Bridgeton Landfill, LLC

Monthly Data Submittals

March 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

April 20, 2018

Commentary on Data

April 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 335 SCFM from the North Quarry and 1,053 SCFM from the South Quarry, for a total site flow of 1,388 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 55 GEW wells that are experiencing low or restricted flows, and five (5) GIW wells that have low gas flow due to the cooling loops that are installed within these wells. By the end of the month, 49 of the GEW wells and 5 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 are 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.

- Attachment E-2 contains gas temperatures as measured at the wellheads. Fifteen (15) vertical wells (excluding GIW wells) increased by 30°F during this reporting period. Additionally, three (3) vertical wells (excluding GIW wells) decreased by 30°F or more. All wells that exhibited changes greater than 30°F are within the historical gas temperature norms for these wells or within the range of temperatures of nearby vertical wells.

- All gas wells in the North Quarry during this reporting period exhibited a maximum wellhead temperature under 145°F. Carbon monoxide (CO) results were non-detect (ND) for North Quarry wells, with the exception of GEW-053 (55 ppm), consistent with past events.

- Site personnel have been performing a comprehensive wellfield investigation to optimize landfill gas collection and control (GCCS). Wells that have been previously decommissioned due to excessive moisture and/or dangerous conditions have been reviewed and monitored to determine if the wells have obstructions that would prohibit pump installation and would therefore preclude leachate and landfill gas collection. Wells that have been identified to have downhole integrity issues will be scheduled for abandonment during the upcoming GCCS system expansion event. Wells that have been identified not to have downhole integrity issues and are no longer

presenting with excessive moisture and/or dangerous conditions have been brought back online. Wells that have been identified not to have downhole integrity issues but still present with excessive moisture and/or dangerous conditions will remain decommissioned until conditions at the location improve. Additional summa samples were collected and results analyzed to optimize the GCCS during the upcoming drilling event. This investigation will continue through Second Quarter 2018, and wellfield expansion and abandonment activities will be reported in the quarterly Landfill Gas Corrective Action Update.

Settlement

- The South Quarry exhibited monthly maximum settlement up to 1.18 feet over 27 days for this reporting period (see Attachment F). While the maximum settlement in the South Quarry is higher than recent measurements, the overall average settlement across the South Quarry has remained typical with the last several months. This specific settlement measurement (1.18 feet) occurred on the newly placed fill project, and most likely the increased maximum settlement is due to the consolidation of the waste from the overburden weight of the soil fill.

Bird Monitoring and Mitigation

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

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 2017 and continued until January 15th 2018.

ATTACHMENT A

WORK COMPLETED AND PLANNED

Bridgeton Landfill, LLC
Monthly Summary of Work Completed and Planned

Work Completed in March 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 construction of alternative first responder entrance, dependent on suitable weather conditions and contractor availability.

Work Planned for April 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.
- Begin installation of HES redundancies.

Leachate Management System

- Continue routine operation of previously installed and upgraded features.
- Perform replacement of LCS-1D pump and transducer.
- Perform replacement of LCS-6B pump.

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:

- 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
March 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***	
3/1/2018	0	1,088	0	290	1,378
3/2/2018	0	1,168	0	294	1,462
3/3/2018	0	1,182	0	294	1,476
3/4/2018	0	1,175	0	294	1,470
3/5/2018	0	1,144	0	290	1,434
3/6/2018	60	1,021	0	325	1,406
3/7/2018	0	1,009	0	354	1,363
3/8/2018	0	1,031	0	352	1,383
3/9/2018	0	1,048	0	354	1,403
3/10/2018	0	1,034	0	349	1,384
3/11/2018	0	1,015	0	349	1,364
3/12/2018	0	1,006	0	352	1,358
3/13/2018	0	1,042	0	350	1,391
3/14/2018	23	909	0	357	1,298
3/15/2018	0	1,093	0	363	1,455
3/16/2018	0	1,071	0	354	1,425
3/17/2018	0	1,016	0	354	1,369
3/18/2018	0	1,004	0	357	1,361
3/19/2018	0	1,003	0	357	1,360
3/20/2018	0	997	0	351	1,349
3/21/2018	0	1,007	0	348	1,355
3/22/2018	0	1,046	0	349	1,394
3/23/2018	0	1,048	0	341	1,390
3/24/2018	0	1,023	0	337	1,359
3/25/2018	0	1,013	0	335	1,348
3/26/2018	0	1,032	0	335	1,367
3/27/2018	0	1,039	0	327	1,366
3/28/2018	0	1,037	0	326	1,363
3/29/2018	0	1,073	0	318	1,391
3/30/2018	0	1,087	0	316	1,403
3/31/2018	0	1,090	0	316	1,407
AVERAGE	**3**	**1,050**	**0**	**335**	**1,388**

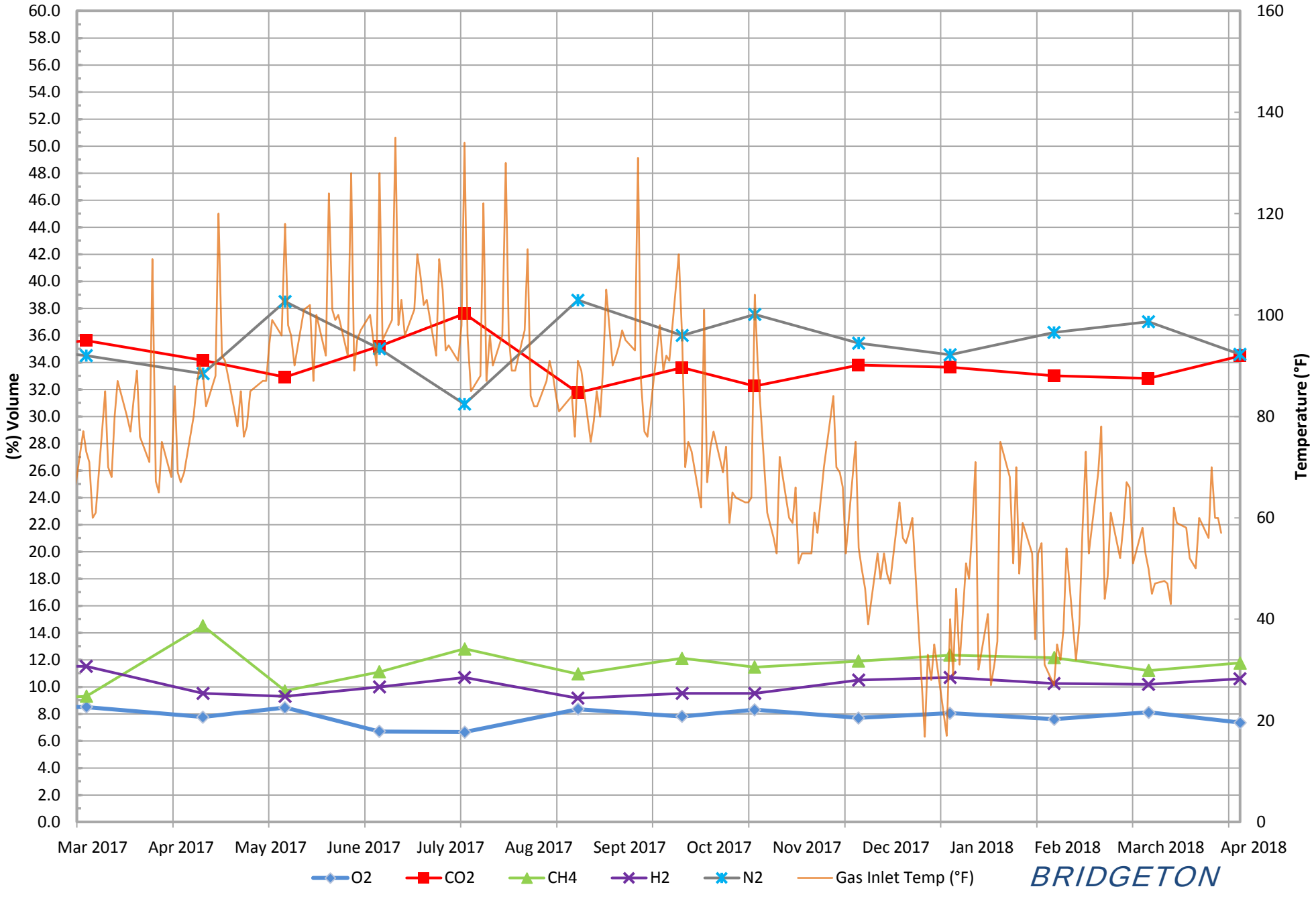
* Flows normalized to **Blower Outlet Flowmeter - EPA Method 2 measurement verified

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

ATTACHMENT B-2

FLOW DATA GRAPHS

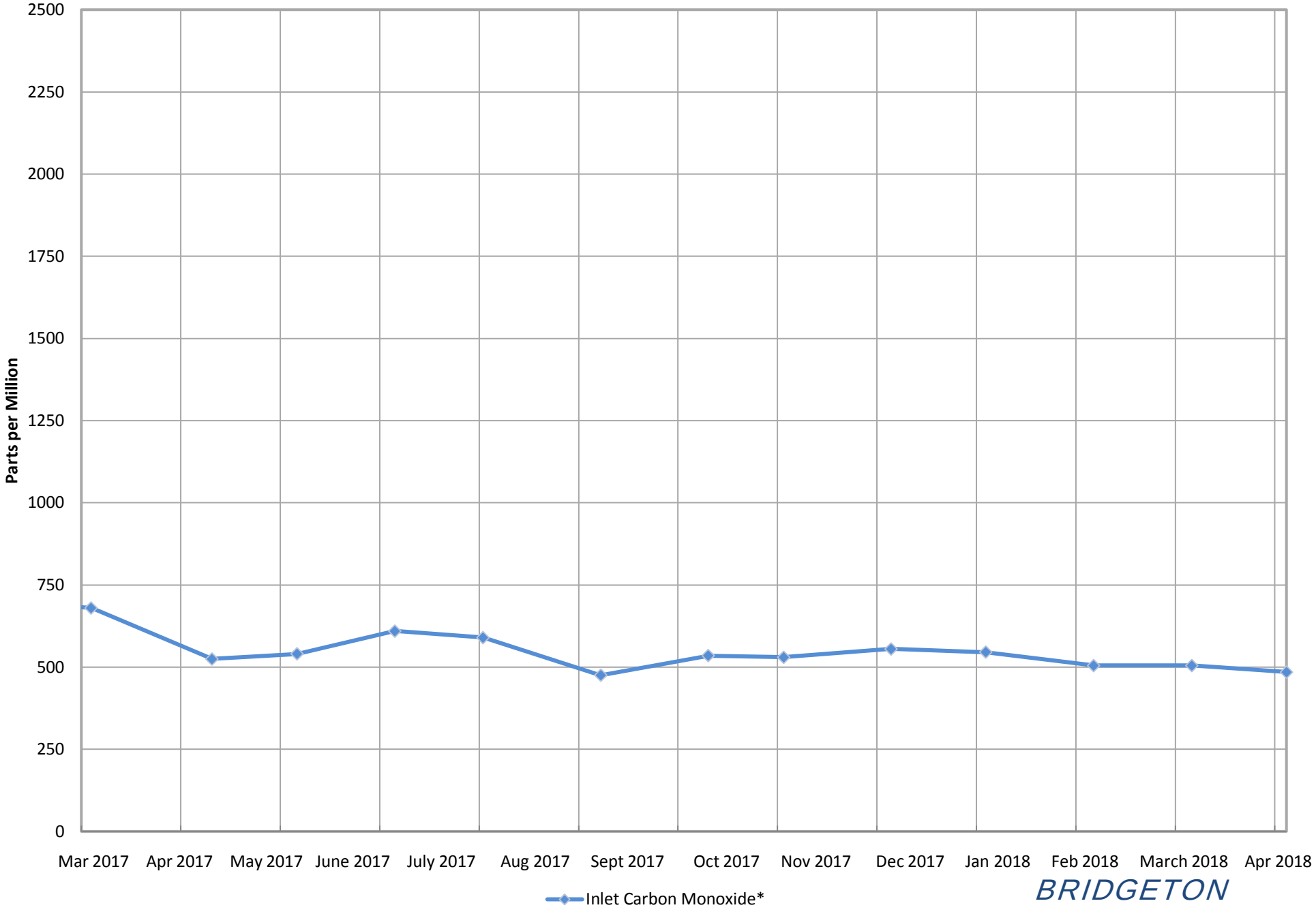
South Quarry Inlet Gas and Temperature*



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

BRIDGETON LANDFILL

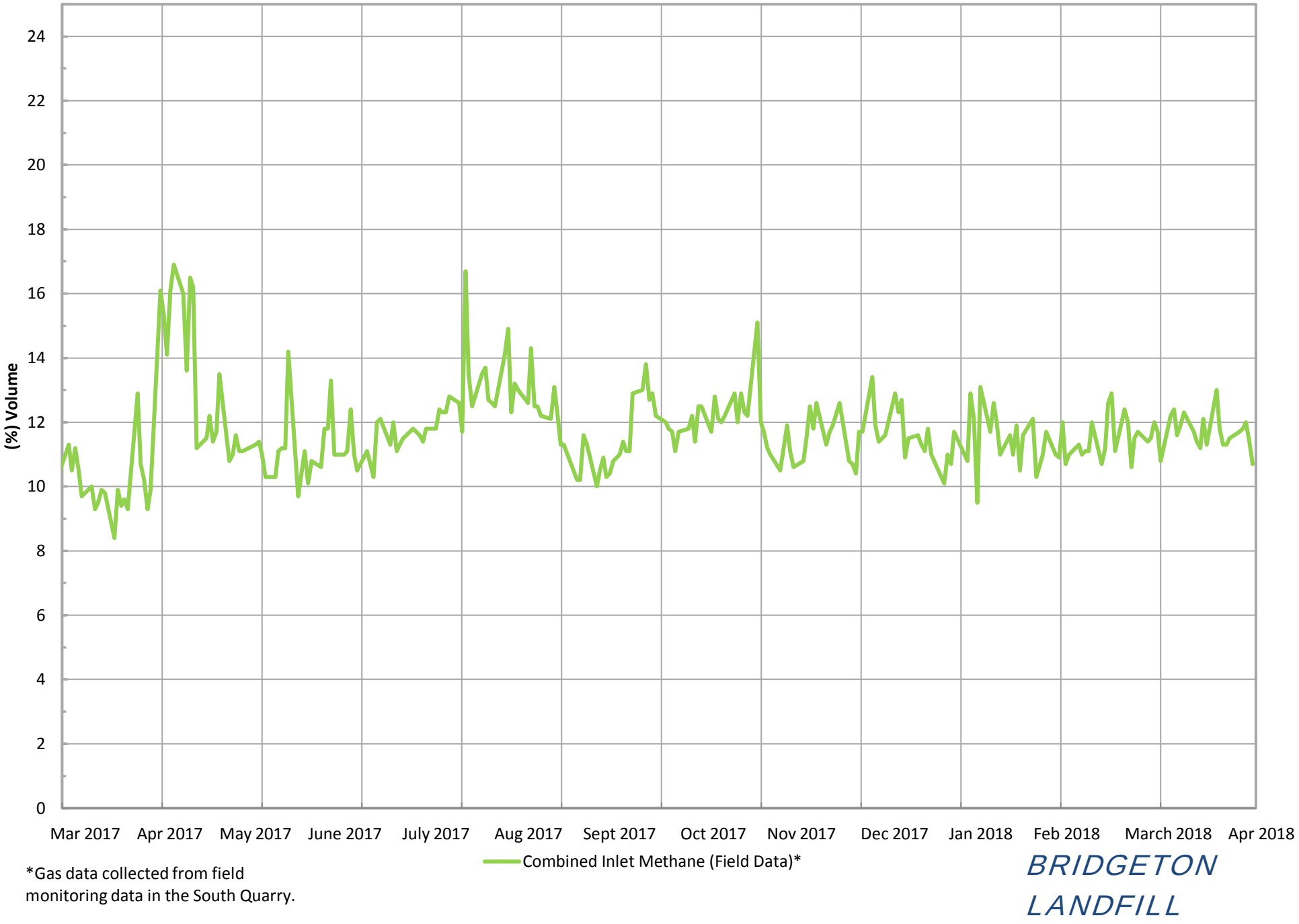
South Quarry Inlet Carbon Monoxide*



*Data collected from Laboratory Reports for the South Quarry.

BRIDGETON LANDFILL

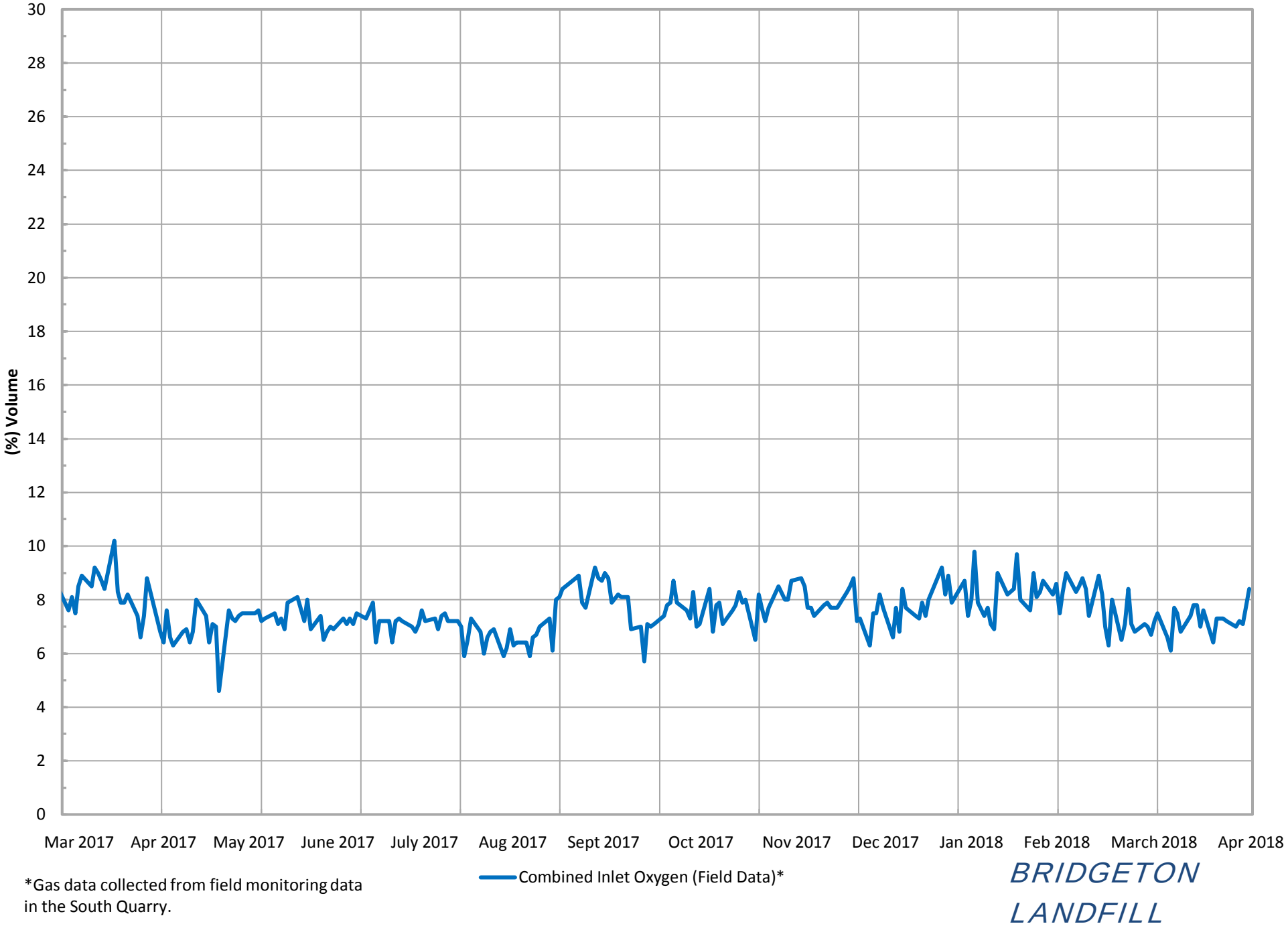
South Quarry Inlet Methane (Field Data)*



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

BRIDGETON LANDFILL

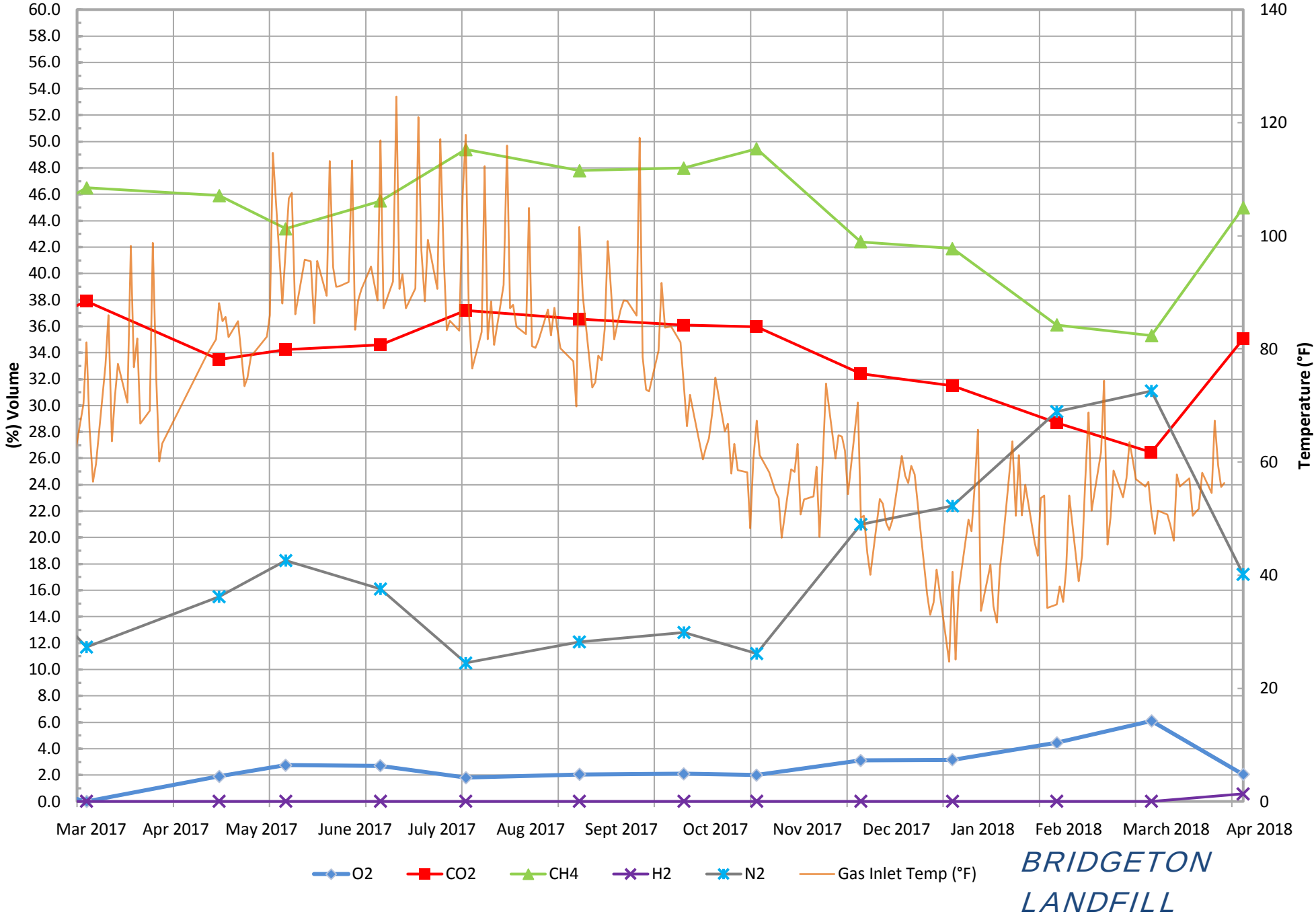
South Quarry Inlet Oxygen (Field Data)*



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

BRIDGETON LANDFILL

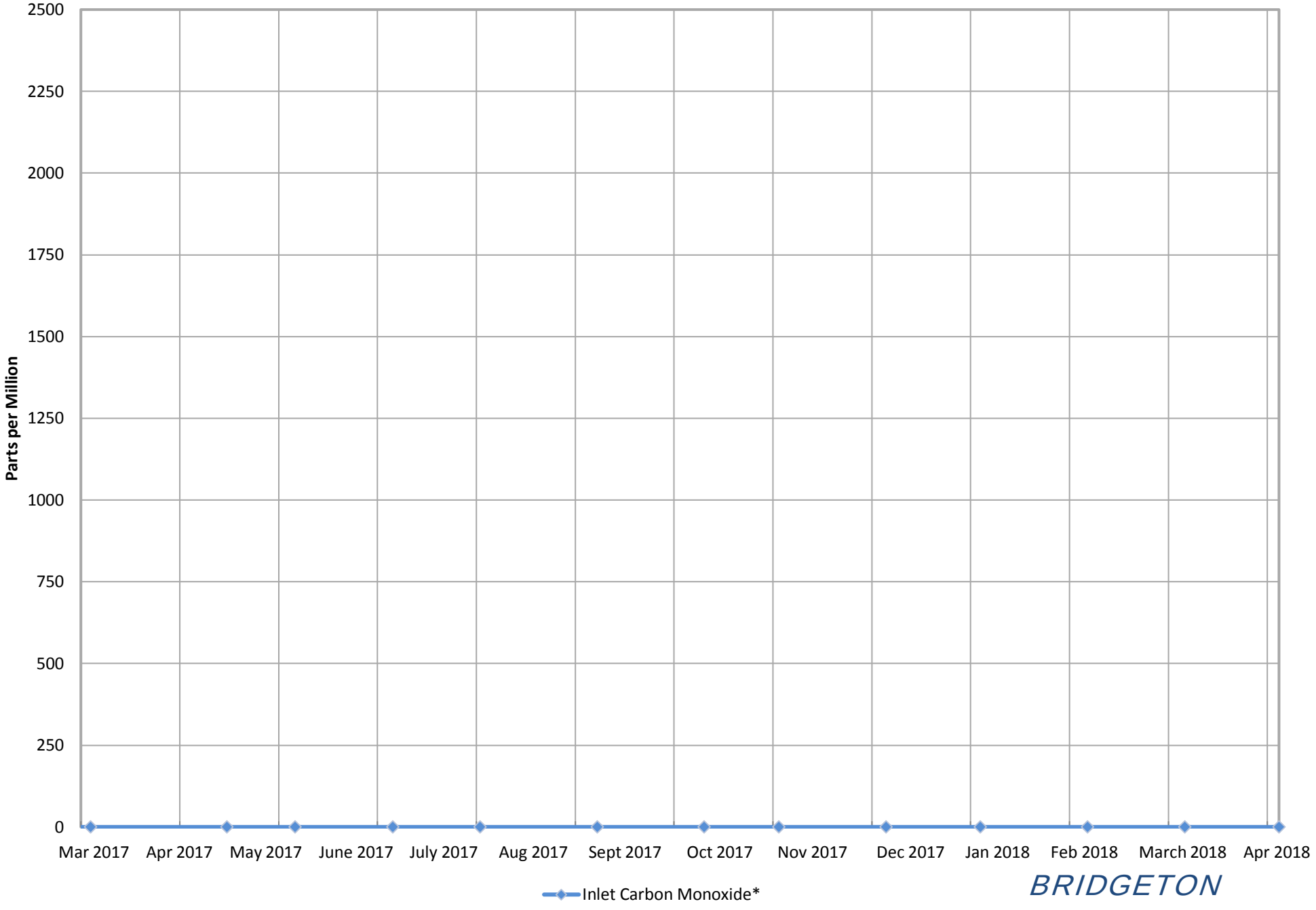
North Quarry Inlet Gas and Temperature*



BRIDGETON LANDFILL

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

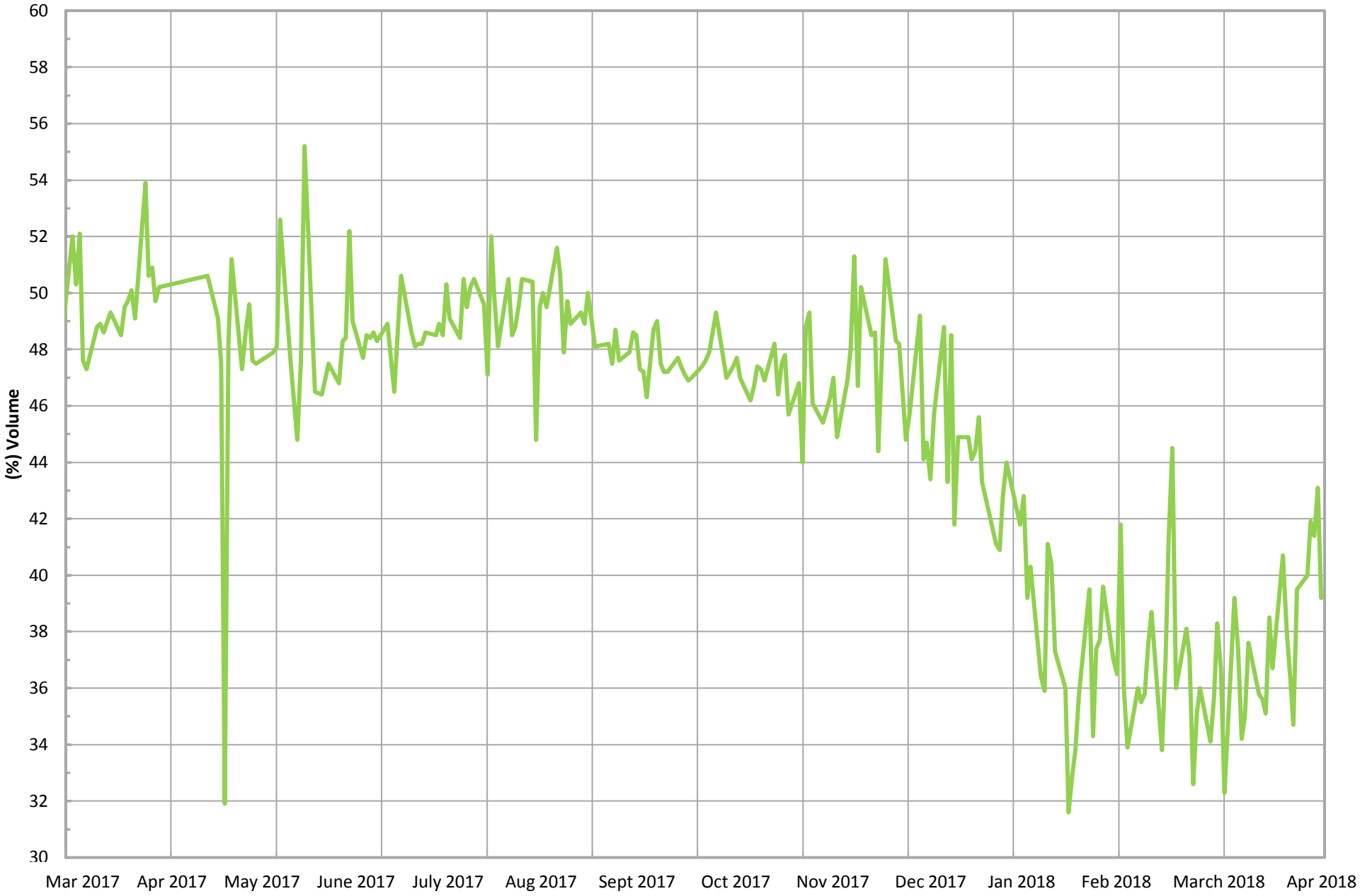
North Quarry Inlet Carbon Monoxide*



*Data collected from Laboratory Reports for the North Quarry.

BRIDGETON LANDFILL

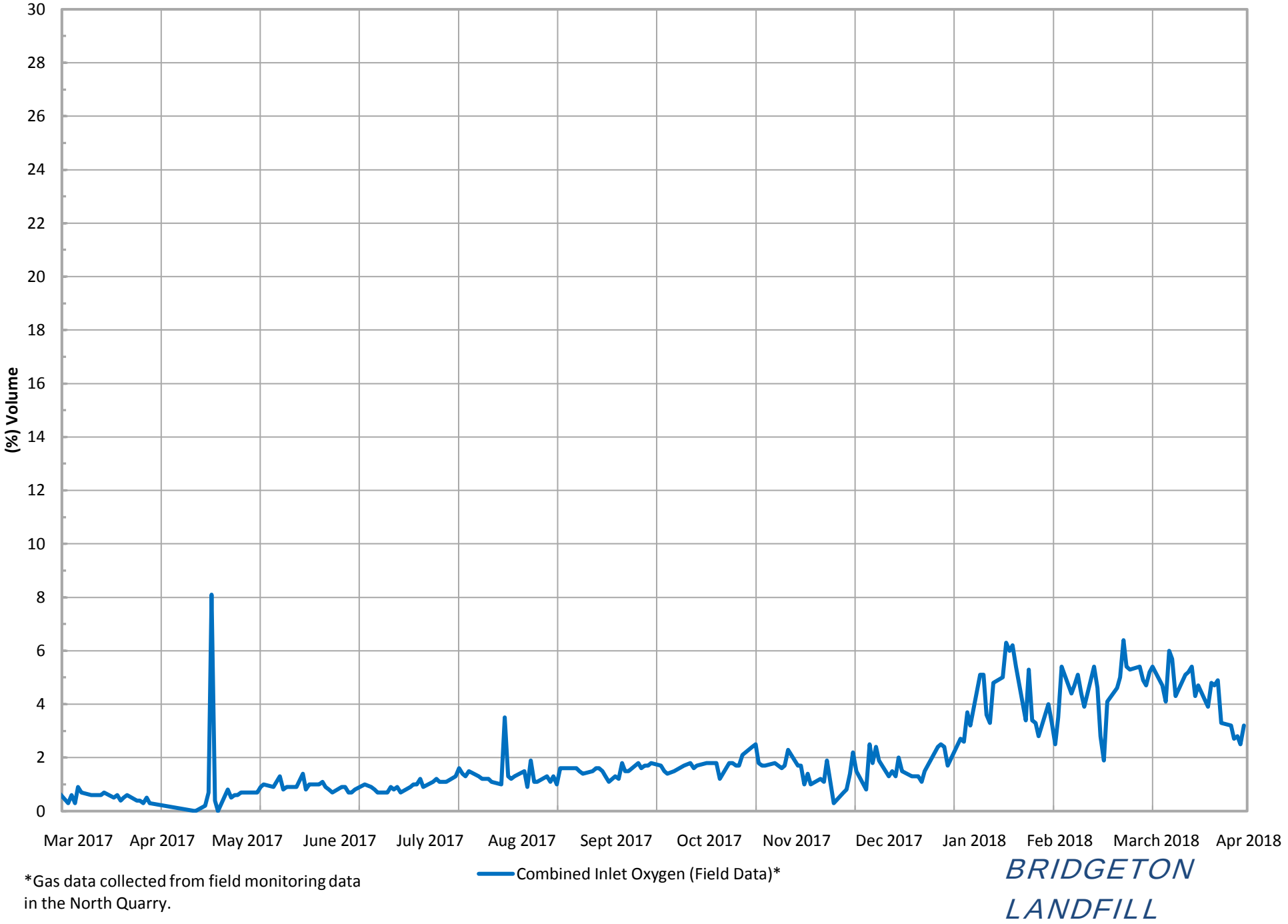
North Quarry Inlet Methane (Field Data)*



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

BRIDGETON LANDFILL

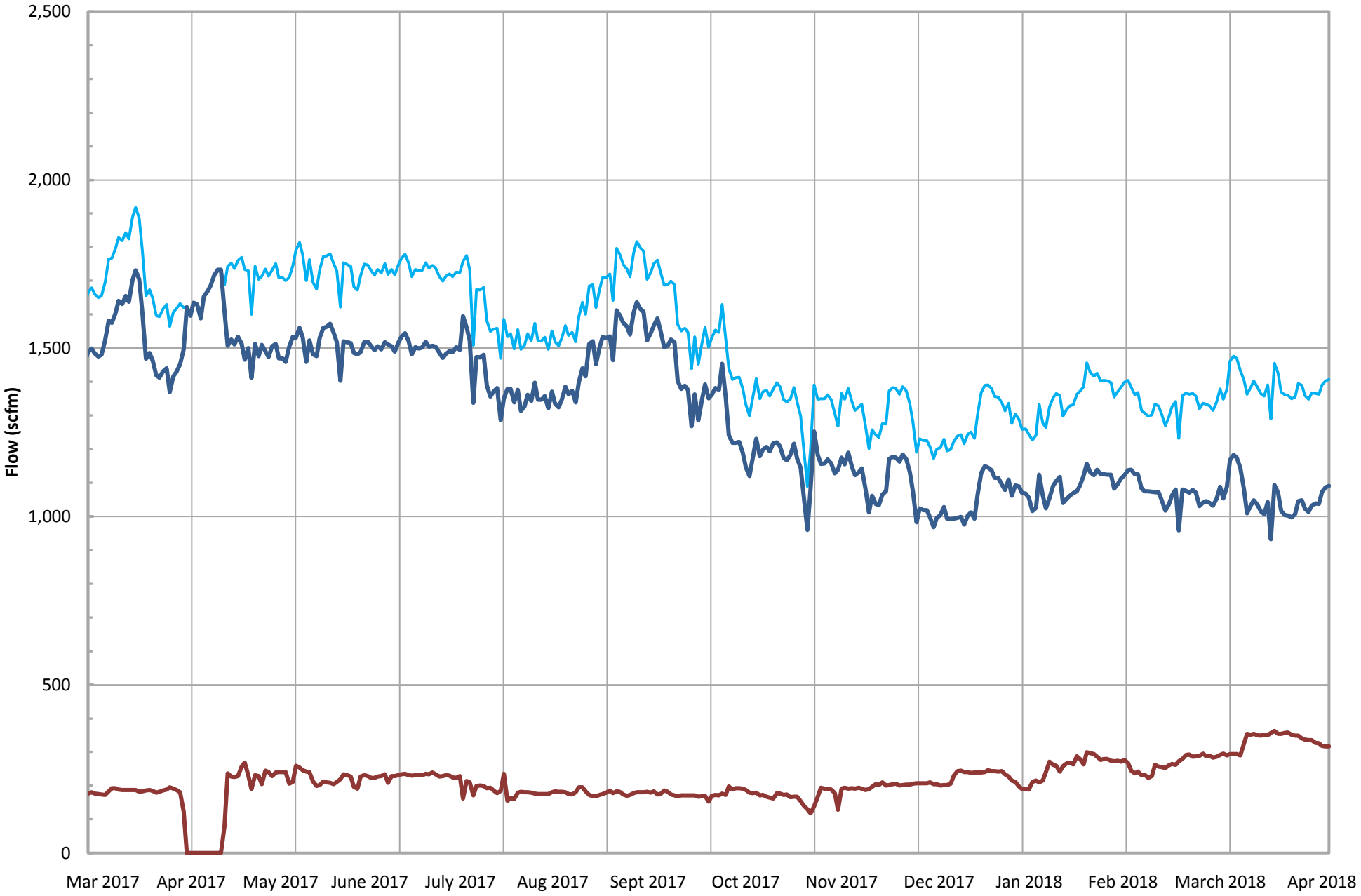
North Quarry Inlet Oxygen (Field Data)*



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

BRIDGETON LANDFILL

Total Combined Flow (scfm)*

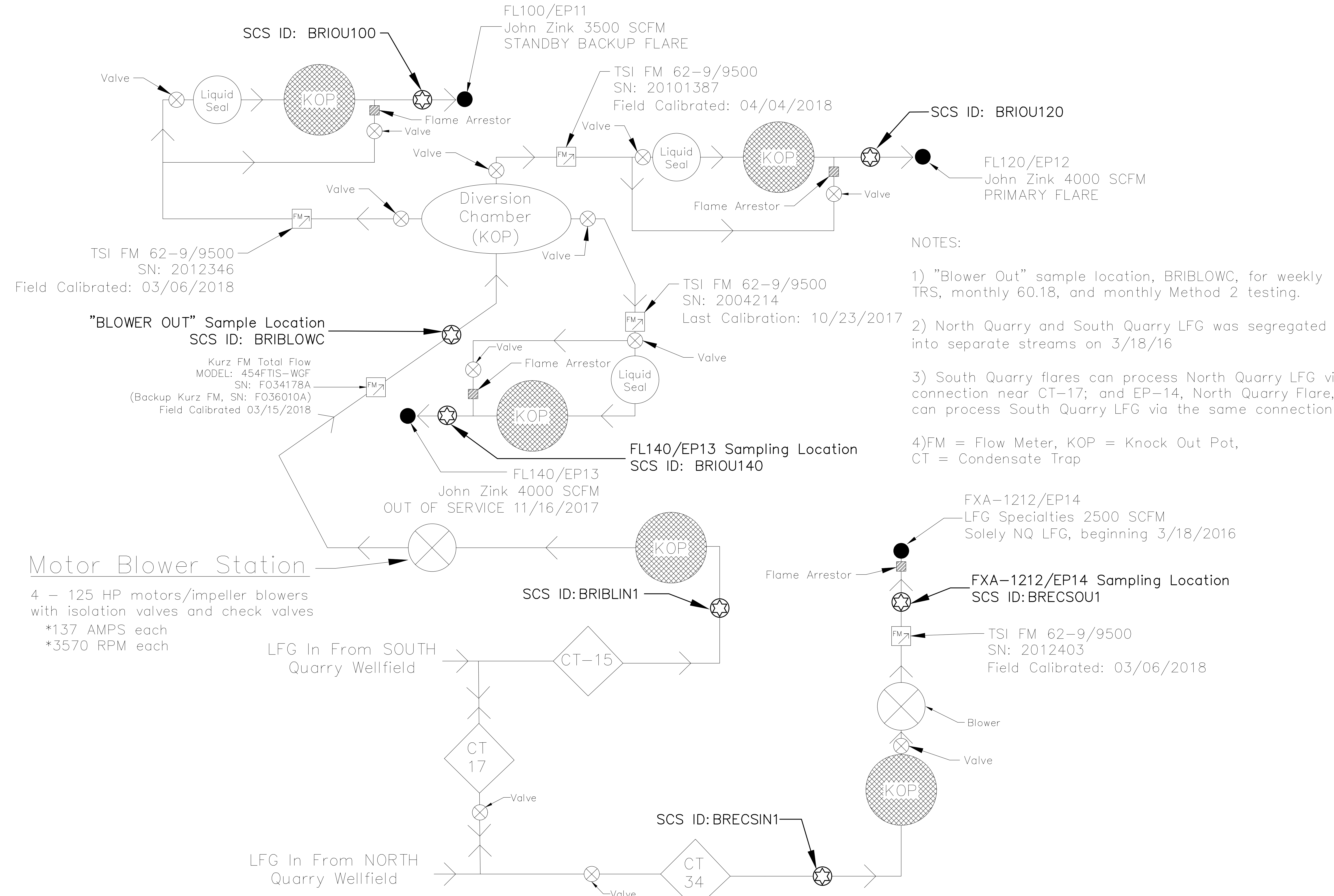


*Combined flow is based on tabulated flow data collected daily from FL-100, FL-120, FL-140, and the Auxillary Candlestick Flare.

