	0.030	44	0.029
Oxygen/Argon	3.9	1.5	ND	1.5	ND	1.5	ND	1.4
Nitrogen	23	3.0	18	3.0	17	3.0	6.1	2.9
Methane	0.52	0.0030	14	0.0030	23	0.0030	35	0.0029
Carbon Monoxide	0.15	0.0030	0.062	0.0030	0.044	0.0030	0.044	0.0029

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-09		L012301-10		L012301-11		L012301-12	
Client Sample I.D.:	GEW 176		GEW 237		GEW 150		GEW 175	
Date/Time Sampled:	1/10/20 10:58		1/10/20 13:30		1/10/20 13:39		1/10/20 13:49	
Date/Time Analyzed:	1/26/20 14:25		1/26/20 14:40		1/26/20 17:34		1/26/20 17:48	
QC Batch No.:	200126GC8A1		200126GC8A1		200126GC8A2		200126GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.1		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	1.2 d	0.030	4.2 d	0.031	15	3.0	3.4 d	0.030
Carbon Dioxide	33	0.030	34	0.031	45	0.030	33	0.030
Oxygen/Argon	3.6	1.5	5.9	1.5	ND	1.5	5.5	1.5
Nitrogen	22	3.0	32	3.1	5.2	3.0	33	3.0
Methane	40	0.0030	24	0.0031	32	0.0030	25	0.0030
Carbon Monoxide	ND	0.0030	0.015	0.0031	0.049	0.0030	0.015	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: A. S. Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-13		L012301-14		L012301-15		L012301-16	
Client Sample I.D.:	GEW 157		GEW 152		GEW 104		GEW 57B	
Date/Time Sampled:	1/10/20 14:00		1/13/20 8:46		1/13/20 9:40		1/13/20 9:52	
Date/Time Analyzed:	1/26/20 18:03		1/26/20 18:17		1/26/20 18:32		1/26/20 18:46	
QC Batch No.:	200126GC8A2		200126GC8A2		200126GC8A2		200126GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.1		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	10	3.1	22	2.7	10	2.7	38	2.7
Carbon Dioxide	28	0.031	48	0.027	38	0.027	52	0.027
Oxygen/Argon	9.0	1.5	ND	1.4	ND	1.4	ND	1.4
Nitrogen	31	3.1	10	2.7	28	2.7	2.8	2.7
Methane	21	0.0031	19	0.0027	22	0.0027	5.2	0.0027
Carbon Monoxide	0.024	0.0031	0.076	0.0027	0.027	0.0027	0.087	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-17		L012301-18		L012301-19		L012301-20	
Client Sample I.D.:	GEW 217		GEW 218		GEW 220		GEW 145	
Date/Time Sampled:	1/13/20 10:07		1/13/20 10:20		1/13/20 13:29		1/13/20 13:43	
Date/Time Analyzed:	1/26/20 19:01		1/26/20 19:15		1/26/20 19:30		1/26/20 19:44	
QC Batch No.:	200126GC8A2		200126GC8A2		200126GC8A2		200126GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		2.7		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	23	2.8	9.1	2.7	12	2.8	24	2.8
Carbon Dioxide	47	0.028	33	0.027	46	0.028	48	0.028
Oxygen/Argon	ND	1.4	4.9	1.4	2.0	1.4	ND	1.4
Nitrogen	2.9	2.8	37	2.7	14	2.8	3.5	2.8
Methane	25	0.0028	16	0.0027	26	0.0028	23	0.0028
Carbon Monoxide	0.048	0.0028	0.033	0.0027	0.056	0.0028	0.040	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-21		L012301-22		L012301-23		L012301-24	
Client Sample I.D.:	GEW 178		GEW 102		GEW 179		GEW 219	
Date/Time Sampled:	1/13/20 14:14		1/13/20 14:28		1/13/20 14:40		1/13/20 14:58	
Date/Time Analyzed:	1/26/20 19:59		1/26/20 20:13		1/26/20 20:28		1/26/20 20:42	
QC Batch No.:	200126GC8A2		200126GC8A2		200126GC8A2		200126GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		2.8		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.035 d	0.028	16	2.8	ND d	0.028	13	2.8
Carbon Dioxide	26	0.028	36	0.028	55	0.028	19	0.028
Oxygen/Argon	7.2	1.4	6.0	1.4	ND	1.4	13	1.4
Nitrogen	43	2.8	20	2.8	ND	2.8	51	2.8
Methane	24	0.0028	21	0.0028	42	0.0028	3.5	0.0028
Carbon Monoxide	ND	0.0028	0.011	0.0028	ND	0.0028	0.045	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-25		L012301-26		L012301-27		L012301-28	
Client Sample I.D.:	GEW 174		GEW 126		GEW 239		GEW 90	
Date/Time Sampled:	1/13/20 15:11		1/15/20 14:20		1/16/20 8:50		1/16/20 9:04	
Date/Time Analyzed:	1/26/20 20:57		1/27/20 8:31		1/27/20 8:46		1/27/20 9:01	
QC Batch No.:	200126GC8A2		200126GC8A2		200126GC8A2		200126GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		3.1		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	15	2.8	14	3.1	29	2.7	17	2.7
Carbon Dioxide	36	0.028	45	0.031	34	0.027	37	0.027
Oxygen/Argon	2.1	1.4	1.8	1.5	7.3	1.4	ND	1.3
Nitrogen	34	2.8	24	3.1	29	2.7	26	2.7
Methane	13	0.0028	16	0.0031	0.78	0.0027	18	0.0027
Carbon Monoxide	0.049	0.0028	0.10	0.0031	0.095	0.0027	0.042	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946									
Lab No.:	L012301-29		L012301-30		L012301-31		L012301-32		
Client Sample I.D.:	GEW 67A		GEW 149		GEW 230		GEW 86		
Date/Time Sampled:	1/16/20 9:16		1/16/20 14:08		1/16/20 14:20		1/16/20 14:32		
Date/Time Analyzed:	1/27/20 9:15		1/27/20 9:30		1/27/20 13:03		1/27/20 13:17		
QC Batch No.:	200126GC8A2		200126GC8A2		200127GC8A1		200127GC8A1		
Analyst Initials:	CM		CM		CM		CM		
Dilution Factor:	2.7		2.8		2.8		2.8		
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	
Hydrogen	33	2.7	0.81	d 0.028	3.2	d 0.028	12	2.8	
Carbon Dioxide	54	0.027	19	0.028	9.4	0.028	23	0.028	
Oxygen/Argon	ND	1.4	2.2	1.4	15	1.4	9.5	1.4	
Nitrogen	4.2	2.7	71	2.8	72	2.8	48	2.8	
Methane	7.8	0.0027	7.0	0.0028	0.57	0.0028	7.1	0.0028	
Carbon Monoxide	0.067	0.0027	0.0061	0.0028	0.020	0.0028	0.030	0.0028	

Results normalized including non-methane hydrocarbons

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d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-33		L012301-34		L012301-35		L012301-36	
Client Sample I.D.:	GEW 88		GEW 13A		GEW 151		GEW 232	
Date/Time Sampled:	1/16/20 14:45		1/16/20 14:57		1/16/20 15:10		1/16/20 15:57	
Date/Time Analyzed:	1/27/20 13:32		1/27/20 13:46		1/27/20 14:01		1/27/20 14:15	
QC Batch No.:	200127GC8A1		200127GC8A1		200127GC8A1		200127GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		2.8		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	35	2.8	25	2.8	18	2.7	16	2.7
Carbon Dioxide	40	0.028	61	0.028	29	0.027	48	0.027
Oxygen/Argon	3.3	1.4	ND	1.4	5.3	1.4	2.9	1.4
Nitrogen	19	2.8	ND	2.8	41	2.7	14	2.7
Methane	1.9	0.0028	9.5	0.0028	6.1	0.0027	18	0.0027
Carbon Monoxide	0.11	0.0028	0.086	0.0028	0.050	0.0027	0.072	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: ASL
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-37		L012301-38		L012301-39		L012301-40	
Client Sample I.D.:	GEW 148		GEW 87		GEW 15		GEW 113	
Date/Time Sampled:	1/16/20 16:12		1/16/20 16:23		1/16/20 16:40		1/16/20 16:50	
Date/Time Analyzed:	1/27/20 14:30		1/27/20 14:44		1/27/20 14:59		1/27/20 15:13	
QC Batch No.:	200127GC8A1		200127GC8A1		200127GC8A1		200127GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	27	2.7	13	2.7	18	2.7	21	2.7
Carbon Dioxide	52	0.027	38	0.027	46	0.027	54	0.027
Oxygen/Argon	ND	1.4	5.6	1.4	ND	1.3	1.7	1.3
Nitrogen	ND	2.7	32	2.7	8.4	2.7	13	2.7
Methane	16	0.0027	10	0.0027	26	0.0027	10	0.0027
Carbon Monoxide	0.14	0.0027	0.036	0.0027	0.061	0.0027	0.091	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: A. S. Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

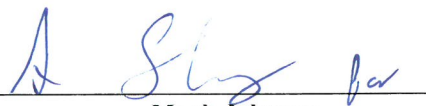
Lab No.:	L012301-41		L012301-42		L012301-43		L012301-44	
Client Sample I.D.:	GEW 238		GEW 16R		GEW 147		GEW 228	
Date/Time Sampled:	1/16/20 17:00		1/16/20 17:11		1/16/20 17:24		1/20/20 10:51	
Date/Time Analyzed:	1/27/20 15:28		1/27/20 15:42		1/27/20 15:57		1/27/20 16:11	
QC Batch No.:	200127GC8A1		200127GC8A1		200127GC8A1		200127GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	18	2.7	27	2.7	15	2.7	30	2.7
Carbon Dioxide	54	0.027	54	0.027	40	0.027	33	0.027
Oxygen/Argon	ND	1.3	ND	1.3	4.2	1.3	3.6	1.3
Nitrogen	14	2.7	8.1	2.7	23	2.7	26	2.7
Methane	13	0.0027	9.2	0.0027	17	0.0027	6.8	0.0027
Carbon Monoxide	0.073	0.0027	0.088	0.0027	0.048	0.0027	0.049	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:


Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-45		L012301-46		L012301-47		L012301-48	
Client Sample I.D.:	GEW 229		GEW 82R		GEW 137		GEW 236	
Date/Time Sampled:	1/20/20 11:16		1/20/20 13:56		1/20/20 14:07		1/20/20 14:18	
Date/Time Analyzed:	1/27/20 16:26		1/27/20 16:40		1/27/20 18:52		1/27/20 19:06	
QC Batch No.:	200127GC8A1		200127GC8A1		200127GC8A2		200127GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
	Hydrogen	0.86 d 0.027	20	2.7	ND d 0.027	37	2.7	
	Carbon Dioxide	11 0.027	32	0.027	40 0.027	38	0.027	
	Oxygen/Argon	11 1.3	1.4	1.3	ND 1.3	4.1	1.3	
	Nitrogen	75 2.7	39	2.7	21 2.7	17	2.7	
	Methane	2.0 0.0027	7.6	0.0027	38 0.0027	2.8	0.0027	
	Carbon Monoxide	0.0030 0.0027	0.068	0.0027	ND 0.0027	0.047	0.0027	

Results normalized including non-methane hydrocarbons

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d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-49		L012301-50		L012301-51		L012301-52	
Client Sample I.D.:	GEW 78R		GEW 138		GEW 227		GEW 135	
Date/Time Sampled:	1/20/20 14:33		1/20/20 14:43		1/20/20 15:21		1/20/20 15:33	
Date/Time Analyzed:	1/27/20 19:21		1/27/20 19:35		1/27/20 19:50		1/27/20 20:04	
QC Batch No.:	200127GC8A2		200127GC8A2		200127GC8A2		200127GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	12	2.7	3.7	d 0.027	25	2.7	14	2.7
Carbon Dioxide	25	0.027	16	0.027	36	0.027	31	0.027
Oxygen/Argon	1.9	1.3	6.2	1.3	5.4	1.3	4.6	1.3
Nitrogen	53	2.7	66	2.7	32	2.7	48	2.7
Methane	8.0	0.0027	7.9	0.0027	1.8	0.0027	2.4	0.0027
Carbon Monoxide	0.047	0.0027	0.022	0.0027	0.057	0.0027	0.056	0.0027

Results normalized including non-methane hydrocarbons

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d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: A S Long for
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-53	L012301-54	L012301-55	L012301-56					
Client Sample I.D.:	GEW 116	GEW 18B	GEW 133	GEW 233					
Date/Time Sampled:	1/21/20 8:34	1/21/20 8:47	1/21/20 9:03	1/21/20 9:16					
Date/Time Analyzed:	1/27/20 20:19	1/27/20 20:33	1/27/20 20:48	1/27/20 21:03					
QC Batch No.:	200127GC8A2	200127GC8A2	200127GC8A2	200127GC8A2					
Analyst Initials:	CM	CM	CM	CM					
Dilution Factor:	2.7	2.7	2.7	2.7					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	
	Hydrogen	5.7	2.7	18	2.7	2.1 d	0.027	16	2.7
	Carbon Dioxide	43	0.027	33	0.027	31	0.027	40	0.027
	Oxygen/Argon	4.7	1.3	4.4	1.3	2.1	1.3	ND	1.3
	Nitrogen	28	2.7	37	2.7	51	2.7	35	2.7
	Methane	18	0.0027	7.1	0.0027	13	0.0027	6.9	0.0027
	Carbon Monoxide	0.043	0.0027	0.067	0.0027	0.054	0.0027	0.051	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By:



Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-57		L012301-58		L012301-59		L012301-60	
Client Sample I.D.:	GEW 134		GEW 117		GEW 19A		GEW 118	
Date/Time Sampled:	1/21/20 9:29		1/21/20 9:46		1/21/20 9:58		1/21/20 10:32	
Date/Time Analyzed:	1/27/20 21:17		1/27/20 21:32		1/27/20 21:46		1/27/20 22:00	
QC Batch No.:	200127GC8A2		200127GC8A2		200127GC8A2		200127GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	6.4	2.7	0.61	d 0.027	25	2.7	26	2.7
Carbon Dioxide	28	0.027	45	0.027	57	0.027	41	0.027
Oxygen/Argon	4.3	1.3	2.2	1.3	3.7	1.3	ND	1.4
Nitrogen	55	2.7	7.8	2.7	12	2.7	29	2.7
Methane	5.9	0.0027	44	0.0027	1.8	0.0027	3.1	0.0027
Carbon Monoxide	0.025	0.0027	0.0066	0.0027	0.12	0.0027	0.13	0.0027

Results normalized including non-methane hydrocarbons

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d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-61		L012301-62		L012301-63		L012301-64	
Client Sample I.D.:	GEW 123		GEW 121		GEW 235		GEW 163	
Date/Time Sampled:	1/21/20 10:46		1/21/20 10:59		1/21/20 11:12		1/21/20 11:23	
Date/Time Analyzed:	1/27/20 22:15		1/27/20 22:29		1/27/20 22:44		1/27/20 22:58	
QC Batch No.:	200127GC8A2		200127GC8A2		200127GC8A2		200127GC8A2	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	4.0 d	0.027	6.5	2.7	16	2.7	7.6	2.7
Carbon Dioxide	51	0.027	46	0.027	49	0.027	55	0.027
Oxygen/Argon	ND	1.3	ND	1.3	ND	1.3	ND	1.4
Nitrogen	17	2.7	17	2.7	9.6	2.7	6.1	2.7
Methane	26	0.0027	29	0.0027	24	0.0027	30	0.0027
Carbon Monoxide	0.059	0.0027	0.024	0.0027	0.044	0.0027	0.021	0.0027

Results normalized including non-methane hydrocarbons

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d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-65		L012301-66		L012301-67		L012301-68	
Client Sample I.D.:	GEW 125		GEW 168		GEW 131		GEW 130	
Date/Time Sampled:	1/10/20 13:46		1/10/20 13:58		1/10/20 14:09		1/10/20 14:33	
Date/Time Analyzed:	1/27/20 23:13		1/27/20 23:27		1/28/20 8:30		1/28/20 8:44	
QC Batch No.:	200127GC8A2		200127GC8A2		200128GC8A1		200128GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		3.1	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	1.1 d	0.030	3.9 d	0.030	11	3.0	17	3.1
Carbon Dioxide	61	0.030	51	0.030	42	0.030	43	0.031
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	ND	3.0	14	3.0	ND	3.0	17	3.1
Methane	35	0.0030	30	0.0030	44	0.0030	21	0.0031
Carbon Monoxide	0.017	0.0030	0.023	0.0030	0.054	0.0030	0.12	0.0031

Results normalized including non-methane hydrocarbons

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RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-69	L012301-70	L012301-71	L012301-72				
Client Sample I.D.:	GEW 169	GEW 127	GEW 170	GEW 186				
Date/Time Sampled:	1/13/20 10:00	1/13/20 10:12	1/13/20 11:51	1/13/20 14:17				
Date/Time Analyzed:	1/28/20 8:59	1/28/20 9:28	1/28/20 9:43	1/28/20 9:58				
QC Batch No.:	200128GC8A1	200128GC8A1	200128GC8A1	200128GC8A1				
Analyst Initials:	CM	CM	CM	CM				
Dilution Factor:	2.8	2.8	2.8	2.8				
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	16	2.8	23	2.8	15	2.8	1.2 d	0.028
Carbon Dioxide	42	0.028	56	0.028	38	0.028	25	0.028
Oxygen/Argon	4.4	1.4	ND	1.4	6.1	1.4	9.8	1.4
Nitrogen	28	2.8	6.2	2.8	29	2.8	43	2.8
Methane	9.4	0.0028	13	0.0028	12	0.0028	21	0.0028
Carbon Monoxide	0.086	0.0028	0.18	0.0028	0.10	0.0028	0.011	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

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d = Analyzed by secondary analysis, batch number 200130GC8A1

Reviewed/Approved By: ASL per
Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-73		L012301-74		L012301-75		L012301-76	
Client Sample I.D.:	GEW 231		GEW 129		GEW 177		GEW 224	
Date/Time Sampled:	1/13/20 14:30		1/13/20 14:41		1/13/20 14:54		1/13/20 15:05	
Date/Time Analyzed:	1/28/20 10:14		1/28/20 10:28		1/28/20 10:43		1/28/20 10:57	
QC Batch No.:	200128GC8A1		200128GC8A1		200128GC8A1		200128GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		2.8		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	2.7 d	0.028	3.8 d	0.028	17	2.8	14	2.8
Carbon Dioxide	23	0.028	52	0.028	46	0.028	58	0.028
Oxygen/Argon	13	1.4	ND	1.4	1.8	1.4	ND	1.4
Nitrogen	51	2.8	11	2.8	23	2.8	ND	2.8
Methane	11	0.0028	32	0.0028	11	0.0028	25	0.0028
Carbon Monoxide	0.026	0.0028	0.041	0.0028	0.16	0.0028	0.11	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200130GC8A2

Reviewed/Approved By: ASL
Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-77		L012301-78		L012301-79		L012301-80	
Client Sample I.D.:	GEW 225		GEW 139		GEW 226		GEW 140	
Date/Time Sampled:	1/14/20 9:50		1/14/20 10:01		1/14/20 10:12		1/14/20 10:25	
Date/Time Analyzed:	1/28/20 11:12		1/28/20 11:26		1/28/20 11:41		1/28/20 11:55	
QC Batch No.:	200128GC8A1		200128GC8A1		200128GC8A1		200128GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		2.8		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	32	2.8	36	2.8	20	2.8	15	2.8
Carbon Dioxide	53	0.028	53	0.028	37	0.028	38	0.028
Oxygen/Argon	ND	1.4	ND	1.4	ND	1.4	ND	1.4
Nitrogen	4.1	2.8	3.5	2.8	32	2.8	23	2.8
Methane	9.1	0.0028	5.5	0.0028	9.0	0.0028	23	0.0028
Carbon Monoxide	0.27	0.0028	0.19	0.0028	0.11	0.0028	0.038	0.0028

Results normalized including non-methane hydrocarbons

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RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-81		L012301-82		L012301-83		L012301-84	
Client Sample I.D.:	GEW 240		GEW 172		GEW 223		GEW 171	
Date/Time Sampled:	1/14/20 11:34		1/14/20 11:45		1/14/20 13:42		1/14/20 13:54	
Date/Time Analyzed:	1/28/20 12:10		1/28/20 12:24		1/28/20 12:39		1/28/20 12:53	
QC Batch No.:	200128GC8A1		200128GC8A1		200128GC8A1		200128GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		2.8		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	10	2.8	21	2.8	13	3.0	3.7 d	0.030
Carbon Dioxide	23	0.028	43	0.028	58	0.030	32	0.030
Oxygen/Argon	5.6	1.4	3.5	1.4	ND	1.5	4.7	1.5
Nitrogen	52	2.8	14	2.8	3.2	3.0	16	3.0
Methane	8.5	0.0028	18	0.0028	25	0.0030	43	0.0030
Carbon Monoxide	0.046	0.0028	0.11	0.0028	0.079	0.0030	0.015	0.0030

Results normalized including non-methane hydrocarbons

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Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-85		L012301-86		L012301-87		L012301-88	
Client Sample I.D.:	GEW 100		GEW 222		GEW 68A		GEW 221	
Date/Time Sampled:	1/14/20 14:06		1/14/20 14:17		1/14/20 14:44		1/14/20 14:58	
Date/Time Analyzed:	1/28/20 13:08		1/28/20 13:23		1/29/20 9:40		1/29/20 9:55	
QC Batch No.:	200128GC8A1		200128GC8A1		200129GC8A1		200129GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		3.0		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	26	2.8	14	3.0	38	3.0	7.3	3.0
Carbon Dioxide	51	0.028	45	0.030	54	0.030	45	0.030
Oxygen/Argon	2.9	1.4	ND	1.5	ND	1.5	ND	1.5
Nitrogen	9.9	2.8	8.7	3.0	ND	3.0	21	3.0
Methane	9.7	0.0028	31	0.0030	1.0	0.0030	25	0.0030
Carbon Monoxide	0.074	0.0028	0.039	0.0030	0.14	0.0030	0.015	0.0030

Results normalized including non-methane hydrocarbons

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Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-89		L012301-90		L012301-91		L012301-92	
Client Sample I.D.:	GEW 180		GEW 101		GEW 181		GEW 234	
Date/Time Sampled:	1/14/20 15:12		1/14/20 15:21		1/15/20 8:58		1/16/20 16:29	
Date/Time Analyzed:	1/29/20 10:09		1/29/20 10:40		1/29/20 10:55		1/29/20 11:09	
QC Batch No.:	200129GC8A1		200129GC8A1		200129GC8A1		200129GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	3.0		3.0		3.0		2.6	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.19 d	0.030	ND d	0.030	ND d	0.030	17	2.6
Carbon Dioxide	60	0.030	49	0.030	71	0.030	31	0.026
Oxygen/Argon	1.7	1.5	ND	1.5	ND	1.5	4.7	1.3
Nitrogen	6.0	3.0	3.0	3.0	ND	3.0	43	2.6
Methane	32	0.0030	47	0.0030	25	0.0030	3.4	0.0026
Carbon Monoxide	0.011	0.0030	ND	0.0030	ND	0.0030	0.081	0.0026

Results normalized including non-methane hydrocarbons

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Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-93		L012301-94		L012301-95		L012301-96	
Client Sample I.D.:	GEW 167		GEW 122		GEW 166		GEW 165	
Date/Time Sampled:	1/20/20 10:30		1/20/20 10:41		1/20/20 10:52		1/20/20 11:25	
Date/Time Analyzed:	1/29/20 11:24		1/29/20 11:38		1/29/20 11:53		1/29/20 12:34	
QC Batch No.:	200129GC8A1		200129GC8A1		200129GC8A1		200129GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	32	2.7	7.4	2.7	36	2.7	6.7	2.7
Carbon Dioxide	43	0.027	33	0.027	55	0.027	31	0.027
Oxygen/Argon	ND	1.3	ND	1.3	ND	1.3	9.0	1.3
Nitrogen	12	2.7	26	2.7	ND	2.7	40	2.7
Methane	11	0.0027	32	0.0027	5.5	0.0027	12	0.0027
Carbon Monoxide	0.16	0.0027	0.033	0.0027	0.25	0.0027	0.032	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: ASL
Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-97		L012301-98		L012301-99		L012301-100	
Client Sample I.D.:	GEW 124		GEW 164		GEW 132		GEW 185	
Date/Time Sampled:	1/20/20 11:41		1/20/20 11:56		1/21/20 11:02		1/21/20 11:14	
Date/Time Analyzed:	1/29/20 12:48		1/29/20 13:03		1/29/20 13:17		1/29/20 13:32	
QC Batch No.:	200129GC8A1		200129GC8A1		200129GC8A1		200129GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.027	0.40 d	0.027	8.7	2.7	ND d	0.027
Carbon Dioxide	32	0.027	44	0.027	24	0.027	47	0.027
Oxygen/Argon	6.2	1.3	1.7	1.3	4.0	1.3	ND	1.3
Nitrogen	21	2.7	26	2.7	52	2.7	16	2.7
Methane	41	0.0027	28	0.0027	11	0.0027	35	0.0027
Carbon Monoxide	ND	0.0027	0.014	0.0027	0.043	0.0027	ND	0.0027

