

Bridgeton Landfill, LLC

Monthly Data Submittals

February 2018

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

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Provided Separately:

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

March 20, 2018

Commentary on Data

March 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 267 SCFM from the North Quarry and 1,064 SCFM from the South Quarry, for a total site flow of 1,331 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 48 GEW wells that are experiencing low or restricted flows, and six (6) GIW wells that have low gas flow due to the cooling loops that are installed within these wells. By the end of the month, 29 of the GEW wells and 4 of the GIW wells still exhibited oxygen at the wellhead at or greater than 5%. All of these wells are low-flow/vacuum sensitive wells with valves only slightly open. On-going tuning, maintenance, and pump operation 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. Please note that the abnormal cold ambient temperatures toward the end of 2017 and during the beginning of 2018 may have affected landfill gas collection and gas well tuning.
- Attachment E-2 contains gas temperatures as measured at the wellheads. Twelve (12) vertical wells (excluding GIW wells) increased by 30°F during this reporting period. Additionally, five (5) 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 (60 ppm), GEW-054 (28 ppm) and GEW-055 (30 ppm), consistent with past events.

Settlement

- The South Quarry exhibited monthly maximum settlement up to 1.07 feet over 32 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 (1.07 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 February 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 March 2018

Gas Collection and Control System (GCCS)

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

Heat Extraction System (HES)

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

Leachate Management System

- Continue routine operation of previously installed and upgraded features.

Pre-Treatment Facility

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

Other Projects:

- 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
February 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***	
2/1/2018	0	1,139	0	245	1,384
2/2/2018	0	1,124	0	237	1,361
2/3/2018	0	1,125	0	242	1,368
2/4/2018	0	1,082	0	232	1,315
2/5/2018	0	1,074	0	232	1,306
2/6/2018	0	1,074	0	224	1,298
2/7/2018	0	1,073	0	228	1,302
2/8/2018	0	1,072	0	262	1,334
2/9/2018	0	1,072	0	256	1,328
2/10/2018	0	1,048	0	255	1,303
2/11/2018	0	1,016	0	253	1,270
2/12/2018	0	1,035	0	261	1,296
2/13/2018	0	1,062	0	264	1,326
2/14/2018	0	1,080	0	262	1,342
2/15/2018	104	855	0	273	1,232
2/16/2018	404	676	0	279	1,359
2/17/2018	0	1,075	0	291	1,366
2/18/2018	0	1,070	0	293	1,363
2/19/2018	0	1,078	0	287	1,365
2/20/2018	0	1,071	0	287	1,358
2/21/2018	0	1,031	0	288	1,320
2/22/2018	0	1,041	0	295	1,336
2/23/2018	0	1,045	0	287	1,333
2/24/2018	0	1,040	0	288	1,329
2/25/2018	0	1,031	0	284	1,315
2/26/2018	0	1,052	0	286	1,338
2/27/2018	0	1,088	0	291	1,379
2/28/2018	0	1,054	0	295	1,349
AVERAGE	18	1,046	0	267	1,331

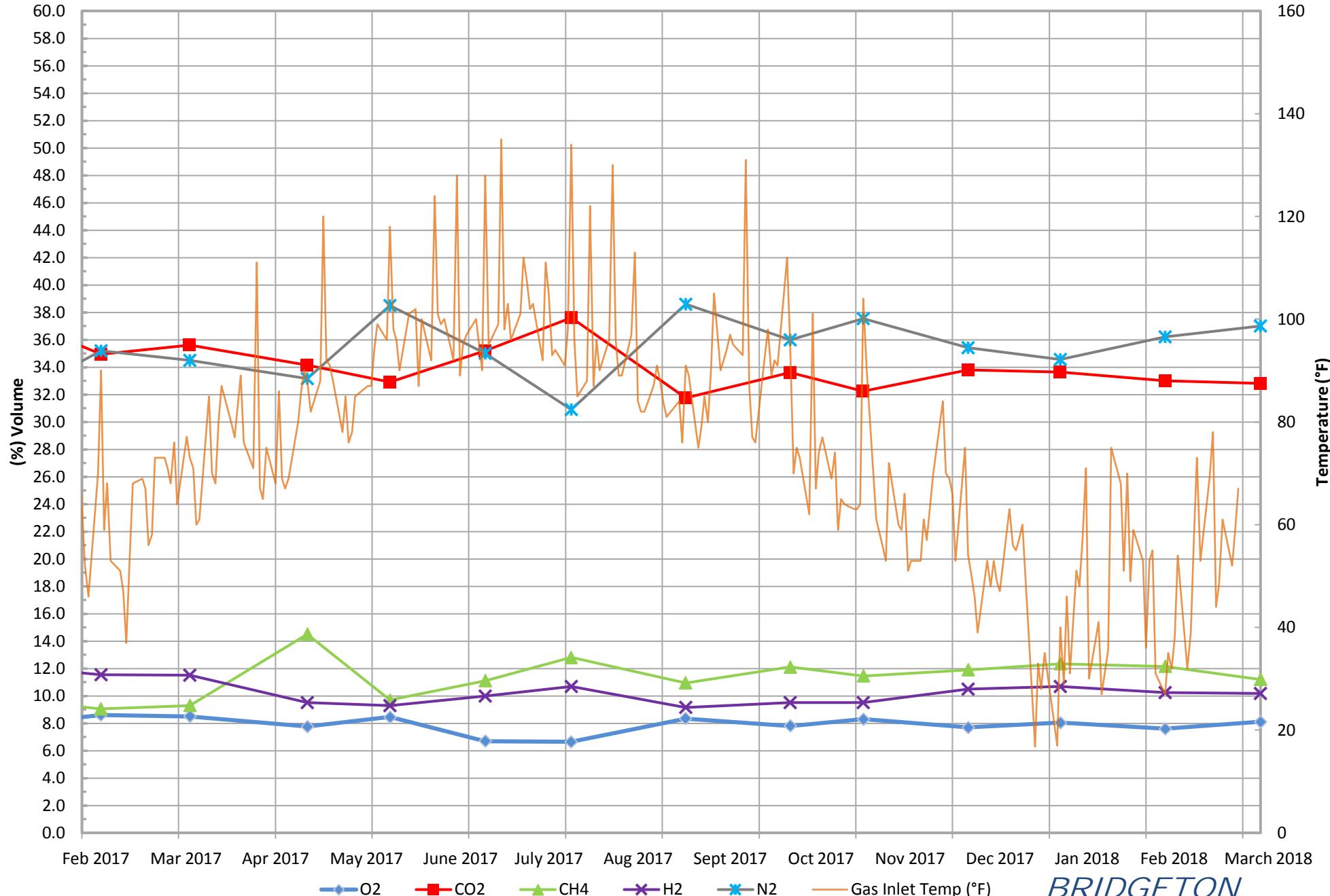
* Flows normalized to **Blower Outlet Flowmeter - EPA Method 2 measurement verified

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

ATTACHMENT B-2

FLOW DATA GRAPHS

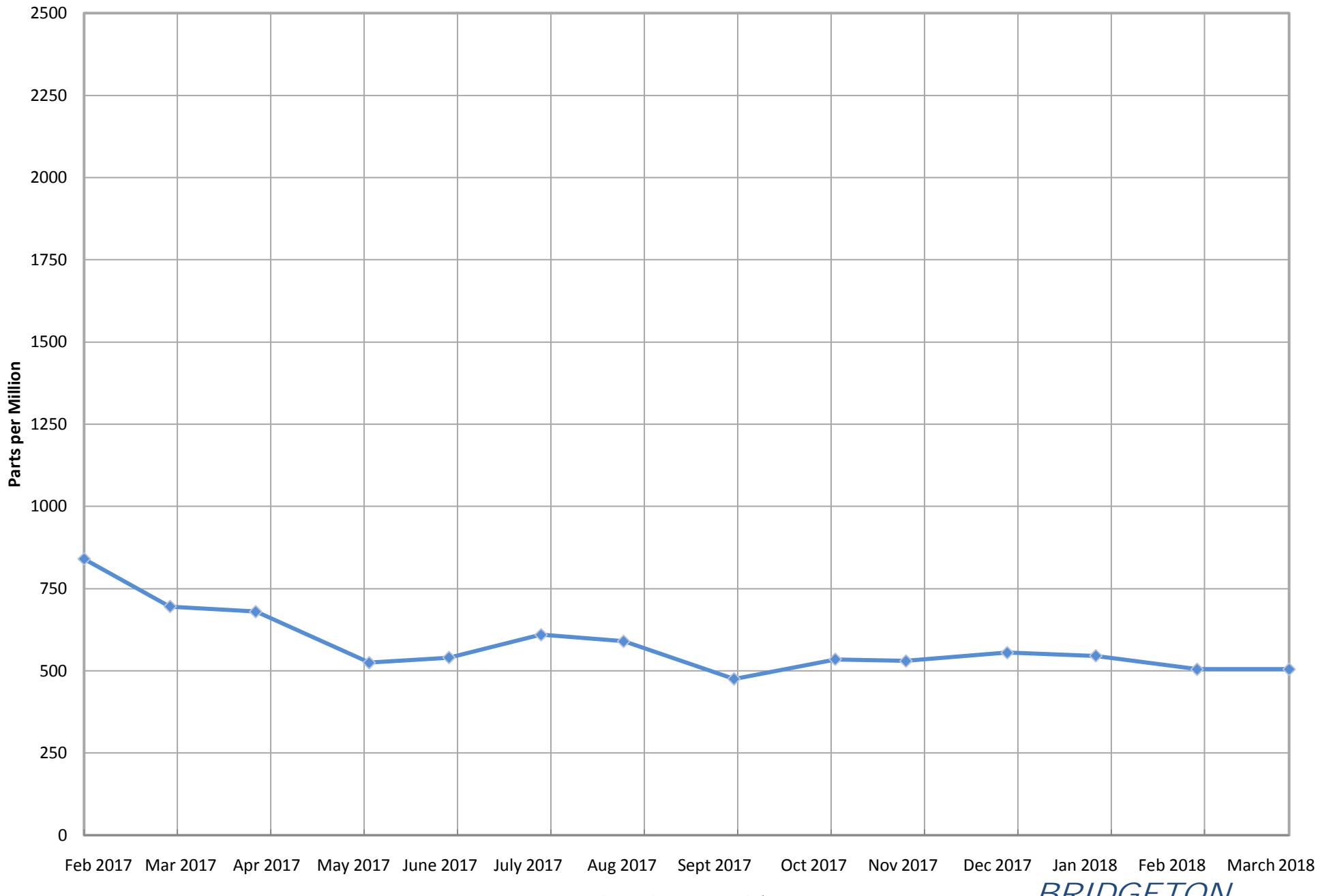
South Quarry Inlet Gas and Temperature*



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

**BRIDGETON
LANDFILL**

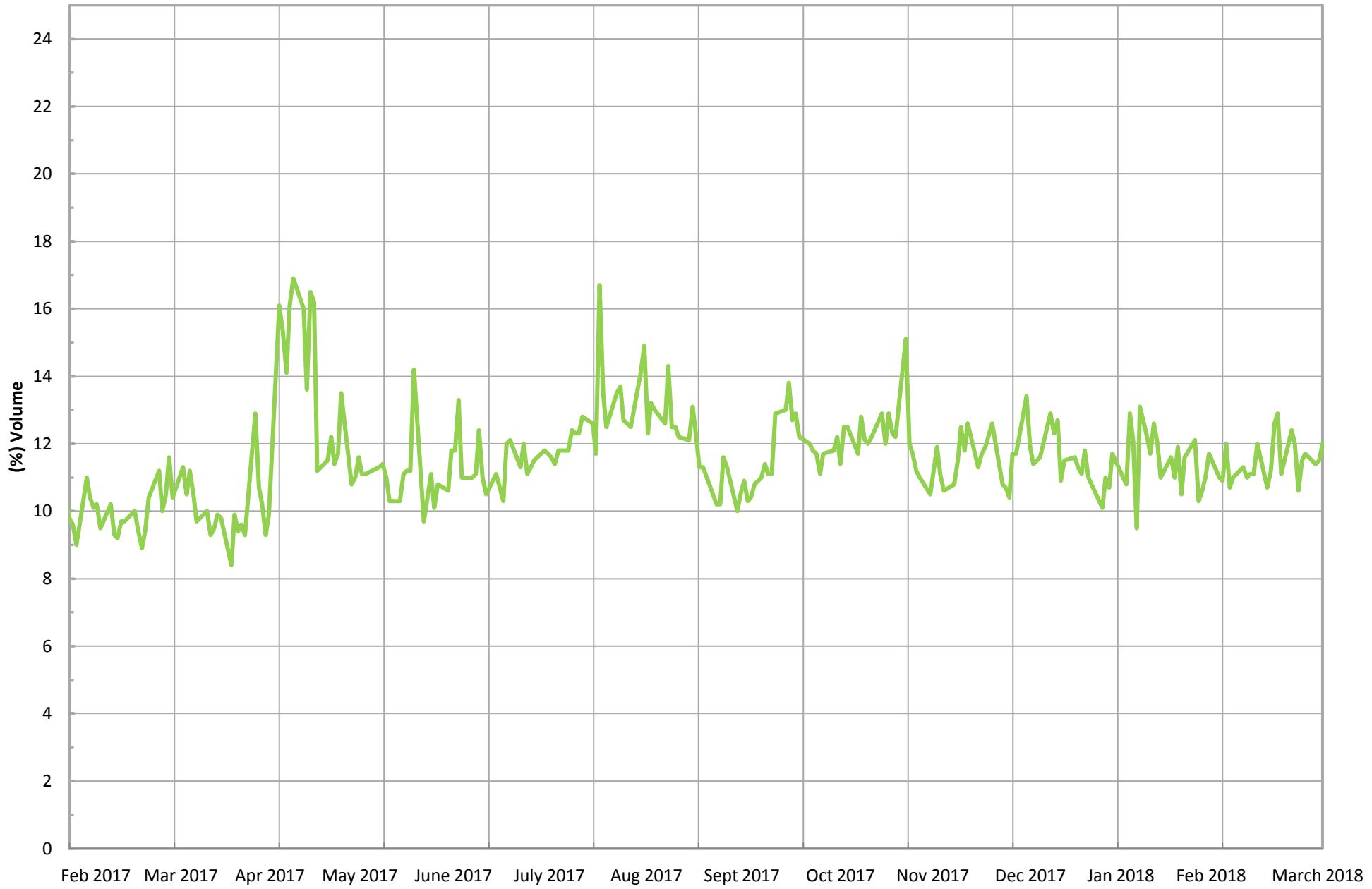
South Quarry Inlet Carbon Monoxide*



*Data collected from Laboratory Reports for the South Quarry.

