Bridgeton Landfill, LLC

Monthly Data Submittals

January 2018

Required by Section 52.E of Agreed Order, Case No. 13SL-CC01088
Effective May 13, 2013

Contents:

Provided Separately:

– Flare Raw Data Excel Spreadsheet
– Gas Wellfield Raw Data Excel Spreadsheet

February 20, 2018

Commentary on Data

February 20, 2018

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

Gas Volume

- As seen in Attachment B-1, the gas collection volumetric rate in for this month averaged 259 SCFM from the North Quarry and 1,092 SCFM from the South Quarry, for a total site flow of 1,351 SCFM, as normalized per the MDNR weekly flow and TRS sampling results.

Gas Quality

- Attachments D and E contain the monthly data related to gas quality as measured at the respective wellheads.

- Attachment E-1 contains vertical wells which had oxygen levels over 5% at one (1) or more weekly monitoring events during this reporting period. These consisted of 49 GEW wells that are experiencing low or restricted flows, and six (6) GIW wells that have low gas flow due to the cooling loops that are installed within these wells. By the end of the month, 39 of the GEW wells and 4 of the GIW wells still exhibited oxygen at the wellhead at or greater than 5%. All of these wells are low-flow/vacuum sensitive wells with valves only slightly open. On-going tuning, maintenance, and pump operation is being performed to manage the oxygen content. With the exception of GEW-1A, all of these wells are in the South Quarry area where the flexible membrane liner cap is in place to prevent atmospheric intrusion into the waste mass. Please note that the abnormal cold ambient temperatures toward the end of 2017 and during the beginning of 2018 may have affected landfill gas collection and gas well tuning.

- Attachment E-2 contains gas temperatures as measured at the wellheads. Eight (8) vertical wells (excluding GIW wells) increased by 30°F during this reporting period. Additionally, 5 vertical wells (excluding GIW wells) decreased by 30°F or more. All wells that exhibited changes greater than 30 degrees are all within the historical gas temperature norms for these wells or within the range of temperatures of nearby vertical wells.

- All wells in the North Quarry during this reporting period exhibited a maximum wellhead temperature under 145°F. Carbon monoxide (CO) results showed non-detect (ND) for North Quarry wells, with the exception of GEW-053 (57 ppm) and GEW-055 (46 ppm).

Settlement

- The South Quarry exhibited monthly maximum settlement up to 0.58 feet over 31 days for this reporting period (see Attachment F).
- Settlement surveys are now being conducted quarterly in the North Quarry. The North Quarry exhibited monthly maximum settlement up to .25 feet over the 3 month monitoring period. (see Attachment F).

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. Bridgeton Landfill personnel completed required annual training by USDA APHIS Wildlife Services on August 25, 2017 for landfill personnel actively involved in managing potentially hazardous wildlife near airports. 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.

Low Fill Project Area

- Enclosed is the requested clean fill placement figure in accordance with the June 19, 2015 letter from the Missouri Department of Natural Resources (MDNR) granting modification approval to Permit number 0118912. This modification allows for the acceptance of clean fill and use thereof as a method of re-establishing positive surface drainage and maintaining structural stability of landfill infrastructure. Condition 4 of this approval is satisfied via the text below and the accompanying figure in Attachment I-1.

- Clean fill activities commenced on June 28th and continued into January.

ATTACHMENT A

WORK COMPLETED AND PLANNED

Bridgeton Landfill, LLC
Monthly Summary of Work Completed and Planned

Work Completed in January 2018

Gas Collection and Control System (GCCS)

- Continued operation and maintenance of GCCS system.
- Continued upgrades to GCCS system as necessary.

Heat Extraction System (HES)

- Continued operation and maintenance of the HES (pilot and barrier wells).

Leachate Management System

- Continued routine operation of previously installed and upgraded features.

Pre-Treatment Facility

- Continued ongoing operation of facility.
- Continued to optimize operation efficiency of pre-treatment facility.
- Permeate continued to be discharged directly to St. Louis Metropolitan Sewer District (MSD) – Bissell Point Facility or other approved disposal facilities as determined by MSD.

Other Projects

- Continued the East Fill project.
- Infrastructure in East Fill area has been raised as necessary to perform maintenance on existing infrastructure.
- Continued construction of alternative first responder entrance, dependent on suitable weather conditions and contractor availability.

Work Planned for February 2018

Gas Collection and Control System (GCCS)

- Continue operation and maintenance of GCCS system.
- Continue upgrades to GCCS system as necessary.

Heat Extraction System (HES)

- Continue operation and maintenance of the HES.
- Continue upgrades to the HES as necessary.

Leachate Management System

- Continue routine operation of previously installed and upgraded features.

Pre-Treatment Facility

- Ongoing operation of facility.
- Continue to optimize operation efficiency of pre-treatment facility.
- Permeate will continue to be discharged directly to MSD – Bissell Point Facility or other approved disposal facilities as determined by MSD.

Other Projects:

- Complete the East Fill project.
- Continue construction of alternative first responder entrance, pending suitable weather conditions and contractor availability.

ATTACHMENT B

DAILY FLARE MONITORING DATA

ATTACHMENT B-1

FLOW DATA TABLE

Daily Flare Monitoring Data - Bridgeton Landfill
January 2018

Date	Average Device Flow* (scfm)				Total Avg. Flow** (scfm)
	Utility Flare (FL-100)	Utility Flare (FL-120)	Utility Flare (FL-140)	EP14 NQ Utility Flare***	
1/1/2018	0	1,068	0	191	1,259
1/2/2018	0	1,055	0	188	1,244
1/3/2018	0	1,015	0	211	1,226
1/4/2018	0	1,025	1	215	1,241
1/5/2018	0	1,123	0	209	1,333
1/6/2018	0	1,063	1	215	1,278
1/7/2018	0	1,023	0	241	1,264
1/8/2018	0	1,054	0	271	1,325
1/9/2018	0	1,090	0	262	1,352
1/10/2018	0	1,105	0	260	1,365
1/11/2018	0	1,116	0	242	1,359
1/12/2018	0	1,039	1	258	1,298
1/13/2018	0	1,051	1	266	1,318
1/14/2018	0	1,060	1	268	1,329
1/15/2018	0	1,068	1	263	1,332
1/16/2018	0	1,074	1	288	1,362
1/17/2018	0	1,092	0	279	1,372
1/18/2018	0	1,121	0	263	1,385
1/19/2018	0	1,156	0	299	1,456
1/20/2018	0	1,130	0	297	1,427
1/21/2018	0	1,122	0	294	1,416
1/22/2018	0	1,139	0	286	1,425
1/23/2018	0	1,125	0	277	1,403
1/24/2018	0	1,124	0	279	1,404
1/25/2018	0	1,124	0	279	1,403
1/26/2018	0	1,124	0	274	1,398
1/27/2018	0	1,082	0	272	1,355
1/28/2018	0	1,096	0	274	1,370
1/29/2018	0	1,112	0	271	1,383
1/30/2018	0	1,122	0	276	1,398
1/31/2018	0	1,137	0	267	1,405
AVERAGE	0	1,092	0	259	**1,351**

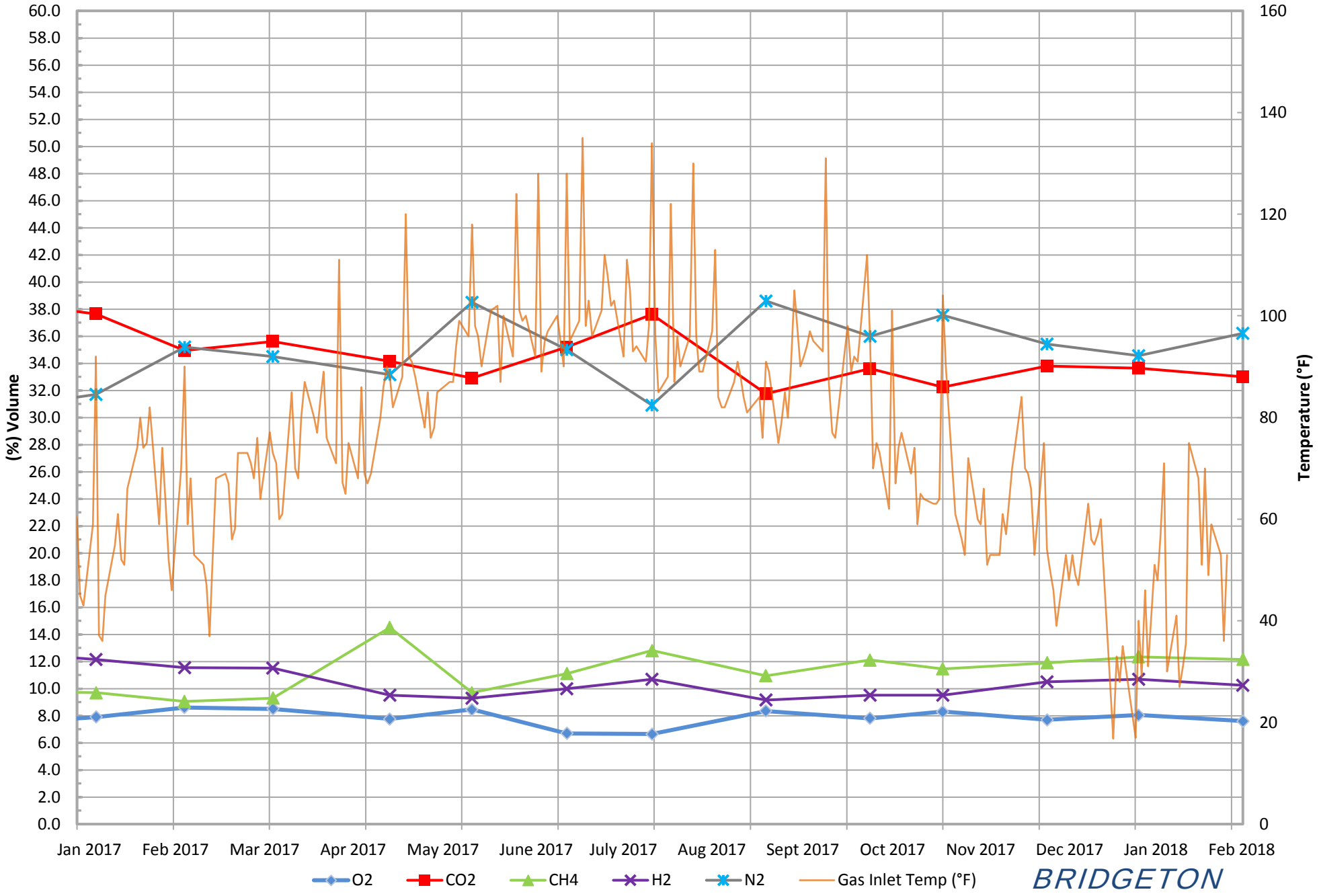
* Flows normalized to **Blower Outlet Flowmeter - EPA Method 2 measurement verified

*** On 3/18/2016, the Bridgeton Landfill began separating the North Quarry gas to the Auxiliary Flare.

ATTACHMENT B-2

FLOW DATA GRAPHS

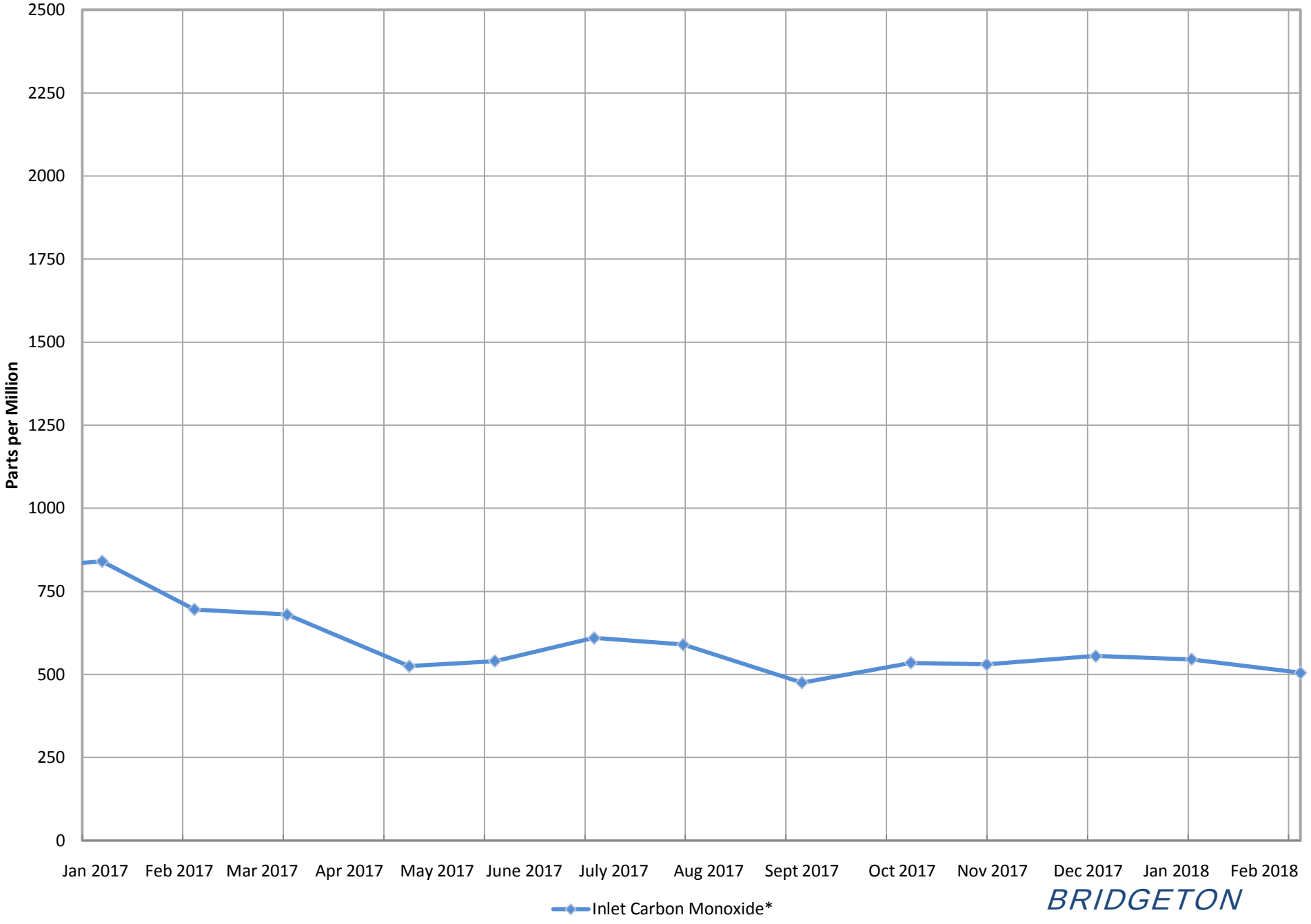
South Quarry Inlet Gas and Temperature*



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

BRIDGETON LANDFILL

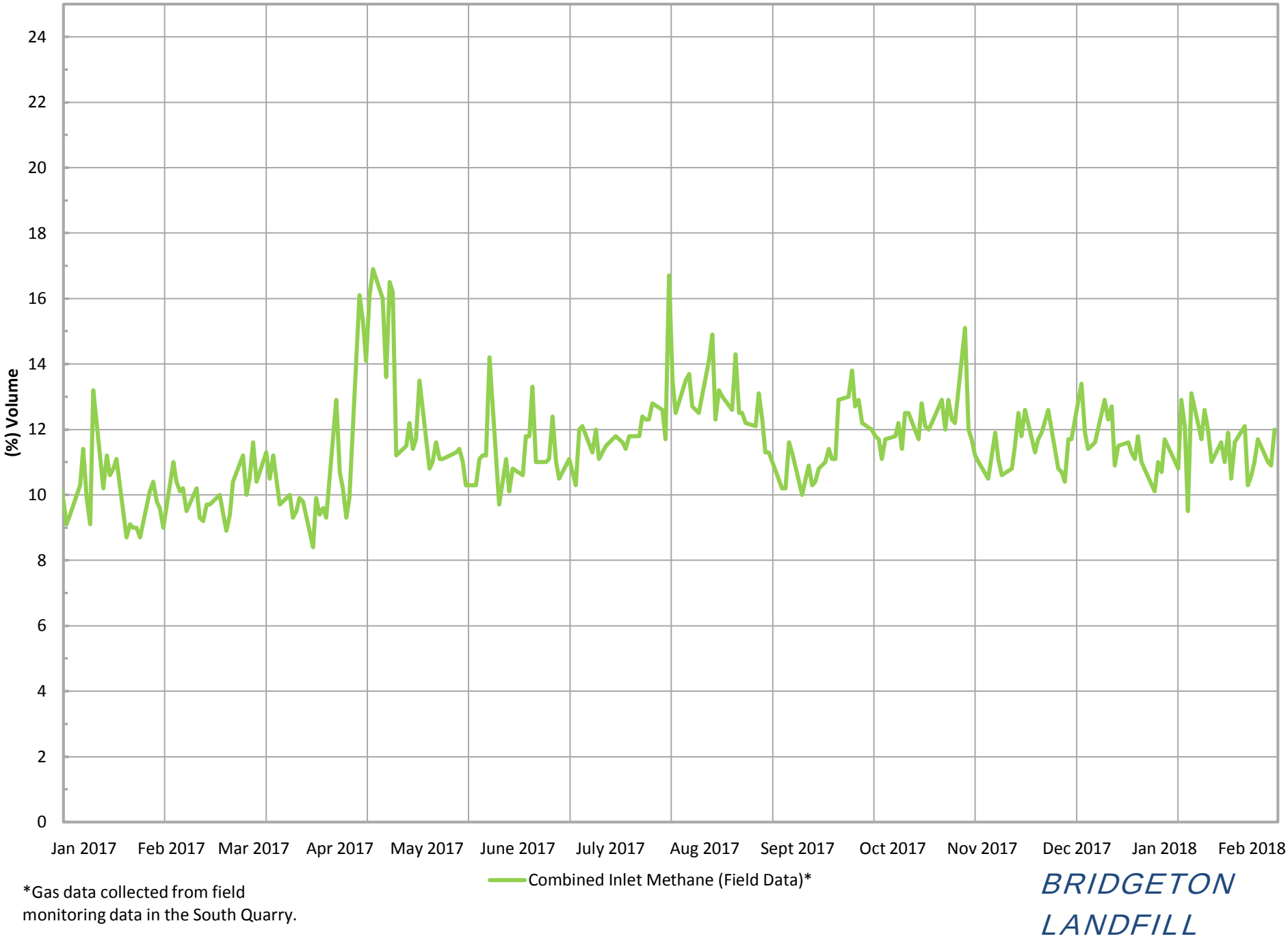
South Quarry Inlet Carbon Monoxide*



*Data collected from Laboratory Reports for the South Quarry.

BRIDGETON LANDFILL

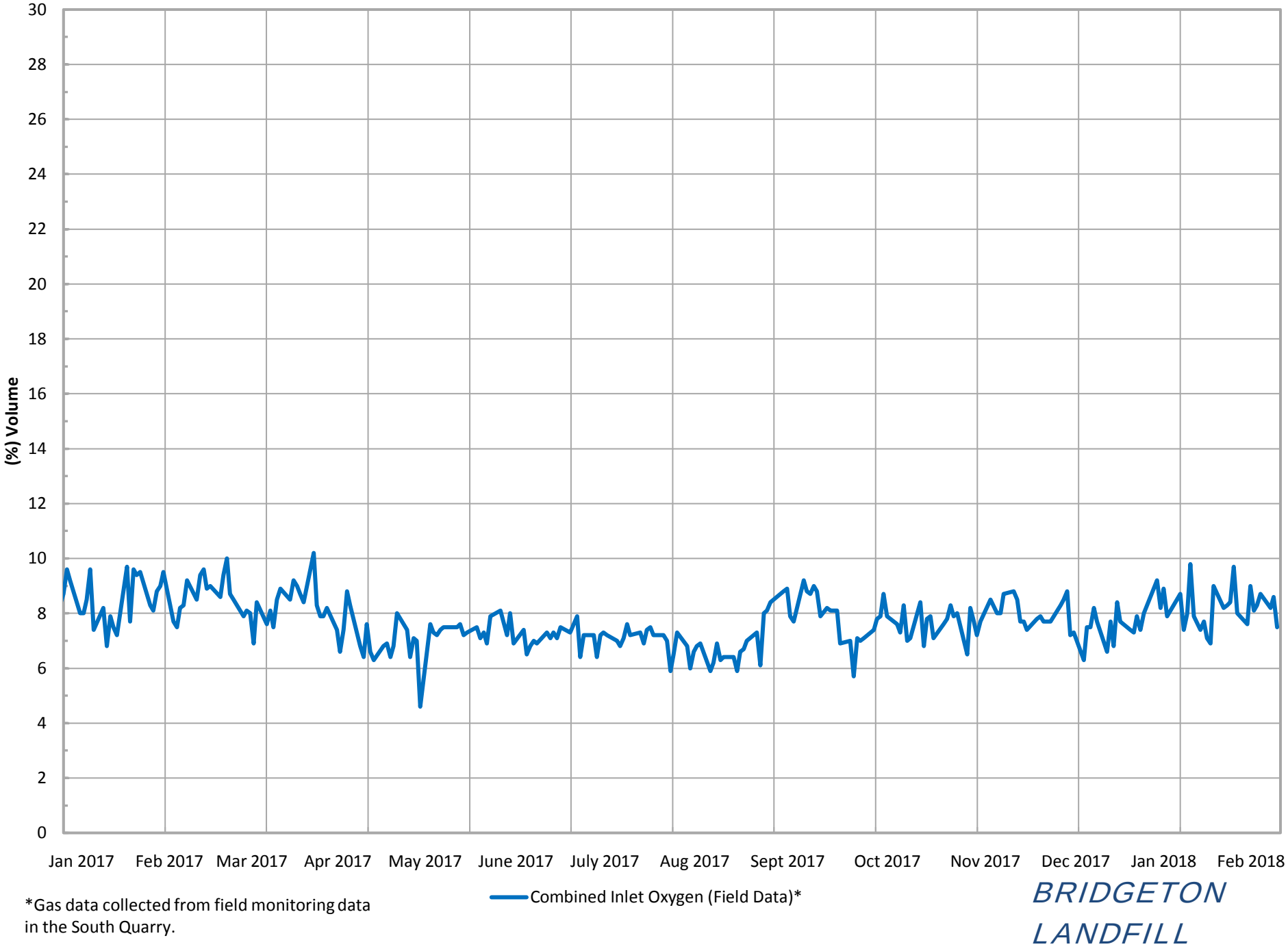
South Quarry Inlet Methane (Field Data)*



*Gas data collected from field monitoring data in the South Quarry.

BRIDGETON LANDFILL

South Quarry Inlet Oxygen (Field Data)*



*Gas data collected from field monitoring data in the South Quarry.

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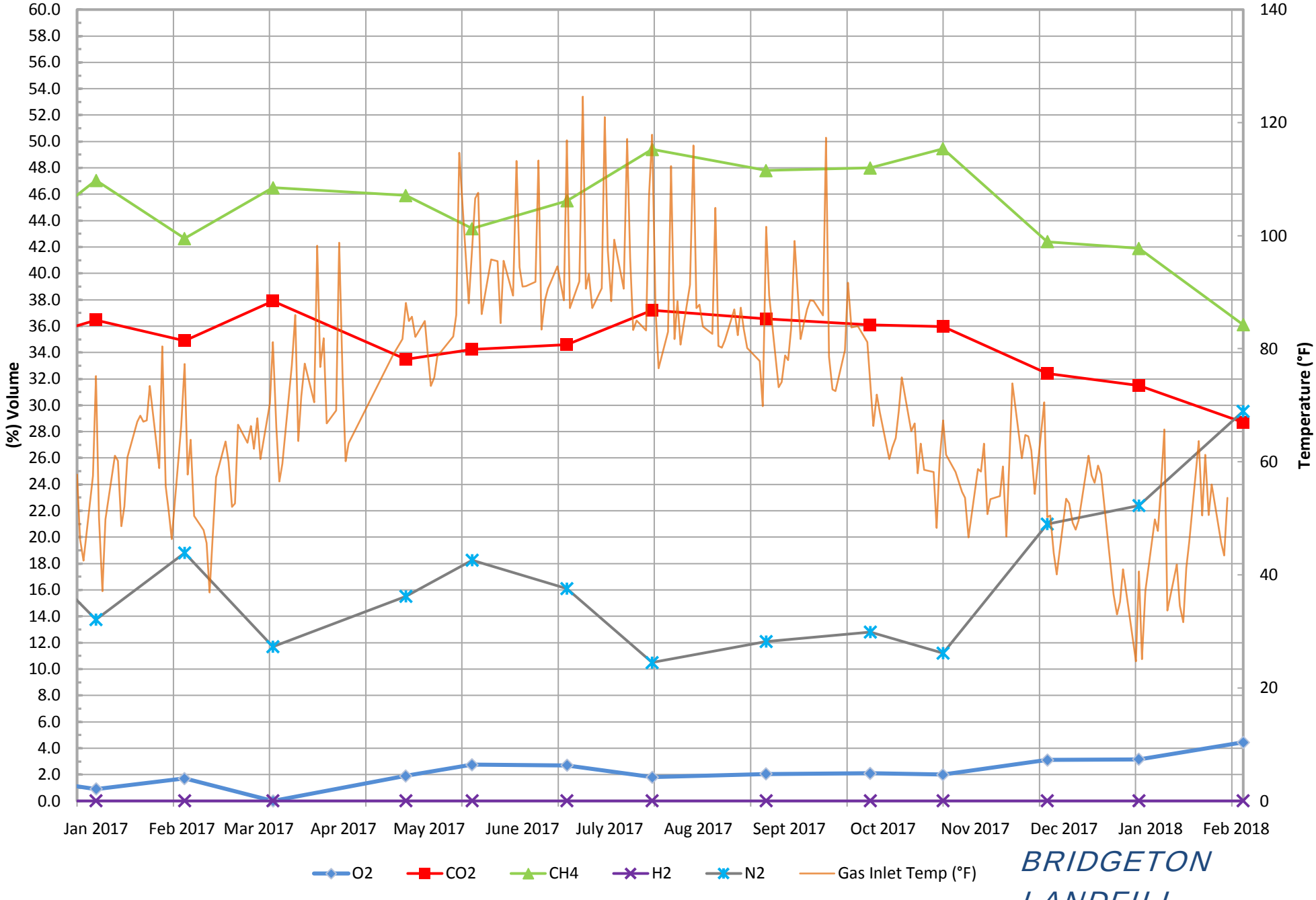
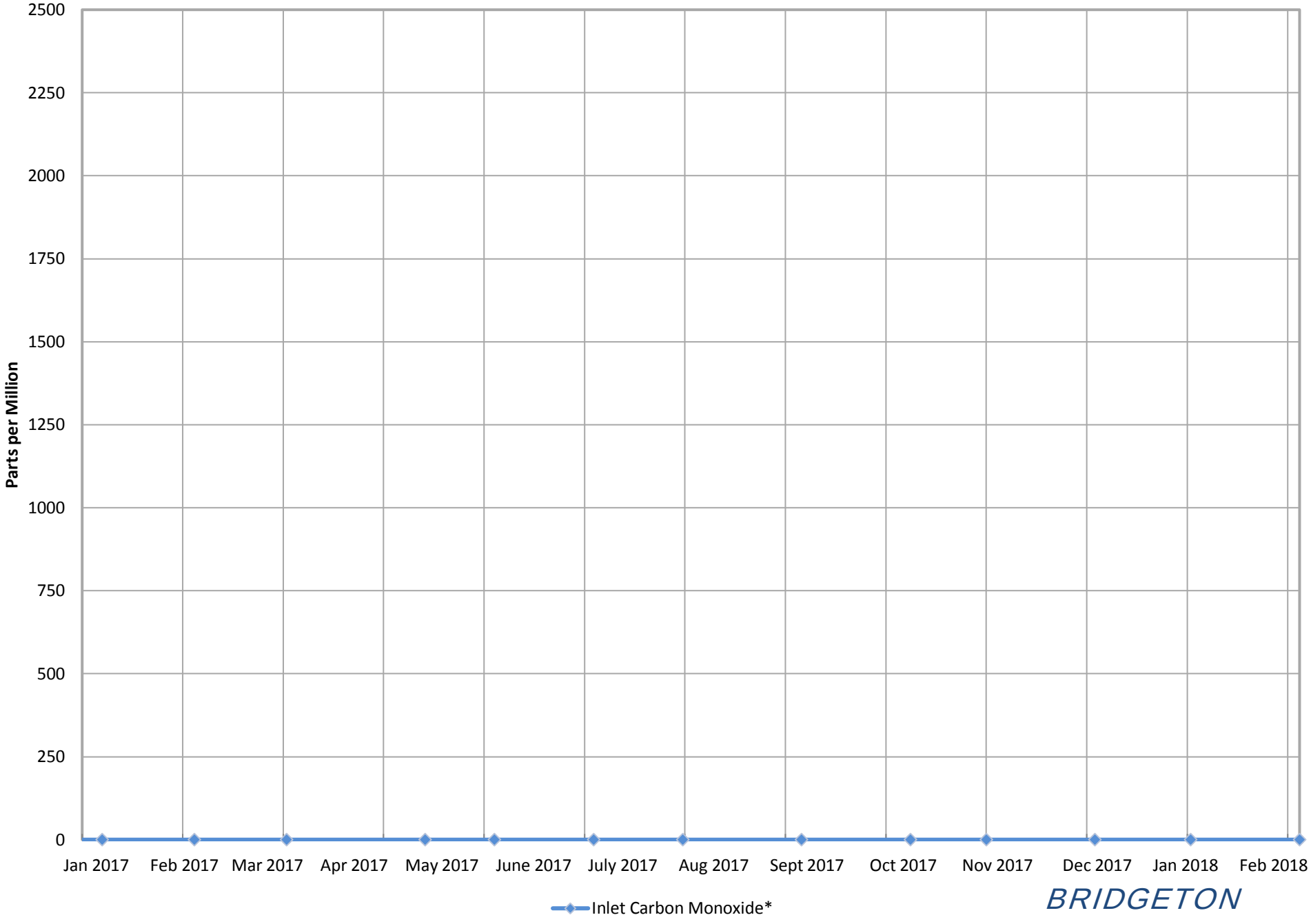
North Quarry Inlet Gas and Temperature*



BRIDGETON LANDFILL

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

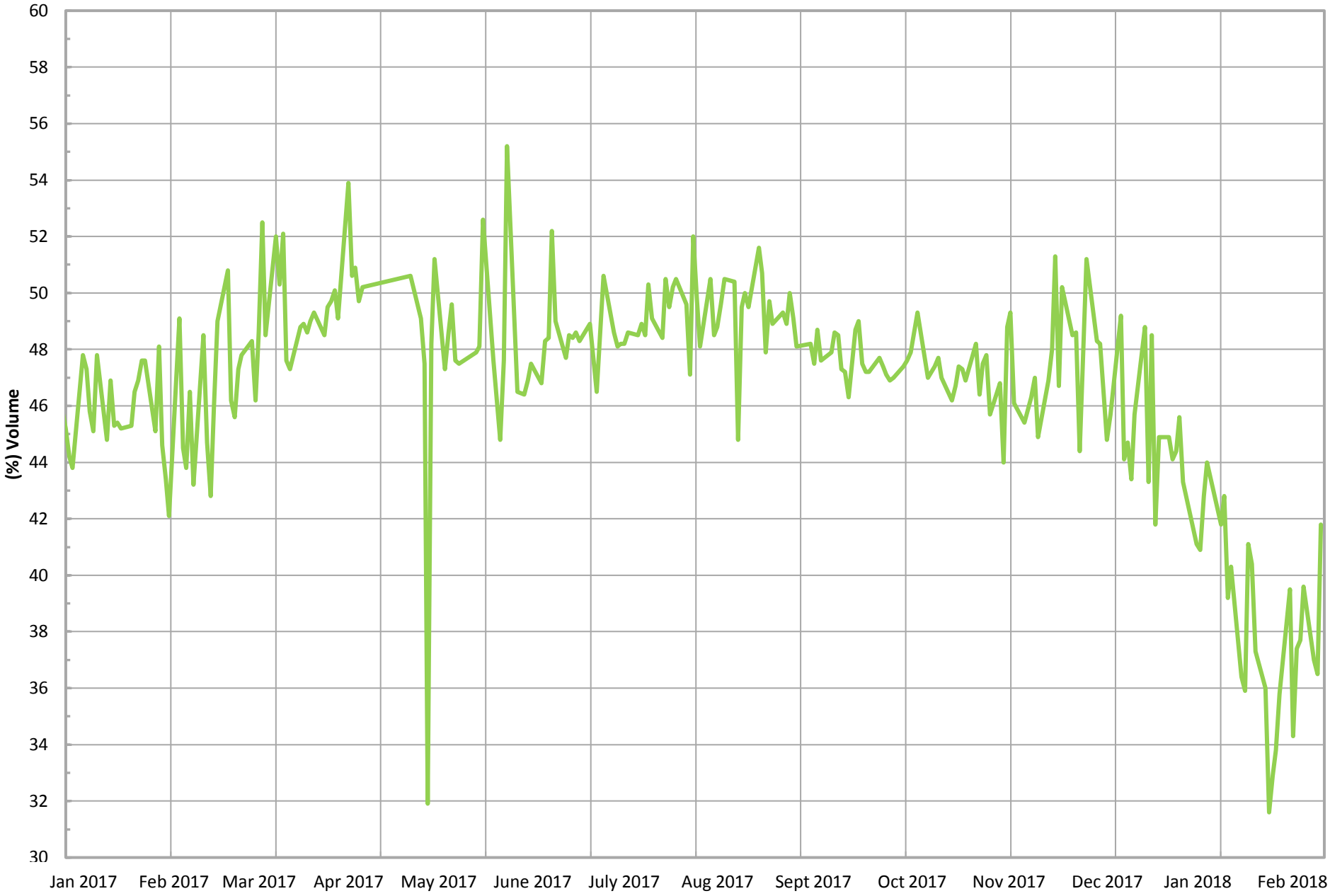
North Quarry Inlet Carbon Monoxide*



*Data collected from Laboratory Reports for the North Quarry.

BRIDGETON LANDFILL

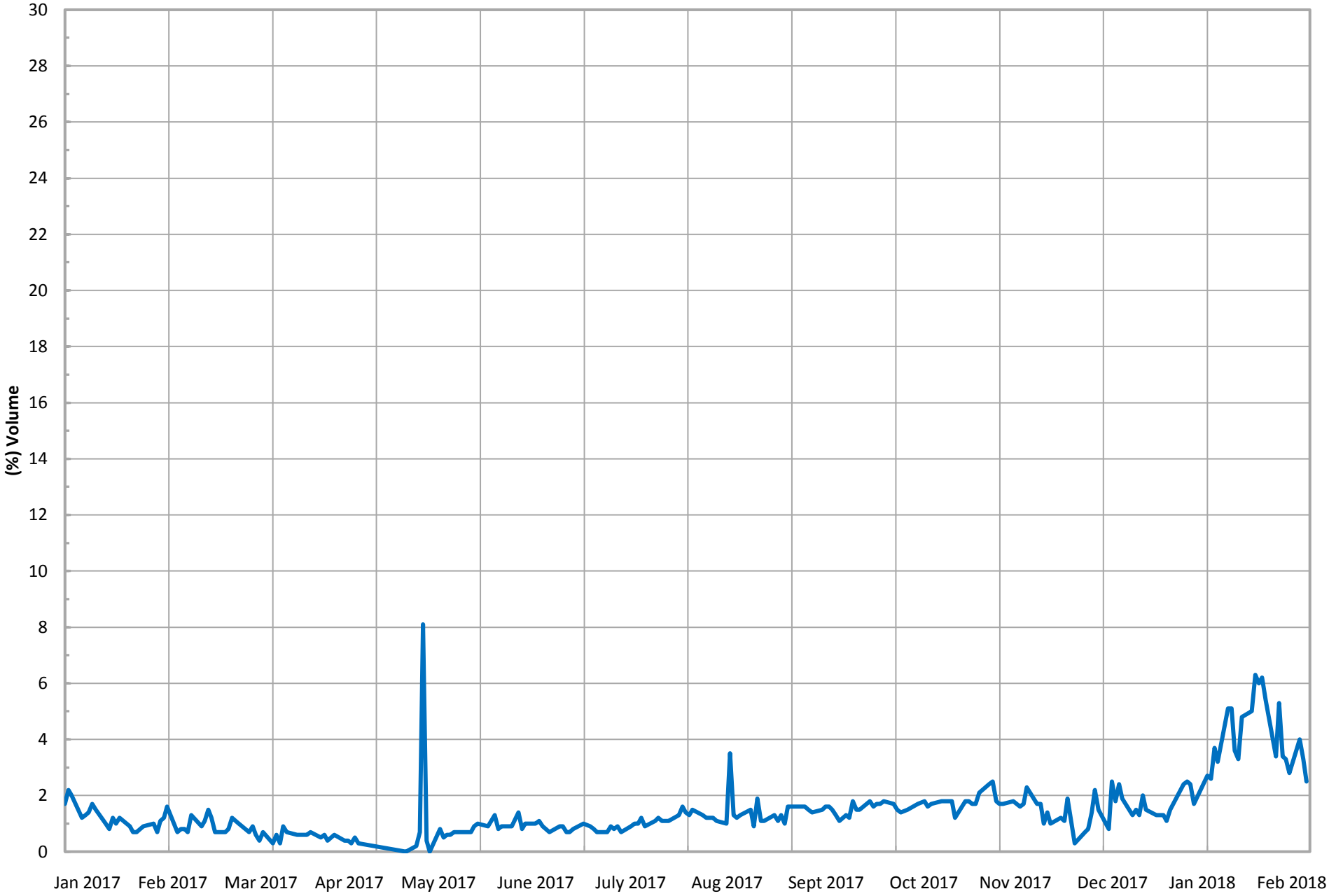
North Quarry Inlet Methane (Field Data)*



*Gas data collected from field monitoring data in the North Quarry.

BRIDGETON LANDFILL

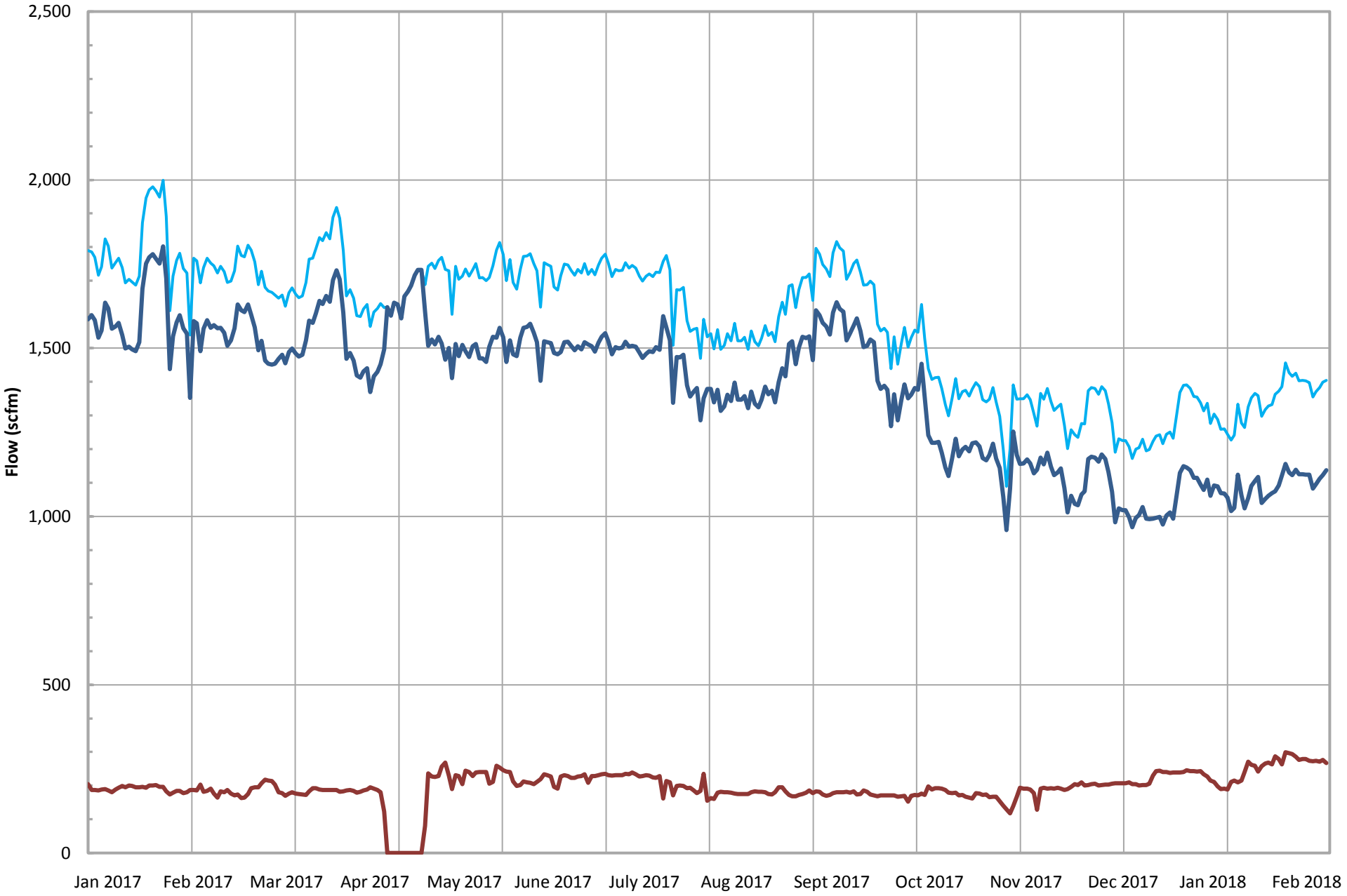
North Quarry Inlet Oxygen (Field Data)*



*Gas data collected from field monitoring data in the North Quarry.