BRIDGETON LANDFILL

ATTACHMENT B-3

FLARE TRS / FLARE STATION FLOW



NOTES:

1) "Blower Out" sample location, BRIBLOWC, for weekly TRS, monthly 60.18, and monthly Method 2 testing.

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

3) South Quarry flares can process North Quarry LFG via connection near CT-17; and EP-14, North Quarry Flare, can process South Quarry LFG via the same connection.

4)FM = Flow Meter, KOP = Knock Out Pot, CT = Condensate Trap

PREPARED FOR:
BRIDGETON LANDFILL, LLC

FIGURE 1 - NORTH & SOUTH QUARRY GCCS FLARE PROCESS FLOE DIAGRAM
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MISSOURI

No.	DATE	REVISION DESCRIPTION
1	9/19/2016	EP-08 Removed, shown only to represent SQ LFG flow
2	3/1/2018	Add FM data, SQ/NQ connection, and update flare status
3	4/19/2018	Add valves, flame arrestors, CT-15 name change. Remove a KOP.

Weaver Consultants Group
WEAVER CONSULTANTS GROUP
6301 EAST HWY AB
COLUMBIA, MISSOURI 65201
(636)-431-3399
www.wcgrp.com

DRAWN BY: DT
REVIEWED BY: DAR
DATE: 03/02/2018
FILE: 0120-131-10
CAD: 2018-04-19 Figure 1 - Flow Diagram.dwg

SHEET 1 OF 1

TABLE 1 **Bridgeton Landfill, LLC.**

Summary of Key LFG Tested Parameters **March 07, 2018 to April 05, 2018**

Flare Compound: Blower Outlet

SAMPLE EVENT #	DATE	VELOCITY ft/sec	FLOW dscfm	TRS ppm_{vd}
[3]161-14	4/5/2018	12.93	1047	1200
				1300
[2]160-13	3/27/2018	12.37	1002	1100
				1200
[2]159-12	3/20/2018	11.94	967	1200
				1200
[2]158-11	3/13/2018	11.69	947	1500
				1400
[1]157-10	3/7/2018	11.23	958	1400
				1500

Notes:

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

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

[3]This sampling event is for "monthly" sampling with EPA Method 2C analysis for flow. For this event the data logger had error in recording accuarte differential pressure measurements. As such, the calibrated Kurz flow meter results utilized for flow determination.

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 161-14
04/05/2018

Kurz FM =	**1,102**	**scfm**	
Fleetzoom Total =	**1,162**	**scfm**	**Δ = 5.1%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
This MONTHLY sampling, Method 2 data logger error, flow per calibrated KURZ flow meter			
Date	Test Date	4/5/18	4/5/18
Time	Start	12:55	13:22
***%CH_4**	Methane, %	11.7	11.8
***%CO_2**	Carbon Dioxide, %	34.3	34.6
***'%O_2**	Oxygen, %	7.4	7.3
***%Balance**	Assumed as Nitrogen, %	34.7	34.5
P_g	Flue Gas Static Pressure, inches of H_2O	15.6	16.0
t_s	Blower Outlet LFG Temperature, °F	77.0	80.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	1,047	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	1,102	
LFG_{CH4}	Methane, lb/hr	306.1	308.7
	Methane, grains/dscf	34.11	34.40
LFG_{CO2}	Carbon Dioxide, lb/hr	2,461.9	2,483.4
	Carbon Dioxide, grains/dscf	274.33	276.73
LFG_{O2}	Oxygen, lb/hr	386.2	381.0
	Oxygen, grains/dscf	43.03	42.45
LFG_{N2}	Balance gas as Nitrogen, lb/hr	1,585.3	1,576.2
	Balance gas as Nitrogen, grains/dscf	176.66	175.64

** 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	1.0	25
	Hydrogen Sulfide Rate, lb/hr	0.01	0.14
	Hydrogen Sulfide Rate, grains/dscf	0.001	0.015
COS	Carbonyl Sulfide Concentration, ppmd	0.56	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	180
	Methyl Mercaptan Rate, lb/hr	1.26	1.41
	Methyl Mercaptan Rate, grains/dscf	0.140	0.157
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.7	2.1
	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	890	910
	Dimethyl Sulfide Rate, lb/hr	9.02	9.22
	Dimethyl Sulfide Rate, grains/dscf	1.005	1.028
CS_2	Carbon Disulfide Concentration, ppmd	0.56	0.59
	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	87	73
	Dimethyl Disulfide Rate, lb/hr	1.34	1.12
	Dimethyl Disulfide Rate, grains/dscf	0.149	0.125
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,200	1,300
	TRS-->SO2 Emission Rate, lb/hr	12.54	13.58
	TRS-->SO2 Emission Rate, grains/dscf	1.397	1.514
	TPY =	54.92	59.49

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 107-14
04/05/2018

Fleetzoom Total = 325 scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
This MONTHLY sampling, Method 2 data logger error, flow per calibrated TSI flow meter			
Date	Test Date	4/5/18	4/5/18
Time	Start	14:47	15:15
***%CH_4**	Methane, %	45.1	44.9
***%CO_2**	Carbon Dioxide, %	35.9	34.2
***'%O_2**	Oxygen, %	1.8	2.3
***%Balance**	Assumed as Nitrogen, %	16.5	17.9
P_g	Flue Gas Static Pressure, inches of H_2O	1.05	1.15
t_s	Blower Outlet LFG Temperature, °F	80.3	83.1
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	309	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	325	
LFG_{CH4}	Methane, lb/hr	347.7	346.2
	Methane, grains/dscf	131.49	130.90
LFG_{CO2}	Carbon Dioxide, lb/hr	759.4	723.4
	Carbon Dioxide, grains/dscf	287.13	273.53
LFG_{O2}	Oxygen, lb/hr	27.7	35.4
	Oxygen, grains/dscf	10.47	13.38
LFG_{N2}	Balance gas as Nitrogen, lb/hr	222.2	241.0
	Balance gas as Nitrogen, grains/dscf	84.00	91.13

** 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	29
	Hydrogen Sulfide Rate, lb/hr	0.05	0.05
	Hydrogen Sulfide Rate, grains/dscf	0.018	0.018
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboyl 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	3.5
	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	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	0.59	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	44	45
	TRS-->SO2 Emission Rate, lb/hr	0.14	0.14
	TRS-->SO2 Emission Rate, grains/dscf	0.051	0.052
	TPY =	0.59	0.61

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

Thursday, April 12, 2018

Method 2 Test Verification for FM Accuracy per monthly test 04/05/2018

LOCATION	TIME		FLOW -SCFM			Method 2 vs. Fleetzoom	Method 2 vs Kurz	Kurz vs Fleetzoom
	Start	Stop	Method 2	FleetZoom	Kurz FM			
BLOWER OUT	8:21	9:51	1,147	1,162	1,097	-1.3%	4.4%	-5.9%

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

Thursday, April 12, 2018

Method 2 Test Verification for FM Accuracy per monthly test 04/05/2018					
LOCATION	TIME		FLOW -SCFM		Method 2 vs. Fleetzoom
	Strat	Stop	Method 2	FleetZoom	
EP14 NQ LFG	13:19	14:49	303	315	-4.2%

AirTECHNOLOGY
Laboratories, Inc.

April 11, 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: J040603-01/04

Enclosed are results for sample(s) received 4/06/18 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 TNI 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 4/10/18.

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: 5 day ☐

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.: 6605567
Bill to: Republic Services
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 15/16, TRS ~~ASTM D5504-12~~ as per Akmutis 4/6/18	ASTM 1946 + H2 + CO & Btu/SCF		ASTM 1946 + H2 + CO & Btu/SCF (by CH4 only)		
	Canister ID	Sample Start	Sample End	Lab Receive												
J040603-01	1297	-19.89	-3.48	-4	NQ EP14 A	4/5/2018	14:47	C-6L	LFG	He	X			X		
-02	7131	-20.1	-3.49	-4	NQ EP14 B	4/5/2018	15:15	C-6L	LFG	He	X			X		
-03	1302	-20.24	-3.49	-3	Blower Outlet A	4/5/2018	12:55	C-6L	LFG	He	X	X				
-04	1296	-20.23	-3.49	-4	Blower Outlet B	4/5/2018	13:22	C-6L	LFG	He	X	X				

AUTHORIZATION TO PERFORM WORK: Dave Penoyer — COMPANY: Republic Services — DATE/TIME:
SAMPLED BY: Anthony Kimutis — COMPANY: Republic Services — DATE/TIME 4/5/18 12:55:15:34
RELINQUISHED BY — DATE/TIME 4/5/18 — RECEIVED BY — DATE/TIME
RELINQUISHED BY — DATE/TIME — RECEIVED BY — DATE/TIME 4/6/18 1322
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 - 5/7/04*

Client: Republic Services Inc.
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/06/18
Matrix: Air
Reporting Units: ppmv

EPA Methods 15/16

Lab No.:	J040603-01		J040603-02		J040603-03		J040603-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	4/5/18 14:47		4/5/18 15:15		4/5/18 12:55		4/5/18 13:22	
Date/Time Analyzed:	4/9/18 9:44		4/9/18 9:56		4/9/18 10:09		4/9/18 10:22	
QC Batch No.:	180409GC3A1		180409GC3A1		180409GC3A1		180409GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		2.8		3.0	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	29	0.59	29	0.59	1.0	0.56	25	0.59
Carbonyl Sulfide	ND	0.59	ND	0.59	ND	0.56	ND	0.59
Methyl Mercaptan	3.7	0.59	3.5	0.59	160 d	56	180 d	59
Ethyl Mercaptan	ND	0.59	ND	0.59	1.7	0.56	2.1	0.59
Dimethyl Sulfide	11	0.59	11	0.59	890 d	56	910 d	59
Carbon Disulfide	ND	0.59	ND	0.59	ND	0.56	ND	0.59
Dimethyl Disulfide	ND	0.59	ND	0.59	87 d	56	73 d	59
Total Reduced Sulfur	44	0.59	45	0.59	1,200	0.56	1,300	0.59

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

Reviewed/Approved By: _____ Date 4-10-18

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.: 180409GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/9/18 9:31		4/9/18 9:06		4/9/18 9:18			
Analyst Initials:	AS		AS		AS			
Datafile:	09apr004		09apr002		09apr003			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	85	70-130%	85	70-130%	0.5	<30
Carbonyl Sulfide	ND	0.20	96	70-130%	96	70-130%	0.1	<30
Methyl Mercaptan	ND	0.20	90	70-130%	89	70-130%	0.2	<30
Ethyl Mercaptan	ND	0.20	90	70-130%	89	70-130%	1.1	<30
Dimethyl Sulfide	ND	0.20	79	70-130%	78	70-130%	1.5	<30
Carbon Disulfide	ND	0.20	78	70-130%	77	70-130%	0.5	<30
Dimethyl Disulfide	ND	0.20	88	70-130%	88	70-130%	0.4	<30

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

Reviewed/Approved By: _____ Date: 4-10-18
Mark J. Johnson
Operations Manager

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

Client: Republic Services Inc.
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/06/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J040603-01		J040603-02					
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B					
Date/Time Sampled:	4/5/18 14:47		4/5/18 15:15					
Date/Time Analyzed:	4/6/18 16:31		4/6/18 16:46					
QC Batch No.:	180406GC8A1		180406GC8A1					
Analyst Initials:	MJ		MJ					
Dilution Factor:	3.0		3.0					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	0.59 d	0.030	0.57 d	0.030				
Carbon Dioxide	35.9	0.030	34.2	0.030				
Oxygen/Argon	1.8	1.5	2.3	1.5				
Nitrogen	16.5	3.0	17.9	3.0				
Methane	45.1	0.0030	44.9	0.0030				
Carbon Monoxide	ND	0.0030	ND	0.0030				
Net Heating Value (BTU/ft3) methane only	410.1	3.0	408.5	3.0				
Gross Heating Value (BTU/ft3) methane only	455.5	3.0	453.7	3.0				

Results normalized including non-methane hydrocarbons
BTU values based on D1946 analysis methane only
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 180410GC8A2

Reviewed/Approved By: _____ Date 4-10-18

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 Inc.
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/06/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J040603-03		J040603-04					
Client Sample I.D.:	Blower Outlet A		Blower Outlet B					
Date/Time Sampled:	4/5/18 12:55		4/5/18 13:22					
Date/Time Analyzed:	4/6/18 17:00		4/6/18 17:15					
QC Batch No.:	180406GC8A1		180406GC8A1					
Analyst Initials:	MJ		MJ					
Dilution Factor:	2.8		3.0					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	10.7	2.8	10.5	3.0				
Carbon Dioxide	34.3	0.028	34.6	0.030				
Oxygen/Argon	7.4	1.4	7.3	1.5				
Nitrogen	34.7	2.8	34.5	3.0				
Methane	11.7	0.0028	11.8	0.0030				
Carbon Monoxide	0.048	0.0028	0.049	0.0030				
Net Heating Value (BTU/ft3)	161.0	2.8	164.8	3.0				
Gross Heating Value (BTU/ft3)	182.3	2.8	186.4	3.0				

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 4-10-18

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: 180406GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	4/6/18 10:22			4/6/18 9:39		4/6/18 9:53					
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	6.05	121	5.91	118	2.3	70	130	30
Carbon Dioxide	ND	0.010	10	10.2	102	9.49	95	7.3	70	130	30
Oxygen/Argon	ND	0.50	15	15.9	107	15.6	105	1.6	70	130	30
Nitrogen	ND	1.0	70	71.5	102	70.0	100	2.1	70	130	30
Methane	ND	0.0010	0.10	0.108	108	0.106	106	1.7	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.105	105	0.103	103	1.8	70	130	30

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

Reviewed/Approved By: _____ Date 4-10-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch # 180410GC8A2
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	4/10/2018 14:56		4/10/2018 14:46		4/10/2018 14:51			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	%Rec	Criteria	%Rec	Criteria	RPD	Criteria
Hydrogen	ND	0.010	96	70-130	101	70-130	5.2	<20

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

Reviewed/Approved By: _____ Date: 4-10-18
Mark Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 160-13
03/27/2018

Kurz FM =	**1,054**	scfm
Fleetzoom Total =	**1,057**	scfm

$\Delta =$ **0.3%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	3/27/18	3/27/18
Time	Start	9:15	9:30
***%CH_4**	Methane, %	11.8	11.9
***%CO_2**	Carbon Dioxide, %	37.7	37.6
***'%O_2**	Oxygen, %	7.2	7.3
***%Balance**	Assumed as Nitrogen, %	43.3	43.2
P_g	Flue Gas Static Pressure, inches of H_2O	12.7	12.5
t_s	Blower Outlet LFG Temperature, °F	70.0	70.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	1,002	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	1,054	
LFG_{CH4}	Methane, lb/hr	295.4	297.9
	Methane, grains/dscf	34.40	34.69
LFG_{CO2}	Carbon Dioxide, lb/hr	2,589.0	2,582.1
	Carbon Dioxide, grains/dscf	301.53	300.73
LFG_{O2}	Oxygen, lb/hr	359.5	364.5
	Oxygen, grains/dscf	41.87	42.45
LFG_{N2}	Balance gas as Nitrogen, lb/hr	1,892.8	1,888.4
	Balance gas as Nitrogen, grains/dscf	220.44	219.93

** 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	0.59	19
	Hydrogen Sulfide Rate, lb/hr	0.00	0.10
	Hydrogen Sulfide Rate, grains/dscf	0.000	0.012
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	87	180
	Methyl Mercaptan Rate, lb/hr	0.65	1.35
	Methyl Mercaptan Rate, grains/dscf	0.076	0.157
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.84	2.0
	Ethyl Mercaptan Rate, lb/hr	0.01	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	830	880
	Dimethyl Sulfide Rate, lb/hr	8.05	8.53
	Dimethyl Sulfide Rate, grains/dscf	0.937	0.994
CS_2	Carbon Disulfide Concentration, ppmd	0.59	0.59
	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	74	54
	Dimethyl Disulfide Rate, lb/hr	1.09	0.79
	Dimethyl Disulfide Rate, grains/dscf	0.127	0.092
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,100	1,200
	TRS-->SO2 Emission Rate, lb/hr	11.00	12.00
	TRS-->SO2 Emission Rate, grains/dscf	1.281	1.397
	TPY =	48.16	52.54

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 106-13
03/27/2018

Fleetzoom Total = 333 scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	3/27/18	3/27/18
Time	Start	8:23	8:38
***%CH_4**	Methane, %	41.9	41.8
***%CO_2**	Carbon Dioxide, %	33.7	33.2
***'%O_2**	Oxygen, %	2.7	2.6
***%Balance**	Assumed as Nitrogen, %	21.7	22.4
P_g	Flue Gas Static Pressure, inches of H_2O	1.11	1.51
t_s	Blower Outlet LFG Temperature, °F	67.3	67.9
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	317	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	333	
LFG_{CH4}	Methane, lb/hr	331.7	330.9
	Methane, grains/dscf	122.16	121.87
LFG_{CO2}	Carbon Dioxide, lb/hr	731.9	721.1
	Carbon Dioxide, grains/dscf	269.53	265.53
LFG_{O2}	Oxygen, lb/hr	42.6	41.1
	Oxygen, grains/dscf	15.70	15.12
LFG_{N2}	Balance gas as Nitrogen, lb/hr	300.0	309.7
	Balance gas as Nitrogen, grains/dscf	110.47	114.04

** 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	22
	Hydrogen Sulfide Rate, lb/hr	0.05	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.017	0.014
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	3.2	3.2
	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	9.9	9.6
	Dimethyl Sulfide Rate, lb/hr	0.03	0.03
	Dimethyl Sulfide Rate, grains/dscf	0.011	0.011
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	41	36
	TRS-->SO2 Emission Rate, lb/hr	0.13	0.11
	TRS-->SO2 Emission Rate, grains/dscf	0.048	0.042
	TPY =	0.57	0.50

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.

April 5, 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: J032805-01/04

Enclosed are results for sample(s) received 3/28/18 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 TNI 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 4/04/18.

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

Standard		48 hours	
Same Day		72 hours	
24 hours		96 hours	
Other:	✓	5 day	

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.:	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					
J032805-01	R1369	-19.66	-3.48	-4	EP-14 NQ A	3/27/2018	8:23	C -1L	LFG	He	X					
-02	J1721	-19.67	-3.48	-4	EP-14 NQ B	3/27/2018	8:38	C -1L	LFG	He	X					
-03	1539	-19.54	-3.49	-4	Blower Outlet A	3/27/2018	9:15	C -1L	LFG	He	X					
-04	R1374	-20.23	-3.46	-4	Blower Outlet B	3/27/2018	9:30	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: 3/27/18	
RELINQUISHED BY	DATE/	RECEIVED BY	DATE/TIME
RELINQUISHED BY 3/27/18 PEN RX	DATE/	RECEIVED BY 3/28/18 1416	DATE/TIME
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:	**03/28/18**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA Methods 15/16

Lab No.:	J032805-01		J032805-02		J032805-03		J032805-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	3/27/18 8:23		3/27/18 8:38		3/27/18 9:15		3/27/18 9:30	
Date/Time Analyzed:	3/29/18 10:03		3/29/18 10:16		3/29/18 10:28		3/29/18 10:41	
QC Batch No.:	180329GC3A1		180329GC3A1		180329GC3A1		180329GC3A1	
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	27	0.59	22	0.59	ND	0.59	19	0.59
Carbonyl Sulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Methyl Mercaptan	3.2	0.59	3.2	0.59	87 d	59	180 d	59
Ethyl Mercaptan	ND	0.59	ND	0.59	0.84	0.59	2.0	0.59
Dimethyl Sulfide	9.9	0.59	9.6	0.59	830 d	59	880 d	59
Carbon Disulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Dimethyl Disulfide	ND	0.59	ND	0.59	74 d	59	54 d	5.9
Total Reduced Sulfur	41	0.59	36	0.59	1,100	0.59	1,200	0.59

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

Reviewed/Approved By: _____ **Date** 4/4/18

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.: 180329GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	3/29/18 9:38		3/29/18 9:13		3829/18 9:25			
Analyst Initials:	AS		AS		AS			
Datafile:	29mar005		29mar003		29mar004			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	83	70-130%	83	70-130%	0.1	<30
Carbonyl Sulfide	ND	0.20	93	70-130%	93	70-130%	0.0	<30
Methyl Mercaptan	ND	0.20	87	70-130%	88	70-130%	1.2	<30
Ethyl Mercaptan	ND	0.20	88	70-130%	88	70-130%	0.0	<30
Dimethyl Sulfide	ND	0.20	78	70-130%	76	70-130%	3.1	<30
Carbon Disulfide	ND	0.20	73	70-130%	73	70-130%	0.1	<30
Dimethyl Disulfide	ND	0.20	81	70-130%	82	70-130%	0.9	<30

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

Reviewed/Approved By: _____ Date: 4/4/18
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 159-12
03/20/2018

Kurz FM =	**1,018**	scfm
Fleetzoom Total =	**977**	scfm

Δ = **-4.2%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	3/20/18	3/20/18
Time	Start	9:35	9:50
***%CH_4**	Methane, %	11.7	11.1
***%CO_2**	Carbon Dioxide, %	37.4	35.8
***'%O_2**	Oxygen, %	7.7	8.4
***%Balance**	Assumed as Nitrogen, %	43.2	44.7
P_g	Flue Gas Static Pressure, inches of H_2O	16.6	16.6
t_s	Blower Outlet LFG Temperature, °F	53.0	53.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	967	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	1,018	
LFG_{CH4}	Methane, lb/hr	282.7	268.2
	Methane, grains/dscf	34.11	32.36
LFG_{CO2}	Carbon Dioxide, lb/hr	2,478.6	2,372.6
	Carbon Dioxide, grains/dscf	299.13	286.33
LFG_{O2}	Oxygen, lb/hr	371.0	404.8
	Oxygen, grains/dscf	44.78	48.85
LFG_{N2}	Balance gas as Nitrogen, lb/hr	1,822.4	1,885.7
	Balance gas as Nitrogen, grains/dscf	219.93	227.57

** 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	21	21
	Hydrogen Sulfide Rate, lb/hr	0.11	0.11
	Hydrogen Sulfide Rate, grains/dscf	0.013	0.013
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	180	180
	Methyl Mercaptan Rate, lb/hr	1.30	1.30
	Methyl Mercaptan Rate, grains/dscf	0.157	0.157
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	2.0	1.9
	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	910
	Dimethyl Sulfide Rate, lb/hr	8.89	8.51
	Dimethyl Sulfide Rate, grains/dscf	1.073	1.028
CS_2	Carbon Disulfide Concentration, ppmd	0.53	0.53
	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	46	46
	Dimethyl Disulfide Rate, lb/hr	0.65	0.65
	Dimethyl Disulfide Rate, grains/dscf	0.079	0.079
❶**$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	1,200	1,200
	TRS-->SO2 Emission Rate, lb/hr	11.58	11.58
	TRS-->SO2 Emission Rate, grains/dscf	1.397	1.397
	TPY =	50.71	50.71

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 105-12
03/20/2018

Fleetzoom Total = 353 scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	3/20/18	3/20/18
Time	Start	8:38	8:53
***%CH_4**	Methane, %	37.3	36.9
***%CO_2**	Carbon Dioxide, %	30.7	30.1
***'%O_2**	Oxygen, %	4.7	4.8
***%Balance**	Assumed as Nitrogen, %	27.3	28.2
P_g	Flue Gas Static Pressure, inches of H_2O	1.28	1.56
t_s	Blower Outlet LFG Temperature, °F	50.5	52.9
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	335	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	353	
LFG_{CH4}	Methane, lb/hr	312.4	309.0
	Methane, grains/dscf	108.75	107.58
LFG_{CO2}	Carbon Dioxide, lb/hr	705.4	691.6
	Carbon Dioxide, grains/dscf	245.54	240.74
LFG_{O2}	Oxygen, lb/hr	78.5	80.2
	Oxygen, grains/dscf	27.33	27.91
LFG_{N2}	Balance gas as Nitrogen, lb/hr	399.3	412.4
	Balance gas as Nitrogen, grains/dscf	138.98	143.57

** 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	24	25
	Hydrogen Sulfide Rate, lb/hr	0.04	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.015	0.015
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	2.8	2.9
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.002	0.003
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	9.6	9.7
	Dimethyl Sulfide Rate, lb/hr	0.03	0.03
	Dimethyl Sulfide Rate, grains/dscf	0.011	0.011
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	37	38
	TRS-->SO2 Emission Rate, lb/hr	0.12	0.13
	TRS-->SO2 Emission Rate, grains/dscf	0.043	0.044
	TPY =	0.54	0.56

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.

March 29, 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: J032102-01/04

Enclosed are results for sample(s) received 3/21/18 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 TNI 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 3/28/18.

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

PAGE: 1 OF 1

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: ✓	5 day	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.: 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					
J032102-01	R1157	-20.43	-3.5	-2	EP-14 NQ A	3/20/2018	8:38	C -1L	LFG	He	X					
-02	R1367	-20.41	-3.47	-2	EP-14 NQ B	3/20/2018	8:53	C -1L	LFG	He	X					
-03	R1346	-20.63	-3.49	-2	Blower Outlet A	3/20/2018	9:35	C -1L	LFG	He	X					
-04	R1158	-20.35	-3.51	-2	Blower Outlet B	3/20/2018	9:50	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: 3/20/18	
RELINQUISHED BY	DATE/ RECEIVED BY	DATE/TIME	
RELINQUISHED BY 3/20/18 PENEY	DATE/ RECEIVED BY 3/21/18 1208	DATE/TIME	
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:	03/21/18
Matrix:	Air
Reporting Units:	ppmv

EPA Methods 15/16

Lab No.:	J032102-01		J032102-02		J032102-03		J032102-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	3/20/18 8:38		3/20/18 8:53		3/20/18 9:35		3/20/18 9:50	
Date/Time Analyzed:	3/23/18 10:33		3/23/18 10:45		3/23/18 10:58		3/23/18 11:11	
QC Batch No.:	180323GC3A1		180323GC3A1		180323GC3A1		180323GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.7		2.7		2.7		2.7	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	24	0.53	25	0.53	21	0.53	21	0.53
Carbonyl Sulfide	ND	0.53	ND	0.53	ND	0.53	ND	0.53
Methyl Mercaptan	2.8	0.53	2.9	0.53	180 d	5.3	180 d	5.3
Ethyl Mercaptan	ND	0.53	ND	0.53	2.0	0.53	1.9	0.53
Dimethyl Sulfide	9.6	0.53	9.7	0.53	950 d	53	910 d	53
Carbon Disulfide	ND	0.53	ND	0.53	ND	0.53	ND	0.53
Dimethyl Disulfide	ND	0.53	ND	0.53	46 d	5.3	46 d	5.3
Total Reduced Sulfur	37	0.53	38	0.53	1,200	0.53	1,200	0.53

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

Reviewed/Approved By: _____ Date 3/28/18

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.: 180323GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	3/23/18 9:21		3/23/18 8:56		3/23/18 9:08			
Analyst Initials:	AS		AS		AS			
Datafile:	21mar014		21mar012		21mar013			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	81	70-130%	82	70-130%	0.8	<30
Carbonyl Sulfide	ND	0.20	82	70-130%	82	70-130%	0.6	<30
Methyl Mercaptan	ND	0.20	92	70-130%	91	70-130%	0.7	<30
Ethyl Mercaptan	ND	0.20	88	70-130%	87	70-130%	1.1	<30
Dimethyl Sulfide	ND	0.20	85	70-130%	83	70-130%	2.1	<30
Carbon Disulfide	ND	0.20	76	70-130%	75	70-130%	0.9	<30
Dimethyl Disulfide	ND	0.20	82	70-130%	82	70-130%	0.7	<30

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

Reviewed/Approved By: _____ Date: 3/28/18
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 158-11
03/13/2018

Kurz FM =	**997**	scfm
Fleetzoom Total =	**1,135**	scfm

$\Delta =$ **12.1%**

	PARAMETER	Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	3/13/18	3/13/18
Time	Start	9:44	9:59
***%CH_4**	Methane, %	12.0	12.4
***%CO_2**	Carbon Dioxide, %	38.0	38.1
***'%O_2**	Oxygen, %	7.1	6.9
***%Balance**	Assumed as Nitrogen, %	42.9	42.6
P_g	Flue Gas Static Pressure, inches of H_2O	16.1	16.0
t_s	Blower Outlet LFG Temperature, °F	51.0	51.0
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	947	
Q_s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm	997	
LFG_{CH4}	Methane, lb/hr	284.0	293.5
	Methane, grains/dscf	34.99	36.15
LFG_{CO2}	Carbon Dioxide, lb/hr	2,467.2	2,473.7
	Carbon Dioxide, grains/dscf	303.92	304.72
LFG_{O2}	Oxygen, lb/hr	335.2	325.7
	Oxygen, grains/dscf	41.29	40.13
LFG_{N2}	Balance gas as Nitrogen, lb/hr	1,772.9	1,760.5
	Balance gas as Nitrogen, grains/dscf	218.40	216.88

** 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	0.56	23
	Hydrogen Sulfide Rate, lb/hr	0.00	0.12
	Hydrogen Sulfide Rate, grains/dscf	0.000	0.014
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	130	190
	Methyl Mercaptan Rate, lb/hr	0.92	1.35
	Methyl Mercaptan Rate, grains/dscf	0.114	0.166
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.89	2.0
	Ethyl Mercaptan Rate, lb/hr	0.01	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	1,100	1,100
	Dimethyl Sulfide Rate, lb/hr	10.08	10.08
	Dimethyl Sulfide Rate, grains/dscf	1.242	1.242
CS_2	Carbon Disulfide Concentration, ppmd	0.56	0.59
	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	100	68
	Dimethyl Disulfide Rate, lb/hr	1.39	0.94
	Dimethyl Disulfide Rate, grains/dscf	0.171	0.116
❶ **$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	1,500	1,400
	TRS-->SO2 Emission Rate, lb/hr	14.18	13.23
	TRS-->SO2 Emission Rate, grains/dscf	1.746	1.630
	TPY =	62.09	57.95

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 104-11
03/13/2018

Fleetzoom Total = 361 scfm

	PARAMETER	EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	3/13/18	3/13/18
Time	Start	8:54	9:08
***%CH_4**	Methane, %	35.4	35.3
***%CO_2**	Carbon Dioxide, %	29.3	29.5
***'%O_2**	Oxygen, %	5.0	4.8
***%Balance**	Assumed as Nitrogen, %	30.3	30.4
P_g	Flue Gas Static Pressure, inches of H_2O	1.09	1.61
t_s	Blower Outlet LFG Temperature, °F	53.7	55.4
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	343	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	361	
LFG_{CH4}	Methane, lb/hr	303.1	302.2
	Methane, grains/dscf	103.21	102.92
LFG_{CO2}	Carbon Dioxide, lb/hr	688.1	692.8
	Carbon Dioxide, grains/dscf	234.34	235.94
LFG_{O2}	Oxygen, lb/hr	85.4	82.0
	Oxygen, grains/dscf	29.08	27.91
LFG_{N2}	Balance gas as Nitrogen, lb/hr	453.0	454.5
	Balance gas as Nitrogen, grains/dscf	154.26	154.77

** 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	26	25
	Hydrogen Sulfide Rate, lb/hr	0.05	0.05
	Hydrogen Sulfide Rate, grains/dscf	0.016	0.015
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	3.3	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	10	10
	Dimethyl Sulfide Rate, lb/hr	0.03	0.03
	Dimethyl Sulfide Rate, grains/dscf	0.011	0.011
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	40	40
	TRS-->SO2 Emission Rate, lb/hr	0.14	0.14
	TRS-->SO2 Emission Rate, grains/dscf	0.047	0.047
	TPY =	0.60	0.60

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.

March 21, 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: J031404-01/04

Enclosed are results for sample(s) received 3/14/18 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 TNI 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 3/20/18.

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												
J031404-01	R1160	-20.89	-4.49	-3	EP-14 NQ A	3/13/2018	8:54	C -1L	LFG	He	X					
-02	J1719	-20.8	-4.47	-3	EP-14 NQ B	3/13/2018	9:08	C -1L	LFG	He	X					
-03	J1718	-21.27	-4.49	-3	Blower Outlet A	3/13/2018	9:44	C -1L	LFG	He	X					
-04	1621	-20.52	-4.48	-3	Blower Outlet B	3/13/2018	9:59	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: 3/13/18

RELINQUISHED BY	DATE/	RECEIVED BY	DATE/TIME
RELINQUISHED BY: PEN	DATE/ 3/13/18	RECEIVED BY	DATE/TIME
RELINQUISHED BY	DATE/	RECEIVED BY: 3/14/18 1228	DATE/TIME
			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:	**03/14/18**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA Methods 15/16

Lab No.:	J031404-01		J031404-02		J031404-03		J031404-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	3/13/18 8:54		3/13/18 9:08		3/13/18 9:44		3/13/18 9:59	
Date/Time Analyzed:	3/15/18 9:26		3/15/18 9:39		3/15/18 9:51		3/15/18 10:04	
QC Batch No.:	180315GC3A1		180315GC3A1		180315GC3A1		180315GC3A1	
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	26	0.56	25	0.56	ND	0.56	23	0.56
Carbonyl Sulfide	ND	0.56	ND	0.56	ND	0.56	ND	0.56
Methyl Mercaptan	3.3	0.56	3.3	0.56	130 d	56	190 d	56
Ethyl Mercaptan	ND	0.56	ND	0.56	0.89	0.56	2.0	0.56
Dimethyl Sulfide	10	0.56	10	0.56	1,100 d	56	1,100 d	56
Carbon Disulfide	ND	0.56	ND	0.56	ND	0.56	0.59	0.56
Dimethyl Disulfide	ND	0.56	ND	0.56	100 d	56	68 d	56
Total Reduced Sulfur	40	0.56	40	0.56	1,500	0.56	1,400	0.56

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

Reviewed/Approved By: _____ Date 3/20/18

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.: 180315GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	3/15/18 9:14		3/15/18 8:49		3/15/18 9:01			
Analyst Initials:	AS		AS		AS			
Datafile:	15mar003		15mar001		15mar002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	88	70-130%	88	70-130%	0.1	<30
Carbonyl Sulfide	ND	0.20	88	70-130%	88	70-130%	0.4	<30
Methyl Mercaptan	ND	0.20	98	70-130%	98	70-130%	0.6	<30
Ethyl Mercaptan	ND	0.20	94	70-130%	94	70-130%	0.3	<30
Dimethyl Sulfide	ND	0.20	89	70-130%	88	70-130%	0.0	<30
Carbon Disulfide	ND	0.20	79	70-130%	79	70-130%	0.4	<30
Dimethyl Disulfide	ND	0.20	85	70-130%	84	70-130%	0.3	<30

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

Reviewed/Approved By: _____ Date: 3/20/18
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 157-10
03/07/2018

	PARAMETER	Blower Out
SOUTH QUARRY LFG - BLOWER OUTLET (FL120/EP-12 Only)		
Date	Test Date	3/7/18
Start	Run Start Time	10:51
	Run Finish Time	12:21
	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	29.63
% H_2O	Moisture Content of LFG, %	0.84
% RH	Relative Humidity, %	60.50
M_{fd}	Dry Mole Fraction	0.992
$\%CH_4$	Methane, %	11.2
$\%CO_2$	Carbon Dioxide, %	32.8
$\%O_2$	Oxygen, %	8.1
%Balance	Assumed as Nitrogen, %	37.0
$\%H_2$	Hydrogen, %	10.2
%CO	Carbon Monoxide, %	0.051
M_d	Dry Molecular Weight, lb/lb-Mole	29.41
M_s	Wet Molecular weight, lb/lb-Mole	29.31
P_g	Flue Gas Static Pressure, inches of H_2O	13.54
P_s	Absolute Flue Gas Pressure, inches of Mercury	30.85
t_s	Average Stack Gas Temperature, °F	54
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.031
v_s	Average LFG Velocity, feet/second	11.23
A_s	Stack Crossectional Area, square feet	1.35
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	958
Q_s	Standard Volumetric Flow Rate, scfm	966
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	912
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	4,387
NHV	Net Heating Value, Btu/scf	148.3
LFG_{CH4}	Methane, lb/hr	268.1
	Methane, grains/dscf	32.65
LFG_{CO2}	Carbon Dioxide, lb/hr	2,153.9
	Carbon Dioxide, grains/dscf	262.34
LFG_{O2}	Oxygen, lb/hr	386.7
	Oxygen, grains/dscf	47.10
LFG_{N2}	Balance gas as Nitrogen, lb/hr	1,546.6
	Balance gas as Nitrogen, grains/dscf	188.37
LFG_{H2}	Hydrogen, lb/hr	30.6
	Hydrogen, grains/dscf	3.73
LFG_{CO}	Carbon Monoxide, lb/hr	2.3
	Carbon Monoxide, grains/dscf	0.28

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	25	25
	Hydrogen Sulfide Rate, lb/hr	0.13	0.13
	Hydrogen Sulfide Rate, grains/dscf	0.015	0.015
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.58
	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	190
	Methyl Mercaptan Rate, lb/hr	1.29	1.36
	Methyl Mercaptan Rate, grains/dscf	0.157	0.166
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	2.0	2.0
	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	1,100
	Dimethyl Sulfide Rate, lb/hr	9.27	10.20
	Dimethyl Sulfide Rate, grains/dscf	1.129	1.242
CS_2	Carbon Disulfide Concentration, ppmd	0.59	0.58
	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	75
	Dimethyl Disulfide Rate, lb/hr	0.98	0.85
	Dimethyl Disulfide Rate, grains/dscf	0.120	0.104

❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,400	1,500
	TRS-->SO2 Emission Rate, lb/hr	13.38	14.34
	TRS-->SO2 Emission Rate, grains/dscf	1.630	1.746

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, March 07, 2018

LOCATION	TIME	FLOW -SCFM			Method 2 vs. Fleetzoom	Method 2 vs Kurz	Kurz vs Fleetzoom
		Method 2	FleetZoom	Kurz FM			
BLOWER OUT	**10:51**	**966**	**1,157**	**1,020**	**-19.8%**	**-5.6%**	**-13.5%**

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

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 103-10
03/07/2018

	PARAMETER	Blower Out
	EP14 NORTH QUARRY LFG ONLY	
Date	Test Date	3/7/18
Start	Run Start Time	8:59
	Run Finish Time	10:29
	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	29.65
% H_2O	Moisture Content of LFG, %	1.01
% RH	Relative Humidity, %	74.80
M_{fd}	Dry Mole Fraction	0.990
%CH_4	Methane, %	35.3
%CO_2	Carbon Dioxide, %	26.5
%O_2	Oxygen, %	6.1
%Balance	Assumed as Nitrogen, %	31.1
%H_2	Hydrogen, % (** reported at the laboratory detection limit*)	3.0
%CO	Carbon Monoxide, % (** reported at the laboratory detection limit*)	0.0030
M_d	Dry Molecular Weight, lb/lb-Mole	28.03
M_s	Wet Molecular weight, lb/lb-Mole	27.93
P_g	Flue Gas Static Pressure, inches of H_2O	1.32
P_s	Absolute Flue Gas Pressure, inches of Mercury	29.76
t_s	Average Stack Gas Temperature, °F	52
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.029
v_s	Average LFG Velocity, feet/second	11.31
A_s	Stack Crossectional Area, square feet	0.51
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	354
Q_s	Standard Volumetric Flow Rate, scfm	357
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	348
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	1,544
NHV	Net Heating Value, Btu/scf	320.7
LFG_{CH4}	Methane, lb/hr	312.1
	Methane, grains/dscf	102.92
LFG_{CO2}	Carbon Dioxide, lb/hr	641.5
	Carbon Dioxide, grains/dscf	211.55
LFG_{O2}	Oxygen, lb/hr	107.6
	Oxygen, grains/dscf	35.47
LFG_{N2}	Balance gas as Nitrogen, lb/hr	480.1
	Balance gas as Nitrogen, grains/dscf	158.33
LFG_{H4}	Hydrogen, lb/hr	3.3
	Hydrogen, grains/dscf	1.10
LFG_{CO}	Carbon Monoxide, lb/hr	0.0
	Carbon Monoxide, grains/dscf	0.02

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	28	22
	Hydrogen Sulfide Rate, lb/hr	0.05	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.017	0.014
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	3.6	3.7
	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	20	18
	Dimethyl Sulfide Rate, lb/hr	0.07	0.06
	Dimethyl Sulfide Rate, grains/dscf	0.023	0.020
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	52	46
	TRS-->SO2 Emission Rate, lb/hr	0.18	0.16
	TRS-->SO2 Emission Rate, grains/dscf	0.061	0.054

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, March 07, 2018

LOCATION	TIME	FLOW -SCFM		Method 2 vs. Fleetzoom
		Method 2	FleetZoom	
EP14 NQ LFG	8:59	357	366	-2.3%

Air TECHNOLOGY
Laboratories, Inc.