**BRIDGETON
LANDFILL**

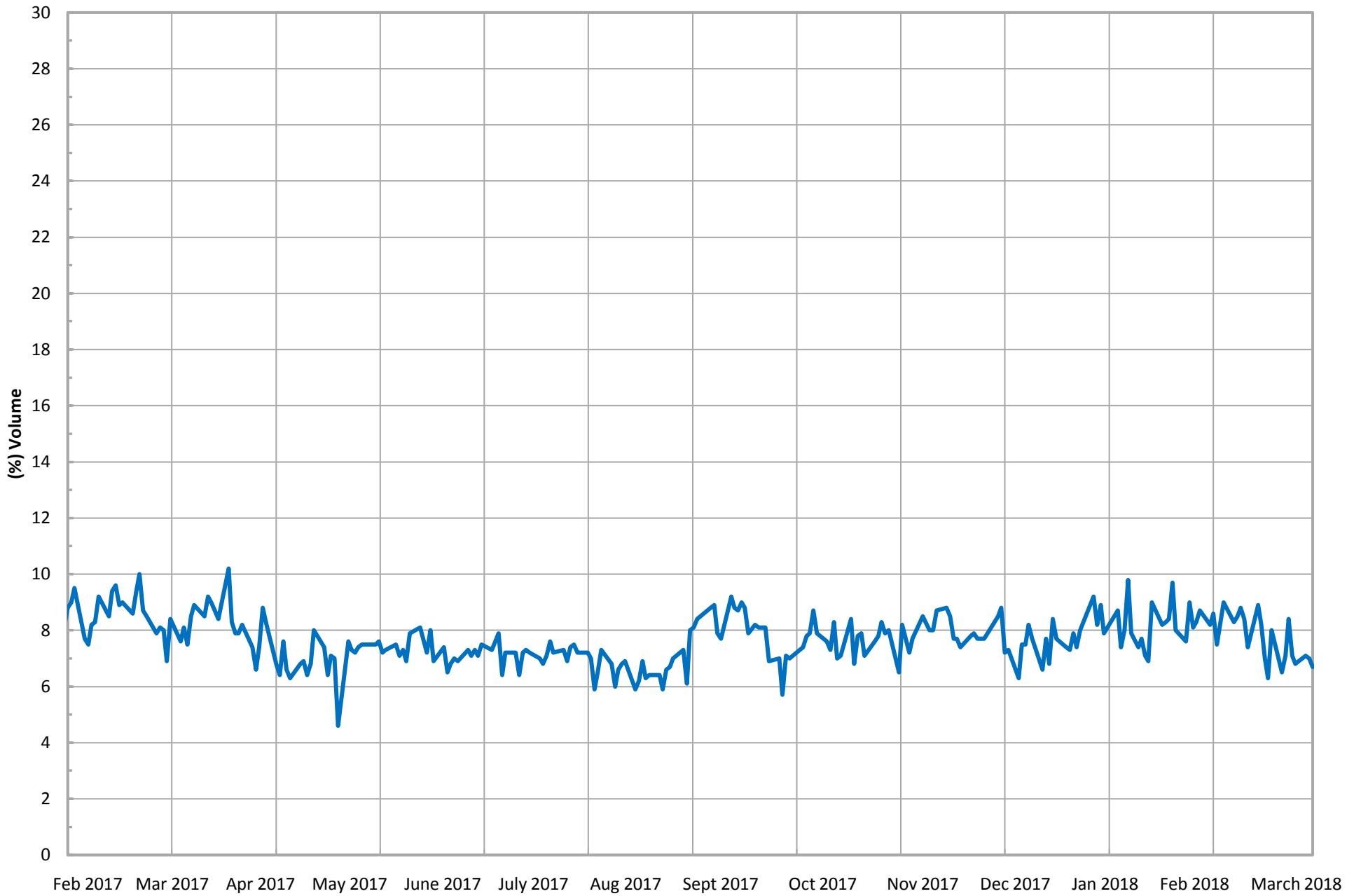
South Quarry Inlet Methane (Field Data)*



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

*BRIDGETON
LANDFILL*

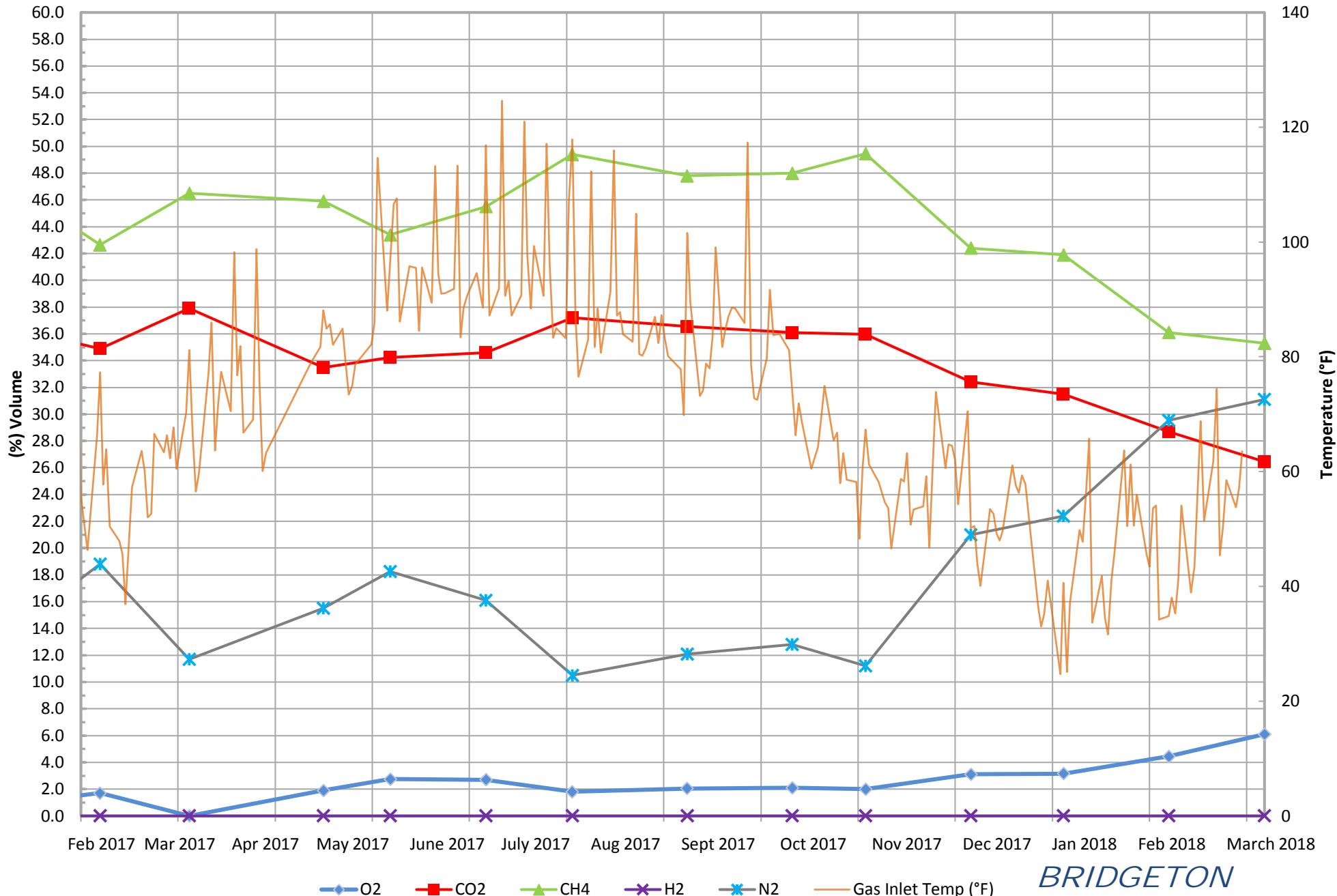
South Quarry Inlet Oxygen (Field Data)*



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

*BRIDGETON
LANDFILL*

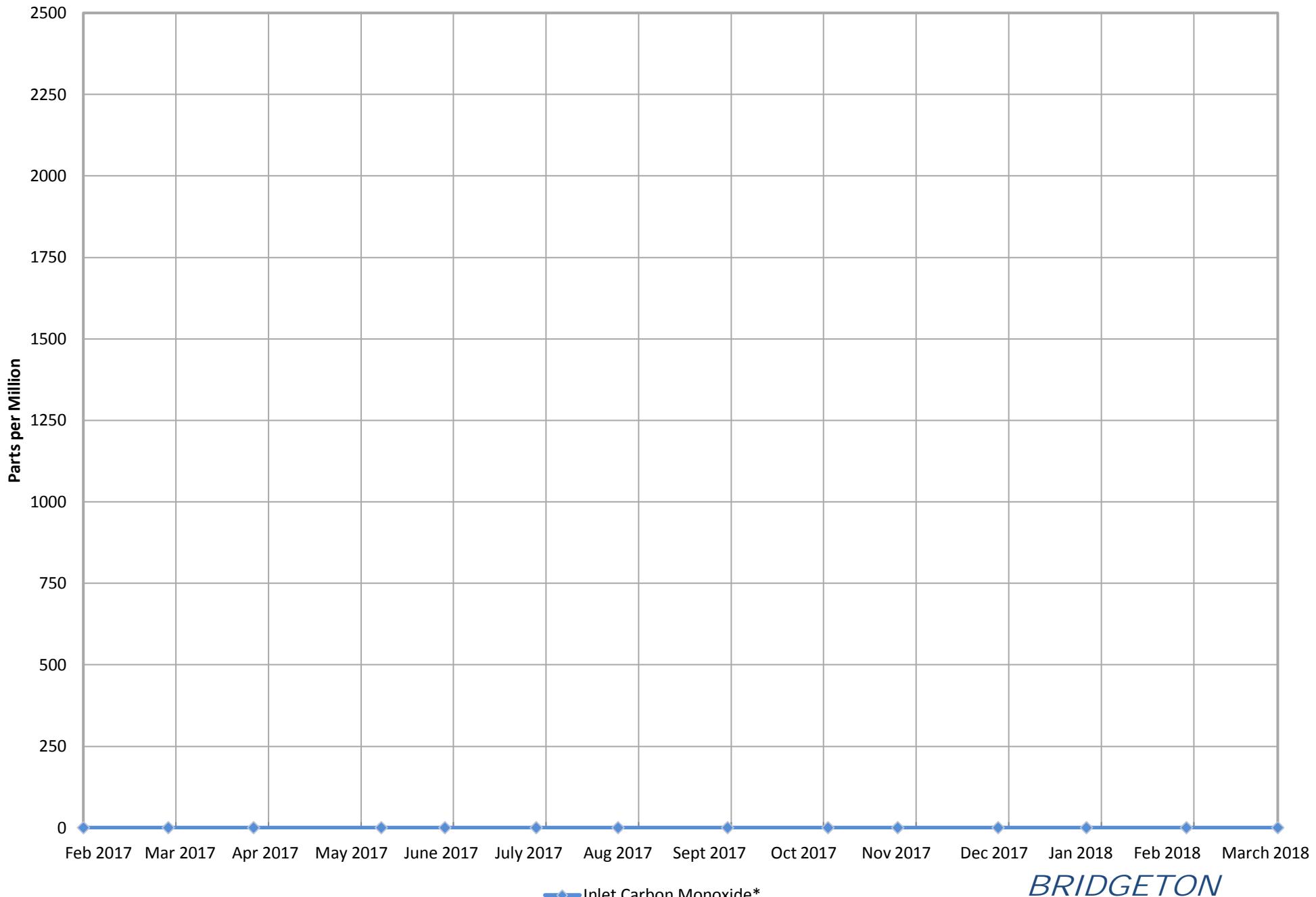
North Quarry Inlet Gas and Temperature*



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

*BRIDGETON
LANDFILL*

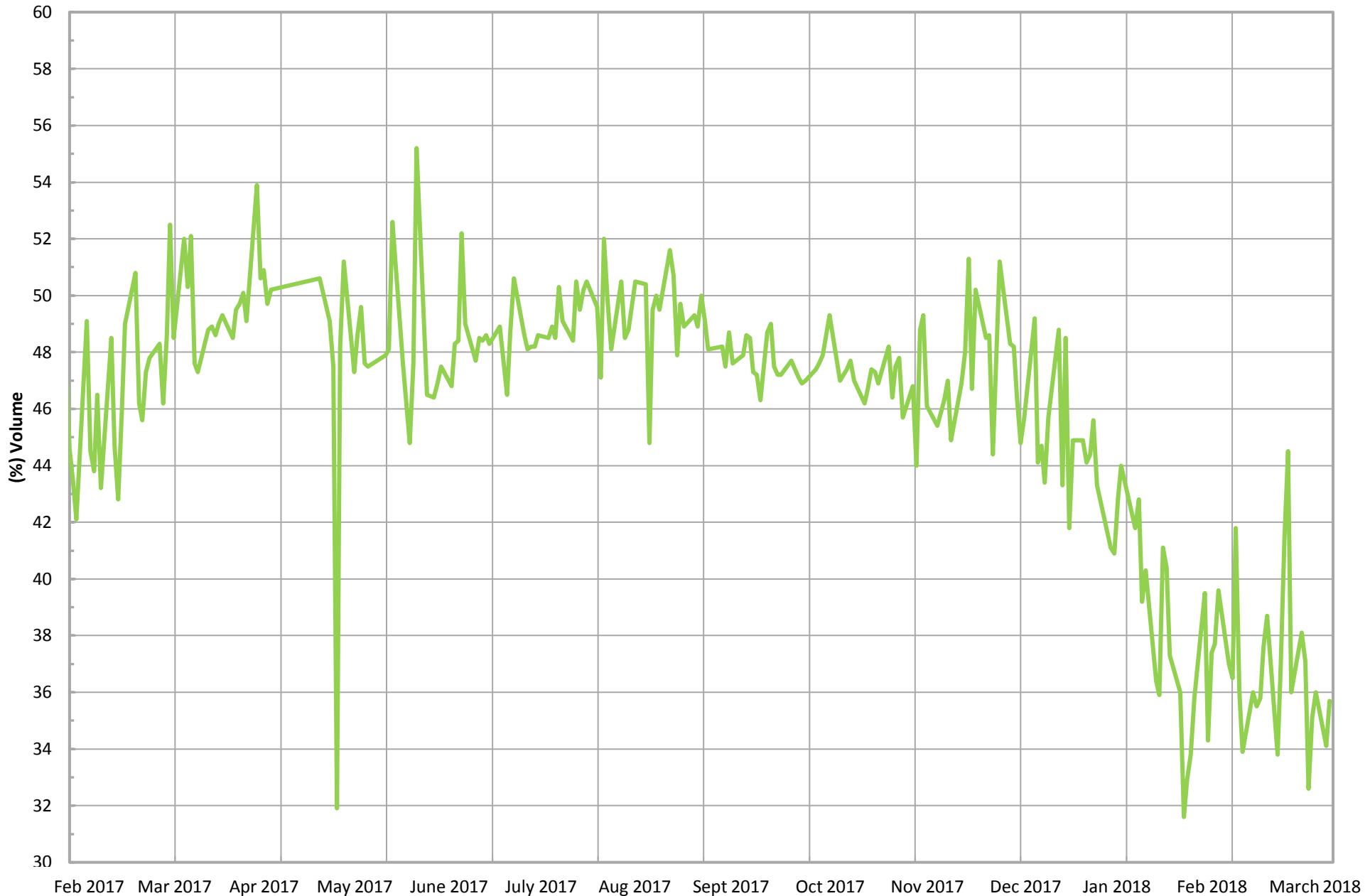
North Quarry Inlet Carbon Monoxide*



*Data collected from Laboratory Reports for the North Quarry.