Results normalized including non-methane hydrocarbons

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Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 01/31/20

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/23/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L012301-101								
Client Sample I.D.:	GEW 120								
Date/Time Sampled:	1/21/20 11:25								
Date/Time Analyzed:	1/29/20 13:46								
QC Batch No.:	200129GC8A1								
Analyst Initials:	CM								
Dilution Factor:	2.9								
ANALYTE	Result % v/v	RL % v/v							
Hydrogen	0.12 d	0.029							
Carbon Dioxide	35	0.029							
Oxygen/Argon	3.5	1.4							
Nitrogen	26	2.9							
Methane	35	0.0029							
Carbon Monoxide	0.0052	0.0029							

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200130GC8A2

Reviewed/Approved By: Mark Johnson
 Mark Johnson
 Operations Manager

Date 01/31/20

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QC Batch No: 200126GC8A1
Matrix: Air
Reporting Units: % v/v

**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/26/20 9:42			1/25/20 21:47		1/25/20 22:02					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Limits		
									Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	5.31	106	5.32	106	0.1	70	130	30
Carbon Dioxide	ND	0.010	10	9.75	97	9.74	97	0.1	70	130	30
Oxygen/Argon	ND	0.50	15	17.4	118	17.5	118	0.1	70	130	30
Nitrogen	ND	1.0	70	76.1	109	76.2	109	0.0	70	130	30
Methane	ND	0.0010	0.10	0.112	112	0.111	111	0.7	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.112	112	0.111	111	0.2	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 01/31/20

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AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 200126GC8A2
Matrix: Air
Reporting Units: % v/v

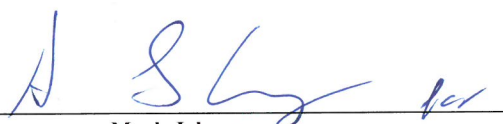
**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK		LCS	LCS D							
Date Analyzed:	1/26/20 17:19		1/26/20 16:36	1/26/20 16:50							
Analyst Initials:	CM		CM	CM							
Dilution Factor:	1.0		1.0	1.0							
					Limits						
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	4.71	94	4.70	94	0.4	70	130	30
Carbon Dioxide	ND	0.010	10	8.81	88	8.83	88	0.2	70	130	30
Oxygen/Argon	ND	0.50	15	16.0	108	16.0	108	0.2	70	130	30
Nitrogen	ND	1.0	70	69.8	100	69.9	100	0.2	70	130	30
Methane	ND	0.0010	0.10	0.112	112	0.111	111	0.4	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.112	112	0.112	112	0.2	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:



Mark Johnson
Operations Manager

Date

01/31/20

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QC Batch No: 200127GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

[illegible]

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson
Operations Manager

Date _____

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QC Batch No: 200127GC8A2
Matrix: Air
Reporting Units: % v/v

**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/27/20 17:54			1/27/20 18:23		1/27/20 18:37					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
									Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	4.98	100	4.96	99	0.4	70	130	30
Carbon Dioxide	ND	0.010	10	9.08	91	9.08	91	0.0	70	130	30
Oxygen/Argon	ND	0.50	15	16.2	109	16.1	109	0.1	70	130	30
Nitrogen	ND	1.0	70	70.3	101	70.2	100	0.1	70	130	30
Methane	ND	0.0010	0.10	0.111	111	0.111	111	0.0	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.113	113	0.113	113	0.0	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

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Operations Manager

Date _____

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QC Batch No: 200128GC8A1
Matrix: Air
Reporting Units: % v/v

**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/28/20 0:40			1/28/20 0:54		1/28/20 1:09					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Limits		
									Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	4.79	96	4.71	94	1.7	70	130	30
Carbon Dioxide	ND	0.010	10	8.89	89	8.91	89	0.2	70	130	30
Oxygen/Argon	ND	0.50	15	16.0	108	16.1	108	0.3	70	130	30
Nitrogen	ND	1.0	70	69.5	99	69.6	100	0.2	70	130	30
Methane	ND	0.0010	0.10	0.113	113	0.112	112	0.1	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.115	115	0.115	115	0.2	70	130	30

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Operations Manager

Date 01/31/20

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QC Batch No: 200129GC8A1
Matrix: Air
Reporting Units: % v/v

**ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/29/20 8:38			1/29/20 8:54		1/29/20 9:09					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
									Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	4.99	100	4.84	97	3.1	70	130	30
Carbon Dioxide	ND	0.010	10	9.08	91	8.92	89	1.8	70	130	30
Oxygen/Argon	ND	0.50	15	16.1	109	16.1	108	0.4	70	130	30
Nitrogen	ND	1.0	70	69.9	100	69.4	99	0.6	70	130	30
Methane	ND	0.0010	0.10	0.113	113	0.113	113	0.8	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.115	115	0.114	114	1.1	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date _____

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QC Batch No: 200130GC8A1
Matrix: Air
Reporting Units: % v/v

**ASTM D1946 Low Level Hydrogen
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/29/20 21:03			1/30/20 8:27		1/30/20 8:32					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
			Limits								
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	0.010	1.0	0.897	90	0.906	91	1.0	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date

01/31/20

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18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 200130GC8A2
Matrix: Air
Reporting Units: % v/v

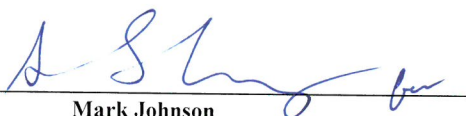
**ASTM D1946 Low Level Hydrogen
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/30/20 10:42			1/30/20 11:02		1/30/20 11:06					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
			Limits								
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	0.010	1.0	0.878	88	0.901	90	2.5	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date 01/31/20

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

February 5, 2020

Republic Services
ATTN: Mike Lambrich
13570 St. Charles Rock Rd.
Bridgeton, MO 63044



LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: L020301-01/04

Enclosed are results for sample(s) received 02/03/20 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich on 02/04/20.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.



18501 E. Gale Ave., Suite
130
City of Industry, CA 91748
Ph: 626-964-4032
Fx: 626-964-5832

Project No.:

Project Name: Bridgeton Landfill

Report To: Mike Lambrich

Company: Republic Services

Street: 13570 St. Charles Rock Rd.

City/State/Zip: Bridgeton, MO 63044

Phone & Fax: 314-683-3921

e-mail: Mlambrich@republicservices.com

Cannister Pressure ("hg)

LAB USE ONLY

SAMPLE IDENTIFICATION

Cannister ID

Sample Start

Sample End

1620301-01

1-02

1-03

1-04

3835

-21.5

-5

3162

-21.5

-5

A7769

-21.9

-5

5934

-21.6

-5

GEW 52

GEW 8

GEW 51

GEW 41R

SAMPLE DATE

SAMPLE TIME

CONTAINER QTY/TYPE

MATRIX

PRESERVATION

1/31/2020

8:16

C

LFG

NA

1/31/2020

8:28

C

LFG

NA

1/31/2020

8:39

C

LFG

NA

1/31/2020

8:55

C

LFG

NA

X

X

X

X

3

3

3

3

CHAIN OF CUSTODY RECORD

TURNAROUND TIME

DELIVERABLES

PAGE: 1 OF 1

Standard ☐ 48 hours ☐ EDD ☒

Same Day ☐ 72 hours ☐ EDF ☐

24 hours ☒ 96 hours ☐ Level 3 ☐

Other: 5 Day ☐ Level 4 ☐

Condition upon receipt:

Sealed Yes ☐ No ☐

Intact Yes ☐ No ☐

Chilled ☐ deg C

ANALYSIS REQUEST

P.O. No.: PO7112802

Bill to: Republic Services

Attn: Mike Lambrich

13570 St. Charles Rock Rd.

Bridgeton, MO 63044

COMMENTS

COMPANY: Republic Services

DAVE PENOYER

AUTHORIZATION TO PERFORM WORK:

COMPANY: Republic Services

DATE/TIME

SAMPLED BY: Anthony Kimutis

RECEIVED BY

DATE/TIME

1/31/2020

2:30

RECEIVED BY

DATE/TIME

1/31/2020

13:00

RECEIVED BY

DATE/TIME

1/31/2020

13:00

METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other

DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy

Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other

Rev. 03 - 5/7/09

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/03/20
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	L020301-01		L020301-02		L020301-03		L020301-04	
Client Sample I.D.:	GEW 52		GEW 8		GEW 51		GEW 41R	
Date/Time Sampled:	1/31/20 8:16		1/31/20 8:28		1/31/20 8:39		1/31/20 8:55	
Date/Time Analyzed:	2/4/20 4:19		2/4/20 4:34		2/4/20 4:48		2/4/20 5:03	
QC Batch No.:	200203GC8A1		200203GC8A1		200203GC8A1		200203GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.8		2.8		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.028	1.2 d	0.028	0.88 d	0.028	ND d	0.028
Carbon Dioxide	38	0.028	41	0.028	40	0.028	33	0.028
Oxygen/Argon	ND	1.4	ND	1.4	ND	1.4	ND	1.4
Nitrogen	6.3	2.8	3.4	2.8	4.1	2.8	12	2.8
Methane	54	0.0028	54	0.0028	55	0.0028	54	0.0028
Carbon Monoxide	ND	0.0028	ND	0.0028	ND	0.0028	ND	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Analyzed by secondary analysis, batch number 200204GC8A2

Reviewed/Approved By: _____

Mark Johnson
 Operations Manager

Date

2-4-20

The cover letter is an integral part of this analytical report



QC Batch No: 200203GC8A1

Matrix: Air

Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	2/3/20 12:25			2/3/20 10:58		2/3/20 11:13					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Limits		
									Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	4.83	97	4.81	96	0.5	70	130	30
Carbon Dioxide	ND	0.010	10	8.87	88	9.17	91	3.3	70	130	30
Oxygen/Argon	ND	0.50	15	15.8	106	15.4	104	2.3	70	130	30
Nitrogen	ND	1.0	70	68.4	98	67.5	97	1.3	70	130	30
Methane	ND	0.0010	0.10	0.110	110	0.110	110	0.1	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.111	111	0.111	111	0.0	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date

2-4-20

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AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 200204GC8A2

Matrix: Air

Reporting Units: % v/v

**ASTM D1946 Low Level Hydrogen
LABORATORY CONTROL SAMPLE SUMMARY**

Lab No.:	METHOD BLANK		LCS	LCSD							
Date Analyzed:	2/4/20 9:59		2/4/20 10:41	2/4/20 10:45							
Analyst Initials:	CM		CM	CM							
Dilution Factor:	1.0		1.0	1.0							
									Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	0.010	1.0	0.845	85	0.861	86	1.9	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date

2-4-20

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

ATTACHMENT D

GAS WELLFIELD DATA

ATTACHMENT D-1

WELLFIELD DATA TABLE

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-002	1/3/2020 9:27:35 AM	54.8	39.6	0.0	5.6	110.7	110.7	21.06	23.03	-0.75	-0.75	-13.35
GEW-002	1/9/2020 8:35:03 AM	53.3	40.4	0.0	6.3	110.2	110.2	12.65	17.49	-0.61	-0.61	-13.31
GEW-002	1/16/2020 2:15:00 PM	53.9	39.9	0.0	6.2	109.4	109.5	21.76	18.11	-0.67	-0.69	-14.11
GEW-002	1/16/2020 2:21:41 PM	53.8	40.1	0.0	6.1	109.5	109.3	18.70	17.70	-0.64	-0.66	-14.07
GEW-002	1/23/2020 11:32:20 AM	55.2	39.8	0.0	5.0	109.5	109.5	24.46	19.66	-0.42	-0.40	-13.86
GEW-002	1/31/2020 1:31:54 PM	53.8	37.0	0.0	9.2	109.7	109.7	27.50	30.39	-1.05	-1.00	-13.14
GEW-003	1/3/2020 10:05:46 AM	55.6	38.9	0.0	5.5	103.8	103.8	30.20	30.32	-0.82	-0.82	-13.52
GEW-003	1/10/2020 8:08:27 AM	56.7	40.1	0.0	3.2	108.4	108.3	17.30	18.12	-0.70	-0.72	-13.10
GEW-003	1/16/2020 2:25:54 PM	55.7	40.2	0.0	4.1	100.9	100.9	10.06	10.05	-0.42	-0.43	-13.35
GEW-003	1/16/2020 2:32:33 PM	55.6	40.2	0.0	4.2	99.9	99.9	5.45	4.76	-0.51	-0.53	-13.77
GEW-003	1/23/2020 11:36:08 AM	55.5	41.0	0.0	3.5	98.4	98.6	21.67	22.68	-0.05	-0.05	-13.82
GEW-003	1/23/2020 11:37:20 AM	54.6	41.8	0.0	3.6	98.7	98.7	23.16	22.34	-0.05	-0.05	-13.69
GEW-003	1/31/2020 10:47:02 AM	55.6	40.5	0.0	3.9	107.0	107.1	11.15	13.52	-0.69	-0.71	-13.56
GEW-004	1/3/2020 9:31:19 AM	54.6	40.0	0.0	5.4	105.9	105.7	3.97	1.82	-0.89	-0.89	-13.73
GEW-004	1/9/2020 8:38:40 AM	53.1	40.7	0.0	6.2	106.7	106.7	23.78	24.69	-0.13	-0.12	-12.72
GEW-004	1/16/2020 2:36:19 PM	52.5	39.5	0.0	8.0	106.2	106.5	14.83	14.83	-0.50	-0.50	-13.06
GEW-004	1/16/2020 2:43:24 PM	52.9	38.9	0.0	8.2	105.5	104.4	11.50	6.64	-0.48	-0.48	-13.02
GEW-004	1/23/2020 11:40:28 AM	52.9	41.5	0.0	5.6	102.8	102.5	8.16	4.71	0.08	0.08	-13.06
GEW-004	1/23/2020 11:41:59 AM	53.0	41.1	0.0	5.9	104.0	103.8	8.59	7.19	0.07	0.06	-13.69
GEW-004	1/24/2020 8:09:05 AM	54.3	39.8	0.0	5.9	106.0	105.7	10.01	9.20	-0.58	-0.57	-13.82
GEW-004	1/31/2020 10:49:56 AM	53.1	40.1	0.0	6.8	106.6	106.5	18.47	18.98	-0.59	-0.58	-13.77
GEW-005	1/3/2020 9:40:45 AM	51.5	37.6	0.0	10.9	74.8	74.8	4.83	6.83	-0.46	-0.47	-13.56
GEW-005	1/3/2020 9:43:03 AM	52.0	37.3	0.0	10.7	74.5	73.7	8.68	13.96	-0.50	-0.47	-13.52
GEW-005	1/9/2020 8:54:26 AM	54.7	39.8	0.0	5.5	76.3	76.4	24.28	24.28	-0.07	-0.07	-13.52
GEW-005	1/16/2020 3:11:25 PM	49.0	35.9	0.0	15.1	72.1	72.1	26.23	25.93	-0.18	-0.18	-13.61
GEW-005	1/16/2020 3:18:35 PM	48.9	35.9	0.0	15.2	70.2	70.2	12.84	12.53	-0.16	-0.16	-13.52
GEW-005	1/23/2020 1:40:41 PM	57.7	38.0	0.0	4.3	66.5	66.5	8.44	8.44	0.36	0.36	-13.06
GEW-005	1/23/2020 1:42:26 PM	56.8	39.0	0.0	4.2	67.5	67.5	7.44	8.57	0.35	0.35	-13.31
GEW-005	1/24/2020 8:22:42 AM	55.8	38.4	0.0	5.8	71.2	71.4	25.12	25.12	-0.27	-0.26	-13.52
GEW-005	1/31/2020 11:07:41 AM	51.4	38.5	0.0	10.1	73.6	73.6	28.33	28.20	-0.20	-0.20	-13.61
GEW-006	1/3/2020 9:50:22 AM	55.6	37.9	0.0	6.5	79.0	79.1	13.31	14.94	-0.67	-0.68	-13.61
GEW-006	1/9/2020 9:00:13 AM	56.0	39.7	0.0	4.3	81.2	81.2	25.55	25.71	-0.27	-0.21	-13.52
GEW-006	1/16/2020 3:36:06 PM	55.4	38.1	0.0	6.5	76.9	77.1	22.25	22.25	-0.49	-0.49	-13.56
GEW-006	1/16/2020 3:42:51 PM	55.9	37.3	0.0	6.8	76.8	76.6	10.77	7.87	-0.50	-0.51	-13.56
GEW-006	1/23/2020 1:51:15 PM	57.5	39.3	0.0	3.2	77.5	77.5	10.78	10.78	0.16	0.16	-13.40
GEW-006	1/23/2020 1:52:32 PM	57.6	39.0	0.0	3.4	77.7	77.7	25.81	25.05	0.13	0.13	-13.31
GEW-006	1/24/2020 8:33:39 AM	56.7	39.0	0.0	4.3	78.2	78.3	6.57	10.97	-0.52	-0.51	-14.11
GEW-006	1/31/2020 11:19:17 AM	55.6	38.4	0.0	6.0	79.0	79.0	14.69	13.60	-0.41	-0.41	-14.11
GEW-007	1/2/2020 10:44:10 AM	56.4	41.1	0.0	2.5	88.6	88.6	15.83	15.83	-6.00	-5.92	-13.61
GEW-007	1/8/2020 11:02:48 AM	56.5	39.6	0.0	3.9	89.6	89.8	8.57	10.14	-6.09	-6.09	-13.48
GEW-007	1/15/2020 9:53:59 AM	56.6	40.3	0.0	3.1	88.7	88.7	9.01	10.52	-5.75	-5.75	-13.69

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-007	1/15/2020 10:00:14 AM	56.7	40.1	0.0	3.2	88.6	88.8	11.20	11.52	-5.75	-5.75	-13.27
GEW-007	1/23/2020 9:29:00 AM	56.4	41.1	0.0	2.5	86.5	86.3	6.67	4.71	-5.75	-5.75	-13.82
GEW-007	1/29/2020 1:43:09 PM	56.7	40.3	0.0	3.0	86.6	86.6	11.53	13.59	-6.22	-6.09	-13.48
GEW-008	1/2/2020 10:47:32 AM	54.1	42.6	0.0	3.3	110.2	110.7	2.70	6.03	-0.79	-0.78	-13.65
GEW-008	1/8/2020 11:07:13 AM	53.4	41.9	0.0	4.7	110.7	110.3	12.35	12.65	-0.75	-0.75	-13.90
GEW-008	1/15/2020 10:04:03 AM	53.7	42.6	0.0	3.7	110.7	110.5	33.11	33.33	-0.97	-0.99	-13.65
GEW-008	1/15/2020 10:10:14 AM	53.6	43.1	0.0	3.3	110.5	110.5	37.05	37.05	-1.00	-1.00	-14.49
GEW-008	1/23/2020 9:32:50 AM	54.9	41.7	0.0	3.4	109.0	109.0	19.47	19.47	-0.80	-0.80	-14.15
GEW-008	1/29/2020 1:46:15 PM	54.6	41.8	0.0	3.6	110.2	110.0	24.72	23.98	-0.71	-0.70	-13.73
GEW-008	1/31/2020 8:24:01 AM	54.6	41.5	0.0	3.9	109.7	109.7	35.99	36.19	-0.91	-0.90	-13.77
GEW-008	1/31/2020 8:31:31 AM	54.3	42.1	0.0	3.6	109.7	109.7	27.37	27.10	-0.95	-0.95	-13.73
GEW-009	1/2/2020 10:50:27 AM	51.5	42.7	0.0	5.8	119.4	119.4	15.16	13.93	-0.04	-0.04	-13.48
GEW-009	1/8/2020 11:11:25 AM	51.6	40.9	0.0	7.5	119.4	118.5	15.30	16.75	-0.02	-0.02	-13.56
GEW-009	1/15/2020 10:14:16 AM	50.4	41.6	0.0	8.0	119.2	119.4	8.47	10.03	-0.15	-0.14	-13.56
GEW-009	1/15/2020 10:20:31 AM	51.0	40.3	0.0	8.7	119.2	119.4	8.79	8.76	-0.17	-0.17	-13.56
GEW-009	1/23/2020 9:36:45 AM	51.0	42.1	0.0	6.9	118.9	118.3	7.19	8.77	-0.08	-0.07	-13.86
GEW-009	1/29/2020 1:48:59 PM	52.3	41.6	0.0	6.1	117.9	118.1	9.30	9.68	-0.05	-0.06	-13.86
GEW-010	1/3/2020 8:43:20 AM	56.8	40.8	0.0	2.4	68.8	69.1	2.42	2.12	-6.54	-6.54	-20.17
GEW-010	1/3/2020 8:49:05 AM	56.6	40.8	0.0	2.6	69.1	69.3	1.55	1.76	-6.54	-6.54	-20.21
GEW-010	1/8/2020 9:52:36 AM	56.4	41.3	0.0	2.3	74.1	74.7	2.60	3.07	-6.08	-6.04	-18.69
GEW-010	1/15/2020 11:24:51 AM	55.2	43.0	0.0	1.8	79.8	79.8	2.67	2.67	-5.40	-5.40	-18.82
GEW-010	1/21/2020 1:45:22 PM	55.9	41.8	0.0	2.3	75.7	76.0	2.00	2.03	-5.36	-5.36	-18.18
GEW-010	1/29/2020 10:05:31 AM	56.5	40.9	0.0	2.6	66.8	66.9	1.75	2.42	-5.99	-5.99	-20.04
GEW-013A	1/7/2020 1:57:55 PM	9.2	70.5	0.0	20.3	192.9	192.9	36.12	36.15	-8.46	-8.46	-19.17
GEW-013A	1/7/2020 1:59:14 PM	9.0	70.8	0.0	20.2	192.9	192.3	35.70	36.85	-8.46	-8.54	-19.00
GEW-013A	1/16/2020 2:54:07 PM	10.7	61.7	0.0	27.6	192.9	191.7	36.56	36.56	-7.39	-7.39	-18.56
GEW-013A	1/16/2020 3:02:34 PM	10.8	60.8	0.0	28.4	192.9	192.9	36.04	35.94	-7.39	-7.39	-18.52
GEW-015	1/7/2020 2:47:11 PM	20.9	51.8	0.0	27.3	97.0	97.0	4.38	6.49	-2.82	-2.81	-19.21
GEW-015	1/16/2020 4:37:34 PM	27.3	48.2	0.0	24.5	69.4	69.3	3.50	3.08	-3.60	-3.58	-18.73
GEW-015	1/16/2020 4:43:05 PM	27.5	47.5	0.0	25.0	69.3	69.3	3.50	3.88	-3.61	-3.60	-18.73
GEW-016R	1/7/2020 2:30:14 PM	8.1	65.3	0.0	26.6	166.9	166.6	9.47	9.89	-2.83	-2.86	-19.00
GEW-016R	1/7/2020 2:32:01 PM	7.9	66.0	0.0	26.1	166.6	166.7	8.93	9.74	-2.81	-2.81	-19.08
GEW-016R	1/16/2020 5:08:17 PM	10.4	56.1	0.0	33.5	161.1	160.7	9.11	9.11	-3.11	-3.11	-19.11
GEW-016R	1/16/2020 5:14:52 PM	10.4	54.9	0.0	34.7	161.1	159.4	8.94	8.71	-3.12	-3.12	-19.11
GEW-018B	1/8/2020 2:10:35 PM	6.4	40.7	3.4	49.5	180.3	180.3	14.28	13.58	-9.20	-9.20	-20.47
GEW-018B	1/8/2020 2:12:01 PM	6.7	39.3	3.6	50.4	179.8	179.3	12.39	12.24	-8.74	-8.74	-19.03
GEW-018B	1/21/2020 8:43:41 AM	8.7	37.9	2.8	50.6	164.5	163.8	11.43	11.26	-11.86	-11.86	-20.17
GEW-018B	1/21/2020 8:53:23 AM	8.2	38.4	2.8	50.6	164.4	164.3	11.23	11.32	-11.82	-11.82	-20.21
GEW-019A	1/7/2020 10:25:28 AM	0.9	61.1	3.7	34.3	50.4	50.4	3.75	4.74	-18.31	-18.31	-20.01
GEW-019A	1/21/2020 9:55:25 AM	2.0	57.4	2.7	37.9	28.7	28.8	1.74	2.46	-18.24	-18.24	-19.62
GEW-019A	1/21/2020 10:03:31 AM	1.6	58.5	2.3	37.6	28.4	28.4	3.70	3.90	-18.07	-18.07	-19.03