March 13, 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: J030802-01/04

Enclosed are results for sample(s) received 3/08/18 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 TNI 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 3/12/18.

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		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:		5 day	☐	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.:	6605567
Bill to:	Republic Services
	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	ASTM 1946 + H2 + CO & Btu/SCF		ASTM 1946 + H2 + CO & Btu/SCF (by CH4 only)		
	Canister ID	Sample Start	Sample End	Lab Receive												
J030882-01	6058	-21.19	-4.46	-.4	NQ EP14 A	3/7/2018	9:09	C-6L	LFG	He	X			X		
-02	5964	-20.88	-4.5	-4	NQ EP14 B	3/7/2018	9:38	C-6L	LFG	He	X			X		
-03	5987	-20.99	-4.5	-4	Blower Outlet A	3/7/2018	11:02	C-6L	LFG	He	X	X				
-04	6052	-21.27	-4.51	-3.5	Blower Outlet B	3/7/2018	11:28	C-6L	LFG	He	X	X				

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

SAMPLED BY: Anthony Kimutis — COMPANY: Republic Services — DATE/TIME 3/7/18

RELINQUISHED BY — DATE 3/7/18 — RECEIVED BY — DATE/TIME

RELINQUISHED BY FedEx — DATE — RECEIVED BY — DATE/TIME 3/8/18 0908

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: 03/08/18
Matrix: Air
Reporting Units: ppmv

EPA Methods 15/16

Lab No.:	J030802-01		J030802-02		J030802-03		J030802-04	
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	3/7/18 9:09		3/7/18 9:38		3/7/18 11:02		3/7/18 11:28	
Date/Time Analyzed:	3/8/18 9:52		3/8/18 10:04		3/8/18 10:17		3/8/18 10:29	
QC Batch No.:	180308GC3A1		180308GC3A1		180308GC3A1		180308GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		3.0		2.9	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	28	0.59	22	0.59	25	0.59	25	0.58
Carbonyl Sulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.58
Methyl Mercaptan	3.6	0.59	3.7	0.59	180 d	59	190 d	58
Ethyl Mercaptan	ND	0.59	ND	0.59	2.0	0.59	2.0	0.58
Dimethyl Sulfide	20	0.59	18	0.59	1,000 d	59	1,100 d	58
Carbon Disulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.58
Dimethyl Disulfide	ND	0.59	ND	0.59	70 d	59	75 d	58
Total Reduced Sulfur	52	0.59	46	0.59	1,400	0.59	1,500	0.58

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

Reviewed/Approved By: _____ Date 3/12/18
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.: 180308GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	3/8/18 8:47		3/8/18 8:22		3/8/18 8:35			
Analyst Initials:	AS		AS		AS			
Datafile:	08mar003		08mar001		08mar002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	86	70-130%	85	70-130%	0.8	<30
Carbonyl Sulfide	ND	0.20	89	70-130%	89	70-130%	0.4	<30
Methyl Mercaptan	ND	0.20	96	70-130%	96	70-130%	0.1	<30
Ethyl Mercaptan	ND	0.20	93	70-130%	92	70-130%	0.7	<30
Dimethyl Sulfide	ND	0.20	90	70-130%	89	70-130%	1.5	<30
Carbon Disulfide	ND	0.20	80	70-130%	79	70-130%	1.1	<30
Dimethyl Disulfide	ND	0.20	87	70-130%	87	70-130%	0.2	<30

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

Reviewed/Approved By: _____ Date: 3/12/18
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: 03/08/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J030802-01		J030802-02					
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B					
Date/Time Sampled:	3/7/18 9:09		3/7/18 9:38					
Date/Time Analyzed:	3/8/18 11:22		3/8/18 11:37					
QC Batch No.:	180308GC8A1		180308GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		3.0					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	ND	3.0	ND	3.0				
Carbon Dioxide	26.4	0.030	26.5	0.030				
Oxygen/Argon	6.2	1.5	6.0	1.5				
Nitrogen	31.2	3.0	31.0	3.0				
Methane	35.2	0.0030	35.4	0.0030				
Carbon Monoxide	ND	0.0030	ND	0.0030				
Net Heating Value (BTU/ft3) methane only	319.7	3.0	321.6	3.0				
Gross Heating Value (BTU/ft3) methane only	355.1	3.0	357.1	3.0				

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 3/12/18

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: 03/08/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J030802-03		J030802-04					
Client Sample I.D.:	Blower Outlet A		Blower Outlet B					
Date/Time Sampled:	3/7/18 11:02		3/7/18 11:28					
Date/Time Analyzed:	3/8/18 11:52		3/8/18 12:06					
QC Batch No.:	180308GC8A1		180308GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		2.9					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	10.5	3.0	9.85	2.9				
Carbon Dioxide	33.7	0.030	31.9	0.029				
Oxygen/Argon	7.7	1.5	8.5	1.4				
Nitrogen	35.9	3.0	38.1	2.9				
Methane	11.5	0.0030	10.9	0.0029				
Carbon Monoxide	0.052	0.0030	0.049	0.0029				
Net Heating Value (BTU/ft3)	151.6	3.0	145.0	2.9				
Gross Heating Value (BTU/ft3)	171.9	3.0	164.3	2.9				

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 3/12/18
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: 180308GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/8/18 10:53			3/8/18 12:35		3/8/18 12:50					
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	5.45	109	5.47	109	0.3	70	130	30
Carbon Dioxide	ND	0.010	10	9.13	91	9.15	91	0.2	70	130	30
Oxygen/Argon	ND	0.50	15	15.4	104	15.5	104	0.5	70	130	30
Nitrogen	ND	1.0	70	69.8	100	70.1	100	0.4	70	130	30
Methane	ND	0.0010	0.10	0.108	108	0.107	107	0.9	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.106	106	0.105	105	1.3	70	130	30

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

Reviewed/Approved By: _____ Date 3/12/18
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.

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

HYDROGEN DATA MAP - MARCH 2018

PROJECT NUMBER: BT-145 | FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-145 (Agreed Order Reporting)\Monthly Reports\03-2018 Report\Internal Draft\Draft Site Data\Gas maps\March 2018.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

MARCH 2018
DESIGNED BY: PML
APPROVED BY: ---

REVISION | DATE

DRAWING NO.:
001

LEGEND

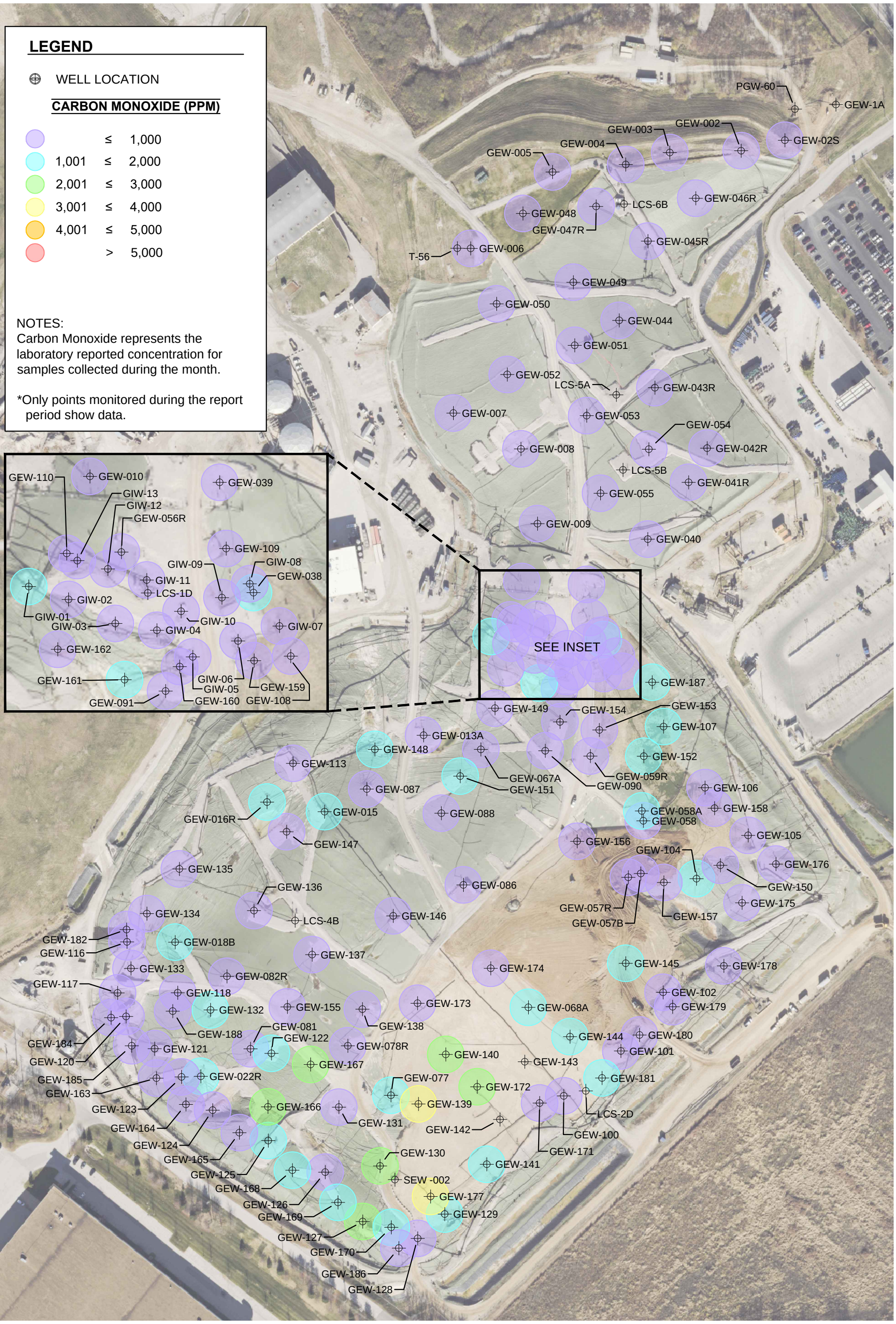
WELL LOCATION

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.



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 - MARCH 2018

PROJECT NUMBER: BT-145

FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-145 (Agreed Order Reporting)\Monthly Reports\03-2018 Report\Internal Draft\Draft Site Data\Gas maps\March 2018.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

MARCH 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

N

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

BRIDGETON LANDFILL
MONTHLY REPORTING

INITIAL TEMPERATURE MAXIMUMS - MARCH 2018

PROJECT NUMBER: BT-145 | FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-145 (Agreed Order Reporting)\Monthly Reports\03-2018 Report\Internal Draft\Draft Site Data\Gas maps\March 2018.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

MARCH 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	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-002	2/5/2018	56	40	ND	ND	ND	ND	
GEW-002	3/8/2018	52	36	ND	11	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-02S	3/8/2018	46	26	6.0	21	ND	ND	See Note 8
GEW-02S	3/30/2018	59	32	2.0	7.3	ND	ND	
GEW-003	11/6/2017	50	37	ND	12	0.082	ND	
GEW-003	12/12/2017	49	36	ND	14	0.067	ND	
GEW-003	1/8/2018	43	34	ND	21	0.098	ND	
GEW-003	2/5/2018	48	37	ND	14	0.10	ND	
GEW-003	3/8/2018	47	35	ND	18	0.074	ND	
GEW-004	11/6/2017	56	39	ND	4.1	0.081	ND	
GEW-004	12/12/2017	52	38	ND	9.3	0.094	ND	
GEW-004	1/8/2018	50	37	ND	13	0.084	ND	
GEW-004	2/5/2018	47	36	ND	15	0.070	ND	
GEW-004	3/8/2018	51	36	ND	12	0.070	ND	
GEW-005	11/6/2017	57	36	ND	6.2	0.035	ND	
GEW-005	12/12/2017	46	34	ND	19	ND	ND	
GEW-005	1/8/2018	43	33	ND	23	ND	ND	
GEW-005	2/6/2018	37	30	ND	33	ND	ND	
GEW-005	3/8/2018	43	31	ND	25	ND	ND	
GEW-006	11/6/2017	59	37	ND	3.2	ND	ND	
GEW-006	1/8/2018	50	33	ND	16	ND	ND	
GEW-006	3/8/2018	54	34	ND	12	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-007	3/5/2018	59	38	ND	ND	ND	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-008	2/6/2018	54	41	ND	3.9	0.55	ND	
GEW-008	3/5/2018	54	41	ND	ND	1.7	ND	
GEW-009	11/7/2017	51	39	ND	9.0	0.60	ND	
GEW-009	12/13/2017	50	38	ND	11	0.70	ND	
GEW-009	1/9/2018	53	39	ND	6.7	0.60	ND	
GEW-009	2/6/2018	49	37	ND	12	1.1	ND	
GEW-009	3/5/2018	55	40	ND	3.3	1.0	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-040	2/6/2018	56	35	1.4	7.7	ND	ND	
GEW-040	3/6/2018	50	32	3.4	15	ND	ND	See Note 8
GEW-040	3/30/2018	51	32	2.2	14	ND	ND	See Note 4
GEW-041R	11/9/2017	59	38	ND	ND	ND	ND	
GEW-041R	1/9/2018	53	35	ND	12	ND	ND	
GEW-041R	3/6/2018	54	34	ND	12	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-042R	2/6/2018	57	39	ND	3.1	ND	ND	
GEW-042R	3/8/2018	52	35	3.0	10	ND	ND	See Note 8
GEW-042R	3/30/2018	58	38	ND	3.2	ND	ND	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
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	
GEW-043R	3/8/2018	56	39	ND	4.5	0.24	ND	
GEW-044	11/9/2017	59	39	ND	ND	ND	ND	
GEW-044	1/8/2018	48	35	ND	16	ND	ND	
GEW-044	3/8/2018	41	26	5.1	28	ND	ND	See Note 8
GEW-044	3/30/2018	54	34	ND	12	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-045R	2/6/2018	56	42	ND	ND	ND	ND	
GEW-045R	3/8/2018	58	38	ND	ND	ND	ND	
GEW-046R	11/6/2017	55	40	ND	4.0	0.061	ND	
GEW-046R	12/12/2017	57	38	ND	4.2	0.039	ND	
GEW-046R	1/8/2018	47	36	ND	17	0.081	ND	
GEW-046R	2/6/2018	51	36	ND	13	0.085	ND	
GEW-046R	3/8/2018	47	33	2.1	18	0.084	ND	See Note 8
GEW-046R	3/30/2018	53	35	ND	11	0.036	ND	
GEW-047R	11/6/2017	56	41	ND	ND	ND	ND	
GEW-047R	12/12/2017	48	36	1.5	14	0.032	ND	
GEW-047R	1/8/2018	37	31	1.5	30	0.041	ND	
GEW-047R	2/6/2018	48	36	ND	15	ND	ND	
GEW-047R	3/8/2018	45	33	ND	22	0.035	ND	
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-048	2/6/2018	51	36	ND	13	ND	ND	
GEW-048	3/8/2018	54	36	ND	9.2	ND	ND	
GEW-049	11/6/2017	57	39	ND	3.4	0.061	ND	
GEW-049	12/12/2017	53	36	ND	10	0.056	ND	
GEW-049	1/8/2018	47	34	ND	17	0.036	ND	
GEW-049	2/6/2018	47	33	ND	19	ND	ND	
GEW-049	3/8/2018	50	35	ND	14	0.055	ND	
GEW-050	11/6/2017	55	36	1.7	7.0	0.054	ND	
GEW-050	1/8/2018	46	32	2.3	19	0.035	ND	See Note 4
GEW-050	3/5/2018	55	35	ND	9.1	0.059	ND	
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-051	3/5/2018	55	38	ND	4.5	1.1	ND	
GEW-052	11/7/2017	52	37	ND	11	0.044	ND	
GEW-052	1/8/2018	34	30	ND	35	ND	ND	
GEW-052	3/5/2018	55	37	1.6	6.4	0.032	ND	
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-053	2/6/2018	49	39	ND	6.1	4.7	60	
GEW-053	3/5/2018	49	38	ND	6.1	5.4	55	
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-054	2/6/2018	52	39	1.4	6.1	2.1	28	
GEW-054	3/5/2018	52	38	ND	5.8	2.4	ND	
GEW-055	11/9/2017	53	41	ND	3.2	2.4	32	
GEW-055	12/12/2017	54	40	ND	3.0	2.1	32	
GEW-055	1/8/2018	50	40	ND	ND	6.5	46	
GEW-055	2/6/2018	50	38	ND	8.7	2.0	30	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-055	3/6/2018	48	37	ND	12	2.0	ND	
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
Flare Station[2]	1/3/2018	41.9	31.5	3.2	22.4	ND	ND	See Note 5
Flare Station[2]	2/5/2018	36.1	28.7	4.5	29.6	ND	ND	See Note 5
Flare Station[2]	3/7/2018	35.3	26.5	6.1	31.1	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. (8) Invalid sample due to canister leak; resampled.

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	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-010	2/6/2018	56	41	ND	ND	0.25	ND	
GEW-010	3/6/2018	55	41	ND	ND	0.22	ND	
GEW-013A	3/12/2018	9.5	32	9.1	41	8.5	350	See Note 4
GEW-015	3/12/2018	14	44	ND	12	29	1,100	
GEW-016R	3/12/2018	5.5	38	2.8	26	27	1,100	
GEW-018B	3/15/2018	0.66	34	6.0	23	36	1,300	See Note 3
GEW-022R	11/9/2017	2.0	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-022R	3/16/2018	0.42	34	10	36	19	1,400	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-038	2/6/2018	13	46	2.2	7.4	31	1,500	
GEW-038	3/6/2018	1.7	38	6.3	22	32	1,300	See Note 4
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-039	2/6/2018	26	32	4.5	37	0.042	42	
GEW-039	3/6/2018	33	35	2.3	30	0.052	ND	
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-056R	2/6/2018	28	43	ND	11	18	570	
GEW-056R	3/6/2018	28	44	ND	7.9	19	530	
GEW-057R	1/16/2018	5.4	38	4.6	16	36	1,000	
GEW-057R	3/14/2018	4.7	33	8.7	30	23	510	See Note 4
GEW-057B	3/14/2018	2.3	17	14	51	16	370	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-058	3/9/2018	4.7	23	6.0	53	13	500	See Note 4
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-058A	3/9/2018	1.2	34	5.0	23	36	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-059R	3/9/2018	18	37	ND	13	31	960	
GEW-067A	3/15/2018	2.8	31	6.1	35	24	350	See Note 3
GEW-068A	3/14/2018	13	46	2.5	11	27	1,600	
GEW-077	3/15/2018	0.44	45	3.7	13	37	2,000	
GEW-078R	3/14/2018	13	41	1.8	24	19	670	
GEW-081	3/15/2018	0.35	24	12	40	22	690	See Note 4
GEW-082R	11/13/2017	11	37	ND	25	26	960	
GEW-082R	1/12/2018	14	37	ND	22	26	910	
GEW-082R	3/14/2018	8.0	32	1.7	35	23	770	
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-086	3/12/2018	13	32	6.1	38	12	250	See Note 4
GEW-087	3/12/2018	5.5	13	15	64	2.0	120	See Note 3
GEW-088	3/15/2018	1.4	41	ND	ND	54	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-090	3/8/2018	19	41	ND	8.5	30	860	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-091	3/8/2018	1.1	12	17	60	9.9	150	See Note 3
GEW-100	3/14/2018	1.3	56	2.5	8.6	30	950	
GEW-101	3/14/2018	17	61	2.7	10	8.8	410	
GEW-102	11/9/2017	5.7	46	2.2	7.4	38	640	
GEW-102	3/14/2018	13	45	2.2	7.5	31	420	
GEW-104	3/14/2018	1.2	53	ND	ND	42	1,300	
GEW-105	3/23/2018	10	37	7.1	30	16	720	See Note 4
GEW-106	3/13/2018	12	33	7.2	35	12	270	See Note 4
GEW-107	11/7/2017	42	39	2.9	10	6.0	290	
GEW-107	1/5/2018	40	51	ND	3.7	4.7	240	
GEW-107	3/9/2018	12	52	2.5	8.6	25	1,300	
GEW-108	3/9/2018	36	47	ND	14	1.3	60	
GEW-109	11/6/2017	33	38	1.9	19	7.9	190	
GEW-109	12/13/2017	26	35	3.1	22	13	340	
GEW-109	1/8/2018	20	32	4.5	33	10	310	
GEW-109	2/6/2018	14	31	2.0	44	9.1	370	
GEW-109	3/6/2018	16	42	ND	24	16	570	
GEW-110	11/6/2017	8.0	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-110	2/6/2018	11	50	ND	ND	35	1,300	
GEW-110	3/6/2018	17	46	1.9	8.6	26	800	
GEW-113	3/12/2018	8.9	40	4.6	25	21	1,000	
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-116	3/14/2018	5.0	33	8.5	37	15	680	See Note 4
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-117	3/15/2018	41	44	2.6	12	0.38	87	
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-118	3/15/2018	1.9	46	3.8	15	32	710	
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-120	3/15/2018	15	49	ND	23	12	500	
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-121	3/15/2018	6.1	39	3.2	34	17	830	
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-122	3/15/2018	11	37	2.4	31	18	1,100	
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-123	3/15/2018	14	48	ND	24	13	630	
GEW-124	11/9/2017	53	44	ND	ND	0.059	ND	
GEW-124	3/15/2018	45	34	4.6	16	0.038	ND	
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-125	3/15/2018	0.78	52	ND	3.5	42	2,000	
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-126	3/15/2018	15	46	ND	28	8.2	570	
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-127	3/15/2018	3.7	53	4.3	15	23	2,100	
GEW-128	11/9/2017	14	60	ND	6.8	17	1,800	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-128	1/11/2018	13	55	ND	17	14	1,400	
GEW-128	3/15/2018	14	48	4.7	21	12	1,000	
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-129	3/15/2018	13	59	ND	8.0	18	1,800	
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-130	3/15/2018	3.8	47	3.6	16	28	2,100	
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-131	3/15/2018	21	43	ND	19	16	950	
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-132	3/15/2018	0.66	37	5.1	26	30	1,700	See Note 4
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	
GEW-133	3/14/2018	7.6	47	2.2	19	24	1,000	
GEW-134	11/13/2017	10	38	2.3	40	10	450	
GEW-134	1/11/2018	12	41	2.0	29	16	700	
GEW-134	3/14/2018	12	34	4.7	38	11	430	
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-135	3/12/2018	5.4	38	3.9	30	22	910	
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-136	3/14/2018	5.2	30	5.7	36	23	650	See Note 4
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-137	3/14/2018	32	32	2.8	34	0.19	32	
GEW-138	11/13/2017	6.5	21	8.9	56	7.0	390	See Note 4
GEW-138	1/12/2018	9.0	33	ND	45	11	650	
GEW-138	3/14/2018	17	38	ND	28	16	910	
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-139	3/15/2018	0.56	57	ND	ND	40	3,300	
GEW-140	1/10/2018	13	50	ND	ND	34	1,300	
GEW-140	3/15/2018	0.31	62	ND	ND	34	2,500	
GEW-141	3/15/2018	0.18	27	12	43	17	1,900	See Note 4
GEW-144	1/10/2018	1.5	24	11	37	25	1,200	See Note 4
GEW-144	3/14/2018	9.0	55	ND	3.4	31	1,200	
GEW-145	3/14/2018	6.8	48	ND	ND	41	1,600	
GEW-146	1/11/2018	2.9	6.4	18	72	0.70	ND	
GEW-146	3/12/2018	2.1	5.1	17	75	0.49	ND	See Note 4
GEW-147	11/13/2017	11	42	ND	22	23	880	
GEW-147	1/11/2018	10	39	ND	28	21	810	
GEW-147	3/12/2018	8.7	33	2.4	40	16	600	
GEW-148	1/11/2018	3.2	48	2.9	9.8	36	2,500	
GEW-148	3/12/2018	3.9	46	3.1	10	36	1,900	
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-149	3/8/2018	9.8	32	5.2	47	6.3	250	
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-150	3/14/2018	9.0	33	8.3	35	14	660	See Note 4
GEW-151	11/13/2017	1.4	43	ND	ND	52	1000	
GEW-151	1/11/2018	12	38	4.4	25	20	650	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-151	3/15/2018	4.7	47	ND	ND	43	1,400	
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-152	3/9/2018	27	44	ND	4.8	23	1,100	
GEW-153	11/7/2017	43	37	ND	17	2.0	77	
GEW-153	1/5/2018	34	30	1.4	32	1.7	99	
GEW-153	3/9/2018	43	34	ND	17	4.6	69	
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-154	3/8/2018	0.19	11	16	62	11	580	See Note 3
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-155	3/14/2018	4.2	25	ND	63	6.6	200	
GEW-156	11/8/2017	16	23	12	43	6.0	140	See Note 4
GEW-156	1/16/2018	11	14	14	58	2.2	70	See Note 4
GEW-156	3/14/2018	34	41	2.3	17	4.5	120	
GEW-157	3/14/2018	11	41	4.4	15	28	990	
GEW-158	11/8/2017	34	48	ND	ND	15	470	
GEW-158	1/10/2018	22	49	ND	ND	26	970	
GEW-158	3/13/2018	14	47	3.7	14	21	600	
GEW-159	11/7/2017	25	40	3.0	29	2.9	150	
GEW-159	1/5/2018	38	40	ND	19	1.5	42	
GEW-159	3/9/2018	45	35	2.6	11	6.1	110	
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-160	3/8/2018	1.2	2.6	21	74	1.1	76	See Note 3
GEW-161	1/5/2018	0.40	28	9.1	31	31	1,400	See Note 4
GEW-161	3/8/2018	3.7	48	1.5	8.2	38	1,700	
GEW-162	11/9/2017	11	56	2.0	11	20	950	
GEW-162	1/5/2018	21	68	ND	4.2	6.1	230	
GEW-162	3/12/2018	12	57	ND	19	10	510	
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-163	3/7/2018	11	40	6.3	29	14	520	See Note 3
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-164	3/7/2018	23	55	1.8	7.4	12	720	
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-165	3/7/2018	12	62	ND	ND	23	1,000	
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-166	3/7/2018	0.58	51	ND	4.1	42	2,600	
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-167	3/7/2018	0.37	52	ND	ND	45	2,600	
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-168	3/7/2018	11	53	1.5	8.4	25	1,300	
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-169	3/7/2018	4.0	53	3.0	12	28	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-170	3/15/2018	7.2	50	4.4	18	20	1,500	
GEW-171	3/15/2018	0.44	25	13	45	16	1,000	See Note 3

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
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-172	3/15/2018	4.3	56	ND	ND	35	2,700	
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-173	3/15/2018	45	46	ND	6.0	1.7	170	
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-174	3/14/2018	20	43	ND	20	15	760	
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-175	3/14/2018	11	33	8.3	36	12	520	See Note 4
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-176	3/14/2018	15	29	9.7	38	7.6	370	See Note 4
GEW-177	11/9/2017	0.32	63	2.0	6.8	27	4,600	
GEW-177	1/15/2018	3.5	59	ND	4.7	31	3,600	
GEW-177	3/15/2018	0.32	63	ND	ND	31	3,600	
GEW-178	3/6/2018	16	59	1.8	11	11	350	
GEW-179	3/15/2018	19	61	2.7	9.3	6.5	180	
GEW-180	3/6/2018	18	51	3.1	10	17	310	
GEW-181	1/23/2018	9.9	61	2.7	9.4	16	1,200	
GEW-181	3/7/2018	11	66	ND	ND	19	1,100	
GEW-182	1/23/2018	7.1	51	2.2	7.5	32	1,400	
GEW-182	3/7/2018	15	40	6.5	26	12	380	See Note 4
GEW-184	1/23/2018	22	40	8.1	30	0.38	96	
GEW-184	3/7/2018	13	24	14	49	0.28	39	
GEW-185	1/23/2018	17	59	ND	4.1	18	940	
GEW-185	3/7/2018	16	62	ND	ND	19	870	
GEW-186	1/23/2018	12	59	1.7	7.2	19	1,900	
GEW-186	3/7/2018	18	39	7.4	29	7.2	480	See Note 4
GEW-187	1/23/2018	10	39	5.8	22	22	1,100	See Note 4
GEW-187	3/6/2018	9.4	55	1.7	5.6	27	1,100	
GEW-188	1/23/2018	0.79	22	12	46	18	800	See Note 4
GEW-188	3/7/2018	1.1	11	16	65	6.9	240	See Note 4
GIW-01	11/6/2017	6.0	61	ND	7.5	23	1,300	
GIW-01	12/12/2017	16	43	6.1	30	5.0	230	See Note 4
GIW-01	1/8/2018	11	53	2.8	12	20	940	
GIW-01	2/5/2018	4.9	61	ND	5.2	27	1,300	
GIW-01	3/5/2018	7.3	60	ND	6.8	25	1,100	
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-02	2/5/2018	2.5	18	14	61	5.6	380	See Note 4
GIW-02	3/5/2018	7.3	23	9.6	53	6.8	430	See Note 4
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-03	2/5/2018	1.4	61	ND	ND	34	1,600	
GIW-03	3/5/2018	9.4	53	ND	13	24	950	
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	6.0	280	See Note 4
GIW-04	1/8/2018	0.53	46	1.5	5.1	46	1,700	
GIW-04	2/5/2018	0.50	36	5.7	20	37	1,200	See Note 4
GIW-04	3/5/2018	9.6	51	ND	5.8	32	850	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
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-05	2/5/2018	0.45	9.7	17	59	14	180	See Note 4
GIW-05	3/5/2018	0.15	3.8	20	70	5.4	46	See Note 4
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-06	2/5/2018	2.6	47	1.6	9.0	39	740	
GIW-06	3/5/2018	16	43	ND	22	17	230	
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-07	2/5/2018	25	56	1.4	11	6.1	310	
GIW-07	3/5/2018	31	54	ND	9.7	4.4	220	
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-08	2/5/2018	22	52	ND	25	0.47	64	
GIW-08	3/5/2018	27	55	ND	17	0.26	52	
GIW-09	11/6/2017	4.0	15	12	67	2.4	150	See Note 4
GIW-09	12/13/2017	13	21	5.9	55	5.0	150	See Note 3
GIW-09	1/9/2018	4.9	14	14	65	2.1	120	See Note 4
GIW-09	2/5/2018	3.9	13	12	66	5.0	200	See Note 4
GIW-09	3/5/2018	3.5	19	7.2	63	7.2	220	See Note 3
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-10	2/5/2018	6.9	40	ND	24	28	560	
GIW-10	3/5/2018	8.7	34	ND	40	16	440	
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-11	2/5/2018	7.7	44	ND	27	20	860	
GIW-11	3/5/2018	16	44	ND	20	18	730	
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-12	2/5/2018	9.8	41	2.5	29	18	930	
GIW-12	3/5/2018	9.3	42	3.1	26	19	970	
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	
GIW-13	2/5/2018	18	59	ND	4.1	18	490	
GIW-13	3/5/2018	23	58	ND	3.2	14	370	
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
Flare Station[2]	2/5/2018	12.2	33.0	7.6	36.2	10.3	505	See Note 6
Flare Station[2]	3/7/2018	11.2	32.8	8.1	37.0	10.2	505	See Note 6

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	

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

ND = Analyte not detected in sample.

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

ATTACHMENT D-2

LAB ANALYSIS REPORTS

Air TECHNOLOGY Laboratories, Inc.

March 27, 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: J031903-01/142

Enclosed are results for sample(s) received 3/19/18 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 TNI 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 3/26/18.

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: 5 DAY

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-01	A7765	-20.2	-5	GIW 1	3/5/2018	9:49	C	LFG	NA	X					-5
-02	5816	-20.3	-5	GIW 2	3/5/2018	9:59	C	LFG	NA	X					-4.5
-03	A7766	-20.5	-5	GIW 3	3/5/2018	10:28	C	LFG	NA	X					-4
-04	5268	-20.8	-5	GIW 4	3/5/2018	11:02	C	LFG	NA	X					-4
-05	A8072	-20.3	-5	GIW 5	3/5/2018	11:19	C	LFG	NA	X					-4.5
-06	A8059	-20.4	-5	GIW 6	3/5/2018	11:31	C	LFG	NA	X					-4.5
-07	4657	-20.3	-5	GIW 7	3/5/2018	13:30	C	LFG	NA	X					-5
-08	A7816	-20	-5	GIW 8	3/5/2018	13:40	C	LFG	NA	X					-5
-09	A7773	-20.5	-5	GIW 9	3/5/2018	13:50	C	LFG	NA	X					-5
-10	3126	-20	-5	GIW 10	3/5/2018	14:01	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME 3/5/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FEDEX			
		8/19/18	1237

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: 5 DAY

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	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
J031903-11	A7794	-19.8	-5	GIW 11	3/5/2018	14:12	C	LFG	NA	X					-5
-12	5815	-20	-5	GIW 12	3/5/2018	14:22	C	LFG	NA	X					-5
-13	A8065	-19.9	-5	GIW 13	3/5/2018	14:31	C	LFG	NA	X					-4.5
-14	A7802	-19.7	-5	GEW 56R	3/6/2018	8:23	C	LFG	NA	X					-5
-15	5308	-19.9	-5	GEW 110	3/6/2018	8:36	C	LFG	NA	X					-4.5
-16	A7792	-20	-5	GEW 10	3/6/2018	8:47	C	LFG	NA	X					-4.5
-17	6152	-19.8	-5	GEW 38	3/6/2018	9:39	C	LFG	NA	X					-5
-18	A8086	-20	-5	GEW 109	3/6/2018	9:49	C	LFG	NA	X					-5
-19	5906	-19.9	-5	GEW 39	3/6/2018	9:59	C	LFG	NA	X					-4.5
-20	A8068	-19.9	-5	GEW 187	3/6/2018	10:43	C	LFG	NA	X					-4.5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME 3/5/18 - 3/6/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FEDEX			3/19/18 1237

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: 5 DAY

DELIVERABLES

EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 3 OF 15

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	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
J031903-21	5929	-19.9	-5	GEW 178	3/6/2018	~~11:19~~ 9R 3/16 ~~-19.9~~	C	LFG	NA	X					-4.5
-22	A8063	-18.7	-5	GEW 180	3/6/2018	~~13:52~~ ~~-18.7~~	C	LFG	NA	X					-4
-23	5936	-20.7	-5	GEW 181	3/7/2018	8:26	C	LFG	NA	X					-4
-24	A8057	-20.6	-5	GEW 186	3/7/2018	8:56	C	LFG	NA	X					-4
-25	A7793	-20.6	-5	GEW 185	3/7/2018	9:40	C	LFG	NA	X					-3.9
-26	5831	-20.7	-5	GEW 184	3/7/2018	9:55	C	LFG	NA	X					-4
-27	A8088	-21.1	-5	GEW 188	3/7/2018	10:11	C	LFG	NA	X					-4
-28	A7744	-20.6	-5	GEW 182	3/7/2018	10:26	C	LFG	NA	X					-4
-29	5821	-20.6	-5	GEW 166	3/7/2018	11:17	C	LFG	NA	X					-4
-30	A7665	-20.5	-5	GEW 165	3/7/2018	11:31	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME 3/6/18 - 3/7/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FEDEX		[illegible]	3/19/18 1237

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: 5 DAY

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	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
J031903-31	A7815	-20.5	-5	GEW 167	3/7/2018	13:28	C	LFG	NA	X					-4
-32	A8098	-20.4	-5	GEW 164	3/7/2018	13:41	C	LFG	NA	X					-4
-33	A7808	-20.6	-5	GEW 163	3/7/2018	13:56	C	LFG	NA	X					-4
-34	3827	-20.5	-5	GEW 168	3/7/2018	14:14	C	LFG	NA	X					-4
-35	A7761	-20.7	-5	GEW 169	3/7/2018	14:25	C	LFG	NA	X					-4
-36	5319	-20.8	-5	GEW 160	3/8/2018	10:52	C	LFG	NA	X					-4
-37	5905	-20.7	-5	GEW 161	3/8/2018	11:04	C	LFG	NA	X					-3.5
-38	5318	-20.5	-5	GEW 91	3/8/2018	11:20	C	LFG	NA	X					-4
-39	6146	-20.5	-5	GEW 154	3/8/2018	13:52	C	LFG	NA	X					-4
-40	A8082	-20.6	-5	GEW 90	3/8/2018	14:03	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME 3/7/18 - 3/8/18

RELINQUISHED BY	DATE/TIME 3/16/18	RECEIVED BY	DATE/TIME
RELINQUISHED BY FedEx	DATE/TIME	RECEIVED BY	DATE/TIME 3/19/18 1237
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.