*BRIDGETON
LANDFILL*

North Quarry Inlet Methane (Field Data)*

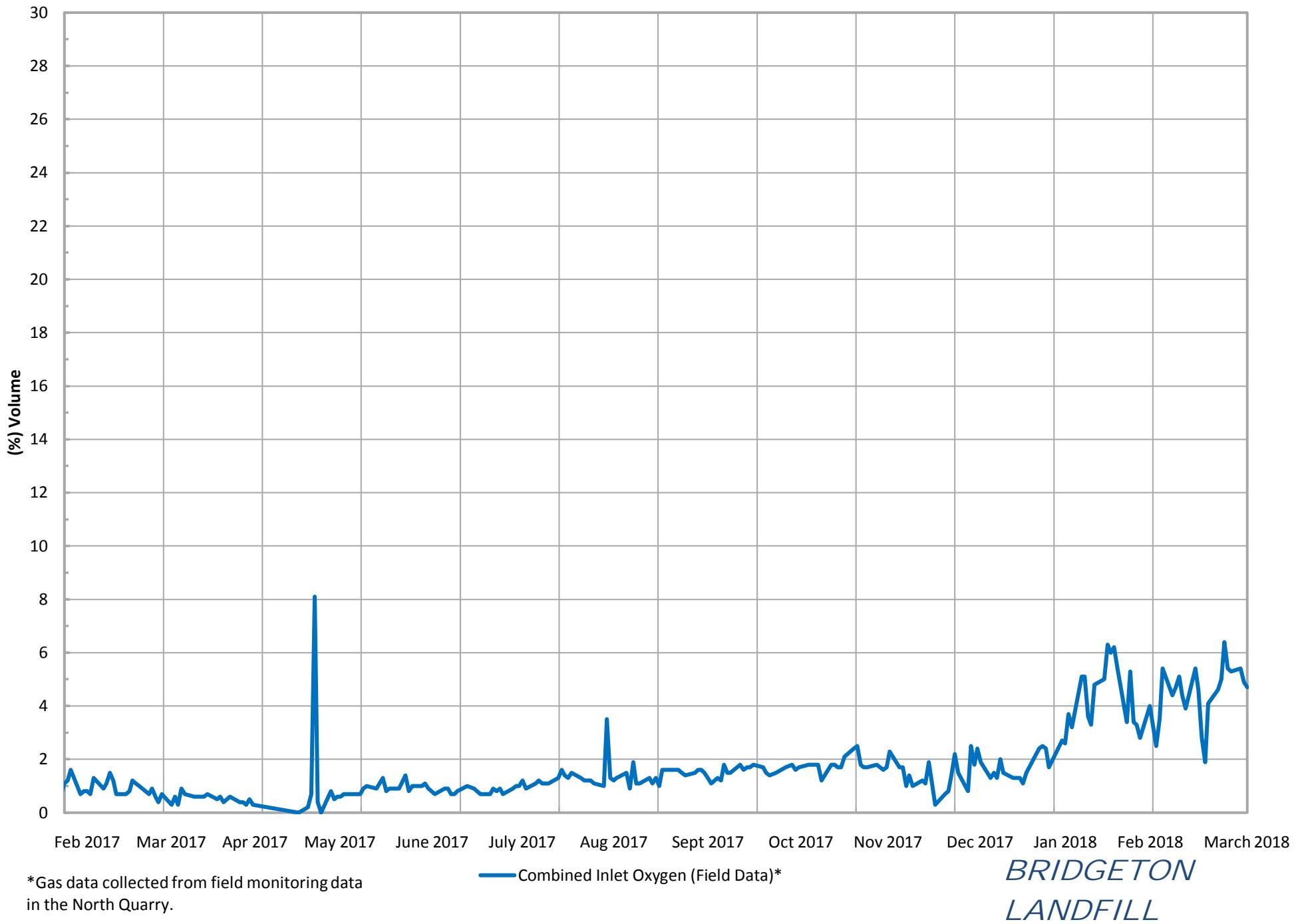


*Gas data collected from field monitoring data in the North Quarry.

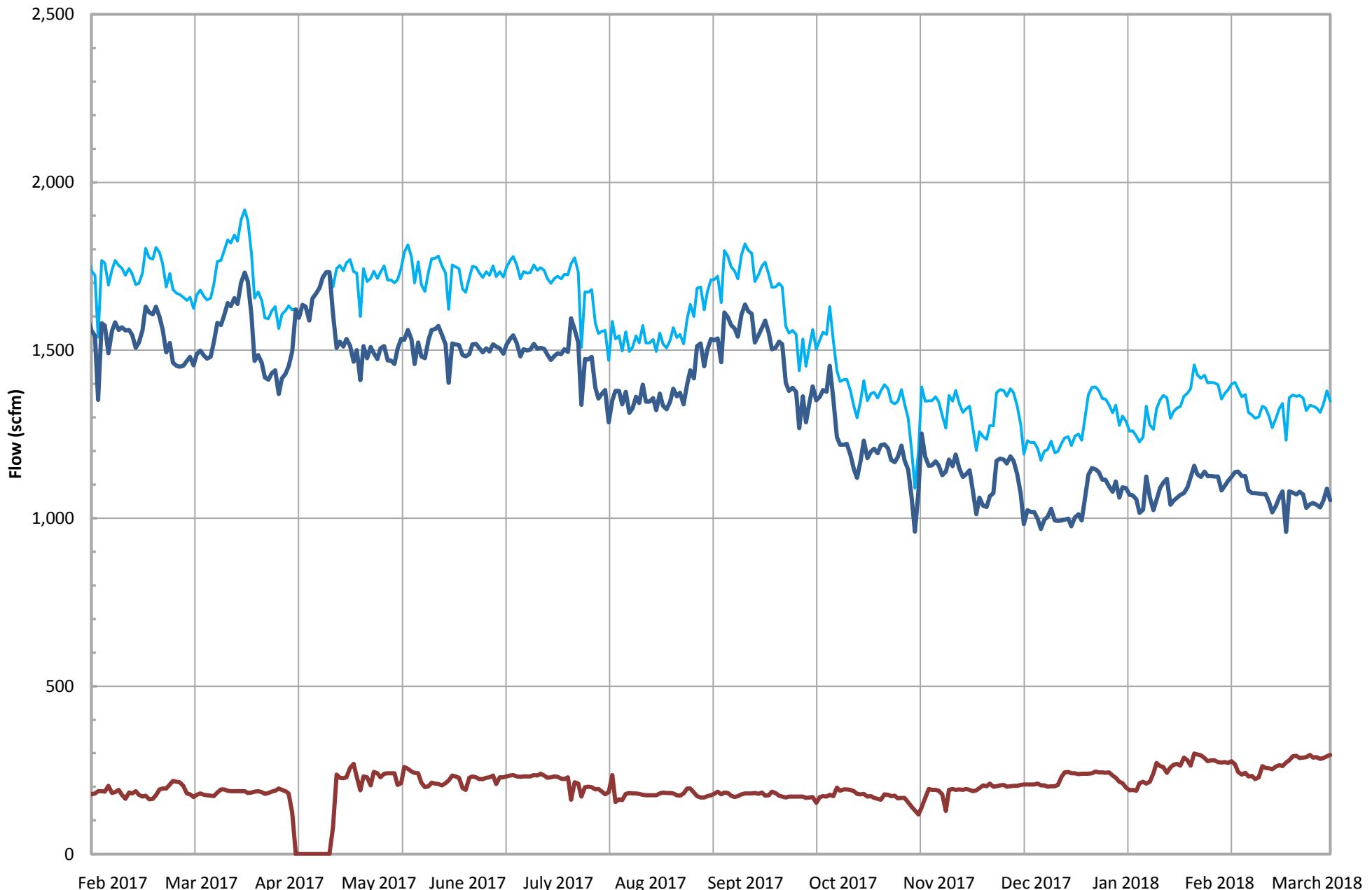
Combined Inlet Methane (Field Data)*

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North Quarry Inlet Oxygen (Field Data)*



Total Combined Flow (scfm)*



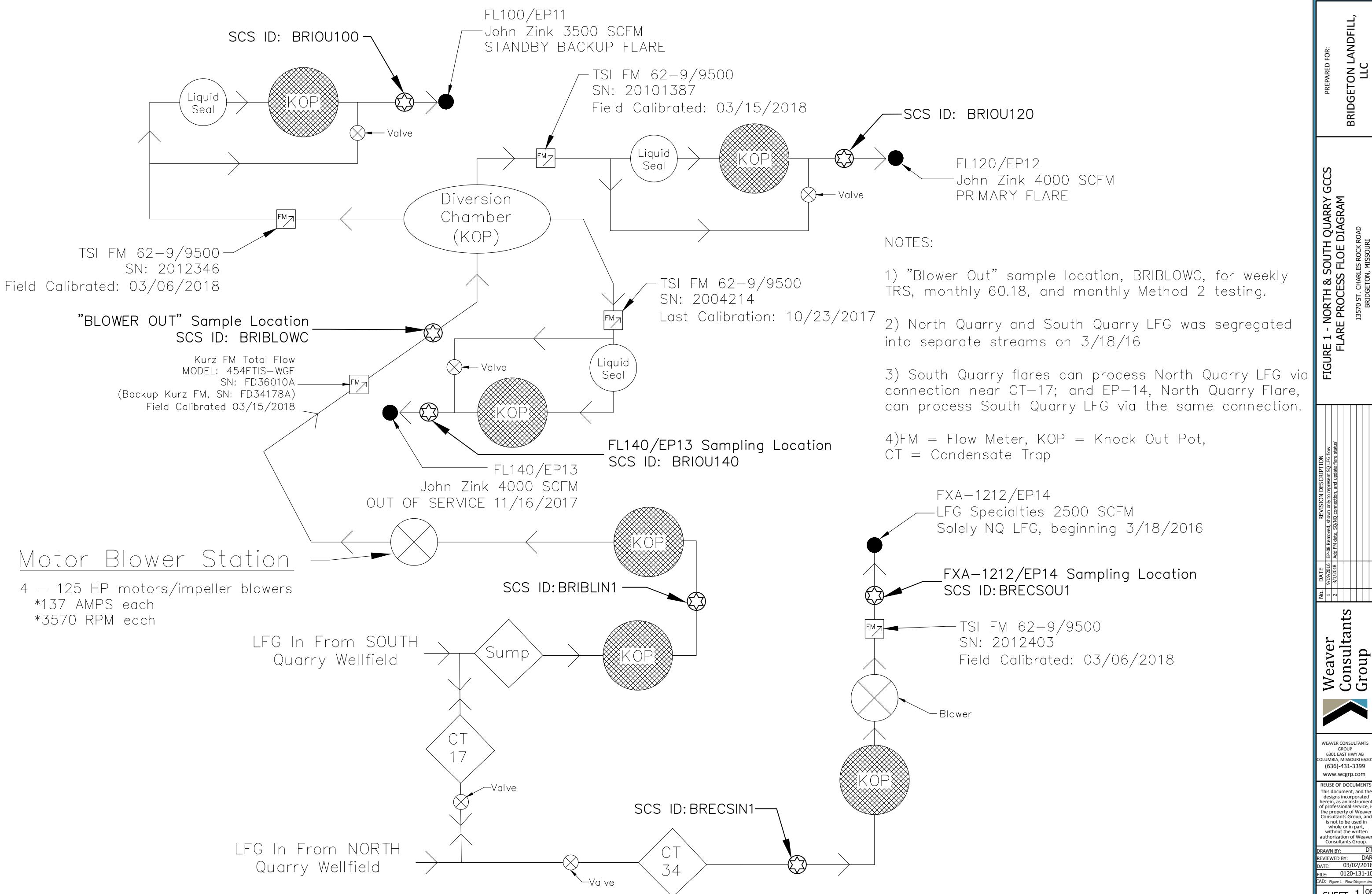
*Combined flow is based on tabulated flow data collected daily from FL-100, FL-120, FL-140, and the Auxiliary Candlestick Flare.

— Total Combined Flow (scfm)*
— SQ Flare Station Total Utility Flare Flow
— NQ Utility Flare

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ATTACHMENT B-3

FLARE TRS / FLARE STATION FLOW



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TABLE 1
Summary of Key LFG Tested Parameters
Flare Compound: Blower Outlet

Bridgeton Landfill, LLC.
February 05, 2018 to March 07, 2018

SAMPLE EVENT #	DATE	VELOCITY ft/sec	FLOW dscfm	TRS ppm _{vd}
¹ 157-10	3/7/2018	11.23	958	1400
				1500
² 156-09	2/27/2018	12.51	1013	1500
				1700
² 155-08	2/20/2018	12.79	1036	1300
				1300
² 154-07	2/13/2018	11.94	967	1100
				1100
¹ 153-06	2/5/2018	13.72	1197	1300
				1400

Notes:

¹Indicates velocity/flow determined by EPA Method 2

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

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)
⌚	Net Run Time, minutes	1:29:55
C _p	Pitot Tube Coeficient	0.99
P _{Br}	Barometric Pressure, inches of Mercury	29.63
% H ₂ O	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 ₂ O	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 ₂ O	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	2.1
	Carbon Monoxide, grains/dscf	0.26

	Outlet A	Outlet B
H ₂ S	Hydrogen Sulfide Concentration, ppmd	25
	Hydrogen Sulfide Rate, lb/hr	0.13
	Hydrogen Sulfide Rate, grains/dscf	0.015
COS	Carbonyl Sulfide Concentration, ppmd	0.59
	Carboynl Sulfide Rate, lb/hr	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001
CH ₄ S	Methyl Mercaptan Concentration, ppmd	180
	Methyl Mercaptan Rate, lb/hr	1.29
	Methyl Mercaptan Rate, grains/dscf	0.157
C ₂ H ₆ S	Ethyl Mercaptan Concentration, ppmd	2.0
	Ethyl Mercaptan Rate, lb/hr	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002
(CH ₃) ₂ S	Dimethyl Sulfide Concentration, ppmd	1,000
	Dimethyl Sulfide Rate, lb/hr	9.27
	Dimethyl Sulfide Rate, grains/dscf	1.129
CS ₂	Carbon Disulfide Concentration, ppmd	0.59
	Carbon Disulfide Rate, lb/hr	0.01
	Carbon Disulfide Rate, grains/dscf	0.001
C ₂ H ₆ S ₂	Dimethyl Disulfide Concentration, ppmd	70
	Dimethyl Disulfide Rate, lb/hr	0.98
	Dimethyl Disulfide Rate, grains/dscf	0.120
①E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	1,400
	TRS-->SO ₂ Emission Rate, lb/hr	13.38
	TRS-->SO ₂ Emission Rate, grains/dscf	1.630
① TRS assumed moelcular mass = SO ₂ , 64.06 gram/mole, i.e. 1 TRS in LFG assumed to = 1 SO ₂ 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