January 2020 Wellfield Monitoring Data - Bridgeton Landfill												
Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-039	1/3/2020 1:56:52 PM	29.6	32.6	2.0	35.8	102.5	102.6	12.07	11.76	-0.18	-0.18	-20.38
GEW-039	1/8/2020 11:13:14 AM	27.0	32.1	2.7	38.2	104.8	104.8	10.46	12.37	-0.15	-0.16	-18.86
GEW-039	1/14/2020 2:18:59 PM	31.2	33.3	1.2	34.3	106.2	106.2	13.99	12.03	-0.16	-0.17	-18.60
GEW-039	1/14/2020 2:25:16 PM	31.4	32.2	1.2	35.2	106.1	106.0	11.58	11.80	-0.17	-0.17	-18.48
GEW-039	1/21/2020 3:06:28 PM	33.1	34.4	0.7	31.8	103.5	103.3	12.07	11.77	-0.19	-0.18	-18.86
GEW-039	1/29/2020 2:01:50 PM	29.5	32.0	2.2	36.3	102.8	102.8	12.62	12.02	-0.16	-0.16	-20.42
GEW-040	1/2/2020 11:16:03 AM	57.1	38.5	0.0	4.4	52.6	52.6	12.74	12.08	-0.27	-0.27	-13.06
GEW-040	1/8/2020 11:41:26 AM	52.1	35.0	0.0	12.9	48.6	48.5	9.86	9.92	-0.40	-0.39	-13.10
GEW-040	1/8/2020 11:43:09 AM	52.1	34.8	0.0	13.1	48.9	49.0	11.54	11.75	-0.16	-0.14	-13.10
GEW-040	1/15/2020 11:04:52 AM	60.3	37.3	0.0	2.4	52.1	52.0	4.94	4.94	-0.15	-0.15	-13.31
GEW-040	1/15/2020 11:10:22 AM	61.6	35.3	0.0	3.1	52.1	52.1	9.01	9.01	-0.30	-0.30	-13.14
GEW-040	1/23/2020 10:04:15 AM	56.0	37.1	0.0	6.9	35.5	35.4	11.89	11.90	-0.38	-0.39	-13.52
GEW-040	1/29/2020 2:18:24 PM	51.8	36.4	0.0	11.8	38.6	38.7	5.00	5.77	-0.36	-0.35	-13.31
GEW-040	1/29/2020 2:20:00 PM	52.4	35.5	0.0	12.1	38.5	38.5	10.01	10.01	-0.16	-0.16	-13.14
GEW-041R	1/2/2020 11:19:40 AM	57.3	36.9	0.0	5.8	61.6	63.4	28.09	27.93	0.04	0.06	-12.81
GEW-041R	1/2/2020 11:21:03 AM	57.1	37.6	0.0	5.3	64.3	64.7	35.70	35.66	-0.01	-0.01	-12.89
GEW-041R	1/8/2020 11:47:12 AM	52.9	34.8	0.0	12.3	74.1	73.9	3.95	4.84	-0.02	-0.01	-13.14
GEW-041R	1/15/2020 11:13:28 AM	52.9	34.7	0.0	12.4	73.4	73.6	5.59	3.95	-0.11	-0.11	-13.48
GEW-041R	1/15/2020 11:19:08 AM	52.2	35.4	0.0	12.4	73.0	72.9	6.25	6.84	-0.13	-0.12	-13.14
GEW-041R	1/23/2020 10:07:30 AM	52.5	35.5	0.0	12.0	54.2	54.7	9.09	9.15	-0.10	-0.13	-13.52
GEW-041R	1/29/2020 2:23:27 PM	54.3	35.5	0.0	10.2	53.7	53.9	6.97	7.53	-0.11	-0.11	-13.52
GEW-041R	1/31/2020 8:52:14 AM	53.9	36.4	0.0	9.7	55.7	55.9	8.52	8.52	-0.09	-0.09	-13.48
GEW-041R	1/31/2020 8:58:11 AM	54.7	34.9	0.0	10.4	56.0	56.0	7.62	8.21	-0.08	-0.08	-13.48
GEW-042R	1/2/2020 11:24:29 AM	57.5	39.9	0.0	2.6	101.8	101.5	25.08	25.37	-2.73	-2.73	-12.09
GEW-042R	1/8/2020 11:50:46 AM	56.2	37.3	0.0	6.5	101.6	101.6	4.68	6.62	-2.99	-2.98	-13.35
GEW-042R	1/15/2020 11:23:04 AM	56.3	38.3	0.0	5.4	100.9	100.7	30.37	29.64	-2.79	-2.79	-10.66
GEW-042R	1/15/2020 11:28:44 AM	56.0	38.9	0.0	5.1	101.1	100.8	10.12	6.63	-2.75	-2.76	-11.08
GEW-042R	1/23/2020 10:10:41 AM	56.9	38.0	0.0	5.1	98.6	98.7	29.56	29.56	-3.05	-3.05	-13.18
GEW-042R	1/29/2020 2:26:30 PM	57.6	38.0	0.0	4.4	99.1	99.4	16.02	16.02	-3.14	-3.14	-13.40
GEW-043R	1/2/2020 11:28:04 AM	55.9	41.6	0.0	2.5	114.9	114.8	23.11	24.03	-0.69	-0.70	-12.97
GEW-043R	1/8/2020 11:53:39 AM	56.1	39.5	0.0	4.4	114.9	114.8	30.27	30.15	-0.72	-0.70	-13.73
GEW-043R	1/15/2020 11:32:55 AM	55.0	41.4	0.0	3.6	115.1	115.2	30.59	31.17	-1.18	-1.17	-13.56
GEW-043R	1/15/2020 11:38:11 AM	55.5	40.1	0.0	4.4	115.3	115.5	12.86	16.09	-1.19	-1.19	-13.73
GEW-043R	1/23/2020 10:14:39 AM	55.8	40.0	0.0	4.2	113.7	113.7	11.40	12.31	-1.02	-1.02	-13.69
GEW-043R	1/29/2020 2:29:33 PM	56.9	39.4	0.0	3.7	113.5	113.5	26.61	26.47	-1.02	-1.02	-13.77
GEW-044	1/2/2020 11:31:06 AM	50.1	39.1	0.0	10.8	58.5	58.6	11.87	11.94	0.05	0.04	-12.81
GEW-044	1/2/2020 11:32:21 AM	50.1	38.1	0.0	11.8	59.9	60.0	14.43	13.86	-0.04	-0.04	-12.85
GEW-044	1/9/2020 8:14:44 AM	51.0	35.9	0.0	13.1	58.0	58.5	3.23	1.68	-0.16	-0.15	-13.14
GEW-044	1/15/2020 1:44:31 PM	45.2	34.7	0.0	20.1	70.5	70.4	8.40	9.28	-0.31	-0.31	-12.97
GEW-044	1/15/2020 1:50:56 PM	44.8	34.3	0.0	20.9	68.9	68.8	8.41	8.41	-0.19	-0.18	-13.02
GEW-044	1/23/2020 10:20:09 AM	55.8	38.8	0.0	5.4	44.0	44.0	11.49	8.40	-0.22	-0.24	-13.27

January 2020 Wellfield Monitoring Data - Bridgeton Landfill												
Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-044	1/29/2020 2:33:19 PM	46.7	36.6	0.0	16.7	46.5	46.4	6.90	6.84	-0.16	-0.17	-13.14
GEW-044	1/29/2020 2:34:27 PM	46.9	36.5	0.0	16.6	42.8	42.7	9.97	10.37	-0.09	-0.08	-13.48
GEW-045R	1/2/2020 11:39:27 AM	57.2	40.8	0.0	2.0	87.9	88.1	14.45	13.10	-3.74	-3.74	-12.85
GEW-045R	1/9/2020 8:23:11 AM	56.9	40.2	0.0	2.9	84.4	84.5	1.84	2.12	-3.40	-3.37	-13.14
GEW-045R	1/15/2020 2:26:49 PM	56.8	39.8	0.0	3.4	88.9	89.0	8.18	8.62	-4.06	-4.06	-13.06
GEW-045R	1/15/2020 2:32:48 PM	56.6	40.0	0.0	3.4	88.4	88.6	9.05	9.05	-4.09	-4.09	-13.14
GEW-045R	1/23/2020 10:28:11 AM	56.5	40.5	0.0	3.0	80.5	80.5	10.87	10.87	-3.36	-3.36	-13.31
GEW-045R	1/29/2020 2:45:36 PM	56.7	39.4	0.0	3.9	82.1	82.3	6.73	6.14	-3.48	-3.47	-13.40
GEW-046R	1/3/2020 9:20:12 AM	56.4	38.2	0.0	5.4	78.4	78.4	7.35	6.80	-0.48	-0.47	-12.76
GEW-046R	1/9/2020 8:26:52 AM	55.1	39.8	0.0	5.1	80.4	80.5	7.60	7.77	-0.10	-0.10	-12.89
GEW-046R	1/15/2020 2:35:50 PM	53.8	38.7	0.0	7.5	84.5	84.4	7.31	6.18	-0.44	-0.44	-13.14
GEW-046R	1/15/2020 2:43:16 PM	53.4	39.5	0.0	7.1	83.5	83.6	8.83	8.83	-0.47	-0.46	-13.35
GEW-046R	1/23/2020 10:32:13 AM	55.1	39.9	0.0	5.0	68.6	69.2	30.47	29.95	-0.14	-0.15	-13.52
GEW-046R	1/29/2020 2:48:27 PM	55.1	40.0	0.0	4.9	66.8	67.2	3.97	2.81	-0.13	-0.12	-13.31
GEW-047R	1/3/2020 9:36:49 AM	52.2	39.5	0.0	8.3	95.6	95.7	7.73	5.47	-0.55	-0.53	-13.31
GEW-047R	1/9/2020 8:44:59 AM	51.6	41.2	0.0	7.2	98.9	98.7	11.39	12.39	0.08	0.11	-13.14
GEW-047R	1/9/2020 8:46:46 AM	52.1	40.7	0.0	7.2	98.7	98.7	15.57	21.43	-0.03	-0.01	-13.40
GEW-047R	1/16/2020 2:54:22 PM	49.1	39.5	0.0	11.4	97.3	97.6	2.93	2.93	-0.24	-0.24	-13.56
GEW-047R	1/16/2020 3:02:07 PM	49.7	38.9	0.0	11.4	96.4	96.2	2.99	3.12	-0.26	-0.26	-13.56
GEW-047R	1/23/2020 11:47:43 AM	52.4	41.4	0.0	6.2	94.3	94.4	19.39	19.20	0.21	0.24	-13.86
GEW-047R	1/23/2020 11:49:13 AM	51.9	41.5	0.0	6.6	95.8	95.8	31.08	30.97	0.20	0.19	-13.82
GEW-047R	1/24/2020 8:12:59 AM	51.3	39.0	0.0	9.7	98.0	97.9	18.43	17.17	-0.35	-0.36	-13.69
GEW-047R	1/31/2020 11:01:53 AM	49.7	38.1	0.0	12.2	97.5	97.7	21.33	22.52	-0.29	-0.29	-13.61
GEW-047R	1/31/2020 11:03:07 AM	49.4	39.1	0.0	11.5	97.7	97.7	34.54	34.54	-0.28	-0.27	-13.65
GEW-048	1/3/2020 9:46:37 AM	57.0	38.3	0.0	4.7	93.1	92.9	28.71	30.49	-0.86	-0.85	-13.56
GEW-048	1/9/2020 8:56:49 AM	56.3	39.5	0.0	4.2	94.3	94.3	8.66	7.24	-0.34	-0.34	-14.20
GEW-048	1/16/2020 3:22:04 PM	56.2	38.8	0.0	5.0	91.9	92.0	9.89	9.89	-0.53	-0.54	-13.73
GEW-048	1/16/2020 3:28:52 PM	56.5	38.8	0.0	4.7	91.9	92.0	11.64	10.97	-0.57	-0.57	-13.98
GEW-048	1/23/2020 1:45:44 PM	56.6	38.8	0.0	4.6	92.6	92.7	10.63	9.90	0.11	0.11	-13.86
GEW-048	1/23/2020 1:47:09 PM	56.0	39.8	0.0	4.2	92.9	93.0	10.63	13.16	0.05	0.06	-13.94
GEW-048	1/24/2020 8:25:55 AM	56.2	39.6	0.0	4.2	93.6	93.6	29.44	29.44	-0.60	-0.60	-13.94
GEW-048	1/31/2020 11:10:12 AM	55.5	39.1	0.0	5.4	93.9	93.9	12.84	14.74	-0.56	-0.53	-14.28
GEW-049	1/2/2020 11:35:06 AM	52.1	38.4	0.0	9.5	87.0	87.2	12.94	14.07	0.16	0.15	-12.93
GEW-049	1/2/2020 11:36:23 AM	51.9	39.0	0.0	9.1	88.8	88.9	27.27	25.55	0.08	0.09	-13.02
GEW-049	1/3/2020 9:09:58 AM	50.4	34.1	0.0	15.5	86.1	86.1	11.03	11.03	-0.53	-0.54	-13.14
GEW-049	1/3/2020 9:11:25 AM	49.1	34.8	0.0	16.1	82.6	82.5	11.74	11.41	-0.49	-0.49	-13.10
GEW-049	1/9/2020 8:17:55 AM	55.5	39.7	0.0	4.8	75.3	75.5	6.24	3.95	0.24	0.23	-13.10
GEW-049	1/9/2020 8:19:11 AM	55.1	39.9	0.0	5.0	78.2	78.2	14.46	16.22	0.11	0.08	-13.14
GEW-049	1/10/2020 8:14:05 AM	50.3	36.1	0.0	13.6	90.5	90.8	21.98	21.98	-0.33	-0.32	-12.97
GEW-049	1/10/2020 8:15:17 AM	50.0	37.2	0.0	12.8	89.8	89.7	13.47	13.75	-0.29	-0.29	-13.02
GEW-049	1/15/2020 1:56:14 PM	50.1	37.3	0.0	12.6	80.5	80.7	7.85	7.34	-0.16	-0.16	-12.97

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-049	1/15/2020 2:01:41 PM	50.4	36.6	0.0	13.0	80.0	79.9	6.80	6.21	-0.15	-0.14	-12.97
GEW-049	1/23/2020 10:23:39 AM	56.4	39.4	0.0	4.2	62.6	63.1	5.64	2.60	-0.03	-0.03	-13.61
GEW-049	1/29/2020 2:38:12 PM	53.8	38.4	0.0	7.8	60.1	60.3	15.49	14.97	-0.04	-0.04	-13.31
GEW-050	1/2/2020 10:38:25 AM	55.2	38.9	0.0	5.9	98.4	98.4	18.09	19.09	-0.54	-0.51	-8.68
GEW-050	1/7/2020 10:59:01 AM	51.3	39.3	0.0	9.4	98.4	98.4	8.62	9.04	-0.50	-0.50	-6.28
GEW-050	1/7/2020 11:00:19 AM	51.2	38.8	0.0	10.0	98.0	97.7	9.05	9.05	-0.40	-0.40	-6.82
GEW-050	1/15/2020 9:31:06 AM	51.7	40.4	0.0	7.9	98.3	98.4	10.57	10.57	-0.36	-0.36	-8.05
GEW-050	1/15/2020 9:37:37 AM	53.1	38.0	0.0	8.9	97.9	98.0	10.61	10.39	-0.33	-0.31	-8.72
GEW-050	1/23/2020 9:20:03 AM	56.3	37.5	0.0	6.2	96.2	96.1	12.23	10.23	-0.19	-0.23	-7.58
GEW-050	1/29/2020 1:36:26 PM	54.7	36.3	0.0	9.0	96.5	96.7	29.19	29.19	-0.20	-0.15	-8.51
GEW-051	1/2/2020 10:54:25 AM	55.0	42.5	0.0	2.5	117.7	117.6	11.37	16.52	-0.63	-0.60	-12.81
GEW-051	1/8/2020 11:15:53 AM	55.2	40.6	0.0	4.2	117.3	117.1	10.03	7.10	-0.60	-0.62	-13.27
GEW-051	1/15/2020 10:26:35 AM	55.3	41.3	0.0	3.4	117.3	117.0	11.05	9.28	-0.94	-0.88	-13.77
GEW-051	1/15/2020 10:31:34 AM	55.9	40.1	0.0	4.0	116.8	117.0	18.18	17.17	-0.90	-0.88	-13.48
GEW-051	1/23/2020 9:41:26 AM	55.0	41.6	0.0	3.4	116.3	116.3	10.40	8.90	-0.52	-0.51	-13.86
GEW-051	1/29/2020 1:52:50 PM	54.8	41.2	0.0	4.0	116.0	116.3	8.91	11.07	-0.42	-0.42	-13.77
GEW-051	1/31/2020 8:35:59 AM	54.6	41.7	0.0	3.7	116.4	116.3	9.29	15.17	-0.75	-0.78	-12.68
GEW-051	1/31/2020 8:42:00 AM	55.6	40.0	0.0	4.4	116.3	116.1	36.30	34.78	-0.70	-0.71	-13.61
GEW-052	1/2/2020 10:41:14 AM	46.8	36.8	0.0	16.4	100.6	100.8	13.62	14.42	-0.05	-0.05	-13.27
GEW-052	1/8/2020 10:56:33 AM	43.6	35.6	0.0	20.8	69.8	70.0	9.06	10.20	-0.03	-0.02	-13.52
GEW-052	1/8/2020 10:58:32 AM	43.7	35.5	0.0	20.8	70.4	70.7	21.88	17.90	-0.01	-0.01	-13.48
GEW-052	1/9/2020 9:07:15 AM	55.8	41.2	0.0	3.0	74.5	74.6	3.42	3.64	-0.01	-0.01	-13.48
GEW-052	1/15/2020 9:40:45 AM	57.1	41.2	0.0	1.7	74.8	75.0	4.83	4.83	-0.01	-0.01	-13.27
GEW-052	1/15/2020 9:48:03 AM	56.7	41.5	0.0	1.8	75.5	75.3	6.57	6.66	-0.01	-0.01	-13.48
GEW-052	1/23/2020 9:23:51 AM	57.3	41.3	0.0	1.4	66.1	66.5	7.44	7.44	0.05	0.05	-13.31
GEW-052	1/23/2020 9:25:32 AM	56.8	41.8	0.0	1.4	67.0	66.9	16.61	16.99	0.05	0.05	-13.48
GEW-052	1/24/2020 8:38:28 AM	57.6	41.0	0.0	1.4	72.5	72.6	9.79	9.85	-0.04	-0.03	-13.56
GEW-052	1/29/2020 1:39:16 PM	57.5	39.6	0.0	2.9	71.7	72.3	10.47	10.09	0.11	0.11	-13.82
GEW-052	1/29/2020 1:40:34 PM	56.5	40.5	0.0	3.0	73.3	73.1	12.50	12.50	0.11	0.11	-13.48
GEW-052	1/30/2020 8:11:43 AM	54.1	38.8	0.0	7.1	67.9	68.4	6.88	6.88	-0.01	-0.01	-13.23
GEW-052	1/31/2020 8:13:14 AM	56.8	40.2	0.0	3.0	72.0	72.3	11.19	11.19	-0.03	-0.03	-13.48
GEW-052	1/31/2020 8:19:39 AM	56.7	39.7	0.0	3.6	72.5	72.3	11.18	11.18	-0.02	-0.02	-13.48
GEW-053	1/2/2020 11:02:04 AM	51.0	43.8	0.0	5.2	140.9	141.9	26.57	26.43	-0.13	-0.13	-12.85
GEW-053	1/2/2020 11:03:11 AM	50.8	44.1	0.0	5.1	141.5	141.5	26.30	25.37	-0.13	-0.11	-13.18
GEW-053	1/8/2020 11:22:55 AM	51.4	41.2	0.0	7.4	136.3	136.2	3.73	4.50	-0.38	-0.37	-13.23
GEW-053	1/8/2020 11:24:33 AM	50.8	42.1	0.0	7.1	136.6	137.1	9.14	9.14	-0.32	-0.32	-13.31
GEW-053	1/15/2020 10:37:14 AM	50.7	42.4	0.0	6.9	140.9	140.9	29.85	29.85	-0.59	-0.59	-13.48
GEW-053	1/15/2020 10:42:25 AM	51.0	42.1	0.0	6.9	140.9	141.5	24.23	25.48	-0.60	-0.61	-13.69
GEW-053	1/23/2020 9:48:22 AM	51.1	41.9	0.0	7.0	135.0	135.9	25.07	24.79	-0.35	-0.35	-13.69
GEW-053	1/23/2020 9:49:30 AM	50.6	42.9	0.0	6.5	135.0	135.3	31.49	29.55	-0.36	-0.36	-13.73
GEW-053	1/29/2020 2:02:48 PM	51.3	40.9	0.0	7.8	140.6	141.0	31.36	25.24	-0.19	-0.16	-13.52

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-053	1/29/2020 2:04:05 PM	50.4	42.5	0.0	7.1	140.6	141.2	22.64	28.81	-0.17	-0.16	-13.44
GEW-054	1/2/2020 11:06:28 AM	52.8	44.1	0.0	3.1	145.9	145.7	45.19	53.95	-3.90	-4.00	-13.40
GEW-054	1/2/2020 11:07:42 AM	52.9	44.3	0.0	2.8	145.9	145.9	60.06	62.09	-4.23	-4.26	-13.35
GEW-054	1/8/2020 11:29:27 AM	53.3	42.1	0.0	4.6	146.2	146.3	51.81	56.39	-4.23	-4.34	-12.89
GEW-054	1/8/2020 11:31:10 AM	53.5	42.0	0.0	4.5	146.3	146.1	65.60	68.35	-4.58	-4.69	-13.48
GEW-054	1/15/2020 10:46:03 AM	52.8	43.2	0.0	4.0	146.1	146.0	39.32	39.32	-4.37	-4.37	-12.97
GEW-054	1/15/2020 10:51:34 AM	53.4	42.4	0.0	4.2	146.1	146.0	46.46	52.87	-4.32	-4.45	-13.90
GEW-054	1/23/2020 9:52:56 AM	53.0	43.2	0.0	3.8	146.3	146.2	55.68	58.15	-4.26	-4.32	-13.98
GEW-054	1/23/2020 9:54:08 AM	52.9	43.7	0.0	3.4	146.1	146.2	63.33	62.63	-4.48	-4.56	-13.27
GEW-054	1/29/2020 2:08:08 PM	53.1	43.0	0.0	3.9	145.9	145.9	60.34	60.34	-4.19	-4.19	-14.03
GEW-054	1/29/2020 2:09:32 PM	53.2	43.2	0.0	3.6	145.9	145.9	58.34	55.74	-4.32	-4.39	-13.35
GEW-055	1/2/2020 11:13:16 AM	52.8	43.0	0.0	4.2	124.2	124.0	9.13	9.13	-0.50	-0.50	-12.89
GEW-055	1/8/2020 11:37:34 AM	52.5	42.2	0.0	5.3	123.9	123.9	6.68	8.74	-0.46	-0.48	-13.10
GEW-055	1/15/2020 10:56:39 AM	52.6	42.3	0.0	5.1	123.7	123.6	10.16	6.32	-0.90	-0.89	-13.31
GEW-055	1/15/2020 11:02:03 AM	52.7	42.5	0.0	4.8	123.7	123.7	4.33	7.35	-0.89	-0.89	-13.27
GEW-055	1/23/2020 10:00:02 AM	52.6	42.3	0.0	5.1	119.6	119.4	8.59	8.59	-0.82	-0.82	-13.52
GEW-055	1/29/2020 2:15:09 PM	53.0	42.0	0.0	5.0	119.2	119.4	8.46	8.46	-0.69	-0.69	-13.56
GEW-056R	1/3/2020 8:53:37 AM	44.3	40.3	0.0	15.4	63.0	62.9	2.17	1.81	-0.51	-0.51	-20.00
GEW-056R	1/3/2020 9:01:49 AM	44.2	40.4	0.0	15.4	62.5	62.6	3.86	3.46	-0.58	-0.58	-20.00
GEW-056R	1/8/2020 9:48:39 AM	44.0	38.8	0.0	17.2	80.7	81.0	6.16	6.05	-0.48	-0.47	-18.69
GEW-056R	1/15/2020 11:21:43 AM	46.3	43.2	0.0	10.5	85.2	85.1	1.88	1.48	-0.34	-0.34	-18.94
GEW-056R	1/21/2020 1:42:17 PM	48.5	41.1	0.0	10.4	65.9	66.1	5.08	4.79	-0.25	-0.24	-18.35
GEW-056R	1/29/2020 10:02:22 AM	48.8	40.4	0.0	10.8	59.7	59.7	6.21	5.71	-0.40	-0.40	-19.79
GEW-057B	1/13/2020 9:48:50 AM	6.3	55.1	0.0	38.6	140.0	140.0	3.17	2.68	-18.91	-18.91	-19.53
GEW-057B	1/13/2020 9:55:37 AM	6.2	53.1	0.0	40.7	141.5	141.5	2.09	2.99	-18.57	-18.57	-18.99
GEW-057B	1/23/2020 8:47:55 AM	6.6	54.8	0.0	38.6	129.0	129.2	3.38	2.27	-17.90	-17.90	-18.27
GEW-058A	1/10/2020 8:23:29 AM	0.5	42.7	2.4	54.4	57.5	57.5	3.85	3.85	-0.81	-0.81	-19.28
GEW-058A	1/10/2020 8:30:23 AM	0.5	43.1	2.3	54.1	56.8	56.8	3.22	3.22	-0.80	-0.80	-19.58
GEW-058A	1/24/2020 9:12:50 AM	0.6	51.4	0.3	47.7	38.9	38.9	1.20	1.20	-0.21	-0.20	-18.94
GEW-059R	1/9/2020 1:58:38 PM	21.4	41.8	0.0	36.8	106.4	106.5	6.38	6.57	-8.32	-8.32	-19.03
GEW-059R	1/9/2020 2:04:54 PM	21.4	41.3	0.0	37.3	107.5	107.5	6.37	6.37	-8.32	-8.32	-18.94
GEW-059R	1/24/2020 8:57:17 AM	22.2	41.2	0.0	36.6	122.3	122.6	5.99	6.26	-8.48	-8.48	-19.15
GEW-067A	1/7/2020 1:48:08 PM	5.9	63.4	0.0	30.7	202.3	202.3	35.25	34.14	2.47	2.34	-19.97
GEW-067A	1/7/2020 1:50:47 PM	5.5	65.3	0.0	29.2	202.3	201.6	25.59	24.51	-3.86	-3.93	-19.08
GEW-067A	1/16/2020 9:13:18 AM	8.8	55.3	0.0	35.9	200.8	200.8	22.82	22.11	-7.94	-7.94	-19.70
GEW-067A	1/16/2020 9:19:45 AM	8.9	55.5	0.0	35.6	200.8	200.8	22.12	21.77	-7.94	-7.94	-19.62
GEW-068A	1/14/2020 2:38:08 PM	0.9	65.9	0.0	33.2	201.6	201.6	52.79	51.86	-1.41	-1.40	-11.42
GEW-068A	1/14/2020 2:46:08 PM	1.1	65.9	0.0	33.0	201.6	201.6	51.83	51.35	-1.41	-1.41	-11.08
GEW-068A	1/23/2020 3:07:03 PM	1.1	53.0	0.0	45.9	198.6	198.6	27.95	28.28	-8.95	-8.95	-12.26
GEW-068A	1/23/2020 3:09:23 PM	0.9	55.0	0.0	44.1	198.4	198.1	27.35	24.20	-8.86	-8.86	-12.14
GEW-078R	1/8/2020 10:04:49 AM	10.3	28.4	0.0	61.3	152.1	152.0	21.58	18.07	-11.16	-11.16	-18.87