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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: 5 DAY

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	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
J031903-41	A8097	-20	-5	GEW 149	3/8/2018	14:15	C	LFG	NA	X					-4
-42	A7670	-20.6	-5	GEW 162	3/12/2018	8:59	C	LFG	NA	X					-4
-43	A7769	-20.8	-5	GEW 86	3/12/2018	9:19	C	LFG	NA	X					-3
-44	5819	-20.8	-5	GEW 13A	3/12/2018	9:54	C	LFG	NA	X					-3
-45	3436	-20.8	-5	GEW 146	3/12/2018	10:46	C	LFG	NA	X					-3.5
-46	A7671	-20.8	-5	GEW 15	3/12/2018	11:01	C	LFG	NA	X					-3
-47	A8087	-21.2	-5	GEW 16R	3/12/2018	11:20	C	LFG	NA	X					-3
-48	5931	-20	-5	GEW 113	3/12/2018	11:32	C	LFG	NA	X					-3
-49	A7782	-20.9	-5	GEW 148	3/12/2018	13:50	C	LFG	NA	X					-4
-50	A7800	-19.7	-5	GEW 87	3/12/2018	14:03	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME 3/8/18-3/12/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FEDEX			3/19/18 1737

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: 5 DAY

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-51	5269	-20.3	-5	GEW 147	3/12/2018	14:20	C	LFG	NA	X					-4
-52	3162	-20.3	-5	GEW 135	3/12/2018	14:35	C	LFG	NA	X					-4
-53	5813	-20.6	-5	GEW 134	3/14/2018	9:26	C	LFG	NA	X					-4
-54	A8090	-20.6	-5	GEW 116	3/14/2018	9:40	C	LFG	NA	X					-4
-55	A7666	-20.5	-5	GEW 133	3/14/2018	9:53	C	LFG	NA	X					-4
-56	A7804	-20.2	-5	GEW 136	3/14/2018	11:26	C	LFG	NA	X					-4
-57	4644	-19.6	-5	GEW 137	3/14/2018	13:23	C	LFG	NA	X					-4
-58	A7779	-20.1	-5	GEW 138	3/14/2018	13:35	C	LFG	NA	X					-4
-59	5313	-20.3	-5	GEW 78R	3/14/2018	13:47	C	LFG	NA	X					-5
-60	5927	-20.1	-5	GEW 155	3/14/2018	14:01	C	LFG	NA	X					-4.5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME 3/13/18 - 3/14/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FedEx			
		3/19/18 1237	

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: 5 DAY

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-61	A7803	-20.2	-5	GEW 82R	3/14/2018	14:15	C	LFG	NA	X					-4.5
-62	A7778	-19.9	-5	GEW 117	3/15/2018	8:46	C	LFG	NA	X					-4.5
-63	5817	-19.5	-5	GEW 120	3/15/2018	9:20	C	LFG	NA	X					-5
-64	5834	-19.8	-5	GEW 118	3/15/2018	9:35	C	LFG	NA	X					-5
-65	5836	-19.9	-5	GEW 132	3/15/2018	9:50	C	LFG	NA	X					-5
-66	A7805	-19.8	-5	GEW 81	3/15/2018	10:08	C	LFG	NA	X					-5
-67	3131	-19.5	-5	GEW 121	3/15/2018	10:52	C	LFG	NA	X					-5
-68	5304	-19.7	-5	GEW 123	3/15/2018	11:07	C	LFG	NA	X					-6
-69	A8055	-19.6	-5	GEW 124	3/15/2018	11:20	C	LFG	NA	X					-6
-70	A7663	-19.6	-5	GEW 122	3/15/2018	11:35	C	LFG	NA	X					-6

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME 3/14/18-3/15/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FED EX			
		3/19/18 1237	

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*

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CHAIN OF CUSTODY RECORD

TURNAROUND TIME

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

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
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e-mail: Mlambrich@republicservices.com

BILLING

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ANALYSIS REQUEST

LAB USE ONLY	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-71	6135	-19.4	-5	GEW 125	3/15/2018	13:22	C	LFG	NA	X					-6
-72	A7645	-20	-5	GEW 126	3/15/2018	13:35	C	LFG	NA	X					-6
-73	A7748	-19.7	-5	GEW 131	3/15/2018	13:47	C	LFG	NA	X					-6
-74	A8071	-19.6	-5	GEW 151	3/15/2018	14:12	C	LFG	NA	X					-6
-75	5921	-19.4	-5	GEW 88	3/15/2018	14:24	C	LFG	NA	X					-6
							C	LFG	NA	X					
							C	LFG	NA	X					
							C	LFG	NA	X					
							C	LFG	NA	X					
							C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Republic Services DATE/TIME: 3/15/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FedEx			
		3/19/18	1137

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: 5 DAY

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-76	A7646	-20.5	-5	GEW 50	3/5/2018	9:19	C	LFG	NA	X					-4
-77	3130	-20.3	-5	GEW 52	3/5/2018	9:40	C	LFG	NA	X					-4.5
-78	5823	-20.6	-5	GEW 7	3/5/2018	10:05	C	LFG	NA	X					-4.5
-79	5832	-20.5	-5	GEW 8	3/5/2018	10:19	C	LFG	NA	X					-4.5
-80	3124	-20.4	-5	GEW 9	3/5/2018	10:37	C	LFG	NA	X					-5
-81	A7662	-20.4	-5	GEW 51	3/5/2018	11:15	C	LFG	NA	X					-5
-82	3834	-20.1	-5	GEW 53	3/5/2018	11:35	C	LFG	NA	X					-5
-83	A7776	-20	-5	GEW 54	3/5/2018	11:51	C	LFG	NA	X					-5
-84	4658	-20.6	-5	GEW 55	3/6/2018	15:05	C	LFG	NA	X					-4
-85	A7819	-19.5	-5	GEW 40	3/6/2018	15:23	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME 3/5/18-3/6/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
Fed Ex			
		3/19/18 1007	

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: 5 DAY

DELIVERABLES
EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 10 OF 15

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	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
J031903-86	A7649	-20.5	-5	GEW 41R	3/6/2018	15:34	C	LFG	NA	X					-4.5
-87	A7810	-20.3	-5	GEW 42R	3/8/2018	8:49	C	LFG	NA	X					-3
-88	5835	-21	-5	GEW 43R	3/8/2018	9:11	C	LFG	NA	X					-4
-89	A7807	-18.4	-5	GEW 44	3/8/2018	9:24	C	LFG	NA	X					-4
-90	5306	-20.9	-5	GEW 45R	3/8/2018	9:46	C	LFG	NA	X					-4
-91	A7798	-20.3	-5	GEW 46R	3/8/2018	9:59	C	LFG	NA	X					-4
-92	5305	-18	-5	GEW 2S	3/8/2018	10:30	C	LFG	NA	X					-3
-93	4656	-21.4	-5	GEW 2	3/8/2018	10:52	C	LFG	NA	X					-3
-94	A7764	-20.9	-5	GEW 3	3/8/2018	11:04	C	LFG	NA	X					-4
-95	5833	-20.8	-5	GEW 4	3/8/2018	11:17	C	LFG	NA	X					-4

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME 3/6/18 - 3/8/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FedEx			
		3/19/18	1137

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: 5 DAY

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J071903-96	5324	-20.9	-5	GEW 47R	3/8/2018	11:35	C	LFG	NA	X					-4
-97	A7781	-21.4	-5	GEW 5	3/8/2018	13:35	C	LFG	NA	X					-4
-98	A7820	-20.6	-5	GEW 48	3/8/2018	13:48	C	LFG	NA	X					-4
-99	A8064	-20.7	-5	GEW 6	3/8/2018	14:05	C	LFG	NA	X					-4
-100	3164	-20.5	-5	GEW 49	3/8/2018	14:28	C	LFG	NA	X					-4
-101	5310	-20	-5	GEW 159	3/9/2018	10:35	C	LFG	NA	X					-4.5
-102	3839	-20.1	-5	GEW 108	3/9/2018	10:46	C	LFG	NA	X					-5
-103	5323	-20.1	-5	GEW 153	3/9/2018	13:38	C	LFG	NA	X					-5
-104	5910	-19.9	-5	GEW 59R	3/9/2018	13:49	C	LFG	NA	X					-5
-105	6151	-20	-5	GEW 107	3/9/2018	14:24	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME 3/8/18-3/9/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FedEx			
			3/19/18 1237

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: ~~5 DAY~~

DELIVERABLES

EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 12 **OF** 15

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	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
J031903-106	4648	-19.7	-5	GEW 152	3/9/2018	14:36	C	LFG	NA	X					-5
-107	A8073	-19.7	-5	GEW 58A	3/9/2018	14:49	C	LFG	NA	X					-5
-108	A8083	-20	-5	GEW 58	3/9/2018	15:06	C	LFG	NA	X					-5
-109	A8103	-20.9	-5	GEW 106	3/13/2018	11:13	C	LFG	NA	X					-4
-110	A7648	-20.9	-5	GEW 158	3/13/2018	11:35	C	LFG	NA	X					-2
-111	3440	-20.7	-5	GEW 176	3/14/2018	10:02	C	LFG	NA	X					-4
-112	A7809	-20.7	-5	GEW 175	3/14/2018	11:40	C	LFG	NA	X					-4
-113	A7747	-20.7	-5	GEW 150	3/14/2018	11:51	C	LFG	NA	X					-4
-114	A8094	-20.74	-5	GEW 104	3/14/2018	12:02	C	LFG	NA	X					-4
-115	5316	-20.2	-5	GEW 157	3/14/2018	13:23	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME 3/9/18 - 3/14/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FedEx		3/19/18 1237	

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: 5 DAY

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-116	A8070	-20.7	-5	GEW 57B	3/14/2018	13:34	C	LFG	NA	X					-5
-117	3156	-19.3	-5	GEW 57R	3/14/2018	13:43	C	LFG	NA	X					-5
-118	5903	-20.2	-5	GEW 156	3/14/2018	13:53	C	LFG	NA	X					-5
-119	3837	-20.6	-5	GEW 145	3/14/2018	14:04	C	LFG	NA	X					-5
-120	A8067	-20.3	-5	GEW 102	3/14/2018	14:14	C	LFG	NA	X					-5
-121	6143	-20.2	-5	GEW 174	3/14/2018	14:27	C	LFG	NA	X					-5
-122	5267	-20	-5	GEW 68A	3/14/2018	14:36	C	LFG	NA	X					-5
-123	A7770	-19.8	-5	GEW 144	3/14/2018	15:10	C	LFG	NA	X					-5
-124	6160	-19.6	-5	GEW 101	3/14/2018	15:20	C	LFG	NA	X					-5
-125	A7767	-20	-5	GEW 100	3/14/2018	15:31	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME 3/14/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
FedEx			
		3/19/18	1237

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:	5 DAY		

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-126	3157	-19.8	-5	GEW 171	3/15/2018	9:21	C	LFG	NA	X					-5
-127	5922	-19.7	-5	GEW 172	3/15/2018	9:48	C	LFG	NA	X					-5
-128	A7775	-19.9	-5	GEW 141	3/15/2018	10:04	C	LFG	NA	X					-5
-129	5907	-20	-5	GEW 140	3/15/2018	10:15	C	LFG	NA	X					-5
-130	6144	-19.6	-5	GEW 173	3/15/2018	10:28	C	LFG	NA	X					-5
-131	5825	-19.7	-5	GEW 139	3/15/2018	10:44	C	LFG	NA	X					-5
-132	A7643	-19.6	-5	GEW 77	3/15/2018	10:58	C	LFG	NA	X					-6
-133	A8066	-19.7	-5	GEW 177	3/15/2018	11:17	C	LFG	NA	X					-5.9
-134	A7818	-19.9	-5	GEW 129	3/15/2018	11:27	C	LFG	NA	X					-5
-135	5837	-19.7	-5	GEW 128	3/15/2018	11:40	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME: 3/15/18

RELINQUISHED BY	DATE/TIME 3/16/18	RECEIVED BY	DATE/TIME
RELINQUISHED BY FedEx	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

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: 5 DAY

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITAL PRESS
	Cannister ID	Sample Start	Sample End												
J031903-136	4655	-18.6	-5	GEW 170	3/15/2018	13:24	C	LFG	NA	X					-6
-137	A7760	-19.5	-5	GEW 127	3/15/2018	13:33	C	LFG	NA	X					-6
-138	3826	-19.6	-5	GEW 130	3/15/2018	13:47	C	LFG	NA	X					-6
-139	A7751	-19	-5	GEW 179	3/15/2018	14:12	C	LFG	NA	X					-6
-140	6130	-19.6	-5	GEW 67A	3/15/2018	14:28	C	LFG	NA	X					-6
-141	5272	-19.4	-5	GEW 18B	3/15/2018	15:30	C	LFG	NA	X					-6
-142	6155	-20.6	-5	GEW 22R	3/16/2018	9:22	C	LFG	NA	X					-4
							C	LFG	NA	X					
							C	LFG	NA	X					
							C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME 3/15/18-3/16/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/16/18		
			3/19/18 1137

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: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-01		J031903-02		J031903-03		J031903-04	
Client Sample I.D.:	GIW 1		GIW 2		GIW 3		GIW 4	
Date/Time Sampled:	3/5/18 9:49		3/5/18 9:59		3/5/18 10:28		3/5/18 11:02	
Date/Time Analyzed:	3/20/18 17:04		3/20/18 17:19		3/20/18 17:34		3/20/18 17:48	
QC Batch No.:	180320GC8A1		180320GC8A1		180320GC8A1		180320GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.1		3.0		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	25	3.2	6.8	3.1	24	3.0	32	3.0
Carbon Dioxide	60	0.032	23	0.031	53	0.030	51	0.030
Oxygen/Argon	ND	1.6	9.6	1.5	ND	1.5	ND	1.5
Nitrogen	6.8	3.2	53	3.1	13	3.0	5.8	3.0
Methane	7.3	0.0032	7.3	0.0031	9.4	0.0030	9.6	0.0030
Carbon Monoxide	0.11	0.0032	0.043	0.0031	0.095	0.0030	0.085	0.0030

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

Reviewed/Approved By: _____ Date 3-26-18

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: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-05		J031903-06		J031903-07		J031903-08	
Client Sample I.D.:	GIW 5		GIW 6		GIW 7		GIW 8	
Date/Time Sampled:	3/5/18 11:19		3/5/18 11:31		3/5/18 13:30		3/5/18 13:40	
Date/Time Analyzed:	3/20/18 18:03		3/20/18 18:17		3/20/18 18:32		3/20/18 18:46	
QC Batch No.:	180320GC8A1		180320GC8A1		180320GC8A1		180320GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.1		3.1		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	5.4	3.1	17	3.1	4.4	3.2	0.26 d	0.032
Carbon Dioxide	3.8	0.031	43	0.031	54	0.032	55	0.032
Oxygen/Argon	20	1.5	ND	1.5	ND	1.6	ND	1.6
Nitrogen	70	3.1	22	3.1	9.7	3.2	17	3.2
Methane	0.15	0.0031	16	0.0031	31	0.0032	27	0.0032
Carbon Monoxide	0.0046	0.0031	0.023	0.0031	0.022	0.0032	0.0052	0.0032

Results normalized including non-methane hydrocarbons
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Reviewed/Approved By: _____ Date 3-26-18

Mark Johnson
Operations Manager

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ASTM D1946

Lab No.:	J031903-09		J031903-10		J031903-11		J031903-12	
Client Sample I.D.:	GIW 9		GIW 10		GIW 11		GIW 12	
Date/Time Sampled:	3/5/18 13:50		3/5/18 14:01		3/5/18 14:12		3/5/18 14:22	
Date/Time Analyzed:	3/20/18 19:01		3/20/18 19:16		3/20/18 19:30		3/20/18 19:45	
QC Batch No.:	180320GC8A1		180320GC8A1		180320GC8A1		180320GC8A1	
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	7.2	3.2	16	3.2	18	3.2	19	3.2
Carbon Dioxide	19	0.032	34	0.032	44	0.032	42	0.032
Oxygen/Argon	7.2	1.6	ND	1.6	ND	1.6	3.1	1.6
Nitrogen	63	3.2	40	3.2	20	3.2	26	3.2
Methane	3.5	0.0032	8.7	0.0032	16	0.0032	9.3	0.0032
Carbon Monoxide	0.022	0.0032	0.044	0.0032	0.073	0.0032	0.097	0.0032

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ASTM D1946

Lab No.:	J031903-13		J031903-14		J031903-15		J031903-16	
Client Sample I.D.:	GIW 13		GEW 56R		GEW 110		GEW 10	
Date/Time Sampled:	3/5/18 14:31		3/6/18 8:23		3/6/18 8:36		3/6/18 8:47	
Date/Time Analyzed:	3/20/18 19:59		3/20/18 20:14		3/20/18 20:29		3/20/18 20:43	
QC Batch No.:	180320GC8A1		180320GC8A1		180320GC8A1		180320GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.1		3.2		3.1		3.1	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	14	3.1	19	3.2	26	3.1	0.22 d	0.031
Carbon Dioxide	58	0.031	44	0.032	46	0.031	41	0.031
Oxygen/Argon	ND	1.5	ND	1.6	1.9	1.5	ND	1.5
Nitrogen	3.2	3.1	7.9	3.2	8.6	3.1	ND	3.1
Methane	23	0.0031	28	0.0032	17	0.0031	55	0.0031
Carbon Monoxide	0.037	0.0031	0.053	0.0032	0.080	0.0031	ND	0.0031

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Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-17		J031903-18		J031903-19		J031903-20	
Client Sample I.D.:	GEW 38		GEW 109		GEW 39		GEW 187	
Date/Time Sampled:	3/6/18 9:39		3/6/18 9:49		3/6/18 9:59		3/6/18 10:43	
Date/Time Analyzed:	3/20/18 20:58		3/20/18 21:12		3/20/18 21:27		3/21/18 6:35	
QC Batch No.:	180320GC8A1		180320GC8A1		180320GC8A1		180321GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.1		3.1	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	32	3.2	16	3.2	0.052 d	0.031	27	3.1
Carbon Dioxide	38	0.032	42	0.032	35	0.031	55	0.031
Oxygen/Argon	6.3	1.6	ND	1.6	2.3	1.5	1.7	1.5
Nitrogen	22	3.2	24	3.2	30	3.1	5.6	3.1
Methane	1.7	0.0032	16	0.0032	33	0.0031	9.4	0.0031
Carbon Monoxide	0.13	0.0032	0.057	0.0032	ND	0.0031	0.11	0.0031

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Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-21		J031903-22		J031903-23		J031903-24	
Client Sample I.D.:	GEW 178		GEW 180		GEW 181		GEW 186	
Date/Time Sampled:	3/6/18 11:19		3/6/18 13:52		3/7/18 8:26		3/7/18 8:56	
Date/Time Analyzed:	3/21/18 6:50		3/21/18 7:04		3/21/18 7:19		3/21/18 7:33	
QC Batch No.:	180321GC8A1		180321GC8A1		180321GC8A1		180321GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.1		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	11	3.1	17	3.0	19	3.0	7.2	3.0
Carbon Dioxide	59	0.031	51	0.030	66	0.030	39	0.030
Oxygen/Argon	1.8	1.5	3.1	1.5	ND	1.5	7.4	1.5
Nitrogen	11	3.1	10	3.0	ND	3.0	29	3.0
Methane	16	0.0031	18	0.0030	11	0.0030	18	0.0030
Carbon Monoxide	0.035	0.0031	0.031	0.0030	0.11	0.0030	0.048	0.0030

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ASTM D1946

Lab No.:	J031903-25		J031903-26		J031903-27		J031903-28	
Client Sample I.D.:	GEW 185		GEW 184		GEW 188		GEW 182	
Date/Time Sampled:	3/7/18 9:40		3/7/18 9:55		3/7/18 10:11		3/7/18 10:26	
Date/Time Analyzed:	3/21/18 7:48		3/21/18 8:02		3/21/18 8:17		3/21/18 8:31	
QC Batch No.:	180321GC8A1		180321GC8A1		180321GC8A1		180321GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.9		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	19	2.9	0.28 d	0.030	6.9	3.0	12	3.0
Carbon Dioxide	62	0.029	24	0.030	11	0.030	40	0.030
Oxygen/Argon	ND	1.4	14	1.5	16	1.5	6.5	1.5
Nitrogen	ND	2.9	49	3.0	65	3.0	26	3.0
Methane	16	0.0029	13	0.0030	1.1	0.0030	15	0.0030
Carbon Monoxide	0.087	0.0029	0.0039	0.0030	0.024	0.0030	0.038	0.0030

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Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-29		J031903-30		J031903-31		J031903-32	
Client Sample I.D.:	GEW 166		GEW 165		GEW 167		GEW 164	
Date/Time Sampled:	3/7/18 11:17		3/7/18 11:31		3/7/18 13:28		3/7/18 13:41	
Date/Time Analyzed:	3/21/18 8:46		3/21/18 9:01		3/21/18 9:15		3/21/18 9:30	
QC Batch No.:	180321GC8A1		180321GC8A1		180321GC8A1		180321GC8A1	
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	42	3.0	23	3.0	45	3.0	12	3.0
Carbon Dioxide	51	0.030	62	0.030	52	0.030	55	0.030
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	1.8	1.5
Nitrogen	4.1	3.0	ND	3.0	ND	3.0	7.4	3.0
Methane	0.58	0.0030	12	0.0030	0.37	0.0030	23	0.0030
Carbon Monoxide	0.26	0.0030	0.10	0.0030	0.26	0.0030	0.072	0.0030

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ASTM D1946

Lab No.:	J031903-33		J031903-34		J031903-35		J031903-36	
Client Sample I.D.:	GEW 163		GEW 168		GEW 169		GEW 160	
Date/Time Sampled:	3/7/18 13:56		3/7/18 14:14		3/7/18 14:25		3/8/18 10:52	
Date/Time Analyzed:	3/21/18 9:44		3/21/18 10:05		3/21/18 10:19		3/21/18 10:34	
QC Batch No.:	180321GC8A1		180321GC8A1		180321GC8A1		180321GC8A1	
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	14	3.0	25	3.0	28	3.0	1.1 d	0.030
Carbon Dioxide	40	0.030	53	0.030	53	0.030	2.6	0.030
Oxygen/Argon	6.3	1.5	1.5	1.5	3.0	1.5	21	1.5
Nitrogen	29	3.0	8.4	3.0	12	3.0	74	3.0
Methane	11	0.0030	11	0.0030	4.0	0.0030	1.2	0.0030
Carbon Monoxide	0.052	0.0030	0.13	0.0030	0.18	0.0030	0.0076	0.0030

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ASTM D1946

Lab No.:	J031903-37		J031903-38		J031903-39		J031903-40	
Client Sample I.D.:	GEW 161		GEW 91		GEW 154		GEW 90	
Date/Time Sampled:	3/8/18 11:04		3/8/18 11:20		3/8/18 13:52		3/8/18 14:03	
Date/Time Analyzed:	3/21/18 10:48		3/21/18 11:03		3/21/18 11:17		3/21/18 13:08	
QC Batch No.:	180321GC8A1		180321GC8A1		180321GC8A1		180321GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.9		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	38	2.9	9.9	3.0	11	3.0	30	3.0
Carbon Dioxide	48	0.029	12	0.030	11	0.030	41	0.030
Oxygen/Argon	1.5	1.4	17	1.5	16	1.5	ND	1.5
Nitrogen	8.2	2.9	60	3.0	62	3.0	8.5	3.0
Methane	3.7	0.0029	1.1	0.0030	0.19	0.0030	19	0.0030
Carbon Monoxide	0.17	0.0029	0.015	0.0030	0.058	0.0030	0.086	0.0030

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ASTM D1946

Lab No.:	J031903-41		J031903-42		J031903-43		J031903-44	
Client Sample I.D.:	GEW 149		GEW 162		GEW 86		GEW 13A	
Date/Time Sampled:	3/8/18 14:15		3/12/18 8:59		3/12/18 9:19		3/12/18 9:54	
Date/Time Analyzed:	3/21/18 13:23		3/21/18 13:37		3/21/18 13:52		3/21/18 14:06	
QC Batch No.:	180321GC8A2		180321GC8A2		180321GC8A2		180321GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	6.3	3.0	10	3.0	12	2.8	8.5	2.8
Carbon Dioxide	32	0.030	57	0.030	32	0.028	32	0.028
Oxygen/Argon	5.2	1.5	ND	1.5	6.1	1.4	9.1	1.4
Nitrogen	47	3.0	19	3.0	38	2.8	41	2.8
Methane	9.8	0.0030	12	0.0030	13	0.0028	9.5	0.0028
Carbon Monoxide	0.025	0.0030	0.051	0.0030	0.025	0.0028	0.035	0.0028

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ASTM D1946

Lab No.:	J031903-45		J031903-46		J031903-47		J031903-48	
Client Sample I.D.:	GEW 146		GEW 15		GEW 16R		GEW 113	
Date/Time Sampled:	3/12/18 10:46		3/12/18 11:01		3/12/18 11:20		3/12/18 11:32	
Date/Time Analyzed:	3/21/18 14:21		3/21/18 14:35		3/21/18 14:50		3/21/18 15:05	
QC Batch No.:	180321GC8A2		180321GC8A2		180321GC8A2		180321GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.9		2.8		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.49 d	0.029	29	2.8	27	2.8	21	2.8
Carbon Dioxide	5.1	0.029	44	0.028	38	0.028	40	0.028
Oxygen/Argon	17	1.4	ND	1.4	2.8	1.4	4.6	1.4
Nitrogen	75	2.9	12	2.8	26	2.8	25	2.8
Methane	2.1	0.0029	14	0.0028	5.5	0.0028	8.9	0.0028
Carbon Monoxide	ND	0.0029	0.11	0.0028	0.11	0.0028	0.10	0.0028

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-49		J031903-50		J031903-51		J031903-52	
Client Sample I.D.:	GEW 148		GEW 87		GEW 147		GEW 135	
Date/Time Sampled:	3/12/18 13:50		3/12/18 14:03		3/12/18 14:20		3/12/18 14:35	
Date/Time Analyzed:	3/21/18 15:19		3/21/18 15:34		3/21/18 15:48		3/21/18 16:03	
QC Batch No.:	180321GC8A2		180321GC8A2		180321GC8A2		180321GC8A2	
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	36	3.0	2.0 d	0.030	16	3.0	22	3.0
Carbon Dioxide	46	0.030	13	0.030	33	0.030	38	0.030
Oxygen/Argon	3.1	1.5	15	1.5	2.4	1.5	3.9	1.5
Nitrogen	10	3.0	64	3.0	40	3.0	30	3.0
Methane	3.9	0.0030	5.5	0.0030	8.7	0.0030	5.4	0.0030
Carbon Monoxide	0.19	0.0030	0.012	0.0030	0.060	0.0030	0.091	0.0030

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 180323GC8A2

Reviewed/Approved By: _____ Date 3-26-18
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: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-53		J031903-54		J031903-55		J031903-56	
Client Sample I.D.:	GEW 134		GEW 116		GEW 133		GEW 136	
Date/Time Sampled:	3/14/18 9:26		3/14/18 9:40		3/14/18 9:53		3/14/18 11:26	
Date/Time Analyzed:	3/21/18 16:17		3/21/18 16:32		3/21/18 16:46		3/21/18 17:01	
QC Batch No.:	180321GC8A2		180321GC8A2		180321GC8A2		180321GC8A2	
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	11	3.0	15	3.0	24	3.0	23	3.0
Carbon Dioxide	34	0.030	33	0.030	47	0.030	30	0.030
Oxygen/Argon	4.7	1.5	8.5	1.5	2.2	1.5	5.7	1.5
Nitrogen	38	3.0	37	3.0	19	3.0	36	3.0
Methane	12	0.0030	5.0	0.0030	7.6	0.0030	5.2	0.0030
Carbon Monoxide	0.043	0.0030	0.068	0.0030	0.10	0.0030	0.065	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: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-57		J031903-58		J031903-59		J031903-60	
Client Sample I.D.:	GEW 137		GEW 138		GEW 78R		GEW 155	
Date/Time Sampled:	3/14/18 13:23		3/14/18 13:35		3/14/18 13:47		3/14/18 14:01	
Date/Time Analyzed:	3/21/18 17:15		3/21/18 17:30		3/21/18 17:45		3/21/18 19:58	
QC Batch No.:	180321GC8A2		180321GC8A2		180321GC8A2		180321GC8A3	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		3.2		3.1	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.19 d	0.030	16	3.0	19	3.2	6.6	3.1
Carbon Dioxide	32	0.030	38	0.030	41	0.032	25	0.031
Oxygen/Argon	2.8	1.5	ND	1.5	1.8	1.6	ND	1.5
Nitrogen	34	3.0	28	3.0	24	3.2	63	3.1
Methane	32	0.0030	17	0.0030	13	0.0032	4.2	0.0031
Carbon Monoxide	0.0032	0.0030	0.091	0.0030	0.067	0.0032	0.020	0.0031

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 180323GC8A2

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-61		J031903-62		J031903-63		J031903-64	
Client Sample I.D.:	GEW 82R		GEW 117		GEW 120		GEW 118	
Date/Time Sampled:	3/14/18 14:15		3/15/18 8:46		3/15/18 9:20		3/15/18 9:35	
Date/Time Analyzed:	3/21/18 20:13		3/21/18 20:28		3/21/18 20:42		3/21/18 20:57	
QC Batch No.:	180321GC8A3		180321GC8A3		180321GC8A3		180321GC8A3	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.1		3.1		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	23	3.1	0.38 d	0.031	12	3.2	32	3.2
Carbon Dioxide	32	0.031	44	0.031	49	0.032	46	0.032
Oxygen/Argon	1.7	1.5	2.6	1.5	ND	1.6	3.8	1.6
Nitrogen	35	3.1	12	3.1	23	3.2	15	3.2
Methane	8.0	0.0031	41	0.0031	15	0.0032	1.9	0.0032
Carbon Monoxide	0.077	0.0031	0.0087	0.0031	0.050	0.0032	0.071	0.0032

Results normalized including non-methane hydrocarbons
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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-65		J031903-66		J031903-67		J031903-68	
Client Sample I.D.:	GEW 132		GEW 81		GEW 121		GEW 123	
Date/Time Sampled:	3/15/18 9:50		3/15/18 10:08		3/15/18 10:52		3/15/18 11:07	
Date/Time Analyzed:	3/21/18 21:11		3/21/18 21:26		3/21/18 21:40		3/21/18 21:55	
QC Batch No.:	180321GC8A3		180321GC8A3		180321GC8A3		180321GC8A3	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.4	
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	30	3.2	22	3.2	17	3.2	13	3.4
Carbon Dioxide	37	0.032	24	0.032	39	0.032	48	0.034
Oxygen/Argon	5.1	1.6	12	1.6	3.2	1.6	ND	1.7
Nitrogen	26	3.2	40	3.2	34	3.2	24	3.4
Methane	0.66	0.0032	0.35	0.0032	6.1	0.0032	14	0.0034
Carbon Monoxide	0.17	0.0032	0.069	0.0032	0.083	0.0032	0.063	0.0034

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: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-69		J031903-70		J031903-71		J031903-72	
Client Sample I.D.:	GEW 124		GEW 122		GEW 125		GEW 126	
Date/Time Sampled:	3/15/18 11:20		3/15/18 11:35		3/15/18 13:22		3/15/18 13:35	
Date/Time Analyzed:	3/21/18 22:09		3/21/18 22:24		3/21/18 22:39		3/21/18 22:53	
QC Batch No.:	180321GC8A3		180321GC8A3		180321GC8A3		180321GC8A3	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		3.4		3.4		3.4	
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	0.038 d	0.034	18	3.4	42	3.4	8.2	3.4
Carbon Dioxide	34	0.034	37	0.034	52	0.034	46	0.034
Oxygen/Argon	4.6	1.7	2.4	1.7	ND	1.7	ND	1.7
Nitrogen	16	3.4	31	3.4	3.5	3.4	28	3.4
Methane	45	0.0034	11	0.0034	0.78	0.0034	15	0.0034
Carbon Monoxide	ND	0.0034	0.11	0.0034	0.20	0.0034	0.057	0.0034

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch:180323GC8A2

Reviewed/Approved By: _____ Date 3-26-18

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Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-73		J031903-74		J031903-75		J031903-76	
Client Sample I.D.:	GEW 131		GEW 151		GEW 88		GEW 50	
Date/Time Sampled:	3/15/18 13:47		3/15/18 14:12		3/15/18 14:24		3/5/18 9:19	
Date/Time Analyzed:	3/22/18 6:31		3/22/18 6:46		3/22/18 7:01		3/22/18 7:15	
QC Batch No.:	180322GC8A1		180322GC8A1		180322GC8A1		180322GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		3.4		3.4		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	3.4	43	3.4	54	3.4	0.059 d	0.030
Carbon Dioxide	43	0.034	47	0.034	41	0.034	35	0.030
Oxygen/Argon	ND	1.7	ND	1.7	ND	1.7	ND	1.5
Nitrogen	19	3.4	ND	3.4	ND	3.4	9.1	3.0
Methane	21	0.0034	4.7	0.0034	1.4	0.0034	55	0.0030
Carbon Monoxide	0.095	0.0034	0.14	0.0034	0.098	0.0034	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:180323GC82

Reviewed/Approved By: _____ Date 3-26-18

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-77		J031903-78		J031903-79		J031903-80	
Client Sample I.D.:	GEW 52		GEW 7		GEW 8		GEW 9	
Date/Time Sampled:	3/5/18 9:40		3/5/18 10:05		3/5/18 10:19		3/5/18 10:37	
Date/Time Analyzed:	3/22/18 7:30		3/22/18 7:44		3/22/18 7:59		3/22/18 8:13	
QC Batch No.:	180322GC8A1		180322GC8A1		180322GC8A1		180322GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.1		3.1		3.1		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	0.032 d	0.031	ND d	0.031	1.7 d	0.031	1.00 d	0.032
Carbon Dioxide	37	0.031	38	0.031	41	0.031	40	0.032
Oxygen/Argon	1.6	1.5	ND	1.5	ND	1.5	ND	1.6
Nitrogen	6.4	3.1	ND	3.1	ND	3.1	3.3	3.2
Methane	55	0.0031	59	0.0031	54	0.0031	55	0.0032
Carbon Monoxide	ND	0.0031	ND	0.0031	ND	0.0031	ND	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch:180323GC8A2

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Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-81		J031903-82		J031903-83		J031903-84	
Client Sample I.D.:	GEW 51		GEW 53		GEW 54		GEW 55	
Date/Time Sampled:	3/5/18 11:15		3/5/18 11:35		3/5/18 11:51		3/6/18 15:05	
Date/Time Analyzed:	3/22/18 8:28		3/22/18 8:42		3/22/18 8:57		3/22/18 9:12	
QC Batch No.:	180322GC8A1		180322GC8A1		180322GC8A1		180322GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.0	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	1.1 d	0.032	5.4	3.2	2.4 d	0.032	2.0 d	0.030
Carbon Dioxide	38	0.032	38	0.032	38	0.032	37	0.030
Oxygen/Argon	ND	1.6	ND	1.6	ND	1.6	ND	1.5
Nitrogen	4.5	3.2	6.1	3.2	5.8	3.2	12	3.0
Methane	55	0.0032	49	0.0032	52	0.0032	48	0.0030
Carbon Monoxide	ND	0.0032	0.0055	0.0032	ND	0.0032	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: 180323GC8A2, 180323GC8A3

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-85		J031903-86		J031903-87		J031903-88	
Client Sample I.D.:	GEW 40		GEW 41R		GEW 42R		GEW 43R	
Date/Time Sampled:	3/6/18 15:23		3/6/18 15:34		3/8/18 8:49		3/8/18 9:11	
Date/Time Analyzed:	3/22/18 9:26		3/22/18 9:41		3/22/18 9:55		3/22/18 10:10	
QC Batch No.:	180322GC8A1		180322GC8A1		180322GC8A1		180322GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.1		2.8		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	0.031	ND d	0.028	0.24 d	0.030
Carbon Dioxide	32	0.030	34	0.031	35	0.028	39	0.030
Oxygen/Argon	3.4	1.5	ND	1.5	3.0	1.4	ND	1.5
Nitrogen	15	3.0	12	3.1	10	2.8	4.5	3.0
Methane	50	0.0030	54	0.0031	52	0.0028	56	0.0030
Carbon Monoxide	ND	0.0030	ND	0.0031	ND	0.0028	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: 180323GC8A3

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-89		J031903-90		J031903-91		J031903-92	
Client Sample I.D.:	GEW 44		GEW 45R		GEW 46R		GEW 2S	
Date/Time Sampled:	3/8/18 9:24		3/8/18 9:46		3/8/18 9:59		3/8/18 10:30	
Date/Time Analyzed:	3/22/18 10:24		3/22/18 10:39		3/22/18 10:53		3/22/18 11:08	
QC Batch No.:	180322GC8A1		180322GC8A1		180322GC8A1		180322GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		3.0		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	0.030	ND d	0.030	0.084 d	0.030	ND d	0.028
Carbon Dioxide	26	0.030	38	0.030	33	0.030	26	0.028
Oxygen/Argon	5.1	1.5	ND	1.5	2.1	1.5	6.0	1.4
Nitrogen	28	3.0	ND	3.0	18	3.0	21	2.8
Methane	41	0.0030	58	0.0030	47	0.0030	46	0.0028
Carbon Monoxide	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0028

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
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Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-93		J031903-94		J031903-95		J031903-96	
Client Sample I.D.:	GEW 2		GEW 3		GEW 4		GEW 47R	
Date/Time Sampled:	3/8/18 10:52		3/8/18 11:04		3/8/18 11:17		3/8/18 11:35	
Date/Time Analyzed:	3/22/18 13:08		3/22/18 13:23		3/22/18 13:38		3/22/18 13:52	
QC Batch No.:	180322GC8A2		180322GC8A2		180322GC8A2		180322GC8A2	
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	ND d	0.028	0.074 d	0.030	0.070 d	0.030	0.035 d	0.030
Carbon Dioxide	36	0.028	35	0.030	36	0.030	33	0.030
Oxygen/Argon	ND	1.4	ND	1.5	ND	1.5	ND	1.5
Nitrogen	11	2.8	18	3.0	12	3.0	22	3.0
Methane	52	0.0028	47	0.0030	51	0.0030	45	0.0030
Carbon Monoxide	ND	0.0028	ND	0.0030	ND	0.0030	ND	0.0030

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Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-97		J031903-98		J031903-99		J031903-100	
Client Sample I.D.:	GEW 5		GEW 48		GEW 6		GEW 49	
Date/Time Sampled:	3/8/18 13:35		3/8/18 13:48		3/8/18 14:05		3/8/18 14:28	
Date/Time Analyzed:	3/22/18 14:07		3/22/18 14:21		3/22/18 14:36		3/22/18 14:50	
QC Batch No.:	180322GC8A2		180322GC8A2		180322GC8A2		180322GC8A2	
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	ND d	0.030	0.055 d	0.030
Carbon Dioxide	31	0.030	36	0.030	34	0.030	35	0.030
Oxygen/Argon	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Nitrogen	25	3.0	9.2	3.0	12	3.0	14	3.0
Methane	43	0.0030	54	0.0030	54	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: 180323GC8A3