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)
④	Net Run Time, minutes	1:29:55
C _p	Pitot Tube Coeficient	0.99
P _{Br}	Barometric Pressure, inches of Mercury	29.65
% H ₂ O	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 ₂ O	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 ₂ O	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 ₂ S	Hydrogen Sulfide Concentration, ppmd	28
	Hydrogen Sulfide Rate, lb/hr	0.05
	Hydrogen Sulfide Rate, grains/dscf	0.017
COS	Carbonyl Sulfide Concentration, ppmd	0.59
	Carboynl Sulfide Rate, lb/hr	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001
CH ₄ S	Methyl Mercaptan Concentration, ppmd	3.6
	Methyl Mercaptan Rate, lb/hr	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003
C ₂ H ₆ S	Ethyl Mercaptan Concentration, ppmd	0.59
	Ethyl Mercaptan Rate, lb/hr	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001
(CH ₃) ₂ S	Dimethyl Sulfide Concentration, ppmd	20
	Dimethyl Sulfide Rate, lb/hr	0.07
	Dimethyl Sulfide Rate, grains/dscf	0.023
CS ₂	Carbon Disulfide Concentration, ppmd	0.59
	Carbon Disulfide Rate, lb/hr	0.00
	Carbon Disulfide Rate, grains/dscf	0.001
C ₂ H ₆ S ₂	Dimethyl Disulfide Concentration, ppmd	0.59
	Dimethyl Disulfide Rate, lb/hr	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001
④E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	52
	TRS-->SO ₂ Emission Rate, lb/hr	0.18
	TRS-->SO ₂ Emission Rate, grains/dscf	0.061

④ 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%



March 13, 2018



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

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

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: 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,

A handwritten signature in blue ink that appears to read "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: 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: ppmv

EPA Methods 15/16

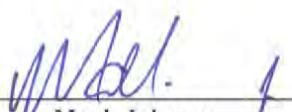
Lab No.:	J030802-01	J030802-02		J030802-03		J030802-04		
Client Sample I.D.:	EP-14 NQ A	EP-14 NQ B		Blower Outlet A		Blower Outlet B		
Date/Time Sampled:	3/7/18 9:09	3/7/18 9:38		3/7/18 11:02		3/7/18 11:28		
Date/Time Analyzed:	3/8/18 9:52	3/8/18 10:04		3/8/18 10:17		3/8/18 10:29		
QC Batch No.:	180308GC3A1	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: _____


 Mark Johnson
 Operations Manager
Date 3/12/18

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

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:

Mark J. Johnson
Operations Manager

Date: 3/12/18

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



Air TECHNOLOGY Laboratories, Inc.

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/ft ³) methane only	319.7	3.0	321.6	3.0	
Gross Heating Value (BTU/ft ³) 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: _____


Mark Johnson
Operations Manager

Date: _____

3/12/18

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

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: _____


Mark Johnson
Operations Manager

Date 3/12/18

The cover letter is an integral part of this analytical report



Air TECHNOLOGY Laboratories, Inc.

page 1 of 1

QC Batch No: 180308GC8A1

Matrix: Air

Reporting Units: % v/v

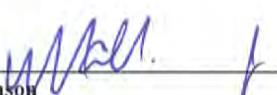
ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

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						
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: _____


 Mark Johnson
 Operations Manager
Date 3/12/18

The cover letter is an integral part of this analytical report

**AirTECHNOLOGY Laboratories, Inc.**

Kurz FM =	1,067	scfm
Fleetzoom Total =	1,018	scfm

$\Delta = -4.8\%$

PARAMETER		Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	2/27/18	2/27/18
Time	Start	9:20	9:36
*%CH ₄	Methane, %	12.1	12.2
*%CO ₂	Carbon Dioxide, %	38.2	39.5
*%O ₂	Oxygen, %	6.4	6.2
*%Balance	Assumed as Nitrogen, %	43.3	42.1
P _g	Flue Gas Static Pressure, inches of H ₂ O	15.4	15.4
t _s	Blower Outlet LFG Temperature, °F	66.3	66.3
Q _{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H ₂ O)	1,013	
Q _s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm		1,067
LFG _{CH4}	Methane, lb/hr	306.4	309.0
	Methane, grains/dscf	35.28	35.57
LFG _{CO2}	Carbon Dioxide, lb/hr	2,653.9	2,744.2
	Carbon Dioxide, grains/dscf	305.52	315.92
LFG _{O2}	Oxygen, lb/hr	323.3	313.2
	Oxygen, grains/dscf	37.22	36.05
LFG _{N2}	Balance gas as Nitrogen, lb/hr	1,914.8	1,861.8
	Balance gas as Nitrogen, grains/dscf	220.44	214.33

* 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 ₂ S	Hydrogen Sulfide Concentration, ppmd	17	19
	Hydrogen Sulfide Rate, lb/hr	0.09	0.10
	Hydrogen Sulfide Rate, grains/dscf	0.011	0.012
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 ₄ S	Methyl Mercaptan Concentration, ppmd	180	200
	Methyl Mercaptan Rate, lb/hr	1.37	1.52
	Methyl Mercaptan Rate, grains/dscf	0.157	0.175
C ₂ H ₆ S	Ethyl Mercaptan Concentration, ppmd	1.8	1.9
	Ethyl Mercaptan Rate, lb/hr	0.02	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
(CH ₃) ₂ S	Dimethyl Sulfide Concentration, ppmd	1,100	1,200
	Dimethyl Sulfide Rate, lb/hr	10.79	11.77
	Dimethyl Sulfide Rate, grains/dscf	1.242	1.355
CS ₂	Carbon Disulfide Concentration, ppmd	0.56	0.60
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
C ₂ H ₆ S ₂	Dimethyl Disulfide Concentration, ppmd	81	94
	Dimethyl Disulfide Rate, lb/hr	1.20	1.40
	Dimethyl Disulfide Rate, grains/dscf	0.139	0.161
E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	1,500	1,700
	TRS-->SO ₂ Emission Rate, lb/hr	15.17	17.19
	TRS-->SO ₂ Emission Rate, grains/dscf	1.746	1.979
TPY =		66.44	75.30

① 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 102-09
 02/27/2018

Fleetzoom Total = **298** scfm

PARAMETER		EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	2/27/18	2/27/18
Time	Start	8:30	8:46
*%CH ₄	Methane, %	35.6	36.7
*%CO ₂	Carbon Dioxide, %	32.5	31.4
**%O ₂	Oxygen, %	4.4	4.0
*%Balance	Assumed as Nitrogen, %	27.5	27.9
P _g	Flue Gas Static Pressure, inches of H ₂ O	1.53	1.50
t _s	Blower Outlet LFG Temperature, °F	66.2	68.1
Q _{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H ₂ O)	283	
Q _s	Fleetzoom Standard Volumetric Flow Rate, scfm	298	
LFG _{CH4}	Methane, lb/hr	251.6	259.4
	Methane, grains/dscf	103.79	107.00
LFG _{CO2}	Carbon Dioxide, lb/hr	630.1	608.8
	Carbon Dioxide, grains/dscf	259.94	251.14
LFG _{O2}	Oxygen, lb/hr	62.0	56.4
	Oxygen, grains/dscf	25.59	23.26
LFG _{N2}	Balance gas as Nitrogen, lb/hr	339.4	344.3
	Balance gas as Nitrogen, grains/dscf	140.00	142.04

* 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 ₂ S	Hydrogen Sulfide Concentration, ppmd	24	26
	Hydrogen Sulfide Rate, lb/hr	0.04	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.015	0.016
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 ₄ S	Methyl Mercaptan Concentration, ppmd	3.7	3.9
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.003
C ₂ H ₆ S	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) ₂ S	Dimethyl Sulfide Concentration, ppmd	24	24
	Dimethyl Sulfide Rate, lb/hr	0.07	0.07
	Dimethyl Sulfide Rate, grains/dscf	0.027	0.027
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 ₂ H ₆ S 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
①E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	53	55
	TRS-->SO ₂ Emission Rate, lb/hr	0.15	0.16
	TRS-->SO ₂ Emission Rate, grains/dscf	0.062	0.064
TPY =		0.66	0.68

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



March 7, 2018



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

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J030102-01/04

Enclosed are results for sample(s) received 3/01/18 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 3/06/18.

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,

A handwritten signature in blue ink that appears to read "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD									
		TURNAROUND TIME		DELIVERABLES		PAGE:		1 OF 1	
		Standard 48 hours		EDD EDF		Condition upon receipt: Sealed Yes Intact Yes Chilled No			
Project No.:		Same Day 72 hours		Level 3					
Project Name:		24 hours 96 hours		Level 4					
Report To:		Other: 5 day							
Company:									
Street:									
City/State/Zip:									
Phone & Fax:									
e-mail:									
ANALYSIS REQUEST									
EPA Method 15/16 + TRS									
P.O. No.:		6605567		BILLING					
Bill to:		Republic Services							
Attn:		Mike Lambrich							
13570 St. Charles Rock Rd.									
Bridgeton, MO 63044									
314-683-3921									
Mlambrich@publicservices.com									
LAB USE ONLY									
Canister Pressures ("hg)									
		Canister ID		Sample Start		Sample End		SAMPLE IDENTIFICATION	
J030102-01		R2210		-20.47		-3		EP-14 NQ A	
-02		R1155		-20.44		-3		EP-14 NQ B	
-03		R1365		-20.17		-3		Blower Outlet A	
-04		R1351		-19.98		-4		Blower Outlet B	
COMMENTS									
AUTHORIZATION TO PERFORM WORK: Dave Penoyer									
SAMPLED BY: Anthony Kimutis	COMPANY: Republic Services		DATE/TIME: 2/27/13						
RELINQUISHED BY: <i>Anthony Kimutis</i>	DATE RECEIVED BY: 2/27/13		DATE/TIME: 2/27/13						
RELINQUISHED BY: <i>John S. Fodder</i>	DATE RECEIVED BY: 2/27/13		DATE/TIME: 2/27/13						
RELINQUISHED BY: <i>John S. Fodder</i>	DATE RECEIVED BY: 2/27/13		DATE/TIME: 2/27/13						
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier AT&T 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 - 5/09									

Client: Republic Services
 Attn: Mike Lambrich
 Project Name: Bridgeton Landfill
 Project No.: NA
 Date Received: 03/01/18
 Matrix: Air
 Reporting Units: ppmv

EPA Methods 15/16

Lab No.:	J030102-01	J030102-02		J030102-03		J030102-04		
Client Sample I.D.:	EP-14 NQ A	EP-14 NQ B		Blower Outlet A		Blower Outlet B		
Date/Time Sampled:	2/27/18 8:30	2/27/18 8:46		2/27/18 9:20		2/27/18 9:36		
Date/Time Analyzed:	3/5/18 10:36	3/5/18 10:48		3/5/18 11:01		3/5/18 11:13		
QC Batch No.:	180305GC3A1	180305GC3A1		180305GC3A1		180305GC3A1		
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.8		2.8		2.8		3.0	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	24	0.56	26	0.56	17	0.56	19	0.59
Carbonyl Sulfide	ND	0.56	ND	0.56	ND	0.56	ND	0.59
Methyl Mercaptan	3.7	0.56	3.9	0.56	180 d	56	200 d	59
Ethyl Mercaptan	ND	0.56	ND	0.56	1.8	0.56	1.9	0.59
Dimethyl Sulfide	24	0.56	24	0.56	1,100 d	56	1,200 d	59
Carbon Disulfide	ND	0.56	ND	0.56	ND	0.56	0.60	0.59
Dimethyl Disulfide	ND	0.56	ND	0.56	81 d	56	94 d	59
Total Reduced Sulfur	53	0.56	55	0.56	1,500	0.56	1,700	0.59

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary dilution

Reviewed/Approved By:

Mark Johnson
Operations Manager

Date 3-6-18

The cover letter is an integral part of this analytical report



Air TECHNOLOGY Laboratories, Inc.

page 1 of 1

QC Batch No.: 180305GC3A1
Matrix: Air
Units: ppmv

4 of 4
J030102

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	3/5/18 9:59		3/5/18 9:34		3/5/18 9:46			
Analyst Initials:	AS		AS		AS			
Datafile:	05mar003		05mar001		05mar002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	94	70-130%	93	70-130%	1.1	<30
Carbonyl Sulfide	ND	0.20	95	70-130%	93	70-130%	1.6	<30
Methyl Mercaptan	ND	0.20	103	70-130%	102	70-130%	0.8	<30
Ethyl Mercaptan	ND	0.20	96	70-130%	95	70-130%	1.2	<30
Dimethyl Sulfide	ND	0.20	93	70-130%	92	70-130%	0.9	<30
Carbon Disulfide	ND	0.20	87	70-130%	86	70-130%	1.3	<30
Dimethyl Disulfide	ND	0.20	92	70-130%	92	70-130%	0.4	<30

ND = Not Detected (Below RL)

RL = Reporting Limit

Reviewed/Approved By:


Mark J. Johnson
Operations Manager

Date: 3-6-18

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 155-08
02/20/2018

Kurz FM =	1,090	scfm
Fleetzoom Total =	1,042	scfm

$\Delta = -4.6\%$

PARAMETER		Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	2/20/18	2/20/18
Time	Start	9:10	9:24
*%CH ₄	Methane, %	12.0	12.2
*%CO ₂	Carbon Dioxide, %	38.7	39.8
*%O ₂	Oxygen, %	7.1	7.0
*%Balance	Assumed as Nitrogen, %	42.2	41.0
P _g	Flue Gas Static Pressure, inches of H ₂ O	14.6	14.6
t _s	Blower Outlet LFG Temperature, °F	78.0	78.0
Q _{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H ₂ O)	1,036	
Q _s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm		1,090
LFG _{CH4}	Methane, lb/hr	310.5	315.7
	Methane, grains/dscf	34.99	35.57
LFG _{CO2}	Carbon Dioxide, lb/hr	2,747.5	2,825.6
	Carbon Dioxide, grains/dscf	309.52	318.32
LFG _{O2}	Oxygen, lb/hr	366.5	361.3
	Oxygen, grains/dscf	41.29	40.71
LFG _{N2}	Balance gas as Nitrogen, lb/hr	1,907.0	1,852.8
	Balance gas as Nitrogen, grains/dscf	214.84	208.73