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-078R	1/8/2020 10:05:58 AM	9.7	30.3	0.0	60.0	151.7	151.7	17.48	17.22	-11.33	-11.16	-19.08
GEW-078R	1/20/2020 2:30:21 PM	9.3	30.6	0.0	60.1	146.6	146.6	17.38	17.40	-11.02	-11.02	-18.86
GEW-078R	1/20/2020 2:36:00 PM	9.7	28.6	0.0	61.7	147.0	147.3	16.74	16.27	-11.02	-11.02	-18.60
GEW-082R	1/8/2020 10:15:33 AM	9.7	37.1	0.0	53.2	173.1	173.1	3.71	3.84	-4.34	-4.34	-18.66
GEW-082R	1/8/2020 10:17:01 AM	9.4	38.1	0.0	52.5	172.6	173.1	2.22	2.62	-4.33	-4.32	-19.04
GEW-082R	1/20/2020 1:53:13 PM	8.9	35.8	0.1	55.2	170.5	170.4	2.53	2.47	-4.16	-4.16	-18.56
GEW-082R	1/20/2020 1:59:35 PM	9.0	35.8	0.0	55.2	171.0	170.8	2.05	2.04	-4.15	-4.15	-18.99
GEW-086	1/7/2020 11:32:16 AM	9.7	39.6	3.3	47.4	180.5	180.9	16.53	16.71	-0.04	-0.05	-19.55
GEW-086	1/7/2020 11:34:24 AM	9.8	38.4	4.2	47.6	183.4	183.3	16.46	18.11	-0.07	-0.05	-19.67
GEW-086	1/16/2020 2:29:19 PM	8.8	26.5	7.8	56.9	172.1	171.9	17.32	15.48	-0.21	-0.22	-18.39
GEW-086	1/16/2020 2:35:38 PM	8.6	25.8	7.9	57.7	170.0	169.5	16.78	16.23	-0.15	-0.14	-18.35
GEW-086	1/30/2020 8:34:28 AM	10.0	41.5	3.2	45.3	183.3	183.3	6.07	6.08	0.02	0.02	-19.49
GEW-086	1/30/2020 8:36:41 AM	10.8	39.1	3.6	46.5	183.3	183.9	6.88	6.87	-0.04	-0.03	-19.62
GEW-087	1/7/2020 2:09:06 PM	13.9	43.1	4.1	38.9	175.1	175.3	8.16	8.62	-9.13	-9.13	-19.59
GEW-087	1/7/2020 2:11:35 PM	14.6	42.9	3.9	38.6	173.3	173.6	15.67	16.51	-6.43	-6.43	-19.42
GEW-087	1/16/2020 4:20:35 PM	11.6	42.6	4.5	41.3	179.7	179.2	4.56	5.24	-4.15	-4.15	-18.82
GEW-087	1/16/2020 4:31:02 PM	12.4	42.2	4.1	41.3	177.7	177.5	3.62	3.50	-2.83	-2.84	-19.07
GEW-088	1/7/2020 2:03:51 PM	2.2	49.5	1.3	47.0	180.0	179.7	25.17	25.90	-1.01	-1.03	-19.21
GEW-088	1/7/2020 2:05:01 PM	2.1	48.5	1.2	48.2	180.3	180.2	25.92	26.10	-1.04	-1.04	-19.12
GEW-088	1/16/2020 2:42:02 PM	2.0	44.4	2.2	51.4	174.2	172.6	96.36	96.36	-1.01	-1.01	-18.05
GEW-088	1/16/2020 2:48:37 PM	2.0	42.8	2.1	53.1	175.8	175.7	89.94	93.30	-0.99	-1.00	-18.27
GEW-090	1/7/2020 11:15:28 AM	18.2	47.8	0.0	34.0	162.6	162.8	8.55	6.83	-17.46	-16.96	-19.17
GEW-090	1/16/2020 9:01:27 AM	20.1	40.9	0.0	39.0	162.0	162.0	6.71	6.67	-16.04	-16.04	-20.17
GEW-090	1/16/2020 9:07:37 AM	20.4	40.4	0.0	39.2	161.6	161.2	6.12	6.50	-16.04	-16.04	-20.04
GEW-091	1/3/2020 9:52:55 AM	3.3	55.9	0.0	40.8	187.6	187.0	26.03	26.04	-12.28	-12.28	-20.17
GEW-091	1/3/2020 10:00:11 AM	3.6	52.8	0.0	43.6	189.4	187.9	25.99	26.30	-12.28	-12.28	-20.21
GEW-091	1/8/2020 10:09:05 AM	3.5	54.9	0.0	41.6	193.9	192.3	28.38	28.38	-9.54	-9.54	-18.31
GEW-091	1/8/2020 10:10:59 AM	3.2	54.7	0.0	42.1	194.1	191.6	28.15	28.58	-9.54	-9.54	-18.52
GEW-091	1/15/2020 1:39:21 PM	3.1	54.2	0.0	42.7	195.0	195.0	35.89	35.74	-5.40	-5.40	-18.35
GEW-091	1/15/2020 1:40:33 PM	2.7	54.1	0.0	43.2	195.5	194.3	36.20	35.77	-5.40	-5.40	-17.89
GEW-091	1/21/2020 2:00:32 PM	3.1	54.9	0.0	42.0	195.4	195.0	37.65	37.68	-6.08	-6.08	-18.18
GEW-091	1/21/2020 2:02:00 PM	2.9	51.9	0.0	45.2	195.7	195.0	36.89	36.54	-6.71	-6.71	-18.52
GEW-091	1/29/2020 10:21:59 AM	6.6	48.8	0.0	44.6	138.0	139.0	14.10	13.25	-19.08	-19.08	-19.83
GEW-091	1/29/2020 10:23:31 AM	6.2	51.8	0.0	42.0	136.8	137.4	10.36	9.85	-19.00	-19.00	-19.92
GEW-100	1/14/2020 2:02:51 PM	11.5	61.6	0.0	26.9	135.0	135.0	6.61	2.80	-2.77	-2.66	-18.16
GEW-100	1/14/2020 2:08:46 PM	11.8	65.4	0.0	22.8	138.3	138.3	3.94	4.21	-2.40	-2.34	-18.53
GEW-100	1/27/2020 10:12:56 AM	12.7	55.9	0.0	31.4	33.8	33.8	3.42	2.75	-18.78	-18.78	-20.13
GEW-101	1/14/2020 3:18:16 PM	45.6	54.4	0.0	0.0	69.1	69.3	3.17	3.79	-0.14	-0.13	-17.73
GEW-101	1/14/2020 3:23:55 PM	47.4	52.0	0.0	0.6	72.0	72.0	5.05	5.05	-0.22	-0.22	-17.99
GEW-101	1/27/2020 10:38:40 AM	41.9	52.0	0.2	5.9	38.9	38.9	3.59	4.01	-0.30	-0.31	-20.13
GEW-102	1/13/2020 2:24:59 PM	20.2	36.3	6.3	37.2	40.8	40.9	3.57	3.45	-12.24	-12.24	-16.96

January 2020 Wellfield Monitoring Data - Bridgeton Landfill												
Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-102	1/13/2020 2:32:28 PM	22.8	39.4	4.6	33.2	41.2	41.2	2.98	5.31	-12.20	-12.20	-17.25
GEW-102	1/24/2020 11:27:19 AM	14.7	24.8	12.3	48.2	41.6	41.5	2.42	1.29	-10.17	-10.17	-17.38
GEW-102	1/24/2020 11:29:16 AM	13.7	23.3	13.2	49.8	41.5	41.5	1.26	1.35	-8.82	-8.82	-17.25
GEW-102	1/28/2020 3:23:58 PM	1.3	5.8	19.3	73.6	35.6	35.6	1.73	2.44	-18.60	-18.60	-18.87
GEW-102	1/28/2020 3:24:46 PM	1.3	5.5	19.3	73.9	35.4	35.4	1.22	3.23	-18.69	-18.60	-18.87
GEW-104	1/13/2020 9:37:32 AM	23.5	41.6	0.0	34.9	142.9	142.9	5.58	5.59	-13.85	-13.85	-19.53
GEW-104	1/13/2020 9:43:23 AM	23.8	39.9	0.0	36.3	142.5	141.5	7.42	6.54	-13.85	-13.85	-19.37
GEW-104	1/23/2020 1:43:26 PM	21.3	43.0	0.4	35.3	178.6	178.0	6.82	6.89	-8.95	-8.95	-18.73
GEW-104	1/23/2020 1:44:43 PM	21.3	42.4	0.3	36.0	178.1	178.0	6.53	6.52	-8.95	-8.95	-18.90
GEW-105	1/10/2020 8:59:36 AM	36.3	47.0	0.0	16.7	114.8	114.5	5.47	6.35	-8.78	-8.78	-19.49
GEW-105	1/10/2020 9:05:31 AM	36.6	46.1	0.0	17.3	116.3	116.3	7.65	6.31	-8.78	-8.78	-19.58
GEW-105	1/24/2020 10:25:47 AM	37.1	45.2	0.0	17.7	120.2	120.2	7.40	7.33	-9.16	-9.16	-18.77
GEW-106	1/10/2020 8:37:06 AM	15.1	50.0	0.3	34.6	171.6	171.0	1.38	1.96	-8.78	-8.78	-19.62
GEW-106	1/10/2020 8:43:52 AM	15.3	49.9	0.3	34.5	170.5	169.6	2.42	2.44	-8.44	-8.44	-19.87
GEW-106	1/22/2020 2:16:56 PM	15.2	46.1	0.1	38.6	163.3	163.8	12.30	13.15	-9.13	-9.13	-18.24
GEW-106	1/22/2020 2:18:20 PM	14.6	48.9	0.1	36.4	161.6	161.8	20.11	21.62	-8.12	-8.03	-18.28
GEW-107	1/2/2020 1:24:00 PM	17.5	52.0	2.2	28.3	125.5	125.8	11.99	11.99	-2.19	-2.19	-19.12
GEW-107	1/9/2020 2:19:15 PM	20.2	49.3	0.9	29.6	121.6	121.5	4.25	5.03	-2.28	-2.28	-19.20
GEW-107	1/9/2020 2:25:22 PM	20.1	50.6	1.0	28.3	122.8	123.4	4.24	3.57	-2.29	-2.28	-19.07
GEW-107	1/24/2020 9:07:36 AM	23.1	52.7	0.0	24.2	128.4	127.8	2.40	2.12	-2.55	-2.55	-18.94
GEW-108	1/3/2020 1:46:45 PM	33.5	47.9	0.1	18.5	179.2	179.2	0.93	1.94	-1.35	-1.35	-19.83
GEW-108	1/3/2020 1:47:47 PM	33.3	47.7	0.1	18.9	179.7	179.7	0.93	1.35	-1.36	-1.36	-19.96
GEW-108	1/8/2020 11:03:00 AM	33.4	45.9	0.1	20.6	177.5	177.5	2.96	3.56	-1.01	-1.00	-18.27
GEW-108	1/8/2020 11:04:46 AM	33.1	46.6	0.1	20.2	177.3	176.9	3.07	3.02	-1.13	-1.13	-18.65
GEW-108	1/14/2020 1:43:21 PM	33.8	47.9	0.0	18.3	179.2	179.2	3.07	3.13	-1.11	-1.12	-18.14
GEW-108	1/14/2020 1:50:03 PM	33.6	47.3	0.0	19.1	179.6	179.7	2.51	2.58	-0.94	-0.93	-17.59
GEW-108	1/21/2020 2:55:44 PM	33.7	46.9	0.0	19.4	171.6	171.0	9.85	9.41	-0.27	-0.27	-18.44
GEW-108	1/21/2020 2:56:50 PM	33.0	46.7	0.0	20.3	171.6	171.0	10.13	10.11	-0.30	-0.30	-18.27
GEW-108	1/29/2020 1:50:49 PM	33.6	45.6	0.1	20.7	172.6	172.3	4.08	4.15	-0.13	-0.13	-19.62
GEW-108	1/29/2020 1:51:56 PM	32.9	45.2	0.0	21.9	173.1	172.7	3.11	3.85	-0.13	-0.12	-19.45
GEW-109	1/3/2020 1:53:52 PM	40.1	40.6	0.9	18.4	88.9	88.9	5.32	6.11	-6.04	-6.04	-20.34
GEW-109	1/8/2020 11:10:27 AM	38.4	39.5	1.2	20.9	94.1	94.1	5.27	5.27	-5.15	-5.15	-18.48
GEW-109	1/14/2020 2:07:31 PM	39.9	40.3	0.7	19.1	104.0	104.1	5.08	5.65	-4.69	-4.69	-17.93
GEW-109	1/14/2020 2:13:50 PM	40.2	39.2	0.8	19.8	104.5	104.7	4.57	5.64	-4.69	-4.69	-18.14
GEW-109	1/21/2020 3:03:02 PM	37.2	37.8	1.3	23.7	77.9	78.2	4.90	4.48	-6.37	-6.37	-18.31
GEW-109	1/29/2020 1:58:22 PM	39.5	41.2	0.9	18.4	83.3	83.3	4.17	4.62	-5.40	-5.40	-19.83
GEW-110	1/3/2020 9:05:48 AM	26.6	37.7	5.4	30.3	52.4	52.4	0.62	2.04	-0.25	-0.24	-20.30
GEW-110	1/3/2020 9:11:30 AM	27.7	38.3	5.0	29.0	52.4	52.4	2.22	2.04	-0.25	-0.24	-20.30
GEW-110	1/8/2020 9:56:13 AM	28.7	37.4	3.9	30.0	61.3	61.4	1.35	1.41	-0.07	-0.07	-18.44
GEW-110	1/15/2020 11:28:52 AM	26.6	36.1	5.8	31.5	67.5	67.5	2.77	2.77	-0.02	-0.03	-18.90
GEW-110	1/15/2020 11:30:28 AM	30.7	41.0	3.3	25.0	67.7	67.7	0.96	1.83	-0.03	-0.03	-18.48

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-110	1/21/2020 1:48:37 PM	40.1	47.2	0.0	12.7	59.3	59.3	2.09	0.94	-0.02	-0.03	-18.27
GEW-110	1/29/2020 10:09:01 AM	36.4	45.2	1.2	17.2	45.8	45.9	1.37	1.12	-0.03	-0.02	-19.79
GEW-113	1/7/2020 2:22:25 PM	10.5	57.6	2.1	29.8	168.1	168.4	9.80	10.73	-1.52	-1.53	-19.25
GEW-113	1/7/2020 2:23:28 PM	10.4	58.7	2.1	28.8	168.5	168.5	8.04	8.04	-1.50	-1.50	-19.21
GEW-113	1/16/2020 4:47:03 PM	11.8	54.5	0.6	33.1	171.9	171.6	9.15	8.60	-1.85	-1.86	-18.94
GEW-113	1/16/2020 4:53:22 PM	11.7	54.2	0.7	33.4	171.6	171.6	8.66	8.65	-1.87	-1.87	-19.07
GEW-116	1/7/2020 10:11:57 AM	16.8	39.3	4.8	39.1	158.5	158.5	43.42	43.14	-4.74	-5.07	-20.18
GEW-116	1/7/2020 10:13:42 AM	16.4	40.5	4.7	38.4	157.3	157.3	39.35	44.06	-4.68	-4.74	-20.22
GEW-116	1/21/2020 8:31:17 AM	21.0	42.9	3.6	32.5	157.7	157.7	10.92	10.38	-1.19	-1.20	-20.08
GEW-116	1/21/2020 8:37:47 AM	20.5	44.3	3.4	31.8	157.3	157.3	12.44	11.02	-1.14	-1.13	-20.38
GEW-117	1/2/2020 1:38:53 PM	40.2	56.5	0.0	3.3	149.8	149.5	11.33	6.15	-16.41	-16.41	-19.00
GEW-117	1/2/2020 1:39:53 PM	40.5	55.4	0.0	4.1	149.5	149.1	10.93	11.02	-16.41	-16.41	-18.91
GEW-117	1/7/2020 10:22:56 AM	39.2	55.4	0.0	5.4	123.9	124.2	7.19	4.28	-17.63	-17.59	-20.05
GEW-117	1/21/2020 9:42:45 AM	47.7	49.0	0.0	3.3	36.9	37.1	2.09	2.39	-19.16	-19.16	-19.62
GEW-117	1/21/2020 9:49:42 AM	48.4	47.5	0.0	4.1	39.8	40.3	2.95	3.82	-19.08	-19.08	-19.62
GEW-118	1/9/2020 8:54:40 AM	3.6	44.8	0.0	51.6	187.0	186.4	35.52	35.15	-7.34	-7.34	-19.87
GEW-118	1/9/2020 8:55:30 AM	3.3	43.8	0.0	52.9	187.0	187.0	34.90	35.28	-7.34	-7.34	-19.41
GEW-118	1/21/2020 10:28:54 AM	3.8	45.8	0.0	50.4	188.3	188.3	36.54	36.43	-6.75	-6.75	-19.75
GEW-118	1/21/2020 10:36:25 AM	4.0	44.4	0.0	51.6	188.3	187.8	36.12	36.16	-6.75	-6.75	-18.99
GEW-120	1/2/2020 1:42:12 PM	34.7	47.7	1.1	16.5	122.3	122.1	14.86	9.56	-4.96	-4.98	-19.04
GEW-120	1/7/2020 10:28:12 AM	34.3	49.4	1.2	15.1	119.3	119.4	13.89	16.99	-4.82	-4.82	-19.67
GEW-120	1/21/2020 11:21:53 AM	36.7	42.5	1.4	19.4	118.7	118.6	16.12	13.11	-4.66	-4.71	-19.08
GEW-120	1/21/2020 11:28:17 AM	38.1	39.5	1.4	21.0	118.0	118.1	17.29	16.92	-4.72	-4.70	-19.50
GEW-121	1/9/2020 8:58:52 AM	24.2	52.5	0.0	23.3	141.9	141.9	4.01	4.53	-2.51	-2.50	-19.45
GEW-121	1/9/2020 8:59:47 AM	24.5	51.8	0.0	23.7	142.5	142.5	3.87	3.26	-2.51	-2.50	-19.28
GEW-121	1/21/2020 10:55:59 AM	31.4	47.8	0.0	20.8	140.9	140.6	4.80	4.76	-2.67	-2.68	-18.94
GEW-121	1/21/2020 11:05:09 AM	31.2	47.8	0.0	21.0	142.5	142.3	4.59	4.71	-2.55	-2.54	-18.90
GEW-122	1/9/2020 8:18:55 AM	33.5	37.8	0.0	28.7	89.3	89.3	14.48	14.40	-10.76	-10.76	-19.79
GEW-122	1/20/2020 10:38:10 AM	32.4	41.3	0.0	26.3	84.9	85.0	8.08	8.47	-11.16	-11.04	-20.18
GEW-122	1/20/2020 10:45:35 AM	34.0	36.3	0.0	29.7	87.1	87.2	12.49	12.69	-11.33	-11.29	-20.18
GEW-123	1/9/2020 9:09:45 AM	25.2	51.4	0.0	23.4	62.6	62.6	2.13	2.35	-2.56	-2.56	-19.62
GEW-123	1/21/2020 10:42:56 AM	27.2	50.9	0.0	21.9	54.2	54.2	2.72	3.22	-3.01	-3.02	-19.11
GEW-123	1/21/2020 10:49:41 AM	27.6	50.3	0.0	22.1	52.9	52.8	2.06	2.49	-2.94	-2.95	-19.07
GEW-124	1/9/2020 9:17:10 AM	0.4	3.4	20.9	75.3	58.0	57.9	4.14	4.14	-4.84	-4.85	-19.32
GEW-124	1/9/2020 9:20:14 AM	16.1	12.7	15.5	55.7	54.2	54.2	1.78	3.66	-4.99	-4.98	-19.37
GEW-124	1/20/2020 11:37:57 AM	53.0	42.9	1.2	2.9	39.2	39.2	3.43	6.86	-18.27	-18.27	-19.46
GEW-124	1/20/2020 11:48:12 AM	36.7	32.1	6.9	24.3	37.4	37.4	5.01	5.70	-18.94	-18.90	-19.12
GEW-125	1/10/2020 1:43:31 PM	35.3	64.5	0.0	0.2	63.0	63.0	5.00	5.00	-0.05	-0.04	-19.12
GEW-125	1/10/2020 1:49:59 PM	34.8	64.1	0.0	1.1	62.6	62.6	4.68	4.36	-1.22	-1.22	-19.00
GEW-125	1/24/2020 2:35:21 PM	45.3	44.1	1.9	8.7	38.8	38.8	3.31	2.79	-1.87	-1.86	-18.35
GEW-126	1/15/2020 2:17:33 PM	17.0	46.5	0.3	36.2	66.3	66.3	12.11	10.16	-11.19	-11.19	-17.93