Reviewed/Approved By: _____ Date 3-26-18

Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-101		J031903-102		J031903-103		J031903-104	
Client Sample I.D.:	GEW 159		GEW 108		GEW 153		GEW 59R	
Date/Time Sampled:	3/9/18 10:35		3/9/18 10:46		3/9/18 13:38		3/9/18 13:49	
Date/Time Analyzed:	3/22/18 15:05		3/22/18 15:19		3/22/18 15:34		3/22/18 15:49	
QC Batch No.:	180322GC8A2		180322GC8A2		180322GC8A2		180322GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.1		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	6.1	3.1	1.3 d	0.032	4.6	3.2	31	3.2
Carbon Dioxide	35	0.031	47	0.032	34	0.032	37	0.032
Oxygen/Argon	2.6	1.5	ND	1.6	ND	1.6	ND	1.6
Nitrogen	11	3.1	14	3.2	17	3.2	13	3.2
Methane	45	0.0031	36	0.0032	43	0.0032	18	0.0032
Carbon Monoxide	0.011	0.0031	0.0060	0.0032	0.0069	0.0032	0.096	0.0032

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-105		J031903-106		J031903-107		J031903-108	
Client Sample I.D.:	GEW 107		GEW 152		GEW 58A		GEW 58	
Date/Time Sampled:	3/9/18 14:24		3/9/18 14:36		3/9/18 14:49		3/9/18 15:06	
Date/Time Analyzed:	3/22/18 16:03		3/22/18 16:18		3/22/18 16:32		3/22/18 16:47	
QC Batch No.:	180322GC8A2		180322GC8A2		180322GC8A2		180322GC8A2	
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	25	3.2	23	3.2	36	3.2	13	3.2
Carbon Dioxide	52	0.032	44	0.032	34	0.032	23	0.032
Oxygen/Argon	2.5	1.6	ND	1.6	5.0	1.6	6.0	1.6
Nitrogen	8.6	3.2	4.8	3.2	23	3.2	53	3.2
Methane	12	0.0032	27	0.0032	1.2	0.0032	4.7	0.0032
Carbon Monoxide	0.13	0.0032	0.11	0.0032	0.13	0.0032	0.050	0.0032

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-109		J031903-110		J031903-111		J031903-112	
Client Sample I.D.:	GEW 106		GEW 158		GEW 176		GEW 175	
Date/Time Sampled:	3/13/18 11:13		3/13/18 11:35		3/14/18 10:02		3/14/18 11:40	
Date/Time Analyzed:	3/22/18 17:01		3/22/18 17:16		3/22/18 17:30		3/22/18 17:45	
QC Batch No.:	180322GC8A2		180322GC8A2		180322GC8A2		180322GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		2.7		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	21	2.7	7.6	3.0	12	3.0
Carbon Dioxide	33	0.030	47	0.027	29	0.030	33	0.030
Oxygen/Argon	7.2	1.5	3.7	1.3	9.7	1.5	8.3	1.5
Nitrogen	35	3.0	14	2.7	38	3.0	36	3.0
Methane	12	0.0030	14	0.0027	15	0.0030	11	0.0030
Carbon Monoxide	0.027	0.0030	0.060	0.0027	0.037	0.0030	0.052	0.0030

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Project No.: NA
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Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-113		J031903-114		J031903-115		J031903-116	
Client Sample I.D.:	GEW 150		GEW 104		GEW 157		GEW 57B	
Date/Time Sampled:	3/14/18 11:51		3/14/18 12:02		3/14/18 13:23		3/14/18 13:34	
Date/Time Analyzed:	3/22/18 19:43		3/22/18 19:58		3/22/18 20:12		3/22/18 20:27	
QC Batch No.:	180322GC8A3		180322GC8A3		180322GC8A3		180322GC8A3	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.0		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	3.0	42	3.0	28	3.2	16	3.2
Carbon Dioxide	33	0.030	53	0.030	41	0.032	17	0.032
Oxygen/Argon	8.3	1.5	ND	1.5	4.4	1.6	14	1.6
Nitrogen	35	3.0	ND	3.0	15	3.2	51	3.2
Methane	9.0	0.0030	1.2	0.0030	11	0.0032	2.3	0.0032
Carbon Monoxide	0.066	0.0030	0.13	0.0030	0.099	0.0032	0.037	0.0032

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-117		J031903-118		J031903-119		J031903-120	
Client Sample I.D.:	GEW 57R		GEW 156		GEW 145		GEW 102	
Date/Time Sampled:	3/14/18 13:43		3/14/18 13:53		3/14/18 14:04		3/14/18 14:14	
Date/Time Analyzed:	3/22/18 20:41		3/22/18 20:56		3/22/18 21:10		3/22/18 21:25	
QC Batch No.:	180322GC8A3		180322GC8A3		180322GC8A3		180322GC8A3	
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	23	3.2	4.5	3.2	41	3.2	31	3.2
Carbon Dioxide	33	0.032	41	0.032	48	0.032	45	0.032
Oxygen/Argon	8.7	1.6	2.3	1.6	ND	1.6	2.2	1.6
Nitrogen	30	3.2	17	3.2	ND	3.2	7.5	3.2
Methane	4.7	0.0032	34	0.0032	6.8	0.0032	13	0.0032
Carbon Monoxide	0.051	0.0032	0.012	0.0032	0.16	0.0032	0.042	0.0032

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Project No.: NA
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Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-121		J031903-122		J031903-123		J031903-124	
Client Sample I.D.:	GEW 174		GEW 68A		GEW 144		GEW 101	
Date/Time Sampled:	3/14/18 14:27		3/14/18 14:36		3/14/18 15:10		3/14/18 15:20	
Date/Time Analyzed:	3/22/18 21:40		3/22/18 21:54		3/22/18 22:09		3/22/18 22:23	
QC Batch No.:	180322GC8A3		180322GC8A3		180322GC8A3		180322GC8A3	
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	15	3.2	27	3.2	31	3.2	8.8	3.2
Carbon Dioxide	43	0.032	46	0.032	55	0.032	61	0.032
Oxygen/Argon	ND	1.6	2.5	1.6	ND	1.6	2.7	1.6
Nitrogen	20	3.2	11	3.2	3.4	3.2	10	3.2
Methane	20	0.0032	13	0.0032	9.0	0.0032	17	0.0032
Carbon Monoxide	0.076	0.0032	0.16	0.0032	0.12	0.0032	0.041	0.0032

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-125		J031903-126		J031903-127		J031903-128	
Client Sample I.D.:	GEW 100		GEW 171		GEW 172		GEW 141	
Date/Time Sampled:	3/14/18 15:31		3/15/18 9:21		3/15/18 9:48		3/15/18 10:04	
Date/Time Analyzed:	3/22/18 22:38		3/22/18 22:52		3/22/18 23:07		3/22/18 23:22	
QC Batch No.:	180322GC8A3		180322GC8A3		180322GC8A3		180322GC8A3	
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	30	3.2	16	3.2	35	3.2	17	3.2
Carbon Dioxide	56	0.032	25	0.032	56	0.032	27	0.032
Oxygen/Argon	2.5	1.6	13	1.6	ND	1.6	12	1.6
Nitrogen	8.6	3.2	45	3.2	ND	3.2	43	3.2
Methane	1.3	0.0032	0.44	0.0032	4.3	0.0032	0.18	0.0032
Carbon Monoxide	0.095	0.0032	0.10	0.0032	0.27	0.0032	0.19	0.0032

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-129		J031903-130		J031903-131		J031903-132	
Client Sample I.D.:	GEW 140		GEW 173		GEW 139		GEW 77	
Date/Time Sampled:	3/15/18 10:15		3/15/18 10:28		3/15/18 10:44		3/15/18 10:58	
Date/Time Analyzed:	3/22/18 23:36		3/23/18 6:27		3/23/18 6:41		3/23/18 6:56	
QC Batch No.:	180322GC8A3		180322GC8A3		180322GC8A3		180322GC8A3	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.4	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	34	3.2	1.7 d	0.032	40	3.2	37	3.4
Carbon Dioxide	62	0.032	46	0.032	57	0.032	45	0.034
Oxygen/Argon	ND	1.6	ND	1.6	ND	1.6	3.7	1.7
Nitrogen	ND	3.2	6.0	3.2	ND	3.2	13	3.4
Methane	0.31	0.0032	45	0.0032	0.56	0.0032	0.44	0.0034
Carbon Monoxide	0.25	0.0032	0.017	0.0032	0.33	0.0032	0.20	0.0034

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-133		J031903-134		J031903-135		J031903-136	
Client Sample I.D.:	GEW 177		GEW 129		GEW 128		GEW 170	
Date/Time Sampled:	3/15/18 11:17		3/15/18 11:27		3/15/18 11:40		3/15/18 13:24	
Date/Time Analyzed:	3/23/18 8:52		3/23/18 9:07		3/23/18 9:21		3/23/18 9:36	
QC Batch No.:	180323GC8A1		180323GC8A1		180323GC8A1		180323GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.3		3.2		3.2		3.4	
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	3.3	18	3.2	12	3.2	20	3.4
Carbon Dioxide	63	0.033	59	0.032	48	0.032	50	0.034
Oxygen/Argon	ND	1.6	ND	1.6	4.7	1.6	4.4	1.7
Nitrogen	ND	3.3	8.0	3.2	21	3.2	18	3.4
Methane	0.32	0.0033	13	0.0032	14	0.0032	7.2	0.0034
Carbon Monoxide	0.36	0.0033	0.18	0.0032	0.10	0.0032	0.15	0.0034

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Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-137		J031903-138		J031903-139		J031903-140	
Client Sample I.D.:	GEW 127		GEW 130		GEW 179		GEW 67A	
Date/Time Sampled:	3/15/18 13:33		3/15/18 13:47		3/15/18 14:12		3/15/18 14:28	
Date/Time Analyzed:	3/23/18 9:50		3/23/18 10:05		3/23/18 10:19		3/23/18 10:35	
QC Batch No.:	180323GC8A1		180323GC8A1		180323GC8A1		180323GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		3.4		3.4		3.4	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	23	3.4	28	3.4	6.5	3.4	24	3.4
Carbon Dioxide	53	0.034	47	0.034	61	0.034	31	0.034
Oxygen/Argon	4.3	1.7	3.6	1.7	2.7	1.7	6.1	1.7
Nitrogen	15	3.4	16	3.4	9.3	3.4	35	3.4
Methane	3.7	0.0034	3.8	0.0034	19	0.0034	2.8	0.0034
Carbon Monoxide	0.21	0.0034	0.21	0.0034	0.018	0.0034	0.035	0.0034

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Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 03/19/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J031903-141		J031903-142					
Client Sample I.D.:	GEW 18B		GEW 22R					
Date/Time Sampled:	3/15/18 15:30		3/16/18 9:22					
Date/Time Analyzed:	3/23/18 10:50		3/23/18 11:04					
QC Batch No.:	180323GC8A1		180323GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.4		3.0					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	36	3.4	19	3.0				
Carbon Dioxide	34	0.034	34	0.030				
Oxygen/Argon	6.0	1.7	10	1.5				
Nitrogen	23	3.4	36	3.0				
Methane	0.66	0.0034	0.42	0.0030				
Carbon Monoxide	0.13	0.0034	0.14	0.0030				

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QC Batch No: 180320GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/20/18 15:20			3/20/18 14:36		3/20/18 14:50					
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	5.85	117	2.7	70	130	30
Carbon Dioxide	ND	0.010	10	9.13	91	9.26	92	1.4	70	130	30
Oxygen/Argon	ND	0.50	15	15.6	105	15.9	107	2.1	70	130	30
Nitrogen	ND	1.0	70	70.3	100	71.8	103	2.1	70	130	30
Methane	ND	0.0010	0.10	0.102	102	0.101	101	0.8	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.101	101	0.100	100	0.8	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180321GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/21/18 6:21			3/20/18 22:25		3/20/18 22:40					
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	5.37	107	5.34	107	0.5	70	130	30
Carbon Dioxide	ND	0.010	10	9.19	92	9.17	92	0.2	70	130	30
Oxygen/Argon	ND	0.50	15	16.0	108	16.0	108	0.2	70	130	30
Nitrogen	ND	1.0	70	72.0	103	71.8	103	0.3	70	130	30
Methane	ND	0.0010	0.10	0.106	106	0.106	106	0.4	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.103	103	0.102	102	0.5	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180321GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/21/18 12:51			3/21/18 12:08		3/21/18 12:22					
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	4.49	90	4.44	89	1.1	70	130	30
Carbon Dioxide	ND	0.010	10	9.00	90	9.00	90	0.0	70	130	30
Oxygen/Argon	ND	0.50	15	16.3	110	16.4	111	0.4	70	130	30
Nitrogen	ND	1.0	70	72.5	104	72.7	104	0.4	70	130	30
Methane	ND	0.0010	0.10	0.104	104	0.104	104	0.5	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.102	102	0.101	101	0.6	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180321GC8A3
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/21/18 18:57			3/21/18 19:12		3/21/18 19:27					
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	4.08	82	3.95	79	3.1	70	130	30
Carbon Dioxide	ND	0.010	10	8.83	88	8.71	87	1.4	70	130	30
Oxygen/Argon	ND	0.50	15	16.4	111	16.3	110	0.9	70	130	30
Nitrogen	ND	1.0	70	72.4	104	71.7	103	0.9	70	130	30
Methane	ND	0.0010	0.10	0.108	108	0.108	108	0.4	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.0987	99	0.0983	98	0.4	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180322GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/22/18 6:17			3/22/18 5:48		3/22/18 6:02					
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	5.92	118	5.87	117	0.8	70	130	30
Carbon Dioxide	ND	0.010	10	9.33	93	9.30	93	0.4	70	130	30
Oxygen/Argon	ND	0.50	15	15.8	107	15.8	107	0.2	70	130	30
Nitrogen	ND	1.0	70	71.3	102	71.0	102	0.3	70	130	30
Methane	ND	0.0010	0.10	0.106	106	0.106	106	0.3	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.105	105	0.105	105	0.3	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180322GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/22/18 12:54			3/22/18 12:09		3/22/18 12:24					
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	5.77	115	5.63	113	2.5	70	130	30
Carbon Dioxide	ND	0.010	10	9.37	93	9.16	91	2.2	70	130	30
Oxygen/Argon	ND	0.50	15	16.0	108	15.8	107	1.4	70	130	30
Nitrogen	ND	1.0	70	71.8	103	70.8	101	1.4	70	130	30
Methane	ND	0.0010	0.10	0.112	112	0.110	110	1.3	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.104	104	0.104	104	0.6	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180322GC8A3
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/22/18 19:29			3/22/18 18:43		3/22/18 18:58					
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	5.45	109	5.32	106	2.3	70	130	30
Carbon Dioxide	ND	0.010	10	9.11	91	9.03	90	0.8	70	130	30
Oxygen/Argon	ND	0.50	15	15.9	107	15.8	107	0.5	70	130	30
Nitrogen	ND	1.0	70	71.1	102	70.6	101	0.7	70	130	30
Methane	ND	0.0010	0.10	0.120	120	0.118	118	1.1	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.106	106	0.105	105	0.6	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 180323GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/23/18 8:38			3/23/18 7:54		3/23/18 8:09					
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	5.91	118	5.93	119	0.4	70	130	30
Carbon Dioxide	ND	0.010	10	9.39	94	9.38	94	0.1	70	130	30
Oxygen/Argon	ND	0.50	15	15.9	107	15.9	107	0.1	70	130	30
Nitrogen	ND	1.0	70	71.3	102	71.3	102	0.1	70	130	30
Methane	ND	0.0010	0.10	0.109	109	0.109	109	0.4	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.108	108	0.108	108	0.7	70	130	30

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

Reviewed/Approved By: _____ Date 3-26-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch # 180323GC8A2
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	3/23/2018 13:43		3/23/2018 13:27		3/23/2018 13:32			
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	103	70-130	102	70-130	0.8	<20

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

Reviewed/Approved By: Date: 3-26-18
Mark Johnson
Operations Manager

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

QC Batch # 180323GC8A3
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	3/23/2018 15:22		3/23/2018 15:12		3/23/2018 15:17			
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	99	70-130	96	70-130	3.0	<20

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

Reviewed/Approved By: Date: 3-26-18
Mark Johnson
Operations Manager

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

Air TECHNOLOGY Laboratories, Inc.

March 29, 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: J032601-01

Enclosed are results for sample(s) received 3/26/18 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:

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

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 3/28/18.

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.: PO7112802
Bill to: Republic Services
Attn: Mike Lambrich
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J032601-01	A7658	-20.6	-5	GEW 105	3/23/2018	8:37	C	LFG	NA	X					-5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Tim Ahrens COMPANY: Cornerstone Env. DATE/TIME 3/23/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
[signature]	3/23/18		
FED EX		[signature]	3/26/18 0915

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: 03/26/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J032601-01							
Client Sample I.D.:	GEW 105							
Date/Time Sampled:	3/23/18 8:37							
Date/Time Analyzed:	3/26/18 15:18							
QC Batch No.:	180326GC8A1							
Analyst Initials:	AS							
Dilution Factor:	3.2							
ANALYTE	Result % v/v	RL % v/v						
Hydrogen	16	3.2						
Carbon Dioxide	37	0.032						
Oxygen/Argon	7.1	1.6						
Nitrogen	30	3.2						
Methane	10	0.0032						
Carbon Monoxide	0.072	0.0032						

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

Reviewed/Approved By: _____ Date 3/28/18

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: 180326GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	3/26/18 11:25			3/26/18 10:41		3/26/18 10:56					
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	5.31	106	5.05	101	5.1	70	130	30
Carbon Dioxide	ND	0.010	10	8.90	89	8.45	84	5.2	70	130	30
Oxygen/Argon	ND	0.50	15	15.3	103	14.6	99	4.4	70	130	30
Nitrogen	ND	1.0	70	69.2	99	66.2	95	4.5	70	130	30
Methane	ND	0.0010	0.10	0.105	105	0.104	104	0.8	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.103	103	0.102	102	0.8	70	130	30

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

Reviewed/Approved By: _____ Date 3/28/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Air TECHNOLOGY
Laboratories, Inc.

April 4, 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: J040202-01/05

Enclosed are results for sample(s) received 4/02/18 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 TNI 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 4/03/18.

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

PAGE: 1 OF 1

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	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					INITIAL PRESS
	Cannister ID	Sample Start	Sample End												
J040202-01	6131	-20.3	-5	GEW 2S	3/30/2018	13:45	C	LFG	NA	X					-5
-02	A8092	-19.8	-5	GEW 40	3/30/2018	14:01	C	LFG	NA	X					-4.9
-03	A8085	-20.3	-5	GEW 42R	3/30/2018	14:22	C	LFG	NA	X					-4
-04	A7758	-20.3	-5	GEW 44	3/30/2018	14:33	C	LFG	NA	X					-4.5
-05	5914	-20.2	-5	GEW 46R	3/30/2018	14:44	C	LFG	NA	X					-4.5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

SAMPLED BY: Anthony Kimutis COMPANY: Republic Services DATE/TIME 3/30/18

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	3/30/18		
FEDEX			
			4/2/18 1500

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 Inc.
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/02/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J040202-01		J040202-02		J040202-03		J040202-04	
Client Sample I.D.:	GEW 2S		GEW 40		GEW 42R		GEW 44	
Date/Time Sampled:	3/30/18 13:45		3/30/18 14:01		3/30/18 14:22		3/30/18 14:33	
Date/Time Analyzed:	4/2/18 21:55		4/2/18 22:10		4/2/18 22:24		4/2/18 22:39	
QC Batch No.:	180402GC8A1		180402GC8A1		180402GC8A1		180402GC8A1	
Analyst Initials:	MJ		MJ		MJ		MJ	
Dilution Factor:	3.2		3.1		3.0		3.1	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.032	ND d	0.031	ND d	0.030	ND d	0.031
Carbon Dioxide	32	0.032	32	0.031	38	0.030	34	0.031
Oxygen/Argon	2.0	1.6	2.2	1.5	ND	1.5	ND	1.5
Nitrogen	7.3	3.2	14	3.1	3.2	3.0	12	3.1
Methane	59	0.0032	51	0.0031	58	0.0030	54	0.0031
Carbon Monoxide	ND	0.0032	ND	0.0031	ND	0.0030	ND	0.0031

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
d = Reported from a secondary analysis. QC Batch: 180403GC8A1

Reviewed/Approved By: _____ Date 4-3-18

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 Inc.
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/02/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	**J040202-05**							
Client Sample I.D.:	**GEW 46R**							
Date/Time Sampled:	**3/30/18 14:44**							
Date/Time Analyzed:	**4/2/18 22:54**							
QC Batch No.:	**180402GC8A1**							
Analyst Initials:	**MJ**							
Dilution Factor:	**3.1**							
ANALYTE	**Result % v/v**	**RL % v/v**						
Hydrogen	0.036 d	0.031						
Carbon Dioxide	35	0.031						
Oxygen/Argon	ND	1.5						
Nitrogen	11	3.1						
Methane	53	0.0031						
Carbon Monoxide	ND	0.0031						

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
d = Reported from a secondary analysis. QC Batch: 180403GC8A1

Reviewed/Approved By: _____ **Date** 4-3-18

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
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QC Batch No: 180402GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	4/2/18 10:08			4/2/18 9:39		4/2/18 9:54					
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	3.82	76	3.76	75	1.4	70	130	30
Carbon Dioxide	ND	0.010	10	7.93	79	7.95	79	0.2	70	130	30
Oxygen/Argon	ND	0.50	15	15.0	101	15.1	102	0.2	70	130	30
Nitrogen	ND	1.0	70	67.8	97	68.0	97	0.2	70	130	30
Methane	ND	0.0010	0.10	0.114	114	0.113	113	0.8	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.102	102	0.101	101	0.7	70	130	30

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

Reviewed/Approved By: _____ Date 4-3-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch # 180403GC8A2
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	4/3/2018 9:49		4/3/2018 9:40		4/3/2018 9:44			
Analyst Initials:	MJ		MJ		MJ			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	%Rec	Criteria	%Rec	Criteria	RPD	Criteria
Hydrogen	ND	0.010	103	70-130	104	70-130	0.7	<20

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

Reviewed/Approved By: _____ Date: 4-3-18
Mark Johnson
Operations Manager

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

ATTACHMENT E

GAS WELLFIELD DATA

ATTACHMENT E-1

WELLFIELD DATA TABLE

March 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	3/8/2018 10:48	51.2	37.8	0.0	11.0	115.0	114.8	36.7	35.7	-2.1	-2.1	-15.2
GEW-002	3/8/2018 10:56	51.5	37.8	0.0	10.7	106.5	107.2	26.9	25.0	-1.5	-1.5	-14.8
GEW-002	3/12/2018 13:45	51.8	36.9	0.0	11.3	114.5	114.5	19.3	20.4	-1.1	-1.1	-14.5
GEW-002	3/12/2018 13:47	50.2	38.2	0.0	11.6	114.4	114.3	14.6	22.4	-1.3	-1.3	-14.8
GEW-002	3/21/2018 9:26	55.0	40.7	0.0	4.3	114.8	114.7	20.2	17.4	-0.8	-0.8	-14.2
GEW-002	3/27/2018 13:48	53.2	39.4	0.0	7.4	113.7	113.7	18.3	19.7	-1.4	-1.4	-14.5
GEW-003	3/8/2018 11:01	45.7	35.8	0.0	18.5	106.0	106.0	23.8	23.5	-0.4	-0.4	-14.2
GEW-003	3/8/2018 11:09	45.9	36.0	0.0	18.1	105.9	105.5	6.0	6.0	-0.4	-0.4	-14.0
GEW-003	3/12/2018 13:50	45.9	36.7	0.0	17.4	105.5	105.7	10.8	7.2	-0.2	-0.2	-14.0
GEW-003	3/12/2018 13:52	45.7	37.0	0.0	17.3	105.7	105.7	9.0	10.1	-0.2	-0.2	-14.0
GEW-003	3/21/2018 9:30	45.3	36.3	0.0	18.4	105.0	105.2	11.8	11.1	-0.8	-0.9	-13.9
GEW-003	3/21/2018 9:31	44.7	36.8	0.0	18.5	104.5	104.8	11.3	11.2	-0.9	-0.8	-13.9
GEW-003	3/27/2018 13:51	46.8	37.8	0.0	15.4	104.1	104.0	6.6	5.4	-0.6	-0.5	-13.9
GEW-003	3/27/2018 13:53	46.8	38.2	0.0	15.0	102.8	103.3	6.1	6.4	-0.5	-0.6	-13.9
GEW-004	3/8/2018 11:13	49.7	37.7	0.0	12.6	112.5	112.5	27.1	27.5	-0.4	-0.4	-14.2
GEW-004	3/8/2018 11:21	49.9	37.5	0.0	12.6	112.5	112.5	30.6	34.2	-0.4	-0.4	-13.8
GEW-004	3/12/2018 13:57	48.4	38.3	0.0	13.3	112.5	112.2	7.1	9.7	-0.1	-0.1	-14.2
GEW-004	3/21/2018 9:34	48.4	37.9	0.0	13.7	111.5	111.9	12.6	12.9	-0.8	-0.8	-13.9
GEW-004	3/21/2018 9:36	47.9	38.2	0.0	13.9	111.2	111.0	15.0	9.7	-0.8	-0.8	-13.7
GEW-004	3/27/2018 13:56	49.0	38.7	0.0	12.3	110.5	110.2	12.3	11.7	-0.5	-0.5	-14.2
GEW-005	3/8/2018 13:31	43.2	30.6	0.0	26.2	86.8	86.8	7.0	12.9	0.0	0.1	-13.7
GEW-005	3/8/2018 13:41	41.8	33.3	0.0	24.9	87.2	87.4	13.5	9.5	0.0	0.0	-13.8
GEW-005	3/9/2018 10:03	40.0	34.7	0.0	25.3	88.9	88.6	10.6	15.0	-0.1	-0.1	-13.7
GEW-005	3/12/2018 15:20	39.9	33.4	0.0	26.7	88.0	88.3	29.9	29.9	-0.04	-0.1	-13.8
GEW-005	3/21/2018 9:50	35.4	31.8	0.0	32.8	85.8	85.5	18.0	12.6	-0.6	-0.6	-14.2
GEW-005	3/21/2018 9:51	35.2	31.5	0.0	33.3	85.4	85.4	13.2	11.0	-0.6	-0.6	-14.2
GEW-005	3/27/2018 14:17	37.3	33.0	0.0	29.7	86.2	85.9	12.9	14.6	-0.2	-0.3	-14.0
GEW-005	3/27/2018 14:18	37.3	32.8	0.0	29.9	85.4	85.7	10.3	6.2	-0.2	-0.2	-14.0
GEW-006	3/8/2018 14:01	51.1	37.0	0.0	11.9	84.2	84.5	9.3	8.8	-0.02	-0.03	-14.0
GEW-006	3/8/2018 14:11	52.4	35.6	0.0	12.0	85.3	85.5	12.3	11.0	-0.1	-0.1	-13.6
GEW-006	3/12/2018 15:30	49.3	35.5	0.0	15.2	86.6	86.6	5.5	14.3	-0.1	-0.1	-13.2
GEW-006	3/21/2018 10:00	44.5	34.9	0.0	20.6	81.0	80.8	13.5	13.5	-0.8	-0.8	-13.9
GEW-006	3/21/2018 10:03	44.5	35.1	0.0	20.4	80.3	80.1	10.0	15.4	-0.8	-0.8	-13.9
GEW-006	3/27/2018 14:27	47.4	36.0	0.0	16.6	79.6	79.5	17.1	10.7	-0.2	-0.2	-14.2
GEW-007	3/5/2018 10:02	59.3	38.4	0.0	2.3	79.2	78.9	14.3	14.2	-0.04	-0.03	-14.2
GEW-007	3/5/2018 10:10	58.6	37.8	0.0	3.6	79.3	79.2	11.5	11.5	-0.1	-0.1	-14.0
GEW-007	3/12/2018 10:23	57.0	39.8	0.0	3.2	77.9	78.1	6.8	6.8	-1.0	-1.0	-14.8
GEW-007	3/19/2018 10:31	58.5	39.9	0.0	1.6	81.8	81.9	7.8	7.8	0.3	0.3	-13.7
GEW-007	3/19/2018 10:32	57.4	40.9	0.0	1.7	82.3	81.9	6.8	10.3	0.3	0.3	-13.9
GEW-007	3/20/2018 11:17	56.6	40.0	0.1	3.3	84.0	84.1	8.7	9.5	-2.3	-2.3	-14.0
GEW-007	3/20/2018 11:19	56.4	40.5	0.1	3.0	84.2	84.2	8.7	8.7	-2.3	-2.4	-13.9

March 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	3/26/2018 10:17	57.4	40.7	0.0	1.9	84.2	84.4	9.9	9.9	-2.1	-2.1	-14.2
GEW-007	3/26/2018 10:18	56.8	41.0	0.0	2.2	84.4	84.9	7.8	7.8	-2.1	-2.1	-14.3
GEW-008	3/5/2018 10:15	53.9	40.2	0.0	5.9	110.0	109.9	15.0	16.2	-0.5	-0.5	-14.1
GEW-008	3/5/2018 10:24	53.2	40.6	0.0	6.2	110.2	110.5	35.7	36.1	-0.4	-0.3	-14.0
GEW-008	3/12/2018 10:27	53.3	42.0	0.0	4.7	109.5	109.8	16.1	9.7	-0.8	-0.8	-14.5
GEW-008	3/19/2018 10:36	54.2	41.3	0.0	4.5	110.8	110.8	14.5	15.5	-0.1	-0.1	-13.6
GEW-008	3/19/2018 10:37	52.6	43.2	0.0	4.2	110.2	111.0	16.6	11.4	-0.1	-0.1	-13.8
GEW-008	3/26/2018 10:22	52.5	43.1	0.0	4.4	110.5	110.0	14.2	17.0	-0.7	-0.7	-14.0
GEW-009	3/5/2018 10:33	53.8	38.9	0.0	7.3	117.6	118.4	9.2	8.3	0.1	0.1	-10.8
GEW-009	3/5/2018 10:42	53.0	40.9	0.0	6.1	117.6	118.2	8.9	11.1	0.1	0.1	-10.8
GEW-009	3/6/2018 14:19	51.3	37.8	0.0	10.9	117.3	117.1	16.1	16.4	-0.2	-0.2	-11.3
GEW-009	3/12/2018 10:31	51.3	40.9	0.0	7.8	114.8	114.5	9.3	8.0	-0.1	-0.1	-10.2
GEW-009	3/19/2018 10:40	52.9	42.8	0.0	4.3	119.9	119.4	8.5	9.6	0.2	0.2	-9.3
GEW-009	3/19/2018 10:43	52.8	42.6	0.0	4.6	119.9	120.5	8.9	8.9	0.2	0.2	-6.7
GEW-009	3/20/2018 11:23	51.1	39.3	0.0	9.6	117.1	117.3	8.9	5.4	-0.2	-0.1	-6.3
GEW-009	3/26/2018 10:25	48.7	40.9	0.0	10.4	115.8	116.3	8.5	6.6	-0.1	-0.1	-7.1
GEW-010	3/6/2018 8:43	57.8	42.0	0.0	0.2	50.1	50.1	4.6	4.4	-1.9	-1.9	-19.9
GEW-010	3/6/2018 8:50	57.2	41.5	0.1	1.2	50.6	50.5	3.7	4.4	-1.9	-1.9	-19.7
GEW-010	3/12/2018 8:20	55.1	44.4	0.0	0.5	38.8	38.8	4.0	4.2	-2.1	-2.0	-19.5
GEW-010	3/19/2018 8:33	54.0	44.6	0.2	1.2	47.6	47.6	3.9	3.9	-1.9	-1.9	-19.9
GEW-010	3/26/2018 8:37	53.3	46.1	0.0	0.6	47.0	47.1	2.2	1.8	-1.8	-1.8	-19.9
GEW-013A	3/12/2018 9:51	10.6	36.7	8.6	44.1	117.6	117.3	96.9	97.4	-1.8	-1.8	-19.0
GEW-013A	3/12/2018 9:57	10.3	36.3	8.9	44.5	117.1	117.7	96.7	95.5	-1.7	-1.9	-18.0
GEW-013A	3/23/2018 13:23	9.3	36.5	7.0	47.2	122.6	121.6	98.2	97.1	-1.8	-1.8	-18.6
GEW-013A	3/23/2018 13:24	9.4	36.6	6.9	47.1	121.8	122.2	97.3	95.4	-1.9	-1.8	-18.9
GEW-015	3/12/2018 10:57	15.1	47.7	0.0	37.2	154.0	154.0	4.7	4.1	-5.9	-5.7	-19.7
GEW-015	3/12/2018 11:04	16.4	48.0	0.0	35.6	153.7	153.7	7.8	7.7	-6.0	-6.0	-19.6
GEW-015	3/23/2018 13:49	15.7	47.9	0.0	36.4	158.0	157.8	11.3	5.8	-5.4	-5.4	-20.1
GEW-015	3/23/2018 13:50	15.7	48.5	0.0	35.8	157.7	157.7	6.7	9.8	-5.6	-5.6	-20.2
GEW-016R	3/12/2018 11:16	8.5	44.5	0.4	46.6	178.6	178.6	NFD		-19.3	-19.3	-19.4
GEW-016R	3/12/2018 11:24	8.8	44.6	0.5	46.1	178.9	178.9	NFD		-19.1	-19.1	-19.4
GEW-016R	3/23/2018 13:54	8.5	45.3	0.1	46.1	179.2	179.2	NFD		-19.7	-19.7	-19.7
GEW-016R	3/23/2018 13:56	8.5	46.5	0.1	44.9	179.2	179.2	NFD		-19.7	-19.7	-19.7
GEW-018B	3/15/2018 15:27	1.0	39.8	4.7	54.5	163.8	163.0	4.6	4.6	-0.3	-0.3	-19.6
GEW-018B	3/15/2018 15:32	0.6	40.1	4.6	54.7	161.6	161.6	6.8	6.3	-0.2	-0.2	-19.6
GEW-018B	3/28/2018 9:13	0.4	41.2	4.9	53.5	156.5	156.5	4.5	4.5	-0.3	-0.3	-18.8
GEW-018B	3/28/2018 9:15	0.5	41.4	4.9	53.2	156.5	156.5	8.6	8.6	-0.3	-0.3	-18.6
GEW-022R	3/16/2018 9:19	0.9	31.2	11.4	56.5	47.1	47.1	5.9	4.4	-21.6	-21.6	-21.4
GEW-022R	3/16/2018 9:25	0.1	20.4	15.2	64.3	47.0	47.1	4.1	3.1	-21.6	-21.6	-21.4
GEW-022R	3/28/2018 13:23	0.0	6.5	19.4	74.1	51.5	51.6	5.6	5.1	-16.6	-16.6	-16.9
GEW-022R	3/28/2018 13:26	0.3	34.3	11.5	53.9	52.6	52.6	2.4	3.1	-20.1	-20.1	-20.4

March 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-038	3/6/2018 9:35	2.1	42.9	5.8	49.2	55.3	55.5	2.0	1.0	-0.5	-0.4	-19.9
GEW-038	3/6/2018 9:41	2.3	41.7	5.5	50.5	54.0	53.9	3.8	4.3	-0.3	-0.3	-19.9
GEW-038	3/12/2018 9:22	2.6	50.6	2.4	44.4	38.7	38.7	2.2	1.8	-0.8	-0.8	-19.6
GEW-038	3/19/2018 9:24	3.1	50.5	2.6	43.8	51.0	51.0	1.8	2.5	-0.2	-0.2	-19.6
GEW-038	3/26/2018 9:45	2.5	38.8	8.1	50.6	46.1	46.2	2.2	2.2	-0.5	-0.5	-17.5
GEW-038	3/26/2018 9:47	2.2	39.2	8.1	50.5	46.1	46.1	2.5	2.2	-0.7	-0.7	-17.0
GEW-039	3/6/2018 9:56	35.0	39.2	0.6	25.2	116.0	116.1	30.0	22.9	-1.8	-1.8	-21.9
GEW-039	3/6/2018 10:02	34.8	37.7	0.6	26.9	116.1	116.3	25.0	26.9	-1.7	-1.8	-21.1
GEW-039	3/12/2018 9:36	26.9	35.5	2.6	35.0	114.4	114.3	24.5	23.3	-1.7	-1.7	-19.2
GEW-039	3/19/2018 9:34	33.3	40.7	1.1	24.9	115.3	115.3	26.5	24.4	-1.7	-1.8	-20.4
GEW-039	3/26/2018 9:56	27.1	37.2	2.4	33.3	115.3	115.3	27.2	20.6	-2.0	-1.9	-20.9
GEW-039	3/26/2018 9:58	27.5	36.1	2.4	34.0	114.9	115.0	20.6	23.5	-1.8	-1.7	-20.0
GEW-040	3/6/2018 15:19	55.6	38.8	0.0	5.6	45.9	45.9	10.4	8.1	-0.6	-0.5	-14.0
GEW-040	3/6/2018 15:26	56.5	36.4	0.1	7.0	45.8	45.8	13.5	11.8	-0.7	-0.6	-13.9
GEW-040	3/12/2018 11:12	54.5	39.5	0.0	6.0	39.5	39.5	10.0	7.2	-0.5	-0.6	-14.3
GEW-040	3/20/2018 11:55	54.6	40.3	0.0	5.1	48.3	48.3	6.4	6.4	-0.6	-0.6	-13.8
GEW-040	3/27/2018 11:05	54.4	39.1	0.0	6.5	59.9	59.9	8.4	5.6	-0.6	-0.6	-13.7
GEW-040	3/30/2018 13:57	52.8	35.9	0.0	11.3	67.7	67.7	9.7	6.8	-0.6	-0.6	-13.7
GEW-040	3/30/2018 14:04	53.5	36.1	0.0	10.4	67.9	67.9	11.2	12.5	-0.6	-0.6	-13.8
GEW-041R	3/6/2018 15:30	52.0	36.4	0.0	11.6	91.2	91.1	9.9	13.2	-0.4	-0.4	-14.1
GEW-041R	3/6/2018 15:37	52.8	34.6	0.0	12.6	91.2	91.2	25.2	25.8	-0.3	-0.3	-14.1
GEW-041R	3/12/2018 11:15	52.0	36.9	0.0	11.1	90.3	90.5	21.6	21.0	-0.4	-0.4	-14.6
GEW-041R	3/21/2018 8:24	53.6	37.3	0.0	9.1	92.4	92.2	9.9	11.3	-0.5	-0.5	-14.2
GEW-041R	3/27/2018 11:09	52.6	37.0	0.0	10.4	94.5	94.6	8.2	10.9	-0.4	-0.4	-13.6
GEW-042R	3/6/2018 15:48	55.8	40.3	0.0	3.9	84.8	84.8	10.4	10.0	-0.4	-0.3	-14.3
GEW-042R	3/8/2018 8:45	54.3	41.2	0.2	4.3	80.5	80.0	9.6	7.3	-0.3	-0.3	-14.4
GEW-042R	3/8/2018 8:53	55.7	39.6	0.3	4.4	80.3	80.7	4.8	5.5	-0.3	-0.3	-14.5
GEW-042R	3/12/2018 11:20	55.1	41.1	0.0	3.8	80.1	80.0	19.9	19.7	-0.3	-0.4	-14.4
GEW-042R	3/21/2018 8:29	54.0	41.2	0.3	4.5	81.9	81.8	13.9	14.9	-0.4	-0.4	-14.1
GEW-042R	3/27/2018 11:13	55.2	41.0	0.0	3.8	90.8	90.2	15.5	16.2	-0.4	-0.4	-13.7
GEW-042R	3/30/2018 14:19	55.8	39.4	0.0	4.8	94.6	94.6	10.6	10.6	-0.3	-0.3	-13.5
GEW-042R	3/30/2018 14:24	56.2	39.9	0.0	3.9	94.3	94.2	13.9	13.1	-0.2	-0.2	-13.6
GEW-043R	3/8/2018 9:07	54.5	39.6	0.3	5.6	109.3	109.0	12.3	12.9	-0.3	-0.3	-14.6
GEW-043R	3/8/2018 9:16	54.0	39.7	0.3	6.0	109.2	108.7	33.6	33.5	-0.4	-0.4	-14.6
GEW-043R	3/12/2018 11:23	54.8	40.0	0.0	5.2	107.4	107.2	11.8	12.1	-0.3	-0.3	-14.7
GEW-043R	3/21/2018 8:34	53.5	40.8	0.3	5.4	107.3	107.6	37.0	37.0	-0.6	-0.6	-13.9
GEW-043R	3/27/2018 11:16	53.3	41.3	0.2	5.2	110.2	110.1	6.6	6.0	-0.3	-0.2	-13.7
GEW-044	3/8/2018 9:20	48.7	35.5	0.0	15.8	64.0	64.0	26.8	28.1	-0.4	-0.4	-14.4
GEW-044	3/8/2018 9:29	50.0	34.6	0.0	15.4	63.3	63.3	10.9	10.8	-0.4	-0.4	-14.3
GEW-044	3/12/2018 11:28	48.7	36.7	0.0	14.6	59.3	59.2	20.3	20.1	-0.5	-0.5	-14.4
GEW-044	3/21/2018 8:39	49.1	35.9	0.0	15.0	66.5	66.5	3.4	3.9	-0.8	-0.8	-13.9