BRIDGETON LANDFILL

Total Combined Flow (scfm)*

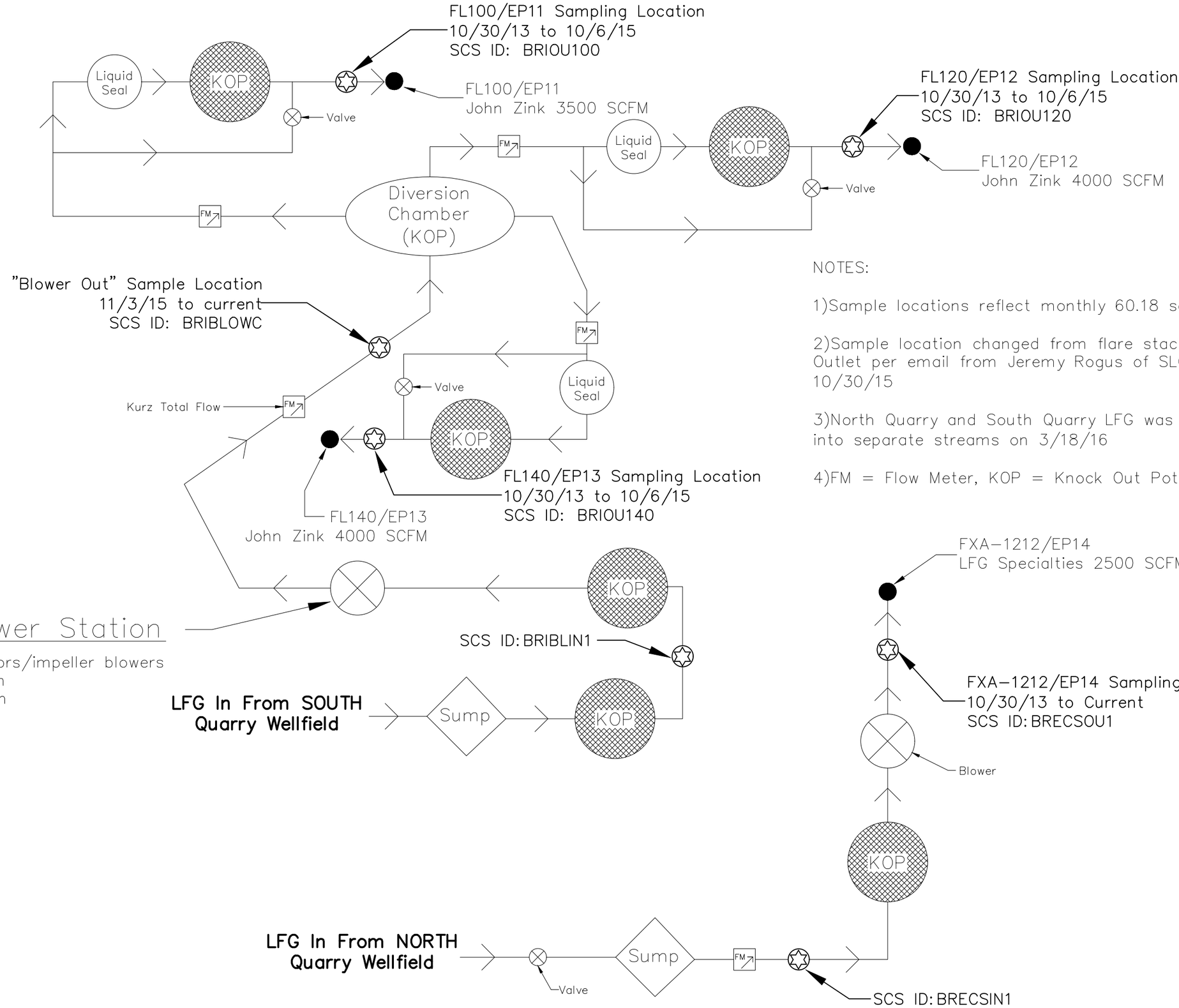


*Combined flow is based on tabulated flow data collected daily from FL-100, FL-120, FL-140, and the Auxillary Candlestick Flare.

BRIDGETON LANDFILL

ATTACHMENT B-3

FLARE TRS / FLARE STATION FLOW



NOTES:

1)Sample locations reflect monthly 60.18 sampling points

2)Sample location changed from flare stacks to Blower Outlet per email from Jeremy Rogus of SLCHD dated 10/30/15

3)North Quarry and South Quarry LFG was segregated into separate streams on 3/18/16

4)FM = Flow Meter, KOP = Knock Out Pot

PREPARED FOR:
BRIDGETON LANDFILL, LLC

FIGURE 1 - NORTH & SOUTH QUARRY FLARE COMPOUND
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MISSOURI

No.	DATE	REVISION DESCRIPTION
1	9/19/2016	EP-9B Removed, shown only to represent SQ LFG flow

Weaver Consultants Group

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DRAWN BY:	DT
REVIEWED BY:	MC
DATE:	10/7/2016
FILE:	0120-131-10
CAD:	Figure 1 - Flow Diagram.dwg

SHEET 1 OF 1

TABLE 1 **Bridgeton Landfill, LLC.**

Summary of Key LFG Tested Parameters **January 03, 2018 to February 05, 2018**

Flare Compound: Blower Outlet

SAMPLE EVENT #	DATE	VELOCITY ft/sec	FLOW dscfm	TRS ppm_{vd}
[1]153-06	2/5/2018	13.72	1197	1300
				1400
[2]152-05	1/31/2018	13.40	1085	1100
				1200
[2]151-04	1/25/2018	13.25	1073	1200
				1300
[2]150-03	1/18/2018	14.06	1139	1200
				1300
149-02	1/11/2018	13.56	1098	1500
				1400
[1]148-01	1/3/2018	12.80	1120	1300
				1300

Notes:

[1]Indicates velocity/flow determined by EPA Method 2

[2]Indicates velocity/flow recorded by Blower Outlet's KURZ Flow Meter

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 153-06
02/05/2018

	PARAMETER	Blower Out
SOUTH QUARRY LFG - BLOWER OUTLET (FL120/EP-12 Only)		
Date	Test Date	2/5/18
Start	Run Start Time	11:17
	Run Finish Time	12:47
	Net Traversing Points	8 (2 x 4)
Θ	Net Run Time, minutes	1:29:55
C_p	Pitot Tube Coeficient	0.99
P_{Br}	Barometric Pressure, inches of Mercury	29.73
% H_2O	Moisture Content of LFG, %	0.53
% RH	Relative Humidity, %	62.05
M_{fd}	Dry Mole Fraction	0.995
%CH_4	Methane, %	12.2
%CO_2	Carbon Dioxide, %	33.0
%O_2	Oxygen, %	7.6
%Balance	Assumed as Nitrogen, %	36.2
%H_2	Hydrogen, %	10.3
%CO	Carbon Monoxide, %	0.051
M_d	Dry Molecular Weight, lb/lb-Mole	29.27
M_s	Wet Molecular weight, lb/lb-Mole	29.21
P_g	Flue Gas Static Pressure, inches of H_2O	13.54
P_s	Absolute Flue Gas Pressure, inches of Mercury	30.76
t_s	Average Stack Gas Temperature, °F	43
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.047
v_s	Average LFG Velocity, feet/second	13.72
A_s	Stack Crossectional Area, square feet	1.35
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	1,197
Q_s	Standard Volumetric Flow Rate, scfm	1,203
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	1,114
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	5,455
NHV	Net Heating Value, Btu/scf	154.6
LFG_{CH4}	Methane, lb/hr	363.4
	Methane, grains/dscf	35.42
LFG_{CO2}	Carbon Dioxide, lb/hr	2,707.8
	Carbon Dioxide, grains/dscf	263.93
LFG_{O2}	Oxygen, lb/hr	453.4
	Oxygen, grains/dscf	44.20
LFG_{N2}	Balance gas as Nitrogen, lb/hr	1,890.7
	Balance gas as Nitrogen, grains/dscf	184.29
LFG_{H2}	Hydrogen, lb/hr	38.5
	Hydrogen, grains/dscf	3.76
LFG_{CO}	Carbon Monoxide, lb/hr	2.6
	Carbon Monoxide, grains/dscf	0.26

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	19	19
	Hydrogen Sulfide Rate, lb/hr	0.12	0.12
	Hydrogen Sulfide Rate, grains/dscf	0.012	0.012
COS	Carbonyl Sulfide Concentration, ppmd	0.55	0.56
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	160	170
	Methyl Mercaptan Rate, lb/hr	1.44	1.52
	Methyl Mercaptan Rate, grains/dscf	0.140	0.149
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.6	1.7
	Ethyl Mercaptan Rate, lb/hr	0.02	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	950	1,000
	Dimethyl Sulfide Rate, lb/hr	11.01	11.58
	Dimethyl Sulfide Rate, grains/dscf	1.073	1.129
CS_2	Carbon Disulfide Concentration, ppmd	0.61	0.66
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	69	78
	Dimethyl Disulfide Rate, lb/hr	1.21	1.11
	Dimethyl Disulfide Rate, grains/dscf	0.118	0.108

❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,300	1,400
	TRS-->SO2 Emission Rate, lb/hr	15.53	16.72
	TRS-->SO2 Emission Rate, grains/dscf	1.514	1.630

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Monday, February 05, 2018

LOCATION	TIME	FLOW -SCFM			Method 2 vs. Fleetzoom	Method 2 vs Kurz	Kurz vs Fleetzoom
		Method 2	FleetZoom	Kurz FM			
BLOWER OUT	**11:17**	**1,203**	**1,043**	**1,057**	**13.3%**	**12.1%**	**1.4%**

**Note: Fleetzoom data derived from EP-12/FL120 TSI Flow Meter*

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 99-06
02/05/2018

	PARAMETER	Blower Out
	EP14 NORTH QUARRY LFG ONLY	
Date	Test Date	2/5/17
Start	Run Start Time	9:06
	Run Finish Time	10:36
	Net Traversing Points	8 (2 x 4)
Θ	Net Run Time, minutes	1:29:55
C_p	Pitot Tube Coeficient	0.99
P_{Br}	Barometric Pressure, inches of Mercury	29.81
% H_2O	Moisture Content of LFG, %	0.69
% RH	Relative Humidity, %	76.25
M_{fd}	Dry Mole Fraction	0.993
%CH_4	Methane, %	36.1
%CO_2	Carbon Dioxide, %	28.7
%O_2	Oxygen, %	4.5
%Balance	Assumed as Nitrogen, %	29.6
%H_2	Hydrogen, % (** reported at the laboratory detection limit*)	2.7
%CO	Carbon Monoxide, % (** reported at the laboratory detection limit*)	0.0027
M_d	Dry Molecular Weight, lb/lb-Mole	28.18
M_s	Wet Molecular weight, lb/lb-Mole	28.11
P_g	Flue Gas Static Pressure, inches of H_2O	1.32
P_s	Absolute Flue Gas Pressure, inches of Mercury	29.87
t_s	Average Stack Gas Temperature, °F	42
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.032
v_s	Average LFG Velocity, feet/second	11.70
A_s	Stack Crossectional Area, square feet	0.51
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	376
Q_s	Standard Volumetric Flow Rate, scfm	379
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	360
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	1,650
NHV	Net Heating Value, Btu/scf	328.5
LFG_{CH4}	Methane, lb/hr	339.3
	Methane, grains/dscf	105.25
LFG_{CO2}	Carbon Dioxide, lb/hr	739.9
	Carbon Dioxide, grains/dscf	229.54
LFG_{O2}	Oxygen, lb/hr	83.4
	Oxygen, grains/dscf	25.88
LFG_{N2}	Balance gas as Nitrogen, lb/hr	484.9
	Balance gas as Nitrogen, grains/dscf	150.44
LFG_{H4}	Hydrogen, lb/hr	3.2
	Hydrogen, grains/dscf	0.99
LFG_{CO}	Carbon Monoxide, lb/hr	0.0
	Carbon Monoxide, grains/dscf	0.01

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	35	34
	Hydrogen Sulfide Rate, lb/hr	0.07	0.07
	Hydrogen Sulfide Rate, grains/dscf	0.022	0.021
COS	Carbonyl Sulfide Concentration, ppmd	0.53	0.53
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	3.7	4.1
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.004
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.53	0.53
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	12	13
	Dimethyl Sulfide Rate, lb/hr	0.04	0.05
	Dimethyl Sulfide Rate, grains/dscf	0.014	0.015
CS_2	Carbon Disulfide Concentration, ppmd	0.53	0.53
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.53	0.53
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001

❶ **$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	51	51
	TRS-->SO2 Emission Rate, lb/hr	0.19	0.19
	TRS-->SO2 Emission Rate, grains/dscf	0.059	0.059

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 152-05
01/31/2018

Kurz FM =	**1,142**	**scfm**
Fleetzoom Total =	**1,110**	**scfm**

Δ = **-2.8%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	1/31/18	1/31/18
Time	Start	9:48	10:08
***%CH_4**	Methane, %	11.7	11.7
***%CO_2**	Carbon Dioxide, %	34.3	35.9
***'%O_2**	Oxygen, %	7.6	7.4
***%Balance**	Assumed as Nitrogen, %	46.4	45.0
P_g	Flue Gas Static Pressure, inches of H_2O	14.2	14.2
t_s	Blower Outlet LFG Temperature, °F	56.0	57.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	1,085	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	1,142	
LFG_{CH4}	Methane, lb/hr	317.1	317.1
	Methane, grains/dscf	34.11	34.11
LFG_{CO2}	Carbon Dioxide, lb/hr	2,550.1	2,669.1
	Carbon Dioxide, grains/dscf	274.33	287.13
LFG_{O2}	Oxygen, lb/hr	410.8	400.0
	Oxygen, grains/dscf	44.20	43.03
LFG_{N2}	Balance gas as Nitrogen, lb/hr	2,195.9	2,129.6
	Balance gas as Nitrogen, grains/dscf	236.22	229.09

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		Blower Outlet A	Blower Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	9.1	10
	Hydrogen Sulfide Rate, lb/hr	0.05	0.06
	Hydrogen Sulfide Rate, grains/dscf	0.006	0.006
COS	Carbonyl Sulfide Concentration, ppmd	0.56	0.56
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	130	140
	Methyl Mercaptan Rate, lb/hr	1.06	1.14
	Methyl Mercaptan Rate, grains/dscf	0.114	0.122
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.3	1.4
	Ethyl Mercaptan Rate, lb/hr	0.01	0.01
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	820	890
	Dimethyl Sulfide Rate, lb/hr	8.61	9.34
	Dimethyl Sulfide Rate, grains/dscf	0.926	1.005
CS_2	Carbon Disulfide Concentration, ppmd	0.56	0.57
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	45	55
	Dimethyl Disulfide Rate, lb/hr	0.72	0.88
	Dimethyl Disulfide Rate, grains/dscf	0.077	0.094
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,100	1,200
	TRS-->SO2 Emission Rate, lb/hr	11.90	12.99
	TRS-->SO2 Emission Rate, grains/dscf	1.281	1.397
	TPY =	52.14	56.88

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 98-05
01/31/2018

Fleetzoom Total = 273 scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	1/31/18	1/31/18
Time	Start	8:51	9:08
***%CH_4**	Methane, %	40.4	40.8
***%CO_2**	Carbon Dioxide, %	33.2	33.3
***'%O_2**	Oxygen, %	1.7	1.6
***%Balance**	Assumed as Nitrogen, %	24.7	24.3
P_g	Flue Gas Static Pressure, inches of H_2O	1.41	1.34
t_s	Blower Outlet LFG Temperature, °F	55.3	56.6
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	260	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	273	
LFG_{CH4}	Methane, lb/hr	262.0	264.6
	Methane, grains/dscf	117.78	118.95
LFG_{CO2}	Carbon Dioxide, lb/hr	590.7	592.5
	Carbon Dioxide, grains/dscf	265.53	266.33
LFG_{O2}	Oxygen, lb/hr	22.0	20.7
	Oxygen, grains/dscf	9.89	9.30
LFG_{N2}	Balance gas as Nitrogen, lb/hr	279.7	275.2
	Balance gas as Nitrogen, grains/dscf	125.75	123.71

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		EP14 NQ A	EP14 NQ B
H_2S	Hydrogen Sulfide Concentration, ppmd	27	27
	Hydrogen Sulfide Rate, lb/hr	0.04	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.017	0.017
COS	Carbonyl Sulfide Concentration, ppmd	0.56	0.56
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	3.2	3.3
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.003
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.56	0.56
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	11	11
	Dimethyl Sulfide Rate, lb/hr	0.03	0.03
	Dimethyl Sulfide Rate, grains/dscf	0.012	0.012
CS_2	Carbon Disulfide Concentration, ppmd	0.56	0.56
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.56	0.56
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	41	42
	TRS-->SO2 Emission Rate, lb/hr	0.11	0.11
	TRS-->SO2 Emission Rate, grains/dscf	0.048	0.049
	TPY =	0.47	0.48

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Air TECHNOLOGY Laboratories, Inc.

February 8, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J020105-01/04

Enclosed are results for sample(s) received 2/01/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 2/07/18.

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,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD

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

TURNAROUND TIME		DELIVERABLES		PAGE: 1 OF 1	
Standard	48 hours	EDD		Condition upon receipt:	
Same Day	72 hours	EDF		Sealed Yes	No
24 hours	96 hours	Level 3		Intact Yes	No
Other:	✓ 5 day	Level 4		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.:	6605567
Bill to:	Republic Services
	Attn: Mike Lambrich
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA Method 15/16 + TRS					
J020105-01	R1352	-20.12	-3.46	-3	EP-14 NQ A	1/31/2018	8:51	C -1L	LFG	He	X					
-02	R1366	-20.41	-3.47	-3	EP-14 NQ B	1/31/2018	9:08	C -1L	LFG	He	X					
-03	1614	-18.57	-3.47	-3	Blower Outlet A	1/31/2018	9:48	C -1L	LFG	He	X					
-04	R1350	-20.09	-3.48	-3	Blower Outlet B	1/31/2018	10:02	C -1L	LFG	He	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	DATE/TIME:	**COMMENTS**
SAMPLED BY: Anthony Kimutis	COMPANY: Republic Services	DATE/TIME 1/31/18	
RELINQUISHED BY [signature] 1/31/18	DATE/ RECEIVED BY	DATE/TIME	
RELINQUISHED BY FED EX	DATE/ RECEIVED BY [signature]	DATE/TIME 2/6/18 1524	
RELINQUISHED BY	DATE/ 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*

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/01/18
Matrix: Air
Reporting Units: ppmv

EPA Methods 15/16

Lab No.:	J020105-01		J020105-02		J020105-03		J020105-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	1/31/18 8:51		1/31/18 9:08		1/31/18 9:48		1/31/18 10:02	
Date/Time Analyzed:	2/2/18 11:25		2/2/18 11:37		2/2/18 11:50		2/2/18 12:02	
QC Batch No.:	180202GC3A1		180202GC3A1		180202GC3A1		180202GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.8		2.8		2.8		2.8	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	27	0.56	27	0.56	9.1	0.56	10	0.56
Carbonyl Sulfide	ND	0.56	ND	0.56	ND	0.56	ND	0.56
Methyl Mercaptan	3.2	0.56	3.3	0.56	130 d	56	140 d	56
Ethyl Mercaptan	ND	0.56	ND	0.56	1.3	0.56	1.4	0.56
Dimethyl Sulfide	11	0.56	11	0.56	820 d	56	890 d	56
Carbon Disulfide	ND	0.56	ND	0.56	ND	0.56	0.57	0.56
Dimethyl Disulfide	ND	0.56	ND	0.56	45 d	5.6	55 d	5.6
Total Reduced Sulfur	41	0.56	42	0.56	1,100	0.56	1,200	0.56

ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution

Reviewed/Approved By: _____ Date 2-7-18

Mark Johnson
Operations Manager

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.: 180202GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	2/2/18 9:19		2/2/18 14:08		2/2/18 14:21			
Analyst Initials:	AS		AS		AS			
Datafile:	02feb003		02feb026		02feb027			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	114	70-130%	114	70-130%	0.5	<30
Carbonyl Sulfide	ND	0.20	92	70-130%	92	70-130%	0.1	<30
Methyl Mercaptan	ND	0.20	127	70-130%	127	70-130%	0.1	<30
Ethyl Mercaptan	ND	0.20	121	70-130%	125	70-130%	3.5	<30
Dimethyl Sulfide	ND	0.20	94	70-130%	93	70-130%	0.4	<30
Carbon Disulfide	ND	0.20	86	70-130%	86	70-130%	0.2	<30
Dimethyl Disulfide	ND	0.20	92	70-130%	92	70-130%	0.5	<30

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

Reviewed/Approved By: _____ Date: 2-7-18
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 151-04
01/25/2018

Kurz FM =	**1,129**	**scfm**
Fleetzoom Total =	**1,083**	**scfm**

Δ = **-4.2%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	1/25/18	1/25/18
Time	Start	9:48	10:34
***%CH_4**	Methane, %	11.5	11.9
***%CO_2**	Carbon Dioxide, %	35.0	35.2
***'%O_2**	Oxygen, %	7.8	7.6
***%Balance**	Assumed as Nitrogen, %	45.7	45.3
P_g	Flue Gas Static Pressure, inches of H_2O	16.7	16.5
t_s	Blower Outlet LFG Temperature, °F	55.0	62.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	1,073	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	1,129	
LFG_{CH4}	Methane, lb/hr	308.3	319.0
	Methane, grains/dscf	33.53	34.69
LFG_{CO2}	Carbon Dioxide, lb/hr	2,573.9	2,588.6
	Carbon Dioxide, grains/dscf	279.93	281.53
LFG_{O2}	Oxygen, lb/hr	417.1	406.4
	Oxygen, grains/dscf	45.36	44.20
LFG_{N2}	Balance gas as Nitrogen, lb/hr	2,139.2	2,120.5
	Balance gas as Nitrogen, grains/dscf	232.66	230.62

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		Blower Outlet A	Blower Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	13	11
	Hydrogen Sulfide Rate, lb/hr	0.07	0.06
	Hydrogen Sulfide Rate, grains/dscf	0.008	0.007
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	160	140
	Methyl Mercaptan Rate, lb/hr	1.29	1.13
	Methyl Mercaptan Rate, grains/dscf	0.140	0.122
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.4	1.4
	Ethyl Mercaptan Rate, lb/hr	0.01	0.01
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	930	950
	Dimethyl Sulfide Rate, lb/hr	9.66	9.86
	Dimethyl Sulfide Rate, grains/dscf	1.050	1.073
CS_2	Carbon Disulfide Concentration, ppmd	0.59	0.62
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	70	72
	Dimethyl Disulfide Rate, lb/hr	1.10	1.13
	Dimethyl Disulfide Rate, grains/dscf	0.120	0.123
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,200	1,300
	TRS-->SO2 Emission Rate, lb/hr	12.85	13.92
	TRS-->SO2 Emission Rate, grains/dscf	1.397	1.514
	TPY =	56.27	60.95

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 97-04
01/25/2018

Fleetzoom Total = 285 scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	1/25/18	1/25/18
Time	Start	8:57	9:13
***%CH_4**	Methane, %	38.4	38.8
***%CO_2**	Carbon Dioxide, %	32.6	32.8
***'%O_2**	Oxygen, %	2.7	2.2
***%Balance**	Assumed as Nitrogen, %	26.3	26.2
P_g	Flue Gas Static Pressure, inches of H_2O	1.33	1.54
t_s	Blower Outlet LFG Temperature, °F	56.5	60.9
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	271	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	285	
LFG_{CH4}	Methane, lb/hr	259.7	262.4
	Methane, grains/dscf	111.95	113.12
LFG_{CO2}	Carbon Dioxide, lb/hr	604.9	608.6
	Carbon Dioxide, grains/dscf	260.74	262.34
LFG_{O2}	Oxygen, lb/hr	36.4	29.7
	Oxygen, grains/dscf	15.70	12.79
LFG_{N2}	Balance gas as Nitrogen, lb/hr	310.6	309.5
	Balance gas as Nitrogen, grains/dscf	133.89	133.38

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		EP14 NQ A	EP14 NQ B
H_2S	Hydrogen Sulfide Concentration, ppmd	27	28
	Hydrogen Sulfide Rate, lb/hr	0.04	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.017	0.017
COS	Carbonyl Sulfide Concentration, ppmd	0.56	0.58
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	3.5	3.6
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.003
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.56	0.58
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	12	12
	Dimethyl Sulfide Rate, lb/hr	0.03	0.03
	Dimethyl Sulfide Rate, grains/dscf	0.014	0.014
CS_2	Carbon Disulfide Concentration, ppmd	0.56	0.58
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.56	0.58
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	43	44
	TRS-->SO2 Emission Rate, lb/hr	0.12	0.12
	TRS-->SO2 Emission Rate, grains/dscf	0.050	0.051
	TPY =	0.51	0.52

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

AirTECHNOLOGY
Laboratories, Inc.

February 1, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J012603-01/04

Enclosed are results for sample(s) received 1/26/18 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:

- Dimethyl disulfide exhibited low recovery in the LCS/LCSD due to degradation in the standard cylinder. Results are ND for this analyte. A new standard cylinder has been acquired and implemented.
- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 2/01/18.

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,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD

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

TURNAROUND TIME		DELIVERABLES		PAGE: 1 OF 1
Standard	48 hours	EDD	✓	Condition upon receipt:
Same Day	72 hours	EDF		Sealed Yes No
24 hours	96 hours	Level 3		Intact Yes No
Other: ✓	5 day	Level 4		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.:	~~6805567~~ 7112302
Bill to:	Republic Services 112621
	Attn: Mike Lambrich
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg)				SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA Method 15/16 + TRS					
	Canister ID	Sample Start	Sample End	Lab Receive												
J012603-01	R1369	-20.83	-4.49	-3	EP-14 NQ A	1/25/2018	8:57	C -1L	LFG	He	X					
-02	1619	-20.78	-4.46	-3.5	EP-14 NQ B	1/25/2018	9:13	C -1L	LFG	He	X					
-03	R1158	-20.25	-4.48	-4	Blower Outlet A	1/25/2018	9:48	C -1L	LFG	He	X					
-04	1616	-20.08	-4.47	-4	Blower Outlet B	1/25/2018	10:34	C -1L	LFG	He	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	DATE/TIME:	COMMENTS
SAMPLED BY: Anthony Kimutis	COMPANY: Republic Services	DATE/TIME 1-25-18 0857-1034	
RELINQUISHED BY	1-25-18	DATE/ RECEIVED BY FedEX	DATE/TIME
RELINQUISHED BY FedEX	1/26/18	DATE/ RECEIVED BY J. King	DATE/TIME 1/26/18 1322
RELINQUISHED BY		DATE/ 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*

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/26/18
Matrix: Air
Reporting Units: ppmv

EPA Methods 15/16

Lab No.:	J012603-01		J012603-02		J012603-03		J012603-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	1/25/18 8:57		1/25/18 9:13		1/25/18 9:48		1/25/18 10:34	
Date/Time Analyzed:	1/29/18 12:27		1/29/18 12:40		1/29/18 12:53		1/29/18 13:05	
QC Batch No.:	180129GC3A1		180129GC3A1		180129GC3A1		180129GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.8		2.9		3.0		3.0	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	27	0.56	28	0.58	13	0.59	11	0.59
Carbonyl Sulfide	ND	0.56	ND	0.58	ND	0.59	ND	0.59
Methyl Mercaptan	3.5	0.56	3.6	0.58	160 d	59	140 d	59
Ethyl Mercaptan	ND	0.56	ND	0.58	1.4	0.59	1.4	0.59
Dimethyl Sulfide	12	0.56	12	0.58	930 d	59	950 d	59
Carbon Disulfide	ND	0.56	ND	0.58	0.59	0.59	0.62	0.59
Dimethyl Disulfide	ND	0.56	ND	0.58	70 d	59	72 d	59
Total Reduced Sulfur	43	0.56	44	0.58	1,200	0.59	1,300	0.59

ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution

Reviewed/Approved By: _____ Date 2/1/18
Mark Johnson
Operations Manager

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.: 180129GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS			LCSD				
Date/Time Analyzed:	1/29/18 8:52		1/29/18 8:27			1/29/18 8:39				
Analyst Initials:	as		AS			AS				
Datafile:	29JAN003		29JAN001			29JAN002				
Dilution Factor:	1.0		1.0			1.0				
ANALYTE	Results	RL	% Rec.		Criteria	% Rec.		Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	84		70-130%	83		70-130%	0.7	<30
Carbonyl Sulfide	ND	0.20	97		70-130%	96		70-130%	1.4	<30
Methyl Mercaptan	ND	0.20	99		70-130%	98		70-130%	0.9	<30
Ethyl Mercaptan	ND	0.20	94		70-130%	92		70-130%	1.4	<30
Dimethyl Sulfide	ND	0.20	82		70-130%	81		70-130%	1.5	<30
Carbon Disulfide	ND	0.20	79		70-130%	78		70-130%	1.4	<30
Dimethyl Disulfide	ND	0.20	64	*	70-130%	63	*	70-130%	0.7	<30

ND = Not Detected (Below RL)
RL = Reporting Limit
* = Outside QC Criteria

Reviewed/Approved By: _____ Date: 2/1/18
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 150-03
01/18/2018

Kurz FM =	**1,199**	**scfm**
Fleetzoom Total =	**1,093**	**scfm**

Δ = **-9.7%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	1/18/18	1/18/18
Time	Start	13:29	13:44
***%CH_4**	Methane, %	12.9	12.5
***%CO_2**	Carbon Dioxide, %	36.4	35.5
***'%O_2**	Oxygen, %	7.0	7.2
***%Balance**	Assumed as Nitrogen, %	43.7	44.8
P_g	Flue Gas Static Pressure, inches of H_2O	15.1	15.9
t_s	Blower Outlet LFG Temperature, °F	60.0	61.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	1,139	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	1,199	
LFG_{CH4}	Methane, lb/hr	367.1	355.7
	Methane, grains/dscf	37.61	36.44
LFG_{CO2}	Carbon Dioxide, lb/hr	2,841.9	2,771.6
	Carbon Dioxide, grains/dscf	291.13	283.93
LFG_{O2}	Oxygen, lb/hr	397.4	408.7
	Oxygen, grains/dscf	40.71	41.87
LFG_{N2}	Balance gas as Nitrogen, lb/hr	2,171.7	2,226.4
	Balance gas as Nitrogen, grains/dscf	222.48	228.08

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		Blower Outlet A	Blower Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	7.5	8.7
	Hydrogen Sulfide Rate, lb/hr	0.05	0.05
	Hydrogen Sulfide Rate, grains/dscf	0.005	0.005
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	150	160
	Methyl Mercaptan Rate, lb/hr	1.28	1.37
	Methyl Mercaptan Rate, grains/dscf	0.131	0.140
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.4	1.6
	Ethyl Mercaptan Rate, lb/hr	0.02	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	960	990
	Dimethyl Sulfide Rate, lb/hr	10.58	10.91
	Dimethyl Sulfide Rate, grains/dscf	1.084	1.118
CS_2	Carbon Disulfide Concentration, ppmd	0.65	0.66
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	66	68
	Dimethyl Disulfide Rate, lb/hr	1.10	1.14
	Dimethyl Disulfide Rate, grains/dscf	0.113	0.116
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,200	1,300
	TRS-->SO2 Emission Rate, lb/hr	13.64	14.77
	TRS-->SO2 Emission Rate, grains/dscf	1.397	1.514
	TPY =	59.74	64.71

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 96-03
01/18/2018

Fleetzoom Total = **308** scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	1/18/18	1/18/18
Time	Start	14:19	14:40
***%CH_4**	Methane, %	40.1	39.7
***%CO_2**	Carbon Dioxide, %	32.4	32.0
***'%O_2**	Oxygen, %	3.3	3.6
***%Balance**	Assumed as Nitrogen, %	24.2	24.7
P_g	Flue Gas Static Pressure, inches of H_2O	1.39	1.43
t_s	Blower Outlet LFG Temperature, °F	63.7	63.1
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	292	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	308	
LFG_{CH4}	Methane, lb/hr	292.8	289.9
	Methane, grains/dscf	116.91	115.74
LFG_{CO2}	Carbon Dioxide, lb/hr	649.0	641.0
	Carbon Dioxide, grains/dscf	259.14	255.94
LFG_{O2}	Oxygen, lb/hr	48.1	52.4
	Oxygen, grains/dscf	19.19	20.93
LFG_{N2}	Balance gas as Nitrogen, lb/hr	308.6	315.0
	Balance gas as Nitrogen, grains/dscf	123.20	125.75

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		EP14 NQ A	EP14 NQ B
H_2S	Hydrogen Sulfide Concentration, ppmd	28	24
	Hydrogen Sulfide Rate, lb/hr	0.04	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.017	0.015
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	3.5	4.0
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.003
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.59	0.59
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	14	14
	Dimethyl Sulfide Rate, lb/hr	0.04	0.04
	Dimethyl Sulfide Rate, grains/dscf	0.016	0.016
CS_2	Carbon Disulfide Concentration, ppmd	0.59	0.59
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.59	0.59
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	46	43
	TRS-->SO2 Emission Rate, lb/hr	0.13	0.13
	TRS-->SO2 Emission Rate, grains/dscf	0.054	0.050
	TPY =	0.59	0.55

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Air TECHNOLOGY
Laboratories, Inc.

January 26, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J011904-01/04

Enclosed are results for sample(s) received 1/19/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 1/26/18.

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,

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

TURNAROUND TIME		DELIVERABLES	PAGE: 1 OF 1
Standard	48 hours	EDD	Condition upon receipt:
Same Day	72 hours	EDF	Sealed Yes No
24 hours	96 hours	Level 3	Intact Yes No
Other: ✓	5 day	Level 4	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.:	6605567
Bill to:	Republic Services
	Attn: Mike Lambrich
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

LAB USE ONLY	Canister Pressures ("hg)				SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST: EPA Method 15/16 + TRS					
	Canister ID	Sample Start	Sample End	Lab Receive												
J011904-01	R1374	-20.14	-4.49	-4	EP-14 NQ A	1/18/2018	14:19	C -1L	LFG	He	X					
-02	J1721	-20.59	-4.47	-4	EP-14 NQ B	1/18/2018	14:40	C -1L	LFG	He	X					
-03	J1720	-20.34	-4.5	-4	Blower Outlet A	1/18/2018	13:29	C -1L	LFG	He	X					
-04	J1723	-20.81	-4.49	-4	Blower Outlet B	1/18/2018	13:44	C -1L	LFG	He	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer — COMPANY: Republic Services — DATE/TIME:

SAMPLED BY: Anthony Kimutis — COMPANY: Republic Services — DATE/TIME 1-18-18

RELINQUISHED BY	1-18-18	RECEIVED BY	DATE/TIME
RELINQUISHED BY	FEDEX	RECEIVED BY	DATE/TIME 1/19/18 1218
RELINQUISHED BY		RECEIVED BY	DATE/TIME

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

COMMENTS

1329-1446

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:	**01/19/18**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA Methods 15/16

Lab No.:	J011904-01		J011904-02		J011904-03		J011904-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	1/18/18 14:19		1/18/18 14:40		1/18/18 13:29		1/18/18 13:44	
Date/Time Analyzed:	1/23/18 10:57		1/23/18 11:09		1/23/18 11:22		1/23/18 11:34	
QC Batch No.:	180123GC3A1		180123GC3A1		180123GC3A1		180123GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	**Result ppmv**	**RL ppmv**	**Result ppmv**	**RL ppmv**	**Result ppmv**	**RL ppmv**	**Result ppmv**	**RL ppmv**
Hydrogen Sulfide	28	0.59	24	0.59	7.5	0.59	8.7	0.59
Carbonyl Sulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Methyl Mercaptan	3.5	0.59	4.0	0.59	150 d	59	160 d	59
Ethyl Mercaptan	ND	0.59	ND	0.59	1.4	0.59	1.6	0.59
Dimethyl Sulfide	14	0.59	14	0.59	960 d	59	990 d	59
Carbon Disulfide	ND	0.59	ND	0.59	0.65	0.59	0.66	0.59
Dimethyl Disulfide	ND	0.59	ND	0.59	66 d	59	68 d	59
Total Reduced Sulfur	46	0.59	43	0.59	1,200	0.59	1,300	0.59

ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution

Reviewed/Approved By: _____ Date 1/26/18

Mark Johnson
Operations Manager

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.: 180123GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	1/23/18 9:39		1/23/18 9:15		1/23/18 9:27			
Analyst Initials:	AS		AS		AS			
Datafile:	23jan003		23jan001		23jan002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	100	70-130%	100	70-130%	0.3	<30
Carbonyl Sulfide	ND	0.20	101	70-130%	100	70-130%	1.1	<30
Methyl Mercaptan	ND	0.20	111	70-130%	110	70-130%	0.6	<30
Ethyl Mercaptan	ND	0.20	103	70-130%	102	70-130%	1.8	<30
Dimethyl Sulfide	ND	0.20	85	70-130%	85	70-130%	0.2	<30
Carbon Disulfide	ND	0.20	89	70-130%	88	70-130%	1.1	<30
Dimethyl Disulfide	ND	0.20	71	70-130%	70	70-130%	1.7	<30

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

Reviewed/Approved By: _____ Date: 1/26/18
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 149-02
01/11/2018

Kurz FM =	**1,156**	scfm
Fleetzoom Total =	**1,093**	scfm

Δ = **-5.7%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	1/11/18	1/11/18
Time	Start	13:33	14:02
***%CH_4**	Methane, %	12.4	12.5
***%CO_2**	Carbon Dioxide, %	38.0	38.0
***'%O_2**	Oxygen, %	6.7	6.8
***%Balance**	Assumed as Nitrogen, %	42.9	42.7
P_g	Flue Gas Static Pressure, inches of H_2O	17.6	18.1
t_s	Blower Outlet LFG Temperature, °F	77.0	79.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	1,098	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	1,156	
LFG_{CH4}	Methane, lb/hr	340.2	342.9
	Methane, grains/dscf	36.15	36.44
LFG_{CO2}	Carbon Dioxide, lb/hr	2,859.7	2,859.7
	Carbon Dioxide, grains/dscf	303.92	303.92
LFG_{O2}	Oxygen, lb/hr	366.6	372.1
	Oxygen, grains/dscf	38.96	39.54
LFG_{N2}	Balance gas as Nitrogen, lb/hr	2,055.0	2,045.4
	Balance gas as Nitrogen, grains/dscf	218.40	217.39

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		Blower Outlet A	Blower Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	10.0	7.4
	Hydrogen Sulfide Rate, lb/hr	0.06	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.006	0.005
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	180	160
	Methyl Mercaptan Rate, lb/hr	1.48	1.32
	Methyl Mercaptan Rate, grains/dscf	0.157	0.140
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.6	1.6
	Ethyl Mercaptan Rate, lb/hr	0.02	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	1,200	1,100
	Dimethyl Sulfide Rate, lb/hr	12.75	11.69
	Dimethyl Sulfide Rate, grains/dscf	1.355	1.242
CS_2	Carbon Disulfide Concentration, ppmd	0.70	0.73
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	90	80
	Dimethyl Disulfide Rate, lb/hr	1.45	1.29
	Dimethyl Disulfide Rate, grains/dscf	0.154	0.137
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,500	1,400
	TRS-->SO2 Emission Rate, lb/hr	16.43	15.34
	TRS-->SO2 Emission Rate, grains/dscf	1.746	1.630
	TPY =	71.97	67.17

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 95-02
01/11/2018

Fleetzoom Total = 263 scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	1/11/18	1/11/18
Time	Start	14:40	14:55
***%CH_4**	Methane, %	40.9	40.8
***%CO_2**	Carbon Dioxide, %	33.9	33.6
***'%O_2**	Oxygen, %	3.0	3.0
***%Balance**	Assumed as Nitrogen, %	22.2	22.7
P_g	Flue Gas Static Pressure, inches of H_2O	1.66	1.35
t_s	Blower Outlet LFG Temperature, °F	68.2	68.4
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	250	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	263	
LFG_{CH4}	Methane, lb/hr	255.3	254.7
	Methane, grains/dscf	119.24	118.95
LFG_{CO2}	Carbon Dioxide, lb/hr	580.6	575.4
	Carbon Dioxide, grains/dscf	271.13	268.73
LFG_{O2}	Oxygen, lb/hr	37.4	37.4
	Oxygen, grains/dscf	17.45	17.45
LFG_{N2}	Balance gas as Nitrogen, lb/hr	242.0	247.4
	Balance gas as Nitrogen, grains/dscf	113.02	115.57

** Fixed gas results based on field parameter data collection at the time of sampling, via Envision Landfill Gas Analyzer*

		EP14 NQ A	EP14 NQ B
H_2S	Hydrogen Sulfide Concentration, ppmd	29	0.59
	Hydrogen Sulfide Rate, lb/hr	0.04	0.00
	Hydrogen Sulfide Rate, grains/dscf	0.018	0.000
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	3.5	0.59
	Methyl Mercaptan Rate, lb/hr	0.01	0.00
	Methyl Mercaptan Rate, grains/dscf	0.003	0.001
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.59	0.59
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	14	14
	Dimethyl Sulfide Rate, lb/hr	0.03	0.03
	Dimethyl Sulfide Rate, grains/dscf	0.016	0.016
CS_2	Carbon Disulfide Concentration, ppmd	0.59	0.59
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.59	0.59
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	47	15
	TRS-->SO2 Emission Rate, lb/hr	0.12	0.04
	TRS-->SO2 Emission Rate, grains/dscf	0.055	0.017
	TPY =	0.51	0.16

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Air TECHNOLOGY
Laboratories, Inc.