* 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 ₂ S	Hydrogen Sulfide Concentration, ppmd	13	14
	Hydrogen Sulfide Rate, lb/hr	0.07	0.08
	Hydrogen Sulfide Rate, grains/dscf	0.008	0.009
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 ₄ S	Methyl Mercaptan Concentration, ppmd	160	160
	Methyl Mercaptan Rate, lb/hr	1.24	1.24
	Methyl Mercaptan Rate, grains/dscf	0.140	0.140
C ₂ H ₆ S	Ethyl Mercaptan Concentration, ppmd	1.7	1.8
	Ethyl Mercaptan Rate, lb/hr	0.02	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
(CH ₃) ₂ S	Dimethyl Sulfide Concentration, ppmd	1,000	1,000
	Dimethyl Sulfide Rate, lb/hr	10.02	10.02
	Dimethyl Sulfide Rate, grains/dscf	1.129	1.129
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 ₂ H ₆ S ₂	Dimethyl Disulfide Concentration, ppmd	64	64
	Dimethyl Disulfide Rate, lb/hr	0.97	0.97
	Dimethyl Disulfide Rate, grains/dscf	0.110	0.110
E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	1,300	1,300
	TRS-->SO ₂ Emission Rate, lb/hr	13.43	13.43
	TRS-->SO ₂ Emission Rate, grains/dscf	1.514	1.514
TPY =		58.84	58.84

① 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 101-08
 02/20/2018

Fleetzoom Total = 288 scfm

PARAMETER		EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	2/20/18	2/20/18
Time	Start	8:21	8:37
*%CH ₄	Methane, %	37.7	37.4
*%CO ₂	Carbon Dioxide, %	30.0	30.2
**%O ₂	Oxygen, %	5.0	4.9
*%Balance	Assumed as Nitrogen, %	27.3	27.5
P _g	Flue Gas Static Pressure, inches of H ₂ O	1.53	1.46
t _s	Blower Outlet LFG Temperature, °F	74.4	74.1
Q _{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H ₂ O)	274	
Q _s	Fleetzoom Standard Volumetric Flow Rate, scfm	288	
LFG _{CH4}	Methane, lb/hr	257.8	255.7
	Methane, grains/dscf	109.91	109.04
LFG _{CO2}	Carbon Dioxide, lb/hr	562.7	566.5
	Carbon Dioxide, grains/dscf	239.94	241.54
LFG _{O2}	Oxygen, lb/hr	68.2	66.8
	Oxygen, grains/dscf	29.08	28.49
LFG _{N2}	Balance gas as Nitrogen, lb/hr	325.9	328.3
	Balance gas as Nitrogen, grains/dscf	138.98	140.00

* 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 ₂ S	Hydrogen Sulfide Concentration, ppmd	28	27
	Hydrogen Sulfide Rate, lb/hr	0.04	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.017	0.017
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH ₄ S	Methyl Mercaptan Concentration, ppmd	3.5	3.5
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.003
C ₂ H ₆ S	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) ₂ S	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 ₂ H ₆ S 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
①E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	43	43
	TRS-->SO ₂ Emission Rate, lb/hr	0.12	0.12
	TRS-->SO ₂ Emission Rate, grains/dscf	0.050	0.050
TPY =		0.51	0.51

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



February 28, 2018



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

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J022103-01/04

Enclosed are results for sample(s) received 2/21/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 2/27/18.

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,

A handwritten signature in blue ink that appears to read 'Mark Johnson'.

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD												
TURNAROUND TIME			DELIVERABLES		PAGE:			1 OF 1				
Project No.:		Standard	48 hours	EDD								
Project Name:		Same Day	72 hours	EDF				Condition upon receipt:				
Report To:		24 hours	96 hours	Level 3				Sealed Yes	No			
Company:		Other:	5 day	Level 4				Intact Yes	No			
Street:		ANALYSIS REQUEST										
City/State/Zip:		EPA Method 15/16 + TRS										
Phone & Fax:		Bridgeton, MO 63044										
e-mail:		Mike Lambrich mlambrich@publicservices.com										
BILLING												
<p>P.O. No.: 66005567</p> <p>Bill to: Republic Services</p> <p>Attn: Mike Lambrich</p> <p>13570 St. Charles Rock Rd.</p> <p>Bridgeton, MO 63044</p>												
LAB USE ONLY		Canister Pressures ("hg)		SAMPLE IDENTIFICATION		DATE		TIME				
		Canister ID	Sample Start	Sample End	Lab Receive	CONTAINER	MATRIX	SAMPLE	PRESERVE-			
<i>2021-03-01</i>		R2205	-19.5	-3.5	<i>-4</i>	EP-14 NQ A	2/20/2018	8:21	C-1L	LFG	He	X
<i>-01</i>		1615	-19.83	-3.49	<i>-4</i>	EP-14 NQ B	2/20/2018	8:37	C-1L	LFG	He	X
<i>-03</i>		R1161	-20.07	-3.48	<i>-4</i>	Blower Outlet A	2/20/2018	9:10	C-1L	LFG	He	X
<i>-04</i>		R2206	-19.9	-3.51	<i>-4</i>	Blower Outlet B	2/20/2018	9:24	C-1L	LFG	He	X
COMMENTS												
AUTHORIZATION TO PERFORM WORK: Dave Penoyer												
SAMPLED BY: Anthony Kimutis				COMPANY: Republic Services		DATE/TIME:						
<i>Anthony Kimutis</i>						<i>2/20/18</i>						
RELINQUISHED BY		DATE RECEIVED BY		DATE REFOINED BY		DATE/TIME						
<i>None</i>		<i>2/20/18</i>		<i>2/20/18</i>		<i>2/20/18</i>						
RELINQUISHED BY		DATE RECEIVED BY		DATE REFOINED BY		DATE/TIME						
<i>None</i>		<i>None</i>		<i>None</i>		<i>None</i>						
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLi Other												
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy												
Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09												

Client: Republic Services
 Attn: Mike Lambrich
 Project Name: Bridgeton Landfill
 Project No.: NA
 Date Received: 02/21/18
 Matrix: Air
 Reporting Units: ppmv

EPA Methods 15/16

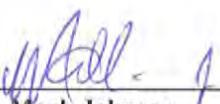
Lab No.:	J022103-01	J022103-02		J022103-03		J022103-04		
Client Sample I.D.:	EP-14 NQ A	EP-14 NQ B		Blower Outlet A		Blower Outlet B		
Date/Time Sampled:	2/20/18 8:21	2/20/18 8:37		2/20/18 9:10		2/20/18 9:24		
Date/Time Analyzed:	2/21/18 14:53	2/21/18 15:05		2/21/18 15:18		2/21/18 15:30		
QC Batch No.:	180221GC3A1	180221GC3A1		180221GC3A1		180221GC3A1		
Analyst Initials:	AS	AS		AS		AS		
Dilution Factor:	3.0	3.0		3.0		3.0		
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	28	0.59	27	0.59	13	0.59	14	0.59
Carbonyl Sulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Methyl Mercaptan	3.5	0.59	3.5	0.59	160 d	59	160 d	59
Ethyl Mercaptan	ND	0.59	ND	0.59	1.7	0.59	1.8	0.59
Dimethyl Sulfide	11	0.59	11	0.59	1,000 d	59	1,000 d	59
Carbon Disulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Dimethyl Disulfide	ND	0.59	ND	0.59	64 d	59	64 d	59
Total Reduced Sulfur	43	0.59	43	0.59	1,300	0.59	1,300	0.59

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary dilution

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date 2/26/18

The cover letter is an integral part of this analytical report

**AirTECHNOLOGY Laboratories, Inc.**

page 1 of 1

QC Batch No.: 180221GC3A1
 Matrix: Air
 Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	2/21/18 14:03		2/21/18 13:38		2/21/18 13:51			
Analyst Initials:	AS		AS		AS			
Datafile:	21feb003		21feb001		21feb002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	89	70-130%	90	70-130%	1.1	<30
Carbonyl Sulfide	ND	0.20	91	70-130%	91	70-130%	0.2	<30
Methyl Mercaptan	ND	0.20	99	70-130%	100	70-130%	1.1	<30
Ethyl Mercaptan	ND	0.20	94	70-130%	92	70-130%	1.8	<30
Dimethyl Sulfide	ND	0.20	91	70-130%	90	70-130%	1.9	<30
Carbon Disulfide	ND	0.20	84	70-130%	83	70-130%	1.5	<30
Dimethyl Disulfide	ND	0.20	89	70-130%	88	70-130%	0.7	<30

ND = Not Detected (Below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark J. Johnson
Operations Manager

Date:

2/26/18

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



AirTECHNOLOGY Laboratories, Inc.

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 154-07
02/13/2018

Kurz FM =	1,018	scfm
Fleetzoom Total =	997	scfm

$\Delta = -2.1\%$

PARAMETER		Blower Outlet A	Blower Outlet B
SOUTH QUARRY LFG - MAIN FLARE COMPOUND BLOWER OUTLET (FL120)			
Date	Test Date	2/13/18	2/13/18
Time	Start	9:39	9:54
*%CH ₄	Methane, %	12.5	12.6
*%CO ₂	Carbon Dioxide, %	35.8	36.6
*%O ₂	Oxygen, %	7.5	7.2
*%Balance	Assumed as Nitrogen, %	44.2	43.6
P _g	Flue Gas Static Pressure, inches of H ₂ O	16.1	16.5
t _s	Blower Outlet LFG Temperature, °F	44.7	47.0
Q _{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H ₂ O)	967	
Q _s	Kurz Blower Outlet, Standard Volumetric Flow Rate, scfm		1,018
LFG _{CH4}	Methane, lb/hr	302.0	304.4
	Methane, grains/dscf	36.44	36.73
LFG _{CO2}	Carbon Dioxide, lb/hr	2,372.9	2,425.9
	Carbon Dioxide, grains/dscf	286.33	292.73
LFG _{O2}	Oxygen, lb/hr	361.4	347.0
	Oxygen, grains/dscf	43.61	41.87
LFG _{N2}	Balance gas as Nitrogen, lb/hr	1,864.8	1,839.5
	Balance gas as Nitrogen, grains/dscf	225.02	221.97
* 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 ₂ S	Hydrogen Sulfide Concentration, ppmd	16	15
	Hydrogen Sulfide Rate, lb/hr	0.08	0.08
	Hydrogen Sulfide Rate, grains/dscf	0.010	0.009
COS	Carbonyl Sulfide Concentration, ppmd	0.56	0.56
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH ₄ S	Methyl Mercaptan Concentration, ppmd	140	140
	Methyl Mercaptan Rate, lb/hr	1.01	1.01
	Methyl Mercaptan Rate, grains/dscf	0.122	0.122
C ₂ H ₆ S	Ethyl Mercaptan Concentration, ppmd	1.6	1.6
	Ethyl Mercaptan Rate, lb/hr	0.01	0.01
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
(CH ₃) ₂ S	Dimethyl Sulfide Concentration, ppmd	830	880
	Dimethyl Sulfide Rate, lb/hr	7.77	8.23
	Dimethyl Sulfide Rate, grains/dscf	0.937	0.994
CS ₂	Carbon Disulfide Concentration, ppmd	0.56	0.57
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
C ₂ H ₆ S ₂	Dimethyl Disulfide Concentration, ppmd	49	54
	Dimethyl Disulfide Rate, lb/hr	0.70	0.77
	Dimethyl Disulfide Rate, grains/dscf	0.084	0.092
①E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	1,100	1,100
	TRS-->SO ₂ Emission Rate, lb/hr	10.61	10.61
	TRS-->SO ₂ Emission Rate, grains/dscf	1.281	1.281
TPY =		46.49	46.49
① TRS assumed moelcular mass = SO ₂ , 64.06 gram/mole, i.e. 1 TRS in LFG assumed to = 1 SO ₂ emitted from the stack			

Bridgeton Landfill, LLC.
 Weekly TRS Sampling Summary
 Event 100-07
 02/13/2018

Fleetzoom Total = **280** scfm

PARAMETER		EP14 NQ A	EP14 NQ B
EP14 NORTH QUARRY FLARE (OPERATING SOLO, NQ LFG Only)			
Date	Test Date	2/13/18	2/13/18
Time	Start	8:50	9:06
*%CH ₄	Methane, %	37.0	37.9
*%CO ₂	Carbon Dioxide, %	31.5	31.7
**%O ₂	Oxygen, %	3.6	2.9
*%Balance	Assumed as Nitrogen, %	27.9	27.5
P _g	Flue Gas Static Pressure, inches of H ₂ O	15.60	1.44
t _s	Blower Outlet LFG Temperature, °F	49.9	52.9
Q _{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H ₂ O)	266	
Q _s	Fleetzoom Standard Volumetric Flow Rate, scfm	280	
LFG _{CH4}	Methane, lb/hr	245.8	251.7
	Methane, grains/dscf	107.87	110.50
LFG _{CO2}	Carbon Dioxide, lb/hr	574.0	577.6
	Carbon Dioxide, grains/dscf	251.94	253.54
LFG _{O2}	Oxygen, lb/hr	47.7	38.4
	Oxygen, grains/dscf	20.93	16.86
LFG _{N2}	Balance gas as Nitrogen, lb/hr	323.6	319.0
	Balance gas as Nitrogen, grains/dscf	142.04	140.00

* 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 ₂ S	Hydrogen Sulfide Concentration, ppmd	23	28
	Hydrogen Sulfide Rate, lb/hr	0.03	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.014	0.017
COS	Carbonyl Sulfide Concentration, ppmd	0.56	0.56
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH ₄ S	Methyl Mercaptan Concentration, ppmd	2.9	3.2
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003	0.003
C ₂ H ₆ S	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) ₂ S	Dimethyl Sulfide Concentration, ppmd	11	10
	Dimethyl Sulfide Rate, lb/hr	0.03	0.03
	Dimethyl Sulfide Rate, grains/dscf	0.012	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 ₂ H ₆ S 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
①E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	37	42
	TRS-->SO ₂ Emission Rate, lb/hr	0.10	0.11
	TRS-->SO ₂ Emission Rate, grains/dscf	0.043	0.049
TPY =		0.43	0.49

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



February 21, 2018

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



LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J021407-01/04

Enclosed are results for sample(s) received 2/14/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 2/20/18.