March 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-044	3/27/2018 11:22	50.1	36.9	0.0	13.0	74.8	75.2	5.6	5.6	-0.6	-0.6	-13.7
GEW-044	3/30/2018 14:30	51.9	36.5	0.0	11.6	83.2	83.3	4.8	4.4	-0.3	-0.4	-13.7
GEW-044	3/30/2018 14:35	52.3	35.3	0.0	12.4	83.8	83.5	10.7	10.7	-0.5	-0.5	-13.5
GEW-045R	3/8/2018 9:42	56.6	39.4	0.0	4.0	58.0	58.0	9.8	9.8	-1.0	-1.0	-13.4
GEW-045R	3/8/2018 9:51	56.5	39.0	0.0	4.5	58.2	58.2	9.8	9.8	-0.9	-0.9	-14.4
GEW-045R	3/12/2018 11:32	58.5	39.4	0.0	2.1	46.1	46.3	4.9	4.0	-1.2	-1.2	-14.2
GEW-045R	3/21/2018 8:45	57.2	39.5	0.0	3.3	80.7	81.2	12.0	11.7	-2.5	-2.4	-13.4
GEW-045R	3/21/2018 8:47	56.9	40.1	0.0	3.0	81.2	81.0	10.3	9.9	-2.3	-2.3	-14.0
GEW-045R	3/27/2018 11:26	56.9	40.9	0.0	2.2	81.6	81.9	5.5	6.2	-1.7	-1.8	-13.6
GEW-046R	3/8/2018 9:56	48.1	37.7	0.0	14.2	84.5	83.5	7.7	8.6	-0.4	-0.4	-14.5
GEW-046R	3/8/2018 10:04	49.0	36.2	0.0	14.8	84.7	85.1	34.8	35.5	-0.4	-0.3	-14.2
GEW-046R	3/12/2018 11:35	48.6	37.2	0.0	14.2	82.4	82.3	26.9	27.4	-0.4	-0.4	-14.7
GEW-046R	3/12/2018 11:36	48.4	37.6	0.0	14.0	82.6	82.1	30.6	30.6	-0.4	-0.4	-14.2
GEW-046R	3/21/2018 8:50	48.7	37.8	0.0	13.5	83.8	84.9	32.6	33.2	-0.6	-0.6	-14.1
GEW-046R	3/21/2018 8:52	48.6	38.0	0.0	13.4	84.2	83.7	3.5	3.0	-0.6	-0.6	-14.0
GEW-046R	3/27/2018 11:29	49.1	38.2	0.0	12.7	86.1	85.4	5.5	4.8	-0.4	-0.4	-13.7
GEW-046R	3/30/2018 14:41	51.4	36.3	0.0	12.3	94.3	94.4	11.6	9.5	-0.1	-0.1	-13.7
GEW-046R	3/30/2018 14:46	51.4	36.8	0.0	11.8	94.1	94.3	9.5	9.8	-0.1	-0.1	-13.8
GEW-047R	3/8/2018 11:31	43.0	36.0	0.0	21.0	103.5	103.5	8.6	9.4	-0.3	-0.3	-14.5
GEW-047R	3/8/2018 11:40	43.7	34.7	0.0	21.6	103.5	103.8	32.8	32.8	-0.3	-0.3	-14.1
GEW-047R	3/12/2018 15:13	45.2	36.2	0.0	18.6	106.2	106.2	14.3	12.7	0.1	0.0	-13.8
GEW-047R	3/12/2018 15:15	45.1	36.3	0.0	18.6	106.8	106.7	7.6	4.7	0.0	0.0	-14.0
GEW-047R	3/13/2018 16:53	46.1	36.9	0.1	16.9	106.5	106.4	26.5	26.2	-0.1	-0.1	-13.7
GEW-047R	3/21/2018 9:44	40.3	36.1	0.0	23.6	101.1	101.3	14.6	18.6	-0.6	-0.6	-14.4
GEW-047R	3/21/2018 9:46	40.8	35.7	0.0	23.5	101.6	101.8	7.7	6.1	-0.6	-0.6	-14.2
GEW-047R	3/27/2018 14:11	43.7	35.8	0.0	20.5	103.2	103.3	9.5	8.6	-0.3	-0.3	-14.4
GEW-047R	3/27/2018 14:13	43.4	36.2	0.0	20.4	103.0	103.3	17.5	16.0	-0.3	-0.3	-14.4
GEW-048	3/8/2018 13:45	53.4	37.7	0.0	8.9	98.4	98.4	12.1	13.6	-0.1	-0.1	-10.4
GEW-048	3/8/2018 13:52	53.5	37.8	0.0	8.7	98.3	98.4	14.4	12.5	-0.1	-0.1	-9.6
GEW-048	3/12/2018 15:25	53.0	37.5	0.0	9.5	98.9	98.9	17.4	15.4	-0.2	-0.2	-8.5
GEW-048	3/21/2018 9:54	51.7	37.4	0.0	10.9	97.5	97.4	32.3	30.9	-0.8	-0.7	-10.4
GEW-048	3/21/2018 9:56	51.3	37.8	0.0	10.9	97.4	97.7	13.6	14.1	-0.7	-0.8	-9.3
GEW-048	3/27/2018 14:21	52.5	38.1	0.0	9.4	97.4	97.7	23.2	23.9	-0.4	-0.4	-8.0
GEW-049	3/8/2018 14:24	50.1	37.3	0.0	12.6	102.4	102.4	8.6	9.2	-0.04	-0.04	-13.8
GEW-049	3/8/2018 14:33	50.5	37.4	0.0	12.1	102.3	102.5	8.6	5.0	-0.1	-0.1	-13.7
GEW-049	3/12/2018 15:38	50.0	36.9	0.0	13.1	102.3	102.3	6.6	7.3	-0.04	-0.04	-13.7
GEW-049	3/12/2018 15:40	49.5	37.6	0.0	12.9	102.1	101.8	8.2	8.2	-0.04	-0.1	-13.8
GEW-049	3/21/2018 10:12	37.9	32.4	0.0	29.7	100.4	100.1	35.2	34.7	-0.7	-0.7	-14.0
GEW-049	3/21/2018 10:14	37.5	33.0	0.0	29.5	99.9	99.9	10.2	11.8	-0.7	-0.7	-13.9
GEW-049	3/27/2018 13:39	42.0	34.0	0.0	24.0	101.3	101.1	16.9	17.4	-0.6	-0.6	-14.1
GEW-049	3/27/2018 13:41	41.7	34.4	0.0	23.9	99.9	100.2	9.4	9.0	-0.5	-0.5	-13.9

March 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-050	3/5/2018 9:16	54.0	39.2	0.0	6.8	102.5	102.8	13.1	12.2	-0.1	-0.04	-8.1
GEW-050	3/5/2018 9:31	54.4	36.7	0.0	8.9	103.0	103.0	13.2	13.5	-0.1	-0.1	-9.2
GEW-050	3/12/2018 10:08	51.0	36.6	0.0	12.4	102.3	102.3	12.7	12.1	-0.4	-0.4	-11.5
GEW-050	3/19/2018 9:57	53.9	39.7	0.0	6.4	104.0	104.3	12.7	12.8	0.1	0.1	-7.6
GEW-050	3/19/2018 9:59	54.1	38.9	0.0	7.0	104.8	105.0	12.1	13.5	0.02	0.02	-7.2
GEW-050	3/20/2018 11:11	49.2	38.6	0.0	12.2	103.5	103.3	26.8	28.4	-0.7	-0.7	-7.6
GEW-050	3/20/2018 11:13	49.7	37.4	0.0	12.9	103.0	103.3	21.0	23.4	-0.6	-0.6	-8.0
GEW-050	3/26/2018 10:07	47.8	37.9	0.0	14.3	103.5	103.6	26.8	29.1	-0.6	-0.6	-8.3
GEW-050	3/26/2018 10:08	47.6	37.7	0.0	14.7	103.1	103.3	17.1	19.1	-0.5	-0.5	-10.7
GEW-051	3/5/2018 11:12	54.3	38.5	0.0	7.2	121.5	121.8	13.0	12.9	-0.02	-0.02	-13.5
GEW-051	3/5/2018 11:22	54.2	37.9	0.0	7.9	122.1	121.8	17.1	17.0	-0.1	-0.1	-13.9
GEW-051	3/12/2018 10:37	53.1	40.2	0.0	6.7	120.4	120.2	17.5	13.6	-0.6	-0.6	-13.8
GEW-051	3/20/2018 11:28	53.0	40.8	0.0	6.2	120.8	120.0	14.0	14.7	-0.7	-0.7	-13.9
GEW-051	3/20/2018 11:30	52.9	40.7	0.0	6.4	120.7	120.7	10.0	10.3	-0.7	-0.8	-13.6
GEW-051	3/26/2018 10:31	53.3	41.2	0.0	5.5	121.0	120.5	12.5	12.5	-0.7	-0.7	-14.2
GEW-052	3/5/2018 9:37	56.0	39.4	0.0	4.6	90.3	89.8	8.3	9.1	0.4	0.4	-13.9
GEW-052	3/5/2018 9:47	55.9	40.0	0.0	4.1	89.8	90.8	4.7	8.3	0.4	0.4	-14.1
GEW-052	3/6/2018 14:28	56.0	41.3	0.0	2.7	90.6	90.5	7.8	8.7	-0.1	-0.1	-14.0
GEW-052	3/6/2018 14:31	56.5	41.7	0.0	1.8	90.7	90.8	26.6	29.4	-0.04	-0.1	-13.8
GEW-052	3/12/2018 10:15	53.1	38.2	0.0	8.7	89.0	89.3	6.5	6.6	0.1	0.1	-14.4
GEW-052	3/12/2018 10:20	52.0	39.3	0.0	8.7	89.6	89.3	6.8	6.5	0.1	0.1	-14.5
GEW-052	3/13/2018 16:59	57.7	40.4	0.0	1.9	95.6	95.9	7.7	5.5	0.2	0.2	-13.8
GEW-052	3/13/2018 17:00	56.8	40.9	0.0	2.3	95.7	95.6	4.7	7.2	0.3	0.2	-14.0
GEW-052	3/14/2018 16:14	56.6	39.6	0.0	3.8	117.9	118.2	18.9	18.8	-0.04	-0.03	-13.2
GEW-052	3/19/2018 10:02	47.3	36.4	0.0	16.3	115.3	115.3	17.2	15.2	-0.1	-0.1	-13.6
GEW-052	3/26/2018 10:12	37.7	33.5	0.0	28.8	111.7	111.7	2.7	7.6	-0.4	-0.5	-13.9
GEW-052	3/26/2018 10:14	37.8	33.2	0.0	29.0	111.7	111.7	11.7	15.4	-0.4	-0.4	-13.9
GEW-053	3/5/2018 11:31	48.8	39.9	0.0	11.3	135.6	135.6	10.6	10.1	0.2	0.2	-14.2
GEW-053	3/5/2018 11:42	48.2	41.0	0.0	10.8	136.8	136.8	9.2	13.7	0.1	0.1	-14.1
GEW-053	3/6/2018 14:24	50.1	39.5	0.0	10.4	135.6	135.9	14.0	12.1	-1.0	-1.0	-14.2
GEW-053	3/6/2018 14:25	47.9	40.4	0.0	11.7	135.3	135.6	28.8	28.0	-0.8	-0.8	-14.2
GEW-053	3/12/2018 10:52	48.6	41.1	0.0	10.3	139.6	139.9	12.3	13.4	-0.7	-0.7	-14.8
GEW-053	3/12/2018 10:53	48.5	41.4	0.0	10.1	139.3	139.6	26.0	26.1	-0.7	-0.7	-14.6
GEW-053	3/20/2018 11:37	50.9	40.3	0.0	8.8	137.7	138.0	24.3	23.6	-0.8	-0.8	-14.0
GEW-053	3/20/2018 11:38	50.1	41.5	0.0	8.4	137.7	138.0	27.7	28.7	-0.8	-0.8	-14.4
GEW-053	3/26/2018 10:38	49.5	41.9	0.0	8.6	140.1	139.9	22.4	22.5	-1.2	-1.2	-14.5
GEW-053	3/26/2018 10:40	49.2	42.5	0.0	8.3	139.5	139.6	5.9	5.2	-1.1	-1.1	-14.7
GEW-054	3/5/2018 11:48	51.8	40.1	0.0	8.1	142.6	142.6	40.2	38.5	-2.9	-2.9	-14.6
GEW-054	3/5/2018 11:56	51.9	40.4	0.0	7.7	142.5	142.6	38.2	41.3	-2.9	-2.9	-15.2
GEW-054	3/12/2018 10:57	52.4	41.7	0.0	5.9	142.9	142.9	41.0	37.5	-3.6	-3.6	-14.5
GEW-054	3/12/2018 10:58	52.2	42.3	0.0	5.5	142.9	142.9	35.8	41.7	-3.5	-3.6	-15.1

March 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-054	3/20/2018 11:41	52.3	42.1	0.0	5.6	144.5	144.5	38.1	42.1	-3.4	-3.4	-14.7
GEW-054	3/20/2018 11:43	52.2	42.3	0.0	5.5	144.5	144.5	38.3	41.8	-3.3	-3.3	-14.9
GEW-054	3/27/2018 10:51	53.0	42.9	0.0	4.1	144.6	144.5	39.6	35.3	-3.3	-3.4	-14.5
GEW-054	3/27/2018 10:53	52.3	42.4	0.0	5.3	144.6	144.5	43.4	39.0	-3.3	-3.4	-14.7
GEW-055	3/6/2018 15:02	46.5	38.8	0.3	14.4	132.0	132.0	12.1	12.4	-1.0	-1.0	-13.5
GEW-055	3/6/2018 15:13	47.3	37.7	0.6	14.4	132.2	132.0	25.0	25.2	-1.0	-1.1	-14.0
GEW-055	3/12/2018 11:07	46.9	39.7	0.2	13.2	131.8	132.0	19.5	20.1	-1.1	-1.1	-14.5
GEW-055	3/12/2018 11:09	46.8	39.7	0.2	13.3	131.2	131.2	19.9	19.9	-1.1	-1.0	-14.4
GEW-055	3/20/2018 11:51	47.7	40.0	0.2	12.1	131.7	132.0	38.9	35.8	-1.0	-1.0	-14.2
GEW-055	3/20/2018 11:52	47.7	40.2	0.4	11.7	131.2	131.6	10.9	10.2	-0.9	-0.9	-13.9
GEW-055	3/27/2018 11:00	47.4	40.2	0.2	12.2	132.6	132.3	11.2	11.2	-1.0	-1.0	-13.8
GEW-055	3/27/2018 11:02	47.6	40.3	0.2	11.9	131.8	131.5	20.1	20.1	-1.0	-0.9	-13.7
GEW-056R	3/6/2018 8:20	28.7	45.0	0.0	26.3	79.5	79.3	5.8	4.5	-0.4	-0.6	-20.4
GEW-056R	3/6/2018 8:26	29.7	41.4	0.0	28.9	79.4	79.4	0.6	3.0	-0.4	-0.4	-20.1
GEW-056R	3/12/2018 8:37	29.4	49.3	0.0	21.3	61.0	60.9	3.8	2.8	-0.4	-0.4	-19.4
GEW-056R	3/19/2018 8:46	30.5	49.1	0.0	20.4	73.4	73.2	2.1	2.1	-0.4	-0.4	-19.6
GEW-056R	3/26/2018 8:53	16.3	51.6	0.0	32.1	51.9	51.9	3.0	2.5	-0.3	-0.3	-19.9
GEW-057B	3/14/2018 13:30	2.6	22.6	12.9	61.9	63.1	63.1	6.0	6.5	-15.2	-15.3	-19.2
GEW-057B	3/14/2018 13:36	2.2	18.4	14.1	65.3	63.4	63.4	1.2	4.1	-10.0	-9.9	-19.2
GEW-057B	3/27/2018 14:06	1.0	12.4	17.5	69.1	49.4	49.4	3.9	2.3	-0.2	-0.2	-19.7
GEW-057B	3/27/2018 14:07	0.9	10.3	17.9	70.9	49.3	49.3	2.0	2.6	-0.2	-0.3	-19.9
GEW-057R	3/14/2018 13:39	4.7	32.2	9.1	54.0	58.6	58.7	3.9	3.7	-17.7	-17.7	-19.1
GEW-057R	3/14/2018 13:45	5.4	40.4	6.6	47.6	60.2	60.2	3.9	3.1	-17.9	-17.8	-19.2
GEW-057R	3/27/2018 14:01	15.0	35.2	10.3	39.5	51.0	51.0	0.8	1.4	-19.1	-19.1	-19.4
GEW-057R	3/27/2018 14:03	15.5	35.2	10.6	38.7	50.8	50.8	1.4	0.8	-19.1	-18.9	-19.6
GEW-058	3/9/2018 14:55	4.5	28.8	4.6	62.1	59.2	59.2	2.7	1.7	-0.8	-0.9	-20.1
GEW-058	3/9/2018 15:09	4.8	25.5	4.8	64.9	58.1	58.0	3.7	4.0	-0.8	-0.8	-20.2
GEW-058A	3/9/2018 14:46	1.6	37.8	3.8	56.8	62.1	62.2	2.4	2.1	-0.4	-0.4	-20.0
GEW-058A	3/9/2018 14:52	0.9	39.8	4.0	55.3	63.6	63.5	3.4	3.0	-0.5	-0.5	-20.1
GEW-059R	3/9/2018 13:46	19.7	42.1	0.0	38.2	160.7	161.2	9.0	10.2	-19.5	-19.6	-20.1
GEW-059R	3/9/2018 13:52	19.9	40.9	0.0	39.2	159.8	159.7	11.4	9.5	-19.6	-19.6	-20.6
GEW-059R	3/23/2018 10:26	18.7	43.7	0.0	37.6	159.8	159.8	9.9	11.0	-19.0	-18.5	-19.0
GEW-059R	3/23/2018 10:28	20.1	43.3	0.0	36.6	159.8	159.8	7.9	7.1	-18.5	-18.5	-18.6
GEW-067A	3/15/2018 14:24	3.1	37.2	4.8	54.9	123.9	123.9	9.5	7.4	-0.1	-0.1	-19.7
GEW-067A	3/15/2018 14:31	2.8	34.8	4.9	57.5	128.0	128.6	9.8	7.2	-0.1	-0.1	-19.7
GEW-068A	3/14/2018 14:33	13.3	51.2	1.1	34.4	181.0	181.3	36.8	36.3	-13.8	-13.8	-19.3
GEW-068A	3/14/2018 14:39	12.5	49.3	1.2	37.0	181.9	182.1	31.0	29.8	-11.3	-11.4	-19.4
GEW-068A	3/28/2018 8:53	13.9	50.6	0.3	35.2	182.6	182.7	27.4	27.3	-12.7	-12.7	-20.0
GEW-068A	3/28/2018 8:54	13.2	53.0	0.2	33.6	182.7	182.7	27.2	26.3	-11.3	-11.2	-19.5
GEW-077	3/15/2018 10:54	0.5	54.9	2.2	42.4	134.0	133.8	18.2	18.2	-19.3	-19.3	-19.2
GEW-077	3/15/2018 11:00	0.3	53.9	1.4	44.4	135.8	135.9	24.0	22.8	-19.3	-19.3	-19.2

March 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-077	3/28/2018 10:50	1.7	54.6	0.2	43.5	137.7	137.8	23.5	23.1	-18.6	-18.6	-18.8
GEW-077	3/28/2018 10:52	1.7	56.4	0.2	41.7	139.6	139.9	24.8	24.7	-19.1	-19.1	-19.0
GEW-078R	3/14/2018 13:44	14.4	46.7	0.0	38.9	155.6	155.6	9.1	9.5	-18.7	-18.7	-19.0
GEW-078R	3/14/2018 13:50	14.6	45.0	0.0	40.4	155.6	155.6	8.7	9.1	-18.7	-18.7	-19.1
GEW-078R	3/27/2018 13:39	6.9	40.3	0.1	52.7	152.1	152.1	8.5	9.0	-18.7	-18.7	-19.4
GEW-078R	3/27/2018 13:41	6.7	41.1	0.0	52.2	152.0	152.1	8.7	8.4	-18.7	-18.7	-19.1
GEW-081	3/15/2018 10:04	1.7	32.4	10.3	55.6	68.1	68.1	3.6	3.6	-19.7	-19.7	-19.7
GEW-081	3/15/2018 10:11	1.5	29.7	10.6	58.2	68.2	68.2	3.7	5.1	-19.7	-19.7	-19.6
GEW-081	3/28/2018 9:42	1.0	31.3	11.1	56.6	51.3	51.3	0.0	5.7	-18.6	-15.1	-18.6
GEW-081	3/28/2018 9:44	0.6	28.9	12.5	58.0	51.0	50.9	2.1	3.6	-17.1	-17.6	-17.1
GEW-082R	3/14/2018 14:11	9.0	38.2	0.0	52.8	175.9	175.8	2.9	4.3	-18.2	-18.2	-19.4
GEW-082R	3/14/2018 14:18	9.6	38.0	0.0	52.4	176.4	176.7	1.9	6.0	-17.7	-17.7	-19.4
GEW-082R	3/27/2018 13:45	8.6	37.1	0.3	54.0	174.2	174.2	3.3	3.4	-17.6	-17.6	-18.8
GEW-082R	3/27/2018 13:46	8.8	38.3	0.3	52.6	174.0	174.2	3.7	5.5	-17.6	-17.6	-18.5
GEW-086	3/12/2018 9:15	12.9	37.5	5.3	44.3	38.1	38.1	0.0	6.5	-0.1	-0.1	-0.9
GEW-086	3/12/2018 9:22	13.8	35.5	5.4	45.3	38.1	38.1	4.0	5.4	-0.1	-0.1	-1.2
GEW-086	3/27/2018 11:41	11.1	33.1	5.7	50.1	68.8	68.8	9.6	10.4	-0.5	-0.5	-19.1
GEW-086	3/27/2018 11:43	10.7	34.2	5.9	49.2	66.3	66.3	7.7	7.3	-0.3	-0.3	-18.6
GEW-087	3/12/2018 13:59	7.3	17.0	13.5	62.2	110.2	110.2	NFD		-18.7	-18.7	-18.8
GEW-087	3/12/2018 14:07	7.0	15.3	13.7	64.0	109.7	109.7	NFD		-18.9	-18.7	-18.9
GEW-087	3/23/2018 13:28	5.3	21.8	11.2	61.7	113.5	113.2	NFD		-19.7	-19.7	-19.9
GEW-087	3/23/2018 13:30	5.9	19.7	11.4	63.0	113.2	113.5	NFD		-19.7	-19.7	-19.9
GEW-088	3/15/2018 14:21	3.5	48.2	0.0	48.3	195.0	195.0	36.8	37.2	-0.7	-0.7	-17.5
GEW-088	3/15/2018 14:27	5.0	45.9	0.0	49.1	195.0	195.0	39.9	39.6	-0.4	-0.6	-16.5
GEW-088	3/28/2018 8:21	6.1	40.1	2.1	51.7	184.5	184.7	51.1	48.9	-0.7	-0.8	-19.1
GEW-088	3/28/2018 8:23	6.0	41.6	2.1	50.3	184.6	184.5	46.9	50.1	-0.8	-0.8	-18.7
GEW-090	3/8/2018 14:00	21.2	45.8	0.1	32.9	147.7	147.7	10.4	7.9	-18.7	-18.7	-18.9
GEW-090	3/8/2018 14:07	22.5	43.1	0.0	34.4	151.4	151.3	7.1	7.4	-18.7	-18.7	-18.8
GEW-090	3/22/2018 9:04	19.8	43.6	0.0	36.6	156.9	156.5	14.6	10.5	-19.6	-19.6	-20.1
GEW-090	3/22/2018 9:06	19.4	47.5	0.0	33.1	157.7	157.3	10.1	11.4	-19.6	-19.6	-20.1
GEW-091	3/8/2018 11:16	2.6	21.5	14.2	61.7	141.5	141.5	42.8	41.8	-19.3	-19.1	-19.7
GEW-091	3/8/2018 11:24	2.3	16.1	15.0	66.6	140.9	140.9	17.5	15.6	-19.3	-19.1	-19.5
GEW-091	3/22/2018 8:54	1.8	22.5	12.9	62.8	177.5	177.6	12.1	12.0	-19.1	-19.1	-20.1
GEW-091	3/22/2018 8:56	1.0	24.2	13.2	61.6	174.2	174.2	9.4	11.7	-18.0	-18.1	-20.0
GEW-100	3/14/2018 15:27	1.4	57.9	1.4	39.3	59.7	60.0	4.8	6.3	-8.4	-8.4	-19.1
GEW-100	3/14/2018 15:34	1.2	57.7	1.3	39.8	61.6	61.7	9.3	5.4	-8.4	-8.4	-19.2
GEW-101	3/14/2018 15:17	18.4	65.5	0.1	16.0	79.8	79.6	10.2	9.2	-0.2	-0.2	-19.4
GEW-101	3/14/2018 15:23	18.4	62.0	0.1	19.5	80.4	80.3	10.3	9.8	-0.2	-0.2	-19.4
GEW-102	3/14/2018 14:11	13.6	52.0	1.2	33.2	63.7	64.2	1.2	1.2	-19.2	-19.2	-19.2
GEW-102	3/14/2018 14:17	13.8	50.1	1.2	34.9	62.6	62.6	4.3	4.2	-19.2	-19.2	-19.3
GEW-104	3/14/2018 11:58	1.4	56.3	0.0	42.3	156.9	156.5	3.5	3.4	-0.7	-0.7	-17.9

March 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-104	3/14/2018 12:04	1.4	56.7	0.0	41.9	162.8	163.3	3.6	3.1	-1.9	-1.9	-15.5
GEW-104	3/27/2018 14:11	2.1	53.2	0.1	44.6	148.0	148.2	2.2	5.0	-0.8	-0.8	-16.7
GEW-104	3/27/2018 14:13	2.2	55.1	0.0	42.7	149.9	149.9	4.6	5.4	-0.8	-0.8	-15.6
GEW-105	3/23/2018 8:19	10.3	40.4	5.9	43.4	144.2	144.2	5.4	6.3	-18.5	-18.5	-19.0
GEW-105	3/23/2018 8:41	11.6	42.3	5.9	40.2	143.4	143.5	8.4	12.4	-18.5	-18.5	-19.3
GEW-106	3/13/2018 11:10	13.6	38.9	5.8	41.7	56.0	56.2	2.1	0.8	-0.8	-0.8	-4.4
GEW-106	3/13/2018 11:18	13.0	36.6	6.4	44.0	56.7	56.6	3.0	2.1	-0.6	-0.6	-4.9
GEW-107	3/9/2018 14:21	14.2	57.9	0.0	27.9	170.1	170.0	9.7	10.5	-15.5	-15.2	-20.4
GEW-107	3/9/2018 14:28	13.2	60.0	0.0	26.8	170.5	171.0	7.3	7.0	-17.1	-17.0	-20.2
GEW-107	3/23/2018 10:32	15.5	57.4	0.0	27.1	170.0	170.0	12.8	11.1	-15.1	-15.1	-18.1
GEW-107	3/23/2018 10:34	14.7	58.3	0.0	27.0	170.0	170.0	12.6	11.5	-15.1	-15.1	-18.2
GEW-108	3/9/2018 10:42	35.9	47.4	0.0	16.7	121.3	121.3	4.5	2.6	-19.1	-19.0	-19.3
GEW-108	3/9/2018 10:50	36.1	47.4	0.0	16.5	117.5	117.5	4.8	4.6	-18.0	-17.6	-19.2
GEW-109	3/6/2018 9:45	18.8	47.4	0.0	33.8	104.5	104.3	6.1	3.7	-9.3	-9.3	-20.4
GEW-109	3/6/2018 9:52	19.7	43.9	0.0	36.4	103.6	103.6	3.2	2.5	-9.5	-9.5	-20.7
GEW-109	3/12/2018 9:30	19.3	44.1	0.2	36.4	96.4	96.7	5.1	5.1	-8.8	-8.8	-19.7
GEW-109	3/19/2018 9:31	20.1	45.9	0.0	34.0	105.5	104.2	2.9	2.2	-8.0	-7.9	-20.0
GEW-109	3/26/2018 9:54	21.3	44.6	0.1	34.0	102.1	101.9	7.0	7.0	-8.9	-8.9	-20.0
GEW-110	3/6/2018 8:30	20.1	50.9	0.0	29.0	48.8	48.7	4.5	3.7	0.2	0.1	-20.4
GEW-110	3/6/2018 8:32	20.1	51.8	0.0	28.1	53.7	53.7	3.0	1.4	-0.2	-0.2	-20.4
GEW-110	3/6/2018 8:38	21.0	46.8	1.1	31.1	57.2	57.2	4.9	3.4	-0.2	-0.2	-19.9
GEW-110	3/12/2018 8:24	14.7	32.6	8.0	44.7	51.0	51.0	3.7	1.2	-0.2	-0.2	-19.5
GEW-110	3/12/2018 8:26	16.6	36.9	6.6	39.9	49.3	49.3	2.5	2.2	-0.1	-0.1	-19.4
GEW-110	3/19/2018 8:36	16.5	38.5	5.6	39.4	58.1	58.0	1.7	2.1	-0.1	-0.1	-20.2
GEW-110	3/19/2018 8:37	15.3	39.9	5.9	38.9	58.0	58.1	1.7	3.5	-0.1	-0.1	-20.1
GEW-110	3/26/2018 8:40	15.9	35.8	7.1	41.2	55.2	55.2	3.2	1.2	-0.1	-0.2	-19.9
GEW-110	3/26/2018 8:41	15.7	36.6	7.0	40.7	55.2	55.2	1.2	2.1	-0.2	-0.1	-20.0
GEW-113	3/12/2018 11:28	13.0	46.2	2.5	38.3	147.2	147.0	11.3	10.9	-4.3	-4.3	-18.7
GEW-113	3/12/2018 11:36	13.1	46.3	2.5	38.1	147.7	147.7	12.5	10.4	-4.2	-4.3	-19.0
GEW-113	3/23/2018 14:00	10.5	44.5	2.6	42.4	148.1	148.1	10.6	12.0	-4.4	-4.4	-19.7
GEW-113	3/23/2018 14:02	10.6	45.9	2.6	40.9	148.1	148.1	10.2	14.4	-4.4	-4.4	-19.8
GEW-116	3/14/2018 9:37	5.8	38.9	7.2	48.1	87.7	88.0	14.4	23.4	-14.0	-13.7	-17.2
GEW-116	3/14/2018 9:44	5.9	37.8	7.4	48.9	87.5	87.2	13.5	18.8	-13.7	-13.2	-15.6
GEW-116	3/21/2018 14:55	10.5	72.7	0.0	16.8	63.1	63.2	6.7	8.1	4.4	4.4	-19.9
GEW-116	3/21/2018 14:58	7.9	71.8	0.0	20.3	135.0	134.7	5.2	7.1	-0.6	-0.5	-20.1
GEW-116	3/26/2018 8:10	10.3	64.9	0.0	24.8	190.2	190.2	21.7	20.4	-0.7	-0.8	-20.8
GEW-116	3/26/2018 8:12	10.3	68.2	0.0	21.5	190.2	190.2	19.6	21.0	-0.8	-0.9	-19.9
GEW-116	3/27/2018 11:50	12.0	63.3	0.0	24.7	189.6	189.6	21.5	22.1	-0.9	-0.6	-18.8
GEW-116	3/27/2018 11:51	11.8	66.8	0.0	21.4	189.7	189.6	26.2	20.7	-0.8	-0.8	-19.1
GEW-116	3/28/2018 10:58	12.4	66.2	0.0	21.4	190.9	190.9	20.5	19.8	-0.5	-0.4	-20.6
GEW-116	3/28/2018 11:00	12.7	66.9	0.0	20.4	190.9	190.9	19.3	20.5	-0.4	-0.4	-20.1

March 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-116	3/29/2018 14:19	13.2	63.5	0.3	23.0	190.2	190.2	23.9	26.6	-1.3	-1.4	-19.3
GEW-116	3/29/2018 14:21	12.7	64.9	0.2	22.2	190.2	190.2	25.9	22.7	-1.6	-1.7	-20.0
GEW-117	3/15/2018 8:42	43.0	46.6	0.6	9.8	106.2	106.2	NFD		-17.3	-17.3	-20.2
GEW-117	3/15/2018 8:49	43.1	46.3	0.5	10.1	108.7	108.3	NFD		-17.3	-17.3	-20.2
GEW-117	3/21/2018 14:12	47.2	49.5	0.0	3.3	65.9	66.1	3.6	1.7	1.6	1.5	-18.7
GEW-117	3/21/2018 14:14	45.0	50.8	0.0	4.2	66.6	66.6	1.7	2.9	-5.5	-5.5	-18.5
GEW-117	3/29/2018 14:33	41.6	51.8	0.0	6.6	83.3	83.5	4.1	4.1	-19.3	-19.5	-19.3
GEW-118	3/15/2018 9:31	2.4	51.8	2.2	43.6	195.7	195.0	16.9	16.5	-0.6	-0.6	-20.0
GEW-118	3/15/2018 9:39	3.0	46.9	3.2	46.9	194.4	194.4	18.0	19.1	-0.7	-0.8	-20.0
GEW-118	3/28/2018 9:20	0.7	13.1	17.7	68.5	150.5	150.2	10.8	10.6	-0.2	-0.2	-18.4
GEW-118	3/28/2018 9:21	0.7	11.0	18.0	70.3	151.7	152.1	10.8	11.3	-0.2	-0.2	-18.7
GEW-120	3/15/2018 9:17	14.6	50.9	0.2	34.3	160.7	160.7	18.7	18.5	-7.4	-7.4	-20.5
GEW-120	3/15/2018 9:23	14.9	49.1	0.1	35.9	160.2	160.2	18.8	20.8	-7.4	-7.4	-20.2
GEW-120	3/28/2018 9:26	14.8	46.6	0.6	38.0	157.4	157.4	18.3	18.5	-7.3	-7.3	-18.9
GEW-120	3/28/2018 9:28	14.4	47.7	0.5	37.4	157.3	157.3	18.4	18.6	-7.3	-7.3	-19.4
GEW-121	3/15/2018 10:49	9.2	43.4	1.6	45.8	173.1	173.1	12.0	17.9	-15.2	-15.4	-18.4
GEW-121	3/15/2018 10:55	8.9	43.9	1.5	45.7	173.6	173.6	11.0	6.6	-14.9	-14.9	-18.4
GEW-121	3/28/2018 9:32	7.2	41.3	1.6	49.9	172.6	172.6	16.2	17.7	-15.2	-15.1	-17.8
GEW-121	3/28/2018 9:33	6.7	42.4	1.6	49.3	172.6	172.6	19.0	19.7	-14.8	-14.8	-17.3
GEW-122	3/15/2018 11:31	12.2	40.6	1.2	46.0	156.0	156.0	27.9	26.5	-20.2	-20.2	-18.8
GEW-122	3/15/2018 11:38	12.6	40.5	1.1	45.8	156.0	156.0	16.6	15.1	-18.5	-18.3	-18.8
GEW-122	3/28/2018 9:48	12.3	38.5	1.3	47.9	155.7	155.6	30.4	30.1	-17.6	-17.6	-18.5
GEW-122	3/28/2018 9:49	12.4	38.8	1.2	47.6	155.6	155.6	27.5	26.0	-17.6	-17.7	-18.7
GEW-123	3/15/2018 11:03	16.8	49.3	0.0	33.9	158.8	158.6	6.6	4.4	-11.6	-11.6	-19.3
GEW-123	3/15/2018 11:10	16.5	49.4	0.0	34.1	159.8	159.8	3.5	6.8	-11.5	-11.5	-19.6
GEW-123	3/28/2018 9:37	11.3	42.8	0.3	45.6	156.5	156.5	6.6	5.4	-11.8	-11.8	-19.0
GEW-123	3/28/2018 9:38	11.3	43.3	0.3	45.1	156.5	156.5	5.5	3.5	-11.8	-11.8	-18.8
GEW-124	3/15/2018 11:16	47.7	36.9	3.7	11.7	69.8	69.8	1.4	0.7	-2.4	-2.4	-9.0
GEW-124	3/15/2018 11:23	47.3	35.9	3.7	13.1	68.7	68.7	5.0	3.5	-2.2	-2.2	-8.9
GEW-125	3/15/2018 13:18	0.5	53.1	0.2	46.2	159.5	159.6	4.9	5.1	-0.1	-0.1	-19.0
GEW-125	3/15/2018 13:26	1.3	54.6	0.1	44.0	159.0	159.0	4.7	3.8	-0.1	-0.1	-18.7
GEW-125	3/28/2018 10:15	1.3	54.7	0.0	44.0	182.1	182.2	13.9	15.9	-0.4	-0.5	-18.2
GEW-125	3/28/2018 10:16	1.2	57.0	0.0	41.8	182.7	182.7	13.9	14.0	-0.3	-0.4	-18.3
GEW-126	3/15/2018 13:32	18.9	48.7	0.5	31.9	93.6	93.6	9.0	12.7	-5.7	-5.8	-5.5
GEW-126	3/15/2018 13:37	18.1	46.4	0.7	34.8	94.6	94.6	5.2	8.6	-5.9	-5.9	-6.3
GEW-127	3/15/2018 13:30	4.1	57.3	2.9	35.7	79.1	79.1	11.1	9.9	-18.5	-18.4	-19.1
GEW-127	3/15/2018 13:38	3.2	65.2	0.6	31.0	79.4	79.4	15.4	13.3	-13.5	-13.0	-19.6
GEW-128	3/15/2018 11:36	15.0	53.0	3.4	28.6	143.9	143.9	52.4	50.9	-15.3	-15.2	-17.3
GEW-128	3/15/2018 11:43	15.3	52.1	3.5	29.1	144.5	144.5	40.8	48.3	-14.3	-14.4	-17.3
GEW-128	3/28/2018 10:26	18.1	50.8	3.8	27.3	144.6	144.6	37.2	52.5	-13.7	-14.2	-15.8
GEW-128	3/28/2018 10:29	18.1	50.0	3.8	28.1	144.5	144.5	45.8	44.3	-13.2	-12.8	-18.0