January 22, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J011601-01/04

Enclosed are results for sample(s) received 1/16/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 1/22/18.

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,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD

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

TURNAROUND TIME		DELIVERABLES		PAGE: 1 OF 1
Standard	48 hours	EDD		Condition upon receipt:
Same Day	72 hours	EDF		Sealed Yes No
24 hours	96 hours	Level 3		Intact Yes No
Other:	✓ 5 day	Level 4		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.:	6605567
Bill to:	Republic Services
	Attn: Mike Lambrich
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

LAB USE ONLY	Canister Pressures ("hg)				SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST: EPA Method 15/16 + TRS					
	Canister ID	Sample Start	Sample End	Lab Receive												
J011601-01	R1347	-19.61	-3.51	-4	EP-14 NQ A	1/11/2018	14:40	C -1L	LFG	He	X					
-02	1533	-19.79	-3.49	-4	EP-14 NQ B	1/11/2018	14:55	C -1L	LFG	He	X					
-03	R1349	-19.57	-3.47	-4	Blower Outlet A	1/11/2018	13:33	C -1L	LFG	He	X					
-04	R1368	-19.53	-3.47	-4	Blower Outlet B	1/11/2018	14:02	C -1L	LFG	He	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	DATE/TIME:	COMMENTS
SAMPLED BY: Anthony Kimutis	COMPANY: Republic Services	DATE/TIME 1-11-18 1402-1501	
RELINQUISHED BY	DATE/ RECEIVED BY	DATE/TIME	
RELINQUISHED BY 1-11-18 FedEx	DATE/ RECEIVED BY	DATE/TIME	
RELINQUISHED BY	DATE/ RECEIVED BY 1/16/18	DATE/TIME 0936	

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:	**01/16/18**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA Methods 15/16

Lab No.:	J011601-01		J011601-02		J011601-03		J011601-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	1/11/18 14:40		1/11/18 14:55		1/11/18 13:33		1/11/18 14:02	
Date/Time Analyzed:	1/16/18 15:48		1/16/18 16:01		1/16/18 17:30		1/16/18 17:42	
QC Batch No.:	180116GC3A1		180116GC3A1		180116GC3A1		180116GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		3.0		3.0	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	29	0.59	ND	0.59	10.0	0.59	7.4	0.59
Carbonyl Sulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Methyl Mercaptan	3.5	0.59	ND	0.59	180 d	59	160 d	59
Ethyl Mercaptan	ND	0.59	ND	0.59	1.6	0.59	1.6	0.59
Dimethyl Sulfide	14	0.59	14	0.59	1,200 d	59	1,100 d	59
Carbon Disulfide	ND	0.59	ND	0.59	0.70	0.59	0.73	0.59
Dimethyl Disulfide	ND	0.59	ND	0.59	90 d	59	80 d	59
Total Reduced Sulfur	47	0.59	15	0.59	1,500	0.59	1,400	0.59

ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution

Reviewed/Approved By: _____ Date 1/22/18

Mark Johnson
Operations Manager

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.: 180116GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	1/16/18 13:42		1/16/18 13:17		1/16/18 13:29			
Analyst Initials:	AS		AS		AS			
Datafile:	16jan003		16jan001		16jan002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	97	70-130%	96	70-130%	1.4	<30
Carbonyl Sulfide	ND	0.20	101	70-130%	99	70-130%	2.1	<30
Methyl Mercaptan	ND	0.20	108	70-130%	107	70-130%	0.7	<30
Ethyl Mercaptan	ND	0.20	100	70-130%	98	70-130%	1.3	<30
Dimethyl Sulfide	ND	0.20	89	70-130%	87	70-130%	2.5	<30
Carbon Disulfide	ND	0.20	90	70-130%	89	70-130%	1.6	<30
Dimethyl Disulfide	ND	0.20	80	70-130%	79	70-130%	1.6	<30

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

Reviewed/Approved By: _____ Date: 1/22/18
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 148-01
01/03/2018

	PARAMETER	Blower Out
SOUTH QUARRY LFG - BLOWER OUTLET (FL120/EP-12 Only)		
Date	Test Date	1/3/18
Start	Run Start Time	11:24
	Run Finish Time	12:54
	Net Traversing Points	8 (2 x 4)
Θ	Net Run Time, minutes	1:29:55
C_p	Pitot Tube Coeficient	0.99
P_{Br}	Barometric Pressure, inches of Mercury	29.68
% H_2O	Moisture Content of LFG, %	0.49
% RH	Relative Humidity, %	59.30
M_{fd}	Dry Mole Fraction	0.995
%CH_4	Methane, %	12.4
%CO_2	Carbon Dioxide, %	33.7
%O_2	Oxygen, %	8.1
%Balance	Assumed as Nitrogen, %	34.6
%H_2	Hydrogen, %	10.7
%CO	Carbon Monoxide, %	0.055
M_d	Dry Molecular Weight, lb/lb-Mole	29.28
M_s	Wet Molecular weight, lb/lb-Mole	29.22
P_g	Flue Gas Static Pressure, inches of H_2O	14.28
P_s	Absolute Flue Gas Pressure, inches of Mercury	30.73
t_s	Average Stack Gas Temperature, °F	41
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.041
v_s	Average LFG Velocity, feet/second	12.80
A_s	Stack Crossectional Area, square feet	1.35
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	1,120
Q_s	Standard Volumetric Flow Rate, scfm	1,125
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	1,039
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	5,105
NHV	Net Heating Value, Btu/scf	156.4
LFG_{CH4}	Methane, lb/hr	345.6
	Methane, grains/dscf	36.01
LFG_{CO2}	Carbon Dioxide, lb/hr	2,583.0
	Carbon Dioxide, grains/dscf	269.13
LFG_{O2}	Oxygen, lb/hr	449.3
	Oxygen, grains/dscf	46.81
LFG_{N2}	Balance gas as Nitrogen, lb/hr	1,688.1
	Balance gas as Nitrogen, grains/dscf	175.89
LFG_{H2}	Hydrogen, lb/hr	37.6
	Hydrogen, grains/dscf	3.92
LFG_{CO}	Carbon Monoxide, lb/hr	2.7
	Carbon Monoxide, grains/dscf	0.28

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	17	21
	Hydrogen Sulfide Rate, lb/hr	0.10	0.12
	Hydrogen Sulfide Rate, grains/dscf	0.011	0.013
COS	Carbonyl Sulfide Concentration, ppmd	0.51	0.53
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	160	160
	Methyl Mercaptan Rate, lb/hr	1.34	1.34
	Methyl Mercaptan Rate, grains/dscf	0.140	0.140
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.5	1.6
	Ethyl Mercaptan Rate, lb/hr	0.02	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	1,000	1,000
	Dimethyl Sulfide Rate, lb/hr	10.84	10.84
	Dimethyl Sulfide Rate, grains/dscf	1.129	1.129
CS_2	Carbon Disulfide Concentration, ppmd	0.63	0.65
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	60	60
	Dimethyl Disulfide Rate, lb/hr	0.99	0.80
	Dimethyl Disulfide Rate, grains/dscf	0.103	0.083

❶ **$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	1,300	1,300
	TRS-->SO2 Emission Rate, lb/hr	14.53	14.53
	TRS-->SO2 Emission Rate, grains/dscf	1.514	1.514

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Wednesday, January 03, 2018

LOCATION	TIME	FLOW -SCFM			Method 2 vs. Fleetzoom	Method 2 vs Kurz	Kurz vs Fleetzoom
		Method 2	FleetZoom	Kurz FM			
BLOWER OUT	**11:24**	**1,125**	**1,020**	**991**	**9.3%**	**11.9%**	**-2.9%**

**Note: Fleetzoom data derived from EP-12/FL120 TSI Flow Meter*

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 94-1
01/03/2018

	PARAMETER	Blower Out
	EP14 NORTH QUARRY LFG ONLY	
Date	Test Date	1/3/17
Start	Run Start Time	9:30
	Run Finish Time	11:00
	Net Traversing Points	8 (2 x 4)
Θ	Net Run Time, minutes	1:29:55
C_p	Pitot Tube Coeficient	0.99
P_{Br}	Barometric Pressure, inches of Mercury	29.72
% H_2O	Moisture Content of LFG, %	0.68
% RH	Relative Humidity, %	41.20
M_{fd}	Dry Mole Fraction	0.993
%CH_4	Methane, %	41.9
%CO_2	Carbon Dioxide, %	31.5
%O_2	Oxygen, %	3.2
%Balance	Assumed as Nitrogen, %	22.4
%H_2	Hydrogen, % (** reported at the laboratory detection limit*)	2.6
%CO	Carbon Monoxide, % (** reported at the laboratory detection limit*)	0.0026
M_d	Dry Molecular Weight, lb/lb-Mole	27.92
M_s	Wet Molecular weight, lb/lb-Mole	27.85
P_g	Flue Gas Static Pressure, inches of H_2O	1.14
P_s	Absolute Flue Gas Pressure, inches of Mercury	29.76
t_s	Average Stack Gas Temperature, °F	41
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.028
v_s	Average LFG Velocity, feet/second	11.01
A_s	Stack Crossectional Area, square feet	0.51
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	353
Q_s	Standard Volumetric Flow Rate, scfm	355
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	339
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	1,534
NHV	Net Heating Value, Btu/scf	381.1
LFG_{CH4}	Methane, lb/hr	369.5
	Methane, grains/dscf	122.16
LFG_{CO2}	Carbon Dioxide, lb/hr	762.1
	Carbon Dioxide, grains/dscf	251.94
LFG_{O2}	Oxygen, lb/hr	55.4
	Oxygen, grains/dscf	18.32
LFG_{N2}	Balance gas as Nitrogen, lb/hr	344.9
	Balance gas as Nitrogen, grains/dscf	114.04
LFG_{H4}	Hydrogen, lb/hr	2.9
	Hydrogen, grains/dscf	0.95
LFG_{CO}	Carbon Monoxide, lb/hr	0.0
	Carbon Monoxide, grains/dscf	0.01

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	39	31
	Hydrogen Sulfide Rate, lb/hr	0.07	0.06
	Hydrogen Sulfide Rate, grains/dscf	0.024	0.019
COS	Carbonyl Sulfide Concentration, ppmd	0.51	0.53
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	3.4	3.3
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.003
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.51	0.53
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	12	12
	Dimethyl Sulfide Rate, lb/hr	0.04	0.04
	Dimethyl Sulfide Rate, grains/dscf	0.014	0.014
CS_2	Carbon Disulfide Concentration, ppmd	0.51	0.53
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.51	0.53
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001

❶ **$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	55	47
	TRS-->SO2 Emission Rate, lb/hr	0.19	0.17
	TRS-->SO2 Emission Rate, grains/dscf	0.064	0.055

❶ TRS assumed moelcular mass = SO2, 64.06 gram/mole, I.e. 1 TRS in LFG assumed to = 1 SO2 emitted from the stack

Air TECHNOLOGY Laboratories, Inc.

January 10, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J010403-01/04

Enclosed are **revised** results for sample(s) received 1/04/18 by Air Technology Laboratories. This revision replaces the report dated 1/08/18 in its entirety. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Report was revised to report the correct Method Blank results for these samples.
- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 1/08/18.

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,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD

Air TECHNOLOGY Laboratories, Inc.

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

TURNAROUND TIME				DELIVERABLES		PAGE: 1 OF 1
Standard	☐	48 hours	■	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	☐	Level 4	☐	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.:	6605567
Bill to:	Republic Services
	Attn: Mike Lambrich
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

LAB USE ONLY	Canister Pressures ("hg)				SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST: EPA Method 15/16	ASTM 1946 + H2 + CO & Btu/SCF		ASTM 1946 + H2 + CO & Btu/SCF (by CH4 only)		
	Canister ID	Sample Start	Sample End	Lab Receive												
J010403-01	5953	-21.57	-3.5	-1	NQ EP14 A	1/3/2018	9:37	C-6L	LFG	He	X			X		
-02	4440	-21.23	-3.5	-2	NQ EP14 B	1/3/2018	10:08	C-6L	LFG	He	X			X		
-03	5966	-21.53	-3.48	-1	Blower Outlet A	1/3/2018	11:30	C-6L	LFG	He	X	X				
-04	5978	-21.46	-3.49	-2	Blower Outlet B	1/3/2018	12:00	C-6L	LFG	He	X	X				

AUTHORIZATION TO PERFORM WORK: **Dave Penoyer** COMPANY: **Republic Services** DATE/TIME:

SAMPLED BY: **Anthony Kimutis** COMPANY: Repubic Services DATE/TIME 1/3/18

RELINQUISHED BY [signature] 1-3-18 DATE/ RECEIVED BY DATE/TIME

RELINQUISHED BY FED EX DATE/ RECEIVED BY [signature] 1/4/18 DATE/TIME 0928

RELINQUISHED BY DATE/ RECEIVED BY DATE/TIME

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

COMMENTS

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: 01/04/18
Matrix: Air
Reporting Units: ppmv

EPA Methods 15/16

Lab No.:	J010403-01		J010403-02		J010403-03		J010403-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	1/3/18 9:37		1/3/18 10:08		1/3/18 11:30		1/3/18 12:00	
Date/Time Analyzed:	1/4/18 14:28		1/4/18 14:41		1/4/18 14:53		1/4/18 15:06	
QC Batch No.:	180104GC3A1		180104GC3A1		180104GC3A1		180104GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.5		2.7		2.5		2.7	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	39 d	5.1	31 d	5.3	17	0.51	21	0.53
Carbonyl Sulfide	ND	0.51	ND	0.53	ND	0.51	ND	0.53
Methyl Mercaptan	3.4	0.51	3.3	0.53	160 d	51	160 d	53
Ethyl Mercaptan	ND	0.51	ND	0.53	1.5	0.51	1.6	0.53
Dimethyl Sulfide	12	0.51	12	0.53	1,000 d	51	1,000 d	53
Carbon Disulfide	ND	0.51	ND	0.53	0.63	0.51	0.65	0.53
Dimethyl Disulfide	ND	0.51	ND	0.53	60 d	51	60 d	53
Total Reduced Sulfur	55	0.51	47	0.53	1,300	0.51	1,300	0.53

ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution

Reviewed/Approved By: _____ Date 1-5-18

Mark Johnson
Operations Manager

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.: 180104GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS			LCSD				
Date/Time Analyzed:	1/4/18 13:37		1/4/18 13:11			1/4/18 13:24				
Analyst Initials:	AS		AS			AS				
Datafile:	04jan004		04jan002			04jan003				
Dilution Factor:	1.0		1.0			1.0				
ANALYTE	Results	RL	% Rec.		Criteria	% Rec.		Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	74		70-130%	73		70-130%	1.5	<30
Carbonyl Sulfide	ND	0.20	89		70-130%	89		70-130%	0.5	<30
Methyl Mercaptan	ND	0.20	86		70-130%	86		70-130%	0.5	<30
Ethyl Mercaptan	ND	0.20	84		70-130%	83		70-130%	1.8	<30
Dimethyl Sulfide	ND	0.20	79		70-130%	78		70-130%	1.0	<30
Carbon Disulfide	ND	0.20	76		70-130%	76		70-130%	1.0	<30
Dimethyl Disulfide	ND	0.20	63	*	70-130%	63	*	70-130%	1.1	<30

ND = Not Detected (Below RL)
RL = Reporting Limit
* = Outside QC Criteria

Reviewed/Approved By: _____ Date: 1-5-18
Mark J. Johnson
Operations Manager

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: 01/04/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J010403-01		J010403-02					
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B					
Date/Time Sampled:	1/3/18 9:37		1/3/18 10:08					
Date/Time Analyzed:	1/4/18 13:23		1/4/18 13:37					
QC Batch No.:	180104GC8A1		180104GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	2.5		2.7					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	ND	2.5	ND	2.7				
Carbon Dioxide	31.6	0.025	31.4	0.027				
Oxygen/Argon	3.1	1.3	3.2	1.3				
Nitrogen	22.2	2.5	22.6	2.7				
Methane	42.1	0.0025	41.7	0.0027				
Carbon Monoxide	ND	0.0025	ND	0.0027				
Net Heating Value (BTU/ft3) methane only	383.0	2.5	379.2	2.7				
Gross Heating Value (BTU/ft3) methane only	425.4	2.5	421.1	2.7				

Results normalized including non-methane hydrocarbons
BTU values based on D1946 analysis methane only
ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 1-5-18
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/04/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J010403-03		J010403-04					
Client Sample I.D.:	Blower Outlet A		Blower Outlet B					
Date/Time Sampled:	1/3/18 11:30		1/3/18 12:00					
Date/Time Analyzed:	1/4/18 13:52		1/4/18 14:07					
QC Batch No.:	180104GC8A1		180104GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	2.5		2.7					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	10.9	2.5	10.5	2.7				
Carbon Dioxide	34.1	0.025	33.2	0.027				
Oxygen/Argon	7.8	1.3	8.3	1.3				
Nitrogen	34.0	2.5	35.1	2.7				
Methane	12.5	0.0025	12.2	0.0027				
Carbon Monoxide	0.055	0.0025	0.054	0.0027				
Net Heating Value (BTU/ft3)	157.9	2.5	154.9	2.7				
Gross Heating Value (BTU/ft3)	179.1	2.5	175.6	2.7				

Results normalized including non-methane hydrocarbons
BTU values based on D1946 analysis and non-methane analysis assumed as propane
ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 1-5-18

Mark Johnson
Operations Manager

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: 180104GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/4/18 11:38			1/4/18 10:08		1/4/18 10:22					
Analyst Initials:	AS			AS		AS					
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	4.89	98	4.92	98	0.5	70	130	30
Carbon Dioxide	ND	0.010	10	8.89	89	8.84	88	0.5	70	130	30
Oxygen/Argon	ND	0.50	15	15.8	107	15.9	107	0.3	70	130	30
Nitrogen	ND	1.0	70	70.1	100	70.4	101	0.3	70	130	30
Methane	ND	0.0010	0.10	0.115	115	0.111	111	3.3	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.107	107	0.106	106	0.6	70	130	30

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

Reviewed/Approved By: _____ Date 1/10/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

ATTACHMENT C

GAS WELL ANALYSIS MAPS

LEGEND

WELL LOCATION

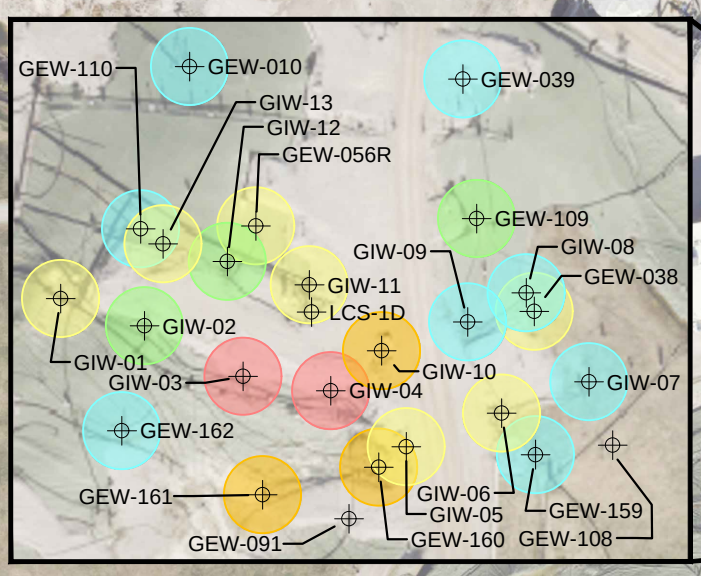
HYDROGEN

		<	10%
10%	<	<	20%
20%	<	<	30%
30%	<	<	40%
		≥	40%

NOTES:
Hydrogen represents the laboratory reported concentration for samples collected during the month.

*Only points monitored during the report period show data.

PGW-60
GEW-1A
GEW-003
GEW-002
GEW-2S
GEW-004
GEW-005
GEW-046R
LCS-6B
GEW-048
GEW-047R
GEW-045R
T-56
GEW-006
GEW-049
GEW-050
GEW-044
GEW-051
GEW-052
LCS-5A
GEW-043R
GEW-007
GEW-053
GEW-054
GEW-008
GEW-042R
LCS-5B
GEW-041R
GEW-055
GEW-009
GEW-040
SEE INSET
GEW-187
GEW-149
GEW-154
GEW-153
GEW-107
GEW-013A
GEW-148
GEW-113
GEW-152
GEW-067A
GEW-059R
GEW-151
GEW-090
GEW-087
GEW-106
GEW-16R
GEW-015
GEW-088
GEW-058A
GEW-058
GEW-158
GEW-147
GEW-156
GEW-105
GEW-104
GEW-135
GEW-176
GEW-086
GEW-150
GEW-136
GEW-057R
GEW-175
GEW-134
LCS-4B
GEW-146
GEW-057B
GEW-157
GEW-182
GEW-018B
GEW-116
GEW-137
GEW-174
GEW-145
GEW-178
GEW-133
GEW-082R
GEW-117
GEW-118
GEW-102
GEW-179
GEW-132
GEW-155
GEW-173
GEW-068A
GEW-138
GEW-081
GEW-188
GEW-144
GEW-180
GEW-184
GEW-122
GEW-078R
GEW-101
GEW-121
GEW-140
GEW-143
GEW-120
GEW-167
GEW-185
GEW-022R
GEW-77
GEW-172
GEW-181
GEW-163
GEW-139
LCS-2D
GEW-123
GEW-166
GEW-131
GEW-142
GEW-100
GEW-164
GEW-124
GEW-171
GEW-165
GEW-130
GEW-141
GEW-125
SEW -002
GEW-168
GEW-177
GEW-126
GEW-129
GEW-169
GEW-127
GEW-170
GEW-186
GEW-128



NOTE:

1.) AERIAL TOPOGRAPHY PROVIDED BY COOPER AERIAL SURVEYS, INC. AND IS DATED DECEMBER 1, 2017

0 200 400 Feet

N

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

BRIDGETON LANDFILL
MONTHLY REPORTING

HYDROGEN DATA MAP - JANUARY 2018

PROJECT NUMBER: BT-145

FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\BT-145 Agreed Order Reporting\Surfer Updates\civil 3D\January 2018\January 2018.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

JANUARY 2018
DESIGNED BY: PML
APPROVED BY: ---

REVISION DATE

DRAWING NO.:
001

LEGEND

WELL LOCATION

CARBON MONOXIDE (PPM)

	≤	1,000
1,001	≤	2,000
2,001	≤	3,000
3,001	≤	4,000
4,001	≤	5,000
	>	5,000

NOTES:
Carbon Monoxide represents the laboratory reported concentration for samples collected during the month.

*Only points monitored during the report period show data.

PGW-60
GEW-1A
GEW-2S
GEW-003
GEW-002
GEW-004
GEW-005
GEW-046R
LCS-6B
GEW-048
GEW-047R
GEW-045R
T-56
GEW-006
GEW-049
GEW-050
GEW-044
GEW-051
GEW-052
LCS-5A
GEW-043R
GEW-007
GEW-053
GEW-054
GEW-008
GEW-042R
LCS-5B
GEW-041R
GEW-055
GEW-009
GEW-040
SEE INSET
GEW-187
GEW-149
GEW-154
GEW-153
GEW-107
GEW-013A
GEW-148
GEW-113
GEW-152
GEW-059R
GEW-067A
GEW-090
GEW-151
GEW-087
GEW-106
GEW-158
GEW-058A
GEW-058
GEW-088
GEW-015
GEW-16R
GEW-147
GEW-156
GEW-105
GEW-104
GEW-176
GEW-135
GEW-086
GEW-150
GEW-136
GEW-175
GEW-057R
GEW-057B
GEW-157
GEW-134
LCS-4B
GEW-146
GEW-182
GEW-116
GEW-018B
GEW-137
GEW-174
GEW-145
GEW-178
GEW-133
GEW-082R
GEW-117
GEW-118
GEW-102
GEW-179
GEW-132
GEW-155
GEW-173
GEW-068A
GEW-138
GEW-188
GEW-081
GEW-122
GEW-144
GEW-180
GEW-184
GEW-121
GEW-078R
GEW-140
GEW-101
GEW-120
GEW-167
GEW-143
GEW-185
GEW-022R
GEW-77
GEW-181
GEW-163
GEW-172
GEW-123
GEW-166
GEW-139
LCS-2D
GEW-131
GEW-164
GEW-142
GEW-100
GEW-124
GEW-171
GEW-165
GEW-130
GEW-141
GEW-125
SEW -002
GEW-168
GEW-177
GEW-126
GEW-129
GEW-169
GEW-127
GEW-170
GEW-186
GEW-128

GEW-110
GEW-010
GEW-039
GIW-13
GIW-12
GEW-056R
GEW-109
GIW-09
GIW-08
GEW-038
GIW-11
LCS-1D
GIW-02
GIW-01
GIW-03
GIW-10
GIW-04
GIW-07
GEW-162
GEW-161
GIW-06
GIW-05
GEW-159
GEW-091
GEW-160
GEW-108

NOTE:

1.) AERIAL TOPOGRAPHY PROVIDED BY COOPER AERIAL SURVEYS, INC. AND IS DATED DECEMBER 1, 2017

0 200 400 Feet

N

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

BRIDGETON LANDFILL
MONTHLY REPORTING

CARBON MONOXIDE DATA MAP - JANUARY 2018

PROJECT NUMBER: BT-145

FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\BT-145 Agreed Order Reporting\Surfer Updates\civil 3D\January 2018\January 2018.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

JANUARY 2018
DESIGNED BY: PML
APPROVED BY: ---

REVISION DATE

DRAWING NO.:
002

LEGEND

WELL LOCATION

MAXIMUM TEMPERATURE (F°)

	<	131°
131°	<	151°
151°	<	171°
171°	<	191°
191°	<	211°
211°	<	231°
	>	231°

NOTES:
Maximum Temperature represents the maximum initial wellhead temperature reading collected during the month.

*Only points monitored during the report period show data.

SEE INSET

NOTE:

1.) AERIAL TOPOGRAPHY PROVIDED BY COOPER AERIAL SURVEYS, INC. AND IS DATED DECEMBER 1, 2017

0 200 400 Feet

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

BRIDGETON LANDFILL
MONTHLY REPORTING

INITIAL TEMPERATURE MAXIMUMS - JANUARY 2018

PROJECT NUMBER: BT-145 | FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\BT-145 Agreed Order Reporting\Surfer Updates\civil 3D\January 2018\January 2018.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

JANUARY 2018
DESIGNED BY: PML
APPROVED BY: ---

REVISION DATE

DRAWING NO.:
003

ATTACHMENT D

LABORATORY DATA

ATTACHMENT D-1

LAB ANALYSIS 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	9/12/2017	45	33	4.9	17	ND	ND	See Note 3
GEW-002	10/9/2017	56	40	ND	ND	ND	ND	
GEW-002	11/6/2017	55	40	ND	3.8	ND	ND	
GEW-002	12/12/2017	54	40	ND	4.4	ND	ND	
GEW-002	1/8/2018	52	36	ND	11	ND	ND	
GEW-02S	9/14/2017	60	37	ND	ND	ND	ND	
GEW-02S	11/9/2017	53	37	2.2	7.7	ND	ND	See Note 3
GEW-02S	1/23/2018	57	36	1.6	5.2	ND	ND	
GEW-003	9/12/2017	51	39	ND	8.7	0.09	ND	
GEW-003	10/9/2017	47	36	ND	15.0	0.06	ND	
GEW-003	11/6/2017	50	37	ND	12.0	0.08	ND	
GEW-003	12/12/2017	49	36	ND	14.0	0.07	ND	
GEW-003	1/8/2018	43	34	ND	21	0.098	ND	
GEW-004	9/12/2017	56	40	ND	3.7	0.06	ND	
GEW-004	10/9/2017	56	39	ND	3.7	0.06	ND	
GEW-004	11/6/2017	56	39	ND	4.1	0.08	ND	
GEW-004	12/12/2017	52	38	ND	9.3	0.09	ND	
GEW-004	1/8/2018	50	37	ND	13	0.084	ND	
GEW-005	9/11/2017	54	36	ND	8.6	ND	ND	
GEW-005	10/9/2017	52	34	1.9	12	ND	ND	
GEW-005	11/6/2017	57	36	ND	6.2	0.04	ND	
GEW-005	12/12/2017	46	34	ND	19	ND	ND	
GEW-005	1/8/2018	43	33	ND	23	ND	ND	
GEW-006	9/11/2017	47	31	4.9	18	ND	ND	See Note 3
GEW-006	11/6/2017	59	37	ND	3.2	ND	ND	
GEW-006	1/8/2018	50	33	ND	16	ND	ND	
GEW-007	9/12/2017	56	40	ND	ND	ND	ND	
GEW-007	11/7/2017	54	36	2.1	7.4	ND	ND	See Note 3
GEW-007	1/9/2018	58	38	ND	ND	ND	ND	
GEW-008	9/12/2017	53	44	ND	ND	1.1	ND	
GEW-008	10/11/2017	53	43	ND	ND	1.1	ND	
GEW-008	11/7/2017	54	43	ND	ND	1.2	ND	
GEW-008	12/13/2017	53	41	ND	3.4	1.5	ND	
GEW-008	1/9/2018	54	42	ND	ND	1.7	ND	
GEW-009	9/12/2017	37	29	7.1	26	0.48	ND	See Note 4
GEW-009	10/11/2017	49	39	ND	10	0.41	ND	
GEW-009	11/7/2017	51	39	ND	9	0.6	ND	
GEW-009	12/13/2017	50	38	ND	11	0.7	ND	
GEW-009	1/9/2018	53	39	ND	6.7	0.60	ND	
GEW-040	9/14/2017	57	40	ND	ND	ND	ND	
GEW-040	10/11/2017	57	39	ND	3.2	ND	ND	
GEW-040	11/9/2017	58	39	ND	ND	ND	ND	
GEW-040	12/13/2017	58	39	ND	ND	ND	ND	
GEW-040	1/9/2018	57	38	ND	4.2	ND	ND	
GEW-041R	9/14/2017	58	39	ND	ND	ND	ND	
GEW-041R	11/9/2017	59	38	ND	ND	ND	ND	
GEW-041R	1/9/2018	53	35	ND	12	ND	ND	
GEW-042R	9/12/2017	56	42	ND	ND	ND	ND	
GEW-042R	10/11/2017	55	39	ND	4.2	ND	ND	
GEW-042R	11/9/2017	55	39	ND	4.5	ND	ND	
GEW-042R	12/13/2017	57	39	ND	ND	ND	ND	
GEW-042R	1/8/2018	58	39	ND	3.1	ND	ND	
GEW-043R	9/12/2017	55	43	ND	ND	0.25	ND	
GEW-043R	11/9/2017	47	34	4.1	15	0.19	ND	See Note 3
GEW-043R	1/8/2018	56	39	ND	3.9	0.29	ND	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-044	9/12/2017	55	39	ND	4.4	ND	ND	
GEW-044	11/9/2017	59	39	ND	ND	ND	ND	
GEW-044	1/8/2018	48	35	ND	16	ND	ND	
GEW-045R	9/12/2017	56	41	ND	ND	ND	ND	
GEW-045R	10/11/2017	57	41	ND	ND	ND	ND	
GEW-045R	11/6/2017	55	41	ND	ND	ND	ND	
GEW-045R	12/12/2017	61	36	ND	ND	ND	ND	
GEW-045R	1/8/2018	53	37	2.4	8.2	ND	ND	See Note 3
GEW-046R	9/12/2017	56	41	ND	ND	0.07	ND	
GEW-046R	10/9/2017	56	40	ND	ND	0.05	ND	
GEW-046R	11/6/2017	55	40	ND	4	0.06	ND	
GEW-046R	12/12/2017	57	38	ND	4.2	0.04	ND	
GEW-046R	1/8/2018	47	36	ND	17	0.081	ND	
GEW-047R	9/12/2017	54	39	ND	6.3	ND	ND	
GEW-047R	10/9/2017	56	42	ND	ND	ND	ND	
GEW-047R	11/6/2017	56	41	ND	ND	ND	ND	
GEW-047R	12/12/2017	48	36	1.5	14	0.03	ND	
GEW-047R	1/8/2018	37	31	1.5	30	0.041	ND	
GEW-048	9/11/2017	56	39	ND	4.7	ND	ND	
GEW-048	10/9/2017	54	36	2.1	7.8	ND	ND	See Note 3
GEW-048	11/6/2017	58	39	ND	ND	ND	ND	
GEW-048	12/12/2017	55	38	ND	6.6	ND	ND	
GEW-048	1/8/2018	50	35	ND	13	0.032	ND	
GEW-049	9/12/2017	56	40	ND	3.7	0.06	ND	
GEW-049	10/11/2017	55	39	ND	5.7	ND	ND	
GEW-049	11/6/2017	57	39	ND	3.4	0.06	ND	
GEW-049	12/12/2017	53	36	ND	10	0.06	ND	
GEW-049	1/8/2018	47	34	ND	17	0.036	ND	
GEW-050	9/12/2017	57	39	ND	ND	0.05	ND	
GEW-050	11/6/2017	55	36	1.7	7	0.05	ND	
GEW-050	1/8/2018	46	32	2.3	19	0.035	ND	See Note 4
GEW-051	9/12/2017	43	32	5.3	19	0.7	ND	See Note 4
GEW-051	11/6/2017	56	40	ND	ND	1.0	ND	
GEW-051	1/8/2018	55	39	ND	4.1	0.90	ND	
GEW-052	9/12/2017	49	35	3.2	13	0.04	ND	See Note 3
GEW-052	11/7/2017	52	37	ND	11	0.04	ND	
GEW-052	1/8/2018	34	30	ND	35	ND	ND	
GEW-053	9/13/2017	49	41	ND	ND	5	56	
GEW-053	10/9/2017	53	40	ND	ND	2.8	58	
GEW-053	11/9/2017	49	42	ND	ND	6.7	56	
GEW-053	12/13/2017	51	41	ND	ND	5.1	62	
GEW-053	1/8/2018	49	38	ND	7.7	4.7	57	
GEW-054	9/13/2017	52	43	ND	ND	2.7	ND	
GEW-054	10/9/2017	53	42	ND	ND	2.7	ND	
GEW-054	11/9/2017	54	41	ND	ND	2.7	30	
GEW-054	12/12/2017	54	41	ND	ND	2.5	ND	
GEW-054	1/9/2018	55	39	ND	3.5	1.5	ND	
GEW-055	9/14/2017	49	41	ND	4.2	4.3	35	
GEW-055	10/11/2017	49	40	1.9	6.4	2.8	36	
GEW-055	11/9/2017	53	41	ND	3.2	2.4	32	
GEW-055	12/12/2017	54	40	ND	3	2.1	32	
GEW-055	1/8/2018	50	40	ND	ND	6.5	46	
Flare Station[2]	9/7/2017	47.8	36.6	2.1	12.1	ND	ND	See Note 5
Flare Station[2]	10/10/2017	48.0	36.1	2.1	12.8	ND	ND	See Note 5
Flare Station[2]	11/2/2017	49.5	36.0	2.0	11.2	ND	ND	See Note 5
Flare Station[2]	12/5/2017	42.4	32.4	3.1	21.0	ND	ND	See Note 5

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
Flare Station[2]	1/3/2018	41.9	31.5	3.2	22.4	ND	ND	See Note 5

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.

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	9/12/2017	55	42	ND	ND	0.35	ND	
GEW-010	10/9/2017	57	41	ND	ND	0.06	ND	
GEW-010	11/6/2017	57	39	ND	ND	0.12	ND	
GEW-010	12/12/2017	57	40	ND	ND	ND	ND	
GEW-010	1/8/2018	56	41	ND	ND	ND	ND	
GEW-022R	9/18/2017	2.8	58	1.8	6.2	30	2,100	
GEW-022R	11/9/2017	2	44	6.3	22	25	1,700	See Note 3
GEW-022R	1/15/2018	2.8	58	ND	2.9	35	2,100	
GEW-038	9/12/2017	0.67	44	5.8	20	29	1,800	See Note 4
GEW-038	10/9/2017	1.2	19	14.0	51	14	840	See Note 4
GEW-038	11/6/2017	0.77	51	2.1	7.3	38	2,300	
GEW-038	12/13/2017	0.89	53	ND	ND	42	2,200	
GEW-038	1/8/2018	12	39	5.2	21	22	1,000	See Note 4
GEW-039	9/12/2017	45	52	ND	ND	ND	ND	
GEW-039	10/9/2017	46	52	ND	ND	ND	ND	
GEW-039	11/6/2017	46	49	ND	3.2	0.14	ND	
GEW-039	12/13/2017	46	48	ND	5.1	ND	ND	
GEW-039	1/8/2018	30	37	2.2	30	0.050	37	
GEW-056R	9/12/2017	27	52	ND	ND	18	590	
GEW-056R	10/9/2017	31	48	ND	ND	17	580	
GEW-056R	11/6/2017	30	42	1.8	10	15	510	
GEW-056R	12/12/2017	9.9	47	ND	20	22	920	
GEW-056R	1/8/2018	26	45	ND	6.5	21	630	
GEW-057R	1/16/2018	5.4	38	4.6	16	36	1,000	
GEW-058	9/6/2017	1.5	25	5.2	53	14	510	See Note 3
GEW-058	11/8/2017	2.4	36	4.1	29	28	1,100	
GEW-058	1/15/2018	2.5	34	4.4	27	32	1,200	
GEW-058A	9/6/2017	11	24	7.6	44	13	540	See Note 3
GEW-058A	11/8/2017	12	25	7.3	41	15	620	See Note 4
GEW-058A	1/15/2018	1.4	31	5.5	28	34	1,300	See Note 4
GEW-059R	9/6/2017	11	45	ND	ND	41	1,300	
GEW-059R	11/7/2017	14	43	ND	4.6	37	1,300	
GEW-059R	1/10/2018	15	40	ND	5.5	38	1,300	
GEW-082R	9/14/2017	12	42	ND	16	28	950	
GEW-082R	11/13/2017	11	37	ND	25	26	960	
GEW-082R	1/12/2018	14	37	ND	22	26	910	
GEW-086	9/6/2017	8.5	30	4.0	51	6.9	180	
GEW-086	11/9/2017	19	37	2.7	36	5.1	140	
GEW-086	1/15/2018	15	32	5.3	38	10	250	See Note 3
GEW-090	9/6/2017	18	45	ND	3.9	32	980	
GEW-090	11/9/2017	19	43	ND	5.6	31	1,000	
GEW-090	1/5/2018	20	42	ND	5.3	31	1,000	
GEW-102	9/8/2017	7.8	42	4.8	17	28	440	
GEW-102	11/9/2017	5.7	46	2.2	7.4	38	640	
GEW-104	9/6/2017	17	52	ND	ND	26	1,000	
GEW-105	9/6/2017	11	44	4.1	18	22	1,200	
GEW-106	9/6/2017	27	50	ND	6.9	14	510	
GEW-107	9/6/2017	0.13	1.6	21	76	0.43	55	See Note 4
GEW-107	11/7/2017	42	39	2.9	10	6	290	
GEW-107	1/5/2018	40	51	ND	3.7	4.7	240	
GEW-108	9/6/2017	29	44	1.7	5.7	18	640	
GEW-109	9/12/2017	32	44	ND	12	11	240	
GEW-109	10/9/2017	36	42	ND	14	7.6	180	
GEW-109	11/6/2017	33	38	2	19	7.9	190	
GEW-109	12/13/2017	26	35	3	22	13	340	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-109	1/8/2018	20	32	4.5	33	10	310	
GEW-110	9/12/2017	13	53	ND	ND	31	1,100	
GEW-110	10/9/2017	7.9	21	12	48	10	510	See Note 4
GEW-110	11/6/2017	8	17	14	53	8.4	290	See Note 4
GEW-110	12/12/2017	12	38	4.2	19	27	990	
GEW-110	1/8/2018	6.5	18	14	52	9.1	340	See Note 4
GEW-116	9/14/2017	5	65	ND	ND	26	1,200	
GEW-116	11/13/2017	7.7	58	ND	4.1	28	1,200	
GEW-116	1/11/2018	5.4	55	2.2	7.4	29	1,400	
GEW-117	9/14/2017	34	51	ND	5.2	7.5	310	
GEW-117	11/9/2017	44	51	ND	ND	0.42	140	
GEW-117	1/11/2018	44	50	ND	4.2	0.49	140	
GEW-118	9/14/2017	0.9	50	1.9	6.8	39	1,400	
GEW-118	11/9/2017	1.9	52	2.3	8.5	34	750	
GEW-118	1/12/2018	1.5	47	3.2	12	37	1,100	
GEW-120	9/14/2017	17	55	ND	18	9	390	
GEW-120	11/9/2017	17	53	ND	18	11	510	
GEW-120	1/11/2018	14	44	2.2	29	9.4	450	
GEW-121	9/18/2017	9.3	50	ND	19	19	860	
GEW-121	11/9/2017	11	48	ND	20	19	910	
GEW-121	1/15/2018	5.6	36	2.5	39	17	990	
GEW-122	9/18/2017	12	34	ND	36	16	1,400	
GEW-122	11/9/2017	12	34	ND	36	16	1,500	
GEW-122	1/15/2018	12	42	ND	19	27	1,500	
GEW-123	9/18/2017	2.8	61	ND	ND	32	2,400	
GEW-123	11/9/2017	7.7	58	ND	ND	31	2,300	
GEW-123	1/15/2018	13	40	ND	35	11	570	
GEW-124	9/18/2017	48	49	ND	ND	0.07	ND	
GEW-124	11/9/2017	53	44	ND	ND	0.06	ND	
GEW-125	9/18/2017	4.2	53	ND	10	31	1,800	
GEW-125	11/9/2017	3.4	45	2.1	20	28	1,800	
GEW-125	1/11/2018	4.0	37	5.1	31	22	1,400	See Note 3
GEW-126	9/18/2017	29	48	ND	13	7.8	570	
GEW-126	11/9/2017	20	46	2.5	24	6.9	530	
GEW-126	1/11/2018	22	45	ND	26	6.3	430	
GEW-127	9/14/2017	3.6	65	ND	ND	27	2,700	
GEW-127	11/9/2017	4.1	54	2.3	14	24	2,600	
GEW-127	1/11/2018	5.8	37	7.4	36	13	1,200	See Note 4
GEW-128	9/14/2017	7.8	63	ND	4.3	23	2,300	
GEW-128	11/9/2017	14	60	ND	6.8	17	1,800	
GEW-128	1/11/2018	13	55	ND	17	14	1,400	
GEW-129	9/14/2017	0.69	60	ND	ND	35	3,500	
GEW-129	11/9/2017	6.3	45	5.5	19	23	2,500	See Note 3
GEW-129	1/15/2018	15	59	ND	6.2	18	1,900	
GEW-130	9/14/2017	3.5	46	3.3	16	31	2,300	
GEW-130	11/9/2017	5.9	39	5.9	27	22	1,600	See Note 4
GEW-130	1/11/2018	4.9	45	4.3	16	29	2,100	
GEW-131	9/18/2017	20	42	ND	15	21	1,400	
GEW-131	11/9/2017	20	39	ND	21	19	1,400	
GEW-131	1/11/2018	21	42	ND	16	19	1,300	
GEW-132	9/14/2017	2.2	27	7.6	47	16	820	See Note 4
GEW-132	11/9/2017	1.8	18	10	61	9.2	500	See Note 4
GEW-132	1/12/2018	2.7	25	8.8	47	16	870	See Note 4
GEW-133	9/14/2017	10	53	ND	13	22	990	
GEW-133	11/13/2017	11	49	ND	15	23	1,100	
GEW-133	1/11/2018	0.75	47	ND	ND	49	1,800	