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,

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

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD									
TURNAROUND TIME			DELIVERABLES			PAGE:			
Project No.:	Standard	48 hours	EDD	Condition upon receipt:		1	OF	1	
Project Name:	Same Day	72 hours	EDF	Sealed	Yes	No			
Report To:	24 hours	96 hours	Level 3	Intact	Yes	No			
Company:	Other:	5 day	Level 4	Chilled		deg C			
Street:	ANALYSIS REQUEST								
City/State/Zip:	EPA Method 15/16 + TRS								
Phone& Fax:									
e-mail:									
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						
Canister ID	Sample Start	Sample End	Lab Receive						
J821437-81	-21.05	-4.49	-3	EP-14 NQ A		2/13/2018	8:50	C-1L	LFG He X
-82	-20.77	-4.44	-3	EP-14 NQ B		2/13/2018	9:06	C-1L	LFG He X
-83	-20.71	-4.49	-3	Blower Outlet A		2/13/2018	9:39	C-1L	LFG He X
-84	-21.12	-4.51	-3	Blower Outlet B		2/13/2018	9:54	C-1L	LFG He X
AUTHORIZATION TO PERFORM WORK: Dave Penoyer									
SAMPLED BY: Anthony Kimutis	COMPANY: Republic Services			DATE/TIME: 2/13/18					
RELINQUISHED BY	COMPANY: Republic Services			DATE/TIME: 2/13/18					
RELINQUISHED BY	COMPANY: Republic Services			DATE/TIME: 2/14/18					
RELINQUISHED BY	COMPANY: Republic Services			DATE/TIME: 2/14/18					
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier AT&T Other									
DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy									
Preservation: H=HCl N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09									

Client: Republic Services
 Attn: Mike Lambrich
 Project Name: Bridgeton Landfill
 Project No.: NA
 Date Received: 02/14/18
 Matrix: Air
 Reporting Units: ppmv

EPA Methods 15/16

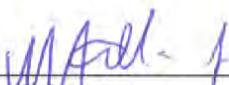
Lab No.:	J021407-01	J021407-02		J021407-03		J021407-04		
Client Sample I.D.:	EP-14 NQ A		EP-14 NQ B		Blower Outlet A		Blower Outlet B	
Date/Time Sampled:	2/13/18 8:50		2/13/18 9:06		2/13/18 9:39		2/13/18 9:54	
Date/Time Analyzed:	2/16/18 15:02		2/16/18 15:15		2/16/18 15:27		2/16/18 15:40	
QC Batch No.:	180216GC3A1		180216GC3A1		180216GC3A1		180216GC3A1	
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	23	0.56	28	0.56	16	0.56	15	0.56
Carbonyl Sulfide	ND	0.56	ND	0.56	ND	0.56	ND	0.56
Methyl Mercaptan	2.9	0.56	3.2	0.56	140 d	56	140 d	56
Ethyl Mercaptan	ND	0.56	ND	0.56	1.6	0.56	1.6	0.56
Dimethyl Sulfide	11	0.56	10	0.56	830 d	56	880 d	56
Carbon Disulfide	ND	0.56	ND	0.56	ND	0.56	0.57	0.56
Dimethyl Disulfide	ND	0.56	ND	0.56	49 d	5.6	54 d	5.6
Total Reduced Sulfur	37	0.56	42	0.56	1,100	0.56	1,100	0.56

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary dilution

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date _____

2/20/18

The cover letter is an integral part of this analytical report

**AirTECHNOLOGY Laboratories, Inc.**

page 1 of 1

QC Batch No.: 180216GC3A1
 Matrix: Air
 Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	2/16/18 8:44		2/16/18 15:53		2/16/18 16:05			
Analyst Initials:	AS		AS		AS			
Datafile:	16feb003		16feb019		16feb020			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	93	70-130%	93	70-130%	0.0	<30
Carbonyl Sulfide	ND	0.20	91	70-130%	91	70-130%	0.5	<30
Methyl Mercaptan	ND	0.20	103	70-130%	103	70-130%	0.5	<30
Ethyl Mercaptan	ND	0.20	97	70-130%	96	70-130%	0.2	<30
Dimethyl Sulfide	ND	0.20	94	70-130%	91	70-130%	2.9	<30
Carbon Disulfide	ND	0.20	84	70-130%	84	70-130%	0.1	<30
Dimethyl Disulfide	ND	0.20	89	70-130%	88	70-130%	1.2	<30

ND = Not Detected (Below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark J. Johnson
Operations Manager

Date:

2/20/18

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



AirTECHNOLOGY Laboratories, Inc.

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

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

		Outlet A	Outlet B
H ₂ S	Hydrogen Sulfide Concentration, ppmd	19	19
	Hydrogen Sulfide Rate, lb/hr	0.12	0.12
	Hydrogen Sulfide Rate, grains/dscf	0.012	0.012
COS	Carbonyl Sulfide Concentration, ppmd	0.55	0.56
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH ₄ S	Methyl Mercaptan Concentration, ppmd	160	170
	Methyl Mercaptan Rate, lb/hr	1.44	1.52
	Methyl Mercaptan Rate, grains/dscf	0.140	0.149
C ₂ H ₆ S	Ethyl Mercaptan Concentration, ppmd	1.6	1.7
	Ethyl Mercaptan Rate, lb/hr	0.02	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
(CH ₃) ₂ S	Dimethyl Sulfide Concentration, ppmd	950	1,000
	Dimethyl Sulfide Rate, lb/hr	11.01	11.58
	Dimethyl Sulfide Rate, grains/dscf	1.073	1.129
CS ₂	Carbon Disulfide Concentration, ppmd	0.61	0.66
	Carbon Disulfide Rate, lb/hr	0.01	0.01
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
C ₂ H ₆ S ₂	Dimethyl Disulfide Concentration, ppmd	69	78
	Dimethyl Disulfide Rate, lb/hr	1.21	1.11
	Dimethyl Disulfide Rate, grains/dscf	0.118	0.108
①E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	1,300	1,400
	TRS-->SO ₂ Emission Rate, lb/hr	15.53	16.72
	TRS-->SO ₂ Emission Rate, grains/dscf	1.514	1.630

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

Monday, February 05, 2018

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

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

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

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

	Outlet A	Outlet B
H ₂ S	Hydrogen Sulfide Concentration, ppmd	35
	Hydrogen Sulfide Rate, lb/hr	0.07
	Hydrogen Sulfide Rate, grains/dscf	0.022
COS	Carbonyl Sulfide Concentration, ppmd	0.53
	Carboynl Sulfide Rate, lb/hr	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001
CH ₄ S	Methyl Mercaptan Concentration, ppmd	3.7
	Methyl Mercaptan Rate, lb/hr	0.01
	Methyl Mercaptan Rate, grains/dscf	0.003
C ₂ H ₆ S	Ethyl Mercaptan Concentration, ppmd	0.53
	Ethyl Mercaptan Rate, lb/hr	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001
(CH ₃) ₂ S	Dimethyl Sulfide Concentration, ppmd	12
	Dimethyl Sulfide Rate, lb/hr	0.04
	Dimethyl Sulfide Rate, grains/dscf	0.014
CS ₂	Carbon Disulfide Concentration, ppmd	0.53
	Carbon Disulfide Rate, lb/hr	0.00
	Carbon Disulfide Rate, grains/dscf	0.001
C ₂ H ₆ S ₂	Dimethyl Disulfide Concentration, ppmd	0.53
	Dimethyl Disulfide Rate, lb/hr	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001
④E _{TRS-SO2}	TRS-->SO ₂ Emission Concentration, ppmd	51
	TRS-->SO ₂ Emission Rate, lb/hr	0.19
	TRS-->SO ₂ Emission Rate, grains/dscf	0.059

④ TRS assumed moelcular mass = SO₂, 64.06 gram/mole, i.e. 1 TRS in LFG assumed to = 1 SO₂ emitted from the stack



February 8, 2018

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



LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J020601-01/04

Enclosed are results for sample(s) received 2/06/18 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 NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 2/08/18.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson".
Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

Client: Republic Services
 Attn: Mike Lambrich
 Project Name: Bridgeton Landfill
 Project No.: NA
 Date Received: 02/06/18
 Matrix: Air
 Reporting Units: ppmv

EPA Methods 15/16

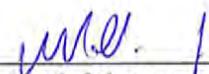
Lab No.:	J020601-01	J020601-02		J020601-03		J020601-04		
Client Sample I.D.:	EP-14 NQ A	EP-14 NQ B		Blower Outlet A		Blower Outlet B		
Date/Time Sampled:	2/5/18 9:17	2/5/18 9:47		2/5/18 11:22		2/5/18 11:50		
Date/Time Analyzed:	2/7/18 9:13	2/7/18 9:25		2/7/18 9:38		2/7/18 9:50		
QC Batch No.:	180207GC3A1	180207GC3A1		180207GC3A1		180207GC3A1		
Analyst Initials:	AS	AS		AS		AS		
Dilution Factor:	2.7	2.7		2.7		2.8		
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	35 d	5.3	34 d	5.3	19	0.55	19	0.56
Carbonyl Sulfide	ND	0.53	ND	0.53	ND	0.55	ND	0.56
Methyl Mercaptan	3.7	0.53	4.1	0.53	160 d	55	170 d	56
Ethyl Mercaptan	ND	0.53	ND	0.53	1.6	0.55	1.7	0.56
Dimethyl Sulfide	12	0.53	13	0.53	950 d	55	1,000 d	56
Carbon Disulfide	ND	0.53	ND	0.53	0.61	0.55	0.66	0.56
Dimethyl Disulfide	ND	0.53	ND	0.53	69 d	55	78 d	56
Total Reduced Sulfur	51	0.53	51	0.53	1,300	0.55	1,400	0.56

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary dilution

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager
Date 2/8/18

The cover letter is an integral part of this analytical report



Air TECHNOLOGY Laboratories, Inc.

page 1 of 1

QC Batch No.: 180207GC3A1
 Matrix: Air
 Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	2/7/18 9:01		2/7/18 8:36		2/7/18 8:48			
Analyst Initials:	AS		AS		AS			
Datafile:	07feb003		07feb001		07feb002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	% RPD	Criteria
Hydrogen Sulfide	ND	0.20	111	70-130%	111	70-130%	0.4	<30
Carbonyl Sulfide	ND	0.20	99	70-130%	97	70-130%	1.4	<30
Methyl Mercaptan	ND	0.20	125	70-130%	124	70-130%	1.0	<30
Ethyl Mercaptan	ND	0.20	121	70-130%	120	70-130%	1.1	<30
Dimethyl Sulfide	ND	0.20	96	70-130%	96	70-130%	0.4	<30
Carbon Disulfide	ND	0.20	83	70-130%	82	70-130%	1.8	<30
Dimethyl Disulfide	ND	0.20	84	70-130%	84	70-130%	0.2	<30

ND = Not Detected (Below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark J. Johnson
Mark J. Johnson
Operations Manager

Date: *2/8/18*

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



AirTECHNOLOGY Laboratories, Inc.

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/06/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020601-01	J020601-02		
Client Sample I.D.:	EP-14 NQ A	EP-14 NQ B		
Date/Time Sampled:	2/5/18 9:17	2/5/18 9:47		
Date/Time Analyzed:	2/6/18 15:24	2/6/18 15:39		
QC Batch No.:	180206GC8A2	180206GC8A2		
Analyst Initials:	AS	AS		
Dilution Factor:	2.7	2.7		
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND	2.7	ND	2.7
Carbon Dioxide	27.8	0.027	29.6	0.027
Oxygen/Argon	5.1	1.3	3.8	1.3
Nitrogen	31.2	2.7	27.9	2.7
Methane	34.8	0.0027	37.4	0.0027
Carbon Monoxide	ND	0.0027	ND	0.0027
Net Heating Value (BTU/ft3) methane only	316.6	2.7	340.3	2.7
Gross Heating Value (BTU/ft3) methane only	351.6	2.7	377.9	2.7

Results normalized including non-methane hydrocarbons

BTU values based on D1946 analysis methane only

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager
Date 2/7/18

The cover letter is an integral part of this analytical report

**Air TECHNOLOGY Laboratories, Inc.**

page 1 of 1

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/06/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020601-03	J020601-04			
Client Sample I.D.:	Blower Outlet A		Blower Outlet B		
Date/Time Sampled:	2/5/18 11:22		2/5/18 11:50		
Date/Time Analyzed:	2/6/18 15:53		2/6/18 16:08		
QC Batch No.:	180206GC8A2		180206GC8A2		
Analyst Initials:	AS		AS		
Dilution Factor:	2.7		2.8		
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	
Hydrogen	10.3	2.7	10.2	2.8	
Carbon Dioxide	33.1	0.027	32.9	0.028	
Oxygen/Argon	7.6	1.4	7.6	1.4	
Nitrogen	36.0	2.7	36.4	2.8	
Methane	12.2	0.0027	12.1	0.0028	
Carbon Monoxide	0.050	0.0027	0.051	0.0028	
Net Heating Value (BTU/ft3)	154.5	2.7	154.7	2.8	
Gross Heating Value (BTU/ft3)	175.2	2.7	175.3	2.8	

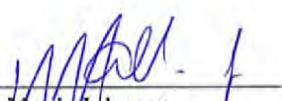
Results normalized including non-methane hydrocarbons

BTU values based on D1946 analysis and non-methane analysis assumed as propane

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date 2/7/18

The cover letter is an integral part of this analytical report

**Air TECHNOLOGY Laboratories, Inc.**

page 1 of 1

QC Batch No: 180206GC8A2
 Matrix: Air
 Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK		LCS	LCSD							
Date Analyzed:	2/6/18 14:09		2/6/18 13:40	2/6/18 13:54							
Analyst Initials:	AS		AS	AS							
Dilution Factor:	1.0		1.0	1.0							
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	4.95	99	4.96	99	0.2	70	130	30
Carbon Dioxide	ND	0.010	10	9.20	92	9.24	92	0.4	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	71.3	102	71.4	102	0.2	70	130	30
Methane	ND	0.0010	0.10	0.108	108	0.109	109	0.4	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: _____

Mark Johnson
 Operations Manager



Date: 2/7/18

The cover letter is an integral part of this analytical report



Air TECHNOLOGY Laboratories, Inc.