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-126	1/15/2020 2:23:26 PM	17.0	47.0	0.3	35.7	65.8	65.8	12.29	12.06	-11.19	-11.19	-17.93
GEW-126	1/24/2020 2:39:50 PM	20.4	46.1	0.8	32.7	40.0	40.2	2.48	2.47	-13.59	-13.59	-18.27
GEW-127	1/13/2020 10:09:17 AM	13.9	63.4	0.3	22.4	47.6	47.6	16.47	16.42	-0.02	-0.01	-20.13
GEW-127	1/13/2020 10:16:01 AM	13.7	63.5	0.5	22.3	49.7	49.8	20.27	20.35	-0.14	-0.14	-19.88
GEW-127	1/27/2020 2:14:11 PM	12.9	48.4	2.8	35.9	60.4	60.4	14.40	14.70	-0.19	-0.19	-19.03
GEW-129	1/6/2020 2:15:23 PM	28.1	49.8	0.2	21.9	133.8	134.1	20.30	20.64	-4.62	-4.62	-17.93
GEW-129	1/6/2020 2:16:25 PM	28.2	49.9	0.2	21.7	134.1	134.1	21.01	21.14	-4.61	-4.60	-18.65
GEW-129	1/13/2020 2:38:11 PM	32.8	54.0	0.0	13.2	121.8	121.6	21.21	21.11	-4.71	-4.68	-19.33
GEW-129	1/13/2020 2:44:38 PM	32.2	54.4	0.0	13.4	121.3	121.3	21.74	21.53	-4.74	-4.73	-19.38
GEW-129	1/27/2020 10:34:53 AM	33.6	62.6	0.0	3.8	121.0	121.0	23.29	23.84	-4.88	-4.85	-20.18
GEW-130	1/10/2020 2:29:51 PM	21.4	48.7	0.0	29.9	159.4	159.0	11.79	11.79	-14.88	-14.88	-19.84
GEW-130	1/10/2020 2:35:45 PM	21.9	47.7	0.0	30.4	159.4	159.4	12.67	10.05	-14.71	-15.10	-19.33
GEW-130	1/22/2020 2:39:53 PM	20.1	43.1	0.0	36.8	156.0	155.7	2.97	2.81	-14.88	-14.84	-19.04
GEW-130	1/22/2020 2:41:00 PM	19.5	45.4	0.0	35.1	156.8	156.8	10.93	10.93	-15.22	-15.22	-18.96
GEW-131	1/10/2020 2:05:37 PM	44.1	47.0	0.0	8.9	121.0	121.0	3.84	5.74	-9.47	-9.47	-19.12
GEW-131	1/10/2020 2:11:39 PM	45.6	44.2	0.0	10.2	120.5	120.7	3.54	8.61	-9.26	-9.13	-19.12
GEW-131	1/27/2020 1:53:09 PM	36.5	50.2	0.0	13.3	44.1	44.2	1.00	2.02	-2.45	-2.46	-18.94
GEW-132	1/9/2020 8:51:45 AM	14.1	29.4	2.3	54.2	121.0	120.7	5.28	4.82	-1.49	-1.49	-19.45
GEW-132	1/21/2020 10:58:36 AM	11.4	31.6	2.3	54.7	124.2	124.2	6.17	7.13	-1.61	-1.61	-19.63
GEW-132	1/21/2020 11:05:48 AM	11.9	28.4	2.3	57.4	126.4	126.4	8.24	3.96	-1.51	-1.51	-19.46
GEW-133	1/2/2020 1:35:50 PM	9.3	34.0	0.0	56.7	83.2	83.3	15.83	17.51	-4.31	-4.31	-20.05
GEW-133	1/7/2020 10:17:11 AM	5.7	36.9	0.0	57.4	120.2	120.2	19.30	19.30	-3.86	-3.86	-19.50
GEW-133	1/21/2020 9:00:16 AM	15.1	35.8	0.0	49.1	33.9	34.0	28.11	23.85	-4.65	-4.65	-19.58
GEW-133	1/21/2020 9:06:27 AM	15.3	34.3	0.0	50.4	36.6	36.7	27.90	27.87	-4.64	-4.65	-19.53
GEW-134	1/8/2020 2:14:56 PM	5.0	32.8	1.9	60.3	69.8	69.7	2.06	2.66	-0.32	-0.32	-18.65
GEW-134	1/21/2020 9:25:59 AM	7.3	32.6	2.8	57.3	36.0	36.0	1.27	2.20	-0.47	-0.47	-19.66
GEW-134	1/21/2020 9:32:11 AM	7.4	30.9	2.9	58.8	35.8	35.9	1.27	1.27	-0.50	-0.50	-19.75
GEW-135	1/8/2020 2:02:16 PM	2.6	42.6	1.1	53.7	97.5	97.9	19.96	19.66	-0.85	-0.84	-17.46
GEW-135	1/20/2020 3:29:41 PM	2.7	37.9	2.2	57.2	65.4	65.6	33.71	33.54	-1.89	-1.88	-16.58
GEW-135	1/20/2020 3:37:05 PM	2.7	37.0	2.3	58.0	65.6	65.4	29.44	29.04	-1.59	-1.57	-16.15
GEW-137	1/8/2020 10:09:34 AM	35.7	42.3	0.0	22.0	63.8	64.0	3.18	7.31	-2.99	-2.99	-19.04
GEW-137	1/20/2020 2:04:07 PM	40.1	42.8	0.0	17.1	42.0	42.1	3.03	3.03	-2.98	-2.98	-18.48
GEW-137	1/20/2020 2:10:42 PM	40.3	41.9	0.0	17.8	42.8	42.8	2.12	2.46	-3.07	-3.07	-18.31
GEW-138	1/8/2020 10:00:53 AM	5.6	15.6	7.5	71.3	50.4	50.4	2.48	3.04	-0.05	-0.05	-19.12
GEW-138	1/8/2020 10:02:11 AM	5.7	15.4	7.5	71.4	51.0	50.9	2.15	2.15	-0.05	-0.05	-18.87
GEW-138	1/20/2020 2:39:50 PM	9.8	21.8	3.2	65.2	34.4	34.1	2.52	2.52	0.00	0.00	-18.99
GEW-138	1/20/2020 2:45:53 PM	9.8	19.4	3.3	67.5	30.6	30.5	2.85	3.38	-0.01	-0.01	-18.65
GEW-139	1/14/2020 9:57:55 AM	6.0	61.6	0.3	32.1	124.7	124.5	1.08	3.58	-1.64	-1.64	-19.00
GEW-139	1/14/2020 10:04:23 AM	6.3	62.1	0.2	31.4	125.0	125.8	2.41	3.74	-1.60	-1.61	-19.33
GEW-139	1/27/2020 1:58:48 PM	3.2	55.2	0.0	41.6	143.2	141.5	1.07	1.10	-0.55	-0.55	-18.94
GEW-139	1/27/2020 2:00:08 PM	3.2	55.0	0.0	41.8	142.6	142.9	1.19	1.07	-0.57	-0.57	-18.94

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-140	1/6/2020 2:07:02 PM	21.8	37.1	0.1	41.0	120.2	120.2	12.27	12.22	-3.61	-3.61	-18.39
GEW-140	1/14/2020 10:22:21 AM	23.2	43.2	0.0	33.6	80.4	80.4	11.53	10.75	-4.78	-4.78	-17.48
GEW-140	1/14/2020 10:28:13 AM	23.6	42.0	0.0	34.4	78.1	78.1	11.15	11.05	-5.07	-5.24	-17.19
GEW-140	1/27/2020 3:14:50 PM	24.8	42.9	0.0	32.3	53.9	53.9	21.96	21.89	-5.83	-5.83	-19.28
GEW-145	1/13/2020 1:40:00 PM	24.1	49.9	0.0	26.0	43.1	42.8	3.94	3.94	-1.05	-1.05	-18.90
GEW-145	1/13/2020 1:46:46 PM	23.9	48.4	0.0	27.7	43.1	43.1	4.32	4.13	-1.40	-1.40	-19.24
GEW-145	1/24/2020 11:23:43 AM	24.5	49.1	0.0	26.4	41.0	41.0	4.00	3.11	-0.49	-0.49	-18.48
GEW-147	1/7/2020 2:43:28 PM	17.6	47.7	2.4	32.3	178.1	178.4	17.99	17.53	-4.87	-4.88	-19.08
GEW-147	1/7/2020 2:45:05 PM	17.3	47.8	2.4	32.5	178.2	178.1	17.58	17.50	-4.92	-4.92	-19.17
GEW-147	1/16/2020 5:20:05 PM	17.9	45.1	2.9	34.1	158.1	157.7	11.32	10.73	-7.72	-7.72	-18.86
GEW-147	1/16/2020 5:27:10 PM	18.4	44.0	3.0	34.6	158.5	158.1	8.90	9.76	-7.72	-7.72	-18.99
GEW-148	1/7/2020 2:14:28 PM	16.6	61.0	0.0	22.4	145.2	145.2	7.29	6.53	-10.57	-10.70	-19.21
GEW-148	1/7/2020 2:16:13 PM	16.2	62.0	0.0	21.8	143.6	143.5	2.05	1.78	-8.79	-8.79	-19.12
GEW-148	1/16/2020 4:09:07 PM	17.5	53.2	0.0	29.3	144.3	143.9	5.96	6.79	-7.22	-7.22	-18.44
GEW-148	1/16/2020 4:15:32 PM	17.7	53.7	0.0	28.6	144.5	144.9	6.16	5.89	-7.22	-7.22	-18.52
GEW-149	1/7/2020 1:53:27 PM	12.4	30.1	0.0	57.5	59.1	59.2	4.05	8.97	-0.09	-0.08	-19.04
GEW-149	1/16/2020 2:04:37 PM	9.1	19.3	0.5	71.1	44.9	45.0	1.37	1.85	-0.11	-0.11	-18.27
GEW-149	1/16/2020 2:11:53 PM	8.8	21.4	0.3	69.5	49.0	49.0	3.96	2.54	-0.06	-0.07	-18.27
GEW-150	1/10/2020 1:36:33 PM	33.7	47.1	0.1	19.1	124.2	124.5	1.52	1.52	-0.63	-0.63	-18.90
GEW-150	1/10/2020 1:42:43 PM	34.0	46.6	0.1	19.3	128.9	128.3	1.27	1.39	-0.65	-0.65	-18.94
GEW-150	1/28/2020 8:29:50 AM	34.0	44.5	0.9	20.6	94.3	94.6	4.19	2.92	-0.87	-0.87	-20.13
GEW-151	1/7/2020 1:45:57 PM	9.0	34.1	3.5	53.4	64.2	64.2	2.70	1.71	-0.24	-0.23	-19.08
GEW-151	1/16/2020 3:07:19 PM	7.6	34.3	3.9	54.2	47.0	47.0	2.84	2.55	-0.20	-0.19	-18.27
GEW-151	1/16/2020 3:13:14 PM	7.6	32.5	4.0	55.9	44.4	44.3	3.79	2.85	-0.19	-0.19	-18.44
GEW-152	1/13/2020 8:42:34 AM	20.3	51.6	0.0	28.1	79.8	79.6	26.28	26.32	-3.62	-3.61	-19.24
GEW-152	1/13/2020 8:50:00 AM	20.6	50.4	0.0	29.0	79.4	75.9	19.79	19.92	-3.25	-3.24	-19.37
GEW-152	1/24/2020 9:04:54 AM	21.2	49.1	0.0	29.7	79.8	80.0	26.58	27.02	-3.23	-3.23	-19.15
GEW-153	1/9/2020 2:08:40 PM	27.9	32.3	0.0	39.8	88.2	88.2	4.44	4.58	-4.63	-4.63	-19.11
GEW-153	1/9/2020 2:15:06 PM	28.2	31.3	0.0	40.5	87.6	87.7	3.82	4.45	-4.64	-4.63	-19.28
GEW-153	1/24/2020 8:59:49 AM	27.5	34.0	0.0	38.5	87.1	87.2	4.54	4.95	-5.07	-5.07	-18.90
GEW-156	1/9/2020 1:46:00 PM	31.8	42.7	0.0	25.5	90.7	90.6	4.05	4.04	-9.79	-9.79	-19.28
GEW-156	1/9/2020 1:52:18 PM	31.0	43.9	0.0	25.1	93.1	92.5	4.80	4.83	-9.67	-9.67	-18.94
GEW-156	1/24/2020 8:53:56 AM	33.3	44.9	0.0	21.8	91.0	91.0	5.21	4.71	-10.85	-10.85	-19.20
GEW-157	1/10/2020 1:56:46 PM	35.7	45.4	0.2	18.7	76.7	76.8	2.00	3.26	-7.43	-7.43	-18.10
GEW-157	1/10/2020 2:03:53 PM	35.6	45.8	0.2	18.4	77.3	77.3	3.26	1.03	-7.43	-7.43	-18.01
GEW-157	1/24/2020 10:33:50 AM	34.8	45.2	0.2	19.8	62.3	62.4	2.61	3.01	-8.10	-8.10	-17.29
GEW-158	1/10/2020 8:48:28 AM	24.5	47.0	0.0	28.5	91.9	92.0	2.54	2.28	-1.63	-1.63	-19.62
GEW-158	1/10/2020 8:55:04 AM	24.8	45.7	0.0	29.5	92.0	91.9	2.28	1.61	-1.60	-1.60	-19.28
GEW-158	1/24/2020 10:28:53 AM	26.1	46.2	0.0	27.7	87.0	86.8	2.35	2.35	-1.49	-1.49	-19.24
GEW-159	1/3/2020 1:42:59 PM	32.1	30.8	6.6	30.5	57.5	57.5	2.06	2.45	-2.39	-2.39	-19.79
GEW-159	1/3/2020 1:44:01 PM	31.7	30.1	6.6	31.6	56.1	56.0	1.15	1.28	-1.84	-1.84	-19.96

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-159	1/6/2020 10:00:17 AM	26.3	27.6	9.6	36.5	58.0	58.2	7.80	4.04	-1.67	-1.67	-19.92
GEW-159	1/6/2020 11:20:51 AM	27.7	29.1	8.4	34.8	58.2	58.5	5.59	7.11	-1.10	-1.10	-19.04
GEW-159	1/8/2020 10:59:27 AM	17.2	17.7	12.3	52.8	52.2	52.2	1.74	2.46	-1.13	-1.14	-18.27
GEW-159	1/8/2020 11:00:23 AM	17.1	17.7	12.3	52.9	51.0	51.0	3.26	2.75	-0.90	-0.90	-18.27
GEW-159	1/14/2020 2:54:57 PM	1.5	5.7	17.5	75.3	71.8	72.4	1.21	1.18	-0.58	-0.58	-17.59
GEW-159	1/14/2020 2:58:59 PM	1.5	5.4	17.1	76.0	78.7	74.8	0.83	0.99	-0.65	-0.65	-18.14
GEW-159	1/15/2020 2:09:19 PM	0.5	2.1	19.5	77.9	62.6	61.5	2.00	2.00	-0.56	-0.56	-17.93
GEW-159	1/15/2020 2:49:52 PM	0.2	0.7	20.7	78.4	58.7	58.8	2.43	1.72	-0.67	-0.67	-18.27
GEW-159	1/15/2020 3:15:12 PM	0.7	3.1	18.9	77.3	59.6	59.6	2.42	2.42	-1.17	-1.17	-18.44
GEW-159	1/20/2020 1:25:29 PM	2.3	4.7	17.6	75.4	37.4	37.4	4.55	3.78	-0.45	-0.44	-18.65
GEW-159	1/20/2020 1:32:05 PM	2.2	4.7	17.6	75.5	37.2	37.3	3.10	3.09	-0.46	-0.46	-18.73
GEW-159	1/29/2020 1:46:34 PM	3.4	6.1	16.9	73.6	40.6	40.6	3.02	2.74	-0.47	-0.48	-19.32
GEW-159	1/29/2020 1:48:04 PM	3.4	7.1	16.9	72.6	40.5	40.5	3.50	3.93	-0.43	-0.43	-19.45
GEW-160	1/3/2020 9:40:44 AM	17.8	40.0	1.6	40.6	49.4	49.3	2.37	4.00	-5.49	-5.49	-20.25
GEW-160	1/3/2020 9:47:18 AM	19.3	42.4	0.6	37.7	49.9	49.9	3.28	3.17	-5.53	-5.53	-20.13
GEW-160	1/8/2020 10:06:09 AM	19.6	40.0	1.0	39.4	49.9	49.9	4.14	4.07	-4.60	-4.60	-18.35
GEW-160	1/15/2020 1:36:49 PM	22.1	44.6	0.0	33.3	63.7	63.7	1.68	1.19	-4.61	-4.61	-18.39
GEW-160	1/21/2020 1:57:36 PM	21.6	44.2	0.1	34.1	52.1	52.1	1.70	2.13	-4.39	-4.39	-18.18
GEW-160	1/29/2020 10:18:44 AM	20.8	44.1	0.0	35.1	39.5	39.5	2.09	2.73	-4.81	-4.81	-19.87
GEW-161	1/3/2020 9:29:30 AM	2.4	56.7	0.0	40.9	69.0	69.1	2.71	3.60	-3.36	-3.36	-20.25
GEW-161	1/3/2020 9:36:06 AM	2.4	57.2	0.0	40.4	70.0	70.0	6.91	7.94	-3.29	-3.29	-20.21
GEW-161	1/8/2020 10:02:36 AM	3.3	51.2	0.9	44.6	79.7	79.8	3.07	3.48	-3.11	-3.12	-18.27
GEW-161	1/15/2020 1:34:01 PM	2.8	54.6	0.0	42.6	89.3	89.3	1.98	3.02	-2.32	-2.31	-18.27
GEW-161	1/21/2020 1:54:40 PM	5.0	53.1	0.0	41.9	80.1	80.3	2.31	1.66	-2.04	-2.04	-18.35
GEW-161	1/29/2020 10:15:36 AM	3.8	54.1	0.0	42.1	61.0	61.3	1.61	0.85	-2.78	-2.78	-19.92
GEW-162	1/3/2020 9:17:42 AM	16.5	61.1	0.0	22.4	44.4	44.4	3.97	4.34	-2.95	-2.95	-20.30
GEW-162	1/3/2020 9:24:14 AM	16.2	61.6	0.0	22.2	44.6	44.5	3.77	3.85	-2.96	-2.95	-19.96
GEW-162	1/8/2020 9:59:32 AM	15.6	61.0	0.0	23.4	56.7	56.7	4.20	4.69	-2.87	-2.88	-18.69
GEW-162	1/15/2020 1:31:20 PM	16.1	61.8	0.0	22.1	64.2	64.1	4.78	3.97	-2.43	-2.43	-18.31
GEW-162	1/21/2020 1:51:38 PM	17.0	60.5	0.0	22.5	45.4	45.4	3.27	2.76	-2.13	-2.13	-17.93
GEW-162	1/29/2020 10:12:20 AM	18.0	61.2	0.0	20.8	40.0	40.0	4.19	4.00	-3.11	-3.11	-19.79
GEW-163	1/9/2020 9:06:42 AM	26.8	52.0	0.2	21.0	128.6	128.3	5.09	7.00	-7.39	-7.39	-19.45
GEW-163	1/21/2020 11:20:24 AM	30.9	55.1	0.0	14.0	130.6	130.9	3.52	3.39	-7.43	-7.43	-18.60
GEW-163	1/21/2020 11:26:26 AM	31.1	53.7	0.0	15.2	130.3	130.0	18.97	20.40	-7.43	-7.43	-18.60
GEW-164	1/9/2020 9:12:59 AM	29.7	47.3	0.2	22.8	151.3	151.3	28.18	26.54	-0.92	-0.93	-18.48
GEW-164	1/9/2020 9:13:51 AM	30.0	46.2	0.2	23.6	151.7	151.3	28.05	29.40	-0.94	-0.94	-19.24
GEW-164	1/20/2020 11:53:20 AM	29.2	45.8	0.6	24.4	151.7	151.0	18.37	18.72	-1.09	-1.00	-16.81
GEW-164	1/20/2020 11:59:41 AM	29.2	45.7	0.5	24.6	151.4	151.0	13.22	23.70	-1.05	-1.03	-18.96
GEW-164	1/27/2020 4:21:54 PM	20.8	36.3	2.9	40.0	154.8	154.9	91.83	91.85	-10.72	-10.72	-19.41
GEW-164	1/27/2020 4:31:05 PM	19.2	34.4	3.9	42.5	148.2	148.8	20.63	20.84	-1.01	-1.01	-19.41
GEW-165	1/9/2020 9:24:07 AM	20.7	42.3	4.6	32.4	144.5	144.5	10.60	11.37	-0.37	-0.36	-19.62

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Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-165	1/9/2020 9:25:24 AM	20.3	42.3	4.6	32.8	144.5	144.0	7.07	6.63	-0.38	-0.37	-19.28
GEW-165	1/20/2020 11:21:55 AM	12.7	39.7	7.3	40.3	129.6	129.1	11.96	12.49	-0.41	-0.42	-19.42
GEW-165	1/20/2020 11:28:51 AM	13.5	34.9	7.6	44.0	129.4	129.7	8.46	10.20	-0.39	-0.39	-19.55
GEW-165	1/22/2020 2:45:27 PM	18.0	40.2	4.9	36.9	126.8	126.8	10.57	12.56	-0.32	-0.34	-18.79
GEW-166	1/9/2020 9:28:58 AM	8.5	54.7	0.0	36.8	167.1	166.6	17.31	18.35	-14.10	-14.10	-19.70
GEW-166	1/9/2020 9:29:57 AM	8.7	56.0	0.0	35.3	166.6	166.6	21.57	22.55	-14.10	-14.10	-19.96
GEW-166	1/20/2020 10:49:13 AM	6.9	59.1	0.0	34.0	139.0	139.3	8.81	8.93	-18.14	-18.14	-20.22
GEW-166	1/20/2020 10:55:42 AM	6.1	63.1	0.0	30.8	140.4	140.6	10.72	9.79	-18.05	-17.80	-19.63
GEW-167	1/9/2020 8:14:55 AM	9.7	48.3	0.1	41.9	143.2	143.2	3.58	3.58	-7.01	-7.01	-19.79
GEW-167	1/9/2020 8:15:47 AM	9.7	48.5	0.0	41.8	142.5	143.2	2.94	3.43	-7.01	-7.01	-19.58
GEW-167	1/20/2020 10:26:16 AM	12.0	47.8	0.0	40.2	137.1	136.8	3.75	2.32	-8.67	-8.67	-20.30
GEW-167	1/20/2020 10:33:59 AM	12.0	48.2	0.0	39.8	136.6	136.2	2.33	3.12	-8.67	-8.33	-19.88
GEW-168	1/6/2020 2:11:16 PM	31.9	50.3	0.2	17.6	128.3	128.9	5.80	3.62	-2.41	-2.40	-17.89
GEW-168	1/10/2020 1:54:34 PM	29.7	54.3	0.2	15.8	128.6	128.9	14.38	11.93	-2.36	-2.36	-18.87
GEW-168	1/10/2020 2:01:10 PM	30.4	53.5	0.2	15.9	129.3	128.6	13.91	10.78	-2.34	-2.34	-17.86
GEW-168	1/24/2020 2:43:07 PM	32.9	51.2	0.7	15.2	118.9	118.6	4.37	3.53	-3.70	-3.70	-16.32
GEW-169	1/13/2020 9:46:07 AM	10.6	44.8	3.4	41.2	94.3	94.1	2.72	2.72	-0.06	-0.06	-19.42
GEW-169	1/13/2020 10:03:26 AM	10.1	45.2	3.2	41.5	85.2	84.7	6.47	6.18	-0.04	-0.03	-20.09
GEW-169	1/24/2020 2:46:53 PM	14.1	49.4	0.9	35.6	66.5	66.4	8.10	7.03	0.02	0.02	-18.27
GEW-169	1/24/2020 2:48:12 PM	13.5	50.3	0.9	35.3	69.8	70.0	9.65	7.89	-0.02	-0.03	-18.39
GEW-170	1/13/2020 11:48:20 AM	12.8	42.7	4.8	39.7	123.0	122.8	13.89	13.89	-0.32	-0.32	-19.46
GEW-170	1/13/2020 11:53:58 AM	12.9	42.5	4.8	39.8	115.8	115.8	9.78	7.84	-0.27	-0.26	-19.29
GEW-170	1/27/2020 2:10:49 PM	14.0	41.9	4.3	39.8	116.3	116.2	7.94	6.01	-0.29	-0.29	-18.99
GEW-171	1/14/2020 1:51:01 PM	42.6	37.4	3.6	16.4	61.8	61.7	4.01	4.53	-1.67	-1.67	-5.60
GEW-171	1/14/2020 1:57:03 PM	42.5	33.5	4.0	20.0	62.9	63.0	1.21	1.71	-2.10	-2.10	-6.19
GEW-171	1/27/2020 10:19:30 AM	24.2	33.8	6.8	35.2	34.9	35.0	2.18	1.31	1.91	1.90	-6.93
GEW-171	1/27/2020 10:22:12 AM	25.2	33.0	6.7	35.1	35.7	35.7	2.17	1.87	-0.04	-0.04	-7.61
GEW-172	1/14/2020 11:42:19 AM	17.5	43.7	3.2	35.6	146.6	145.6	7.36	8.14	-4.71	-4.71	-16.64
GEW-172	1/14/2020 11:48:07 AM	19.2	46.6	2.3	31.9	147.3	147.3	7.35	8.49	-4.68	-4.68	-17.10
GEW-172	1/23/2020 2:49:36 PM	17.4	44.8	2.0	35.8	159.4	159.8	1.51	2.39	-3.98	-3.98	-18.60
GEW-172	1/23/2020 2:51:07 PM	17.4	45.0	2.0	35.6	159.4	159.4	3.51	3.47	-3.91	-3.92	-19.20
GEW-174	1/13/2020 3:07:47 PM	15.3	40.9	0.0	43.8	115.6	115.2	8.23	6.33	-0.96	-0.96	-12.18
GEW-174	1/13/2020 3:13:46 PM	15.2	40.1	0.0	44.7	114.3	114.6	3.63	6.91	-0.95	-0.95	-12.18
GEW-174	1/27/2020 2:36:06 PM	11.5	34.6	1.0	52.9	116.6	116.3	5.82	6.50	-1.52	-1.51	-11.16
GEW-175	1/10/2020 1:46:20 PM	26.1	36.3	4.0	33.6	144.9	144.9	32.73	34.38	-0.25	-0.26	-17.93
GEW-175	1/10/2020 1:51:40 PM	26.6	34.9	4.1	34.4	144.9	144.6	33.01	34.04	-0.25	-0.25	-18.60
GEW-175	1/22/2020 2:26:57 PM	28.7	36.6	3.9	30.8	142.2	142.2	32.58	35.16	-0.17	-0.19	-17.27
GEW-175	1/22/2020 2:28:11 PM	29.1	35.9	3.8	31.2	142.2	141.9	42.40	34.62	-0.19	-0.18	-17.19
GEW-176	1/2/2020 1:28:41 PM	52.6	45.8	0.0	1.6	57.9	57.9	6.12	6.12	-0.02	-0.01	-18.96
GEW-176	1/2/2020 1:30:33 PM	53.4	43.8	0.0	2.8	58.0	58.0	5.96	5.86	-0.03	-0.02	-19.08
GEW-176	1/10/2020 10:55:49 AM	41.2	36.2	2.4	20.2	61.2	61.2	2.10	1.21	-0.04	-0.03	-19.28