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Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-134	9/14/2017	14.0	46	ND	27	12	500	
GEW-134	11/13/2017	10.0	38	2.3	40	10	450	
GEW-134	1/11/2018	12	41	2.0	29	16	700	
GEW-135	9/14/2017	6	52	ND	8.6	32	1,200	
GEW-135	11/13/2017	7.3	35	4.4	36	18	890	
GEW-135	1/11/2018	9.2	42	2.6	23	23	1,000	
GEW-136	9/8/2017	5.4	30	7.7	37	19	490	See Note 4
GEW-136	11/13/2017	5.7	26	7.7	40	20	540	See Note 4
GEW-136	1/11/2018	5.0	21	9.6	50	14	370	See Note 4
GEW-137	9/8/2017	22	31	3	44	ND	ND	
GEW-137	11/13/2017	29	34	1.8	35	0.16	33	
GEW-137	1/12/2018	35	33	1.6	30	ND	ND	
GEW-138	9/14/2017	14	43	ND	28	14	790	
GEW-138	11/13/2017	6.5	21	8.9	56	7	390	See Note 4
GEW-138	1/12/2018	9.0	33	ND	45	11	650	
GEW-139	9/14/2017	2.6	50	ND	4.2	41	2,700	
GEW-139	11/9/2017	1.8	51	ND	ND	43	3,000	
GEW-139	1/15/2018	2.3	52	ND	ND	42	2,700	
GEW-140	1/10/2018	13	50	ND	ND	34	1,300	
GEW-144	1/10/2018	1.5	24	11	37	25	1,200	See Note 4
GEW-145	9/8/2017	1.3	32	8.8	31	26	1100	See Note 3
GEW-146	9/8/2017	1.7	7.4	16	74	0.44	ND	See Note 4
GEW-146	1/11/2018	2.9	6.4	18	72	0.70	ND	
GEW-147	9/14/2017	12	46	ND	13	27	960	
GEW-147	11/13/2017	11	42	ND	22	23	880	
GEW-147	1/11/2018	10	39	ND	28	21	810	
GEW-148	9/6/2017	4	51	1.8	6	37	2,100	
GEW-148	1/11/2018	3.2	48	2.9	9.8	36	2,500	
GEW-149	9/6/2017	12	36	5.2	34	13	570	See Note 3
GEW-149	11/9/2017	14	32	4.3	43	6.4	310	
GEW-149	1/11/2018	12	27	6.9	48	6.5	240	See Note 4
GEW-150	9/6/2017	9.2	41	6.4	28	15	580	See Note 4
GEW-150	11/8/2017	12	29	7.7	44	6.7	260	See Note 4
GEW-150	1/10/2018	16	31	8.6	32	12	310	See Note 3
GEW-151	9/6/2017	23	51	ND	5.3	20	780	
GEW-151	11/13/2017	1.4	43	ND	ND	52	1000	
GEW-151	1/11/2018	12	38	4.4	25	20	650	
GEW-152	9/6/2017	24	45	ND	3.8	26	1300	
GEW-152	11/7/2017	24	42	2.2	7.5	23	1300	
GEW-152	1/5/2018	26	42	1.6	6.0	24	1200	
GEW-153	9/6/2017	45	40	ND	8.1	5.3	66	
GEW-153	11/7/2017	43	37	ND	17	2	77	
GEW-153	1/5/2018	34	30	1.4	32	1.7	99	
GEW-154	9/6/2017	13	18	13	55	1.5	88	See Note 4
GEW-154	11/9/2017	2.2	10	16	64	7.2	340	See Note 4
GEW-154	1/10/2018	1.5	6.4	18	70	4.2	200	See Note 4
GEW-155	9/14/2017	2.2	21	4.8	69	2.8	77	
GEW-155	11/13/2017	1.1	13	11	75	ND	79	See Note 3
GEW-155	1/12/2018	6.3	27	2.3	60	4.3	97	
GEW-156	11/8/2017	16	23	12	43	6	140	See Note 4
GEW-156	1/16/2018	11	14	14	58	2.2	70	See Note 4
GEW-158	9/6/2017	34	48	ND	ND	15	470	
GEW-158	11/8/2017	34	48	ND	ND	15	470	
GEW-158	1/10/2018	22	49	ND	ND	26	970	
GEW-159	9/6/2017	26	43	ND	25	4.8	150	
GEW-159	11/7/2017	25	40	3	29	2.9	150	
GEW-159	1/5/2018	38	40	ND	19	1.5	42	

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Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-160	9/8/2017	1.2	55	ND	ND	40	1,900	
GEW-160	11/13/2017	13	43	ND	20	23	1,100	
GEW-160	1/5/2018	12	53	ND	ND	31	1,400	
GEW-161	9/8/2017	0.84	59	ND	ND	36	1,900	
GEW-161	1/5/2018	0.40	28	9.1	31	31	1,400	See Note 4
GEW-162	9/6/2017	7.9	64	ND	ND	25	930	
GEW-162	11/9/2017	11	56	2	11	20	950	
GEW-162	1/5/2018	21	68	ND	4.2	6.1	230	
GEW-163	9/14/2017	4.6	31	7.2	46	9.7	450	See Note 4
GEW-163	11/7/2017	10	36	6.8	38	8.7	400	See Note 4
GEW-163	1/9/2018	2.9	23	13	48	12	500	See Note 4
GEW-164	9/14/2017	18	60	ND	6.4	14	920	
GEW-164	11/7/2017	18	51	3.6	17	11	690	
GEW-164	1/9/2018	20	50	3.5	15	11	640	
GEW-165	9/14/2017	5.4	38	8.8	32	14	850	See Note 4
GEW-165	11/7/2017	7.8	54	3.7	13	20	1,100	
GEW-165	1/9/2018	11	63	ND	ND	23	1,200	
GEW-166	9/14/2017	0.66	53	1.8	6.9	37	2,400	
GEW-166	11/7/2017	0.81	53	1.7	6.6	38	2,500	
GEW-166	1/9/2018	1.2	51	ND	5.0	41	2,600	
GEW-167	9/14/2017	0.33	40	5.5	20	33	1,900	See Note 4
GEW-167	11/7/2017	0.56	35	7.8	28	28	1,700	See Note 4
GEW-167	1/9/2018	0.43	30	9.1	33	27	1,600	See Note 3
GEW-168	9/14/2017	6.5	59	ND	ND	31	1,900	
GEW-168	11/7/2017	10	55	1.6	6.5	26	1,700	
GEW-168	1/10/2018	11	54	ND	4.2	29	1,700	
GEW-169	9/14/2017	3.2	62	ND	ND	32	2,400	
GEW-169	11/7/2017	2.6	46	5.6	22	23	1,700	See Note 4
GEW-169	1/10/2018	2.4	52	3.0	13	29	2,100	
GEW-170	9/14/2017	7.6	52	3.5	16	19	1,800	
GEW-170	11/9/2017	8.3	41	7.1	28	15	1,300	See Note 4
GEW-170	1/11/2018	8.0	39	7.2	31	14	1,000	See Note 4
GEW-172	11/9/2017	0.33	46	4.3	15	34	2,700	
GEW-172	1/16/2018	0.45	49	3.0	11	36	2,800	
GEW-173	9/14/2017	28	44	3.2	23	1.8	210	
GEW-173	11/9/2017	8.7	17	12	61	0.21	33	See Note 4
GEW-173	1/16/2018	24	34	1.6	39	0.27	29	
GEW-174	9/8/2017	10	42	3.6	23	20	1,100	
GEW-174	11/9/2017	5.5	50	ND	ND	42	2,700	
GEW-174	1/10/2018	20	44	ND	16	19	960	
GEW-175	9/6/2017	14	40	5.3	31	9.8	420	See Note 4
GEW-175	11/8/2017	17	45	3.5	21	13	550	
GEW-175	1/10/2018	21	44	3.7	19	12	430	
GEW-176	9/6/2017	21	42	4.4	23	9.3	370	
GEW-176	11/8/2017	21	39	5.5	28	6.8	250	See Note 4
GEW-176	1/10/2018	23	34	7.2	30	5.9	180	See Note 4
GEW-177	11/9/2017	0.32	63	2	6.8	27	4,600	
GEW-177	1/15/2018	3.5	59	ND	4.7	31	3,600	
GEW-181	1/23/2018	9.9	61	2.7	9.4	16	1,200	
GEW-182	1/23/2018	7.1	51	2.2	7.5	32	1,400	
GEW-184	1/23/2018	22	40	8.1	30	0.38	96	
GEW-185	1/23/2018	17	59	ND	4.1	18	940	
GEW-186	1/23/2018	12	59	1.7	7.2	19	1,900	
GEW-187	1/23/2018	10	39	5.8	22	22	1,100	See Note 4
GEW-188	1/23/2018	0.79	22	12	46	18	800	See Note 4
GIW-01	9/12/2017	13	39	3.8	38	5.8	800	

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Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GIW-01	10/9/2017	27	41	3.3	28	0.67	110	
GIW-01	11/6/2017	6	61	ND	7.5	23	1,300	
GIW-01	12/12/2017	16	43	6.1	30	5	230	See Note 4
GIW-01	1/8/2018	11	53	2.8	12	20	940	
GIW-02	9/12/2017	2.8	20	16	58	2.7	110	See Note 4
GIW-02	10/9/2017	2.3	17	13	65	2.8	290	See Note 4
GIW-02	11/6/2017	1.9	12	14	69	2.8	240	See Note 4
GIW-02	12/12/2017	5.7	32	7.3	43	11	550	See Note 4
GIW-02	1/8/2018	13	50	3.4	17	16	690	
GIW-03	9/12/2017	2.5	59	2	8.5	27	1,400	
GIW-03	10/9/2017	3.3	53	1.9	17	24	1,400	
GIW-03	11/6/2017	2.9	47	2.1	25	23	1,300	
GIW-03	12/12/2017	1.1	59	ND	ND	37	1,900	
GIW-03	1/8/2018	1.5	54	ND	ND	41	1,700	
GIW-04	9/12/2017	12	49	3.4	14	21	1,100	
GIW-04	10/9/2017	3.3	53	3	15	26	1,400	
GIW-04	11/6/2017	1.5	48	4.5	18	27	1,500	
GIW-04	12/12/2017	0.096	5.6	20	69	6	280	See Note 4
GIW-04	1/8/2018	0.53	46	1.5	5.1	46	1,700	
GIW-05	9/12/2017	0.3	6.8	19	68	6.1	120	See Note 3
GIW-05	10/9/2017	0.36	7.2	18	66	8.2	150	See Note 4
GIW-05	11/6/2017	0.21	4.1	20	73	2.3	68	See Note 4
GIW-05	12/12/2017	0.32	8.7	18	62	11	120	See Note 4
GIW-05	1/8/2018	0.92	28	10	36	25	350	See Note 3
GIW-06	9/12/2017	12	44	ND	24	18	410	
GIW-06	10/9/2017	15	43	ND	25	15	340	
GIW-06	11/6/2017	17	43	1.6	25	14	320	
GIW-06	12/13/2017	1.7	50	ND	3.5	43	830	
GIW-06	1/8/2018	12	48	ND	9.5	29	560	
GIW-07	9/12/2017	26	59	ND	10	2.8	160	
GIW-07	10/9/2017	22	61	ND	10	5	210	
GIW-07	11/6/2017	21	62	1.9	11	4.3	250	
GIW-07	12/13/2017	19	58	2.6	14	6.3	340	
GIW-07	1/9/2018	30	56	ND	7.1	6.1	350	
GIW-08	9/12/2017	22	56	ND	20	0.84	99	
GIW-08	10/9/2017	24	55	ND	19	0.49	78	
GIW-08	11/6/2017	22	52	1.8	24	0.48	67	
GIW-08	12/13/2017	25	51	ND	22	0.68	82	
GIW-08	1/9/2018	29	54	ND	15	0.49	68	
GIW-09	9/12/2017	7.2	22	5	61	4.5	120	See Note 4
GIW-09	10/9/2017	3.9	17	9.8	66	2.6	160	See Note 4
GIW-09	11/6/2017	4	15	12	67	2.4	150	See Note 4
GIW-09	12/13/2017	13	21	5.9	55	5	150	See Note 3
GIW-09	1/9/2018	4.9	14	14	65	2.1	120	See Note 4
GIW-10	9/12/2017	11	42	ND	26	20	590	
GIW-10	10/9/2017	14	36	ND	34	15	470	
GIW-10	11/6/2017	11	31	ND	41	15	470	
GIW-10	12/12/2017	6.1	42	ND	17	34	660	
GIW-10	1/9/2018	4.9	41	1.8	17	36	650	
GIW-11	9/12/2017	18	48	ND	18	15	580	
GIW-11	10/9/2017	15	40	2.6	30	12	560	
GIW-11	11/6/2017	13	38	1.7	33	14	620	
GIW-11	12/12/2017	29	46	ND	6.4	18	590	
GIW-11	1/9/2018	9.2	47	ND	20	22	910	
GIW-12	9/12/2017	11	34	7.9	36	11	590	See Note 4
GIW-12	10/9/2017	6.2	33	8.7	37	15	990	See Note 4

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GIW-12	11/6/2017	4.9	32	8.3	37	17	1100	See Note 4
GIW-12	12/12/2017	14	33	6.7	37	9.4	470	See Note 4
GIW-12	1/9/2018	9.9	33	6.0	38	13	730	See Note 4
GIW-13	9/12/2017	15	63	1.6	6	14	550	
GIW-13	10/9/2017	20	57	ND	5.2	16	550	
GIW-13	11/6/2017	24	56	ND	3.9	15	540	
GIW-13	12/12/2017	17	56	ND	5.5	20	610	
GIW-13	1/9/2018	18	58	ND	3.2	20	560	
Flare Station[2]	9/7/2017	11.0	31.8	8.4	38.6	9.2	475	See Note 6
Flare Station[2]	10/10/2017	12.1	33.6	7.8	36.0	9.5	535	See Note 6
Flare Station[2]	11/2/2017	11.5	32.3	8.3	37.6	9.5	530	See Note 6
Flare Station[2]	12/5/2017	11.9	33.8	7.7	35.4	10.5	555	See Note 6
Flare Station[2]	1/3/2018	12.4	33.7	8.1	34.6	10.7	545	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.

ND = Analyte not detected in sample.

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

ATTACHMENT D-2

LAB ANALYSIS REPORTS

AirTECHNOLOGY
Laboratories, Inc.

January 25, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J011803-01/106

Enclosed are results for sample(s) received 1/18/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 1/25/18.

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,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD

Air TECHNOLOGY Laboratories, Inc.

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

TURNAROUND TIME

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

DELIVERABLES

EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 1 OF 12

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg) Canister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
J011803-01	5304	-21.8	-5	GEW 160	1/5/2018	10:27	C	LFG	NA	X					-3
-02	A8071	-21.5	-5	GEW 161	1/5/2018	10:39	C	LFG	NA	X					-3
-03	6146	-21.6	-5	GEW 90	1/5/2018	11:09	C	LFG	NA	X					-3
-04	6144	-21.5	-5	GEW 162	1/5/2018	11:25	C	LFG	NA	X					-3

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY FED EX	DATE/TIME	RECEIVED BY	DATE/TIME 1/18/18 1122
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

COMMENTS

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TURNAROUND TIME

Standard ☐ 48 hours ☒
Same Day ☐ 72 hours ☐
24 hours ☐ 96 hours ☐
Other:

DELIVERABLES

EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

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

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Phone& Fax:	314-683-3921
e-mail:	Mlambrich@republicservices.com

BILLING

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ANALYSIS REQUEST

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	Canister ID	Sample Start	Sample End												
J011803-05	6131	-21.7	-5	GEW 159	1/5/2018	11:31	C	LFG	NA	X					-3
-06	A7794	-21.3	-5	GEW 153	1/5/2018	14:02	C	LFG	NA	X					-3
-07	5907	-21.7	-5	GEW 107	1/5/2018	14:17	C	LFG	NA	X					-3
-08	A7792	-21.8	-5	GEW 152	1/5/2018	14:29	C	LFG	NA	X					-3
-09	A7765	-21	-5	GEW 46R	1/8/2018	10:20	C	LFG	NA	X					-4
-10	A7773	-20.9	-5	GEW 2	1/8/2018	10:33	C	LFG	NA	X					-4
-11	3130	-21	-5	GEW 3	1/8/2018	10:45	C	LFG	NA	X					-4
-12	A7775	-20.5	-5	GEW 4	1/8/2018	10:57	C	LFG	NA	X					-4
-13	4656	-19.5	-5	GEW 45R	1/8/2018	11:11	C	LFG	NA	X					-4
-14	5817	-20.6	-5	GEW 47R	1/8/2018	11:27	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Ronald Baker COMPANY: Republic Services DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FedEx	DATE/TIME	RECEIVED BY: [signature] 1/18/18	DATE/TIME 1122
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

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

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Fx: 626-964-5832

CHAIN OF CUSTODY RECORD

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

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Canister ID	Sample Start	Sample End												
J011803-15	A7663	-20.8	-5	GEW 5	1/8/2018	11:48	C	LFG	NA	X					-4
-16	3440	-20.6	-5	GEW 48	1/8/2018	13:52	C	LFG	NA	X					-4
-17	A7649	-21.2	-5	GEW 6	1/8/2018	14:07	C	LFG	NA	X					-4
-18	A7781	-20.8	-5	GEW 44	1/8/2018	14:21	C	LFG	NA	X					-4
-19	5305	-20.6	-5	GEW 51	1/8/2018	14:32	C	LFG	NA	X					-4
-20	5833	-20.6	-5	GEW 49	1/8/2018	14:43	C	LFG	NA	X					-4
-21	5835	-20.4	-5	GEW 52	1/8/2018	14:55	C	LFG	NA	X					-4
-22	A7810	-19.9	-5	GEW 50	1/8/2018	15:06	C	LFG	NA	X					-4
-23	5815	-20.6	-5	GEW 55	1/8/2018	15:21	C	LFG	NA	X					-4
-24	6151	-20.7	-5	GEW 53	1/8/2018	15:32	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services		
SAMPLED BY: Ronald Baker	COMPANY: Republic Services	DATE/TIME	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FEDEX	DATE/TIME	RECEIVED BY: [signature] 1/18/18 1122	DATE/TIME
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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Fx: 626-964-5832

CHAIN OF CUSTODY RECORD

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

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

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Canister ID	Sample Start	Sample End												
J011803-25	5310	-20.9	-5	GEW 43R	1/8/2018	15:43	C	LFG	NA	X					-4
-26	5816	-21	-5	GEW 42R	1/8/2018	15:56	C	LFG	NA	X					-4
-27	5819	-20.9	-5	GEW 54	1/9/2018	9:56	C	LFG	NA	X					-4
-28	A8096	-21.1	-5	GEW 41R	1/9/2018	10:10	C	LFG	NA	X					-4
-29	3131	-20.9	-5	GEW 40	1/9/2018	10:22	C	LFG	NA	X					-4
-30	A7646	-20.9	-5	GEW 7	1/9/2018	14:26	C	LFG	NA	X					-4
-31	A8072	-20.8	-5	GEW 8	1/9/2018	14:44	C	LFG	NA	X					-4
-32	A8059	-20.9	-5	GEW 9	1/9/2018	14:58	C	LFG	NA	X					-4
-33	A8083	-20.4	-5	GEW 59R	1/10/2018	8:57	C	LFG	NA	X					-5
-34	A7761	-20.2	-5	GEW 158	1/10/2018	9:14	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Ronald Baker COMPANY: Republic Services DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FED EX	DATE/TIME	RECEIVED BY: [signature]	DATE/TIME: 1/18/18 1122
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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CHAIN OF CUSTODY RECORD

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

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Canister ID	Sample Start	Sample End												
J011803-35	A7769	-20.5	-5	GEW 176	1/10/2018	9:26	C	LFG	NA	X					-5
-36	A8097	-20.2	-5	GEW 150	1/10/2018	9:38	C	LFG	NA	X					-5
-37	A7818	-19.9	-5	GEW 175	1/10/2018	10:41	C	LFG	NA	X					-5
-38	A7665	-20.1	-5	GEW 174	1/10/2018	11:04	C	LFG	NA	X					-5
-39	A8055	-20	-5	GEW 144	1/10/2018	11:17	C	LFG	NA	X					-5
-40	A7760	-19.9	-5	GEW 140	1/10/2018	11:35	C	LFG	NA	X					-5
-41	5821	-19.8	-5	GEW 170	1/11/2018	9:02	C	LFG	NA	X					-5
-42	A7809	-20.3	-5	GEW 128	1/11/2018	9:15	C	LFG	NA	X					-5
-43	5831	-19.9	-5	GEW 127	1/11/2018	9:28	C	LFG	NA	X					-5
-44	5813	-19	-5	GEW 130	1/11/2018	9:41	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services		
SAMPLED BY: Ronald Baker	COMPANY: Republic Services	DATE/TIME	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FedEx	DATE/TIME	RECEIVED BY: [signature]	DATE/TIME: 1/18/18 1122
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

COMMENTS

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

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CHAIN OF CUSTODY RECORD

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

Project No.:	
Project Name:	Bridgeton Landfill
Report To:	Mike Lambrich
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Street:	13570 St. Charles Rock Rd.
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Phone& Fax:	314-683-3921
e-mail:	Mlambrich@republicservices.com

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P.O. No.:	PO7112802
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	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Canister ID	Sample Start	Sample End												
J011803-45	A7779	-20.1	-5	GEW 126	1/11/2018	10:24	C	LFG	NA	X					-6
-46	A7778	-19.7	-5	GEW 131	1/11/2018	10:36	C	LFG	NA	X					-2
-47	A8068	-19.8	-5	GEW 125	1/11/2018	11:17	C	LFG	NA	X					-6
-48	5927	-22.4	-5	GEW 58A	1/15/2018	10:53	C	LFG	NA	X					-3
-49	5309	-21.7	-5	GEW 58	1/15/2018	11:22	C	LFG	NA	X					-3

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Ronald Baker COMPANY: Republic Services DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY FED EX	DATE/TIME	RECEIVED BY	DATE/TIME 1/18/18 1122
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DELIVERABLES

EDD ☐
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Level 3 ☐
Level 4 ☐

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

Project No.:	
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ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INIT. & PRESS
	Canister ID	Sample Start	Sample End												
J011803-50	A8073	-20.8	-5	GEW 38	1/8/2018	9:45	C	LFG	NA	X					-4
-51	A8057	-21	-5	GEW 109	1/8/2018	9:59	C	LFG	NA	X					-4
-52	5836	-20.5	-5	GEW 39	1/8/2018	10:11	C	LFG	NA	X					-4
-53	3157	-20.6	-5	GEW 10	1/8/2018	11:01	C	LFG	NA	X					-4
-54	A8065	-21.4	-5	GEW 56R	1/8/2018	11:14	C	LFG	NA	X					-4
-55	A8082	-21.1	-5	GEW 110	1/8/2018	11:27	C	LFG	NA	X					-4
-56	A7643	-20.7	-5	GIW 1	1/8/2018	11:42	C	LFG	NA	X					-4
-57	A7670	-20.9	-5	GIW 2	1/8/2018	13:26	C	LFG	NA	X					-4
-58	5319	-20.6	-5	GIW 3	1/8/2018	13:39	C	LFG	NA	X					-4
-59	A8090	-21	-5	GIW 4	1/8/2018	14:00	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Cornerstone Env. DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
DGJ - FedEx		DGJ -	1/18/18 1122

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

COMMENTS

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:

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg) Canister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
J011803-60	A7815	-20.7	-5	GIW 5	1/8/2018	14:19	C	LFG	NA	X					-4
-61	3826	-21	-5	GIW 6	1/8/2018	14:31	C	LFG	NA	X					-4
-62	A7804	-21.1	-5	GIW 7	1/9/2018	8:26	C	LFG	NA	X					-4
-63	5323	-20.9	-5	GIW 8	1/9/2018	8:42	C	LFG	NA	X					-4
-64	5268	-21.2	-5	GIW 9	1/9/2018	8:54	C	LFG	NA	X					-3.5
-65	3827	-20.8	-5	GIW 10	1/9/2018	9:49	C	LFG	NA	X					-4
-66	4648	-21.2	-5	GIW 11	1/9/2018	10:01	C	LFG	NA	X					-3
-67	5828	-21.2	-5	GIW 12	1/9/2018	11:22	C	LFG	NA	X					-4
-68	A8098	-21.2	-5	GIW 13	1/9/2018	11:33	C	LFG	NA	X					-4
-69	5308	-21.3	-5	GEW 163	1/9/2018	13:27	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Cornerstone Env. DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FED EX	DATE/TIME	RECEIVED BY	DATE/TIME
			1/18/18 1122
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

COMMENTS

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:

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg) Canister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
J011803-70	5906	-20.8	-5	GEW 164	1/9/2018	13:39	C	LFG	NA	X					-4
-71	5905	-20.8	-5	GEW 165	1/9/2018	14:03	C	LFG	NA	X					-4
-72	A7666	-21.1	-5	GEW 166	1/9/2018	14:16	C	LFG	NA	X					-4
-73	5922	-21.1	-5	GEW 167	1/9/2018	14:31	C	LFG	NA	X					-4
-74	3162	-20.3	-5	GEW 168	1/10/2018	8:22	C	LFG	NA	X					-5
-75	A7808	-20.6	-5	GEW 169	1/10/2018	8:36	C	LFG	NA	X					-5
-76	A7805	-19.8	-5	GEW 154	1/10/2018	14:33	C	LFG	NA	X					-5
-77	A7802	-20.1	-5	GEW 149	1/11/2018	8:26	C	LFG	NA	X					-5
-78	4655	-20	-5	GEW 148	1/11/2018	9:04	C	LFG	NA	X					-5
-79	5269	-20	-5	GEW 151	1/11/2018	9:19	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Cornerstone Env. DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
~~FED~~ EX			
		[illegible]	1/18/18 1122

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

COMMENTS

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*

CHAIN OF CUSTODY RECORD

AirTECHNOLOGY Laboratories, Inc.

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

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

DELIVERABLES
EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 10 OF 12

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg) Canister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
J011803-80	A7816	-20	-5	GEW 146	1/11/2018	9:40	C	LFG	NA	X					-5.5
-81	A7747	-19.9	-5	GEW 147	1/11/2018	10:36	C	LFG	NA	X					-5.5
-82	5936	-19.5	-5	GEW 136	1/11/2018	10:52	C	LFG	NA	X					-5
-83	5921	-19.9	-5	GEW 135	1/11/2018	11:29	C	LFG	NA	X					-5.5
-84	6158	-20.5	-5	GEW 134	1/11/2018	11:43	C	LFG	NA	X					-5.5
-85	A7793	-19.8	-5	GEW 116	1/11/2018	13:59	C	LFG	NA	X					-5.5
-86	A7767	-20	-5	GEW 133	1/11/2018	14:11	C	LFG	NA	X					-5
-87	6152	-19.9	-5	GEW 117	1/11/2018	14:26	C	LFG	NA	X					-5.5
-88	6130	-20.1	-5	GEW 120	1/11/2018	14:39	C	LFG	NA	X					-5.5
-89	4644	-22	-5	GEW 137	1/12/2018	8:47	C	LFG	NA	X					-2

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Cornerstone Env. DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
FEDEX		[illegible] - 1/18	1122

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

COMMENTS

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.

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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:

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg) Canister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
J011803-90	A7766	-21.7	-5	GEW 138	1/12/2018	9:13	C	LFG	NA	X					-2.9
-91	3834	-21.3	-5	GEW 155	1/12/2018	9:57	C	LFG	NA	X					-3
-92	5829	-21.6	-5	GEW 132	1/12/2018	10:21	C	LFG	NA	X					-3
-93	5928	-21.6	-5	GEW 82R	1/12/2018	10:50	C	LFG	NA	X					-2.5
-94	A7744	-21.5	-5	GEW 118	1/12/2018	11:36	C	LFG	NA	X					-3
-95	A7648	-21.3	-5	GEW 121	1/15/2018	9:25	C	LFG	NA	X					-3
-96	A7751	-21.7	-5	GEW 123	1/15/2018	9:36	C	LFG	NA	X					-2.5
-97	6143	-22	-5	GEW 22R	1/15/2018	9:47	C	LFG	NA	X					-3
-98	3837	-21.8	-5	GEW 122	1/15/2018	10:04	C	LFG	NA	X					-3
-99	A8067	-21.7	-5	GEW 139	1/15/2018	11:04	C	LFG	NA	X					-3

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services		
SAMPLED BY: Tim Ahrens	COMPANY: Cornerstone Env.	DATE/TIME	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY: ~~FED EX~~	DATE/TIME	RECEIVED BY: 1/18/18 1122	DATE/TIME
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

COMMENTS

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:

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

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressure ("Hg) Canister ID	Sample Start	Sample End	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
J011803-100	4657	-21.6	-5	GEW 129	1/15/2018	11:27	C	LFG	NA	X					-2.5
-101	3126	-21.5	-5	GEW 86	1/15/2018	13:45	C	LFG	NA	X					-3
-102	5313	-21.7	-5	GEW 177	1/15/2018	14:14	C	LFG	NA	X					-2
-103	A8088	-22.1	-5	GEW 57R	1/16/2018	8:47	C	LFG	NA	X					-2
-104	A7770	-22	-5	GEW 156	1/16/2018	13:25	C	LFG	NA	X					-2
-105	5834	-22.3	-5	GEW 173	1/16/2018	13:46	C	LFG	NA	X					-2
-106	A7748	-22	-5	GEW 172	1/16/2018	14:02	C	LFG	NA	X					-2

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Cornerstone Env. DATE/TIME

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY FED EX	DATE/TIME	RECEIVED BY	DATE/TIME 1/18/18 1122
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

COMMENTS

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: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-01		J011803-02		J011803-03		J011803-04	
Client Sample I.D.:	GEW 160		GEW 161		GEW 90		GEW 162	
Date/Time Sampled:	1/5/18 10:27		1/5/18 10:39		1/5/18 11:09		1/5/18 11:25	
Date/Time Analyzed:	1/19/18 11:25		1/19/18 11:40		1/19/18 11:54		1/19/18 12:09	
QC Batch No.:	180119GC8A1		180119GC8A1		180119GC8A1		180119GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	31	2.8	31	2.8	31	2.8	6.1	2.8
Carbon Dioxide	53	0.028	28	0.028	42	0.028	68	0.028
Oxygen/Argon	ND	1.4	9.1	1.4	ND	1.4	ND	1.4
Nitrogen	ND	2.8	31	2.8	5.3	2.8	4.2	2.8
Methane	12	0.0028	0.40	0.0028	20	0.0028	21	0.0028
Carbon Monoxide	0.14	0.0028	0.14	0.0028	0.10	0.0028	0.023	0.0028

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-05		J011803-06		J011803-07		J011803-08	
Client Sample I.D.:	GEW 159		GEW 153		GEW 107		GEW 152	
Date/Time Sampled:	1/5/18 11:31		1/5/18 14:02		1/5/18 14:17		1/5/18 14:29	
Date/Time Analyzed:	1/19/18 12:23		1/19/18 12:38		1/19/18 12:53		1/19/18 13:07	
QC Batch No.:	180119GC8A1		180119GC8A1		180119GC8A1		180119GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	1.5 d	0.028	1.7 d	0.028	4.7	2.8	24	2.8
Carbon Dioxide	40	0.028	30	0.028	51	0.028	42	0.028
Oxygen/Argon	ND	1.4	1.4	1.4	ND	1.4	1.6	1.4
Nitrogen	19	2.8	32	2.8	3.7	2.8	6.0	2.8
Methane	38	0.0028	34	0.0028	40	0.0028	26	0.0028
Carbon Monoxide	0.0042	0.0028	0.0099	0.0028	0.024	0.0028	0.12	0.0028

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 180124GC8A1

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-09		J011803-10		J011803-11		J011803-12	
Client Sample I.D.:	GEW 46R		GEW 2		GEW 3		GEW 4	
Date/Time Sampled:	1/8/18 10:20		1/8/18 10:33		1/8/18 10:45		1/8/18 10:57	
Date/Time Analyzed:	1/19/18 13:22		1/19/18 13:36		1/19/18 13:51		1/19/18 14:05	
QC Batch No.:	180119GC8A1		180119GC8A1		180119GC8A1		180119GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	0.081 d	0.030	ND d	0.030	0.098 d	0.030	0.084 d	0.030
Carbon Dioxide	36	0.030	36	0.030	34	0.030	37	0.030
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	17	3.0	11	3.0	21	3.0	13	3.0
Methane	47	0.0030	52	0.0030	43	0.0030	50	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 = Reported from a secondary analysis. QC Batch: 180124GC8A1

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-13		J011803-14		J011803-15		J011803-16	
Client Sample I.D.:	GEW 45R		GEW 47R		GEW 5		GEW 48	
Date/Time Sampled:	1/8/18 11:11		1/8/18 11:27		1/8/18 11:48		1/8/18 13:52	
Date/Time Analyzed:	1/19/18 14:20		1/19/18 14:34		1/19/18 14:49		1/19/18 15:03	
QC Batch No.:	180119GC8A1		180119GC8A1		180119GC8A1		180119GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	0.041 d	0.030	ND d	0.030	0.032 d	0.030
Carbon Dioxide	37	0.030	31	0.030	33	0.030	35	0.030
Oxygen/Argon	2.4	1.5	1.5	1.5	ND	1.5	ND	1.5
Nitrogen	8.2	3.0	30	3.0	23	3.0	13	3.0
Methane	53	0.0030	37	0.0030	43	0.0030	50	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 = Reported from a secondary analysis. QC Batch: 180124GC8A1

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-17		J011803-18		J011803-19		J011803-20	
Client Sample I.D.:	GEW 6		GEW 44		GEW 51		GEW 49	
Date/Time Sampled:	1/8/18 14:07		1/8/18 14:21		1/8/18 14:32		1/8/18 14:43	
Date/Time Analyzed:	1/19/18 15:18		1/19/18 15:33		1/19/18 15:47		1/19/18 16:02	
QC Batch No.:	180119GC8A1		180119GC8A1		180119GC8A1		180119GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	0.90 d	0.030	0.036 d	0.030
Carbon Dioxide	33	0.030	35	0.030	39	0.030	34	0.030
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	16	3.0	16	3.0	4.1	3.0	17	3.0
Methane	50	0.0030	48	0.0030	55	0.0030	47	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 = Reported from a secondary analysis. QC Batch: 180124GC8A1

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

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

Client:	**Republic Services**
Attn:	**Mike Lambrich**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-21		J011803-22		J011803-23		J011803-24	
Client Sample I.D.:	GEW 52		GEW 50		GEW 55		GEW 53	
Date/Time Sampled:	1/8/18 14:55		1/8/18 15:06		1/8/18 15:21		1/8/18 15:32	
Date/Time Analyzed:	1/19/18 17:48		1/19/18 18:02		1/19/18 18:17		1/19/18 18:31	
QC Batch No.:	180119GC8A2		180119GC8A2		180119GC8A2		180119GC8A2	
Analyst Initials:	MJ		MJ		MJ		MJ	
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	0.035 d	0.030	6.5	3.0	4.7	3.0
Carbon Dioxide	30	0.030	32	0.030	40	0.030	38	0.030
Oxygen/Argon	ND	1.5	2.3	1.5	ND	1.5	ND	1.5
Nitrogen	35	3.0	19	3.0	ND	3.0	7.7	3.0
Methane	34	0.0030	46	0.0030	50	0.0030	49	0.0030
Carbon Monoxide	ND	0.0030	ND	0.0030	0.0046	0.0030	0.0057	0.0030

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Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-25		J011803-26		J011803-27		J011803-28	
Client Sample I.D.:	GEW 43R		GEW 42R		GEW 54		GEW 41R	
Date/Time Sampled:	1/8/18 15:43		1/8/18 15:56		1/9/18 9:56		1/9/18 10:10	
Date/Time Analyzed:	1/19/18 18:46		1/19/18 19:00		1/19/18 19:15		1/19/18 19:29	
QC Batch No.:	180119GC8A2		180119GC8A2		180119GC8A2		180119GC8A2	
Analyst Initials:	MJ		MJ		MJ		MJ	
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	0.29 d	0.030	ND d	0.030	1.5 d	0.030	ND d	0.030
Carbon Dioxide	39	0.030	39	0.030	39	0.030	35	0.030
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	3.9	3.0	3.1	3.0	3.5	3.0	12	3.0
Methane	56	0.0030	58	0.0030	55	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
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Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-29		J011803-30		J011803-31		J011803-32	
Client Sample I.D.:	GEW 40		GEW 7		GEW 8		GEW 9	
Date/Time Sampled:	1/9/18 10:22		1/9/18 14:26		1/9/18 14:44		1/9/18 14:58	
Date/Time Analyzed:	1/19/18 19:44		1/19/18 19:58		1/19/18 20:13		1/19/18 20:28	
QC Batch No.:	180119GC8A2		180119GC8A2		180119GC8A2		180119GC8A2	
Analyst Initials:	MJ		MJ		MJ		MJ	
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	1.7 d	0.030	0.60 d	0.030
Carbon Dioxide	38	0.030	38	0.030	42	0.030	39	0.030
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	4.2	3.0	ND	3.0	ND	3.0	6.7	3.0
Methane	57	0.0030	58	0.0030	54	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
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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-33		J011803-34		J011803-35		J011803-36	
Client Sample I.D.:	GEW 59R		GEW 158		GEW 176		GEW 150	
Date/Time Sampled:	1/10/18 8:57		1/10/18 9:14		1/10/18 9:26		1/10/18 9:38	
Date/Time Analyzed:	1/19/18 20:42		1/19/18 20:57		1/19/18 21:11		1/19/18 21:26	
QC Batch No.:	180119GC8A2		180119GC8A2		180119GC8A2		180119GC8A2	
Analyst Initials:	MJ		MJ		MJ		MJ	
Dilution Factor:	3.2		3.2		3.2		3.2	
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	38	3.2	26	3.2	5.9	3.2	12	3.2
Carbon Dioxide	40	0.032	49	0.032	34	0.032	31	0.032
Oxygen/Argon	ND	1.6	ND	1.6	7.2	1.6	8.6	1.6
Nitrogen	5.5	3.2	ND	3.2	30	3.2	32	3.2
Methane	15	0.0032	22	0.0032	23	0.0032	16	0.0032
Carbon Monoxide	0.13	0.0032	0.097	0.0032	0.018	0.0032	0.031	0.0032

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Operations Manager

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Attn:	**Mike Lambrich**
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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-37		J011803-38		J011803-39		J011803-40	
Client Sample I.D.:	GEW 175		GEW 174		GEW 144		GEW 140	
Date/Time Sampled:	1/10/18 10:41		1/10/18 11:04		1/10/18 11:17		1/10/18 11:35	
Date/Time Analyzed:	1/19/18 21:40		1/19/18 21:55		1/19/18 22:09		1/20/18 9:55	
QC Batch No.:	180119GC8A2		180119GC8A2		180119GC8A2		180119GC8A2	
Analyst Initials:	MJ		MJ		MJ		MJ	
Dilution Factor:	3.2		3.2		3.2		3.2	
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	3.2	19	3.2	25	3.2	34	3.2
Carbon Dioxide	44	0.032	44	0.032	24	0.032	50	0.032
Oxygen/Argon	3.7	1.6	ND	1.6	11	1.6	ND	1.6
Nitrogen	19	3.2	16	3.2	37	3.2	ND	3.2
Methane	21	0.0032	20	0.0032	1.5	0.0032	13	0.0032
Carbon Monoxide	0.043	0.0032	0.096	0.0032	0.12	0.0032	0.13	0.0032