ATTACHMENT C

GAS WELL ANALYSIS MAPS

LEGEND

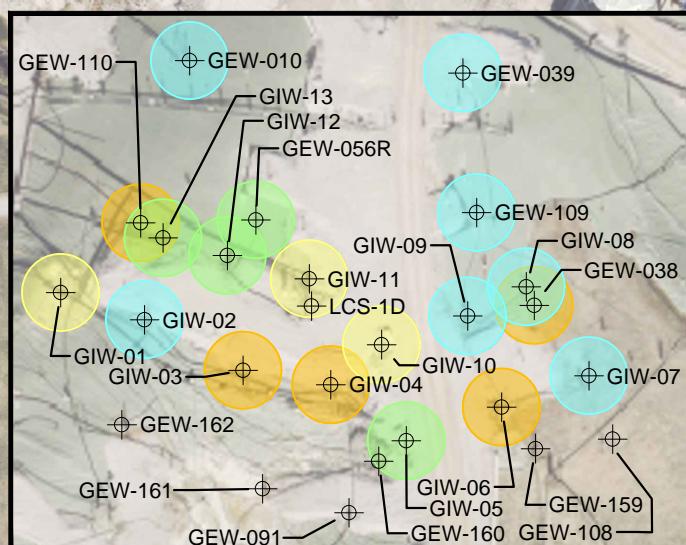
WELL LOCATION

HYDROGEN

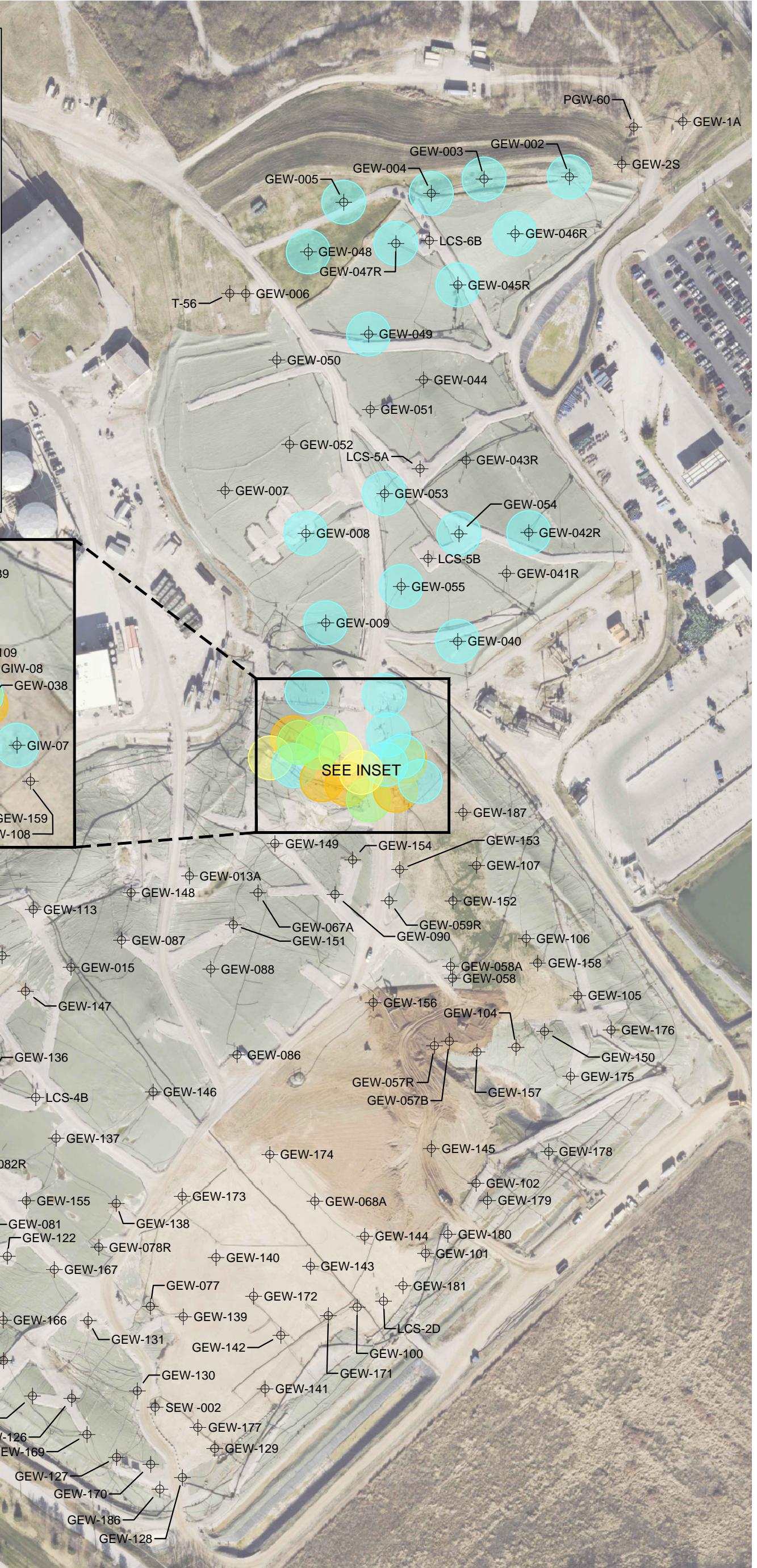


NOTES:
Hydrogen represents the laboratory reported concentration for samples collected during the month.

*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



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

BRIDGETON LANDFILL MONTHLY REPORTING



FEBRUARY 2018

DESIGNED BY: PML

APPROVED BY: ---

DRAWING NO.:

www.w3.org

001

1

ANSWER

HYDROGEN DATA MAP - FEBRUARY 2018

The logo for FEEZOR Engineering, Inc. It features the word "FEEZOR" in a large, bold, black serif font. To the left of "FEEZOR" is a vertical bar consisting of three segments: a thin black line, a thick black line, and another thin black line. To the right of "FEEZOR" is a thick black square. Below "FEEZOR" is the company name "ENGINEERING, INC." in a smaller, bold, black sans-serif font.

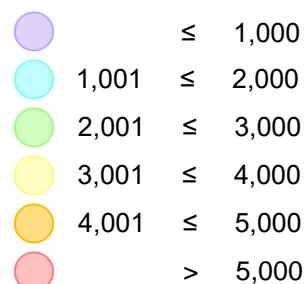
ENGINEERING, INC.

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

LEGEND

⊕ WELL LOCATION

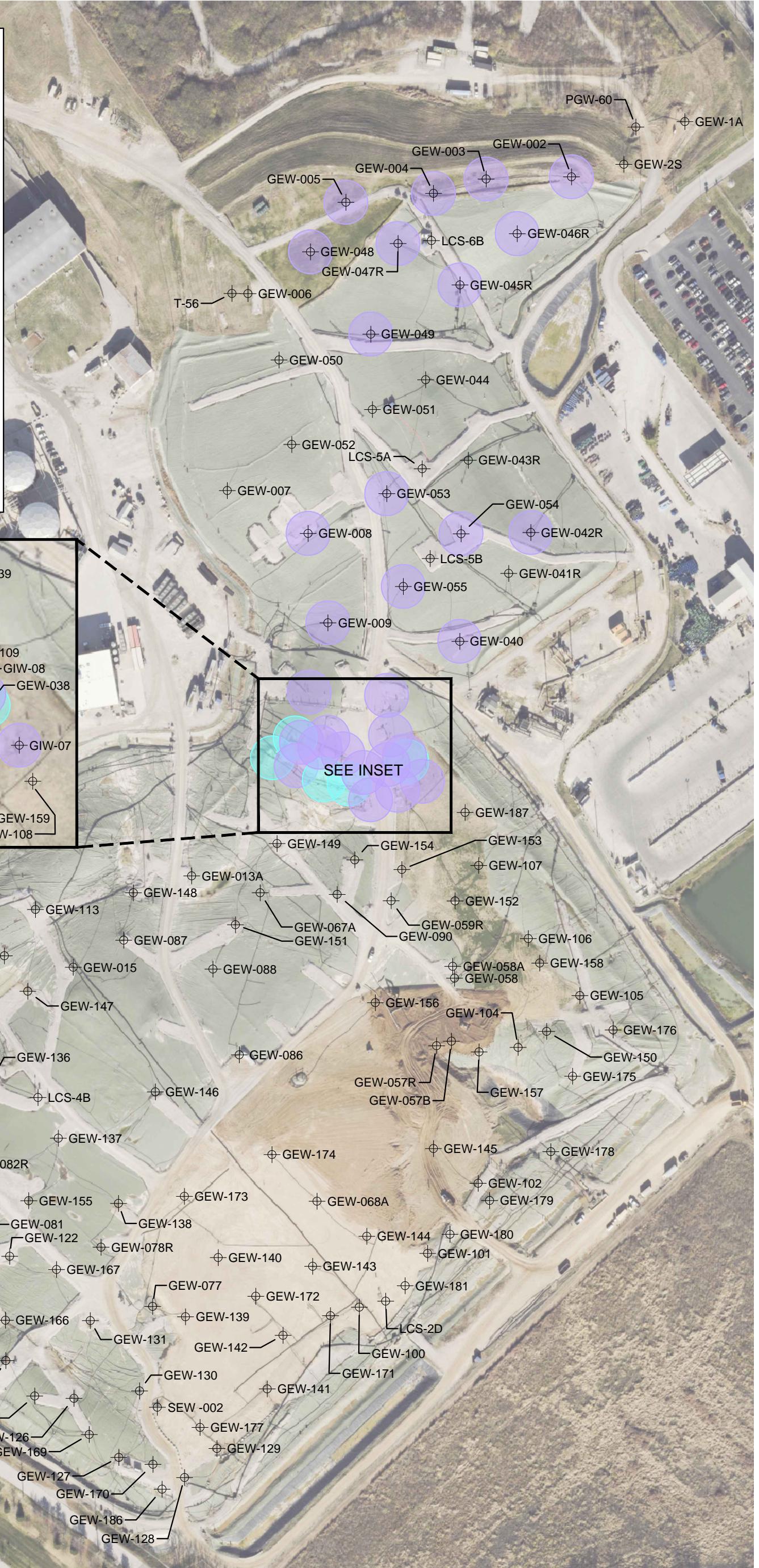
CARBON MONOXIDE (PPM)



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



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

BRIDGETON LANDFILL
MONTHLY REPORTING

FEBRUARY 2018

DESIGNED BY: PML

APPROVED BY: ---

DRAWING NO.:

002

CARBON MONOXIDE DATA MAP - FEBRUARY 2018

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

Engineering for a Better World
Feezor
ENGINEERING, INC.

REVISION DATE

LEGEND

⊕ WELL LOCATION

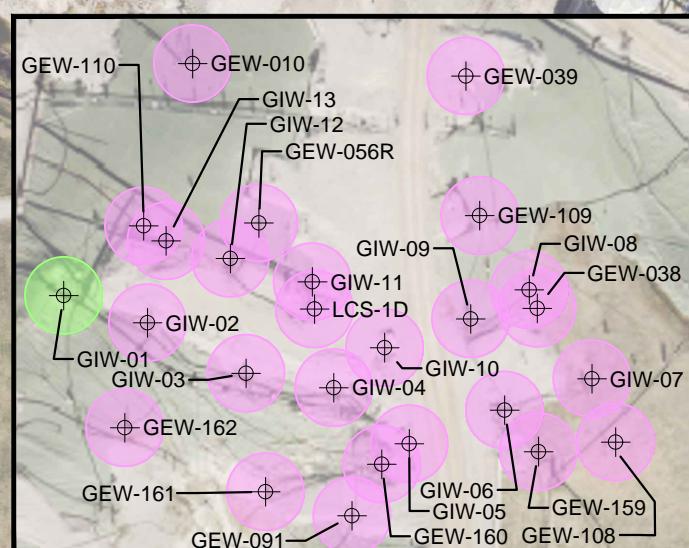
MAXIMUM TEMPERATURE (F°)

- (Pink) < 131°
- (Purple) 131° < 151°
- (Cyan) 151° < 171°
- (Green) 171° < 191°
- (Yellow) 191° < 211°
- (Orange) 211° < 231°
- (Red) > 231°

NOTES:

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

*Only points monitored during the report period show data.



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	10/9/2017	56	40	ND	ND	ND	ND	
GEW-002	11/6/2017	55	40	ND	3.8	ND	ND	
GEW-002	12/12/2017	54	40	ND	4.4	ND	ND	
GEW-002	1/8/2018	52	36	ND	11	ND	ND	
GEW-002	2/5/2018	56	40	ND	ND	ND	ND	
GEW-02S	11/9/2017	53	37	2.2	7.7	ND	ND	See Note 3
GEW-02S	1/23/2018	57	36	1.6	5.2	ND	ND	
GEW-003	10/9/2017	47	36	ND	15.0	0.06	ND	
GEW-003	11/6/2017	50	37	ND	12.0	0.08	ND	
GEW-003	12/12/2017	49	36	ND	14.0	0.07	ND	
GEW-003	1/8/2018	43	34	ND	21	0.098	ND	
GEW-003	2/5/2018	48	37	ND	14	0.10	ND	
GEW-004	10/9/2017	56	39	ND	3.7	0.06	ND	
GEW-004	11/6/2017	56	39	ND	4.1	0.08	ND	
GEW-004	12/12/2017	52	38	ND	9.3	0.09	ND	
GEW-004	1/8/2018	50	37	ND	13	0.084	ND	
GEW-004	2/5/2018	47	36	ND	15	0.070	ND	
GEW-005	10/9/2017	52	34	1.9	12	ND	ND	
GEW-005	11/6/2017	57	36	ND	6.2	0.04	ND	
GEW-005	12/12/2017	46	34	ND	19	ND	ND	
GEW-005	1/8/2018	43	33	ND	23	ND	ND	
GEW-005	2/6/2018	37	30	ND	33	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-007	11/7/2017	54	36	2.1	7.4	ND	ND	See Note 3
GEW-007	1/9/2018	58	38	ND	ND	ND	ND	
GEW-008	10/11/2017	53	43	ND	ND	1.1	ND	
GEW-008	11/7/2017	54	43	ND	ND	1.2	ND	
GEW-008	12/13/2017	53	41	ND	3.4	1.5	ND	
GEW-008	1/9/2018	54	42	ND	ND	1.7	ND	
GEW-008	2/6/2018	54	41	ND	3.9	0.55	ND	
GEW-009	10/11/2017	49	39	ND	10	0.41	ND	
GEW-009	11/7/2017	51	39	ND	9	0.6	ND	
GEW-009	12/13/2017	50	38	ND	11	0.7	ND	
GEW-009	1/9/2018	53	39	ND	6.7	0.60	ND	
GEW-009	2/6/2018	49	37	ND	12	1.1	ND	
GEW-040	10/11/2017	57	39	ND	3.2	ND	ND	
GEW-040	11/9/2017	58	39	ND	ND	ND	ND	
GEW-040	12/13/2017	58	39	ND	ND	ND	ND	
GEW-040	1/9/2018	57	38	ND	4.2	ND	ND	
GEW-040	2/6/2018	56	35	1.4	7.7	ND	ND	
GEW-041R	11/9/2017	59	38	ND	ND	ND	ND	
GEW-041R	1/9/2018	53	35	ND	12	ND	ND	
GEW-042R	10/11/2017	55	39	ND	4.2	ND	ND	
GEW-042R	11/9/2017	55	39	ND	4.5	ND	ND	
GEW-042R	12/13/2017	57	39	ND	ND	ND	ND	
GEW-042R	1/8/2018	58	39	ND	3.1	ND	ND	
GEW-042R	2/6/2018	57	39	ND	3.1	ND	ND	
GEW-043R	11/9/2017	47	34	4.1	15	0.19	ND	See Note 3
GEW-043R	1/8/2018	56	39	ND	3.9	0.29	ND	
GEW-044	11/9/2017	59	39	ND	ND	ND	ND	
GEW-044	1/8/2018	48	35	ND	16	ND	ND	
GEW-045R	10/11/2017	57	41	ND	ND	ND	ND	
GEW-045R	11/6/2017	55	41	ND	ND	ND	ND	
GEW-045R	12/12/2017	61	36	ND	ND	ND	ND	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)	(ppm)					
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-046R	10/9/2017	56	40	ND	ND	0.05	ND	
GEW-046R	11/6/2017	55	40	ND	4	0.06	ND	
GEW-046R	12/12/2017	57	38	ND	4.2	0.04	ND	
GEW-046R	1/8/2018	47	36	ND	17	0.081	ND	
GEW-046R	2/6/2018	51	36	ND	13	0.085	ND	
GEW-047R	10/9/2017	56	42	ND	ND	ND	ND	
GEW-047R	11/6/2017	56	41	ND	ND	ND	ND	
GEW-047R	12/12/2017	48	36	1.5	14	0.03	ND	
GEW-047R	1/8/2018	37	31	1.5	30	0.041	ND	
GEW-047R	2/6/2018	48	36	ND	15	ND	ND	
GEW-048	10/9/2017	54	36	2.1	7.8	ND	ND	See Note 3
GEW-048	11/6/2017	58	39	ND	ND	ND	ND	
GEW-048	12/12/2017	55	38	ND	6.6	ND	ND	
GEW-048	1/8/2018	50	35	ND	13	0.032	ND	
GEW-048	2/6/2018	51	36	ND	13	ND	ND	
GEW-049	10/11/2017	55	39	ND	5.7	ND	ND	
GEW-049	11/6/2017	57	39	ND	3.4	0.06	ND	
GEW-049	12/12/2017	53	36	ND	10	0.06	ND	
GEW-049	1/8/2018	47	34	ND	17	0.036	ND	
GEW-049	2/6/2018	47	33	ND	19	ND	ND	
GEW-050	11/6/2017	55	36	1.7	7	0.05	ND	
GEW-050	1/8/2018	46	32	2.3	19	0.035	ND	See Note 4
GEW-051	11/6/2017	56	40	ND	ND	1.0	ND	
GEW-051	1/8/2018	55	39	ND	4.1	0.90	ND	
GEW-052	11/7/2017	52	37	ND	11	0.04	ND	
GEW-052	1/8/2018	34	30	ND	35	ND	ND	
GEW-053	10/9/2017	53	40	ND	ND	2.8	58	
GEW-053	11/9/2017	49	42	ND	ND	6.7	56	
GEW-053	12/13/2017	51	41	ND	ND	5.1	62	
GEW-053	1/8/2018	49	38	ND	7.7	4.7	57	
GEW-053	2/6/2018	49	39	ND	6.1	4.7	60	
GEW-054	10/9/2017	53	42	ND	ND	2.7	ND	
GEW-054	11/9/2017	54	41	ND	ND	2.7	30	
GEW-054	12/12/2017	54	41	ND	ND	2.5	ND	
GEW-054	1/9/2018	55	39	ND	3.5	1.5	ND	
GEW-054	2/6/2018	52	39	1.4	6.1	2.1	28	
GEW-055	10/11/2017	49	40	1.9	6.4	2.8	36	
GEW-055	11/9/2017	53	41	ND	3.2	2.4	32	
GEW-055	12/12/2017	54	40	ND	3	2.1	32	
GEW-055	1/8/2018	50	40	ND	ND	6.5	46	
GEW-055	2/6/2018	50	38	ND	8.7	2.0	30	
Flare Station ²	10/10/2017	48.0	36.1	2.1	12.8	ND	ND	See Note 5
Flare Station ²	11/2/2017	49.5	36.0	2.0	11.2	ND	ND	See Note 5
Flare Station ²	12/5/2017	42.4	32.4	3.1	21.0	ND	ND	See Note 5
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