March 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	3/15/2018 11:24	14.4	63.6	0.0	22.0	168.6	168.9	21.1	19.8	-17.8	-17.8	-19.0
GEW-129	3/15/2018 11:31	14.3	61.1	0.0	24.6	166.1	166.1	13.9	14.0	-12.3	-12.4	-19.4
GEW-129	3/28/2018 10:39	14.5	59.3	0.0	26.2	169.0	168.5	9.8	9.9	-10.5	-10.3	-15.7
GEW-129	3/28/2018 10:41	14.3	59.3	0.0	26.4	169.5	169.5	15.8	14.6	-11.2	-11.2	-17.7
GEW-130	3/15/2018 13:44	4.1	52.3	2.5	41.1	183.3	183.3	20.6	21.1	-3.0	-3.0	-20.1
GEW-130	3/15/2018 13:50	3.8	52.0	2.2	42.0	183.9	183.9	21.5	22.1	-1.8	-1.8	-19.5
GEW-130	3/28/2018 10:39	4.3	49.9	3.1	42.7	187.0	187.0	4.6	9.6	-1.5	-1.5	-17.7
GEW-130	3/28/2018 10:40	4.2	51.1	3.1	41.6	187.0	187.1	30.9	9.8	-1.7	-1.7	-18.2
GEW-131	3/15/2018 13:43	23.0	46.3	0.0	30.7	159.4	159.4	11.8	16.1	-12.4	-12.5	-19.3
GEW-131	3/15/2018 13:50	23.0	46.1	0.0	30.9	159.4	159.4	12.5	16.7	-12.4	-12.3	-19.3
GEW-131	3/28/2018 10:09	24.6	41.4	0.0	34.0	132.1	132.3	10.4	11.5	-14.1	-13.8	-17.9
GEW-131	3/28/2018 10:10	24.5	41.8	0.0	33.7	132.0	132.1	11.2	11.6	-14.0	-14.0	-18.4
GEW-132	3/1/2018 13:41	1.0	36.9	4.7	57.4	174.6	175.3	2.8	2.0	-0.2	-0.1	-19.0
GEW-132	3/1/2018 13:53	0.9	40.1	4.6	54.4	174.2	175.3	1.7	2.8	-0.1	-0.1	-18.7
GEW-132	3/15/2018 9:47	1.8	43.0	3.6	51.6	182.7	182.7	0.8	6.2	-0.1	-0.1	-20.0
GEW-132	3/15/2018 9:55	2.0	42.1	3.6	52.3	182.7	182.7	3.3	9.2	-0.04	-0.04	-19.8
GEW-133	3/8/2018 15:56	7.8	54.1	0.0	38.1	119.2	119.2	8.2	21.2	-6.3	-6.4	-12.5
GEW-133	3/8/2018 15:58	7.5	54.8	0.0	37.7	126.4	127.0	34.3	24.2	-10.8	-11.2	-15.0
GEW-133	3/14/2018 9:50	9.6	50.6	0.6	39.2	169.0	169.0	28.6	29.9	-11.8	-11.7	-20.2
GEW-133	3/14/2018 9:58	10.1	50.5	0.6	38.8	168.5	168.5	30.0	27.0	-12.0	-11.9	-20.4
GEW-133	3/27/2018 15:10	9.3	48.3	0.3	42.1	109.0	109.2	26.4	31.7	-16.7	-16.2	-18.5
GEW-134	3/14/2018 9:23	12.6	37.3	3.3	46.8	105.5	105.8	2.2	4.2	-1.0	-1.0	-20.0
GEW-134	3/14/2018 9:30	12.9	38.1	3.3	45.7	109.2	109.0	5.9	3.7	-1.0	-1.0	-20.2
GEW-135	3/12/2018 14:31	6.6	42.5	2.7	48.2	148.1	148.4	14.8	13.4	-3.6	-3.5	-18.7
GEW-135	3/12/2018 14:39	7.0	42.1	2.7	48.2	148.4	148.4	9.6	11.2	-3.1	-3.1	-18.4
GEW-135	3/23/2018 14:06	7.9	42.5	3.1	46.5	148.6	148.4	29.8	19.4	-4.8	-4.0	-19.8
GEW-135	3/23/2018 14:07	7.9	43.3	3.1	45.7	148.6	148.8	30.0	24.3	-4.8	-4.3	-20.1
GEW-136	3/14/2018 11:23	6.2	36.0	4.5	53.3	114.3	114.0	9.0	9.3	-0.1	-0.1	-14.0
GEW-136	3/14/2018 11:32	6.5	34.4	5.2	53.9	117.6	117.6	0.0	2.9	-0.1	-0.1	-11.7
GEW-136	3/14/2018 11:34	6.5	35.1	5.2	53.2	117.1	117.1	3.5	1.1	-0.1	-0.1	-14.2
GEW-136	3/27/2018 15:23	4.1	27.2	9.1	59.6	114.5	115.2	2.9	4.4	-0.2	-0.2	-13.4
GEW-136	3/27/2018 15:24	4.2	26.5	9.3	60.0	115.3	114.3	1.1	3.5	-0.1	-0.1	-12.2
GEW-137	3/14/2018 13:20	32.2	34.9	0.4	32.5	77.7	77.9	5.5	2.8	-8.4	-8.4	-19.1
GEW-137	3/14/2018 13:26	31.7	35.5	0.3	32.5	76.1	76.4	3.5	2.8	-8.4	-8.4	-19.4
GEW-138	3/14/2018 13:32	16.0	40.6	0.0	43.4	135.9	135.9	3.7	5.7	-0.1	-0.1	-19.0
GEW-138	3/14/2018 13:39	16.7	40.4	0.0	42.9	135.3	136.2	3.0	4.1	-0.1	-0.1	-19.1
GEW-138	3/27/2018 15:16	5.5	33.3	1.0	60.2	123.4	123.7	5.3	3.8	-0.2	-0.1	-19.0
GEW-138	3/27/2018 15:18	5.1	33.2	1.1	60.6	125.3	125.6	4.9	3.7	-0.2	-0.2	-19.1
GEW-139	3/9/2018 9:39	0.5	56.9	0.0	42.6	169.5	169.1	3.6	2.3	1.1	1.1	-19.1
GEW-139	3/9/2018 9:52	0.6	55.1	0.0	44.3	173.1	173.1	4.9	3.0	-1.0	-1.0	-19.8
GEW-139	3/15/2018 10:40	0.5	59.4	0.0	40.1	196.4	196.4	5.7	4.8	10.1	10.2	-20.2

March 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-139	3/15/2018 10:50	0.2	57.2	0.0	42.6	197.9	197.9	16.0	17.5	-0.7	-0.5	-20.3
GEW-139	3/23/2018 10:19	4.3	53.6	0.0	42.1	189.6	189.6	6.0	4.2	-5.0	-5.0	-20.6
GEW-139	3/23/2018 10:21	4.2	56.9	0.0	38.9	189.6	189.6	7.9	4.4	-4.9	-5.0	-19.1
GEW-139	3/28/2018 10:44	7.5	56.6	0.0	35.9	176.9	176.9	2.0	7.0	-9.3	-9.3	-19.2
GEW-139	3/28/2018 10:46	7.7	56.7	0.0	35.6	176.9	176.9	9.8	7.7	-9.3	-9.3	-19.9
GEW-140	3/15/2018 10:11	0.2	65.1	0.0	34.7	198.6	198.6	10.8	12.0	12.1	12.1	-19.7
GEW-140	3/15/2018 10:21	0.1	63.6	0.0	36.3	203.9	203.9	12.3	11.1	-1.3	-1.3	-21.9
GEW-140	3/28/2018 10:18	13.6	59.3	0.0	27.1	190.7	190.8	25.1	23.7	-5.6	-5.5	-19.5
GEW-140	3/28/2018 10:19	13.8	58.2	0.0	28.0	190.6	190.9	21.5	22.3	-5.6	-5.6	-19.9
GEW-141	3/15/2018 10:00	0.1	29.7	12.0	58.2	66.5	67.3	4.0	3.8	-0.04	-0.03	-19.7
GEW-141	3/15/2018 10:06	0.1	29.7	12.0	58.2	68.6	68.6	3.8	3.8	-0.1	-0.04	-19.7
GEW-141	3/28/2018 10:08	0.1	20.2	14.7	65.0	49.3	49.3	4.1	3.7	-0.04	-0.04	-18.6
GEW-141	3/28/2018 10:10	0.1	21.3	14.7	63.9	49.2	49.2	2.5	2.2	-0.1	-0.04	-18.8
GEW-142	3/15/2018 9:55	0.0	5.0	20.6	74.4	75.0	75.2	4.6	4.6	-2.1	-2.0	-19.8
GEW-142	3/15/2018 9:56	0.0	2.2	21.2	76.6	75.2	75.0	3.3	2.9	-2.1	-2.1	-19.7
GEW-142	3/28/2018 10:04	0.0	4.0	20.6	75.4	48.0	47.9	4.3	4.3	-1.9	-1.9	-19.0
GEW-142	3/28/2018 10:05	0.0	1.7	21.0	77.3	47.9	47.9	2.8	2.8	-1.9	-1.9	-19.0
GEW-143	3/14/2018 15:52	0.0	1.0	20.2	78.8	65.0	65.0	1.2	2.9	-3.9	-3.8	-19.1
GEW-143	3/14/2018 15:53	0.0	0.3	20.3	79.4	64.9	64.8	2.4	2.4	-3.9	-3.9	-19.1
GEW-143	3/28/2018 9:00	0.0	1.3	21.1	77.6	48.5	48.5	1.2	2.1	-3.9	-3.9	-19.1
GEW-143	3/28/2018 9:02	0.0	0.7	21.2	78.1	48.2	48.2	2.1	1.7	-4.0	-4.0	-19.1
GEW-144	3/14/2018 15:07	9.7	55.0	0.1	35.2	69.5	69.8	3.8	3.8	-0.4	-0.3	-19.2
GEW-144	3/14/2018 15:13	9.5	57.1	0.1	33.3	68.9	69.1	3.6	1.9	-0.4	-0.3	-19.2
GEW-145	3/14/2018 14:01	7.6	52.2	0.0	40.2	88.9	88.6	8.2	6.0	-16.3	-16.3	-18.8
GEW-145	3/14/2018 14:07	7.6	52.9	0.0	39.5	93.6	93.9	3.6	3.1	-16.8	-16.8	-19.3
GEW-146	3/12/2018 10:43	2.0	9.8	17.1	71.1	67.7	68.1	9.8	8.9	-0.01	-0.01	-19.3
GEW-146	3/12/2018 10:50	1.9	6.1	17.5	74.5	67.9	67.9	8.2	9.1	-0.02	-0.03	-19.4
GEW-146	3/23/2018 13:41	3.2	11.4	15.2	70.2	76.8	77.0	9.1	8.6	-0.1	-0.1	-20.1
GEW-146	3/23/2018 13:42	3.4	8.8	15.6	72.2	77.0	76.9	8.8	9.5	-0.1	-0.1	-20.2
GEW-147	3/12/2018 14:16	9.7	38.0	0.4	51.9	147.0	147.0	21.9	21.6	-18.1	-18.1	-18.5
GEW-147	3/12/2018 14:24	9.9	38.8	0.3	51.0	147.3	147.3	23.1	22.0	-18.1	-18.1	-18.7
GEW-147	3/23/2018 14:11	11.5	41.0	0.5	47.0	158.1	158.1	27.1	26.3	-18.8	-18.8	-19.9
GEW-147	3/23/2018 14:13	11.7	40.7	0.4	47.2	158.4	158.5	25.1	25.1	-18.7	-18.7	-19.7
GEW-148	3/12/2018 13:46	3.5	50.7	1.7	44.1	116.3	116.6	2.1	4.3	-12.7	-12.8	-19.0
GEW-148	3/12/2018 13:53	4.8	51.7	1.3	42.2	120.2	120.2	5.6	2.1	-12.3	-12.3	-19.2
GEW-149	3/8/2018 14:12	13.2	34.9	3.1	48.8	91.9	91.3	13.7	13.7	-0.2	-0.2	-4.3
GEW-149	3/8/2018 14:18	12.3	36.0	3.1	48.6	93.7	93.8	13.3	13.3	-0.3	-0.3	-3.8
GEW-150	3/14/2018 11:47	9.5	37.8	7.5	45.2	183.4	183.9	7.8	9.8	-0.7	-0.7	-19.7
GEW-150	3/14/2018 11:54	9.6	38.8	7.3	44.3	179.2	179.2	4.5	4.5	-0.4	-0.4	-18.2
GEW-150	3/27/2018 14:17	12.5	52.3	2.2	33.0	188.0	187.6	7.8	10.1	-0.3	-0.3	-18.1
GEW-150	3/27/2018 14:19	12.7	53.4	2.2	31.7	187.6	187.0	9.2	7.0	-0.3	-0.3	-17.0

March 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-151	3/15/2018 14:08	6.1	51.3	0.0	42.6	168.4	168.5	2.3	3.0	-0.3	-0.3	-17.9
GEW-151	3/15/2018 14:16	6.6	50.8	0.0	42.6	172.2	172.4	2.8	4.6	-0.4	-0.4	-18.0
GEW-151	3/28/2018 8:16	12.1	49.3	0.3	38.3	164.7	165.2	20.6	35.5	-3.7	-3.8	-19.4
GEW-151	3/28/2018 8:18	11.6	49.9	0.0	38.5	165.7	166.1	21.1	25.3	-2.9	-4.7	-19.2
GEW-152	3/9/2018 14:32	27.0	49.5	0.0	23.5	118.8	118.7	5.6	5.6	-8.2	-8.3	-19.6
GEW-152	3/9/2018 14:40	27.3	48.3	0.0	24.4	119.7	119.4	5.2	2.2	-7.8	-7.8	-20.0
GEW-153	3/9/2018 13:35	43.6	37.3	0.0	19.1	56.4	56.5	3.9	4.4	-1.2	-1.3	-20.2
GEW-153	3/9/2018 13:42	43.2	36.8	0.0	20.0	63.5	63.9	3.9	4.1	-1.4	-1.5	-19.9
GEW-154	3/8/2018 13:49	0.0	13.7	14.8	71.5	47.3	47.4	2.5	2.2	-0.7	-0.7	-19.4
GEW-154	3/8/2018 13:55	0.1	12.9	14.9	72.1	48.5	48.5	2.5	2.5	-0.6	-0.7	-19.1
GEW-154	3/22/2018 8:58	0.1	21.0	13.3	65.6	47.9	47.9	2.1	2.1	-1.9	-1.9	-19.9
GEW-154	3/22/2018 9:00	0.1	21.7	13.2	65.0	47.6	47.6	2.5	2.5	-1.9	-1.9	-19.8
GEW-155	3/14/2018 13:58	5.4	29.7	0.0	64.9	114.3	114.3	3.8	3.8	-0.03	-0.03	-18.1
GEW-155	3/14/2018 14:04	4.7	28.4	0.1	66.8	115.8	115.8	4.5	4.4	-0.03	-0.02	-18.1
GEW-156	3/14/2018 13:49	35.4	46.5	0.5	17.6	95.8	95.9	4.4	2.9	-12.8	-12.8	-19.1
GEW-156	3/14/2018 13:55	36.0	44.8	0.5	18.7	94.8	94.6	5.9	5.7	-12.8	-12.8	-19.1
GEW-157	3/14/2018 13:20	11.1	47.6	3.4	37.9	98.7	98.7	1.8	2.0	-17.0	-16.9	-19.1
GEW-157	3/14/2018 13:26	11.8	45.5	3.2	39.5	98.5	98.9	3.3	4.2	-17.2	-17.2	-19.2
GEW-158	3/13/2018 11:31	17.0	55.3	0.0	27.7	164.3	163.8	7.9	3.9	-1.4	-1.4	-13.2
GEW-158	3/13/2018 11:40	17.1	57.4	0.0	25.5	167.6	168.5	11.4	12.3	-1.8	-1.8	-12.2
GEW-159	3/9/2018 10:31	46.7	38.6	0.7	14.0	57.3	57.3	4.2	4.4	-0.9	-0.9	-19.0
GEW-159	3/9/2018 10:38	46.7	38.6	0.8	13.9	58.0	58.0	4.4	5.3	-0.8	-0.8	-19.4
GEW-160	3/8/2018 10:48	1.2	9.2	18.1	71.5	49.3	49.4	16.9	12.9	-19.7	-19.7	-19.5
GEW-160	3/8/2018 10:56	1.0	3.3	19.3	76.4	49.6	49.6	6.3	0.0	-19.6	-19.6	-19.6
GEW-160	3/22/2018 8:46	5.2	23.5	12.5	58.8	42.7	42.8	14.7	9.8	-20.0	-20.0	-19.9
GEW-160	3/22/2018 8:49	5.2	20.6	12.9	61.3	43.3	43.3	4.9	6.3	-20.0	-20.0	-19.9
GEW-161	3/8/2018 11:00	4.1	52.6	0.1	43.2	48.6	48.5	3.6	2.7	-11.5	-11.5	-19.7
GEW-161	3/8/2018 11:08	5.3	50.5	0.0	44.2	45.5	45.5	2.1	1.7	-11.8	-11.8	-19.6
GEW-162	3/12/2018 8:55	12.7	54.9	0.0	32.4	45.9	45.9	3.0	6.4	-11.8	-11.8	-19.4
GEW-162	3/12/2018 9:03	12.8	56.2	0.0	31.0	45.5	45.5	2.4	1.7	-11.8	-11.8	-19.4
GEW-163	3/7/2018 13:52	12.6	44.1	5.5	37.8	173.2	173.6	9.1	5.0	-0.2	-0.2	-18.6
GEW-163	3/7/2018 14:01	12.2	41.1	5.8	40.9	173.1	173.6	5.7	2.8	-0.2	-0.1	-19.5
GEW-163	3/13/2018 10:49	14.3	41.4	6.2	38.1	160.2	160.2	14.6	18.7	-0.2	-0.2	-18.0
GEW-163	3/13/2018 10:51	14.3	42.4	6.2	37.1	159.8	159.8	19.9	12.9	-0.2	-0.2	-17.9
GEW-163	3/20/2018 13:28	6.8	35.2	8.6	49.4	170.5	170.5	1.1	8.7	-0.2	-0.2	-19.0
GEW-163	3/20/2018 13:30	6.5	35.6	8.5	49.4	170.5	170.5	16.4	4.7	-0.2	-0.2	-19.1
GEW-163	3/27/2018 10:06	1.4	23.6	14.6	60.4	173.1	172.7	20.7	20.8	-0.2	-0.2	-18.3
GEW-163	3/27/2018 10:07	1.3	23.6	14.7	60.4	173.1	172.7	21.9	23.1	-0.2	-0.2	-17.4
GEW-164	3/2/2018 11:37	23.5	54.8	0.4	21.3	162.4	162.0	13.6	13.4	-0.1	-0.1	-19.2
GEW-164	3/2/2018 11:40	22.4	56.3	0.5	20.8	162.2	162.4	19.0	18.4	-0.2	-0.2	-19.3
GEW-164	3/7/2018 13:38	26.9	51.9	1.1	20.1	155.6	155.2	34.2	18.8	-0.2	-0.2	-20.2

March 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-164	3/7/2018 13:46	26.1	53.3	1.2	19.4	155.2	155.2	20.1	31.5	-0.2	-0.2	-20.5
GEW-164	3/13/2018 10:54	24.3	55.2	1.1	19.4	160.2	160.2	24.5	27.8	-0.2	-0.2	-18.7
GEW-164	3/13/2018 10:56	24.1	55.3	1.1	19.5	160.2	159.9	32.4	22.5	-0.1	-0.2	-18.8
GEW-164	3/20/2018 13:33	22.4	52.9	1.2	23.5	156.9	157.3	4.8	4.1	-0.2	-0.2	-20.4
GEW-164	3/20/2018 13:35	22.4	54.0	1.1	22.5	157.3	156.9	6.4	5.9	-0.2	-0.2	-19.3
GEW-164	3/27/2018 10:11	21.1	48.0	3.7	27.2	155.8	155.6	17.1	20.2	-0.3	-0.3	-19.0
GEW-164	3/27/2018 10:13	21.0	48.0	3.6	27.4	155.6	156.0	19.6	20.2	-0.3	-0.3	-18.9
GEW-165	3/7/2018 11:27	16.1	64.3	0.0	19.6	180.9	180.9	12.2	13.9	-0.1	-0.1	-20.4
GEW-165	3/7/2018 11:35	15.1	60.8	0.0	24.1	181.5	181.5	15.4	22.4	-0.1	-0.1	-18.7
GEW-165	3/13/2018 11:01	13.8	57.0	0.0	29.2	182.1	182.1	13.7	14.7	0.7	0.7	-18.3
GEW-165	3/13/2018 11:06	13.1	61.8	0.0	25.1	183.3	183.0	13.7	23.9	-0.2	-0.2	-17.9
GEW-165	3/20/2018 13:41	10.3	51.3	2.9	35.5	177.1	176.9	17.0	22.0	-0.7	-0.7	-15.0
GEW-165	3/20/2018 13:43	9.9	54.1	2.9	33.1	177.5	177.5	22.6	21.5	-0.7	-0.7	-15.0
GEW-165	3/27/2018 10:16	9.7	49.7	4.3	36.3	176.9	176.9	23.0	25.3	-0.7	-0.7	-12.9
GEW-165	3/27/2018 10:18	9.6	51.6	4.3	34.5	177.5	176.9	19.2	8.2	-0.8	-0.8	-13.0
GEW-166	3/7/2018 11:14	0.7	55.8	0.2	43.3	195.7	195.7	61.2	59.3	-4.5	-4.5	-18.7
GEW-166	3/7/2018 11:21	1.1	55.1	0.2	43.6	195.7	195.7	30.7	38.9	-4.1	-3.9	-20.0
GEW-166	3/13/2018 11:09	1.3	54.2	0.2	44.3	195.7	195.7	20.7	32.3	-6.9	-7.0	-18.9
GEW-166	3/13/2018 11:11	1.4	55.9	0.2	42.5	195.7	195.7	55.5	40.2	-7.3	-7.0	-18.8
GEW-166	3/20/2018 13:56	1.6	52.4	0.4	45.6	195.5	195.4	36.1	32.5	-7.4	-7.4	-19.9
GEW-166	3/20/2018 13:57	1.6	56.2	0.3	41.9	195.6	195.7	59.3	58.8	-7.9	-8.4	-19.7
GEW-166	3/27/2018 10:22	1.4	54.7	0.2	43.7	195.7	195.7	51.1	55.5	-8.9	-8.8	-19.6
GEW-166	3/27/2018 10:23	1.3	56.4	0.2	42.1	195.7	195.7	33.4	33.2	-9.3	-9.3	-18.2
GEW-167	3/2/2018 11:27	2.0	25.7	12.1	60.2	165.7	165.2	27.6	27.5	-1.4	-1.4	-12.7
GEW-167	3/2/2018 11:31	2.4	24.7	11.9	61.0	162.0	161.6	10.2	6.7	-0.3	-0.3	-18.1
GEW-167	3/7/2018 13:24	0.2	55.2	0.1	44.5	192.9	192.9	9.0	12.7	-0.1	-0.2	-17.1
GEW-167	3/7/2018 13:32	0.5	51.4	0.0	48.1	192.9	192.9	21.6	22.4	-0.2	-0.2	-17.0
GEW-167	3/13/2018 11:17	1.2	52.1	0.8	45.9	192.3	192.3	21.0	21.8	-0.2	-0.2	-17.8
GEW-167	3/13/2018 11:19	1.3	54.0	0.8	43.9	192.3	192.3	49.8	49.3	-0.7	-0.8	-17.6
GEW-167	3/20/2018 14:13	1.7	51.8	0.0	46.5	193.6	193.4	9.2	6.2	-0.1	-0.1	-16.7
GEW-167	3/20/2018 14:14	1.7	55.5	0.0	42.8	193.6	192.9	19.7	17.0	-0.2	-0.2	-16.2
GEW-167	3/27/2018 10:38	1.1	34.2	9.6	55.1	184.5	184.5	42.7	43.6	-0.5	-0.5	-16.6
GEW-167	3/27/2018 10:40	1.0	33.4	9.7	55.9	184.7	184.5	42.9	46.2	-0.6	-0.6	-16.7
GEW-168	3/7/2018 14:10	12.9	56.5	0.1	30.5	169.0	168.5	172.6	173.7	-2.4	-2.4	-20.0
GEW-168	3/7/2018 14:17	13.9	54.4	0.1	31.6	168.5	168.5	173.8	174.9	-2.5	-2.4	-19.9
GEW-168	3/13/2018 11:24	15.9	57.9	0.0	26.2	169.5	169.5	169.2	171.1	-2.3	-2.3	-19.0
GEW-168	3/13/2018 11:25	16.1	57.7	0.0	26.2	169.6	169.5	172.1	170.3	-2.3	-2.3	-19.5
GEW-168	3/20/2018 14:20	17.5	57.4	0.1	25.0	169.0	169.0	175.2	174.8	-2.2	-2.2	-19.5
GEW-168	3/20/2018 14:21	18.1	57.7	0.0	24.2	168.6	169.0	175.1	174.0	-2.2	-2.2	-20.1
GEW-168	3/27/2018 10:27	14.6	55.3	0.0	30.1	170.0	170.0	174.3	174.6	-2.1	-2.1	-18.8
GEW-168	3/27/2018 10:28	15.1	56.4	0.0	28.5	170.1	170.0	174.6	174.4	-2.2	-2.2	-19.0

March 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-169	3/2/2018 11:20	4.3	54.3	1.7	39.7	186.4	186.1	29.0	20.2	-1.2	-1.2	-19.3
GEW-169	3/2/2018 11:22	4.2	55.2	1.6	39.0	186.4	186.4	20.3	19.5	-1.9	-1.8	-18.5
GEW-169	3/7/2018 14:21	5.4	52.9	2.3	39.4	185.1	185.1	26.3	28.5	-1.5	-1.4	-20.3
GEW-169	3/7/2018 14:29	5.7	54.7	2.3	37.3	184.5	184.6	24.7	25.4	-1.4	-1.3	-19.7
GEW-169	3/13/2018 11:29	8.2	53.8	1.7	36.3	185.0	184.6	6.2	11.2	-1.1	-1.1	-19.0
GEW-169	3/13/2018 11:31	8.1	56.8	1.7	33.4	185.1	185.1	54.8	47.0	-1.3	-1.4	-19.0
GEW-169	3/20/2018 14:26	9.1	55.9	1.8	33.2	184.5	184.5	39.2	43.4	-1.1	-1.2	-19.4
GEW-169	3/20/2018 14:29	8.9	56.6	1.8	32.7	184.5	184.5	72.4	75.3	-1.3	-1.3	-19.3
GEW-169	3/27/2018 10:32	5.2	50.8	4.2	39.8	180.0	179.8	21.9	23.8	-1.8	-1.8	-18.8
GEW-169	3/27/2018 10:34	5.0	51.2	4.2	39.6	179.7	179.7	61.7	66.0	-2.1	-2.1	-18.8
GEW-170	3/15/2018 13:21	9.1	57.4	1.4	32.1	182.1	182.1	13.2	11.7	-1.1	-1.0	-12.9
GEW-170	3/15/2018 13:27	8.3	59.5	1.2	31.0	182.1	182.1	13.8	13.2	-1.1	-1.1	-13.5
GEW-170	3/28/2018 10:21	12.5	53.2	1.4	32.9	180.9	180.9	11.5	8.5	-1.2	-1.2	-11.9
GEW-170	3/28/2018 10:23	12.5	56.0	1.4	30.1	180.9	180.3	11.7	6.2	-1.2	-1.2	-11.7
GEW-171	3/15/2018 9:18	0.6	39.8	9.6	50.0	66.4	66.3	2.3	1.6	-20.2	-20.3	-20.3
GEW-171	3/15/2018 9:24	0.1	17.0	18.1	64.8	65.4	65.4	3.6	3.0	-19.3	-19.3	-19.8
GEW-171	3/28/2018 9:55	0.5	19.2	15.5	64.8	48.2	48.2	2.7	2.7	-17.6	-17.6	-19.1
GEW-171	3/28/2018 9:56	0.3	21.4	14.5	63.8	48.2	48.2	2.1	1.7	-17.6	-17.6	-18.6
GEW-172	3/15/2018 9:45	4.3	60.7	0.0	35.0	156.9	157.3	11.5	7.7	2.5	2.5	-20.1
GEW-172	3/15/2018 9:51	4.0	62.1	0.0	33.9	158.2	158.5	15.6	13.8	-3.5	-3.5	-19.7
GEW-172	3/28/2018 10:14	0.2	49.8	3.1	46.9	50.5	50.4	4.9	5.6	-19.1	-19.0	-19.1
GEW-173	3/15/2018 10:25	44.4	47.5	0.0	8.1	110.0	110.2	8.0	7.8	0.0	0.0	-19.7
GEW-173	3/15/2018 10:33	45.1	46.7	0.0	8.2	114.8	114.8	6.9	6.9	-0.1	-0.1	-19.7
GEW-174	3/14/2018 14:23	20.6	47.0	0.0	32.4	143.9	144.0	31.9	28.6	-3.6	-3.5	-19.8
GEW-174	3/14/2018 14:29	20.9	45.3	0.0	33.8	144.3	144.4	30.0	34.7	-3.6	-3.6	-20.0
GEW-174	3/28/2018 9:06	20.9	42.9	0.0	36.2	141.5	141.5	32.6	35.7	-4.2	-4.2	-19.9
GEW-174	3/28/2018 9:07	20.5	44.7	0.0	34.8	142.2	141.6	37.2	30.8	-4.2	-4.1	-19.4
GEW-175	3/14/2018 11:36	11.4	37.4	7.6	43.6	154.4	154.4	40.7	40.3	-0.4	-0.4	-17.6
GEW-175	3/14/2018 11:43	11.5	37.3	7.5	43.7	153.3	153.7	34.0	35.0	-0.3	-0.2	-17.2
GEW-175	3/28/2018 8:46	8.9	37.5	8.6	45.0	164.7	164.7	26.7	28.0	-0.2	-0.2	-12.6
GEW-175	3/28/2018 8:47	8.4	38.7	8.4	44.5	164.7	164.3	27.8	23.9	-0.2	-0.2	-12.7
GEW-176	3/14/2018 9:58	17.3	26.7	10.8	45.2	49.0	48.9	6.3	6.5	-0.01	-0.02	-10.4
GEW-176	3/14/2018 10:07	16.1	29.7	7.9	46.3	49.4	49.3	3.3	2.8	0.1	0.0	0.4
GEW-176	3/14/2018 11:32	20.1	32.0	8.6	39.3	54.9	54.9	7.2	5.5	-0.1	-0.1	-19.9
GEW-176	3/28/2018 8:39	18.6	27.5	10.4	43.5	47.1	47.1	6.0	5.6	-0.1	-0.1	-19.7
GEW-176	3/28/2018 8:40	18.9	27.0	10.4	43.7	47.1	47.1	7.2	6.9	-0.1	-0.1	-19.6
GEW-177	3/15/2018 11:09	0.3	70.2	0.0	29.5	200.1	200.8	32.0	29.5	12.1	12.1	-16.5
GEW-177	3/15/2018 11:21	0.4	68.9	0.0	30.7	203.9	203.9	36.1	40.7	-1.7	-1.9	-19.3
GEW-177	3/28/2018 10:44	4.0	63.0	0.0	33.0	194.4	194.8	14.7	14.8	-14.0	-14.1	-19.9
GEW-177	3/28/2018 10:46	3.9	64.6	0.0	31.5	195.0	195.0	18.6	19.8	-13.7	-13.7	-19.5
GEW-178	3/6/2018 11:15	16.2	58.4	0.9	24.5	96.7	97.0	9.1	7.1	-0.2	-0.2	-20.7

March 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	3/6/2018 11:21	16.7	55.3	0.8	27.2	96.3	96.7	8.1	10.1	-0.3	-0.3	-21.1
GEW-178	3/13/2018 8:47	16.1	49.3	3.3	31.3	97.7	97.8	8.4	4.4	-0.1	-0.1	-19.3
GEW-178	3/20/2018 8:45	15.9	51.1	4.0	29.0	90.1	90.1	9.3	7.3	-0.1	-0.1	-20.4
GEW-178	3/20/2018 8:46	16.0	52.3	4.0	27.7	90.6	90.5	10.3	10.5	-0.1	-0.1	-20.6
GEW-178	3/27/2018 8:08	17.5	56.6	2.2	23.7	100.6	100.8	8.9	7.3	-0.2	-0.2	-19.6
GEW-179	3/6/2018 13:39	0.0	0.5	20.7	78.8	46.1	46.1	10.7	8.5	-20.5	-20.5	-20.4
GEW-179	3/6/2018 13:40	0.0	0.7	20.8	78.5	46.1	46.0	6.8	1.2	-20.5	-20.5	-20.5
GEW-179	3/13/2018 14:34	17.5	65.9	0.1	16.5	63.4	63.5	26.9	17.0	-5.0	-3.8	-10.7
GEW-179	3/15/2018 14:08	20.4	63.4	1.1	15.1	84.9	81.9	19.3	6.9	-18.5	-18.1	-19.7
GEW-179	3/15/2018 14:15	20.3	63.9	0.1	15.7	82.4	83.2	40.6	30.8	-16.2	-15.2	-20.1
GEW-179	3/20/2018 9:22	19.2	63.0	0.2	17.6	38.5	38.6	5.0	6.7	-20.2	-19.7	-20.4
GEW-179	3/23/2018 9:41	20.8	61.6	0.0	17.6	106.0	106.0	6.6	5.2	0.4	0.4	-18.8
GEW-179	3/23/2018 9:43	18.9	65.9	0.0	15.2	113.2	113.5	7.1	5.9	-0.4	-0.3	-19.7
GEW-179	3/27/2018 8:16	19.9	59.0	1.7	19.4	121.4	121.3	7.5	6.1	-0.6	-0.6	-14.5
GEW-180	3/6/2018 13:46	20.6	55.5	0.3	23.6	47.2	47.1	6.0	6.0	0.4	0.4	-20.3
GEW-180	3/6/2018 13:49	20.1	57.3	0.1	22.5	49.7	49.7	4.3	4.1	-1.4	-1.4	-20.8
GEW-180	3/6/2018 13:55	21.5	55.2	0.2	23.1	48.0	48.0	3.8	3.9	-1.7	-1.7	-20.8
GEW-180	3/13/2018 8:59	12.1	65.6	0.0	22.3	64.0	64.0	2.7	2.1	4.2	4.2	-19.2
GEW-180	3/13/2018 9:06	12.3	69.2	0.0	18.5	97.5	98.7	3.9	3.0	-0.3	-0.3	-19.3
GEW-180	3/20/2018 10:30	10.5	68.6	0.0	20.9	126.7	126.5	4.6	5.5	-0.6	-0.6	-20.2
GEW-180	3/27/2018 8:21	16.4	60.7	0.7	22.2	104.1	104.3	5.5	7.1	-6.4	-6.4	-19.4
GEW-181	3/7/2018 8:22	11.3	64.1	0.3	24.3	164.7	165.2	12.7	14.4	-1.1	-1.0	-19.9
GEW-181	3/7/2018 8:30	12.2	62.6	0.2	25.0	165.2	165.2	8.9	6.2	-1.0	-1.1	-20.5
GEW-181	3/13/2018 9:11	13.4	64.2	0.0	22.4	169.0	169.0	7.3	6.2	-0.8	-0.9	-20.0
GEW-181	3/13/2018 9:13	13.5	63.9	0.0	22.6	169.0	169.0	4.8	13.5	-0.6	-0.6	-19.6
GEW-181	3/20/2018 10:35	11.7	67.1	0.0	21.2	167.1	167.0	13.8	9.9	-0.8	-0.9	-20.7
GEW-181	3/20/2018 10:36	11.7	68.4	0.0	19.9	167.1	167.1	12.3	12.3	-0.7	-0.6	-20.7
GEW-181	3/27/2018 8:26	14.1	63.9	0.0	22.0	165.7	165.7	9.0	9.2	-0.5	-0.5	-13.6
GEW-181	3/27/2018 8:28	13.8	65.8	0.0	20.4	165.7	165.7	8.7	7.7	-0.5	-0.5	-13.2
GEW-182	3/7/2018 10:22	15.7	43.6	6.1	34.6	118.9	119.2	18.6	14.8	-0.9	-0.8	-21.3
GEW-182	3/7/2018 10:29	15.6	42.7	6.0	35.7	119.4	119.4	18.0	19.1	-0.9	-0.9	-21.0
GEW-182	3/13/2018 10:25	17.7	46.1	4.2	32.0	136.8	136.8	15.8	18.5	-0.6	-0.6	-19.3
GEW-182	3/13/2018 10:26	17.8	46.7	4.2	31.3	136.5	136.8	15.4	16.9	-0.6	-0.6	-16.2
GEW-182	3/20/2018 11:25	13.6	46.7	4.6	35.1	139.0	139.0	18.1	10.5	-0.6	-0.6	-21.1
GEW-182	3/20/2018 11:27	13.9	48.8	4.6	32.7	138.3	138.4	16.1	19.9	-0.5	-0.5	-19.8
GEW-182	3/27/2018 9:12	18.7	44.5	4.8	32.0	134.9	134.7	16.8	20.0	-0.8	-0.8	-18.1
GEW-182	3/27/2018 9:14	18.6	45.1	4.7	31.6	134.7	135.0	17.3	5.8	-0.8	-0.7	-20.2
GEW-184	3/7/2018 9:52	13.2	30.5	13.3	43.0	68.7	68.6	1.2	4.9	-0.01	-0.01	-19.1
GEW-184	3/7/2018 9:58	13.4	27.9	13.7	45.0	70.2	70.2	4.5	2.4	-0.1	-0.03	-19.3
GEW-184	3/13/2018 10:04	14.1	27.2	13.4	45.3	76.8	77.2	2.9	1.2	-0.03	-0.03	-18.7
GEW-184	3/13/2018 10:05	13.9	27.6	13.3	45.2	77.3	77.1	3.7	3.5	-0.02	-0.03	-18.8