Results normalized including non-methane hydrocarbons
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Attn:	**Mike Lambrich**
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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-41		J011803-42		J011803-43		J011803-44	
Client Sample I.D.:	GEW 170		GEW 128		GEW 127		GEW 130	
Date/Time Sampled:	1/11/18 9:02		1/11/18 9:15		1/11/18 9:28		1/11/18 9:41	
Date/Time Analyzed:	1/22/18 9:47		1/22/18 10:01		1/22/18 10:16		1/22/18 10:30	
QC Batch No.:	180122GC8A1		180122GC8A1		180122GC8A1		180122GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
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	14	3.2	14	3.2	13	3.2	29	3.2
Carbon Dioxide	39	0.032	55	0.032	37	0.032	45	0.032
Oxygen/Argon	7.2	1.6	ND	1.6	7.4	1.6	4.3	1.6
Nitrogen	31	3.2	17	3.2	36	3.2	16	3.2
Methane	8.0	0.0032	13	0.0032	5.8	0.0032	4.9	0.0032
Carbon Monoxide	0.10	0.0032	0.14	0.0032	0.12	0.0032	0.21	0.0032

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Reviewed/Approved By: _____ **Date** 1/25/18

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Client:	**Republic Services**
Attn:	**Mike Lambrich**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-45		J011803-46		J011803-47		J011803-48	
Client Sample I.D.:	GEW 126		GEW 131		GEW 125		GEW 58A	
Date/Time Sampled:	1/11/18 10:24		1/11/18 10:36		1/11/18 11:17		1/15/18 10:53	
Date/Time Analyzed:	1/22/18 10:45		1/22/18 10:59		1/22/18 11:14		1/22/18 11:28	
QC Batch No.:	180122GC8A1		180122GC8A1		180122GC8A1		180122GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		2.7		3.4		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	6.3	3.4	19	2.7	22	3.4	34	2.8
Carbon Dioxide	45	0.034	42	0.027	37	0.034	31	0.028
Oxygen/Argon	ND	1.7	ND	1.3	5.1	1.7	5.5	1.4
Nitrogen	26	3.4	16	2.7	31	3.4	28	2.8
Methane	22	0.0034	21	0.0027	4.0	0.0034	1.4	0.0028
Carbon Monoxide	0.043	0.0034	0.13	0.0027	0.14	0.0034	0.13	0.0028

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-49		J011803-50		J011803-51		J011803-52	
Client Sample I.D.:	GEW 58		GEW 38		GEW 109		GEW 39	
Date/Time Sampled:	1/15/18 11:22		1/8/18 9:45		1/8/18 9:59		1/8/18 10:11	
Date/Time Analyzed:	1/22/18 11:43		1/22/18 11:57		1/22/18 12:12		1/22/18 12:26	
QC Batch No.:	180122GC8A1		180122GC8A1		180122GC8A1		180122GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	32	2.8	22	3.0	10	3.0	0.050 d	0.030
Carbon Dioxide	34	0.028	39	0.030	32	0.030	37	0.030
Oxygen/Argon	4.4	1.4	5.2	1.5	4.5	1.5	2.2	1.5
Nitrogen	27	2.8	21	3.0	33	3.0	30	3.0
Methane	2.5	0.0028	12	0.0030	20	0.0030	30	0.0030
Carbon Monoxide	0.12	0.0028	0.10	0.0030	0.031	0.0030	0.0037	0.0030

Results normalized including non-methane hydrocarbons
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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-53		J011803-54		J011803-55		J011803-56	
Client Sample I.D.:	GEW 10		GEW 56R		GEW 110		GIW 1	
Date/Time Sampled:	1/8/18 11:01		1/8/18 11:14		1/8/18 11:27		1/8/18 11:42	
Date/Time Analyzed:	1/22/18 12:41		1/22/18 12:55		1/22/18 13:10		1/22/18 13:25	
QC Batch No.:	180122GC8A1		180122GC8A1		180122GC8A1		180122GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	21	3.0	9.1	3.0	20	3.0
Carbon Dioxide	41	0.030	45	0.030	18	0.030	53	0.030
Oxygen/Argon	ND	1.5	ND	1.5	14	1.5	2.8	1.5
Nitrogen	ND	3.0	6.5	3.0	52	3.0	12	3.0
Methane	56	0.0030	26	0.0030	6.5	0.0030	11	0.0030
Carbon Monoxide	ND	0.0030	0.063	0.0030	0.034	0.0030	0.094	0.0030

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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-57		J011803-58		J011803-59		J011803-60	
Client Sample I.D.:	GIW 2		GIW 3		GIW 4		GIW 5	
Date/Time Sampled:	1/8/18 13:26		1/8/18 13:39		1/8/18 14:00		1/8/18 14:19	
Date/Time Analyzed:	1/22/18 13:39		1/22/18 13:54		1/22/18 14:08		1/22/18 14:23	
QC Batch No.:	180122GC8A1		180122GC8A1		180122GC8A1		180122GC8A1	
Analyst Initials:	AS		AS		AS		AS	
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	16	3.0	41	3.0	46	3.0	25	3.0
Carbon Dioxide	50	0.030	54	0.030	46	0.030	28	0.030
Oxygen/Argon	3.4	1.5	ND	1.5	1.5	1.5	10	1.5
Nitrogen	17	3.0	ND	3.0	5.1	3.0	36	3.0
Methane	13	0.0030	1.5	0.0030	0.53	0.0030	0.92	0.0030
Carbon Monoxide	0.069	0.0030	0.17	0.0030	0.17	0.0030	0.035	0.0030

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Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-61		J011803-62		J011803-63		J011803-64	
Client Sample I.D.:	GIW 6		GIW 7		GIW 8		GIW 9	
Date/Time Sampled:	1/8/18 14:31		1/9/18 8:26		1/9/18 8:42		1/9/18 8:54	
Date/Time Analyzed:	1/22/18 16:19		1/22/18 16:34		1/22/18 16:48		1/22/18 17:03	
QC Batch No.:	180122GC8A2		180122GC8A2		180122GC8A2		180122GC8A2	
Analyst Initials:	AS		AS		AS		AS	
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	29	3.0	6.1	3.0	0.49 d	0.030	2.1 d	0.029
Carbon Dioxide	48	0.030	56	0.030	54	0.030	14	0.029
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	14	1.4
Nitrogen	9.5	3.0	7.1	3.0	15	3.0	65	2.9
Methane	12	0.0030	30	0.0030	29	0.0030	4.9	0.0029
Carbon Monoxide	0.056	0.0030	0.035	0.0030	0.0068	0.0030	0.012	0.0029

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 180124GC8A2

Reviewed/Approved By: _____ Date 1/25/18

Mark Johnson
Operations Manager

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

Client:	**Republic Services**
Attn:	**Mike Lambrich**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-65		J011803-66		J011803-67		J011803-68	
Client Sample I.D.:	GIW 10		GIW 11		GIW 12		GIW 13	
Date/Time Sampled:	1/9/18 9:49		1/9/18 10:01		1/9/18 11:22		1/9/18 11:33	
Date/Time Analyzed:	1/22/18 17:18		1/22/18 17:32		1/22/18 17:47		1/22/18 18:01	
QC Batch No.:	180122GC8A2		180122GC8A2		180122GC8A2		180122GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		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	36	3.0	22	2.8	13	3.0	20	3.0
Carbon Dioxide	41	0.030	47	0.028	33	0.030	58	0.030
Oxygen/Argon	1.8	1.5	ND	1.4	6.0	1.5	ND	1.5
Nitrogen	17	3.0	20	2.8	38	3.0	3.2	3.0
Methane	4.9	0.0030	9.2	0.0028	9.9	0.0030	18	0.0030
Carbon Monoxide	0.065	0.0030	0.091	0.0028	0.073	0.0030	0.056	0.0030

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Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-69		J011803-70		J011803-71		J011803-72	
Client Sample I.D.:	GEW 163		GEW 164		GEW 165		GEW 166	
Date/Time Sampled:	1/9/18 13:27		1/9/18 13:39		1/9/18 14:03		1/9/18 14:16	
Date/Time Analyzed:	1/22/18 18:16		1/22/18 18:30		1/22/18 18:45		1/22/18 18:59	
QC Batch No.:	180122GC8A2		180122GC8A2		180122GC8A2		180122GC8A2	
Analyst Initials:	AS		AS		AS		AS	
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	12	3.0	11	3.0	23	3.0	41	3.0
Carbon Dioxide	23	0.030	50	0.030	63	0.030	51	0.030
Oxygen/Argon	13	1.5	3.5	1.5	ND	1.5	ND	1.5
Nitrogen	48	3.0	15	3.0	ND	3.0	5.0	3.0
Methane	2.9	0.0030	20	0.0030	11	0.0030	1.2	0.0030
Carbon Monoxide	0.050	0.0030	0.064	0.0030	0.12	0.0030	0.26	0.0030

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Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-73		J011803-74		J011803-75		J011803-76	
Client Sample I.D.:	GEW 167		GEW 168		GEW 169		GEW 154	
Date/Time Sampled:	1/9/18 14:31		1/10/18 8:22		1/10/18 8:36		1/10/18 14:33	
Date/Time Analyzed:	1/22/18 19:14		1/22/18 19:28		1/22/18 19:43		1/22/18 19:58	
QC Batch No.:	180122GC8A2		180122GC8A2		180122GC8A2		180122GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.2		3.2		3.2	
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	3.0	29	3.2	29	3.2	4.2	3.2
Carbon Dioxide	30	0.030	54	0.032	52	0.032	6.4	0.032
Oxygen/Argon	9.1	1.5	ND	1.6	3.0	1.6	18	1.6
Nitrogen	33	3.0	4.2	3.2	13	3.2	70	3.2
Methane	0.43	0.0030	11	0.0032	2.4	0.0032	1.5	0.0032
Carbon Monoxide	0.16	0.0030	0.17	0.0032	0.21	0.0032	0.020	0.0032

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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-77		J011803-78		J011803-79		J011803-80	
Client Sample I.D.:	GEW 149		GEW 148		GEW 151		GEW 146	
Date/Time Sampled:	1/11/18 8:26		1/11/18 9:04		1/11/18 9:19		1/11/18 9:40	
Date/Time Analyzed:	1/22/18 20:12		1/22/18 20:27		1/22/18 20:41		1/22/18 20:56	
QC Batch No.:	180122GC8A2		180122GC8A2		180122GC8A2		180122GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.3	
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	6.5	3.2	36	3.2	20	3.2	0.70 d	0.033
Carbon Dioxide	27	0.032	48	0.032	38	0.032	6.4	0.033
Oxygen/Argon	6.9	1.6	2.9	1.6	4.4	1.6	18	1.6
Nitrogen	48	3.2	9.8	3.2	25	3.2	72	3.3
Methane	12	0.0032	3.2	0.0032	12	0.0032	2.9	0.0033
Carbon Monoxide	0.024	0.0032	0.25	0.0032	0.065	0.0032	ND	0.0033

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Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-81		J011803-82		J011803-83		J011803-84	
Client Sample I.D.:	GEW 147		GEW 136		GEW 135		GEW 134	
Date/Time Sampled:	1/11/18 10:36		1/11/18 10:52		1/11/18 11:29		1/11/18 11:43	
Date/Time Analyzed:	1/23/18 11:17		1/23/18 11:32		1/23/18 11:47		1/23/18 12:01	
QC Batch No.:	180123GC8A1		180123GC8A1		180123GC8A1		180123GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.3		3.2		3.3		3.3	
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	21	3.3	14	3.2	23	3.3	16	3.3
Carbon Dioxide	39	0.033	21	0.032	42	0.033	41	0.033
Oxygen/Argon	ND	1.6	9.6	1.6	2.6	1.6	2.0	1.6
Nitrogen	28	3.3	50	3.2	23	3.3	29	3.3
Methane	10	0.0033	5.0	0.0032	9.2	0.0033	12	0.0033
Carbon Monoxide	0.081	0.0033	0.037	0.0032	0.100	0.0033	0.070	0.0033

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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-85		J011803-86		J011803-87		J011803-88	
Client Sample I.D.:	GEW 116		GEW 133		GEW 117		GEW 120	
Date/Time Sampled:	1/11/18 13:59		1/11/18 14:11		1/11/18 14:26		1/11/18 14:39	
Date/Time Analyzed:	1/23/18 12:16		1/23/18 12:30		1/23/18 12:45		1/23/18 12:59	
QC Batch No.:	180123GC8A1		180123GC8A1		180123GC8A1		180123GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.3		3.2		3.3		3.3	
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	29	3.3	49	3.2	0.49 d	0.033	9.4	3.3
Carbon Dioxide	55	0.033	47	0.032	50	0.033	44	0.033
Oxygen/Argon	2.2	1.6	ND	1.6	ND	1.6	2.2	1.6
Nitrogen	7.4	3.3	ND	3.2	4.2	3.3	29	3.3
Methane	5.4	0.0033	0.75	0.0032	44	0.0033	14	0.0033
Carbon Monoxide	0.14	0.0033	0.18	0.0032	0.014	0.0033	0.045	0.0033

Results normalized including non-methane hydrocarbons
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Reviewed/Approved By: _____ **Date** 1/25/18

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Client:	**Republic Services**
Attn:	**Mike Lambrich**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-89		J011803-90		J011803-91		J011803-92	
Client Sample I.D.:	GEW 137		GEW 138		GEW 155		GEW 132	
Date/Time Sampled:	1/12/18 8:47		1/12/18 9:13		1/12/18 9:57		1/12/18 10:21	
Date/Time Analyzed:	1/23/18 13:14		1/23/18 13:28		1/23/18 13:43		1/23/18 13:57	
QC Batch No.:	180123GC8A1		180123GC8A1		180123GC8A1		180123GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.7		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	ND d	0.027	11	2.7	4.3	2.8	16	2.8
Carbon Dioxide	33	0.027	33	0.027	27	0.028	25	0.028
Oxygen/Argon	1.6	1.3	ND	1.4	2.3	1.4	8.8	1.4
Nitrogen	30	2.7	45	2.7	60	2.8	47	2.8
Methane	35	0.0027	9.0	0.0027	6.3	0.0028	2.7	0.0028
Carbon Monoxide	ND	0.0027	0.065	0.0027	0.0097	0.0028	0.087	0.0028

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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-93		J011803-94		J011803-95		J011803-96	
Client Sample I.D.:	GEW 82R		GEW 118		GEW 121		GEW 123	
Date/Time Sampled:	1/12/18 10:50		1/12/18 11:36		1/15/18 9:25		1/15/18 9:36	
Date/Time Analyzed:	1/23/18 15:54		1/23/18 16:09		1/23/18 16:23		1/23/18 16:38	
QC Batch No.:	180123GC8A2		180123GC8A2		180123GC8A2		180123GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.7		2.8		2.8		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	26	2.7	37	2.8	17	2.8	11	2.7
Carbon Dioxide	37	0.027	47	0.028	36	0.028	40	0.027
Oxygen/Argon	ND	1.4	3.2	1.4	2.5	1.4	ND	1.4
Nitrogen	22	2.7	12	2.8	39	2.8	35	2.7
Methane	14	0.0027	1.5	0.0028	5.6	0.0028	13	0.0027
Carbon Monoxide	0.091	0.0027	0.11	0.0028	0.099	0.0028	0.057	0.0027

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Attn:	**Mike Lambrich**
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Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-97		J011803-98		J011803-99		J011803-100	
Client Sample I.D.:	GEW 22R		GEW 122		GEW 139		GEW 129	
Date/Time Sampled:	1/15/18 9:47		1/15/18 10:04		1/15/18 11:04		1/15/18 11:27	
Date/Time Analyzed:	1/23/18 16:52		1/23/18 17:07		1/23/18 17:21		1/23/18 17:36	
QC Batch No.:	180123GC8A2		180123GC8A2		180123GC8A2		180123GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.8		2.8		2.8		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	27	2.8	42	2.8	18	2.7
Carbon Dioxide	58	0.028	42	0.028	52	0.028	59	0.027
Oxygen/Argon	ND	1.4	ND	1.4	ND	1.4	ND	1.4
Nitrogen	2.9	2.8	19	2.8	ND	2.8	6.2	2.7
Methane	2.8	0.0028	12	0.0028	2.3	0.0028	15	0.0027
Carbon Monoxide	0.21	0.0028	0.15	0.0028	0.27	0.0028	0.19	0.0027

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/18/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J011803-101		J011803-102		J011803-103		J011803-104	
Client Sample I.D.:	GEW 86		GEW 177		GEW 57R		GEW 156	
Date/Time Sampled:	1/15/18 13:45		1/15/18 14:14		1/16/18 8:47		1/16/18 13:25	
Date/Time Analyzed:	1/23/18 17:51		1/23/18 18:05		1/23/18 18:20		1/23/18 18:34	
QC Batch No.:	180123GC8A2		180123GC8A2		180123GC8A2		180123GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.8		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	2.8	31	2.7	36	2.7	2.2 d	0.027
Carbon Dioxide	32	0.028	59	0.027	38	0.027	14	0.027
Oxygen/Argon	5.3	1.4	ND	1.3	4.6	1.3	14	1.3
Nitrogen	38	2.8	4.7	2.7	16	2.7	58	2.7
Methane	15	0.0028	3.5	0.0027	5.4	0.0027	11	0.0027
Carbon Monoxide	0.025	0.0028	0.36	0.0027	0.10	0.0027	0.0070	0.0027

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Attn:	**Mike Lambrich**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**01/18/18**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	J011803-105		J011803-106					
Client Sample I.D.:	GEW 173		GEW 172					
Date/Time Sampled:	1/16/18 13:46		1/16/18 14:02					
Date/Time Analyzed:	1/23/18 18:49		1/23/18 19:03					
QC Batch No.:	180123GC8A2		180123GC8A2					
Analyst Initials:	AS		AS					
Dilution Factor:	2.7		2.7					
ANALYTE	**Result % v/v**	**RL % v/v**	**Result % v/v**	**RL % v/v**				
Hydrogen	0.27 d	0.027	36	2.7				
Carbon Dioxide	34	0.027	49	0.027				
Oxygen/Argon	1.6	1.3	3.0	1.3				
Nitrogen	39	2.7	11	2.7				
Methane	24	0.0027	0.45	0.0027				
Carbon Monoxide	0.0029	0.0027	0.28	0.0027				

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QC Batch No: 180119GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/19/18 11:10			1/19/18 10:26		1/19/18 10:41					
Analyst Initials:	AS			AS		AS					
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	5.79	116	5.72	114	1.2	70	130	30
Carbon Dioxide	ND	0.010	10	9.33	93	9.31	93	0.3	70	130	30
Oxygen/Argon	ND	0.50	15	15.9	108	15.9	107	0.3	70	130	30
Nitrogen	ND	1.0	70	71.1	102	71.0	101	0.2	70	130	30
Methane	ND	0.0010	0.10	0.110	110	0.109	109	0.8	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.108	108	0.107	107	0.8	70	130	30

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

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180119GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/19/18 17:31			1/19/18 17:00		1/19/18 17:14					
Analyst Initials:	MJ			MJ		MJ					
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	5.73	115	5.58	112	2.8	70	130	30
Carbon Dioxide	ND	0.010	10	9.34	93	9.19	92	1.7	70	130	30
Oxygen/Argon	ND	0.50	15	16.0	108	15.8	107	1.2	70	130	30
Nitrogen	ND	1.0	70	71.4	102	70.5	101	1.3	70	130	30
Methane	ND	0.0010	0.10	0.111	111	0.110	110	0.5	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.108	108	0.107	107	0.2	70	130	30

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

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180122GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/22/18 8:56			1/22/18 9:10		1/22/18 9:25					
Analyst Initials:	AS			AS		AS					
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	5.73	115	5.82	116	1.5	70	130	30
Carbon Dioxide	ND	0.010	10	9.08	91	9.34	93	2.9	70	130	30
Oxygen/Argon	ND	0.50	15	15.7	106	16.0	108	2.0	70	130	30
Nitrogen	ND	1.0	70	69.6	100	71.0	102	2.0	70	130	30
Methane	ND	0.0010	0.10	0.109	109	0.108	108	0.8	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.107	107	0.107	107	0.8	70	130	30

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

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180122GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/22/18 15:36			1/22/18 15:50		1/22/18 16:05					
Analyst Initials:	AS			AS		AS					
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	5.69	114	5.76	115	1.2	70	130	30
Carbon Dioxide	ND	0.010	10	9.36	93	9.38	94	0.3	70	130	30
Oxygen/Argon	ND	0.50	15	16.1	108	16.1	109	0.2	70	130	30
Nitrogen	ND	1.0	70	71.7	102	71.9	103	0.3	70	130	30
Methane	ND	0.0010	0.10	0.111	111	0.115	115	3.5	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.109	109	0.108	108	0.5	70	130	30

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

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180123GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/23/18 11:03			1/23/18 10:05		1/23/18 10:20					
Analyst Initials:	AS			AS		AS					
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	5.32	106	5.29	106	0.5	70	130	30
Carbon Dioxide	ND	0.010	10	9.29	93	9.20	92	1.0	70	130	30
Oxygen/Argon	ND	0.50	15	15.9	108	16.2	109	1.3	70	130	30
Nitrogen	ND	1.0	70	70.5	101	71.6	102	1.5	70	130	30
Methane	ND	0.0010	0.10	0.112	112	0.111	111	1.1	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.110	110	0.109	109	1.1	70	130	30

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

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180123GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/23/18 15:39			1/23/18 14:56		1/23/18 15:10					
Analyst Initials:	AS			AS		AS					
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	5.01	100	4.97	99	0.7	70	130	30
Carbon Dioxide	ND	0.010	10	9.27	93	9.27	93	0.0	70	130	30
Oxygen/Argon	ND	0.50	15	16.4	110	16.4	110	0.0	70	130	30
Nitrogen	ND	1.0	70	72.7	104	72.6	104	0.1	70	130	30
Methane	ND	0.0010	0.10	0.109	109	0.108	108	0.5	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.108	108	0.107	107	0.7	70	130	30

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

Reviewed/Approved By: _____ Date 1/25/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch # 180124GC8A1
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	1/24/2018 8:55		1/24/2018 8:34		1/24/2018 8:39			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	%Rec	Criteria	%Rec	Criteria	RPD	Criteria
Hydrogen	ND	0.01	94	70-130	95	70-130	0.6	<20

ND = Not Detected (Below RL)
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 1/25/18
Mark Johnson
Operations Manager

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

QC Batch # 180124GC8A2
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	1/24/2018 10:55		1/24/2018 10:45		1/24/2018 10:50			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	%Rec	Criteria	%Rec	Criteria	RPD	Criteria
Hydrogen	ND	0.01	94	70-130	93	70-130	1.0	<20

ND = Not Detected (Below RL)
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 1/25/18
Mark Johnson
Operations Manager

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

Air TECHNOLOGY
Laboratories, Inc.

January 26, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J012506-01/08

Enclosed are results for sample(s) received 1/25/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 1/26/18.

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,

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

TURNAROUND TIME

Standard ☐ 48 hours ☑
Same Day ☐ 72 hours ☐
24 hours ☐ 96 hours ☐
Other:

DELIVERABLES

EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 1 OF 1

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.: PO6312552 ~~7112502~~ AD 1/25/18
Bill to: Republic Services
Attn: Mike Lambrich
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

ANALYSIS REQUEST

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, H2					INITIAL PRESS
J012506-01	A7798	-20.6	-5	GEW 187	1/23/2018	8:39	C	LFG	NA	X					-4
-02	5934	-20.7	-5	GEW 181	1/23/2018	9:43	C	LFG	NA	X					-3
-03	4658	-20.8	-5	GEW 186	1/23/2018	10:58	C	LFG	NA	X					-4
-04	5832	-20	-5	GEW 182	1/23/2018	11:29	C	LFG	NA	X					-4
-05	A7819	-20.5	-5	GEW 185	1/23/2018	13:22	C	LFG	NA	X					-4
-06	A8064	-20.8	-5	GEW 184	1/23/2018	13:35	C	LFG	NA	X					-4
-07	5823	-20.7	-5	GEW 188	1/23/2018	13:54	C	LFG	NA	X					-4
-08	A7795	-20.7	-5	GEW 2S	1/23/2018	14:41	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Cornerstone Env. DATE/TIME 1/23/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
FED EX		[signature]	1/25/18 0900

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

COMMENTS

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: 01/25/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J012506-01		J012506-02		J012506-03		J012506-04	
Client Sample I.D.:	GEW 187		GEW 181		GEW 186		GEW 182	
Date/Time Sampled:	1/23/18 8:39		1/23/18 9:43		1/23/18 10:58		1/23/18 11:29	
Date/Time Analyzed:	1/25/18 17:31		1/25/18 17:46		1/25/18 18:00		1/25/18 18:15	
QC Batch No.:	180125GC8A2		180125GC8A2		180125GC8A2		180125GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		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	22	3.0	16	2.8	19	3.0	32	3.0
Carbon Dioxide	39	0.030	61	0.028	59	0.030	51	0.030
Oxygen/Argon	5.8	1.5	2.7	1.4	1.7	1.5	2.2	1.5
Nitrogen	22	3.0	9.4	2.8	7.2	3.0	7.5	3.0
Methane	10	0.0030	9.9	0.0028	12	0.0030	7.1	0.0030
Carbon Monoxide	0.11	0.0030	0.12	0.0028	0.19	0.0030	0.14	0.0030

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 1/26/18
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 01/25/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J012506-05		J012506-06		J012506-07		J012506-08	
Client Sample I.D.:	GEW 185		GEW 184		GEW 188		GEW 2S	
Date/Time Sampled:	1/23/18 13:22		1/23/18 13:35		1/23/18 13:54		1/23/18 14:41	
Date/Time Analyzed:	1/25/18 18:29		1/25/18 18:44		1/25/18 18:58		1/25/18 19:13	
QC Batch No.:	180125GC8A2		180125GC8A2		180125GC8A2		180125GC8A2	
Analyst Initials:	AS		AS		AS		AS	
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	0.38 d	0.030	18	3.0	ND d	0.030
Carbon Dioxide	59	0.030	40	0.030	22	0.030	36	0.030
Oxygen/Argon	ND	1.5	8.1	1.5	12	1.5	1.6	1.5
Nitrogen	4.1	3.0	30	3.0	46	3.0	5.2	3.0
Methane	17	0.0030	22	0.0030	0.79	0.0030	57	0.0030
Carbon Monoxide	0.094	0.0030	0.0096	0.0030	0.080	0.0030	ND	0.0030

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 180126GC8A2

Reviewed/Approved By: _____ Date 1/26/18
Mark Johnson
Operations Manager

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: 180125GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	1/25/18 16:48			1/25/18 17:02		1/25/18 17:17					
Analyst Initials:	AS			AS		AS					
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	5.30	106	5.27	105	0.5	70	130	30
Carbon Dioxide	ND	0.010	10	8.79	88	8.80	88	0.1	70	130	30
Oxygen/Argon	ND	0.50	15	15.3	103	15.3	103	0.3	70	130	30
Nitrogen	ND	1.0	70	69.3	99	69.5	99	0.3	70	130	30
Methane	ND	0.0010	0.10	0.110	110	0.109	109	0.7	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.108	108	0.107	107	1.1	70	130	30

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

Reviewed/Approved By: _____ Date 1/26/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch # 180126GC8A2
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	1/26/2018 11:37		1/26/2018 11:07		1/26/2018 11:12			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	%Rec	Criteria	%Rec	Criteria	RPD	Criteria
Hydrogen	ND	0.01	102	70-130	102	70-130	0.6	<20

ND = Not Detected (Below RL)
RL = PQL X Dilution Factor

Reviewed/Approved By: Mark Johnson
Operations Manager

Date: 1/26/18

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

ATTACHMENT E

GAS WELLFIELD DATA

ATTACHMENT E-1

WELLFIELD DATA TABLE

January 2018 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_2O		
GEW-002	1/4/2018 9:25	46.7	39.6	0.0	13.7	102.1	102.2	9.6	14.7	-0.6	-0.6	-5.9
GEW-002	1/8/2018 10:29	50.7	39.1	0.0	10.2	108.5	108.5	22.2	22.4	-1.7	-1.7	-14.7
GEW-002	1/8/2018 10:35	51.4	37.3	0.0	11.3	107.5	107.5	17.2	12.7	-1.3	-1.3	-14.8
GEW-002	1/19/2018 10:19	54.6	38.9	0.0	6.5	115.0	115.0	44.1	48.3	-1.8	-1.9	-14.7
GEW-002	1/22/2018 14:33	54.7	36.9	0.0	8.4	113.0	108.7	54.3	53.7	-2.0	-1.9	-13.9
GEW-002	1/22/2018 14:35	53.4	38.0	0.0	8.6	114.8	114.7	23.9	23.6	-1.8	-1.9	-13.0
GEW-003	1/4/2018 9:30	43.5	36.9	0.0	19.6	96.5	96.2	8.4	12.5	-0.4	-0.4	-4.3
GEW-003	1/8/2018 10:42	42.9	36.6	0.0	20.5	110.2	110.0	32.0	33.2	-0.8	-0.8	-11.4
GEW-003	1/8/2018 10:49	43.1	37.3	0.0	19.6	110.2	110.0	27.5	29.1	-0.7	-0.7	-11.4
GEW-003	1/19/2018 10:23	41.1	35.7	0.0	23.2	110.2	110.5	11.1	15.9	-0.4	-0.5	-13.4
GEW-003	1/19/2018 10:30	41.1	35.9	0.0	23.0	110.0	110.2	10.9	11.9	-0.4	-0.4	-13.3
GEW-003	1/22/2018 14:38	41.3	35.1	0.0	23.6	110.0	110.0	17.2	14.5	-0.5	-0.6	-12.6
GEW-003	1/22/2018 14:40	40.6	36.1	0.0	23.3	109.5	109.5	10.8	8.1	-0.6	-0.6	-12.6
GEW-004	1/4/2018 9:34	48.3	37.9	0.0	13.8	105.4	105.7	31.7	31.2	-0.3	-0.4	-3.9
GEW-004	1/8/2018 10:54	49.0	39.8	0.0	11.2	115.3	115.0	5.5	12.3	-0.6	-0.6	-11.6
GEW-004	1/8/2018 11:00	49.2	38.1	0.0	12.7	115.8	115.2	27.2	27.0	-0.5	-0.5	-11.5
GEW-004	1/19/2018 10:35	47.2	38.1	0.0	14.7	116.0	117.0	12.6	13.0	-0.3	-0.3	-13.2
GEW-004	1/22/2018 14:43	47.1	38.0	0.0	14.9	116.3	116.8	9.7	11.0	-0.7	-0.6	-12.9
GEW-005	1/4/2018 10:45	40.4	34.2	0.0	25.4	70.7	70.8	31.1	31.5	0.0	0.0	-15.5
GEW-005	1/8/2018 11:45	42.4	34.8	0.0	22.8	76.1	76.2	0.0	0.0	-0.1	-0.1	-14.1
GEW-005	1/8/2018 11:51	41.9	32.6	0.0	25.5	76.8	76.4	15.6	14.2	-0.1	-0.1	-13.9
GEW-005	1/19/2018 10:46	45.5	35.9	0.0	18.6	80.3	79.8	3.9	7.5	0.1	0.1	-13.6
GEW-005	1/19/2018 10:50	45.7	36.1	0.0	18.2	86.7	87.5	21.4	11.0	-0.1	0.0	-13.3
GEW-005	1/22/2018 14:56	40.9	34.6	0.0	24.5	88.4	88.8	8.7	13.2	-0.3	-0.3	-12.9
GEW-005	1/22/2018 14:58	40.7	34.5	0.0	24.8	88.4	88.6	15.0	12.6	-0.4	-0.4	-12.8
GEW-006	1/2/2018 10:19	45.8	37.1	0.2	16.9	27.9	27.9	0.0	0.0	0.2	0.3	-13.3
GEW-006	1/2/2018 10:20	45.9	36.4	0.0	17.7	29.0	29.1	14.9	14.6	0.1	0.1	-13.4
GEW-006	1/4/2018 11:01	41.9	37.2	0.0	20.9	53.2	53.6	0.0	0.0	0.0	0.1	-16.1
GEW-006	1/4/2018 11:03	42.3	34.7	0.0	23.0	66.4	67.0	19.3	17.5	0.0	0.0	-14.8
GEW-006	1/5/2018 11:01	43.3	32.2	0.0	24.5	79.2	79.4	0.0	0.0	-0.2	-0.2	-15.3
GEW-006	1/5/2018 11:18	43.1	33.7	0.0	23.2	76.4	75.2	11.7	11.2	-0.2	-0.2	-15.1
GEW-006	1/8/2018 14:03	48.8	35.9	0.0	15.3	70.7	70.6	9.9	11.5	-0.1	-0.1	-13.4
GEW-006	1/8/2018 14:10	48.5	36.0	0.0	15.5	71.8	71.8	12.8	11.1	-0.1	-0.1	-14.1
GEW-006	1/19/2018 13:37	54.3	37.5	0.0	8.2	84.2	84.2	6.8	2.8	0.3	0.3	-13.6
GEW-006	1/19/2018 13:42	54.8	37.7	0.0	7.5	85.8	85.9	10.3	14.6	0.2	0.2	-13.4
GEW-006	1/22/2018 9:38	48.1	37.3	0.0	14.6	84.0	83.9	4.8	6.2	-0.1	-0.1	-12.7
GEW-007	1/4/2018 14:01	60.6	37.5	0.1	1.8	83.3	83.4	13.2	13.2	-2.2	-2.2	-14.7
GEW-007	1/9/2018 14:29	58.6	39.9	0.0	1.5	83.2	83.3	31.5	30.9	-1.9	-1.9	-14.7
GEW-007	1/9/2018 14:34	57.2	34.9	0.0	7.9	83.0	82.8	41.6	40.4	-1.9	-1.9	-14.6
GEW-007	1/19/2018 8:49	56.2	40.1	0.0	3.7	84.0	84.1	48.9	50.0	-2.1	-2.1	-14.3
GEW-007	1/19/2018 8:51	57.4	40.6	0.0	2.0	83.5	83.5	36.8	36.4	-2.1	-2.1	-14.1

January 2018 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_2O**		
GEW-007	1/22/2018 9:54	56.9	40.7	0.0	2.4	87.7	87.7	12.5	12.4	-1.8	-1.8	-13.2
GEW-007	1/22/2018 9:56	56.3	41.3	0.0	2.4	87.7	87.7	10.9	11.6	-1.8	-1.8	-13.2
GEW-008	1/4/2018 14:06	54.3	34.8	0.0	10.9	108.2	108.2	12.1	12.1	-0.6	-0.6	-14.4
GEW-008	1/9/2018 14:41	52.8	42.5	0.0	4.7	108.4	108.5	16.8	16.1	-0.7	-0.7	-14.5
GEW-008	1/9/2018 14:48	52.4	44.0	0.0	3.6	109.6	109.6	34.6	35.0	-0.6	-0.6	-14.6
GEW-008	1/19/2018 8:57	52.6	43.1	0.0	4.3	110.2	110.5	15.7	12.0	-0.7	-0.7	-14.2
GEW-008	1/22/2018 10:00	52.2	43.4	0.0	4.4	111.7	111.7	15.0	15.0	-0.5	-0.5	-13.0
GEW-009	1/2/2018 11:06	53.6	40.4	0.0	6.0	115.3	114.5	0.0	0.0	0.2	0.2	-3.4
GEW-009	1/2/2018 11:09	54.4	42.0	0.0	3.6	114.0	114.7	0.0	0.0	0.2	0.2	-2.0
GEW-009	1/4/2018 14:10	53.6	38.9	0.0	7.5	110.2	110.5	0.0	0.0	0.2	0.2	-0.4
GEW-009	1/4/2018 14:12	54.5	42.3	0.0	3.2	109.5	109.2	0.0	0.0	0.2	0.2	-0.3
GEW-009	1/5/2018 11:02	54.6	34.9	0.0	10.5	120.2	120.5	0.0	0.0	-0.1	-0.1	-2.4
GEW-009	1/5/2018 11:26	53.4	40.0	0.0	6.6	120.5	120.5	0.0	0.0	-0.1	-0.1	-1.6
GEW-009	1/5/2018 11:48	52.1	38.9	0.0	9.0	124.5	122.1	11.6	11.3	-0.3	-0.3	-14.6
GEW-009	1/9/2018 14:54	51.1	42.0	0.0	6.9	112.1	112.2	31.4	32.7	-0.2	-0.2	-15.0
GEW-009	1/9/2018 15:02	51.1	39.5	0.0	9.4	111.6	111.7	32.2	34.1	-0.2	-0.2	-14.6
GEW-009	1/19/2018 9:01	47.1	39.6	0.0	13.3	118.4	118.6	23.1	23.1	-0.3	-0.3	-18.3
GEW-009	1/22/2018 10:04	47.6	40.7	0.0	11.7	120.0	120.1	11.6	12.8	-0.2	-0.2	-16.6
GEW-010	1/2/2018 10:43	58.1	38.8	0.1	3.0	20.1	20.0	6.4	6.3	-2.2	-2.2	-19.7
GEW-010	1/8/2018 10:58	55.5	41.9	0.0	2.6	41.5	41.5	1.3	2.2	-2.6	-2.6	-18.7
GEW-010	1/8/2018 11:04	55.3	41.4	0.0	3.3	41.2	41.2	1.8	1.8	-2.6	-2.6	-18.6
GEW-010	1/16/2018 10:15	58.1	38.3	0.2	3.4	12.6	12.6	9.0	8.5	-2.4	-2.3	-20.4
GEW-010	1/22/2018 9:59	58.0	41.7	0.3	0.0	64.4	64.4	3.7	3.7	-2.1	-2.1	-19.3
GEW-010	1/29/2018 10:45	55.1	42.9	0.3	1.7	33.7	33.7	5.1	4.8	-2.5	-2.5	-20.5
GEW-013A	1/19/2018 14:10	10.4	36.5	8.3	44.8	114.0	113.5	119.1	118.8	-3.0	-3.0	-17.0
GEW-013A	1/19/2018 14:12	10.4	36.3	8.3	45.0	116.3	115.5	106.4	108.2	-2.5	-2.4	-17.9
GEW-015	1/18/2018 14:02	19.2	41.6	0.0	39.2	166.1	166.1	18.4	14.0	-5.6	-5.5	-20.2
GEW-015	1/18/2018 14:03	20.8	41.0	0.0	38.2	166.1	166.1	17.7	18.9	-5.6	-5.6	-19.8
GEW-015	1/24/2018 13:59	17.8	47.5	0.0	34.7	165.7	165.7	6.6	9.5	-5.6	-5.6	-18.7
GEW-015	1/24/2018 14:01	17.9	48.4	0.0	33.7	165.2	165.2	8.8	8.6	-5.6	-5.6	-18.7
GEW-016R	1/18/2018 14:08	14.2	40.2	0.3	45.3	175.3	175.3	NFD		-19.7	-19.6	-19.4
GEW-016R	1/18/2018 14:10	14.1	39.9	0.3	45.7	175.3	175.3	NFD		-19.5	-19.2	-19.4
GEW-016R	1/24/2018 14:04	10.6	46.2	0.4	42.8	180.3	180.3	NFD		-18.3	-18.3	-18.4
GEW-016R	1/24/2018 14:06	10.6	47.1	0.4	41.9	180.3	180.3	NFD		-18.2	-18.3	-18.1
GEW-018B	1/18/2018 14:18	3.4	39.6	0.5	56.5	163.8	163.3	14.1	12.3	-0.5	-0.5	-19.4
GEW-018B	1/18/2018 14:19	3.5	41.0	0.5	55.0	162.9	162.9	18.3	15.5	-0.7	-0.5	-19.4
GEW-018B	1/25/2018 10:15	1.6	44.5	2.7	51.2	153.3	153.7	6.5	6.7	-0.4	-0.4	-20.2
GEW-018B	1/25/2018 10:16	1.8	44.5	3.3	50.4	154.0	154.0	4.8	5.8	-0.4	-0.4	-20.2
GEW-022R	1/15/2018 9:44	3.8	59.2	0.3	36.7	33.4	33.4	3.8	3.8	-1.9	-1.9	-7.9
GEW-022R	1/15/2018 9:51	4.2	57.5	0.4	37.9	32.5	32.6	1.8	3.6	-1.9	-1.9	-8.6
GEW-022R	1/25/2018 13:34	0.3	26.9	12.2	60.6	79.4	79.3	3.6	3.7	-18.7	-18.7	-18.8