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Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-176	1/10/2020 11:01:08 AM	41.5	35.7	2.3	20.5	60.2	60.2	2.97	2.10	-0.07	-0.07	-19.28
GEW-176	1/24/2020 10:22:07 AM	42.2	36.9	2.2	18.7	38.2	38.1	1.83	1.33	-0.04	-0.04	-19.28
GEW-177	1/13/2020 2:50:37 PM	12.3	49.4	0.7	37.6	171.0	170.6	23.84	31.31	-15.69	-15.64	-18.32
GEW-177	1/13/2020 2:56:39 PM	12.0	50.4	0.8	36.8	171.2	171.0	12.97	13.75	-15.81	-15.90	-19.29
GEW-177	1/27/2020 10:38:48 AM	15.9	54.7	0.0	29.4	165.2	165.7	25.58	19.01	-17.12	-17.04	-19.12
GEW-177	1/27/2020 10:40:00 AM	15.5	57.4	0.0	27.1	165.2	164.8	21.77	21.77	-16.96	-16.96	-18.53
GEW-178	1/3/2020 2:03:29 PM	27.0	29.9	5.7	37.4	71.5	70.9	7.50	7.40	-0.90	-0.90	-20.30
GEW-178	1/3/2020 2:04:50 PM	26.9	29.9	5.9	37.3	70.8	71.4	6.06	6.39	-0.83	-0.83	-20.13
GEW-178	1/13/2020 2:11:19 PM	26.0	29.4	5.7	38.9	65.1	64.9	6.68	6.89	-0.90	-0.89	-19.07
GEW-178	1/13/2020 2:17:09 PM	26.3	29.0	5.6	39.1	64.7	64.7	4.81	5.24	-0.77	-0.77	-19.20
GEW-178	1/16/2020 4:15:43 PM	24.6	28.7	6.8	39.9	61.6	61.8	5.42	9.77	-0.78	-0.82	-19.17
GEW-178	1/16/2020 4:17:27 PM	25.1	30.2	6.1	38.6	49.9	49.4	4.30	3.52	-0.12	-0.15	-18.91
GEW-178	1/22/2020 2:32:08 PM	35.5	41.4	3.4	19.7	51.5	51.3	2.15	3.04	-0.22	-0.20	-18.70
GEW-179	1/13/2020 2:36:23 PM	43.0	53.5	0.0	3.5	60.7	60.7	3.21	3.64	-0.31	-0.31	-19.24
GEW-179	1/13/2020 2:42:47 PM	42.9	53.2	0.0	3.9	61.0	60.9	3.83	3.43	-0.25	-0.26	-18.69
GEW-179	1/24/2020 11:32:48 AM	40.9	54.6	0.0	4.5	64.5	64.5	2.38	3.99	1.57	1.57	-16.74
GEW-179	1/24/2020 2:00:03 PM	41.8	53.6	0.0	4.6	67.7	68.1	6.67	6.66	-0.19	-0.19	-15.26
GEW-180	1/14/2020 3:08:59 PM	31.5	66.0	0.8	1.7	83.3	83.3	16.93	18.79	-14.08	-14.29	-17.52
GEW-180	1/14/2020 3:14:36 PM	31.5	64.9	0.8	2.8	83.8	83.8	18.95	14.93	-14.25	-14.21	-17.86
GEW-180	1/27/2020 10:42:55 AM	36.0	57.0	0.1	6.9	64.2	64.9	8.43	7.98	-15.91	-15.91	-19.70
GEW-181	1/15/2020 8:54:56 AM	25.7	72.3	0.0	2.0	65.1	65.3	10.93	13.91	-16.19	-16.19	-19.12
GEW-181	1/15/2020 9:01:37 AM	25.0	75.0	0.0	0.0	65.2	65.1	13.94	9.69	-16.58	-16.36	-19.00
GEW-181	1/27/2020 10:34:49 AM	28.1	65.2	0.0	6.7	55.0	55.3	7.42	8.38	-16.42	-16.42	-20.00
GEW-185	1/7/2020 10:31:41 AM	33.9	54.8	0.0	11.3	98.7	98.7	2.78	1.96	-0.54	-0.55	-19.88
GEW-185	1/7/2020 10:33:10 AM	33.6	55.4	0.0	11.0	112.5	112.7	10.69	10.04	-1.82	-1.77	-20.35
GEW-185	1/21/2020 11:10:37 AM	37.1	49.6	0.0	13.3	101.7	101.6	2.63	2.63	-0.67	-0.67	-19.97
GEW-185	1/21/2020 11:17:15 AM	36.5	50.8	0.0	12.7	111.0	111.2	4.88	6.86	-2.17	-2.15	-19.92
GEW-186	1/13/2020 2:13:55 PM	22.7	26.3	8.6	42.4	70.5	70.4	2.67	4.78	-0.10	-0.10	-19.33
GEW-186	1/13/2020 2:19:14 PM	21.9	26.6	8.5	43.0	70.7	70.7	3.38	5.20	-0.11	-0.12	-19.25
GEW-186	1/23/2020 1:59:51 PM	23.3	29.7	7.5	39.5	69.5	69.1	5.03	3.74	-0.10	-0.10	-18.69
GEW-186	1/23/2020 2:01:06 PM	23.4	29.3	7.5	39.8	69.3	68.8	2.70	2.88	-0.09	-0.09	-18.69
GEW-187	1/3/2020 1:50:53 PM	41.4	52.4	0.0	6.2	107.9	107.9	7.34	7.33	-2.17	-2.17	-19.62
GEW-187	1/8/2020 11:07:24 AM	40.8	52.2	0.0	7.0	111.3	111.2	5.81	5.71	-1.97	-1.97	-18.60
GEW-187	1/14/2020 1:54:57 PM	40.7	52.0	0.0	7.3	111.0	111.0	6.70	6.79	-1.90	-1.91	-18.22
GEW-187	1/14/2020 2:00:46 PM	40.7	51.3	0.0	8.0	113.0	112.2	8.13	10.28	-1.95	-1.96	-18.39
GEW-187	1/21/2020 2:59:35 PM	41.1	52.3	0.0	6.6	100.8	100.4	6.72	8.07	-1.95	-1.94	-18.27
GEW-187	1/29/2020 1:55:03 PM	41.5	51.1	0.0	7.4	100.4	100.4	6.83	6.06	-2.02	-2.02	-19.70
GEW-217	1/3/2020 2:08:41 PM	11.4	56.0	0.0	32.6	183.9	184.5	3.48	3.43	-1.29	-1.30	-14.29
GEW-217	1/3/2020 2:10:06 PM	11.1	53.7	0.0	35.2	185.0	184.5	2.37	2.17	-1.39	-1.39	-14.38
GEW-217	1/13/2020 10:03:49 AM	26.3	49.2	0.3	24.2	49.6	49.3	2.12	3.39	-17.90	-17.90	-18.35
GEW-217	1/13/2020 10:10:11 AM	26.3	48.5	0.2	25.0	51.5	51.8	4.14	4.24	-17.56	-17.56	-18.01

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-217	1/27/2020 9:57:04 AM	8.9	56.7	0.0	34.4	181.5	181.3	2.24	2.31	-2.97	-2.96	-18.10
GEW-217	1/27/2020 9:58:14 AM	8.6	56.4	0.0	35.0	181.5	180.9	4.26	2.78	-3.11	-3.11	-17.38
GEW-218	1/13/2020 10:17:13 AM	17.5	37.2	3.7	41.6	97.2	97.2	11.17	11.28	-1.00	-1.00	-19.83
GEW-218	1/13/2020 10:23:03 AM	17.8	35.6	3.7	42.9	96.5	96.7	10.71	10.65	-1.00	-1.00	-19.87
GEW-218	1/27/2020 9:51:18 AM	17.3	37.9	4.2	40.6	91.5	91.3	11.18	10.95	-0.91	-0.91	-20.38
GEW-219	1/13/2020 2:55:15 PM	4.6	23.7	11.5	60.2	164.7	164.7	1.45	0.98	-0.02	-0.02	-19.03
GEW-219	1/13/2020 3:01:10 PM	4.4	22.1	11.6	61.9	162.4	163.8	3.53	3.35	-0.03	-0.03	-19.15
GEW-219	1/23/2020 1:36:57 PM	5.8	24.9	9.3	60.0	152.9	152.1	2.10	0.89	-0.02	-0.02	-18.94
GEW-219	1/23/2020 1:37:56 PM	5.7	24.3	9.3	60.7	151.0	150.6	2.76	2.34	-0.04	-0.03	-18.60
GEW-220	1/13/2020 1:26:12 PM	27.2	47.0	0.8	25.0	151.3	151.7	2.52	2.82	-14.86	-14.86	-18.69
GEW-220	1/13/2020 1:33:46 PM	27.0	46.7	0.8	25.5	151.3	150.2	2.81	2.80	-14.06	-14.06	-18.99
GEW-220	1/23/2020 1:32:51 PM	34.4	45.4	0.0	20.2	115.9	116.4	7.01	5.07	-15.03	-15.03	-18.65
GEW-221	1/14/2020 2:53:47 PM	25.2	51.8	0.0	23.0	84.4	84.4	8.04	9.24	-9.47	-9.26	-10.99
GEW-221	1/14/2020 3:01:46 PM	26.0	50.2	0.0	23.8	83.7	83.7	10.80	13.58	-9.47	-9.13	-10.91
GEW-221	1/27/2020 10:47:16 AM	32.8	43.9	0.0	23.3	43.4	43.4	10.06	10.91	-11.02	-11.02	-12.18
GEW-222	1/14/2020 2:13:48 PM	30.9	53.0	0.0	16.1	84.7	84.7	6.17	4.29	-6.13	-6.13	-18.41
GEW-222	1/14/2020 2:20:26 PM	31.9	49.2	0.0	18.9	87.9	87.8	3.78	10.45	-6.09	-6.13	-17.94
GEW-222	1/27/2020 10:51:08 AM	34.1	46.2	0.0	19.7	69.1	69.1	2.31	1.69	-8.32	-8.32	-19.79
GEW-223	1/14/2020 1:38:41 PM	25.5	63.8	0.0	10.7	129.8	129.7	8.27	7.92	-2.48	-2.50	-17.90
GEW-223	1/14/2020 1:45:00 PM	25.6	64.7	0.0	9.7	125.1	124.8	7.30	10.21	-2.50	-2.49	-18.74
GEW-223	1/27/2020 1:46:07 PM	32.5	54.4	0.1	13.0	89.3	89.1	4.72	3.70	-5.40	-5.40	-19.70
GEW-224	1/13/2020 3:01:56 PM	24.9	64.7	0.0	10.4	162.9	162.4	13.09	11.44	-12.22	-11.84	-13.40
GEW-224	1/13/2020 3:08:12 PM	25.8	62.2	0.0	12.0	162.0	162.4	15.04	16.03	-11.88	-12.18	-14.70
GEW-224	1/27/2020 10:27:30 AM	17.3	62.6	0.0	20.1	146.6	147.6	5.28	2.93	-3.92	-3.94	-4.38
GEW-224	1/27/2020 10:28:41 AM	16.8	64.7	0.0	18.5	147.7	148.0	6.11	7.23	-3.92	-3.94	-4.38
GEW-225	1/14/2020 9:47:12 AM	10.6	58.6	0.6	30.2	175.3	175.8	4.96	4.65	-2.62	-2.62	-19.38
GEW-225	1/14/2020 9:53:55 AM	9.6	62.2	0.3	27.9	180.2	180.3	7.14	10.01	-3.76	-3.78	-19.55
GEW-225	1/23/2020 2:54:12 PM	16.1	49.2	0.1	34.6	130.5	130.3	7.71	8.27	-6.59	-6.59	-19.41
GEW-226	1/14/2020 10:08:42 AM	9.2	45.6	0.0	45.2	184.5	184.5	13.19	15.00	-1.32	-1.32	-19.63
GEW-226	1/14/2020 10:14:23 AM	9.8	40.9	0.0	49.3	183.9	183.9	14.08	14.85	-1.32	-1.34	-19.50
GEW-226	1/23/2020 2:58:29 PM	9.0	41.2	0.0	49.8	184.5	184.0	13.38	13.53	-1.03	-1.04	-19.49
GEW-226	1/23/2020 2:59:32 PM	8.7	41.9	0.0	49.4	184.5	184.5	13.13	13.59	-1.03	-1.03	-19.28
GEW-227	1/8/2020 2:05:40 PM	5.5	41.5	2.3	50.7	179.1	179.2	4.41	4.47	-0.01	-0.01	-18.44
GEW-227	1/8/2020 2:06:54 PM	5.6	40.7	2.3	51.4	179.7	179.7	5.07	4.88	-0.02	-0.02	-18.22
GEW-227	1/20/2020 3:18:12 PM	2.1	40.0	4.4	53.5	191.6	191.6	3.63	3.88	-0.09	-0.09	-18.56
GEW-227	1/20/2020 3:24:52 PM	1.9	41.4	4.3	52.4	190.9	190.9	3.76	3.76	-0.09	-0.09	-19.03
GEW-228	1/8/2020 9:49:29 AM	2.0	25.5	7.4	65.1	187.3	186.4	26.95	26.22	-1.19	-1.13	-19.00
GEW-228	1/8/2020 9:51:34 AM	1.8	25.0	7.5	65.7	169.5	167.6	21.59	22.32	-0.62	-0.63	-18.79
GEW-228	1/20/2020 10:48:39 AM	8.4	38.3	2.4	50.9	134.7	135.3	15.99	16.12	-0.46	-0.46	-19.11
GEW-228	1/20/2020 10:59:27 AM	8.6	38.9	2.3	50.2	162.0	162.9	12.74	12.36	-0.09	-0.09	-19.66
GEW-228	1/29/2020 2:14:59 PM	1.8	49.3	0.5	48.4	195.0	195.7	1.27	1.60	0.40	0.40	-19.32

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-228	1/29/2020 2:18:34 PM	1.2	50.6	0.4	47.8	202.3	202.2	7.07	7.07	-0.06	-0.06	-19.37
GEW-228	1/31/2020 9:42:02 AM	2.3	45.5	0.0	52.2	48.5	48.5	4.30	4.12	0.33	0.33	-19.03
GEW-228	1/31/2020 9:45:21 AM	2.0	49.9	0.0	48.1	81.0	83.5	2.33	2.02	-0.09	-0.09	-18.94
GEW-228	1/31/2020 2:35:37 PM	1.3	46.8	0.0	51.9	156.0	155.6	3.41	2.73	0.36	0.36	-18.27
GEW-228	1/31/2020 2:38:55 PM	1.2	51.5	0.0	47.3	196.4	196.4	5.65	5.62	-0.08	-0.08	-18.35
GEW-229	1/8/2020 9:55:32 AM	1.1	18.0	8.1	72.8	86.3	86.8	7.95	7.60	0.02	0.03	-18.96
GEW-229	1/8/2020 9:57:32 AM	1.0	16.4	8.1	74.5	87.7	87.5	10.29	7.53	-0.02	-0.01	-18.74
GEW-229	1/20/2020 11:11:58 AM	2.3	15.4	9.4	72.9	83.4	84.7	8.44	8.32	-0.01	-0.01	-19.53
GEW-229	1/20/2020 11:20:01 AM	2.2	12.0	9.7	76.1	84.9	84.9	8.18	7.85	-0.02	-0.02	-19.58
GEW-230	1/7/2020 11:19:43 AM	0.8	15.7	11.6	71.9	156.0	155.6	8.04	6.51	-0.03	-0.03	-19.00
GEW-230	1/7/2020 11:26:13 AM	0.7	11.9	11.9	75.5	151.0	151.0	4.40	3.28	-0.02	-0.04	-19.00
GEW-230	1/16/2020 2:17:07 PM	0.6	10.8	13.7	74.9	153.3	152.9	5.40	5.47	-0.03	-0.03	-18.39
GEW-230	1/16/2020 2:23:43 PM	0.6	9.6	13.9	75.9	155.2	155.2	4.79	4.44	-0.05	-0.05	-18.52
GEW-231	1/13/2020 2:22:07 PM	12.5	25.2	11.2	51.1	116.6	117.0	7.37	6.78	-0.05	-0.06	-19.46
GEW-231	1/13/2020 2:32:47 PM	11.9	25.4	11.4	51.3	113.7	114.1	4.13	9.04	-0.06	-0.04	-19.29
GEW-231	1/23/2020 2:04:13 PM	19.7	33.9	7.7	38.7	115.4	115.3	6.74	6.38	-0.08	-0.08	-19.07
GEW-231	1/23/2020 2:05:07 PM	19.3	33.9	7.7	39.1	115.5	115.4	7.34	6.65	-0.10	-0.09	-19.20
GEW-232	1/7/2020 2:19:28 PM	29.0	59.7	0.0	11.3	93.2	93.5	4.58	2.80	-0.53	-0.54	-19.12
GEW-232	1/16/2020 3:53:59 PM	21.4	54.4	0.0	24.2	135.9	134.6	2.61	2.61	-0.17	-0.17	-18.60
GEW-232	1/16/2020 4:00:35 PM	21.4	54.5	0.0	24.1	138.7	139.0	2.59	2.96	-0.16	-0.15	-18.60
GEW-232	1/30/2020 8:45:23 AM	29.5	51.0	0.0	19.5	100.8	101.3	4.39	3.77	-0.41	-0.41	-19.79
GEW-233	1/8/2020 2:18:21 PM	4.7	48.7	0.0	46.6	71.8	71.8	4.68	3.70	-5.07	-5.07	-18.94
GEW-233	1/21/2020 9:12:56 AM	8.6	42.7	0.0	48.7	125.6	125.8	7.64	5.80	-6.50	-6.50	-14.71
GEW-233	1/21/2020 9:20:46 AM	8.4	43.3	0.0	48.3	126.7	127.2	5.79	4.25	-6.46	-6.46	-16.24
GEW-234	1/3/2020 2:16:14 PM	6.5	35.8	3.4	54.3	195.0	195.0	10.40	9.80	-0.87	-0.87	-19.83
GEW-234	1/3/2020 2:17:15 PM	6.2	35.1	3.4	55.3	195.0	195.0	10.08	10.40	-0.87	-0.87	-19.92
GEW-234	1/16/2020 4:25:33 PM	4.4	36.7	2.9	56.0	197.9	197.9	9.71	10.13	-0.98	-1.00	-19.25
GEW-234	1/16/2020 4:32:05 PM	3.9	37.5	2.8	55.8	197.2	197.2	10.58	9.72	-0.93	-0.93	-18.91
GEW-235	1/9/2020 9:03:40 AM	21.0	51.7	0.0	27.3	121.3	121.9	4.70	4.28	-3.88	-3.88	-19.66
GEW-235	1/21/2020 11:09:10 AM	25.5	50.4	0.0	24.1	106.7	107.2	4.26	3.97	-4.36	-4.35	-18.94
GEW-235	1/21/2020 11:15:26 AM	25.5	50.5	0.0	24.0	108.5	108.5	3.66	2.93	-4.33	-4.32	-18.69
GEW-236	1/7/2020 8:38:32 AM	5.8	26.2	10.2	57.8	196.5	196.5	3.33	4.61	-1.58	-1.54	-21.65
GEW-236	1/7/2020 8:40:38 AM	5.5	27.9	9.9	56.7	196.4	196.4	2.36	5.45	-0.82	-0.81	-20.98
GEW-236	1/8/2020 9:05:14 AM	1.2	48.9	0.5	49.4	203.9	203.6	4.37	4.37	-0.07	-0.07	-20.51
GEW-236	1/8/2020 9:07:27 AM	1.0	52.5	0.4	46.1	203.9	203.9	4.11	4.12	-0.11	-0.12	-20.09
GEW-236	1/9/2020 9:14:37 AM	1.8	54.5	0.0	43.7	203.9	203.9	6.75	7.52	0.11	0.11	-19.80
GEW-236	1/9/2020 9:20:46 AM	1.2	57.8	0.0	41.0	203.9	203.9	3.59	2.88	-0.14	-0.14	-19.80
GEW-236	1/10/2020 8:38:00 AM	2.1	47.1	1.5	49.3	203.8	203.9	8.64	4.96	-0.23	-0.22	-19.42
GEW-236	1/10/2020 8:39:19 AM	1.4	50.2	1.5	46.9	203.8	203.8	9.00	10.92	-0.25	-0.28	-20.30
GEW-236	1/14/2020 9:01:43 AM	3.1	35.3	6.1	55.5	201.6	201.6	5.66	6.05	-0.49	-0.49	-20.18
GEW-236	1/14/2020 9:03:16 AM	2.7	37.0	5.9	54.4	201.6	201.6	6.13	6.13	-0.37	-0.37	-19.97

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Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-236	1/20/2020 2:15:10 PM	3.9	43.5	2.6	50.0	201.1	200.1	3.55	4.14	-0.25	-0.25	-19.66
GEW-236	1/20/2020 2:21:20 PM	3.4	42.8	2.8	51.0	201.6	201.6	4.36	6.94	-0.25	-0.24	-18.77
GEW-237	1/10/2020 1:27:01 PM	25.3	35.6	4.7	34.4	146.3	146.2	15.45	16.43	-0.33	-0.33	-18.52
GEW-237	1/10/2020 1:33:07 PM	25.0	36.3	4.5	34.2	146.3	146.3	17.24	15.62	-0.32	-0.32	-19.37
GEW-237	1/22/2020 2:22:40 PM	24.5	38.9	4.3	32.3	141.2	141.2	16.42	16.56	-0.29	-0.31	-18.62
GEW-237	1/22/2020 2:23:50 PM	24.9	37.4	4.3	33.4	141.2	141.2	16.25	16.25	-0.27	-0.27	-16.76
GEW-238	1/7/2020 2:26:10 PM	12.8	66.4	0.0	20.8	187.6	187.6	16.10	15.47	-1.06	-1.02	-19.25
GEW-238	1/7/2020 2:27:28 PM	12.9	67.1	0.0	20.0	187.6	187.6	16.77	14.58	-0.96	-0.94	-19.38
GEW-238	1/16/2020 4:57:19 PM	14.0	55.9	0.0	30.1	179.2	178.7	13.52	13.51	-1.72	-1.72	-19.20
GEW-238	1/16/2020 5:03:35 PM	14.1	55.4	0.0	30.5	178.6	178.5	13.69	13.55	-1.73	-1.72	-19.28
GEW-239	1/7/2020 11:11:15 AM	1.7	59.0	0.0	39.3	199.3	200.1	6.23	4.12	0.02	0.03	-19.76
GEW-239	1/7/2020 11:12:54 AM	1.1	64.3	0.0	34.6	201.8	201.9	12.27	11.95	-0.16	-0.14	-19.55
GEW-239	1/16/2020 8:47:04 AM	0.8	38.6	5.8	54.8	197.5	197.9	19.02	19.14	-0.61	-0.62	-20.04
GEW-239	1/16/2020 8:54:24 AM	0.8	39.9	5.6	53.7	197.2	196.4	16.19	13.72	-0.55	-0.55	-19.75
GEW-239	1/30/2020 8:16:58 AM	1.2	56.5	0.0	42.3	203.1	203.1	2.38	3.71	0.03	0.03	-19.70
GEW-239	1/30/2020 8:24:23 AM	1.2	54.4	0.0	44.4	203.3	203.1	2.56	3.59	-0.10	-0.10	-19.92
GEW-239	1/31/2020 10:35:20 AM	1.2	52.4	0.0	46.4	87.8	87.5	3.46	3.05	0.82	0.81	-19.07
GEW-239	1/31/2020 10:38:37 AM	1.2	57.1	0.0	41.7	200.1	200.8	6.56	6.06	-0.12	-0.12	-18.90
GEW-239	1/31/2020 10:40:27 AM	1.2	55.7	0.0	43.1	201.6	201.6	8.69	8.34	-0.11	-0.11	-19.03
GEW-239	1/31/2020 2:49:17 PM	1.2	55.2	0.0	43.6	203.1	203.1	5.19	4.50	0.21	0.21	-18.14
GEW-239	1/31/2020 2:51:55 PM	1.2	58.6	0.0	40.2	203.9	203.9	10.66	10.24	-0.15	-0.15	-18.14
GEW-240	1/14/2020 11:31:25 AM	9.4	27.9	3.5	59.2	123.8	124.5	6.86	6.86	-0.27	-0.27	-18.96
GEW-240	1/14/2020 11:36:48 AM	9.5	25.7	3.5	61.3	125.5	126.4	4.33	5.41	-0.27	-0.26	-18.87
GEW-240	1/27/2020 2:42:09 PM	0.9	59.7	0.0	39.4	205.4	205.4	25.06	26.20	-1.09	-1.09	-19.24
GEW-240	1/27/2020 2:44:13 PM	0.7	59.2	0.0	40.1	205.4	205.4	23.12	23.16	-1.10	-1.10	-19.53
GEW-240	1/27/2020 3:10:58 PM	1.3	61.3	0.0	37.4	205.4	205.4	20.96	23.06	-0.26	-0.27	-19.28
GEW-2S	1/3/2020 9:24:13 AM	57.7	36.2	0.0	6.1	50.7	50.7	12.74	7.75	-0.89	-0.93	-13.14
GEW-2S	1/9/2020 8:31:38 AM	54.6	36.6	0.0	8.8	56.0	56.0	4.00	7.46	-1.41	-1.62	-12.81
GEW-2S	1/15/2020 2:48:07 PM	56.8	35.6	1.1	6.5	62.8	62.9	8.33	7.86	-6.64	-6.43	-13.18
GEW-2S	1/15/2020 2:55:39 PM	60.6	35.8	0.0	3.6	62.8	62.8	8.78	11.10	-6.72	-6.77	-13.14
GEW-2S	1/23/2020 11:19:42 AM	66.8	29.5	0.3	3.4	38.0	38.1	15.58	11.20	-13.15	-12.81	-13.52
GEW-2S	1/31/2020 8:01:59 AM	63.2	35.0	0.0	1.8	48.7	48.7	17.68	16.99	-4.26	-4.08	-13.48
GEW-2S	1/31/2020 8:03:02 AM	62.6	34.8	0.0	2.6	48.8	48.8	19.41	19.41	-4.08	-4.08	-13.44
GIW-01	1/3/2020 10:53:46 AM	14.3	55.1	1.7	28.9	67.9	67.8	7.19	6.56	-0.39	-0.38	-20.21
GIW-01	1/3/2020 11:00:04 AM	13.9	54.2	1.8	30.1	68.6	68.6	5.36	5.50	-0.35	-0.34	-19.87
GIW-01	1/8/2020 10:14:47 AM	16.0	57.0	0.6	26.4	91.0	91.0	2.80	2.80	-0.10	-0.10	-18.05
GIW-01	1/15/2020 1:44:57 PM	17.6	62.4	0.0	20.0	84.7	84.5	2.59	3.06	-0.08	-0.07	-17.93
GIW-01	1/21/2020 2:05:59 PM	19.0	60.7	0.0	20.3	70.9	70.7	2.19	2.16	0.13	0.13	-18.27
GIW-01	1/21/2020 2:07:43 PM	19.7	60.3	0.0	20.0	72.0	72.3	4.11	4.11	-0.20	-0.20	-17.84
GIW-01	1/29/2020 10:27:14 AM	18.5	56.3	1.4	23.8	80.3	80.3	8.35	8.18	-0.26	-0.26	-19.03
GIW-02	1/3/2020 11:04:35 AM	3.6	29.9	6.6	59.9	42.5	42.5	1.66	0.63	-0.25	-0.25	-20.21