March 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-184	3/20/2018 11:12	13.4	33.1	11.8	41.7	72.5	72.3	3.2	6.3	-0.03	-0.02	-20.2
GEW-184	3/20/2018 11:13	14.4	32.4	12.0	41.2	73.6	73.4	4.3	5.7	-0.02	-0.02	-20.2
GEW-184	3/27/2018 8:53	11.3	26.7	14.2	47.8	84.7	85.1	4.4	3.7	-0.03	-0.04	-18.9
GEW-184	3/27/2018 8:55	11.5	25.5	14.5	48.5	85.0	84.7	6.3	1.7	-0.1	-0.1	-18.6
GEW-185	3/7/2018 9:36	16.2	63.8	0.0	20.0	154.4	154.0	7.5	4.5	-0.1	-0.1	-19.5
GEW-185	3/7/2018 9:45	16.7	62.1	0.0	21.2	154.0	154.0	5.5	6.6	-0.03	-0.04	-19.3
GEW-185	3/13/2018 10:10	16.3	59.5	0.0	24.2	158.6	158.5	6.8	4.8	-0.1	-0.1	-18.8
GEW-185	3/13/2018 10:11	15.9	60.9	0.0	23.2	159.0	159.0	4.0	1.0	-0.1	-0.1	-18.9
GEW-185	3/20/2018 11:17	16.3	59.5	0.0	24.2	155.3	155.2	7.3	7.6	-0.1	-0.1	-18.4
GEW-185	3/20/2018 11:18	15.9	62.7	0.0	21.4	156.0	156.0	5.0	5.7	-0.1	-0.1	-19.3
GEW-185	3/27/2018 8:59	16.7	59.1	0.0	24.2	159.0	159.0	5.0	5.5	-0.1	-0.1	-18.2
GEW-185	3/27/2018 9:00	16.4	61.4	0.0	22.2	159.4	159.4	2.9	7.0	-0.1	-0.1	-18.2
GEW-186	3/7/2018 8:53	19.5	43.2	6.7	30.6	126.9	126.9	5.4	2.7	-0.04	-0.1	-19.3
GEW-186	3/7/2018 9:00	19.9	42.8	6.5	30.8	126.8	127.2	4.7	6.5	-0.2	-0.2	-19.2
GEW-186	3/13/2018 9:38	18.8	40.4	7.6	33.2	131.2	131.2	8.1	6.7	-0.2	-0.2	-19.0
GEW-186	3/13/2018 9:41	20.1	41.3	7.1	31.5	130.6	130.5	6.1	5.4	-0.1	-0.1	-18.9
GEW-186	3/20/2018 10:54	17.4	44.3	7.0	31.3	132.0	132.0	3.0	7.5	-0.04	-0.03	-19.7
GEW-186	3/20/2018 10:56	18.2	43.4	7.1	31.3	132.3	132.6	5.7	6.0	-0.1	-0.1	-20.7
GEW-186	3/27/2018 8:39	22.6	49.5	3.3	24.6	138.7	139.2	7.0	7.3	-0.2	-0.3	-18.3
GEW-186	3/27/2018 8:41	24.1	48.4	3.2	24.3	139.3	139.3	8.3	10.6	-0.2	-0.3	-18.5
GEW-187	3/6/2018 10:39	9.5	55.0	0.9	34.6	172.0	171.6	6.6	6.1	-2.5	-2.5	-19.9
GEW-187	3/6/2018 10:46	10.5	56.8	0.8	31.9	172.6	172.6	6.0	9.1	-2.6	-2.6	-20.4
GEW-187	3/13/2018 8:37	9.6	57.0	1.0	32.4	172.6	172.1	9.2	6.5	-2.7	-2.7	-19.2
GEW-187	3/13/2018 8:39	9.6	56.5	1.2	32.7	172.6	172.6	3.6	7.3	-2.7	-2.6	-19.3
GEW-187	3/20/2018 8:34	12.0	56.1	1.3	30.6	156.5	156.0	6.5	5.4	-4.9	-4.9	-20.6
GEW-187	3/20/2018 8:36	12.0	56.8	1.2	30.0	155.7	155.6	0.5	6.5	-4.9	-4.9	-20.1
GEW-187	3/27/2018 7:55	14.3	54.9	1.6	29.2	152.7	152.5	7.6	8.0	-5.9	-5.9	-19.8
GEW-187	3/27/2018 7:56	13.8	55.9	1.1	29.2	153.0	154.0	6.5	6.3	-5.9	-5.9	-19.6
GEW-188	3/1/2018 14:14	0.8	14.9	15.3	69.0	82.8	83.7	6.4	8.3	-0.1	-0.1	-14.0
GEW-188	3/1/2018 15:43	0.7	42.2	5.2	51.9	60.4	60.4	7.7	7.6	-0.1	-0.1	-19.2
GEW-188	3/2/2018 8:39	1.6	19.7	13.2	65.5	70.7	70.7	13.1	23.2	-0.1	-0.1	-12.6
GEW-188	3/2/2018 8:48	1.3	16.6	14.0	68.1	81.0	82.6	18.2	17.7	-0.2	-0.3	-15.1
GEW-188	3/7/2018 10:07	1.1	14.5	16.4	68.0	72.0	71.6	13.6	13.6	-0.2	-0.2	-17.6
GEW-188	3/7/2018 10:15	1.0	12.9	16.8	69.3	70.2	70.0	13.9	14.0	-0.2	-0.2	-20.9
GEW-188	3/13/2018 9:51	2.1	16.9	16.7	64.3	66.2	66.5	12.0	11.6	-0.1	-0.1	-16.5
GEW-188	3/13/2018 9:53	2.0	14.1	16.8	67.1	66.8	66.8	14.2	15.1	-0.1	-0.1	-17.0
GEW-188	3/20/2018 11:35	0.8	23.0	13.9	62.3	60.0	60.2	23.0	23.0	-0.04	-0.1	-16.6
GEW-188	3/20/2018 11:37	0.7	22.6	14.1	62.6	60.1	60.4	14.5	13.1	-0.1	-0.2	-14.1
GEW-188	3/27/2018 9:05	0.4	18.9	16.2	64.5	60.9	61.0	4.6	5.2	-0.01	-0.01	-18.3
GEW-188	3/27/2018 9:07	0.4	18.0	16.3	65.3	61.1	61.1	3.9	3.4	-0.02	-0.01	-18.5
GEW-1A	3/8/2018 10:13	0.2	3.1	20.5	76.2	42.6	42.6	4.0	4.0	-13.8	-13.8	-14.4

March 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-1A	3/8/2018 10:15	0.1	1.3	21.0	77.6	42.2		2.1		-13.8		-14.4
GEW-1A	3/12/2018 11:49	0.4	5.9	19.9	73.8	38.2	38.2	5.3	5.6	-14.2	-14.2	-14.7
GEW-1A	3/12/2018 11:50	0.2	2.6	20.7	76.5	38.2	38.2	2.7	4.2	-14.2	-14.2	-14.5
GEW-1A	3/21/2018 8:58	0.4	6.2	20.5	72.9	40.2	40.2	3.9	3.9	-13.7	-13.7	-14.2
GEW-1A	3/21/2018 9:00	0.3	3.0	21.3	75.4	40.3	40.3	3.2	1.2	-13.7	-13.7	-14.2
GEW-1A	3/27/2018 13:22	0.0	3.7	20.2	76.1	51.5	51.4	4.3	4.3	-13.7	-13.8	-14.1
GEW-1A	3/27/2018 13:24	0.0	1.2	20.7	78.1	51.3	51.3	3.4	3.4	-13.8	-13.8	-14.0
GEW-2S	3/8/2018 10:26	57.6	37.1	0.6	4.7	53.4	53.7	15.3	13.1	-5.8	-5.8	-12.3
GEW-2S	3/8/2018 10:34	58.9	35.4	0.5	5.2	54.4	54.4	14.3	15.8	-5.7	-5.8	-12.4
GEW-2S	3/12/2018 13:33	58.5	35.9	0.3	5.3	52.1	52.3	16.4	20.0	-4.6	-4.8	-12.5
GEW-2S	3/21/2018 9:09	58.2	38.0	0.2	3.6	54.3	54.6	15.4	12.5	-4.6	-4.8	-11.5
GEW-2S	3/27/2018 13:32	58.8	37.2	0.2	3.8	55.2	55.3	16.3	15.0	-5.9	-6.3	-10.9
GEW-2S	3/30/2018 13:42	59.4	33.6	0.8	6.2	64.2	64.3	17.0	21.9	-8.4	-7.9	-9.9
GEW-2S	3/30/2018 13:48	58.5	34.3	0.8	6.4	65.8	65.8	19.4	19.5	-7.9	-7.5	-9.9
GIW-01	3/5/2018 9:45	7.2	60.5	0.6	31.7	171.9	172.1	10.9	12.0	-5.6	-5.5	-20.1
GIW-01	3/5/2018 9:52	8.6	57.5	0.4	33.5	171.6	171.6	10.5	10.5	-5.4	-5.5	-20.1
GIW-01	3/12/2018 8:43	8.4	60.6	0.3	30.7	171.8	171.6	5.3	5.5	-5.3	-5.3	-20.1
GIW-01	3/12/2018 8:45	8.0	61.6	0.3	30.1	172.1	171.8	5.2	6.4	-5.5	-5.3	-20.1
GIW-01	3/19/2018 8:53	9.6	61.9	0.2	28.3	172.6	173.1	12.7	14.0	-5.9	-5.9	-20.1
GIW-01	3/19/2018 8:54	9.5	63.3	0.2	27.0	173.1	173.1	9.7	9.6	-5.9	-5.9	-20.2
GIW-01	3/26/2018 9:02	9.1	61.6	0.3	29.0	171.6	171.6	12.4	12.2	-6.8	-6.8	-19.9
GIW-01	3/26/2018 9:04	9.1	60.0	0.4	30.5	171.9	172.1	7.6	6.7	-6.9	-7.0	-20.1
GIW-02	3/5/2018 9:56	8.3	29.8	8.8	53.1	45.5	45.5	4.0	4.2	-0.1	-0.1	-19.9
GIW-02	3/5/2018 10:02	8.6	26.5	9.2	55.7	44.4	44.5	2.5	2.8	-0.1	-0.1	-19.6
GIW-02	3/12/2018 8:48	1.8	20.2	14.6	63.4	41.2	41.1	4.7	4.9	-0.1	-0.1	-19.6
GIW-02	3/12/2018 8:50	1.9	17.6	15.0	65.5	40.5	40.5	2.2	3.1	-0.1	-0.1	-19.5
GIW-02	3/19/2018 8:57	1.7	27.4	12.6	58.3	50.2	49.9	4.5	4.3	-0.1	-0.1	-20.1
GIW-02	3/19/2018 8:58	1.7	23.0	13.4	61.9	48.8	48.8	2.8	2.8	-0.1	-0.1	-19.6
GIW-02	3/26/2018 9:10	1.8	19.0	14.2	65.0	47.0	47.0	1.8	3.1	-0.1	-0.1	-20.4
GIW-02	3/26/2018 9:11	1.9	16.8	14.6	66.7	47.0	47.0	2.2	3.1	-0.1	-0.1	-19.7
GIW-03	3/5/2018 10:25	10.6	52.6	0.2	36.6	45.2	45.2	5.3	5.6	-3.4	-3.4	-17.0
GIW-03	3/5/2018 10:31	10.9	54.3	0.1	34.7	45.2	45.2	3.5	3.7	-3.4	-3.4	-16.5
GIW-03	3/12/2018 8:53	3.2	59.2	0.6	37.0	38.8	38.7	5.7	5.2	-0.7	-0.7	-17.1
GIW-03	3/19/2018 9:01	4.8	59.6	1.3	34.3	47.0	47.0	3.9	3.3	-1.4	-1.4	-17.2
GIW-03	3/26/2018 9:14	10.9	51.4	1.2	36.5	47.0	47.0	2.8	3.9	-4.2	-4.2	-14.5
GIW-04	3/5/2018 10:59	12.3	49.9	0.9	36.9	45.5	45.5	3.3	3.5	-3.0	-2.9	-19.5
GIW-04	3/5/2018 11:05	12.9	53.7	0.9	32.5	45.5	45.5	4.5	3.5	-3.0	-3.0	-19.9
GIW-04	3/12/2018 8:56	12.3	52.5	2.3	32.9	38.4	38.5	2.2	1.8	-2.2	-2.2	-19.4
GIW-04	3/19/2018 9:04	8.7	52.5	2.7	36.1	46.8	46.9	3.0	2.8	-2.4	-2.4	-19.9
GIW-04	3/26/2018 9:16	9.3	47.8	4.1	38.8	45.8	45.8	2.1	2.5	-3.4	-3.4	-17.0
GIW-05	3/5/2018 11:10	1.1	15.8	18.0	65.1	45.0	45.0	0.0	0.0	-2.0	-1.8	-19.6

March 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-05	3/5/2018 11:22	0.3	4.5	21.3	73.9	45.2	45.2	7.6	7.0	-0.6	-0.5	-19.5
GIW-05	3/12/2018 9:07	0.0	1.7	21.2	77.1	38.3	38.3	6.9	6.7	-3.4	-3.4	-19.6
GIW-05	3/12/2018 9:09	0.0	0.8	21.4	77.8	38.2	38.3	6.1	7.0	-3.1	-3.1	-19.6
GIW-05	3/19/2018 9:11	0.0	6.4	20.6	73.0	46.1	46.1	0.0	0.0	-0.1	-0.1	-19.7
GIW-05	3/19/2018 9:13	0.0	3.9	21.2	74.9	46.1	46.2	0.0	0.0	-0.1	-0.1	-19.7
GIW-05	3/26/2018 9:24	0.0	7.5	20.2	72.3	46.4	46.4	3.6	6.0	-2.5	-2.2	-17.0
GIW-05	3/26/2018 9:26	0.0	5.1	20.8	74.1	46.5	46.5	3.1	2.9	-2.2	-2.2	-17.0
GIW-06	3/5/2018 11:27	17.7	44.3	0.1	37.9	45.5	45.5	6.2	6.6	-12.3	-12.2	-19.5
GIW-06	3/5/2018 11:34	17.6	45.3	0.0	37.1	45.5	45.5	4.4	4.2	-11.9	-11.9	-19.4
GIW-06	3/12/2018 9:13	14.8	44.0	0.0	41.2	38.1	38.1	5.8	5.6	-7.4	-7.2	-19.6
GIW-06	3/19/2018 9:16	17.6	45.9	0.1	36.4	46.5	46.5	4.4	5.3	-8.3	-8.3	-20.1
GIW-06	3/26/2018 9:38	13.2	48.0	0.0	38.8	46.4	46.5	4.3	3.3	-4.9	-4.9	-16.9
GIW-07	3/5/2018 13:27	30.0	51.0	0.2	18.8	47.2	47.2	7.0	7.0	-5.0	-5.0	-19.8
GIW-07	3/5/2018 13:33	29.7	51.3	0.1	18.9	47.4	47.4	5.4	5.0	-5.0	-5.0	-19.8
GIW-07	3/12/2018 9:16	29.5	55.1	0.3	15.1	38.2	38.2	5.3	5.7	-5.5	-5.4	-19.4
GIW-07	3/19/2018 9:19	28.5	56.6	0.2	14.7	48.2	48.3	4.3	4.3	-4.1	-4.1	-19.7
GIW-07	3/26/2018 9:41	26.1	60.0	0.1	13.8	46.3	46.4	4.1	4.1	-3.9	-3.9	-17.5
GIW-08	3/5/2018 13:36	25.0	52.5	0.0	22.5	48.2	48.2	3.1	3.3	-2.4	-2.4	-19.4
GIW-08	3/5/2018 13:43	24.8	53.2	0.0	22.0	48.3	48.3	4.3	3.6	-2.4	-2.4	-19.9
GIW-08	3/12/2018 9:19	28.4	53.8	0.0	17.8	38.2	38.5	6.0	6.7	-2.5	-2.5	-19.4
GIW-08	3/19/2018 9:22	29.0	56.0	0.0	15.0	50.2	50.3	1.7	1.7	-2.3	-2.2	-19.6
GIW-08	3/26/2018 9:43	30.0	56.3	0.0	13.7	46.7	46.8	2.2	2.2	-2.5	-2.5	-17.1
GIW-09	3/5/2018 13:47	2.9	25.9	5.8	65.4	47.8	47.8	3.5	3.7	-0.6	-0.5	-19.9
GIW-09	3/5/2018 13:53	2.9	22.1	6.1	68.9	47.6	47.6	2.6	2.2	-0.6	-0.6	-19.4
GIW-09	3/12/2018 9:26	2.2	19.2	11.4	67.2	38.4	38.5	4.0	3.8	-0.6	-0.7	-19.6
GIW-09	3/12/2018 9:27	2.3	17.6	11.6	68.5	38.5	38.5	3.1	3.1	-0.7	-0.7	-19.6
GIW-09	3/19/2018 9:27	3.4	24.7	8.1	63.8	53.4	53.4	3.9	3.3	-0.4	-0.4	-19.3
GIW-09	3/19/2018 9:28	3.7	21.4	8.4	66.5	53.2	53.2	3.7	3.5	-0.4	-0.4	-19.7
GIW-09	3/26/2018 9:49	1.9	18.2	11.7	68.2	46.0	46.1	2.8	2.5	-0.9	-0.9	-17.2
GIW-09	3/26/2018 9:51	2.1	15.7	11.9	70.3	46.2	46.1	1.8	1.8	-0.9	-0.8	-17.3
GIW-10	3/5/2018 13:58	8.9	37.8	0.0	53.3	48.3	48.3	2.5	2.5	-4.0	-4.0	-19.7
GIW-10	3/5/2018 14:04	9.2	37.4	0.0	53.4	48.5	48.5	0.6	1.8	-4.0	-4.0	-19.7
GIW-10	3/12/2018 8:59	8.9	39.9	0.0	51.2	38.9	38.9	3.3	2.8	-4.0	-4.0	-19.6
GIW-10	3/19/2018 9:07	7.8	40.2	0.0	52.0	47.1	47.1	2.8	3.5	-3.8	-3.8	-19.9
GIW-10	3/26/2018 9:19	8.4	39.5	0.0	52.1	46.8	46.8	2.8	3.7	-4.1	-4.2	-17.1
GIW-11	3/5/2018 14:08	16.9	46.6	0.1	36.4	48.4	48.4	1.4	7.0	-1.2	-1.2	-17.2
GIW-11	3/5/2018 14:15	17.1	46.7	0.1	36.1	48.4	48.4	2.4	3.9	-1.1	-1.2	-19.4
GIW-11	3/12/2018 8:40	16.8	47.4	0.0	35.8	38.8	38.8	2.5	4.4	-1.3	-1.2	-16.7
GIW-11	3/19/2018 8:49	17.1	45.3	0.1	37.5	46.5	46.5	3.0	3.0	-1.4	-1.4	-17.9
GIW-11	3/26/2018 8:55	17.4	49.2	0.0	33.4	46.1	46.2	2.5	3.7	-1.4	-1.4	-15.6
GIW-11	3/26/2018 8:57	17.9	47.6	0.0	34.5	46.4	46.4	5.0	1.8	-2.0	-2.0	-18.6

March 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-12	3/5/2018 14:19	10.8	44.5	2.2	42.5	48.2	48.0	2.9	1.9	-0.1	-0.1	-18.4
GIW-12	3/5/2018 14:24	10.5	44.3	2.2	43.0	48.2	48.2	3.4	3.4	-0.1	-0.1	-18.0
GIW-12	3/12/2018 8:33	7.9	42.3	5.1	44.7	38.2	38.3	3.4	3.8	-0.1	-0.1	-18.1
GIW-12	3/12/2018 8:34	7.7	41.8	5.2	45.3	38.3	38.3	1.8	1.3	-0.1	-0.1	-18.0
GIW-12	3/19/2018 8:43	9.4	43.4	4.8	42.4	45.5	45.5	1.3	1.8	-0.1	-0.1	-18.6
GIW-12	3/26/2018 8:49	11.7	41.1	5.6	41.6	45.9	45.9	2.2	2.2	-0.1	-0.1	-18.5
GIW-12	3/26/2018 8:50	11.8	40.5	5.6	42.1	45.9	45.9	2.5	1.8	-0.1	-0.1	-18.5
GIW-13	3/5/2018 14:28	24.5	57.9	0.0	17.6	48.3	48.3	5.7	3.1	-1.1	-1.1	-11.5
GIW-13	3/5/2018 14:34	24.7	54.9	0.0	20.4	48.5	48.5	2.6	3.6	-1.1	-1.1	-11.8
GIW-13	3/12/2018 8:30	23.0	57.4	0.0	19.6	38.5	38.5	4.4	3.3	-1.0	-1.1	-11.2
GIW-13	3/19/2018 8:40	24.8	58.1	0.0	17.1	45.5	45.5	4.3	4.1	-1.4	-1.4	-14.7
GIW-13	3/26/2018 8:44	28.2	56.0	0.0	15.8	45.8	45.8	4.3	4.1	-1.5	-1.5	-15.0
LCS-1D	3/22/2018 14:21	22.3	15.9	12.5	49.3	55.1	55.1	4.6	2.6	-17.2	-17.2	-19.0
LCS-1D	3/22/2018 14:22	22.6	16.5	12.4	48.5	54.9	55.0	2.4	2.4	-17.2	-17.3	-18.5
LCS-2D	3/21/2018 13:28	61.7	36.7	0.2	1.4	56.9	56.8	5.2	5.7	-19.2	-19.1	-19.3
LCS-3D	3/21/2018 14:00	1.5	51.1	2.8	44.6	55.2	55.2	2.2	1.8	-18.8	-18.8	-18.8
LCS-5A	3/5/2018 11:27	54.8	38.2	0.3	6.7	71.3	71.1	NFD		-13.8	-13.8	-14.1
LCS-5A	3/12/2018 10:48	51.6	38.4	1.2	8.8	69.3	69.3	NFD		-14.5	-14.5	-14.4
LCS-5A	3/20/2018 11:34	52.0	38.5	1.3	8.2	70.9	70.7	NFD		-13.8	-13.8	-13.8
LCS-5A	3/26/2018 10:35	52.1	39.3	0.9	7.7	72.3	72.3	NFD		-14.4	-14.4	-14.2
LCS-5B	3/8/2018 8:37	54.3	41.8	0.0	3.9	138.5	138.7	22.4	22.3	-14.3	-14.3	-14.4
LCS-5B	3/8/2018 8:38	53.2	41.4	0.0	5.4	136.8	136.5	19.3	18.2	-13.8	-13.9	-14.3
LCS-5B	3/12/2018 11:01	53.0	42.0	0.0	5.0	138.4	138.4	20.0	23.8	-14.2	-14.2	-14.2
LCS-5B	3/12/2018 11:03	53.0	42.1	0.0	4.9	138.3	138.3	21.5	20.7	-14.2	-14.2	-14.0
LCS-5B	3/20/2018 11:45	53.4	41.9	0.0	4.7	139.0	138.7	22.6	20.7	-13.7	-13.8	-13.8
LCS-5B	3/20/2018 11:47	53.6	42.1	0.0	4.3	138.0	138.1	20.3	21.4	-13.8	-13.7	-13.8
LCS-5B	3/27/2018 10:56	53.3	42.2	0.0	4.5	142.8	143.2	22.2	23.9	-13.7	-13.7	-13.5
LCS-5B	3/27/2018 10:57	53.3	42.1	0.0	4.6	140.9	140.4	13.9	14.1	-13.7	-13.7	-13.6
LCS-6B	3/8/2018 11:25	49.9	39.4	0.0	10.7	92.2	93.0	28.0	27.4	-1.8	-1.9	-13.9
LCS-6B	3/8/2018 11:27	49.4	40.0	0.0	10.6	90.8	91.2	25.0	25.0	-1.4	-1.5	-14.2
LCS-6B	3/12/2018 15:08	47.9	37.3	0.0	14.8	81.0	80.7	5.8	4.0	-1.1	-1.1	-13.9
LCS-6B	3/21/2018 9:40	46.2	38.8	0.0	15.0	76.8	76.2	8.3	7.8	-2.1	-2.1	-14.0
LCS-6B	3/21/2018 9:41	46.1	38.7	0.0	15.2	74.0	74.1	8.8	8.8	-1.7	-1.7	-14.2
LCS-6B	3/27/2018 13:59	48.5	39.3	0.0	12.2	68.6	68.8	7.9	8.4	-1.4	-1.4	-14.0
PGW-60	3/8/2018 10:19	58.9	38.9	0.0	2.2	80.7	80.7	35.6	27.7	8.8	7.2	-13.4
PGW-60	3/8/2018 10:21	56.5	40.1	0.0	3.4	79.0	78.9	21.8	33.2	-2.7	-3.1	-12.4
PGW-60	3/12/2018 13:28	56.9	38.5	0.4	4.2	75.7	75.7	27.8	24.3	-3.8	-3.8	-11.2
PGW-60	3/21/2018 9:04	59.1	37.3	0.2	3.4	64.2	64.3	14.3	11.0	-8.8	-8.4	-11.8
PGW-60	3/27/2018 13:27	57.0	38.9	0.2	3.9	70.4	70.4	8.2	3.9	-6.8	-7.4	-11.2
SEW-002	3/21/2018 15:28	13.0	60.6	0.1	26.3	59.7	59.7	10.0	4.7	-0.1	-0.1	-18.2
SEW-003	3/21/2018 15:58	5.4	52.1	3.8	38.7	88.4	88.2	8.5	7.9	-0.2	-0.2	-19.9

March 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**		
T-56	3/8/2018 14:15	45.7	32.8	0.0	21.5	50.7	50.7	15.3	14.4	-0.04	-0.03	-14.1
T-56	3/8/2018 14:17	44.8	33.4	0.0	21.8	50.7	50.7	14.1	18.6	-0.04	-0.04	-14.2
T-56	3/12/2018 15:33	42.6	33.1	0.0	24.3	50.4	50.4	18.0	16.6	-0.1	-0.1	-13.6
T-56	3/21/2018 10:06	36.7	31.5	1.2	30.6	49.9	49.9	15.9	14.8	-0.1	-0.1	-13.7
T-56	3/27/2018 14:30	53.3	35.4	0.0	11.3	49.9	49.9	16.9	16.8	-0.04	-0.03	-13.9

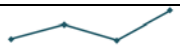
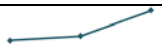
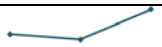
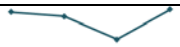
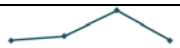
ATTACHMENT E-2

MAXIMUM WELLHEAD TEMPERATURE TABLE

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	December 2017	January 2018	Febrauary 2018	March 2018	><30°F	
GEW-002	121.5	115.0	117.4	115.0		
GEW-003	111.5	110.2	114.0	106.0		
GEW-004	117.6	116.3	115.1	112.5		
GEW-005	90.5	88.4	91.7	88.9		
GEW-006	90.3	85.8	87.7	86.6		
GEW-007	85.4	87.7	83.2	84.4		
GEW-008	111.1	111.7	111.7	110.8		
GEW-009	122.4	124.5	118.9	119.9		
GEW-010	63.9	64.4	61.8	50.6		
GEW-013A	117.2	116.3	119.2	122.6		
GEW-015	182.1	166.1	165.2	158.0		
GEW-016R	182.1	180.3	180.2	179.2		
GEW-018B	165.2	163.8	165.4	163.8		
GEW-022R	56.0	79.4	60.8	52.6		
GEW-038	70.2	65.4	60.2	55.3		
GEW-039	100.1	117.6	119.4	116.1		
GEW-040	50.8	62.0	61.4	67.9		
GEW-041R	97.9	97.2	96.7	94.5		
GEW-042R	98.7	108.5	95.0	94.6		
GEW-043R	118.9	117.9	117.3	110.2		
GEW-044	88.0	89.3	84.0	83.8		
GEW-045R	72.6	76.8	86.1	81.6		
GEW-046R	99.6	92.4	90.8	94.3		
GEW-047R	110.0	109.5	113.5	106.8		
GEW-048	100.8	100.8	99.6	98.9		
GEW-049	106.2	106.3	103.8	102.4		
GEW-050	105.2	105.5	103.8	104.8		
GEW-051	123.7	123.4	122.1	122.1		
GEW-052	112.8	112.0	105.7	117.9		
GEW-053	139.0	139.9	136.6	140.1		
GEW-054	144.2	142.9	143.7	144.6		
GEW-055	135.0	140.9	134.1	132.6		
GEW-056R	88.4	90.3	87.0	79.5		
GEW-057B	64.0	61.4	55.5	63.4		
GEW-057R	61.5	59.9	40.5	60.2		
GEW-058	69.5	52.6	46.6	59.2		
GEW-058A	67.7	51.3	43.6	63.6		

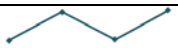
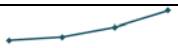
Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	December 2017	January 2018	Febrauary 2018	March 2018	><30°F	
GEW-059R	157.3	162.1	162.9	160.7		
GEW-067A	94.8	111.5	93.6	128.0		
GEW-068A	173.1	174.2	174.2	182.7		
GEW-077	--	91.7	98.2	139.6		
GEW-078R	157.3	160.2	157.7	155.6		
GEW-081	50.4	68.6	63.7	68.2		
GEW-082R	178.6	178.6	176.9	176.4		
GEW-086	72.3	67.7	59.3	68.8		
GEW-087	111.2	136.2	105.0	113.5		
GEW-088	185.7	194.3	193.8	195.0		
GEW-090	152.9	157.7	146.3	157.7		
GEW-091	187.6	96.2	107.0	177.5		
GEW-100	45.2	62.8	49.1	61.6		
GEW-101	55.2	68.5	54.7	80.4		
GEW-102	36.4	60.2	44.8	63.7		
GEW-104	--	61.2	40.5	162.8		
GEW-105	133.3	--	--	144.2		
GEW-106	66.8	54.2	76.1	56.7		
GEW-107	114.3	113.2	113.1	170.5		
GEW-108	142.2	122.6	119.9	121.3		
GEW-109	72.6	105.2	90.6	105.5		
GEW-110	67.5	75.0	65.1	58.1		
GEW-113	155.1	152.9	151.7	148.1		
GEW-116	184.5	174.7	121.3	190.9		
GEW-117	117.6	99.6	93.1	108.7		
GEW-118	194.3	194.3	196.4	195.7		
GEW-120	164.7	164.3	160.3	160.7		
GEW-121	171.0	176.4	171.6	173.6		
GEW-122	156.0	160.2	186.3	156.0		
GEW-123	163.5	163.3	160.6	159.8		
GEW-124	48.5	71.0	60.7	69.8		
GEW-125	181.6	174.1	171.1	182.7		
GEW-126	53.4	84.8	75.7	94.6		
GEW-127	177.5	166.1	154.0	79.4		
GEW-128	168.5	169.1	136.8	144.6		
GEW-129	145.2	130.1	170.0	169.5		
GEW-130	178.7	180.0	180.9	187.0		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	December 2017	January 2018	Febrauary 2018	March 2018	><30°F	
GEW-131	163.3	165.2	160.2	159.4		
GEW-132	186.4	152.5	174.7	182.7		
GEW-133	151.7	61.4	58.0	169.0		
GEW-134	122.9	122.9	117.0	109.2		
GEW-135	154.8	155.6	153.3	148.6		
GEW-136	128.6	101.1	114.3	117.6		
GEW-137	70.8	62.6	64.4	77.7		
GEW-138	103.5	132.1	95.8	135.9		
GEW-139	147.3	147.0	147.3	197.9		
GEW-140	51.8	117.3	116.4	203.9		
GEW-141	--	--	51.8	68.6		
GEW-142	44.2	62.4	47.0	75.2		
GEW-143	44.4	63.5	56.4	65.0		
GEW-144	23.2	63.1	45.6	69.5		
GEW-145	36.3	59.0	87.4	93.6		
GEW-146	86.1	82.6	80.5	77.0		
GEW-147	183.9	183.3	181.2	158.4		
GEW-148	76.0	61.6	58.5	120.2		
GEW-149	118.6	96.0	113.5	93.7		
GEW-150	63.7	149.2	186.4	188.0		
GEW-151	86.8	151.3	156.9	172.2		
GEW-152	122.9	115.3	115.5	119.7		
GEW-153	103.9	61.8	44.0	63.5		
GEW-154	70.9	61.1	43.4	48.5		
GEW-155	92.4	90.8	102.3	115.8		
GEW-156	93.1	80.5	69.7	95.8		
GEW-157	--	60.7	124.5	98.7		
GEW-158	106.9	129.7	182.1	167.6		
GEW-159	72.5	54.0	59.1	58.0		
GEW-160	83.2	51.9	44.3	49.6		
GEW-161	63.6	42.8	48.2	48.6		
GEW-162	64.1	74.6	67.9	45.9		
GEW-163	185.0	192.9	189.0	173.2		
GEW-164	164.8	152.9	156.5	162.4		
GEW-165	183.3	183.9	182.1	183.3		
GEW-166	195.0	192.9	194.3	195.7		
GEW-167	192.9	194.8	189.6	193.6		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	December 2017	January 2018	Febrauary 2018	March 2018	><30°F	
GEW-168	178.6	180.9	172.1	170.1		
GEW-169	190.9	186.7	188.3	186.4		
GEW-170	165.7	167.1	189.6	182.1		
GEW-171	--	--	80.7	66.4		
GEW-172	46.1	65.8	56.3	158.2		
GEW-173	86.5	97.4	95.5	114.8		
GEW-174	144.9	144.5	143.5	144.3		
GEW-175	123.1	116.9	113.7	164.7		
GEW-176	65.6	54.7	59.2	54.9		
GEW-177	50.8	194.3	54.6	203.9		
GEW-178	47.3	44.0	105.4	100.6		
GEW-179	28.5	38.5	68.6	121.4		
GEW-180	29.0	38.6	118.1	126.7		
GEW-181	28.7	72.6	169.0	169.0		
GEW-182	30.6	162.4	173.9	139.0		
GEW-184	58.0	68.7	112.7	85.0		
GEW-185	136.2	151.3	161.9	159.4		
GEW-186	42.1	67.7	141.5	139.3		
GEW-187	75.9	90.8	174.8	172.6		
GEW-188	183.9	63.3	99.9	82.8		
GEW-1A	64.4	63.5	72.7	51.5		
GEW-2S	65.5	62.2	64.7	65.8		
GIW-01	179.7	171.6	175.8	173.1		
GIW-02	67.7	64.9	68.4	50.2		
GIW-03	65.7	60.3	62.3	47.0		
GIW-04	66.2	64.2	63.3	46.8		
GIW-05	67.4	63.0	61.4	46.5		
GIW-06	69.3	62.6	60.9	46.5		
GIW-07	70.2	63.5	59.4	48.2		
GIW-08	71.6	66.8	65.5	50.2		
GIW-09	70.7	65.0	61.4	53.4		
GIW-10	67.7	64.9	60.7	48.5		
GIW-11	68.1	65.4	62.8	48.4		
GIW-12	64.5	63.7	62.9	48.2		
GIW-13	63.8	65.1	62.3	48.5		
LCS-1D	64.5	75.2	85.1	55.1		
LCS-2D	--	--	--	56.9		
LCS-4B	--	--	--	--		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	December 2017	January 2018	Febrauary 2018	March 2018	><30°F	
LCS-5A	82.4	82.6	80.0	72.3		
LCS-5B	148.0	142.5	146.4	142.8		
LCS-6B	148.0	123.1	121.3	92.2		
PGW-60	82.6	63.4	86.6	80.7		
SEW-002	57.3	53.2	57.2	59.7		
SEW-003	--	--	--	88.4		
T-56	55.7	47.0	52.6	50.7		

-- = 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	1,408.81	
5	-1.00	0.00	1,532,873.29	
6	0.00	1.00	3,718.99	

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 (2-16-2018 to 3-15-2018)
- 3–2018 — *SETTLEMENT FRONT CONTOUR FOR AREA WITH 1.21' PER 27 DAYS FOR CURRENT PERIOD OF DAYS

*NONE FOR MARCH 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 2-16-18 FROM SPOT ELEVATIONS SURVEYED ON 3-15-18.
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 2/16/2018 - 3/15/2018

PROJECT NUMBER: BT-145 | FILE PATH: C:\Users\plimt\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-145 (Agreed Order Reporting)\Monthly Reports\03-2018 Report\Internal Draft\Draft Site Data\settlement2_working\Settlement And Fill - - -.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

MARCH 2018	
DESIGNED BY: PML	
APPROVED BY: DRF	
REVISION	DATE

DRAWING NO.: 001

ATTACHMENT G

SUMMARY OF ODOR COMPLAINTS

March 1, 2018 – March 31, 2018 / MDNR ODOR COMPLAINTS

Name: Jill Calkins

Message: Odor logged March 9, 2018, at 10:00 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was reported over 15 hours after the observation time so real time follow-up was not possible. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of a southeastern origin placing this location outside the downwind pathway of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Sara

Message: Odor logged March 10, 2018, at 8:47 pm strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of an eastern origin placing this location outside the downwind pathway of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: David Beck

Message: Odor logged March 10, 2018, at 9:25 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. A weak trash odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of an east northeastern origin placing this location outside the downwind pathway of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Lauren England

Message: Odor logged March 10, 2018, at 10:16 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was duplicated and submitted a total of two times. No odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. This location is in

close proximity to another know odor source with frequent off-site odor emissions. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: N/A

Message: Odor logged March 11, 2018, at 6:11 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Sherry Shull

Message: Odor logged March 11, 2018, at 6:45 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of an east northeastern origin placing this location outside the downwind pathway of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Phoebe Love

Message: Odor logged March 3, 2018, at 1:30 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was submitted over 7 days after the observation time so real time follow-up was not possible. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of an eastern origin placing this location outside the downwind pathway of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: N/A

Message: Odor logged March 11, 2018, at 6:40 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Debbie Neuman

Message: Odor logged March 9, 2018, at 5:45 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was submitted over 2 days after the observation time so real time follow-up was not possible. An odor patrol performed concurrently with the time cited in this concern did not observe Bridgeton Landfill odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Debbie Neuman

Message: Odor logged March 11, 2018, at 11:05 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At this time cited in this concern winds were of a west northwestern origin placing this location outside the downwind pathway of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Jim Clauser

Message: Odor logged March 11, 2018, at 7:45 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was submitted over 4 hours after the observation time so real time follow-up was not possible. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. This location is in close proximity to another known odor source with frequent off-site odor emissions. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: David McComber

Message: Odor logged March 12, 2018, at 12:25 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor at several observation points between this location and the Bridgeton Landfill. At the time cited in this concern winds were of a northwestern origin placing this location directly downwind of another known odor source with frequent off-site odor emissions. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Susan Rohde

Message: Odor logged March 12, 2018, at 1:44 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was reported over 2 hours after the observation time so real time follow-up was not possible. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor at several observation points between this location and the Bridgeton Landfill. This location is in close proximity to another known odor source. At the time cited in this concern winds were of a west northwestern origin placing this location outside the downwind pathway of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: N/A

Message: Odor logged March 12, 2018, at 9:30 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was reported over 2 hours after the observation time so real time follow-up was not possible. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. This location is in close proximity to another known odor source with frequent off-site odor emissions. At the time cited in this concern winds were of a west northwestern origin placing this location directly downwind of another known odor source with frequent off-site odor emissions. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Susan Rohde

Message: Odor logged March 15, 2018, at 3:00 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was reported just over an hour after the observation time so real time follow-up was not possible. Odor from another known odor source was observed at this location just over an hour after the observation time. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of a north northwestern origin placing this location directly downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Kari

Message: Odor logged March 15, 2018, at 3:20 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was reported just 8 hours after the observation time so real time follow-up was not possible. This location is in close proximity to another known odor source with frequent off-site odor emissions. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of a north northwestern origin placing this location directly downwind of another known odor source with frequent off-site odor emissions. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Susan Rohde

Message: Odor logged March 21, 2018, at 1:31 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. A strong (15 Nasal Ranger D/T value) odor from another known odor source was observed at this location within an hour of the time cited in this concern. This location is in close proximity to another known odor source. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of a north northwestern origin placing this location directly downwind of another known odor source. This was not a Bridgeton Landfill odor.

Name: N/A

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

Follow-up: No information was provided in this odor concern received on March 24, 2018, therefore Bridgeton Landfill staff could not investigate.

Name: David McComber

Message: Odor logged March 29, 2018, at 5:11 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor was observed at this location within an hour of the time cited in this concern. Odor patrols performed before and after the time cited in this concern did not observe Bridgeton Landfill odor. At the time cited in this concern winds were of a north northwestern origin placing this location directly downwind of another known odor source with frequent off-site odor emissions. There is no evidence to suggest that this was a Bridgeton Landfill odor.

ATTACHMENT H

LIQUID CHARACTERIZATION DATA AND DISCHARGE LOG

Bridgeton Landfill - Leachate PreTreatment Plant

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

Direct Discharge to MSD

Date	Waste	Source	Quantity (gal)
3/1/2018	LPTP Permeate	Through Tank AST 97k (MSD Sampling Point 013)	158,188
3/2/2018			254,694
3/3/2018			205,910
3/4/2018			153,400
3/5/2018			202,968
3/6/2018			200,928
3/7/2018			176,968
3/8/2018			132,040
3/9/2018			109,200
3/10/2018			226,096
3/11/2018			172,056
3/12/2018			142,128
3/13/2018			226,360
3/14/2018			216,008
3/15/2018			213,904
3/16/2018			262,904
3/17/2018			214,080
3/18/2018			135,880
3/19/2018			127,544
3/20/2018			140,520
3/21/2018			132,048
3/22/2018			134,464
3/23/2018			132,376
3/24/2018			163,744
3/25/2018			243,528
3/26/2018			210,744
3/27/2018			156,056
3/28/2018			149,144
3/29/2018			197,120
3/30/2018			251,864
3/31/2018			266,952
		Total	**5,709,816**

ATTACHMENT I

LOW FILL PROJECT AREA

ATTACHMENT I-1

LOW FILL AREA BOUNDARY

LEGEND

BOUNDARY OF FILL AREA FOR 2-16-2018 THROUGH 3-15-2018

(NOTE: NO FILL WAS PLACED BETWEEN 2-16-2018 AND 3-15-2018)

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 2/16/2018 - 3/15/2018

PROJECT NUMBER: BT-145

FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-145 (Agreed Order Reporting)\Monthly Reports\03-2018 Report\Internal Draft\Draft Site Data\settlement\2_working\Settlement And Fill - - -.dwg

Engineering for a Better World
FEEZOR ENGINEERING, INC.

REVISION	DATE

FEBRUARY 2018
DESIGNED BY: PML
APPROVED BY: DRF

DRAWING NO.:
002