January 2018 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_2O		
GEW-022R	1/25/2018 13:36	0.2	30.8	11.9	57.1	78.2	78.1	2.3	3.2	-18.7	-18.7	-18.8
GEW-038	1/2/2018 13:40	1.1	53.9	0.0	45.0	33.8	34.1	2.2	2.2	0.0	0.0	-16.0
GEW-038	1/2/2018 13:42	0.8	56.0	0.0	43.2	34.5	34.5	2.2	2.2	-4.1	-4.1	-16.4
GEW-038	1/8/2018 9:42	12.5	42.0	4.7	40.8	41.2	41.0	3.3	11.3	-12.1	-12.1	-16.1
GEW-038	1/8/2018 9:49	13.7	41.5	4.8	40.0	39.9	39.9	6.0	4.1	-12.1	-12.1	-16.0
GEW-038	1/16/2018 13:42	17.8	46.7	1.5	34.0	22.9	23.3	0.6	1.7	-8.7	-8.8	-19.6
GEW-038	1/22/2018 10:11	17.0	44.6	2.9	35.5	65.4	65.4	1.2	2.9	-8.4	-8.3	-14.5
GEW-038	1/22/2018 10:13	17.3	45.1	2.8	34.8	65.1	65.1	3.4	2.9	-5.4	-5.4	-12.0
GEW-038	1/29/2018 13:41	12.8	48.1	2.1	37.0	41.9	41.9	2.5	2.5	-1.8	-1.8	-20.8
GEW-039	1/2/2018 13:58	46.6	49.4	0.0	4.0	35.0	35.3	1.2	1.2	0.2	0.2	0.1
GEW-039	1/2/2018 14:06	46.4	49.6	0.0	4.0	35.7	34.2	10.0	10.0	0.2	0.2	0.0
GEW-039	1/3/2018 15:01	48.7	48.0	0.0	3.3	36.0	35.7	2.8	3.0	0.1	0.1	0.3
GEW-039	1/3/2018 15:02	47.6	48.4	0.0	4.0	36.0	36.0	3.4	3.5	0.1	0.1	0.0
GEW-039	1/4/2018 14:41	49.7	46.0	0.0	4.3	35.4	35.3	7.7	7.6	0.1	0.1	-1.0
GEW-039	1/4/2018 14:44	48.2	46.6	0.0	5.2	34.9	35.0	5.9	5.6	0.1	0.1	0.0
GEW-039	1/5/2018 15:17	48.4	48.7	0.0	2.9	39.8	39.5	5.3	5.3	0.0	0.0	-0.1
GEW-039	1/5/2018 15:18	48.3	49.0	0.0	2.7	39.2	39.1	5.2	4.9	0.0	0.0	-0.1
GEW-039	1/8/2018 10:08	32.5	39.2	1.0	27.3	113.7	113.7	31.7	23.0	-2.0	-2.1	-19.4
GEW-039	1/8/2018 10:16	31.2	39.1	1.1	28.6	113.5	113.5	30.0	17.5	-2.1	-2.2	-17.8
GEW-039	1/16/2018 13:54	30.6	40.5	0.9	28.0	109.0	109.2	27.3	27.7	-1.6	-1.7	-16.7
GEW-039	1/22/2018 10:20	35.3	39.3	1.3	24.1	117.6	117.6	25.4	24.6	-2.1	-2.1	-16.7
GEW-039	1/29/2018 13:54	27.5	36.1	2.0	34.4	113.8	113.9	27.2	27.7	-2.2	-2.2	-21.6
GEW-039	1/29/2018 13:56	27.5	35.7	2.0	34.8	114.0	114.0	23.7	25.2	-2.0	-2.2	-20.6
GEW-040	1/4/2018 14:52	54.3	37.4	0.0	8.3	35.7	35.8	0.0	0.0	-0.4	-0.4	-14.8
GEW-040	1/9/2018 10:18	56.3	40.2	0.0	3.5	39.5	39.5	5.9	8.3	-0.6	-0.6	-14.5
GEW-040	1/9/2018 10:24	56.8	39.0	0.0	4.2	39.5	39.5	8.8	6.6	-0.6	-0.6	-14.5
GEW-040	1/19/2018 9:32	56.9	40.7	0.0	2.4	41.0	41.0	7.0	8.6	-0.6	-0.6	-13.8
GEW-040	1/19/2018 9:34	57.4	40.0	0.0	2.6	41.2	41.2	5.5	5.3	-0.6	-0.6	-13.8
GEW-040	1/22/2018 10:36	54.9	41.0	0.0	4.1	62.0	62.1	4.9	4.9	-0.5	-0.5	-12.9
GEW-041R	1/4/2018 14:48	54.3	38.1	0.3	7.3	92.4	92.6	24.0	15.6	-0.3	-0.2	-15.4
GEW-041R	1/5/2018 14:27	57.1	34.2	0.4	8.3	68.4	68.1	0.0	0.0	-0.2	-0.2	-1.5
GEW-041R	1/5/2018 15:15	57.1	35.8	0.2	6.9	53.3	53.7	9.8	10.2	-0.1	-0.2	-1.0
GEW-041R	1/8/2018 8:54	55.7	37.1	0.0	7.2	97.0	97.2	9.7	10.2	-1.0	-1.0	-13.6
GEW-041R	1/9/2018 10:05	51.5	38.1	0.2	10.2	87.0	87.1	8.0	8.0	-0.6	-0.6	-14.1
GEW-041R	1/9/2018 10:12	52.6	36.4	0.2	10.8	85.8	85.8	29.7	29.8	-0.6	-0.6	-14.2
GEW-041R	1/19/2018 9:38	51.1	36.4	0.0	12.5	93.9	93.9	27.1	27.7	-0.5	-0.5	-13.7
GEW-041R	1/22/2018 10:39	51.1	37.5	0.0	11.4	97.2	97.2	9.8	11.9	-0.3	-0.2	-12.7
GEW-042R	1/2/2018 10:33	59.2	40.1	0.0	0.7	27.0	27.1	0.0	0.0	0.6	0.6	-10.8
GEW-042R	1/2/2018 10:39	59.9	39.0	0.0	1.1	28.8	28.8	0.0	0.0	0.5	0.5	-0.4
GEW-042R	1/2/2018 10:40	60.5	38.4	0.0	1.1	29.0	29.0	0.0	0.0	0.5	0.5	-0.3
GEW-042R	1/4/2018 14:42	58.9	39.0	0.0	2.1	38.9	39.2	7.8	8.9	0.1	0.1	-0.3

January 2018 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_2O**		
GEW-042R	1/4/2018 14:44	59.3	39.2	0.0	1.5	40.2	40.2	0.0	5.9	0.1	0.1	-0.3
GEW-042R	1/5/2018 10:36	60.2	37.8	0.0	2.0	31.1	31.1	13.7	13.7	-0.1	-0.1	-5.4
GEW-042R	1/5/2018 10:45	56.7	40.1	0.0	3.2	29.4	29.9	0.0	0.0	-0.1	-0.1	-5.5
GEW-042R	1/5/2018 15:29	59.5	37.8	0.0	2.7	38.3	39.1	5.6	7.6	-0.2	-0.2	-0.1
GEW-042R	1/8/2018 8:46	56.6	36.0	0.7	6.7	108.5	109.0	19.1	19.2	-7.9	-7.9	-13.9
GEW-042R	1/8/2018 8:50	54.7	36.4	0.8	8.1	103.5	101.6	9.3	9.3	-3.5	-3.6	-13.6
GEW-042R	1/8/2018 15:51	56.1	41.4	0.1	2.4	101.1	101.1	9.6	9.6	-1.9	-1.9	-13.7
GEW-042R	1/8/2018 16:01	56.1	41.4	0.1	2.4	96.8	96.7	12.2	11.5	-0.6	-0.6	-13.7
GEW-042R	1/19/2018 9:42	56.0	41.9	0.0	2.1	90.5	90.1	4.5	4.8	-0.5	-0.5	-13.7
GEW-042R	1/22/2018 10:43	55.0	42.4	0.0	2.6	97.0	97.0	8.6	9.4	-0.2	-0.2	-12.8
GEW-043R	1/4/2018 14:38	51.8	39.7	0.0	8.5	116.8	116.6	0.0	0.0	-0.9	-0.9	-15.1
GEW-043R	1/8/2018 15:39	54.3	42.1	0.0	3.6	116.2	116.3	14.2	17.1	-1.3	-1.4	-14.0
GEW-043R	1/8/2018 15:47	55.0	42.2	0.0	2.8	115.8	116.0	17.1	13.2	-1.2	-1.2	-13.7
GEW-043R	1/19/2018 9:46	55.1	41.6	0.0	3.3	116.8	116.6	12.0	13.4	-0.8	-0.8	-14.3
GEW-043R	1/22/2018 10:47	53.8	42.1	0.0	4.1	117.9	117.6	30.1	30.4	-0.5	-0.4	-13.2
GEW-044	1/4/2018 11:23	48.5	35.3	0.0	16.2	80.6	80.8	0.0	0.0	-0.7	-0.7	-15.2
GEW-044	1/8/2018 14:18	47.8	35.1	0.0	17.1	80.7	81.2	6.9	8.0	-0.7	-0.7	-13.5
GEW-044	1/8/2018 14:25	47.5	37.2	0.0	15.3	80.7	80.5	9.0	9.0	-0.7	-0.7	-13.5
GEW-044	1/19/2018 9:49	47.5	37.4	0.0	15.1	84.0	84.0	24.0	23.5	-0.8	-0.8	-13.7
GEW-044	1/22/2018 10:51	48.3	38.3	0.0	13.4	89.3	89.6	39.6	39.1	-0.4	-0.4	-12.8
GEW-045R	1/4/2018 9:14	51.5	41.6	0.0	6.9	27.6	28.1	29.4	28.2	0.0	0.0	-15.5
GEW-045R	1/4/2018 9:16	57.9	41.3	0.0	0.8	31.6	31.7	0.0	0.0	-0.1	-0.1	-15.5
GEW-045R	1/8/2018 11:07	57.0	42.5	0.0	0.5	57.8	57.8	0.0	0.0	0.5	0.5	-14.2
GEW-045R	1/8/2018 11:16	56.2	38.6	0.0	5.2	65.8	65.8	0.0	0.0	-0.5	-0.5	-13.8
GEW-045R	1/19/2018 9:53	58.0	41.1	0.0	0.9	56.3	56.4	8.5	7.5	-0.4	-0.4	-13.2
GEW-045R	1/19/2018 9:55	57.4	41.1	0.0	1.5	60.7	60.7	6.9	7.4	-1.9	-1.9	-13.7
GEW-045R	1/22/2018 10:56	58.4	39.8	0.0	1.8	76.8	76.8	10.4	10.3	-4.4	-4.4	-12.9
GEW-046R	1/4/2018 9:21	49.8	38.9	0.0	11.3	77.9	78.0	0.0	0.0	-0.4	-0.4	-5.7
GEW-046R	1/8/2018 10:08	45.8	38.9	0.0	15.3	90.8	90.3	5.6	5.6	-0.9	-0.9	-14.5
GEW-046R	1/8/2018 10:23	46.0	37.8	0.0	16.2	90.1	89.6	40.4	40.0	-0.8	-0.8	-14.0
GEW-046R	1/19/2018 10:00	48.7	38.9	0.0	12.4	89.6	89.6	15.2	17.4	-0.4	-0.4	-13.7
GEW-046R	1/22/2018 11:01	47.5	38.7	0.0	13.8	92.4	92.4	27.2	26.6	-0.3	-0.3	-13.1
GEW-047R	1/4/2018 10:40	40.9	37.4	0.0	21.7	91.5	91.6	6.9	10.5	-0.2	-0.2	-15.2
GEW-047R	1/8/2018 11:23	33.9	32.4	1.5	32.2	88.2	88.1	0.0	0.0	-0.3	-0.3	-14.3
GEW-047R	1/8/2018 11:35	37.6	35.6	0.2	26.6	96.0	96.0	34.9	34.0	-0.3	-0.3	-14.5
GEW-047R	1/19/2018 10:42	41.9	36.2	0.0	21.9	108.7	109.0	35.5	34.1	-0.2	-0.1	-14.1
GEW-047R	1/22/2018 14:50	40.3	36.1	0.0	23.6	109.5	109.5	9.0	8.1	-0.4	-0.5	-13.4
GEW-047R	1/22/2018 14:52	40.6	35.9	0.0	23.5	109.2	108.5	23.5	23.4	-0.5	-0.5	-13.4
GEW-048	1/4/2018 10:49	48.5	36.2	0.0	15.3	91.7	91.7	30.3	31.2	-0.5	-0.5	-13.3
GEW-048	1/8/2018 13:48	52.0	37.3	0.0	10.7	98.4	98.4	19.5	21.1	-0.5	-0.5	-8.6
GEW-048	1/8/2018 13:55	49.9	35.6	0.0	14.5	98.4	98.5	17.2	19.9	-0.5	-0.5	-12.6

January 2018 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_2O**		
GEW-048	1/19/2018 13:26	53.4	38.3	0.0	8.3	100.8	100.8	15.2	14.9	-0.1	-0.1	-9.0
GEW-048	1/22/2018 15:02	50.6	38.8	0.0	10.6	99.9	100.4	15.8	14.9	-0.6	-0.6	-10.1
GEW-049	1/4/2018 11:18	46.4	37.2	0.0	16.4	101.5	101.8	0.0	0.0	-0.3	-0.3	-15.2
GEW-049	1/8/2018 14:40	47.8	39.0	0.0	13.2	103.0	103.2	10.8	10.8	-0.5	-0.5	-13.6
GEW-049	1/8/2018 14:46	46.6	36.9	0.0	16.5	103.0	103.0	14.2	14.7	-0.5	-0.5	-13.4
GEW-049	1/19/2018 13:31	52.4	39.0	0.0	8.6	106.3	106.5	10.6	10.1	-0.1	-0.1	-13.2
GEW-049	1/19/2018 13:33	52.2	39.1	0.0	8.7	106.3	106.5	10.9	9.9	-0.1	-0.1	-13.1
GEW-049	1/22/2018 15:19	42.5	35.4	0.0	22.1	104.3	104.5	5.4	6.7	-0.7	-0.4	-12.9
GEW-050	1/5/2018 8:46	47.3	36.0	0.0	16.7	102.8	102.8	34.5	32.4	-0.7	-0.6	-11.1
GEW-050	1/8/2018 15:03	48.0	37.0	0.0	15.0	103.1	103.0	16.9	17.6	-0.7	-0.6	-9.9
GEW-050	1/8/2018 15:08	48.4	34.6	0.0	17.0	103.2	103.3	15.9	19.2	-0.6	-0.6	-8.9
GEW-050	1/19/2018 8:35	51.2	37.1	0.0	11.7	104.4	104.1	21.2	22.1	-0.4	-0.4	-8.0
GEW-050	1/22/2018 9:43	50.4	37.1	0.0	12.5	105.5	105.5	12.7	18.8	-0.4	-0.3	-10.5
GEW-051	1/4/2018 11:27	56.4	38.4	0.0	5.2	120.4	120.5	0.0	0.0	-0.7	-0.7	-14.6
GEW-051	1/8/2018 14:29	54.7	42.0	0.0	3.3	121.8	121.5	17.1	16.8	-0.8	-0.9	-13.1
GEW-051	1/8/2018 14:35	54.4	40.5	0.0	5.1	121.3	121.3	13.7	12.2	-0.9	-0.8	-13.1
GEW-051	1/19/2018 9:07	53.9	41.2	0.0	4.9	122.1	122.1	32.5	33.0	-0.8	-0.8	-13.6
GEW-051	1/22/2018 10:09	53.0	42.1	0.0	4.9	123.4	123.1	36.5	36.5	-0.5	-0.5	-12.7
GEW-052	1/5/2018 8:41	32.6	32.3	0.0	35.1	108.7	108.7	34.6	35.1	-0.6	-0.6	-15.8
GEW-052	1/8/2018 14:51	34.0	33.8	0.0	32.2	109.2	109.2	17.5	17.0	-0.6	-0.6	-13.7
GEW-052	1/8/2018 14:58	33.3	32.8	0.0	33.9	109.9	109.8	37.4	39.2	-0.5	-0.6	-13.9
GEW-052	1/19/2018 8:39	36.2	32.2	0.0	31.6	110.7	110.8	15.2	9.7	-0.3	-0.4	-14.4
GEW-052	1/19/2018 8:41	36.5	32.5	0.0	31.0	110.7	110.7	15.2	14.1	-0.3	-0.3	-14.0
GEW-052	1/22/2018 9:47	36.6	33.5	0.0	29.9	112.0	112.0	28.6	29.2	-0.3	-0.3	-13.1
GEW-052	1/22/2018 9:49	36.8	33.8	0.0	29.4	111.8	112.0	28.6	24.8	-0.3	-0.2	-13.1
GEW-053	1/4/2018 14:22	47.5	41.4	0.0	11.1	134.1	134.1	19.5	17.9	-1.1	-1.1	-14.3
GEW-053	1/4/2018 14:23	48.8	40.9	0.0	10.3	133.6	133.6	17.1	17.7	-1.1	-1.1	-14.4
GEW-053	1/8/2018 15:29	47.8	42.5	0.0	9.7	137.3	137.4	17.0	19.6	-1.5	-1.5	-13.9
GEW-053	1/8/2018 15:35	48.4	41.8	0.0	9.8	136.8	136.5	12.6	12.6	-1.3	-1.3	-14.5
GEW-053	1/19/2018 9:14	49.0	41.2	0.0	9.8	139.9	139.6	28.5	28.7	-0.7	-0.8	-13.7
GEW-053	1/19/2018 9:15	48.7	42.3	0.0	9.0	139.9	139.6	31.1	33.3	-0.8	-0.8	-13.9
GEW-053	1/22/2018 10:16	48.0	42.6	0.0	9.4	139.3	139.3	13.9	13.9	-0.5	-0.5	-12.8
GEW-053	1/22/2018 10:18	47.7	43.0	0.0	9.3	139.3	139.3	16.0	13.4	-0.5	-0.5	-12.9
GEW-054	1/4/2018 15:03	52.8	41.3	0.0	5.9	141.3	141.3	37.6	40.8	-4.4	-4.4	-15.5
GEW-054	1/4/2018 15:05	53.5	41.8	0.0	4.7	141.3	141.3	41.8	46.3	-4.4	-4.3	-15.6
GEW-054	1/9/2018 9:53	57.1	38.2	0.0	4.7	141.3	141.4	40.2	46.3	-4.5	-4.5	-14.9
GEW-054	1/9/2018 10:00	54.6	41.7	0.0	3.7	142.2	142.2	45.5	41.5	-4.5	-4.5	-14.6
GEW-054	1/19/2018 9:19	53.2	41.8	0.0	5.0	141.5	141.5	38.8	41.9	-4.3	-4.3	-14.4
GEW-054	1/19/2018 9:20	53.3	42.1	0.0	4.6	141.5	141.5	36.6	36.1	-4.3	-4.3	-15.0
GEW-054	1/22/2018 10:21	51.9	42.7	0.0	5.4	142.9	142.9	37.3	38.0	-3.5	-3.5	-13.4
GEW-054	1/22/2018 10:23	51.8	42.9	0.0	5.3	142.9	143.0	41.0	39.0	-3.5	-3.5	-12.9

January 2018 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_2O**		
GEW-055	1/2/2018 10:52	53.5	35.4	0.0	11.1	22.0	22.3	0.0	0.0	0.6	0.6	-0.7
GEW-055	1/2/2018 10:53	51.0	41.3	0.0	7.7	23.8	24.0	0.0	0.0	0.6	0.6	-0.7
GEW-055	1/4/2018 14:16	49.5	41.0	0.0	9.5	34.9	35.3	0.0	0.0	0.3	0.3	0.3
GEW-055	1/4/2018 14:18	49.4	42.0	0.0	8.6	37.8	37.9	0.0	0.0	0.3	0.3	0.3
GEW-055	1/5/2018 10:35	50.8	41.8	0.1	7.3	23.1	23.2	6.7	7.4	0.1	0.1	-0.2
GEW-055	1/5/2018 10:36	50.2	42.7	0.0	7.1	23.3	23.3	7.9	0.0	0.1	0.1	-0.7
GEW-055	1/5/2018 15:39	54.3	36.7	0.0	9.0	30.6	31.0	9.6	7.7	0.1	0.1	0.2
GEW-055	1/5/2018 16:47	49.4	42.2	0.0	8.4	22.8	22.8	0.0	0.0	0.0	0.0	0.4
GEW-055	1/8/2018 9:12	50.1	40.6	0.5	8.8	138.3	138.3	17.7	16.9	-2.4	-2.4	-14.1
GEW-055	1/8/2018 9:15	50.0	41.3	0.4	8.3	131.6	122.1	5.7	5.7	-1.2	-1.2	-13.6
GEW-055	1/8/2018 15:18	52.0	40.4	0.0	7.6	87.6	87.7	7.5	8.9	-0.3	-0.3	-13.5
GEW-055	1/8/2018 15:24	49.7	40.3	0.0	10.0	87.9	87.7	8.0	8.9	-0.3	-0.3	-13.5
GEW-055	1/11/2018 11:00	48.5	45.6	0.0	5.9	92.4	92.2	4.0	4.0	0.5	0.5	-13.2
GEW-055	1/11/2018 11:04	49.5	44.6	0.0	5.9	140.9	140.8	21.2	20.9	-1.0	-0.9	-13.9
GEW-055	1/11/2018 14:31	49.1	43.8	0.4	6.7	138.7	138.3	13.7	15.7	-1.0	-1.0	-13.7
GEW-055	1/12/2018 9:33	51.3	39.9	0.3	8.5	138.3	137.1	29.2	30.5	-1.3	-1.3	-15.3
GEW-055	1/12/2018 9:35	51.5	40.5	0.2	7.8	137.7	137.4	11.7	11.8	-1.4	-1.4	-15.0
GEW-055	1/19/2018 9:28	51.3	41.7	0.0	7.0	136.8	136.8	32.2	32.4	-1.0	-1.0	-14.7
GEW-055	1/19/2018 14:35	51.6	41.2	0.0	7.2	137.1	137.1	9.8	9.9	-0.5	-0.5	-12.9
GEW-055	1/22/2018 10:30	48.4	41.7	0.0	9.9	136.5	136.5	16.6	16.0	-0.6	-0.6	-13.2
GEW-055	1/22/2018 10:32	48.4	42.1	0.0	9.5	136.5	136.5	29.1	29.0	-0.7	-0.6	-13.2
GEW-056R	1/2/2018 10:58	26.1	50.4	0.0	23.5	49.3	49.4	1.3	3.3	-0.4	-0.4	-19.7
GEW-056R	1/8/2018 11:11	26.9	47.9	0.0	25.2	65.2	65.3	1.2	2.7	-0.5	-0.5	-18.7
GEW-056R	1/8/2018 11:17	27.6	47.3	0.0	25.1	64.5	64.7	5.1	3.0	-0.4	-0.4	-18.5
GEW-056R	1/16/2018 10:39	25.2	48.7	0.0	26.1	37.1	37.0	4.4	2.8	-0.6	-0.6	-20.1
GEW-056R	1/22/2018 10:04	31.3	44.3	0.0	24.4	90.3	90.3	2.6	3.1	-0.5	-0.5	-19.3
GEW-056R	1/29/2018 11:02	26.9	44.2	0.0	28.9	51.5	51.5	2.5	2.1	-0.6	-0.6	-21.6
GEW-057B	1/18/2018 13:13	4.9	31.8	6.9	56.4	53.4	53.4	4.9	3.9	-18.6	-18.7	-19.0
GEW-057B	1/18/2018 13:14	4.5	33.7	6.9	54.9	53.7	53.7	2.1	3.1	-18.7	-18.6	-18.9
GEW-057B	1/26/2018 10:18	1.0	32.8	6.5	59.7	60.7	60.9	3.9	2.8	-12.7	-12.8	-20.7
GEW-057B	1/26/2018 10:23	2.8	39.1	4.4	53.7	61.4	61.4	10.3	16.5	-15.3	-15.3	-20.5
GEW-057R	1/16/2018 8:44	5.8	40.1	4.3	49.8	3.7	3.6	6.4	6.6	-20.7	-20.7	-20.8
GEW-057R	1/16/2018 8:50	7.7	40.1	4.2	48.0	3.0	3.0	5.7	6.2	-20.7	-20.7	-20.9
GEW-057R	1/26/2018 10:27	5.8	38.0	6.1	50.1	59.9	59.9	1.9	3.5	-20.3	-20.3	-20.5
GEW-057R	1/26/2018 10:29	5.4	37.5	6.3	50.8	59.0	58.8	2.1	2.4	-19.2	-19.2	-20.7
GEW-058	1/15/2018 11:19	1.9	46.7	3.7	47.7	26.9	26.9	20.1	8.6	-3.0	-2.9	-20.5
GEW-058	1/15/2018 11:28	2.7	42.7	2.7	51.9	28.1	28.1	10.8	27.3	-3.3	-2.9	-20.5
GEW-058	1/24/2018 15:21	1.9	33.4	5.8	58.9	52.6	52.5	15.3	14.9	-3.7	-3.6	-19.1
GEW-058	1/24/2018 15:23	2.0	30.6	6.1	61.3	49.9	49.9	6.2	7.1	-1.6	-1.6	-19.2
GEW-058A	1/15/2018 10:50	1.3	40.2	4.9	53.6	26.0	26.0	5.1	3.9	-0.5	-0.5	-20.5
GEW-058A	1/15/2018 10:59	1.3	37.7	5.1	55.9	23.7	23.7	3.7	3.9	-0.5	-0.5	-20.6

January 2018 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_2O**		
GEW-058A	1/24/2018 15:16	2.1	37.6	4.2	56.1	51.1	51.2	3.3	1.2	-0.5	-0.5	-19.3
GEW-058A	1/24/2018 15:18	1.9	39.2	4.4	54.5	51.3	51.3	3.3	2.5	-0.3	-0.3	-19.2
GEW-059R	1/10/2018 8:53	16.8	44.2	0.1	38.9	152.5	152.5	8.6	7.4	-18.0	-18.1	-18.2
GEW-059R	1/10/2018 9:01	16.0	43.9	0.0	40.1	154.4	154.4	7.1	4.8	-18.0	-17.7	-18.2
GEW-059R	1/24/2018 14:14	15.3	40.5	0.0	44.2	162.1	162.4	8.4	8.8	-18.7	-18.7	-19.0
GEW-059R	1/24/2018 14:15	14.5	42.3	0.0	43.2	162.0	162.0	8.8	7.7	-18.7	-18.8	-19.2
GEW-067A	1/19/2018 14:04	2.9	34.6	7.1	55.4	108.2	108.5	45.2	45.5	-0.1	-0.1	-18.8
GEW-067A	1/19/2018 14:07	2.8	34.4	7.3	55.5	111.5	111.0	43.4	43.3	-0.1	-0.1	-20.7
GEW-068A	1/19/2018 14:43	17.2	47.1	1.1	34.6	173.6	173.3	26.8	26.8	-17.8	-17.8	-21.0
GEW-068A	1/19/2018 14:44	17.1	48.6	1.2	33.1	173.1	173.1	26.4	23.2	-17.8	-17.7	-20.9
GEW-068A	1/26/2018 13:51	18.2	48.4	1.4	32.0	173.6	173.7	28.5	28.0	-17.6	-17.6	-21.9
GEW-068A	1/26/2018 13:53	17.9	48.8	1.4	31.9	174.2	174.2	26.5	30.3	-17.4	-17.6	-21.4
GEW-077	1/26/2018 9:52	1.0	56.8	0.0	42.2	91.7	92.2	13.8	12.8	-20.1	-20.1	-20.2
GEW-078R	1/18/2018 13:34	13.8	42.1	0.0	44.1	160.1	159.9	16.1	16.0	-18.7	-18.7	-18.7
GEW-078R	1/18/2018 13:35	13.0	44.3	0.0	42.7	160.2	160.2	16.0	16.0	-19.0	-18.8	-18.8
GEW-078R	1/25/2018 9:13	10.7	41.8	0.0	47.5	154.0	154.0	8.7	6.6	-18.2	-18.2	-18.4
GEW-078R	1/25/2018 9:14	10.6	42.8	0.0	46.6	154.1	154.4	5.1	8.0	-18.2	-18.2	-18.5
GEW-081	1/18/2018 13:42	1.6	52.5	0.0	45.9	54.8	54.9	6.9	6.8	0.2	0.2	0.1
GEW-081	1/18/2018 13:43	1.7	56.0	0.0	42.3	54.8	54.8	7.1	9.0	0.2	0.2	0.0
GEW-081	1/25/2018 11:31	1.8	43.0	4.9	50.3	68.6	68.6	5.6	1.6	-19.1	-19.1	-19.4
GEW-082R	1/12/2018 10:46	16.5	42.3	0.0	41.2	177.5	177.5	18.2	19.3	-17.7	-17.7	-18.0
GEW-082R	1/12/2018 10:53	17.4	41.8	0.0	40.8	177.5	177.5	3.6	2.5	-16.7	-16.8	-17.4
GEW-082R	1/25/2018 9:50	14.1	40.3	0.0	45.6	178.6	178.2	2.1	6.6	-18.7	-18.7	-19.8
GEW-082R	1/25/2018 9:51	14.3	41.4	0.0	44.3	178.6	178.6	5.8	7.1	-18.7	-18.7	-20.1
GEW-086	1/15/2018 13:42	16.2	36.8	3.7	43.3	41.2	41.2	9.6	8.5	-0.6	-0.6	-19.4
GEW-086	1/15/2018 13:48	15.9	39.2	3.5	41.4	40.8	40.8	10.7	9.7	-0.5	-0.5	-19.3
GEW-086	1/24/2018 14:19	15.0	34.5	5.7	44.8	67.7	67.7	10.5	10.8	-0.4	-0.4	-19.4
GEW-086	1/24/2018 14:20	15.7	33.6	5.7	45.0	67.7	67.7	9.8	9.2	-0.4	-0.4	-19.0
GEW-087	1/19/2018 14:17	9.9	26.1	10.6	53.4	136.2	135.9	NFD		-20.8	-20.8	-20.8
GEW-087	1/19/2018 14:18	11.3	23.0	10.3	55.4	130.6	130.3	NFD		-20.7	-20.6	-20.7
GEW-088	1/19/2018 14:23	2.1	44.1	0.0	53.8	193.6	193.6	20.5	21.6	0.2	0.2	-19.8
GEW-088	1/19/2018 14:25	1.8	47.9	0.0	50.3	194.3	194.2	28.8	27.9	-0.2	-0.1	-18.3
GEW-090	1/5/2018 11:05	21.6	43.9	0.1	34.4	145.3	144.9	11.4	10.1	-20.4	-20.4	-20.8
GEW-090	1/5/2018 11:13	20.4	44.9	0.0	34.7	148.7	148.0	7.1	7.1	-20.4	-20.3	-20.8
GEW-090	1/24/2018 14:25	24.9	44.4	0.0	30.7	157.7	157.7	3.5	5.0	-18.7	-18.7	-18.8
GEW-090	1/24/2018 14:26	24.6	46.1	0.0	29.3	157.1	157.3	5.3	4.2	-18.7	-18.8	-18.8
GEW-091	1/18/2018 14:28	3.9	15.0	16.6	64.5	94.1	94.1	59.4	58.1	-15.2	-14.8	-15.1
GEW-091	1/18/2018 14:29	3.8	11.7	17.2	67.3	94.1	94.3	51.4	51.4	-14.8	-14.8	-15.1
GEW-091	1/24/2018 14:32	1.8	11.6	17.9	68.7	96.2	96.2	40.8	42.2	-16.3	-16.3	-16.4
GEW-091	1/24/2018 14:33	1.8	9.2	18.2	70.8	96.0	96.0	43.8	42.0	-15.8	-15.8	-15.9
GEW-100	1/19/2018 14:55	1.3	46.6	6.0	46.1	62.8	62.8	2.0	2.0	-20.3	-20.3	-20.5

January 2018 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_2O**		
GEW-100	1/19/2018 14:57	1.3	47.2	5.9	45.6	62.8	62.8	2.3	2.3	-17.9	-17.9	-20.3
GEW-100	1/26/2018 10:11	2.0	40.0	8.4	49.6	61.0	61.0	5.2	4.9	-20.1	-20.1	-20.2
GEW-100	1/26/2018 10:12	1.8	42.8	8.5	46.9	60.9	60.7	3.5	5.4	-20.1	-20.1	-20.2
GEW-101	1/19/2018 15:00	13.9	48.1	5.6	32.4	68.5	68.6	13.7	14.5	-0.3	-0.3	-21.2
GEW-101	1/19/2018 15:02	14.3	49.3	5.4	31.0	68.1	68.1	10.0	11.0	-0.2	-0.2	-20.7
GEW-101	1/26/2018 14:01	17.8	54.8	2.9	24.5	65.1	65.1	5.4	4.0	-0.1	-0.1	-20.9
GEW-102	1/26/2018 10:43	8.6	51.7	0.0	39.7	60.2	60.2	3.1	3.3	-20.4	-20.2	-20.4
GEW-104	1/26/2018 9:59	1.1	42.1	3.4	53.4	61.2	61.3	1.3	1.7	-20.2	-20.2	-20.0
GEW-106	1/18/2018 11:07	6.0	42.8	4.1	47.1	42.5	42.5	2.8	2.5	-0.9	-0.9	-8.1
GEW-106	1/24/2018 15:28	3.4	34.3	8.6	53.7	53.7	53.8	2.5	2.5	-0.9	-0.9	-7.5
GEW-106	1/24/2018 15:30	3.3	34.6	8.7	53.4	54.2	54.2	3.0	3.0	-0.7	-0.7	-7.3
GEW-107	1/5/2018 14:13	40.7	53.4	0.0	5.9	44.1	44.3	35.2	39.3	-20.5	-20.2	-19.2
GEW-107	1/5/2018 14:20	40.4	54.4	0.0	5.2	42.8	42.8	19.7	13.1	-20.3	-20.3	-19.4
GEW-107	1/24/2018 14:18	36.5	54.9	0.0	8.6	113.2	112.7	10.9	14.1	-18.7	-18.8	-19.2
GEW-108	1/18/2018 11:00	37.5	42.9	0.0	19.6	119.6	119.9	10.8	8.1	-19.6	-19.6	-19.8
GEW-108	1/24/2018 14:06	38.0	43.6	0.0	18.4	122.6	122.6	3.7	3.1	-18.7	-18.7	-18.8
GEW-109	1/2/2018 13:49	20.0	34.4	5.9	39.7	37.2	37.2	3.1	3.3	-4.0	-4.1	-20.6
GEW-109	1/2/2018 13:53	22.7	37.5	3.1	36.7	44.0	44.1	5.6	5.2	-12.8	-12.8	-21.2
GEW-109	1/8/2018 9:55	24.2	37.0	2.2	36.6	64.0	63.5	3.1	3.3	-14.0	-13.8	-18.7
GEW-109	1/8/2018 10:03	24.2	37.2	3.1	35.5	63.3	63.3	4.7	3.3	-14.1	-14.1	-18.5
GEW-109	1/16/2018 13:51	19.3	39.1	0.0	41.6	55.2	55.3	4.8	4.8	-11.3	-11.3	-15.9
GEW-109	1/22/2018 10:17	18.6	42.1	0.0	39.3	105.2	105.2	7.4	4.6	-12.3	-12.3	-19.3
GEW-109	1/29/2018 13:51	15.4	34.8	0.0	49.8	62.8	63.1	1.3	1.5	-15.5	-15.6	-20.8
GEW-110	1/2/2018 10:46	13.8	45.6	0.0	40.6	16.5	16.5	4.2	4.2	0.1	0.2	-19.8
GEW-110	1/2/2018 10:48	12.4	48.3	0.0	39.3	22.2	22.8	1.4	1.7	-0.3	-0.3	-20.6
GEW-110	1/8/2018 11:24	8.5	22.5	15.9	53.1	44.4	44.7	8.4	10.1	-0.4	-0.3	-18.8
GEW-110	1/8/2018 11:31	7.9	21.9	15.9	54.3	46.7	46.7	12.5	11.0	-0.3	-0.3	-18.8
GEW-110	1/16/2018 10:19	14.2	33.3	6.4	46.1	26.9	26.9	19.8	17.6	-0.6	-0.5	-20.2
GEW-110	1/16/2018 10:24	12.8	33.7	7.0	46.5	27.3	28.8	17.4	18.4	-0.3	-0.3	-20.1
GEW-110	1/22/2018 9:52	11.5	35.4	8.1	45.0	75.0	75.0	3.8	2.4	-0.2	-0.2	-19.4
GEW-110	1/22/2018 9:55	11.9	35.0	8.0	45.1	75.0	75.0	4.3	6.9	-0.2	-0.2	-19.6
GEW-110	1/29/2018 10:49	9.4	29.8	10.9	49.9	42.1	41.5	12.5	9.8	-0.2	-0.2	-20.6
GEW-110	1/29/2018 10:52	9.1	29.4	11.1	50.4	35.4	35.3	14.8	16.6	-0.1	-0.1	-20.4
GEW-113	1/19/2018 15:10	9.5	46.7	2.4	41.4	152.6	152.6	17.4	17.0	-7.6	-7.5	-22.0
GEW-113	1/19/2018 15:11	9.7	47.1	2.4	40.8	152.5	152.5	17.9	16.8	-7.5	-7.5	-21.7
GEW-113	1/24/2018 13:52	11.2	41.7	3.5	43.6	152.9	152.9	17.1	16.0	-6.6	-6.6	-18.7
GEW-113	1/24/2018 13:53	11.0	42.6	3.5	42.9	151.0	151.0	12.4	9.7	-5.1	-5.1	-18.7
GEW-116	1/11/2018 13:55	6.0	55.0	1.4	37.6	174.7	174.7	1.0	13.1	-17.0	-16.9	-19.9
GEW-116	1/11/2018 14:03	7.1	49.4	1.4	42.1	174.7	174.7	7.9	9.7	-16.6	-16.9	-19.7
GEW-116	1/25/2018 10:07	5.3	49.6	3.6	41.5	94.8	95.3	3.1	3.3	-18.6	-18.7	-18.9
GEW-117	1/11/2018 14:22	51.7	48.1	0.2	0.0	99.6	99.7	NFD		-18.0	-18.0	-19.9

January 2018 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_2O**		
GEW-117	1/11/2018 14:29	50.0	48.2	0.3	1.5	99.6	99.4	NFD		-17.6	-17.6	-19.5
GEW-117	1/25/2018 10:57	49.1	46.6	0.7	3.6	92.2	92.2	NFD		-18.2	-18.2	-19.8
GEW-118	1/12/2018 11:32	3.8	57.2	0.2	38.8	187.6	187.0	22.5	23.0	-1.4	-1.6	-20.3
GEW-118	1/12/2018 11:40	4.5	57.6	0.0	37.9	194.3	194.3	13.4	13.6	-0.6	-0.5	-20.0
GEW-118	1/25/2018 11:09	3.0	53.4	0.0	43.6	192.9	192.6	14.7	13.9	-0.1	-0.2	-19.7
GEW-118	1/25/2018 11:12	2.7	55.0	0.0	42.3	192.9	194.3	16.2	4.4	0.0	-0.1	-19.4
GEW-120	1/11/2018 14:35	18.0	45.6	1.2	35.2	164.3	164.3	31.2	30.6	-18.5	-18.9	-19.8
GEW-120	1/11/2018 14:42	16.5	46.1	1.2	36.2	164.3	164.3	28.1	34.8	-19.0	-19.0	-20.0
GEW-120	1/25/2018 11:01	15.4	41.3	2.3	41.0	162.9	162.9	35.1	34.6	-18.5	-18.6	-19.6
GEW-120	1/25/2018 11:04	14.9	42.2	2.3	40.6	162.9	162.9	33.8	33.9	-18.4	-18.6	-19.9
GEW-121	1/15/2018 9:21	6.4	37.0	1.6	55.0	164.7	164.4	20.8	16.8	-18.3	-17.9	-18.9
GEW-121	1/15/2018 9:27	6.5	39.1	1.5	52.9	164.3	164.3	23.0	27.1	-18.3	-18.8	-18.8
GEW-121	1/25/2018 11:37	9.7	42.1	1.4	46.8	175.9	175.9	4.1	12.3	-16.2	-16.6	-18.2
GEW-121	1/25/2018 11:38	9.9	42.4	1.3	46.4	176.4	176.4	26.0	21.7	-15.7	-15.2	-17.7
GEW-122	1/15/2018 10:01	14.9	45.4	0.0	39.7	100.2	100.4	22.0	21.8	-4.3	-4.3	-3.9
GEW-122	1/15/2018 10:07	15.0	45.0	0.0	40.0	104.8	105.2	31.7	30.7	-5.0	-4.9	-4.3
GEW-122	1/25/2018 13:51	12.3	37.9	0.7	49.1	160.2	160.2	21.2	22.5	-17.8	-17.7	-17.2
GEW-122	1/25/2018 13:52	11.9	39.3	0.6	48.2	160.2	160.2	22.0	21.3	-17.8	-17.8	-17.2
GEW-123	1/15/2018 9:32	14.9	43.7	0.0	41.4	128.9	129.6	17.8	17.6	-15.3	-15.2	-19.9
GEW-123	1/15/2018 9:39	15.2	41.8	0.0	43.0	129.7	129.7	17.4	17.7	-14.9	-14.9	-19.5
GEW-123	1/25/2018 13:29	12.2	45.6	0.1	42.1	163.3	163.3	16.7	17.4	-11.9	-11.9	-19.1
GEW-123	1/25/2018 13:30	12.0	46.4	0.0	41.6	163.3	162.9	15.3	17.0	-11.9	-11.9	-18.9
GEW-124	1/25/2018 13:45	19.8	28.0	10.4	41.8	71.0	71.0	2.9	2.3	-11.0	-10.9	-11.5
GEW-124	1/25/2018 13:46	18.4	27.1	11.8	42.7	71.0	71.0	1.2	1.2	-11.0	-11.0	-11.5
GEW-125	1/11/2018 11:13	4.8	41.3	4.2	49.7	169.5	169.5	21.2	22.3	-14.5	-14.5	-18.5
GEW-125	1/11/2018 11:20	4.0	43.9	4.3	47.8	170.0	170.0	16.4	21.1	-14.5	-14.8	-18.4
GEW-125	1/25/2018 14:01	4.9	40.3	4.3	50.5	174.1	173.6	22.4	20.5	-13.9	-13.9	-17.9
GEW-125	1/25/2018 14:03	4.9	40.5	4.3	50.3	173.9	173.7	17.6	18.1	-14.0	-14.3	-17.9
GEW-126	1/11/2018 10:20	21.3	50.1	0.0	28.6	74.6	74.4	5.3	5.9	-6.9	-7.2	-6.7
GEW-126	1/11/2018 10:26	21.9	48.8	0.0	29.3	73.9	73.9	6.2	7.2	-7.4	-7.1	-6.5
GEW-126	1/25/2018 14:08	17.2	44.2	0.0	38.6	84.8	84.9	12.9	10.3	-6.0	-6.0	-5.7
GEW-127	1/11/2018 9:25	5.6	45.7	6.6	42.1	165.7	165.7	35.4	30.4	-18.6	-18.9	-19.3
GEW-127	1/11/2018 9:31	5.8	41.5	6.7	46.0	166.1	166.1	34.2	35.8	-18.9	-18.3	-19.3
GEW-127	1/26/2018 8:47	7.4	38.9	7.4	46.3	154.0	154.0	35.1	33.3	-21.0	-21.1	-22.1
GEW-127	1/26/2018 8:49	6.9	40.6	7.2	45.3	154.0	154.0	36.5	36.6	-20.1	-20.1	-21.1
GEW-128	1/11/2018 9:11	12.8	61.7	0.3	25.2	163.3	163.3	21.8	21.2	-18.9	-18.3	-18.9
GEW-128	1/11/2018 9:19	12.8	60.2	0.3	26.7	164.7	164.7	25.1	24.1	-18.6	-18.6	-19.0
GEW-128	1/26/2018 9:03	15.8	61.9	0.1	22.2	169.1	169.0	29.1	30.1	-19.1	-19.1	-19.9
GEW-128	1/26/2018 9:05	15.7	62.6	0.1	21.6	169.1	169.0	28.5	28.6	-19.1	-19.1	-20.1
GEW-129	1/15/2018 11:24	22.2	60.0	0.0	17.8	125.6	125.6	11.7	11.1	-19.4	-19.3	-19.7
GEW-129	1/15/2018 11:30	21.3	57.1	0.0	21.6	122.6	123.1	9.9	13.1	-19.5	-19.4	-19.7