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Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GIW-02	1/3/2020 11:05:31 AM	3.5	29.5	6.7	60.3	42.5	42.5	1.40	1.88	-0.26	-0.25	-20.21
GIW-02	1/8/2020 10:17:53 AM	4.5	49.9	3.2	42.4	57.8	58.0	3.85	3.44	-0.20	-0.20	-18.27
GIW-02	1/15/2020 9:00:01 AM	4.7	57.7	1.0	36.6	50.7	50.7	4.88	4.39	-0.28	-0.28	-19.28
GIW-02	1/15/2020 9:05:52 AM	4.8	59.2	0.8	35.2	51.0	51.0	3.63	3.63	-0.27	-0.26	-19.28
GIW-02	1/21/2020 2:10:43 PM	6.6	59.6	0.1	33.7	45.8	45.8	2.77	2.77	-0.14	-0.13	-18.27
GIW-02	1/29/2020 10:30:19 AM	6.6	57.1	0.6	35.7	40.8	40.7	1.87	2.87	-0.24	-0.25	-19.75
GIW-03	1/3/2020 11:08:45 AM	19.8	46.3	0.0	33.9	44.8	44.9	3.35	3.21	-8.91	-8.91	-20.51
GIW-03	1/8/2020 10:21:25 AM	19.0	48.4	0.0	32.6	55.8	56.0	4.33	4.33	-7.51	-7.51	-18.52
GIW-03	1/15/2020 9:09:05 AM	19.3	49.4	0.3	31.0	51.8	51.8	2.31	1.97	-7.77	-7.77	-19.07
GIW-03	1/15/2020 9:14:56 AM	20.2	47.1	0.4	32.3	51.8	51.8	1.97	2.31	-8.15	-8.15	-18.94
GIW-03	1/21/2020 2:13:53 PM	19.9	50.6	0.1	29.4	47.1	47.0	2.10	1.19	-7.05	-7.05	-18.35
GIW-03	1/29/2020 10:33:38 AM	21.5	51.1	0.0	27.4	41.3	41.3	3.53	3.53	-8.06	-8.06	-19.75
GIW-04	1/3/2020 11:12:50 AM	14.3	46.7	1.8	37.2	44.3	44.3	3.33	3.09	-4.08	-4.08	-19.28
GIW-04	1/8/2020 10:24:22 AM	13.5	46.1	2.2	38.2	53.8	53.7	3.65	3.44	-3.60	-3.60	-18.27
GIW-04	1/15/2020 9:18:55 AM	13.1	45.8	2.4	38.7	51.5	51.5	1.99	2.34	-3.48	-3.48	-19.28
GIW-04	1/15/2020 9:24:58 AM	14.8	49.7	0.3	35.2	52.3	52.4	2.90	2.33	-3.42	-3.41	-18.60
GIW-04	1/21/2020 2:16:40 PM	8.9	49.4	1.5	40.2	45.6	45.7	3.27	2.47	-2.05	-2.05	-18.60
GIW-04	1/29/2020 10:37:51 AM	9.0	48.0	2.3	40.7	40.5	40.5	3.36	3.58	-2.68	-2.67	-19.62
GIW-05	1/3/2020 11:22:32 AM	17.2	36.2	3.7	42.9	42.8	42.8	9.11	8.17	-2.55	-2.54	-20.25
GIW-05	1/8/2020 10:32:01 AM	0.6	0.4	20.7	78.3	49.6	49.6	7.48	8.00	-2.28	-2.28	-18.52
GIW-05	1/8/2020 10:33:00 AM	0.9	0.5	20.5	78.1	49.6	49.6	8.00	7.48	-2.28	-2.27	-18.60
GIW-05	1/15/2020 9:29:12 AM	0.2	3.1	20.8	75.9	51.5	51.4	0.00	0.00	-1.78	-1.78	-19.28
GIW-05	1/15/2020 9:35:02 AM	0.0	0.9	21.3	77.8	52.1	52.1	0.00	0.00	-1.75	-1.74	-18.99
GIW-05	1/21/2020 2:23:32 PM	0.5	3.7	20.8	75.0	40.3	40.8	0.00	0.00	-1.19	-1.20	-18.14
GIW-05	1/21/2020 2:27:36 PM	0.6	0.5	20.8	78.1	41.5	41.5	0.00	0.00	-1.35	-1.35	-18.27
GIW-05	1/29/2020 10:45:47 AM	0.0	0.3	21.1	78.6	37.3	37.2	0.00	1.28	-1.82	-1.82	-19.66
GIW-05	1/29/2020 10:46:41 AM	0.0	0.3	21.0	78.7	37.4	37.4	4.25	4.25	-1.80	-1.79	-19.62
GIW-05	1/30/2020 11:34:41 AM	20.4	34.5	4.6	40.5	43.4	43.4	5.86	5.86	-2.54	-2.54	-19.87
GIW-05	1/30/2020 11:36:28 AM	20.9	35.1	4.4	39.6	43.3	43.1	5.14	4.27	-1.83	-1.83	-19.83
GIW-05	1/30/2020 11:39:19 AM	21.3	35.1	4.1	39.5	43.1	43.1	2.57	2.86	-1.83	-1.84	-19.62
GIW-06	1/3/2020 11:25:58 AM	33.0	40.4	0.5	26.1	43.7	43.7	2.15	3.21	-19.38	-19.38	-20.51
GIW-06	1/8/2020 10:36:34 AM	36.0	39.2	0.9	23.9	54.7	54.7	4.42	4.42	-14.82	-14.82	-18.65
GIW-06	1/15/2020 9:38:25 AM	35.3	38.8	0.7	25.2	52.6	52.6	3.86	3.86	-15.87	-15.87	-18.82
GIW-06	1/15/2020 9:44:15 AM	35.5	39.7	0.1	24.7	52.8	52.8	2.55	3.05	-15.91	-15.91	-19.07
GIW-06	1/21/2020 2:33:47 PM	37.2	45.3	0.1	17.4	46.4	46.5	5.66	5.79	-2.83	-2.83	-18.65
GIW-06	1/29/2020 10:54:49 AM	42.4	41.7	0.0	15.9	39.5	39.5	5.30	5.30	-6.88	-6.88	-19.62
GIW-07	1/3/2020 11:28:24 AM	52.5	44.8	0.0	2.7	43.7	43.7	4.54	4.18	-1.95	-1.95	-20.59
GIW-07	1/8/2020 10:39:12 AM	51.6	43.2	0.4	4.8	56.5	56.5	5.95	5.83	-1.88	-1.87	-18.27
GIW-07	1/15/2020 9:47:52 AM	53.4	42.1	0.4	4.1	53.2	53.2	3.15	3.60	-1.98	-1.98	-18.94
GIW-07	1/15/2020 9:53:57 AM	54.4	42.0	0.1	3.5	52.7	52.7	3.80	3.80	-1.99	-1.99	-19.24
GIW-07	1/21/2020 2:36:12 PM	54.0	43.7	0.1	2.2	47.5	47.6	5.39	5.39	-1.61	-1.61	-18.27

January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GIW-07	1/29/2020 10:57:08 AM	54.9	42.3	0.0	2.8	38.8	38.9	5.37	5.07	-1.59	-1.59	-19.62
GIW-08	1/3/2020 11:30:54 AM	47.1	43.5	0.0	9.4	44.1	44.0	2.24	1.86	-2.99	-2.98	-20.25
GIW-08	1/8/2020 10:41:29 AM	47.2	43.1	0.0	9.7	53.9	53.9	5.32	3.66	-2.56	-2.54	-18.27
GIW-08	1/15/2020 9:56:47 AM	48.2	43.1	0.0	8.7	53.1	53.1	2.63	2.33	-2.65	-2.65	-18.60
GIW-08	1/15/2020 10:02:37 AM	48.3	42.6	0.0	9.1	52.7	52.6	2.90	2.33	-2.66	-2.67	-18.99
GIW-08	1/21/2020 2:39:22 PM	46.9	43.1	0.0	10.0	42.6	42.6	3.16	3.15	-2.14	-2.13	-17.93
GIW-08	1/29/2020 10:59:25 AM	47.8	43.1	0.0	9.1	40.5	40.5	4.37	4.37	-2.46	-2.45	-19.66
GIW-09	1/3/2020 11:33:38 AM	18.4	35.4	0.8	45.4	43.1	43.1	1.40	1.87	-1.32	-1.32	-20.25
GIW-09	1/8/2020 10:44:28 AM	21.4	33.2	1.3	44.1	50.2	50.3	4.09	3.26	-1.13	-1.14	-17.93
GIW-09	1/15/2020 10:07:45 AM	22.3	35.1	1.0	41.6	52.2	52.2	3.61	3.40	-1.12	-1.12	-18.94
GIW-09	1/15/2020 10:13:52 AM	22.6	37.0	0.5	39.9	52.3	52.3	1.58	2.35	-1.12	-1.12	-18.73
GIW-09	1/21/2020 2:42:28 PM	24.6	37.8	0.3	37.3	43.1	43.0	2.49	2.49	-0.70	-0.69	-18.27
GIW-09	1/29/2020 11:02:22 AM	21.2	37.8	0.2	40.8	39.3	39.2	2.25	3.14	-0.97	-0.97	-19.62
GIW-10	1/3/2020 11:36:08 AM	20.5	33.8	0.0	45.7	44.4	44.4	2.40	2.05	-3.92	-3.92	-20.30
GIW-10	1/8/2020 10:46:53 AM	20.9	33.6	0.0	45.5	54.6	54.7	1.72	1.72	-3.69	-3.69	-18.27
GIW-10	1/15/2020 10:42:09 AM	22.5	33.8	0.0	43.7	53.4	53.4	2.54	2.23	-3.70	-3.71	-18.60
GIW-10	1/15/2020 10:47:56 AM	22.5	33.3	0.0	44.2	54.2	54.2	1.86	2.53	-3.75	-3.75	-18.99
GIW-10	1/21/2020 2:45:06 PM	22.6	36.3	0.0	41.1	45.7	45.7	4.30	3.72	-3.04	-3.05	-17.59
GIW-10	1/29/2020 11:08:00 AM	23.5	35.7	0.0	40.8	39.9	39.9	4.65	3.91	-3.53	-3.54	-19.75
GIW-11	1/3/2020 11:38:40 AM	21.9	32.1	0.8	45.2	43.7	43.7	2.57	3.06	-2.41	-2.41	-13.66
GIW-11	1/8/2020 10:49:33 AM	21.2	31.6	0.7	46.5	53.9	54.2	3.23	1.22	-2.14	-2.13	-13.32
GIW-11	1/15/2020 10:50:52 AM	23.9	32.7	0.8	42.6	54.5	54.4	1.98	3.07	-2.19	-2.19	-13.57
GIW-11	1/15/2020 10:57:20 AM	24.0	31.9	0.8	43.3	55.5	55.6	2.97	3.18	-2.17	-2.17	-11.97
GIW-11	1/21/2020 2:47:29 PM	26.2	35.3	0.4	38.1	49.0	49.0	4.10	4.45	-1.97	-1.96	-10.99
GIW-11	1/29/2020 11:10:42 AM	25.6	34.4	0.4	39.6	40.1	40.1	2.68	2.90	-2.16	-2.16	-14.80
GIW-12	1/3/2020 11:41:33 AM	30.0	34.9	2.2	32.9	42.8	42.8	2.58	2.77	-0.31	-0.31	-18.60
GIW-12	1/8/2020 10:51:55 AM	29.9	35.0	2.0	33.1	52.6	52.7	3.69	3.48	-0.26	-0.26	-16.91
GIW-12	1/15/2020 11:00:50 AM	31.7	34.8	2.0	31.5	56.2	56.2	1.99	1.99	-0.27	-0.27	-18.18
GIW-12	1/15/2020 11:07:19 AM	31.6	34.4	2.0	32.0	57.2	57.2	2.33	1.98	-0.27	-0.27	-17.59
GIW-12	1/21/2020 2:49:51 PM	32.8	37.6	0.8	28.8	44.7	44.8	3.05	3.74	-0.30	-0.31	-17.46
GIW-12	1/29/2020 11:13:10 AM	32.3	35.7	1.6	30.4	38.5	38.5	3.15	2.88	-0.31	-0.31	-18.90
GIW-13	1/3/2020 11:44:10 AM	37.0	47.3	0.0	15.7	43.1	43.2	3.37	3.37	-0.83	-0.83	-8.71
GIW-13	1/8/2020 10:54:16 AM	38.1	47.5	0.0	14.4	54.4	54.5	4.41	4.24	-0.80	-0.80	-9.73
GIW-13	1/15/2020 11:10:50 AM	41.8	45.9	0.0	12.3	58.0	58.0	1.98	2.32	-0.66	-0.66	-7.74
GIW-13	1/15/2020 11:16:57 AM	41.4	46.7	0.0	11.9	57.7	57.7	2.32	2.62	-0.86	-0.86	-11.16
GIW-13	1/21/2020 2:52:19 PM	40.6	47.3	0.0	12.1	44.6	44.7	4.13	3.73	-0.52	-0.52	-7.44
GIW-13	1/29/2020 11:15:37 AM	42.7	46.8	0.0	10.5	38.5	38.5	3.83	3.83	-0.67	-0.67	-8.46
LCS-1D	1/6/2020 3:05:47 PM	54.0	38.1	1.2	6.7	63.0	62.8	2.99	2.16	-2.99	-3.00	-13.15
LCS-1D	1/24/2020 8:31:58 AM	54.3	41.0	0.6	4.1	40.3	40.3	2.21	1.73	-2.21	-2.21	-13.40
LCS-2D	1/6/2020 11:23:00 AM	53.8	40.4	0.9	4.9	60.4	60.7	2.42	2.68	-17.69	-17.69	-18.60
LCS-2D	1/27/2020 10:30:58 AM	56.6	40.6	0.1	2.7	34.0	34.0	4.02	4.37	-18.78	-18.78	-19.96

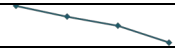
January 2020 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
LCS-3D	1/13/2020 8:24:12 AM	29.2	60.6	0.2	10.0	142.4	141.9	14.26	11.83	-18.91	-18.91	-18.05
LCS-3D	1/13/2020 8:25:26 AM	29.5	60.5	0.0	10.0	142.5	142.9	12.23	13.00	-18.91	-18.91	-18.82
LCS-3D	1/27/2020 9:46:52 AM	3.8	55.2	0.9	40.1	32.7	32.7	9.10	9.10	-19.80	-19.80	-19.96
LCS-4B	1/6/2020 8:57:37 AM	16.9	60.5	0.9	21.7	50.3	50.5	4.14	3.60	-18.91	-18.91	-19.58
LCS-4B	1/29/2020 2:25:27 PM	15.8	58.4	1.5	24.3	38.9	38.8	4.48	4.31	-18.24	-18.24	-19.62
LCS-5A	1/2/2020 10:57:48 AM	56.9	42.6	0.0	0.5	78.7	78.3	13.88	12.48	-10.40	-10.40	-12.68
LCS-5A	1/8/2020 11:19:33 AM	56.8	41.1	0.0	2.1	80.2	80.5	12.74	13.01	-10.40	-10.32	-13.14
LCS-5A	1/15/2020 10:34:34 AM	57.2	41.6	0.0	1.2	75.8	75.9	23.21	21.02	-10.82	-10.49	-12.97
LCS-5A	1/23/2020 9:45:01 AM	57.3	42.0	0.0	0.7	71.0	70.8	14.85	14.85	-11.16	-11.16	-13.35
LCS-5A	1/29/2020 1:59:41 PM	57.8	41.2	0.0	1.0	69.7	70.4	22.63	5.52	-11.08	-11.16	-12.81
LCS-5B	1/2/2020 11:10:14 AM	54.4	43.8	0.0	1.8	128.0	128.1	15.97	11.69	-10.49	-10.82	-13.02
LCS-5B	1/8/2020 11:33:54 AM	54.4	42.0	0.0	3.6	126.7	127.8	24.87	21.76	-10.44	-10.44	-13.14
LCS-5B	1/15/2020 10:54:21 AM	54.4	43.1	0.0	2.5	126.1	126.7	12.24	15.40	-11.08	-11.16	-13.40
LCS-5B	1/23/2020 9:57:09 AM	54.5	43.5	0.0	2.0	122.0	124.1	25.07	22.25	-10.53	-10.53	-13.52
LCS-5B	1/29/2020 2:12:21 PM	54.8	42.9	0.0	2.3	120.3	120.4	26.51	22.39	-12.18	-11.84	-13.48
LCS-6B	1/3/2020 9:34:06 AM	53.7	39.7	0.0	6.6	51.8	51.8	4.14	4.14	-1.45	-1.46	-12.97
LCS-6B	1/9/2020 8:41:23 AM	52.9	41.2	0.0	5.9	58.7	58.8	9.61	8.19	-0.84	-0.80	-13.10
LCS-6B	1/16/2020 2:46:40 PM	51.2	39.9	0.0	8.9	51.6	51.8	13.12	12.79	-1.10	-1.10	-13.27
LCS-6B	1/16/2020 2:49:01 PM	50.2	40.6	0.0	9.2	49.4	49.3	7.81	2.95	-0.60	-0.60	-13.35
LCS-6B	1/23/2020 11:44:55 AM	56.5	41.4	0.0	2.1	40.5	40.6	6.72	7.37	-0.05	-0.05	-13.77
LCS-6B	1/31/2020 10:55:07 AM	56.0	42.0	0.0	2.0	49.9	49.9	11.79	11.03	-0.62	-0.63	-13.48
SEW-002	1/6/2020 10:46:25 AM	26.2	46.6	3.6	23.6	65.4	66.0	4.04	4.21	-0.12	-0.12	-17.67
SEW-002	1/27/2020 2:06:56 PM	46.9	29.9	1.9	21.3	37.2	37.2	4.44	4.09	-17.22	-17.22	-17.25
SEW-003	1/6/2020 9:03:53 AM	2.0	33.6	6.5	57.9	65.5	65.5	8.95	7.65	-0.08	-0.08	-19.62
SEW-003	1/6/2020 9:04:43 AM	1.9	33.2	6.5	58.4	66.0	65.9	8.10	8.61	-0.08	-0.09	-19.45
SEW-003	1/20/2020 8:43:35 AM	2.0	26.7	6.5	64.8	39.5	39.5	8.47	9.36	-0.11	-0.11	-19.83
SEW-003	1/20/2020 9:15:25 AM	1.7	28.3	6.3	63.7	41.2	41.1	25.28	26.24	-0.11	-0.12	-20.13
T-56	1/3/2020 9:52:44 AM	51.3	36.5	0.0	12.2	47.9	47.9	15.42	12.48	-0.01	-0.02	-13.23
T-56	1/9/2020 9:02:43 AM	52.7	37.0	0.0	10.3	49.8	49.8	13.40	9.48	-0.04	-0.02	-13.40
T-56	1/16/2020 3:45:32 PM	34.6	32.1	0.4	32.9	45.1	45.2	7.59	4.06	-0.04	-0.04	-13.61
T-56	1/16/2020 3:46:48 PM	34.3	32.1	0.4	33.2	45.6	45.5	11.48	7.03	-0.02	-0.03	-13.52
T-56	1/23/2020 1:56:10 PM	59.1	37.9	0.0	3.0	41.2	41.3	4.08	12.41	-0.01	-0.01	-13.65
T-56	1/31/2020 11:21:45 AM	54.5	37.8	0.0	7.7	44.7	44.6	11.96	12.00	-0.05	-0.05	-13.52