January 2018 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_2O**		
GEW-129	1/26/2018 9:09	15.1	59.9	0.0	25.0	130.1	130.3	7.0	7.8	-20.4	-20.3	-20.4
GEW-130	1/11/2018 9:37	5.4	57.7	1.8	35.1	179.7	179.7	31.6	35.1	-9.5	-9.5	-19.6
GEW-130	1/11/2018 9:44	5.3	54.3	1.8	38.6	180.0	180.2	24.2	30.3	-9.1	-9.4	-20.1
GEW-130	1/25/2018 14:19	6.3	45.2	3.5	45.0	179.6	179.7	22.8	28.1	-8.5	-8.5	-19.2
GEW-130	1/25/2018 14:21	6.1	46.5	3.5	43.9	179.2	179.2	30.0	22.4	-8.5	-8.5	-18.6
GEW-131	1/11/2018 10:32	21.1	49.1	0.0	29.8	163.8	163.8	16.8	16.8	-10.4	-10.4	-19.0
GEW-131	1/11/2018 10:39	21.5	47.0	0.0	31.5	164.3	164.3	15.9	15.6	-10.4	-10.4	-19.2
GEW-131	1/25/2018 14:13	21.2	41.2	0.0	37.6	165.2	165.2	12.8	15.0	-11.3	-11.3	-18.8
GEW-131	1/25/2018 14:15	21.6	41.7	0.0	36.7	165.2	165.2	14.1	13.8	-11.4	-11.3	-18.3
GEW-132	1/12/2018 10:17	3.0	29.5	8.9	58.6	136.5	135.9	4.8	3.0	-0.6	-0.6	-13.1
GEW-132	1/12/2018 10:25	3.1	30.1	8.9	57.9	135.9	136.2	4.4	2.6	-0.6	-0.6	-11.9
GEW-132	1/25/2018 11:23	3.9	32.9	7.6	55.6	151.7	151.7	3.6	3.4	-0.5	-0.5	-19.4
GEW-132	1/25/2018 11:25	4.2	31.8	7.7	56.3	152.5	151.7	2.3	4.5	-0.5	-0.5	-19.4
GEW-133	1/11/2018 14:07	1.4	53.0	0.0	45.6	61.4	61.4	6.4	4.3	-19.9	-19.9	-19.5
GEW-133	1/11/2018 14:14	2.6	42.3	0.0	55.1	61.2	61.2	6.3	3.1	-19.9	-19.9	-19.9
GEW-133	1/17/2018 9:12	0.1	5.3	20.5	74.1	21.5	22.2	3.3	3.5	-20.0	-20.0	-20.2
GEW-133	1/17/2018 9:13	0.1	5.5	20.0	74.4	23.2	23.2	4.0	4.2	-19.6	-19.7	-20.0
GEW-133	1/25/2018 10:11	2.4	62.4	0.2	35.0	60.9	60.9	3.3	4.3	-20.1	-20.1	-20.1
GEW-134	1/11/2018 11:39	15.9	45.7	1.1	37.3	122.6	122.4	11.9	12.1	-0.6	-0.6	-18.4
GEW-134	1/11/2018 11:47	15.2	45.5	1.0	38.3	122.9	122.9	19.5	16.7	-0.4	-0.5	-18.1
GEW-134	1/25/2018 8:27	11.8	40.2	2.9	45.1	104.8	105.0	4.6	4.3	-0.7	-0.7	-18.9
GEW-135	1/11/2018 11:26	13.1	47.8	1.7	37.4	155.6	155.6	29.6	31.3	-5.7	-5.7	-19.1
GEW-135	1/11/2018 11:33	13.1	47.2	1.7	38.0	155.2	155.6	21.6	24.5	-4.9	-5.2	-18.4
GEW-135	1/25/2018 8:15	8.0	40.7	3.4	47.9	150.6	150.6	33.7	30.5	-6.0	-5.9	-18.9
GEW-135	1/25/2018 8:18	8.0	41.7	3.5	46.8	149.5	149.2	28.1	28.6	-4.7	-4.8	-19.2
GEW-136	1/11/2018 10:48	6.3	26.4	9.2	58.1	98.2	98.6	4.7	1.6	-0.1	-0.2	-9.2
GEW-136	1/11/2018 10:56	6.4	26.5	9.0	58.1	100.1	99.6	8.8	11.2	-0.2	-0.2	-9.1
GEW-136	1/25/2018 8:34	5.7	32.3	8.1	53.9	99.9	100.1	3.8	2.8	-0.1	-0.1	-7.2
GEW-136	1/25/2018 8:35	5.7	32.0	8.1	54.2	101.1	101.5	2.3	2.0	0.0	0.0	-7.2
GEW-137	1/12/2018 8:43	36.7	34.1	0.0	29.2	17.9	17.9	8.0	7.8	-4.2	-4.2	-19.9
GEW-137	1/12/2018 8:50	37.1	35.1	0.0	27.8	16.4	16.4	4.2	4.0	-4.0	-4.1	-19.9
GEW-137	1/25/2018 8:57	34.3	37.5	0.3	27.9	62.6	62.6	2.9	2.4	-9.4	-9.4	-18.8
GEW-138	1/12/2018 9:10	9.3	36.1	0.1	54.5	113.2	113.7	1.9	1.9	-0.1	-0.1	-19.8
GEW-138	1/12/2018 9:16	9.4	35.2	0.1	55.3	111.0	111.3	2.5	3.9	-0.2	-0.1	-20.2
GEW-138	1/25/2018 9:02	7.0	33.3	2.1	57.6	132.1	132.6	2.6	4.0	-0.1	-0.1	-18.4
GEW-138	1/25/2018 9:04	6.5	34.6	2.1	56.8	132.0	132.5	1.1	3.9	-0.1	-0.1	-18.5
GEW-139	1/15/2018 11:01	3.7	53.7	0.0	42.6	123.4	123.7	6.3	5.7	-2.5	-2.6	-19.4
GEW-139	1/15/2018 11:07	4.3	56.1	0.0	39.6	123.9	123.9	5.3	3.4	-2.5	-2.5	-19.9
GEW-139	1/26/2018 9:55	4.1	54.6	0.0	41.3	147.0	147.0	1.0	5.0	-2.6	-2.6	-20.3
GEW-139	1/26/2018 9:57	4.4	55.9	0.0	39.7	146.3	146.3	2.6	2.6	-2.7	-2.7	-20.2
GEW-140	1/10/2018 11:31	15.3	40.6	0.3	43.8	79.1	79.2	2.9	3.1	0.2	0.2	-18.3

January 2018 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_2O**		
GEW-140	1/10/2018 11:38	13.9	54.0	0.0	32.1	96.2	97.0	6.0	7.7	-2.4	-2.4	-18.2
GEW-140	1/26/2018 10:23	22.8	50.4	0.2	26.6	117.3	117.3	5.8	5.2	-3.7	-3.7	-20.1
GEW-142	1/19/2018 14:49	0.1	1.7	20.0	78.2	61.3	61.4	2.9	3.1	-16.3	-16.4	-20.7
GEW-142	1/19/2018 14:50	0.1	0.5	20.2	79.2	62.4	62.4	2.3	2.3	-16.8	-16.8	-20.7
GEW-142	1/26/2018 10:05	0.9	7.5	21.1	70.5	61.8	61.8	5.5	5.4	-15.7	-15.7	-20.2
GEW-142	1/26/2018 10:06	0.9	5.9	21.3	71.9	61.7	61.6	4.2	3.9	-15.7	-15.7	-20.2
GEW-143	1/10/2018 11:24	0.0	3.8	21.0	75.2	62.4	62.4	3.5	2.4	-12.6	-12.3	-18.3
GEW-143	1/10/2018 11:27	0.0	2.2	21.4	76.4	62.1	62.1	4.3	3.7	-11.0	-11.0	-18.8
GEW-143	1/26/2018 10:16	0.5	9.7	20.3	69.5	63.0	63.0	4.7	3.7	-16.6	-16.6	-20.2
GEW-143	1/26/2018 10:18	0.5	6.6	20.7	72.2	63.5	63.6	1.2	7.0	-16.8	-16.7	-20.2
GEW-144	1/10/2018 11:13	1.4	32.2	10.7	55.7	63.1	63.2	2.0	2.3	-18.4	-18.5	-18.5
GEW-144	1/10/2018 11:19	1.3	26.0	11.0	61.7	62.4	62.4	0.0	2.3	-18.5	-18.4	-18.3
GEW-144	1/26/2018 13:56	1.1	17.3	14.8	66.8	61.6	61.6	2.0	3.5	-20.2	-20.2	-20.9
GEW-144	1/26/2018 13:58	1.0	13.9	15.4	69.7	61.5	61.5	1.6	1.2	-20.2	-20.1	-20.9
GEW-145	1/26/2018 10:36	0.1	3.1	21.1	75.7	59.0	59.0	3.1	2.8	-10.9	-10.9	-20.5
GEW-145	1/26/2018 10:38	0.1	1.0	21.3	77.6	59.0	59.0	2.3	2.3	-11.3	-11.3	-20.5
GEW-146	1/11/2018 9:37	4.8	8.0	17.4	69.8	82.1	82.3	11.6	10.3	-0.2	-0.3	-19.8
GEW-146	1/11/2018 9:44	3.6	7.0	17.6	71.8	82.6	82.6	8.5	8.4	0.0	0.0	-19.9
GEW-146	1/24/2018 13:44	4.5	10.6	16.4	68.5	79.1	79.1	10.0	9.6	0.0	0.0	-18.5
GEW-146	1/24/2018 13:45	4.8	7.4	16.9	70.9	79.5	79.4	9.0	9.3	0.0	0.0	-18.4
GEW-147	1/11/2018 10:33	10.6	44.1	0.1	45.2	172.6	172.6	32.1	31.5	-17.9	-17.9	-19.4
GEW-147	1/11/2018 10:40	11.5	44.2	0.0	44.3	172.6	172.6	27.7	28.9	-18.2	-18.3	-19.4
GEW-147	1/24/2018 14:12	13.9	41.8	0.1	44.2	183.2	183.3	36.9	35.9	-16.8	-16.8	-18.4
GEW-147	1/24/2018 14:14	13.8	43.2	0.1	42.9	183.3	183.3	36.2	36.7	-16.8	-16.8	-18.5
GEW-148	1/11/2018 9:00	3.9	52.1	1.7	42.3	61.1	61.1	3.5	10.8	-19.3	-18.9	-19.4
GEW-148	1/11/2018 9:08	5.3	53.0	1.7	40.0	61.1	61.1	9.4	9.4	-19.2	-19.2	-19.4
GEW-148	1/24/2018 13:35	9.8	49.1	1.5	39.6	61.6	61.6	3.3	3.5	-17.8	-17.8	-18.4
GEW-149	1/11/2018 8:22	11.7	30.7	5.8	51.8	89.3	89.3	14.0	15.0	-0.4	-0.4	-16.0
GEW-149	1/11/2018 8:30	11.9	31.7	5.8	50.6	89.6	89.5	15.9	13.8	-0.3	-0.4	-15.9
GEW-149	1/24/2018 13:19	6.3	28.8	7.2	57.7	96.0	95.8	15.2	14.0	-0.3	-0.3	-7.5
GEW-149	1/24/2018 13:20	6.6	28.1	7.3	58.0	95.0	95.0	16.4	15.5	-0.3	-0.3	-7.6
GEW-150	1/10/2018 9:35	17.9	38.7	6.9	36.5	148.4	148.4	24.0	22.9	-12.5	-12.6	-17.1
GEW-150	1/10/2018 9:41	17.9	36.6	7.1	38.4	149.2	149.2	20.7	21.1	-12.6	-12.6	-16.4
GEW-150	1/26/2018 9:51	12.2	38.3	7.3	42.2	124.1	124.0	32.9	29.8	-13.7	-12.9	-20.7
GEW-150	1/26/2018 9:54	12.3	37.7	7.5	42.5	123.9	123.9	22.4	23.2	-11.9	-11.4	-20.5
GEW-151	1/11/2018 9:15	16.6	45.4	3.7	34.3	149.5	150.2	24.8	8.3	-7.6	-6.0	-19.7
GEW-151	1/11/2018 9:23	16.2	43.6	3.8	36.4	151.3	150.3	26.3	12.4	-8.5	-7.1	-19.4
GEW-151	1/24/2018 13:28	9.6	35.7	5.4	49.3	150.2	149.1	43.7	36.0	-12.4	-7.6	-19.7
GEW-151	1/24/2018 13:30	9.5	37.0	5.3	48.2	149.9	149.9	21.9	35.0	-9.0	-8.7	-19.7
GEW-152	1/5/2018 14:25	26.2	46.4	1.0	26.4	105.2	105.0	2.2	2.2	-9.5	-9.4	-20.2
GEW-152	1/5/2018 14:32	26.4	46.5	0.8	26.3	106.2	106.5	4.6	4.0	-9.7	-9.4	-20.4

January 2018 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_2O**		
GEW-152	1/24/2018 15:13	27.9	47.1	0.0	25.0	115.3	114.9	2.6	3.1	-7.0	-7.0	-19.3
GEW-153	1/5/2018 13:58	35.1	33.3	0.0	31.6	60.2	60.2	15.8	14.6	-5.3	-5.3	-19.6
GEW-153	1/5/2018 14:07	34.7	33.7	0.0	31.6	61.8	61.8	13.9	9.4	-5.6	-5.6	-19.4
GEW-153	1/24/2018 14:09	0.2	5.5	20.0	74.3	51.3	51.4	7.0	7.8	-0.6	-0.6	-19.2
GEW-153	1/24/2018 14:11	0.0	1.3	20.9	77.8	51.9	52.0	2.1	2.1	-0.2	-0.2	-19.1
GEW-154	1/5/2018 10:57	0.0	10.5	17.8	71.7	24.7	24.7	3.3	3.2	-1.6	-1.6	-9.4
GEW-154	1/5/2018 11:01	0.1	7.2	18.3	74.4	24.9	24.8	2.3	2.3	-1.6	-1.6	-9.7
GEW-154	1/10/2018 14:29	1.7	10.5	15.8	72.0	61.1	61.1	2.4	1.2	-0.7	-0.7	-16.0
GEW-154	1/10/2018 14:37	1.5	7.8	16.4	74.3	60.9	60.9	0.0	9.9	-0.8	-0.8	-16.0
GEW-154	1/24/2018 11:34	0.7	3.3	19.7	76.3	41.1	41.2	9.9	3.9	-0.8	-0.8	-17.4
GEW-154	1/24/2018 11:36	0.7	3.1	19.7	76.5	41.2	41.2	3.6	7.4	-0.9	-0.8	-17.1
GEW-155	1/12/2018 9:53	7.2	30.2	0.9	61.7	64.0	63.9	3.4	3.0	-0.1	-0.1	-19.0
GEW-155	1/12/2018 10:00	6.9	30.2	1.0	61.9	64.3	64.3	4.8	4.2	-0.1	-0.1	-19.0
GEW-155	1/25/2018 9:43	1.5	25.6	4.2	68.7	90.8	90.6	5.9	5.7	-0.1	-0.1	-17.0
GEW-156	1/16/2018 13:21	10.2	19.3	12.3	58.2	56.9	56.5	9.7	9.2	-0.1	-0.1	-19.3
GEW-156	1/16/2018 13:28	10.8	16.9	13.0	59.3	57.2	57.2	8.9	8.9	-0.1	-0.1	-19.4
GEW-156	1/26/2018 15:51	22.5	27.1	8.0	42.4	80.5	80.7	4.8	4.9	-0.1	-0.1	-21.3
GEW-156	1/26/2018 15:53	22.6	26.3	8.2	42.9	80.5	81.2	4.5	4.5	-0.1	-0.1	-21.4
GEW-157	1/26/2018 10:04	1.0	7.6	19.2	72.2	59.7	59.7	1.1	2.6	-0.6	-0.6	-20.7
GEW-157	1/26/2018 10:06	1.0	4.4	19.7	74.9	60.7	60.9	1.4	0.6	-0.1	-0.1	-20.7
GEW-158	1/10/2018 9:10	22.4	53.5	0.0	24.1	129.7	129.7	2.2	2.6	-0.3	-0.3	-7.8
GEW-158	1/10/2018 9:16	22.5	51.3	0.0	26.2	129.7	130.2	5.6	4.8	-0.2	-0.3	-4.0
GEW-158	1/24/2018 15:33	23.3	55.2	0.0	21.5	84.2	84.1	4.3	4.0	-1.4	-1.4	-10.7
GEW-159	1/5/2018 11:26	39.5	39.6	0.0	20.9	29.5	29.5	13.8	8.5	-19.9	-20.2	-21.4
GEW-159	1/5/2018 11:33	33.4	35.7	0.2	30.7	30.2	30.2	15.3	10.8	-19.9	-19.9	-21.2
GEW-159	1/24/2018 13:59	0.1	7.6	18.1	74.2	54.0	54.0	6.2	6.1	-18.8	-18.7	-18.7
GEW-159	1/24/2018 14:01	0.0	3.5	18.9	77.6	51.5	51.3	0.6	2.3	-15.4	-15.3	-18.8
GEW-160	1/5/2018 10:23	12.9	52.7	0.1	34.3	24.1	24.0	10.0	12.0	-18.5	-18.5	-18.8
GEW-160	1/5/2018 10:31	12.4	54.3	0.0	33.3	25.1	25.2	13.3	15.4	-18.4	-18.0	-18.7
GEW-160	1/24/2018 11:24	6.8	47.6	1.8	43.8	51.9	52.0	7.1	5.4	-17.7	-17.7	-17.7
GEW-161	1/5/2018 10:35	0.4	33.5	8.1	58.0	22.5	22.5	1.8	3.4	-18.5	-18.5	-18.6
GEW-161	1/5/2018 10:45	0.2	32.4	8.5	58.9	23.7	23.7	1.8	1.8	-18.0	-18.0	-18.4
GEW-161	1/24/2018 11:26	0.1	9.5	20.5	69.9	42.8	42.8	5.2	5.9	-15.2	-15.2	-17.0
GEW-161	1/24/2018 11:28	0.1	7.4	20.8	71.7	42.7	42.6	2.8	3.7	-15.0	-15.1	-16.8
GEW-162	1/5/2018 11:21	21.2	60.4	0.0	18.4	26.3	26.2	2.5	3.5	-16.5	-16.5	-20.6
GEW-162	1/5/2018 11:30	20.0	65.6	0.0	14.4	25.6	26.0	1.9	1.8	-18.0	-17.9	-20.7
GEW-162	1/24/2018 13:13	14.2	58.8	0.0	27.0	74.6	74.8	4.8	4.3	-12.3	-12.4	-19.3
GEW-163	1/2/2018 14:22	13.6	41.0	4.1	41.3	159.4	160.2	6.4	6.3	-0.1	-0.1	-19.6
GEW-163	1/2/2018 14:23	12.4	43.9	4.0	39.7	160.2	160.2	8.1	7.8	-0.1	-0.1	-19.7
GEW-163	1/9/2018 13:24	2.5	27.5	11.6	58.4	156.0	156.7	18.0	18.6	-0.1	-0.1	-18.5
GEW-163	1/9/2018 13:31	2.8	27.9	11.6	57.7	156.9	157.2	13.8	12.2	-0.1	-0.1	-19.2

January 2018 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_2O		
GEW-163	1/16/2018 14:20	4.0	23.9	12.3	59.8	143.5	144.5	21.3	21.9	-0.2	-0.2	-19.4
GEW-163	1/16/2018 14:21	3.6	25.4	12.5	58.5	143.2	142.2	13.6	11.9	-0.2	-0.1	-19.5
GEW-163	1/22/2018 11:06	2.1	61.5	0.0	36.4	192.9	192.3	27.5	25.5	-0.2	-0.2	-17.7
GEW-163	1/22/2018 11:08	2.3	61.6	0.0	36.1	192.9	192.9	39.9	44.1	-0.5	-0.6	-17.8
GEW-164	1/2/2018 14:27	21.6	52.5	1.8	24.1	152.5	151.7	38.1	37.8	-0.6	-0.6	-20.4
GEW-164	1/2/2018 14:28	21.4	53.6	1.7	23.3	152.5	152.1	37.6	36.6	-0.6	-0.7	-20.3
GEW-164	1/9/2018 13:36	20.6	51.2	2.6	25.6	143.2	143.2	22.4	32.4	-0.8	-0.8	-19.1
GEW-164	1/9/2018 13:43	20.7	49.0	2.7	27.6	143.2	143.5	33.2	21.4	-0.8	-0.8	-19.6
GEW-164	1/16/2018 14:25	20.7	47.8	3.7	27.8	139.3	139.3	5.4	13.5	-0.7	-0.7	-20.4
GEW-164	1/16/2018 14:26	20.2	49.2	3.6	27.0	138.7	139.0	29.7	23.0	-0.7	-0.7	-20.0
GEW-164	1/22/2018 11:12	23.4	53.4	1.3	21.9	152.5	152.5	21.7	8.2	-0.3	-0.3	-18.2
GEW-164	1/22/2018 11:14	23.2	54.7	1.3	20.8	152.9	152.5	23.9	23.3	-0.4	-0.4	-18.5
GEW-165	1/2/2018 14:32	4.4	27.6	13.2	54.8	128.9	128.9	39.3	39.5	-2.7	-2.8	-20.4
GEW-165	1/2/2018 14:35	4.5	25.5	13.5	56.5	123.4	123.1	14.8	14.8	-0.7	-0.7	-20.9
GEW-165	1/9/2018 13:53	13.3	59.4	0.0	27.3	177.5	178.0	14.7	10.7	3.9	3.8	-19.9
GEW-165	1/9/2018 13:59	13.7	60.9	0.0	25.4	183.3	183.9	17.2	18.1	-0.1	-0.1	-20.4
GEW-165	1/9/2018 14:07	14.5	58.8	0.0	26.7	183.9	183.9	20.4	20.8	-0.1	0.0	-20.8
GEW-165	1/16/2018 14:50	12.6	60.2	0.0	27.2	181.5	182.1	20.8	18.9	-0.4	-0.4	-20.6
GEW-165	1/16/2018 14:51	12.5	63.3	0.0	24.2	182.5	182.1	15.0	15.2	-0.3	-0.4	-20.5
GEW-165	1/22/2018 11:21	5.3	33.6	10.7	50.4	155.6	155.6	28.5	24.1	-2.2	-2.1	-18.6
GEW-165	1/22/2018 11:22	5.3	33.6	10.9	50.2	155.6	155.3	23.0	26.4	-2.1	-2.1	-18.4
GEW-166	1/2/2018 14:39	1.5	46.3	1.4	50.8	188.9	188.8	26.7	33.2	-17.7	-17.4	-18.7
GEW-166	1/2/2018 14:41	1.0	51.0	1.2	46.8	189.0	188.9	25.1	25.5	-18.0	-17.5	-18.8
GEW-166	1/9/2018 14:12	1.9	54.5	0.4	43.2	192.8	192.3	24.9	34.2	-15.2	-15.2	-18.2
GEW-166	1/9/2018 14:20	2.4	51.4	0.4	45.8	192.9	192.9	33.9	24.8	-15.2	-15.2	-17.0
GEW-166	1/16/2018 14:54	1.6	53.7	0.8	43.9	187.0	187.0	36.5	42.1	-17.3	-17.5	-19.1
GEW-166	1/16/2018 14:56	1.3	55.0	0.8	42.9	186.4	186.4	37.7	39.5	-17.4	-17.3	-18.7
GEW-166	1/22/2018 11:26	2.1	51.9	1.4	44.6	186.4	186.4	11.9	27.6	-15.6	-15.7	-16.0
GEW-166	1/22/2018 11:27	2.3	52.5	1.3	43.9	185.7	186.2	57.1	44.1	-15.7	-15.7	-14.5
GEW-167	1/2/2018 14:45	0.8	50.3	2.0	46.9	186.1	186.4	20.5	19.5	-0.1	-0.1	-18.2
GEW-167	1/2/2018 14:46	0.8	50.9	2.0	46.3	186.4	186.4	18.2	20.0	-0.1	-0.1	-18.1
GEW-167	1/9/2018 14:28	1.6	38.6	7.9	51.9	175.8	174.7	9.5	10.9	-0.2	-0.2	-17.7
GEW-167	1/9/2018 14:35	1.4	36.8	8.0	53.8	175.4	175.8	10.6	9.8	-0.3	-0.3	-18.0
GEW-167	1/16/2018 15:12	0.5	40.3	7.7	51.5	171.0	171.6	11.5	13.7	-0.3	-0.3	-14.8
GEW-167	1/16/2018 15:14	0.4	37.0	8.1	54.5	171.4	172.1	8.0	11.7	-0.2	-0.2	-15.3
GEW-167	1/22/2018 11:33	1.4	39.6	0.0	59.0	194.3	194.5	7.3	6.9	0.3	0.3	-18.2
GEW-167	1/22/2018 11:37	1.8	47.4	0.0	50.8	194.8	194.4	28.3	28.7	-0.2	-0.2	-16.6
GEW-168	1/2/2018 14:50	3.5	53.7	0.0	42.8	180.9	180.9	174.1	174.5	-2.2	-2.1	-19.0
GEW-168	1/2/2018 14:52	3.9	54.7	0.0	41.4	180.1	179.8	175.1	173.7	-2.1	-2.1	-19.1
GEW-168	1/10/2018 8:16	11.4	55.3	0.1	33.2	178.0	178.0	165.1	165.8	-2.6	-2.6	-18.4
GEW-168	1/10/2018 8:26	13.4	54.7	0.0	31.9	177.7	178.0	167.7	167.0	-2.6	-2.6	-18.0

January 2018 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_2O**		
GEW-168	1/16/2018 15:02	11.6	56.1	0.0	32.3	169.0	169.0	164.7	165.6	-3.0	-3.0	-19.1
GEW-168	1/16/2018 15:03	11.5	58.4	0.0	30.1	169.5	169.0	162.8	164.3	-2.9	-2.9	-18.6
GEW-168	1/22/2018 11:45	18.8	54.3	0.1	26.8	179.1	178.7	173.0	172.2	-1.8	-1.8	-18.5
GEW-168	1/22/2018 11:46	18.3	56.1	0.1	25.5	178.9	178.6	171.8	171.7	-1.8	-1.8	-18.4
GEW-169	1/2/2018 14:55	3.3	52.4	1.0	43.3	182.7	182.7	17.4	16.3	-2.2	-2.2	-19.1
GEW-169	1/2/2018 14:56	3.1	52.5	1.0	43.4	182.7	182.7	20.7	21.6	-2.2	-2.2	-19.2
GEW-169	1/10/2018 8:32	3.7	54.8	2.4	39.1	186.5	186.4	39.8	43.5	-1.9	-1.9	-17.9
GEW-169	1/10/2018 8:40	4.4	53.2	2.4	40.0	186.7	187.0	23.9	11.1	-1.3	-1.3	-18.2
GEW-169	1/16/2018 15:07	2.5	54.3	2.2	41.0	184.9	185.1	15.9	12.3	-1.3	-1.3	-17.9
GEW-169	1/16/2018 15:08	2.3	55.9	2.2	39.6	184.6	184.3	12.5	11.9	-1.2	-1.3	-18.2
GEW-169	1/22/2018 11:50	7.6	48.0	3.1	41.3	183.9	183.9	10.7	22.1	-2.2	-2.1	-18.4
GEW-169	1/22/2018 11:52	8.1	51.3	3.0	37.6	183.7	183.9	19.2	23.3	-2.4	-2.5	-18.4
GEW-170	1/11/2018 8:59	8.3	44.9	6.3	40.5	167.1	167.1	16.2	8.2	-6.8	-6.8	-9.8
GEW-170	1/11/2018 9:07	8.2	42.6	6.2	43.0	167.1	167.5	16.9	25.5	-7.0	-6.7	-9.7
GEW-170	1/26/2018 8:58	11.3	48.5	4.2	36.0	165.7	165.7	27.9	23.2	-7.8	-7.4	-16.8
GEW-170	1/26/2018 9:00	10.9	51.2	4.1	33.8	166.1	166.1	28.6	27.2	-7.4	-7.4	-16.0
GEW-172	1/16/2018 13:58	0.3	53.1	3.1	43.5	18.4	18.4	7.9	6.0	-19.7	-19.6	-19.8
GEW-172	1/16/2018 14:06	0.5	52.1	3.2	44.2	19.3	19.3	4.2	8.5	-19.7	-19.7	-19.9
GEW-172	1/26/2018 10:01	1.4	54.9	1.4	42.3	65.8	66.1	5.5	2.7	-20.2	-20.1	-20.3
GEW-173	1/16/2018 13:42	25.4	35.6	0.7	38.3	67.5	67.5	2.9	11.1	-0.2	-0.1	-18.9
GEW-173	1/16/2018 13:50	24.0	36.8	0.6	38.6	68.5	68.4	9.0	10.3	-0.2	-0.1	-19.0
GEW-173	1/26/2018 10:28	6.2	18.8	10.3	64.7	97.2	97.2	57.7	58.0	-2.1	-2.1	-4.4
GEW-173	1/26/2018 10:30	6.2	17.0	10.4	66.4	97.4	97.2	53.8	52.3	-2.1	-2.1	-4.7
GEW-174	1/10/2018 10:56	20.4	47.2	0.2	32.2	143.7	143.7	38.0	25.1	-3.7	-3.6	-19.4
GEW-174	1/10/2018 11:07	19.9	47.7	0.1	32.3	144.5	144.2	39.8	45.9	-3.6	-3.6	-19.2
GEW-174	1/26/2018 13:47	22.3	46.4	0.1	31.2	143.9	143.9	29.7	33.1	-4.2	-4.2	-21.4
GEW-174	1/26/2018 13:48	22.2	47.3	0.0	30.5	143.9	144.5	36.3	39.3	-4.2	-4.2	-21.1
GEW-175	1/10/2018 10:37	21.6	47.8	3.0	27.6	116.9	116.8	53.9	53.2	-0.6	-0.6	-18.9
GEW-175	1/10/2018 10:44	20.9	44.1	3.1	31.9	116.9	116.8	53.4	53.4	-0.6	-0.6	-18.9
GEW-175	1/26/2018 9:48	21.9	45.5	3.6	29.0	115.9	116.0	49.0	52.6	-0.7	-0.7	-21.6
GEW-176	1/10/2018 9:23	21.8	42.3	6.5	29.4	54.7	54.7	9.6	10.0	-0.2	-0.2	-18.8
GEW-176	1/10/2018 9:29	22.7	37.8	6.7	32.8	54.7	54.7	7.9	7.5	-0.3	-0.3	-18.5
GEW-176	1/24/2018 15:40	20.1	38.6	6.6	34.7	52.6	52.6	5.8	7.0	-0.3	-0.3	-19.1
GEW-176	1/24/2018 15:42	20.9	37.3	6.7	35.1	52.3	52.3	4.8	5.6	-0.3	-0.3	-19.3
GEW-177	1/15/2018 14:11	4.1	63.8	0.0	32.1	193.6	193.6	13.0	19.5	-18.2	-18.2	-18.8
GEW-177	1/15/2018 14:17	4.9	65.7	0.0	29.4	194.3	193.6	13.6	20.4	-18.2	-18.2	-18.8
GEW-177	1/26/2018 9:13	0.7	43.0	8.3	48.0	59.7	59.7	14.6	12.0	-20.5	-20.5	-20.4
GEW-177	1/26/2018 9:14	0.7	46.6	7.2	45.5	59.2	59.1	3.9	2.8	-20.6	-20.5	-20.5
GEW-178	1/9/2018 15:17	5.2	39.5	10.1	45.2	39.9	39.9	3.2	3.2	-19.5	-19.5	-19.6
GEW-178	1/9/2018 15:19	3.2	28.3	15.2	53.3	39.9	39.9	3.4	3.4	-19.0	-19.0	-19.7
GEW-178	1/18/2018 9:00	10.0	62.1	0.9	27.0	32.0	32.1	3.7	3.8	-6.4	-6.4	-20.2

January 2018 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_2O**		
GEW-178	1/23/2018 9:04	0.4	3.7	21.1	74.8	36.4	36.4	3.9	3.7	-16.3	-16.3	-19.7
GEW-178	1/23/2018 9:06	0.3	3.3	21.1	75.3	36.4	36.4	3.3	3.3	-16.3	-16.2	-19.7
GEW-178	1/29/2018 14:17	11.1	64.5	0.0	24.4	39.2	39.2	4.0	4.0	0.0	0.0	-20.6
GEW-178	1/29/2018 14:20	11.4	65.3	0.0	23.3	44.0	44.2	2.2	0.5	-0.1	-0.1	-20.7
GEW-179	1/18/2018 9:06	1.9	19.5	16.6	62.0	33.0	33.3	3.8	3.6	-19.7	-19.7	-20.2
GEW-179	1/18/2018 9:08	5.2	21.8	15.5	57.5	32.6	32.6	3.1	3.1	-19.6	-19.6	-20.4
GEW-179	1/23/2018 9:26	0.1	1.7	21.2	77.0	36.3	36.3	5.0	2.1	-17.9	-17.8	-19.7
GEW-179	1/23/2018 9:27	0.1	1.4	21.2	77.3	36.1	36.1	0.9	1.1	-18.0	-18.0	-19.6
GEW-179	1/29/2018 14:28	0.0	10.0	19.4	70.6	37.8	37.8	6.6	5.9	-15.0	-15.2	-20.7
GEW-179	1/29/2018 14:30	0.1	6.1	20.1	73.7	38.5	38.5	5.3	3.5	-16.6	-16.7	-20.7
GEW-180	1/18/2018 9:14	0.2	11.5	19.5	68.8	33.8	33.9	5.7	6.0	-17.2	-17.2	-20.2
GEW-180	1/18/2018 9:15	0.3	6.5	19.7	73.5	34.4	34.4	4.3	3.8	-17.3	-17.4	-20.4
GEW-180	1/23/2018 9:31	0.1	0.9	21.1	77.9	36.4	36.3	3.5	2.7	-17.2	-17.1	-19.6
GEW-180	1/23/2018 9:33	0.1	0.8	21.2	77.9	36.2	36.1	2.1	2.0	-16.7	-16.7	-19.7
GEW-180	1/29/2018 14:35	0.1	4.5	20.4	75.0	38.6	38.7	2.8	2.8	-14.3	-14.3	-20.7
GEW-180	1/29/2018 14:37	0.0	3.5	20.2	76.3	38.3	38.2	1.0	1.0	-14.3	-14.3	-20.7
GEW-181	1/18/2018 9:20	9.6	58.3	3.0	29.1	37.8	37.8	4.1	4.6	-14.7	-14.7	-20.2
GEW-181	1/23/2018 9:39	11.1	65.7	0.4	22.8	36.5	36.5	6.5	6.5	-9.4	-9.3	-19.7
GEW-181	1/23/2018 9:51	11.4	63.6	0.9	24.1	36.4	36.4	7.1	5.2	-8.9	-8.9	-19.7
GEW-181	1/29/2018 14:42	9.2	54.4	4.0	32.4	35.6	35.6	12.0	7.1	-5.4	-5.5	-20.9
GEW-181	1/30/2018 9:34	10.5	66.9	0.0	22.6	52.9	52.9	11.8	11.1	19.3	19.1	-20.2
GEW-181	1/30/2018 9:34	10.5	66.9	0.0	22.6	52.9	52.9	11.8	11.1	19.3	19.1	-20.2
GEW-181	1/30/2018 9:38	10.4	67.4	0.0	22.2	72.6	72.5	10.6	14.0	-4.1	-4.2	-20.4
GEW-181	1/30/2018 9:38	10.4	67.4	0.0	22.2	72.6	72.5	10.6	14.0	-4.1	-4.2	-20.4
GEW-182	1/18/2018 9:38	7.4	58.4	0.0	34.2	38.1	38.3	2.7	2.4	0.4	0.4	-20.4
GEW-182	1/18/2018 9:42	7.1	59.5	0.0	33.4	64.9	65.8	2.3	1.9	-0.2	-0.2	-20.2
GEW-182	1/23/2018 11:26	10.6	56.3	0.0	33.1	155.6	155.7	4.3	10.2	-0.5	-0.5	-11.2
GEW-182	1/23/2018 11:33	10.5	56.7	0.0	32.8	162.4	163.8	15.3	16.0	-0.7	-0.7	-12.6
GEW-182	1/29/2018 15:06	9.6	51.7	0.0	38.7	141.5	141.2	1.8	7.2	0.6	0.6	-7.7
GEW-182	1/29/2018 15:11	8.8	57.3	0.0	33.9	155.3	157.7	7.0	6.8	-0.1	-0.2	-16.1
GEW-184	1/18/2018 9:47	19.9	42.3	8.0	29.8	68.7	68.5	3.7	4.2	-0.1	-0.2	-20.2
GEW-184	1/18/2018 9:49	19.9	41.9	8.0	30.2	67.6	67.6	4.6	3.4	-0.1	-0.1	-20.2
GEW-184	1/23/2018 13:32	20.4	44.2	6.9	28.5	65.9	66.1	3.8	3.6	-0.1	-0.1	-18.6
GEW-184	1/23/2018 13:40	20.3	41.5	7.3	30.9	66.2	66.6	3.2	1.2	-0.1	-0.1	-18.5
GEW-184	1/29/2018 15:18	17.8	36.6	9.1	36.5	62.6	62.6	3.7	4.2	-0.1	-0.1	-20.6
GEW-184	1/29/2018 15:20	17.9	36.6	9.3	36.2	62.5	62.4	3.7	3.7	-0.1	-0.1	-20.5
GEW-185	1/18/2018 9:54	16.4	60.5	0.0	23.1	143.6	143.5	3.1	2.0	0.0	0.0	-20.2
GEW-185	1/18/2018 9:56	16.3	63.1	0.0	20.6	145.5	145.9	5.3	2.7	-0.1	-0.1	-20.1
GEW-185	1/23/2018 13:18	16.0	60.3	0.0	23.7	149.5	149.1	4.2	2.9	-0.2	-0.2	-18.5
GEW-185	1/23/2018 13:26	16.6	60.8	0.0	22.6	151.3	151.3	3.7	1.5	-0.3	-0.3	-18.4
GEW-185	1/29/2018 15:24	16.7	61.2	0.0	22.1	106.3	106.6	9.8	9.2	-0.3	-0.3	-20.5

January 2018 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_2O**		
GEW-186	1/18/2018 9:30	14.5	60.2	0.0	25.3	49.1	49.3	3.8	4.0	-0.1	-0.1	-20.2
GEW-186	1/18/2018 9:32	14.2	64.3	0.0	21.5	56.5	56.8	2.6	0.7	-0.2	-0.3	-20.2
GEW-186	1/23/2018 10:55	11.9	57.1	1.2	29.8	61.4	61.5	6.1	5.3	-0.2	-0.2	-19.8
GEW-186	1/23/2018 11:01	12.6	57.2	1.0	29.2	62.6	62.6	3.2	3.4	-0.1	-0.1	-19.6
GEW-186	1/29/2018 14:54	13.0	58.4	0.7	27.9	59.2	59.3	2.9	1.7	-0.2	-0.1	-21.2
GEW-186	1/29/2018 14:57	12.7	60.1	0.7	26.5	67.7	67.9	5.5	5.4	-0.2	-0.2	-20.4
GEW-187	1/18/2018 8:50	13.9	44.9	3.6	37.6	79.4	79.8	3.9	4.1	-0.9	-0.9	-20.4
GEW-187	1/23/2018 8:35	10.9	44.1	4.4	40.6	80.5	80.7	5.4	3.3	-1.0	-1.1	-20.2
GEW-187	1/23/2018 8:42	12.1	45.7	4.3	37.9	80.8	80.9	3.5	5.0	-1.0	-1.0	-20.2
GEW-187	1/29/2018 14:04	11.6	45.5	3.8	39.1	89.0	88.7	3.8	2.3	-1.0	-1.0	-20.9
GEW-187	1/18/2018 10:01	2.2	27.5	11.1	59.2	90.8	91.0	15.7	10.7	-0.1	-0.2	-14.1
GEW-187	1/18/2018 10:08	2.3	24.4	11.8	61.5	77.6	76.9	7.3	7.2	-0.1	-0.1	-20.4
GEW-188	1/23/2018 13:51	0.3	28.6	11.4	59.7	54.0	54.1	18.4	20.8	-0.1	0.0	-14.5
GEW-188	1/23/2018 14:00	0.4	26.3	11.9	61.4	55.3	55.5	4.8	18.6	-0.1	-0.1	-11.6
GEW-188	1/29/2018 15:30	1.1	27.6	12.9	58.4	57.3	57.1	9.4	17.5	0.4	0.1	-19.0
GEW-188	1/29/2018 15:37	0.9	19.4	14.6	65.1	63.3	63.3	11.1	8.6	-0.1	-0.1	-19.8
GEW-1A	1/5/2018 8:58	0.9	8.5	20.1	70.5	18.3	18.3	7.2	6.7	-14.6	-14.5	-14.5
GEW-1A	1/5/2018 8:59	0.3	4.1	21.8	73.8	18.2	18.3	6.1	6.3	-14.5	-14.6	-14.5
GEW-1A	1/9/2018 14:01	1.4	8.0	19.3	71.3	39.8	39.8	6.4	3.7	-14.0	-13.9	-14.5
GEW-1A	1/9/2018 14:02	0.7	2.9	20.4	76.0	40.0	40.0	1.2	2.5	-14.2	-13.9	-14.4
GEW-1A	1/19/2018 10:06	0.9	1.2	21.0	76.9	48.5	48.5	2.4	2.7	-13.7	-13.7	-13.8
GEW-1A	1/19/2018 10:07	0.5	0.5	21.6	77.4	48.7	48.8	2.1	1.8	-13.6	-13.6	-13.7
GEW-1A	1/22/2018 11:07	1.2	3.8	20.1	74.9	63.5	63.5	1.2	3.5	-12.8	-12.8	-12.9
GEW-1A	1/22/2018 11:08	0.8	1.3	20.9	77.0	63.5	63.5	2.0	1.7	-12.8	-12.8	-12.9
GEW-2S	1/18/2018 17:06	59.4	38.8	0.0	1.8	47.2	47.6	14.1	14.4	-12.5	-11.8	-13.9
GEW-2S	1/22/2018 11:20	54.2	40.7	0.2	4.9	62.2	62.1	9.9	8.0	-11.7	-11.8	-12.9
GEW-2S	1/23/2018 14:36	58.9	40.7	0.4	0.0	45.2	45.2	9.5	3.9	-12.9	-12.9	-14.1
GEW-2S	1/23/2018 14:45	56.9	40.2	0.1	2.8	44.9	44.9	7.9	9.7	-12.9	-12.9	-14.2
GIW-01	1/2/2018 11:17	11.6	46.1	5.1	37.2	15.5	15.8	6.2	5.8	-19.0	-19.0	-19.8
GIW-01	1/2/2018 11:18	11.6	43.8	5.0	39.6	16.5	16.5	3.8	4.4	-18.5	-18.4	-19.7
GIW-01	1/8/2018 11:39	13.2	54.8	2.4	29.6	115.1	115.3	3.8	9.8	-17.1	-17.1	-18.8
GIW-01	1/8/2018 11:47	12.8	54.9	2.4	29.9	116.8	116.8	9.5	7.7	-17.1	-17.1	-18.7
GIW-01	1/16/2018 11:22	5.0	59.4	1.1	34.5	163.8	163.7	9.9	8.6	-9.0	-8.9	-20.4
GIW-01	1/16/2018 11:24	5.0	64.1	0.9	30.0	163.3	163.7	10.0	10.2	-8.3	-8.1	-20.2
GIW-01	1/22/2018 8:34	6.2	61.7	0.3	31.8	171.6	171.0	10.4	10.1	-4.9	-4.8	-20.2
GIW-01	1/22/2018 8:39	6.8	62.7	0.2	30.3	171.0	171.0	10.3	10.3	-4.3	-4.2	-19.6
GIW-01	1/29/2018 11:08	6.0	58.6	0.3	35.1	169.0	169.0	6.0	7.0	-4.8	-4.8	-22.1
GIW-01	1/29/2018 11:09	5.9	62.7	0.2	31.2	169.5	169.4	6.7	8.1	-4.8	-4.7	-22.1
GIW-02	1/2/2018 11:21	8.4	41.7	4.9	45.0	25.1	25.3	1.3	1.9	0.0	0.0	-20.1
GIW-02	1/8/2018 13:22	12.7	51.8	2.6	32.9	39.0	38.9	1.8	1.3	-0.1	-0.1	-18.5
GIW-02	1/8/2018 13:31	13.3	52.2	2.6	31.9	39.2	39.2	1.3	1.3	-0.1	-0.1	-18.5

January 2018 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_2O**		
GIW-02	1/16/2018 11:28	2.9	30.3	11.2	55.6	19.5	19.8	2.9	2.3	-0.1	-0.1	-19.6
GIW-02	1/16/2018 11:29	3.1	27.7	11.5	57.7	20.4	20.4	2.9	3.0	-0.1	-0.1	-19.6
GIW-02	1/22/2018 8:45	3.0	24.7	12.9	59.4	64.9	64.9	1.2	3.4	-0.2	-0.1	-19.7
GIW-02	1/22/2018 8:47	3.0	23.4	13.1	60.5	64.5	64.5	3.2	2.7	-0.1	-0.2	-19.8
GIW-02	1/29/2018 11:12	2.3	25.6	13.8	58.3	34.5	34.5	6.0	4.4	-0.1	-0.1	-18.6
GIW-02	1/29/2018 11:14	2.6	20.5	14.7	62.2	34.1	34.0	1.8	2.2	-0.1	-0.1	-22.1
GIW-03	1/2/2018 11:24	2.3	58.5	0.0	39.2	21.4	21.4	3.5	3.2	0.2	0.2	-13.8
GIW-03	1/2/2018 11:26	2.0	60.9	0.0	37.1	21.0	21.0	3.0	1.9	-0.7	-0.7	-14.0
GIW-03	1/8/2018 13:36	1.8	58.0	0.0	40.2	39.5	39.5	2.5	2.5	-1.5	-1.5	-11.9
GIW-03	1/8/2018 13:44	2.8	55.4	0.0	41.8	39.9	40.0	2.2	2.2	-1.6	-1.6	-11.2
GIW-03	1/16/2018 11:33	1.8	60.0	0.0	38.2	15.4	15.7	4.8	4.8	-0.1	-0.1	-15.1
GIW-03	1/22/2018 8:50	3.0	57.6	0.0	39.4	60.3	60.3	2.9	2.7	-5.4	-5.4	-11.5
GIW-03	1/29/2018 11:16	2.5	58.5	0.4	38.6	34.1	34.0	4.6	4.8	-3.0	-3.0	-18.8
GIW-04	1/2/2018 11:29	1.0	53.9	0.2	44.9	21.9	21.9	3.5	3.2	-0.6	-0.6	-18.2
GIW-04	1/8/2018 13:53	1.1	53.5	0.0	45.4	39.7	39.7	3.4	2.6	1.7	1.7	-16.0
GIW-04	1/8/2018 13:55	1.5	53.2	0.5	44.8	39.6	39.6	2.8	11.1	-3.0	-3.1	-15.7
GIW-04	1/8/2018 14:03	2.2	51.0	1.0	45.8	39.5	39.5	2.5	2.5	-3.9	-4.0	-15.8
GIW-04	1/16/2018 11:37	0.0	12.8	20.1	67.1	16.5	16.8	6.5	6.5	-18.1	-18.1	-19.6
GIW-04	1/16/2018 11:39	0.0	10.3	20.8	68.9	16.7	16.6	5.2	5.1	-17.3	-17.2	-19.6
GIW-04	1/22/2018 8:56	0.5	10.8	18.9	69.8	63.2	63.8	2.8	2.9	-13.2	-13.1	-14.5
GIW-04	1/22/2018 8:57	0.4	5.4	19.8	74.4	64.2	64.2	5.0	1.7	-13.3	-13.3	-15.8
GIW-04	1/29/2018 11:20	0.5	46.4	2.3	50.8	35.6	35.6	10.4	9.7	-5.9	-5.9	-23.1
GIW-05	1/2/2018 11:37	0.0	8.5	21.0	70.5	21.1	21.5	0.0	0.0	-0.1	-0.1	-18.2
GIW-05	1/2/2018 11:38	0.0	5.3	21.7	73.0	21.9	21.9	0.0	0.0	-0.1	-0.1	-18.3
GIW-05	1/8/2018 14:15	1.7	11.3	17.0	70.0	38.8	38.8	2.9	4.9	-5.4	-5.5	-15.9
GIW-05	1/8/2018 14:22	2.8	35.4	8.7	53.1	39.3	39.4	5.7	7.0	-5.4	-5.4	-15.9
GIW-05	1/16/2018 11:49	0.0	3.5	21.1	75.4	14.9	15.1	0.0	0.0	-0.1	-0.1	-19.6
GIW-05	1/16/2018 11:51	0.0	2.1	21.4	76.5	15.3	15.4	0.0	0.0	-0.1	-0.1	-19.6
GIW-05	1/22/2018 9:06	0.1	0.2	21.0	78.7	62.7	62.8	0.0	0.0	0.0	0.0	-14.5
GIW-05	1/22/2018 9:07	0.1	0.1	21.0	78.8	63.0	63.0	0.0	0.0	0.0	0.0	-14.5
GIW-05	1/29/2018 11:43	0.0	7.4	21.1	71.5	33.8	34.1	0.0	0.0	-0.1	-0.1	-21.6
GIW-05	1/29/2018 11:46	0.0	1.1	21.1	77.8	34.4	34.5	0.0	0.0	-0.1	-0.1	-21.6
GIW-06	1/2/2018 13:31	1.6	49.4	0.5	48.5	30.9	31.0	5.8	6.1	-0.6	-0.5	-16.1
GIW-06	1/8/2018 14:27	17.7	53.3	0.0	29.0	40.2	40.2	4.0	1.3	-2.0	-2.0	-16.0
GIW-06	1/8/2018 14:34	18.6	52.7	0.0	28.7	40.2	40.2	1.8	2.8	-1.9	-1.9	-15.9
GIW-06	1/16/2018 13:31	2.0	56.7	0.0	41.3	22.4	21.5	3.8	2.6	0.3	0.3	-19.5
GIW-06	1/16/2018 13:32	1.8	56.2	0.0	42.0	20.1	20.0	5.2	3.9	-0.7	-0.7	-19.5
GIW-06	1/22/2018 9:15	7.7	43.8	0.2	48.3	62.6	63.0	3.0	3.0	-6.9	-6.9	-14.5
GIW-06	1/29/2018 13:32	14.4	41.2	0.2	44.2	44.1	44.1	4.0	4.0	-9.3	-9.3	-20.7
GIW-07	1/2/2018 13:34	20.9	58.9	0.5	19.7	31.5	31.6	3.1	3.1	-6.4	-6.3	-16.6
GIW-07	1/9/2018 8:22	34.4	54.2	0.4	11.0	34.9	34.9	1.8	1.3	-5.4	-5.2	-17.9

January 2018 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_2O**		
GIW-07	1/9/2018 8:33	30.3	54.2	0.4	15.1	34.7	34.7	2.2	1.8	-5.1	-5.1	-17.9
GIW-07	1/16/2018 13:35	32.3	54.8	0.5	12.4	20.7	20.9	4.8	3.6	-6.1	-6.1	-19.6
GIW-07	1/22/2018 9:20	22.2	60.4	0.5	16.9	63.5	62.7	3.8	2.9	-5.4	-5.4	-15.4
GIW-07	1/29/2018 13:36	26.2	50.2	1.4	22.2	44.3	44.3	5.5	5.4	-6.4	-6.4	-20.7
GIW-08	1/2/2018 13:37	26.5	54.3	0.0	19.2	31.9	32.0	3.6	3.9	-1.5	-1.5	-16.7
GIW-08	1/9/2018 8:39	29.3	52.7	0.0	18.0	36.0	36.0	2.5	1.8	-2.7	-2.8	-18.2
GIW-08	1/9/2018 8:47	29.2	51.8	0.0	19.0	36.4	36.4	2.5	1.3	-2.7	-2.7	-17.9
GIW-08	1/16/2018 13:39	26.9	53.6	0.0	19.5	20.9	21.0	2.5	4.1	-2.4	-2.4	-19.6
GIW-08	1/22/2018 9:23	23.4	53.7	0.0	22.9	66.8	67.1	2.9	2.7	-2.7	-2.7	-15.1
GIW-08	1/29/2018 13:38	23.9	47.3	0.0	28.8	40.5	40.7	4.8	5.4	-2.8	-2.8	-20.7
GIW-09	1/2/2018 13:45	18.6	35.5	3.1	42.8	32.3	32.3	4.8	4.6	-0.8	-0.7	-16.5
GIW-09	1/9/2018 8:51	4.8	18.4	13.4	63.4	35.6	35.6	2.6	2.6	-0.8	-0.8	-18.1
GIW-09	1/9/2018 8:58	4.6	16.2	13.8	65.4	35.6	35.5	1.3	1.3	-0.8	-0.8	-17.9
GIW-09	1/16/2018 13:46	4.6	21.4	11.5	62.5	18.6	19.0	3.6	3.6	-0.8	-0.7	-19.4
GIW-09	1/16/2018 13:47	4.9	18.2	12.1	64.8	19.3	19.4	3.3	3.8	-0.7	-0.7	-19.4
GIW-09	1/22/2018 9:28	4.4	16.6	12.3	66.7	65.0	65.3	3.4	3.0	-1.1	-1.0	-14.2
GIW-09	1/22/2018 9:30	4.5	15.6	12.4	67.5	64.9	64.9	2.4	1.2	-1.0	-1.0	-15.0
GIW-09	1/29/2018 13:45	1.0	15.1	14.3	69.6	40.6	40.5	4.7	4.8	-0.7	-0.7	-20.7
GIW-09	1/29/2018 13:47	1.0	12.8	14.8	71.4	39.8	39.8	4.2	2.9	-0.7	-0.7	-20.9
GIW-10	1/2/2018 11:32	6.6	46.3	0.0	47.1	25.6	25.6	5.2	5.0	-3.4	-3.4	-18.6
GIW-10	1/9/2018 9:45	5.4	46.1	0.0	48.5	38.1	38.1	1.3	2.2	-3.0	-3.0	-17.9
GIW-10	1/9/2018 9:52	6.7	47.8	0.0	45.5	38.2	38.2	3.6	2.5	-3.1	-3.1	-17.4
GIW-10	1/16/2018 11:43	8.7	45.1	0.0	46.2	22.0	22.1	3.7	3.2	-3.5	-3.5	-19.6
GIW-10	1/22/2018 9:37	7.1	46.8	0.0	46.1	64.9		3.8	NR	-3.1		-14.4
GIW-10	1/29/2018 11:36	7.0	42.7	0.0	50.3	37.4	37.4	1.8	2.2	-4.1	-4.1	-21.7
GIW-11	1/2/2018 11:02	13.4	49.5	0.0	37.1	21.6	21.5	2.3	3.2	-0.8	-0.8	-10.7
GIW-11	1/9/2018 9:57	12.2	50.7	0.2	36.9	38.1	38.2	3.1	3.1	-1.2	-1.2	-17.5
GIW-11	1/9/2018 10:04	12.6	48.7	0.1	38.6	39.2	39.2	3.8	4.7	-1.2	-1.2	-15.0
GIW-11	1/16/2018 10:42	11.8	51.7	0.0	36.5	12.6	12.6	1.9	1.9	-0.8	-0.9	-12.2
GIW-11	1/22/2018 9:40	10.2	49.6	0.2	40.0	65.4	65.5	2.1	3.4	-1.1	-1.1	-18.4
GIW-11	1/29/2018 11:05	10.5	44.3	0.2	45.0	32.7	32.7	3.6	5.0	-1.5	-1.4	-21.2
GIW-12	1/2/2018 10:55	2.3	53.6	0.0	44.1	12.1	12.7	2.5	2.7	0.0	0.0	-11.8
GIW-12	1/9/2018 11:19	11.0	37.7	5.4	45.9	40.1	40.2	2.2	1.8	-0.1	-0.1	-18.0
GIW-12	1/9/2018 11:25	11.1	37.6	5.3	46.0	39.8	39.8	2.8	2.5	-0.1	-0.1	-18.1
GIW-12	1/16/2018 10:34	3.0	51.4	1.1	44.5	8.4	8.5	1.4	3.3	0.0	-0.1	-8.0
GIW-12	1/22/2018 9:44	13.0	37.0	5.5	44.5	63.7	63.7	3.4	3.2	-0.1	-0.1	-18.3
GIW-12	1/22/2018 9:46	13.0	36.7	5.6	44.7	63.7	63.7	1.2	1.2	-0.1	-0.1	-17.9
GIW-12	1/29/2018 10:58	8.0	36.0	8.0	48.0	32.0	31.9	4.6	2.5	-0.2	-0.1	-18.9
GIW-12	1/29/2018 10:59	8.6	33.0	8.3	50.1	31.9	31.9	2.1	1.6	-0.2	-0.2	-18.2
GIW-13	1/2/2018 10:51	19.3	56.4	0.0	24.3	18.5	18.5	4.6	5.0	-1.6	-1.6	-15.6
GIW-13	1/9/2018 11:30	19.4	58.4	0.0	22.2	41.0	41.0	0.0	2.2	-1.4	-1.5	-13.9

January 2018 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_2O**		
GIW-13	1/9/2018 11:37	20.8	56.9	0.0	22.3	40.2	40.0	3.1	2.8	-1.5	-1.5	-13.6
GIW-13	1/16/2018 10:28	7.3	64.0	0.0	28.7	11.5	11.5	5.8	5.0	0.0	0.0	-1.7
GIW-13	1/22/2018 9:49	19.9	58.6	0.0	21.5	65.1	65.1	2.1	3.2	-1.2	-1.2	-12.9
GIW-13	1/29/2018 10:55	21.1	56.3	0.0	22.6	32.6	32.6	4.6	5.0	-1.5	-1.5	-14.0
LCS-1D	1/18/2018 13:20	61.2	38.4	0.4	0.0	75.2	75.5	14.1	14.4	-16.3	-16.2	-19.0
LCS-5A	1/4/2018 14:34	53.6	40.0	1.1	5.3	71.6	71.6	NFD		-15.1	-15.1	-14.5
LCS-5A	1/11/2018 14:35	53.8	42.7	0.3	3.2	80.5	80.3	NFD		-13.5	-13.6	-13.3
LCS-5A	1/19/2018 9:10	55.8	40.4	0.3	3.5	75.5	76.0	NFD		-13.8	-13.8	-13.8
LCS-5A	1/22/2018 10:13	54.6	41.1	0.2	4.1	82.6	83.0	NFD		-13.2	-12.8	-13.1
LCS-5B	1/4/2018 14:59	56.4	38.5	0.0	5.1	144.8	144.8	22.9	25.8	-14.8	-14.8	-15.0
LCS-5B	1/4/2018 15:00	53.9	41.0	0.0	5.1	145.2	145.2	26.2	24.5	-14.8	-14.8	-15.1
LCS-5B	1/11/2018 14:21	54.2	42.3	0.1	3.4	143.9	143.9	20.2	23.0	-13.2	-13.2	-13.3
LCS-5B	1/11/2018 14:22	53.5	43.0	0.0	3.5	141.4	141.4	16.8	16.3	-13.2	-13.3	-13.6
LCS-5B	1/19/2018 9:23	53.8	41.8	0.0	4.4	142.9	142.5	22.4	22.6	-13.5	-13.4	-13.7
LCS-5B	1/19/2018 9:25	54.1	42.0	0.0	3.9	141.9	142.5	20.4	20.8	-13.6	-13.7	-13.7
LCS-5B	1/22/2018 10:26	53.1	42.6	0.0	4.3	143.2	143.2	23.7	23.2	-12.7	-12.7	-12.6
LCS-5B	1/22/2018 10:27	52.7	42.4	0.0	4.9	140.8	141.1	16.8	16.2	-12.7	-12.8	-12.8
LCS-6B	1/4/2018 9:07	55.4	41.5	0.0	3.1	22.5	22.8	12.7	12.7	9.8	9.8	-15.5
LCS-6B	1/4/2018 9:10	55.4	43.2	0.0	1.4	85.6	86.5	10.3	11.4	-9.8	-9.8	-15.5
LCS-6B	1/11/2018 14:42	51.1	39.5	0.0	9.4	111.0	111.0	15.5	16.2	-3.0	-3.0	-13.3
LCS-6B	1/19/2018 10:39	50.6	39.3	0.0	10.1	123.1	123.0	24.4	21.6	-11.8	-11.7	-13.3
LCS-6B	1/22/2018 14:46	49.7	40.8	0.0	9.5	113.0	112.7	4.0	4.0	-2.8	-2.8	-13.1
SEW-002	1/30/2018 14:38	5.4	33.3	10.0	51.3	53.2	53.2	7.7	10.9	-0.3	-0.3	-19.2
SEW-002	1/30/2018 14:38	5.4	33.3	10.0	51.3	53.2	53.2	7.7	10.9	-0.3	-0.3	-19.2
SEW-002	1/30/2018 14:41	5.5	32.7	10.1	51.7	49.8	49.3	8.0	7.9	-0.1	-0.1	-19.2
SEW-002	1/30/2018 14:41	5.5	32.7	10.1	51.7	49.8	49.3	8.0	7.9	-0.1	-0.1	-19.2
T-56	1/4/2018 11:06	31.0	31.5	0.0	37.5	43.5	43.9	14.4	20.6	0.0	0.0	-15.0
T-56	1/12/2018 15:07	21.4	26.9	0.3	51.4	43.0	42.5	21.0	18.3	-0.1	-0.1	-0.2
T-56	1/19/2018 13:46	44.6	33.3	0.0	22.1	47.0	47.0	17.1	15.8	0.0	0.0	-13.3
T-56	1/19/2018 13:48	44.9	33.1	0.0	22.0	46.9	46.8	11.4	12.4	-0.1	-0.1	-13.5
T-56	1/22/2018 15:11	39.2	31.5	0.0	29.3	47.0	47.0	17.7	17.2	0.1	0.1	-12.3
T-56	1/22/2018 15:14	40.0	31.2	0.0	28.8	46.9	46.8	19.3	19.3	-0.1	-0.1	-13.5

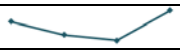
ATTACHMENT E-2

MAXIMUM WELLHEAD TEMPERATURE TABLE

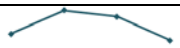
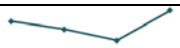
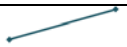
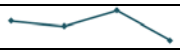
Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2017	November 2017	December 2017	January 2018	><30°F	
GEW-002	121.0	107.1	121.5	115.0		
GEW-003	114.7	111.4	111.5	110.2		
GEW-004	118.1	116.2	117.6	116.3		
GEW-005	91.5	89.4	90.5	88.4		
GEW-006	87.5	86.5	90.3	85.8		
GEW-007	93.6	91.5	85.4	87.7		
GEW-008	111.5	111.7	111.1	111.7		
GEW-009	121.5	121.8	122.4	124.5		
GEW-010	84.9	61.8	63.9	64.4		
GEW-013A	129.7	119.7	117.2	116.3		
GEW-015	156.9	183.1	182.1	166.1		
GEW-016R	183.3	183.3	182.1	180.3		
GEW-018B	181.3	171.0	165.2	163.8		
GEW-022R	102.3	92.5	56.0	79.4		
GEW-038	90.6	71.6	70.2	65.4		
GEW-039	113.7	106.5	100.1	117.6		
GEW-040	79.6	62.8	50.8	62.0		
GEW-041R	104.5	99.9	97.9	97.2		
GEW-042R	107.0	97.9	98.7	108.5		
GEW-043R	119.7	118.4	118.9	117.9		
GEW-044	95.0	85.6	88.0	89.3		
GEW-045R	96.3	87.7	72.6	76.8		
GEW-046R	99.4	97.0	99.6	92.4		
GEW-047R	80.0	103.8	110	109.5		
GEW-048	103.3	100.6	100.8	100.8		
GEW-049	108.7	106.5	106.2	106.3		
GEW-050	106.2	104.3	105.2	105.5		
GEW-051	123.9	122.1	123.7	123.4		
GEW-052	112.0	111.5	112.8	112.0		
GEW-053	134.6	137.1	139.0	139.9		
GEW-054	142.9	143.2	144.2	142.9		
GEW-055	132.0	132.6	135.0	140.9		
GEW-056R	111.0	96.5	88.4	90.3		
GEW-057B	74.1	55.5	64.0	61.4		
GEW-057R	85.6	69.5	61.5	59.9		
GEW-058	84.7	71.8	69.5	52.6		
GEW-058A	85.4	67.5	67.7	51.3		

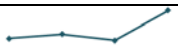
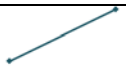
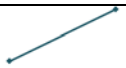
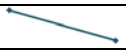
Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2017	November 2017	December 2017	January 2018	><30°F	
GEW-059R	168.5	161.1	157.3	162.1		
GEW-067A	169.5	151.7	94.8	111.5		
GEW-068A	183.3	179.7	173.1	174.2		
GEW-077	--	--	--	91.7		
GEW-078R	169.0	162.4	157.3	160.2		
GEW-081	87.5	80.0	50.4	68.6		
GEW-082R	183.3	177.5	178.6	178.6		
GEW-086	99.4	101.8	72.3	67.7		
GEW-087	169.0	128.6	111.2	136.2		
GEW-088	197.2	190.9	185.7	194.3		
GEW-090	170.1	162.6	152.9	157.7		
GEW-091	199.3	185.7	187.6	96.2		
GEW-100	91.9	57.8	45.2	62.8		
GEW-101	--	81.4	55.2	68.5		
GEW-102	85.6	62.3	36.4	60.2		
GEW-104	173.6	55.2	--	61.2		
GEW-105	81.7	78.9	133.3	--		
GEW-106	76.2	62.3	66.8	54.2		
GEW-107	78.9	62.9	114.3	113.2		
GEW-108	146.3	141.9	142.2	122.6		
GEW-109	92.7	78.4	72.6	105.2		
GEW-110	89.6	70.0	67.5	75.0		
GEW-113	159.4	157.3	155.1	152.9		
GEW-116	190.9	187.0	184.5	174.7		
GEW-117	139.9	132.9	117.6	99.6		
GEW-118	195.0	193.0	194.3	194.3		
GEW-120	158.1	162.9	164.7	164.3		
GEW-121	175.3	174.7	171	176.4		
GEW-122	158.5	157.7	156	160.2		
GEW-123	173.6	187.1	163.5	163.3		
GEW-124	86.3	75.2	48.5	71.0		
GEW-125	181.0	184.5	181.6	174.1		
GEW-126	96.5	86.6	53.4	84.8		
GEW-127	86.8	190.2	177.5	166.1		
GEW-128	181.5	171.0	168.5	169.1		
GEW-129	158.1	146.2	145.2	130.1		
GEW-130	188.9	168.5	178.7	180.0		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2017	November 2017	December 2017	January 2018	><30°F	
GEW-131	170.5	164.4	163.3	165.2		
GEW-132	162	195.7	186.4	152.5		
GEW-133	170	159.4	151.7	61.4		
GEW-134	143.2	129.2	122.9	122.9		
GEW-135	156.5	153.3	154.8	155.6		
GEW-136	111.4	134.8	128.6	101.1		
GEW-137	95.9	79.5	70.8	62.6		
GEW-138	130.0	121.5	103.5	132.1		
GEW-139	181.6	168.5	147.3	147.0		
GEW-140	93.4	75.9	51.8	117.3		
GEW-141	--	--	--	--		
GEW-142	--	76.6	44.2	62.4		
GEW-143	92.9	77.1	44.4	63.5		
GEW-144	--	--	23.2	63.1		
GEW-145	83.3	60.4	36.3	59		
GEW-146	101.6	87.8	86.1	82.6		
GEW-147	185.1	174.2	183.9	183.3		
GEW-148	158.9	51.7	76.0	61.6		
GEW-149	142.5	98.5	118.6	96.0		
GEW-150	140.9	116.0	63.7	149.2		
GEW-151	82.2	122.6	86.8	151.3		
GEW-152	127.4	125.0	122.9	115.3		
GEW-153	89.1	81.5	103.9	61.8		
GEW-154	104.3	88.5	70.9	61.1		
GEW-155	124.3	112.0	92.4	90.8		
GEW-156	102.4	87.2	93.1	80.5		
GEW-157	75.6	68.4	--	60.7		
GEW-158	107.8	96.3	106.9	129.7		
GEW-159	116.8	102.3	72.5	54.0		
GEW-160	156.0	48.8	83.2	51.9		
GEW-161	178.6	47.4	63.6	42.8		
GEW-162	113.2	69.6	64.1	74.6		
GEW-163	165.2	178.7	185.0	192.9		
GEW-164	173.6	167.6	164.8	152.9		
GEW-165	188.3	183.9	183.3	183.9		
GEW-166	196.4	195.7	195.0	192.9		
GEW-167	195.0	191.7	192.9	194.8		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2017	November 2017	December 2017	January 2018	><30°F	
GEW-168	187.0	181.6	178.6	180.9		
GEW-169	195.0	193.6	190.9	186.7		
GEW-170	164.3	168.1	165.7	167.1		
GEW-171	--	--	--	--		
GEW-172	--	80.0	46.1	65.8		
GEW-173	106.7	98.4	86.5	97.4		
GEW-174	--	152.9	144.9	144.5		
GEW-175	127.0	124.4	123.1	116.9		
GEW-176	87.9	69.0	65.6	54.7		
GEW-177	60.2	80.7	50.8	194.3		
GEW-178	--	--	47.3	44.0		
GEW-179	--	--	28.5	38.5		
GEW-180	--	--	29.0	38.6		
GEW-181	--	--	28.7	72.6		Pump installed; well dewatered
GEW-182	--	--	30.6	162.4		Pump installed; well dewatered
GEW-184	--	--	58.0	68.7		
GEW-185	--	--	136.2	151.3		
GEW-186	--	--	42.1	67.7		
GEW-187	--	--	75.9	90.8		
GEW-188	--	--	183.9	63.3		
GEW-1A	83.3	71.1	64.4	63.5		
GEW-2S	87.0	72.8	65.5	62.2		
GIW-01	178.0	173.1	179.7	171.6		
GIW-02	88.2	70.9	67.7	64.9		
GIW-03	82.9	65.8	65.7	60.3		
GIW-04	85.6	69.5	66.2	64.2		
GIW-05	87.0	70.4	67.4	63.0		
GIW-06	89.0	73.4	69.3	62.6		
GIW-07	90.9	78.0	70.2	63.5		
GIW-08	92.0	74.5	71.6	66.8		
GIW-09	90.6	73.8	70.7	65.0		
GIW-10	86.3	72.5	67.7	64.9		
GIW-11	85.3	67.9	68.1	65.4		
GIW-12	81.0	60.1	64.5	63.7		
GIW-13	86.2	65.0	63.8	65.1		
LCS-1D	87.5	69.8	64.5	75.2		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	October 2017	November 2017	December 2017	January 2018	><30°F	
LCS-2D	--	--	--	--		
LCS-4B	--	--	--	--		
LCS-5A	92.0	84.1	82.4	82.6		
LCS-6B	113.0	104.2	148.0	123.1		
PGW-60	90.8	83.7	100.9	--		
SEW-002	98.9	111.7	57.3	53.2		
T-56	78.5	60.7	55.7	47.0		

-- = Indicates no data available.

ATTACHMENT F

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	1,424,088.17	
6	0.00	1.00	109,870.42	

LEGEND

- 12-2-2016 TOPOGRAPHY (2' CONTOUR)
- 500 — 12-2-2016 TOPOGRAPHY (10' CONTOUR)
- .25 — MINOR ELEVATION CHANGE CONTOUR (0.25 FEET)
- .50 — MAJOR ELEVATION CHANGE CONTOUR (0.50 FEET)
- -.03 — SPOT ELEVATION DIFFERENCE (TO 12-15-2017 to 1-15-2018)
- 1–2018 — *SETTLEMENT FRONT CONTOUR FOR AREA WITH 1.39' PER 31 DAYS FOR CURRENT PERIOD OF DAYS

*NONE FOR JANUARY 2018

NOTES:

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS CO. ON DECEMBER 1, 2017.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. ELEVATION DIFFERENCE DETERMINED BY SUBTRACTING SPOT ELEVATIONS SURVEYED ON 12-15-17 FROM SPOT ELEVATIONS SURVEYED ON 1-15-18.
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.

0 200 400 Feet

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

BRIDGETON LANDFILL
SETTLEMENT MONITORING

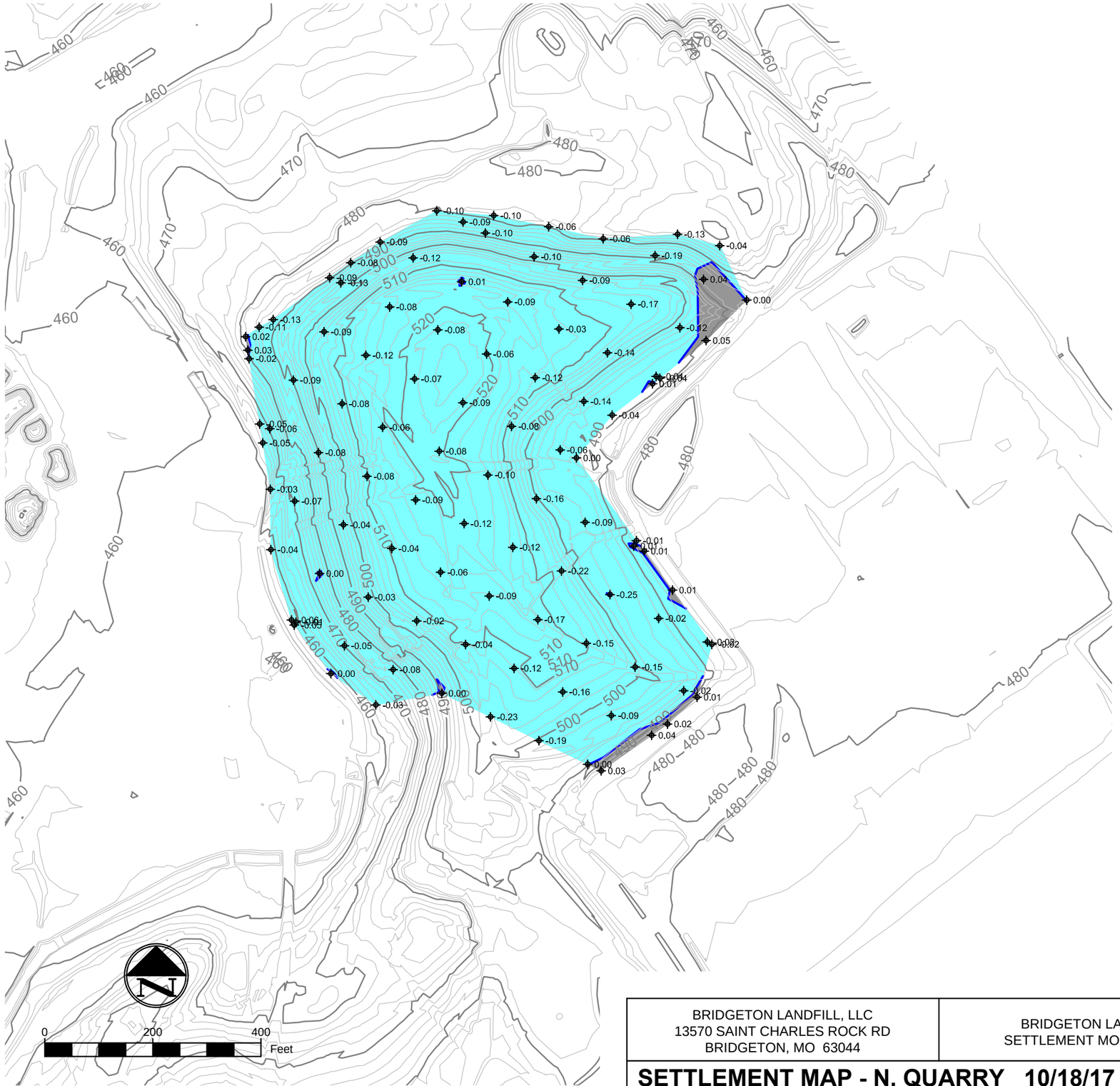
SETTLEMENT MAP 12/15/17 - 1/15/2018

PROJECT NUMBER: BT-145 | FILE PATH: C:\Users\plimt\Dropbox (Feezor Engineering)\BT-145 Agreed Order Reporting\Monthly Reports\2018-01 Report\Interval Draft\Draft Site Data\Settlement\3_deliverables\Settlement And Fill 1-15-18 ((3d2018).dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

JANUARY 2018	
DESIGNED BY: PML	
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	628,445.81	
6	0.00	1.00	13,821.61	

LEGEND

- 12-2-2016 TOPOGRAPHY (2' CONTOUR)
- 500 — 12-2-2016 TOPOGRAPHY (10' CONTOUR)
- .25 — MINOR ELEVATION CHANGE CONTOUR (0.25 FEET)
- .50 — MAJOR ELEVATION CHANGE CONTOUR (0.50 FEET)
- -.03 — SPOT ELEVATION DIFFERENCE (10-18-2017 to 1-15-2018)
- *1–2018* — *SETTLEMENT FRONT CONTOUR FOR AREA WITH 4.00' PER 89 DAYS FOR CURRENT PERIOD OF DAYS

*NONE FOR 10-18-2017 THROUGH 1-15-2018

NOTES:

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS CO. ON DECEMBER 1, 2017.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. ELEVATION DIFFERENCE DETERMINED BY SUBTRACTING SPOT ELEVATIONS SURVEYED ON 10-18-17 FROM SPOT ELEVATIONS SURVEYED ON 1-15-18.
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

SETTLEMENT MAP - N. QUARRY 10/18/17 - 1/15/2018

PROJECT NUMBER: BT-145 | FILE PATH: C:\Users\plimt\Dropbox (Feezor Engineering)\BT-145 Agreed Order Reporting\Quarterly Settlement\3_deliverables\NQ Settlement And Fill 1-15-18 (c3d2018).dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

JANUARY 2018
DESIGNED BY: PML
APPROVED BY: DRF

REVISION	DATE

DRAWING NO.: 003

ATTACHMENT G

SUMMARY OF ODOR COMPLAINTS

January 1, 2017 – January 31, 2017 / MDNR ODOR COMPLAINTS

Name: N/A

Message: No date, time, or odor strength was provided.

Follow-up: No information was provided in this odor concern received on January 4, 2018, therefore Bridgeton Landfill staff could not investigate.

ATTACHMENT H

LIQUID CHARACTERIZATION DATA AND DISCHARGE LOG

Bridgeton Landfill - Leachate PreTreatment Plant

January 2018

Liquid Characterization Data

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

Hauled Disposal to MSD – Bissell Point

Date	Waste	Source	Transporter	Quantity
1/1/2018	LPTP Activated Sludge/ Permeate	Tank 1 (T1)	MBI	0
1/2/2018				0
1/3/2018				0
1/4/2018				0
1/5/2018				0
1/6/2018				0
1/7/2018				0
1/8/2018				0
1/9/2018				0
1/10/2018				0
1/11/2018				0
1/12/2018				0
1/13/2018				0
1/14/2018				0
1/15/2018				0
1/16/2018				0
1/17/2018				0
1/18/2018				0
1/19/2018				0
1/20/2018				0
1/21/2018				0
1/22/2018				0
1/23/2018				0
1/24/2018				0
1/25/2018				0
1/26/2018				0
1/27/2018				0
1/28/2018				0
1/29/2018				0
1/30/2018				0
1/31/2018				0
			Total	**0**

Direct Discharge to MSD

Date	Waste	Source	Quantity (gal)
1/1/2018	LPTP Permeate	Through Tank AST 97k (MSD Sampling Point 013)	69,832
1/2/2018			66,960
1/3/2018			64,468
1/4/2018			60,424
1/5/2018			58,084
1/6/2018			54,264
1/7/2018			52,124
1/8/2018			67,232
1/9/2018			60,704
1/10/2018			53,644
1/11/2018			86,728
1/12/2018			119,600
1/13/2018			115,700
1/14/2018			121,004
1/15/2018			125,180
1/16/2018			117,512
1/17/2018			85,496
1/18/2018			74,510
1/19/2018			43,498
1/20/2018			64,008
1/21/2018			66,516
1/22/2018			83,256
1/23/2018			74,704
1/24/2018			72,440
1/25/2018			68,424
1/26/2018			59,608
1/27/2018			59,544
1/28/2018			75,428
1/29/2018			69,688
1/30/2018			77,640
1/31/2018			167,724
		Total	**2,435,944**

ATTACHMENT I

LOW FILL PROJECT AREA

ATTACHMENT I-1

LOW FILL AREA BOUNDARY

LEGEND

BOUNDARY OF FILL AREA FOR 12-15-2017 THROUGH 1-15-2018

NOTES:

1. SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS CO. ON DECEMBER 1, 2017.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. SURVEY POINTS WERE PERFORMED USING GPS METHODS.

N

0 350 700 Feet

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

BRIDGETON LANDFILL
SETTLEMENT MONITORING

LOW FILL AREA BOUNDARY 12/15/2017 - 1/15/2018

PROJECT NUMBER: BT-145

FILE PATH: C:\Users\plinn\Dropbox (Feezor Engineering)\BT-145 Agreed Order Reporting\Monthly Reports\2018-01 Report\Internal Draft\Draft Site Date\Settlement\3_deliverables\Settlement And Fill 1-15-18 (c3d2018).dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

JANUARY 2018
DESIGNED BY: PML
APPROVED BY: DRF

REVISION	DATE

DRAWING NO.:
002