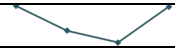
ATTACHMENT D-2

MAXIMUM WELLHEAD TEMPERATURE TABLE

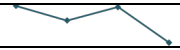
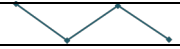
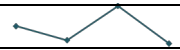
Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2019	November 2019	December 2019	January 2020	><30°F	
GEW-002	114.3	112.5	112.2	110.7		
GEW-003	117.3	111.7	113.7	108.4		
GEW-004	113.5	111.5	111.0	106.7		
GEW-005	89.3	84.0	84.4	76.4		
GEW-006	86.9	85.8	85.1	81.2		
GEW-007	95.8	91.4	90.8	89.8		
GEW-008	114.6	112.0	112.2	110.7		
GEW-009	123.4	121.8	121.6	119.4		
GEW-010	103.5	91.5	92.9	79.8		
GEW-013A	194.3	193.0	193.6	192.9		
GEW-015	135.3	102.8	95.4	97.0		
GEW-016R	172.6	171.0	169.5	166.9		
GEW-018B	190.2	195.6	202.4	180.3		
GEW-019A	89.4	63.3	42.7	50.4		
GEW-039	109.7	105.3	106.5	106.2		
GEW-040	85.9	58.7	54.7	52.6		
GEW-041R	100.2	89.6	76.6	74.1		
GEW-042R	107.8	103.9	103.0	101.8		
GEW-043R	118.4	116.6	115.8	115.5		
GEW-044	101.6	89.7	69.1	70.5		
GEW-045R	99.4	92.2	91.0	89.0		
GEW-046R	96.7	89.6	88.9	84.5		
GEW-047R	111.2	100.8	103.8	98.9		
GEW-048	99.1	97.9	97.0	94.3		
GEW-049	106.5	97.9	83.2	90.8		
GEW-050	105.0	100.8	100.6	98.4		
GEW-051	121.8	115.6	120.3	117.7		
GEW-052	111.7	106.7	105.7	100.8		
GEW-053	143.2	142.2	142.3	141.9		
GEW-054	147.0	146.6	146.3	146.3		
GEW-055	133.2	130.0	128.9	124.2		
GEW-056R	113.2	91.2	95.5	85.2		
GEW-057B	180.3	179.7	170.5	141.5		
GEW-058A	128.9	108.0	90.3	57.5		
GEW-059R	143.2	121.5	121.9	122.6		
GEW-067A	203.1	196.4	195.0	202.3		
GEW-068A	197.2	197.2	196.6	201.6		
GEW-078R	156.5	154.0	147.5	152.1		
GEW-082R	177.2	176.9	172.6	173.1		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2019	November 2019	December 2019	January 2020	><30°F	
GEW-086	182.7	184.5	190.2	183.9		
GEW-087	190.2	192.4	187.6	179.7		
GEW-088	181.5	187.6	180.9	180.3		
GEW-090	203.1	203.1	194.3	162.8		
GEW-091	118.1	194.3	193.6	195.7		
GEW-100	74.1	70.5	76.6	138.3		
GEW-101	65.9	79.9	67.7	72.0		
GEW-102	86.1	60.4	48.2	41.6		
GEW-104	179.7	151.3	137.6	178.6		
GEW-105	139.2	140.2	132.3	120.2		
GEW-106	170.6	171.6	169.5	171.6		
GEW-107	150.8	135.5	146.2	128.4		
GEW-108	176.9	174.2	185.1	179.7		
GEW-109	113.1	91.8	104.3	104.7		
GEW-110	116.0	94.1	94.6	67.7		
GEW-113	168.5	168.1	170.4	171.9		
GEW-116	169.5	169.3	165.2	158.5		
GEW-117	173.6	171.0	167.6	149.8		
GEW-118	194.3	202.3	193.6	188.3		
GEW-120	118.4	93.6	122.5	122.3		
GEW-121	156.5	152.1	150.6	142.5		
GEW-122	106.9	109.6	97.9	89.3		
GEW-123	90.1	90.6	69.1	62.6		
GEW-124	77.9	77.3	63.4	58.0		
GEW-125	78.8	78.6	57.3	63.0		
GEW-126	54.4	61.0	61.6	66.3		
GEW-127	129.2	108.3	81.6	60.4		
GEW-128	99.1	--	--	--		Temporarily decommissioned
GEW-129	139.3	134.4	140.9	134.1		
GEW-130	165.7	160.5	158.1	159.4		
GEW-131	122.5	126.0	129.4	121.0		
GEW-132	134.1	130.6	127.3	126.4		
GEW-133	162.9	141.5	128.9	120.2		
GEW-134	114.0	82.1	73.2	69.8		
GEW-135	133.2	111.0	109.0	97.9		
GEW-137	92.7	72.5	65.1	64.0		
GEW-138	85.6	63.5	59.8	51.0		
GEW-139	160.3	156.4	141.5	143.2		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2019	November 2019	December 2019	January 2020	><30°F	
GEW-140	130.4	172.6	137.4	120.2		
GEW-144	87.5	--	--	--		Temporarily decommissioned
GEW-145	90.6	49.6	49.4	43.1		
GEW-147	178.0	147.7	154.4	178.4		
GEW-148	153.3	148.9	151.3	145.2		
GEW-149	107.2	87.9	105.7	59.2		
GEW-150	183.3	186.4	154.4	128.9		
GEW-151	112.2	67.8	87.5	64.2		
GEW-152	133.4	97.7	94.1	80.0		
GEW-153	106.3	93.8	92.7	88.2		
GEW-154	--	--	--	--		Temporarily decommissioned
GEW-155	86.1	58.5	--	--		Temporarily decommissioned
GEW-156	126.4	92.2	124.7	93.1		
GEW-157	113.5	90.7	75.5	77.3		
GEW-158	109.3	100.1	92.2	92.0		
GEW-159	104.8	95.8	102.1	78.7		
GEW-160	94.2	96.3	92.9	63.7		
GEW-161	114.5	112.0	106.9	89.3		
GEW-162	111.9	75.9	80.6	64.2		
GEW-163	153.7	154.4	146.3	130.9		
GEW-164	148.4	146.0	150.6	154.9		
GEW-165	159.0	149.5	149.1	144.5		
GEW-166	175.8	182.1	184.5	167.1		
GEW-167	156.9	148.1	146.3	143.2		
GEW-168	136.5	133.5	133.8	129.3		
GEW-169	127.2	135.6	117.6	94.3		
GEW-170	156.9	135.8	129.0	123.0		
GEW-171	67.2	76.2	66.1	63.0		
GEW-172	164.3	157.3	147.5	159.8		
GEW-173	--	--	--	--		Temporarily decommissioned
GEW-174	130.3	129.8	129.5	116.6		
GEW-175	158.5	154.0	145.6	144.9		
GEW-176	80.0	64.7	102.1	61.2		
GEW-177	179.2	175.3	170.5	171.2		
GEW-178	92.4	77.8	74.5	71.5		
GEW-179	109.7	95.8	68.0	68.1		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2019	November 2019	December 2019	January 2020	><30°F	
GEW-180	94.8	98.4	100.1	83.8		
GEW-181	102.8	103.3	102.8	65.3		
GEW-182	98.4	--	--	--		Temporarily decommissioned
GEW-184	96.1	--	--	--		Temporarily decommissioned
GEW-185	118.9	121.0	132.3	112.7		
GEW-186	110.2	97.3	82.4	70.7		
GEW-187	139.3	117.1	121.0	113.0		
GEW-188	96.2	--	--	--		Temporarily decommissioned
GEW-217	119.4	95.7	186.4	185.0		
GEW-218	132.3	121.5	110.2	97.2		
GEW-219	183.3	172.1	176.0	164.7		
GEW-220	194.3	182.1	182.1	151.7		
GEW-221	108.0	100.5	96.3	84.4		
GEW-222	165.7	178.6	104.8	87.9		
GEW-223	155.6	162.0	129.7	129.8		
GEW-224	183.3	176.9	171.0	162.9		
GEW-225	180.9	185.1	126.4	180.3		
GEW-226	187.6	188.3	183.9	184.5		
GEW-227	177.0	202.3	198.7	191.6		
GEW-228	200.0	189.6	197.2	202.3		
GEW-229	112.2	104.5	103.4	87.7		
GEW-230	169.0	185.7	167.6	156.0		
GEW-231	135.3	129.3	119.4	117.0		
GEW-232	160.7	136.2	79.9	139.0		
GEW-233	175.4	150.6	54.7	127.2		
GEW-234	201.6	191.6	191.7	197.9		
GEW-235	139.3	143.2	128.6	121.9		
GEW-236	204.7	204.7	204.7	203.9		
GEW-237	164.0	161.1	148.1	146.3		
GEW-238	197.9	197.0	200.8	187.6		
GEW-239	205.4	185.1	192.3	203.9		
GEW-240	198.6	197.2	154.0	205.4		
GEW-2S	81.0	67.5	66.1	62.9		
GIW-01	154.4	107.7	102.3	91.0		
GIW-02	110.8	76.4	77.5	58.0		
GIW-03	102.3	70.6	74.8	56.0		
GIW-04	106.7	75.8	79.8	53.8		

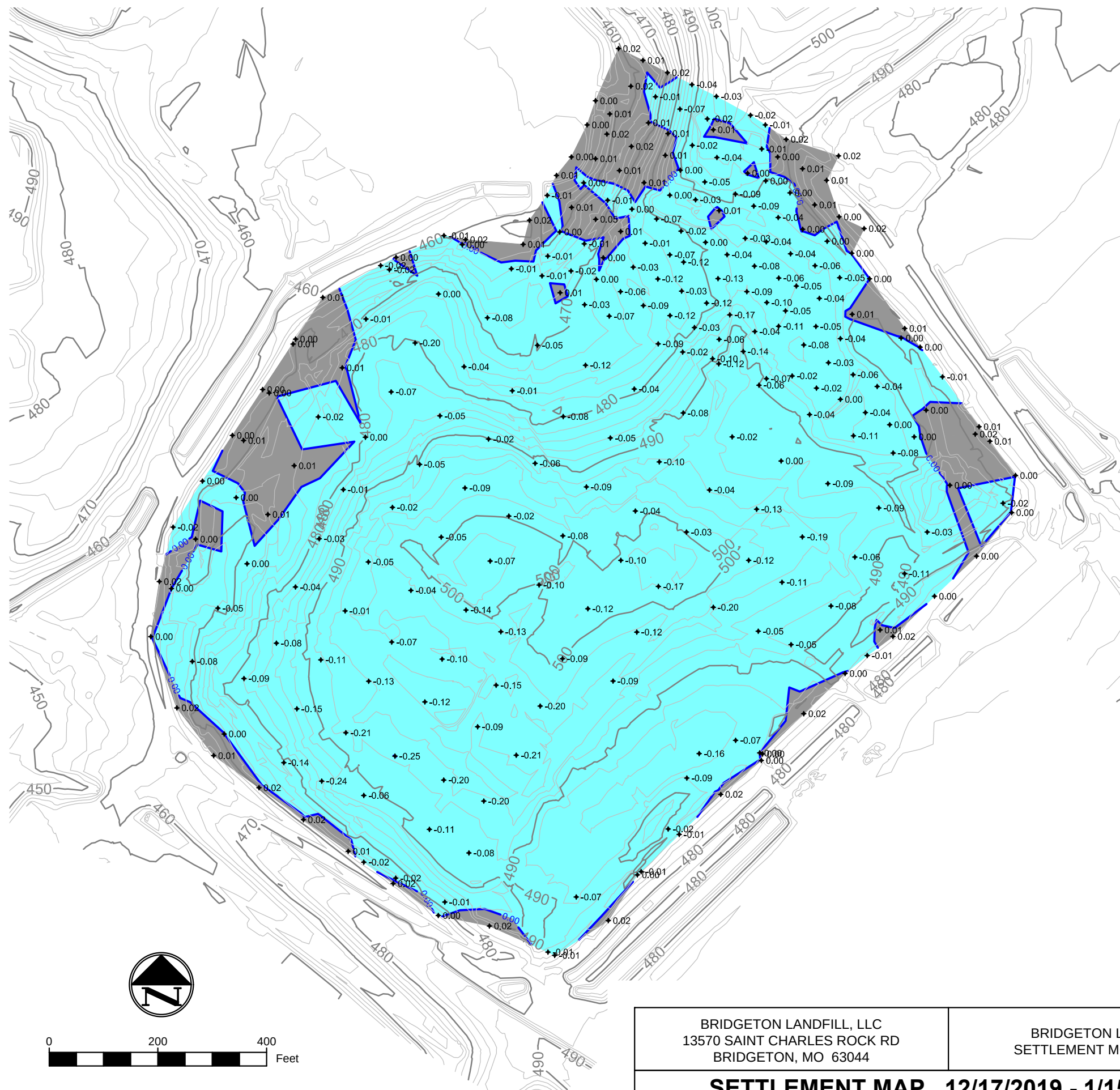
Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2019	November 2019	December 2019	January 2020	><30°F	
GIW-05	97.4	71.1	69.8	52.1		
GIW-06	104.6	75.9	77.5	54.7		
GIW-07	104.5	72.6	75.9	56.5		
GIW-08	105.0	68.5	70.7	53.9		
GIW-09	101.8	72.7	72.3	52.3		
GIW-10	103.6	75.5	75.7	54.7		
GIW-11	100.1	78.9	77.5	55.6		
GIW-12	97.5	75.0	73.0	57.2		
GIW-13	98.9	72.6	72.3	58.0		
LCS-1D	106.0	63.5	55.5	63.0		
LCS-2D	69.5	71.6	67.6	60.7		
LCS-3D	113.2	151.0	140.6	142.9		
LCS-4B	99.5	62.7	52.6	50.5		
LCS-5A	86.8	91.4	83.5	80.5		
LCS-5B	144.2	137.7	135.5	128.1		
LCS-6B	76.5	72.3	68.3	58.8		
SEW-002	100.1	59.2	52.5	66.0		
SEW-003	95.0	68.6	65.5	66.0		
T-56	70.6	58.9	53.6	49.8		

-- = Indicates no data available.

ATTACHMENT E

SETTLEMENT FRONT MAP



Thickness Map				
Range	Minimum Depth	Maximum Depth	2D Area (Sq. Ft.)	Color
1	-5.00	-4.00	0.00	
2	-4.00	-3.00	0.00	
3	-3.00	-2.00	0.00	
4	-2.00	-1.00	0.00	
5	-1.00	0.00	1,359,312.93	
6	0.00	1.00	175,705.59	

LEGEND

-
- 12-10-2019 TOPOGRAPHY (2' CONTOUR)
-
-
- 12-10-2019 TOPOGRAPHY (10' CONTOUR)
-
-
- .25 MINOR ELEVATION CHANGE CONTOUR (0.25 FEET)
-
-
- .50 MAJOR ELEVATION CHANGE CONTOUR (0.50 FEET)
-
-
- .03 SPOT ELEVATION DIFFERENCE (12-17-2019 to 1-15-2020)
-
-
- 1-2020**
- *SETTLEMENT FRONT CONTOUR FOR AREA WITH 1.31' PER 29 DAYS FOR CURRENT PERIOD OF DAYS
-
-
- *NONE FOR JANUARY 2020

- NOTES:
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS CO. ON DECEMBER 10, 2019.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. ELEVATION DIFFERENCE DETERMINED BY SUBTRACTING SPOT ELEVATIONS SURVEYED ON 12-17-19 FROM SPOT ELEVATIONS SURVEYED ON 1-15-20.
4. SURVEY POINTS WERE PERFORMED USING GPS METHODS.
5. SETTLEMENT RANGE SURFACE WAS GENERATED FROM THE SPOT ELEVATION DIFFERENCES.
6. ELEVATION DIFFERENCES THAT ARE SHOWN AS NEGATIVE INDICATE SPOTS OF SETTLEMENT.
7. ANY POINTS THAT ARE NOT A GROUND-TO-GROUND COMPARISON TO THE PREVIOUS MONTH'S POINTS, OR THAT WERE NOT SURVEYED IN THE SAME LOCATION AS THE PREVIOUS MONTH ARE NOT INCLUDED AND WERE NOT USED IN ANY SURFACE GENERATION.

BRIDGETON LANDFILL, LLC
13570 SAINT CHARLES ROCK RD
BRIDGETON, MO 63044

BRIDGETON LANDFILL
SETTLEMENT MONITORING

PROJECT NUMBER: BT-145 | FILE PATH: D:\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-145 (Agreed Order Reporting)\Monthly Reports\01-2020 Report\Internal Draft\Site Data\settlement\Settlement And Fill 1-15-2020.dwg

JANUARY 2020

DESIGNED BY: IN

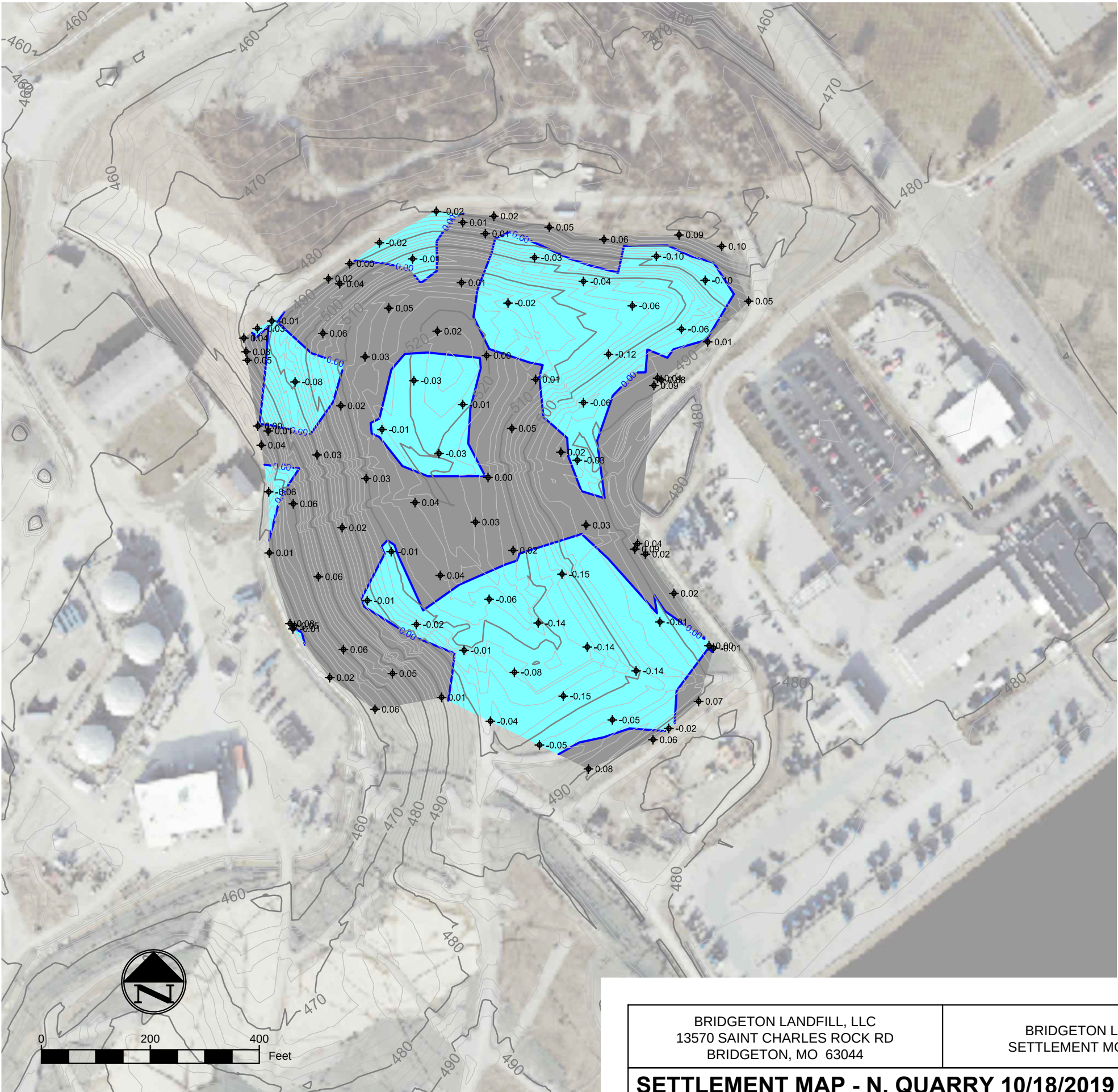
APPROVED BY: DRF

REVISION

DATE

DRAWING NO.:

001



Thickness Map				
Range	Minimum Depth	Maximum Depth	2D Area (Sq. Ft.)	Color
1	-5.00	-4.00	0.00	
2	-4.00	-3.00	0.00	
3	-3.00	-2.00	0.00	
4	-2.00	-1.00	0.00	
5	-1.00	0.00	320,818.62	
6	0.00	1.00	339,371.08	

LEGEND

- 12-10-2019 TOPOGRAPHY (2' CONTOUR)
- 500 12-10-2019 TOPOGRAPHY (10' CONTOUR)
- .25 MINOR ELEVATION CHANGE CONTOUR (0.25 FEET)
- .50 MAJOR ELEVATION CHANGE CONTOUR (0.50 FEET)
- ⊕ -.03 SPOT ELEVATION DIFFERENCE (10-18-2019 to 1-15-2020)
- 1-2020 *SETTLEMENT FRONT CONTOUR FOR AREA WITH 4.00' PER 89 DAYS FOR CURRENT PERIOD OF DAYS
- *NONE FOR 10-18-2019 THROUGH 1-15-2020

- NOTES:
- EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS CO. ON DECEMBER 10, 2019.
 - FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 - ELEVATION DIFFERENCE DETERMINED BY SUBTRACTING SPOT ELEVATIONS SURVEYED ON 10-18-19 FROM SPOT ELEVATIONS SURVEYED ON 1-15-20.
 - SURVEY POINTS WERE PERFORMED USING GPS METHODS.
 - SETTLEMENT RANGE SURFACE WAS GENERATED FROM THE SPOT ELEVATION DIFFERENCES.
 - ELEVATION DIFFERENCES THAT ARE SHOWN AS NEGATIVE INDICATE SPOTS OF SETTLEMENT.
 - ANY POINTS THAT ARE NOT A GROUND-TO-GROUND COMPARISON TO THE PREVIOUS MONTH'S POINTS, OR THAT WERE NOT SURVEYED IN THE SAME LOCATION AS THE PREVIOUS MONTH ARE NOT INCLUDED AND WERE NOT USED IN ANY SURFACE GENERATION.

BRIDGETON LANDFILL, LLC
13570 SAINT CHARLES ROCK RD
BRIDGETON, MO 63044

BRIDGETON LANDFILL
SETTLEMENT MONITORING

PROJECT NUMBER: BT-145

FILE PATH: D:\dmpbox (Feezor Engineering)\Bridgeton\100-149BT-145 (Agreed Order Reporting)\Quarterly Settlement\2020-01\Quarterly MQ Settlement 1-15-2020.dwg

Engineering for a Better World

FEEZOR

ENGINEERING, INC.

JANUARY 2020

DESIGNED BY: IN

APPROVED BY: DRF

REVISION

DATE

DRAWING NO.:

003

ATTACHMENT F

LIQUID CHARACTERIZATION DATA AND DISCHARGE LOG

Bridgeton Landfill - Leachate PreTreatment Plant

January 2020

Liquid Characterization Data

Liquid characterization data is made available to MDNR on an ongoing basis. No additional leachate characterization data, beyond that produced for MSD, was collected during the prior month.

Hauled Disposal to MSD – Bissell Point

Date	Waste	Source	Transporter	Quantity
12/1/2019	LPTP Activated Sludge/ Permeate	Tank 1 (T1)	MBI	0
12/2/2019				0
12/3/2019				0
12/4/2019				0
12/5/2019				0
12/6/2019				0
12/7/2019				0
12/8/2019				0
12/9/2019				0
12/10/2019				0
12/11/2019				0
12/12/2019				0
12/13/2019				0
12/14/2019				0
12/15/2019				0
12/16/2019				0
12/17/2019				0
12/18/2019				0
12/19/2019				0
12/20/2019				0
12/21/2019				0
12/22/2019				0
12/23/2019				0
12/24/2019				0
12/25/2019				0
12/26/2019				0
12/27/2019				0
12/28/2019				0
12/29/2019				0
12/30/2019				0
12/31/2019				0
Total				0

Direct Discharge to MSD

Date	Waste	Source	Quantity (gal)
1/1/2020	LPTP Permeate	Through Tank AST 97k (MSD Sampling Point 013)	225,248
1/2/2020			116,784
1/3/2020			119,616
1/4/2020			119,976
1/5/2020			117,760
1/6/2020			112,824
1/7/2020			115,680
1/8/2020			111,968
1/9/2020			172,056
1/10/2020			237,784
1/11/2020			135,776
1/12/2020			274,928
1/13/2020			242,176
1/14/2020			263,992
1/15/2020			257,632
1/16/2020			227,784
1/17/2020			130,424
1/18/2020			80,064
1/19/2020			201,256
1/20/2020			269,424
1/21/2020			265,368
1/22/2020			257,216
1/23/2020			125,776
1/24/2020			117,424
1/25/2020			117,712
1/26/2020			221,744
1/27/2020			285,248
1/28/2020			282,056
1/29/2020			184,376
1/30/2020			140,656
1/31/2020			147,064
Total			5,677,792

ATTACHMENT G

VOLUMES OF LEACHATE PROCESSED

Bridgeton Landfill - Leachate Volumes
January 2020

Total volume of leachate from the individual leachate collection sumps during the month. Additional non-LCS leachate was collected and the total volume was 1,693,626 gallons. Therefore, the total leachate collected was 3,419,916 gallons.

ID	Volume
LCS -1D	0
LCS-2D	0
LCS-3D	110,520
LCS-4B	0
LCS-5A	1,572,992
LCS-5B	42,368
LCS-6B	410

ATTACHMENT H

SLIP FAILURE AND SEPARATION ASSESSMENT

January 27, 2020

Ms. Erin Fanning
Division Manager
Bridgeton Landfill, LLC.
13570 Saint Charles Rock Road
Bridgeton, MO 63044

RE: Bridgeton Slip Failure and Separation Assessment
4th Quarter 2019 Inspection

Dear Erin,

On December 16, 2019, I performed an inspection of the Bridgeton Landfill for the purpose of identifying any visual evidence of instability or incipient failure. The inspection included the North and South Quarry fill areas. This inspection was for the 4th quarter of 2019. The previous inspection was performed on September 30, 2019.

The observation of the slopes for both the North and South Quarry areas was performed to look for telltale signs of movements related to instability, including areas of suspension of the membrane on the upslope areas that would result if scarping, not visible due to the temporary membrane cap, existed. In addition, areas that showed indicated localized differential settlement were walked over to determine if any open tension cracking, an indication of separation, was present. The observations were made while walking along the areas within the landfill boundaries.

The inspection did not identify any previously unobserved (and reported) movements or signs of movement within the North or South Quarry that could be potential signs of instability. The landfill surface in the South Quarry shows signs of continued settlement with minor areas of tension in the membrane along the eastern side approximately above the underlying Quarry wall related to differential settlement in the area.

Since the quarterly inspections were begun in 2013, the sloping portions of the landfill are noticeably flatter and therefore, less prone to instability. At this time, there are very few areas within the heat-affected portions of the South Quarry that have slopes exceeding 20%. The general reduction in vertical relief has essentially eliminated any potential for instability of any consequence in the South Quarry. The only slopes that are close to the original ground surface slopes in the South Quarry are those south of the neck area. These areas were examined for any signs of movement and none was observed.

Fill materials continue to be placed in the locally depressed areas to allow for drainage of stormwater in the South Quarry. The areas east of the main fills in South Quarry exhibit signs

of differential settlement along the vertical projection of the Quarry wall. No open tension cracking was indicated in area of the differential settlement when pressing the membrane down to contact the underlying ground surface in this area. No increase of tension in the membrane was present along the east side of the fill zone than observed during the previous inspection in June 2019. At the time of the inspection it was snowing and all work was temporarily suspended.

Since the June inspection, earthen fill had been placed along west side of the south quarry south of the neck area. No signs of instability or separation were observed in the areas adjacent to the fills.

The North Quarry cap construction was completed in the 2nd quarter of 2017. No signs of instability or settlement patterns that would indicate separation were observed in the North Quarry during the site inspection. The quarterly survey data from 4th quarter for the north quarry was performed on 1-15-19 and shows no signs of settlement patterns indicative of instability of any kind.

In addition, a review of the monthly settlement at grid points in the South Quarry for the past quarter. I did not see any indication of instability in the data. No indication of instability was observed in the South Quarry based on settlement patterns. As mentioned in previous reports, the Bridgeton site has not exhibited a coupling of instability and settlement.

This is the twenty-ninth review I have performed of this type at the Bridgeton since the fall of 2012. To date, no signs of impending instability of any consequence has been identified or occurred.

I hope this information is helpful to you. Please call if there are any questions.

Sincerely,



Peter J. Carey, PE
President