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

ND = Analyte not detected in sample.

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

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)				(ppm)		
South Quarry								
GEW-010	10/9/2017	57	41	ND	ND	0.06	ND	
GEW-010	11/6/2017	57	39	ND	ND	0.12	ND	
GEW-010	12/12/2017	57	40	ND	ND	ND	ND	
GEW-010	1/8/2018	56	41	ND	ND	ND	ND	
GEW-010	2/6/2018	56	41	ND	ND	0.25	ND	
GEW-022R	11/9/2017	2	44	6.3	22	25	1,700	See Note 3
GEW-022R	1/15/2018	2.8	58	ND	2.9	35	2,100	
GEW-038	10/9/2017	1.2	19	14.0	51	14	840	See Note 4
GEW-038	11/6/2017	0.77	51	2.1	7.3	38	2,300	
GEW-038	12/13/2017	0.89	53	ND	ND	42	2,200	
GEW-038	1/8/2018	12	39	5.2	21	22	1,000	See Note 4
GEW-038	2/6/2018	13	46	2.2	7.4	31	1,500	
GEW-039	10/9/2017	46	52	ND	ND	ND	ND	
GEW-039	11/6/2017	46	49	ND	3.2	0.14	ND	
GEW-039	12/13/2017	46	48	ND	5.1	ND	ND	
GEW-039	1/8/2018	30	37	2.2	30	0.050	37	
GEW-039	2/6/2018	26	32	4.5	37	0.042	42	
GEW-056R	10/9/2017	31	48	ND	ND	17	580	
GEW-056R	11/6/2017	30	42	1.8	10	15	510	
GEW-056R	12/12/2017	9.9	47	ND	20	22	920	
GEW-056R	1/8/2018	26	45	ND	6.5	21	630	
GEW-056R	2/6/2018	28	43	ND	11	18	570	
GEW-057R	1/16/2018	5.4	38	4.6	16	36	1,000	
GEW-058	11/8/2017	2.4	36	4.1	29	28	1,100	
GEW-058	1/15/2018	2.5	34	4.4	27	32	1,200	
GEW-058A	11/8/2017	12	25	7.3	41	15	620	See Note 4
GEW-058A	1/15/2018	1.4	31	5.5	28	34	1,300	See Note 4
GEW-059R	11/7/2017	14	43	ND	4.6	37	1,300	
GEW-059R	1/10/2018	15	40	ND	5.5	38	1,300	
GEW-082R	11/13/2017	11	37	ND	25	26	960	
GEW-082R	1/12/2018	14	37	ND	22	26	910	
GEW-086	11/9/2017	19	37	2.7	36	5.1	140	
GEW-086	1/15/2018	15	32	5.3	38	10	250	See Note 3
GEW-090	11/9/2017	19	43	ND	5.6	31	1,000	
GEW-090	1/5/2018	20	42	ND	5.3	31	1,000	
GEW-102	11/9/2017	5.7	46	2.2	7.4	38	640	
GEW-107	11/7/2017	42	39	2.9	10	6	290	
GEW-107	1/5/2018	40	51	ND	3.7	4.7	240	
GEW-109	10/9/2017	36	42	ND	14	7.6	180	
GEW-109	11/6/2017	33	38	2	19	7.9	190	
GEW-109	12/13/2017	26	35	3	22	13	340	
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-110	10/9/2017	7.9	21	12	48	10	510	See Note 4
GEW-110	11/6/2017	8	17	14	53	8.4	290	See Note 4
GEW-110	12/12/2017	12	38	4.2	19	27	990	
GEW-110	1/8/2018	6.5	18	14	52	9.1	340	See Note 4
GEW-110	2/6/2018	11	50	ND	ND	35	1,300	
GEW-116	11/13/2017	7.7	58	ND	4.1	28	1,200	
GEW-116	1/11/2018	5.4	55	2.2	7.4	29	1,400	
GEW-117	11/9/2017	44	51	ND	ND	0.42	140	
GEW-117	1/11/2018	44	50	ND	4.2	0.49	140	
GEW-118	11/9/2017	1.9	52	2.3	8.5	34	750	
GEW-118	1/12/2018	1.5	47	3.2	12	37	1,100	
GEW-120	11/9/2017	17	53	ND	18	11	510	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)	(ppm)					
GEW-120	1/11/2018	14	44	2.2	29	9.4	450	
GEW-121	11/9/2017	11	48	ND	20	19	910	
GEW-121	1/15/2018	5.6	36	2.5	39	17	990	
GEW-122	11/9/2017	12	34	ND	36	16	1,500	
GEW-122	1/15/2018	12	42	ND	19	27	1,500	
GEW-123	11/9/2017	7.7	58	ND	ND	31	2,300	
GEW-123	1/15/2018	13	40	ND	35	11	570	
GEW-124	11/9/2017	53	44	ND	ND	0.06	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-126	11/9/2017	20	46	2.5	24	6.9	530	
GEW-126	1/11/2018	22	45	ND	26	6.3	430	
GEW-127	11/9/2017	4.1	54	2.3	14	24	2,600	
GEW-127	1/11/2018	5.8	37	7.4	36	13	1,200	See Note 4
GEW-128	11/9/2017	14	60	ND	6.8	17	1,800	
GEW-128	1/11/2018	13	55	ND	17	14	1,400	
GEW-129	11/9/2017	6.3	45	5.5	19	23	2,500	See Note 3
GEW-129	1/15/2018	15	59	ND	6.2	18	1,900	
GEW-130	11/9/2017	5.9	39	5.9	27	22	1,600	See Note 4
GEW-130	1/11/2018	4.9	45	4.3	16	29	2,100	
GEW-131	11/9/2017	20	39	ND	21	19	1,400	
GEW-131	1/11/2018	21	42	ND	16	19	1,300	
GEW-132	11/9/2017	1.8	18	10	61	9.2	500	See Note 4
GEW-132	1/12/2018	2.7	25	8.8	47	16	870	See Note 4
GEW-133	11/13/2017	11	49	ND	15	23	1,100	
GEW-133	1/11/2018	0.75	47	ND	ND	49	1,800	
GEW-134	11/13/2017	10.0	38	2.3	40	10	450	
GEW-134	1/11/2018	12	41	2.0	29	16	700	
GEW-135	11/13/2017	7.3	35	4.4	36	18	890	
GEW-135	1/11/2018	9.2	42	2.6	23	23	1,000	
GEW-136	11/13/2017	5.7	26	7.7	40	20	540	See Note 4
GEW-136	1/11/2018	5.0	21	9.6	50	14	370	See Note 4
GEW-137	11/13/2017	29	34	1.8	35	0.16	33	
GEW-137	1/12/2018	35	33	1.6	30	ND	ND	
GEW-138	11/13/2017	6.5	21	8.9	56	7	390	See Note 4
GEW-138	1/12/2018	9.0	33	ND	45	11	650	
GEW-139	11/9/2017	1.8	51	ND	ND	43	3,000	
GEW-139	1/15/2018	2.3	52	ND	ND	42	2,700	
GEW-140	1/10/2018	13	50	ND	ND	34	1,300	
GEW-144	1/10/2018	1.5	24	11	37	25	1,200	See Note 4
GEW-146	1/11/2018	2.9	6.4	18	72	0.70	ND	
GEW-147	11/13/2017	11	42	ND	22	23	880	
GEW-147	1/11/2018	10	39	ND	28	21	810	
GEW-148	1/11/2018	3.2	48	2.9	9.8	36	2,500	
GEW-149	11/9/2017	14	32	4.3	43	6.4	310	
GEW-149	1/11/2018	12	27	6.9	48	6.5	240	See Note 4
GEW-150	11/8/2017	12	29	7.7	44	6.7	260	See Note 4
GEW-150	1/10/2018	16	31	8.6	32	12	310	See Note 3
GEW-151	11/13/2017	1.4	43	ND	ND	52	1000	
GEW-151	1/11/2018	12	38	4.4	25	20	650	
GEW-152	11/7/2017	24	42	2.2	7.5	23	1300	
GEW-152	1/5/2018	26	42	1.6	6.0	24	1200	
GEW-153	11/7/2017	43	37	ND	17	2	77	
GEW-153	1/5/2018	34	30	1.4	32	1.7	99	
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

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)	(ppm)					
GEW-155	11/13/2017	1.1	13	11	75	ND	79	See Note 3
GEW-155	1/12/2018	6.3	27	2.3	60	4.3	97	
GEW-156	11/8/2017	16	23	12	43	6	140	See Note 4
GEW-156	1/16/2018	11	14	14	58	2.2	70	See Note 4
GEW-158	11/8/2017	34	48	ND	ND	15	470	
GEW-158	1/10/2018	22	49	ND	ND	26	970	
GEW-159	11/7/2017	25	40	3	29	2.9	150	
GEW-159	1/5/2018	38	40	ND	19	1.5	42	
GEW-160	11/13/2017	13	43	ND	20	23	1,100	
GEW-160	1/5/2018	12	53	ND	ND	31	1,400	
GEW-161	1/5/2018	0.40	28	9.1	31	31	1,400	See Note 4
GEW-162	11/9/2017	11	56	2	11	20	950	
GEW-162	1/5/2018	21	68	ND	4.2	6.1	230	
GEW-163	11/7/2017	10	36	6.8	38	8.7	400	See Note 4
GEW-163	1/9/2018	2.9	23	13	48	12	500	See Note 4
GEW-164	11/7/2017	18	51	3.6	17	11	690	
GEW-164	1/9/2018	20	50	3.5	15	11	640	
GEW-165	11/7/2017	7.8	54	3.7	13	20	1,100	
GEW-165	1/9/2018	11	63	ND	ND	23	1,200	
GEW-166	11/7/2017	0.81	53	1.7	6.6	38	2,500	
GEW-166	1/9/2018	1.2	51	ND	5.0	41	2,600	
GEW-167	11/7/2017	0.56	35	7.8	28	28	1,700	See Note 4
GEW-167	1/9/2018	0.43	30	9.1	33	27	1,600	See Note 3
GEW-168	11/7/2017	10	55	1.6	6.5	26	1,700	
GEW-168	1/10/2018	11	54	ND	4.2	29	1,700	
GEW-169	11/7/2017	2.6	46	5.6	22	23	1,700	See Note 4
GEW-169	1/10/2018	2.4	52	3.0	13	29	2,100	
GEW-170	11/9/2017	8.3	41	7.1	28	15	1,300	See Note 4
GEW-170	1/11/2018	8.0	39	7.2	31	14	1,000	See Note 4
GEW-172	11/9/2017	0.33	46	4.3	15	34	2,700	
GEW-172	1/16/2018	0.45	49	3.0	11	36	2,800	
GEW-173	11/9/2017	8.7	17	12	61	0.21	33	See Note 4
GEW-173	1/16/2018	24	34	1.6	39	0.27	29	
GEW-174	11/9/2017	5.5	50	ND	ND	42	2,700	
GEW-174	1/10/2018	20	44	ND	16	19	960	
GEW-175	11/8/2017	17	45	3.5	21	13	550	
GEW-175	1/10/2018	21	44	3.7	19	12	430	
GEW-176	11/8/2017	21	39	5.5	28	6.8	250	See Note 4
GEW-176	1/10/2018	23	34	7.2	30	5.9	180	See Note 4
GEW-177	11/9/2017	0.32	63	2	6.8	27	4,600	
GEW-177	1/15/2018	3.5	59	ND	4.7	31	3,600	
GEW-181	1/23/2018	9.9	61	2.7	9.4	16	1,200	
GEW-182	1/23/2018	7.1	51	2.2	7.5	32	1,400	
GEW-184	1/23/2018	22	40	8.1	30	0.38	96	
GEW-185	1/23/2018	17	59	ND	4.1	18	940	
GEW-186	1/23/2018	12	59	1.7	7.2	19	1,900	
GEW-187	1/23/2018	10	39	5.8	22	22	1,100	See Note 4
GEW-188	1/23/2018	0.79	22	12	46	18	800	See Note 4
GIW-01	10/9/2017	27	41	3.3	28	0.67	110	
GIW-01	11/6/2017	6	61	ND	7.5	23	1,300	
GIW-01	12/12/2017	16	43	6.1	30	5	230	See Note 4
GIW-01	1/8/2018	11	53	2.8	12	20	940	
GIW-01	2/5/2018	4.9	61	ND	5.2	27	1,300	
GIW-02	10/9/2017	2.3	17	13	65	2.8	290	See Note 4
GIW-02	11/6/2017	1.9	12	14	69	2.8	240	See Note 4
GIW-02	12/12/2017	5.7	32	7.3	43	11	550	See Note 4

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)	(%)	(%)	(%)	(%)	(ppm)	
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-03	10/9/2017	3.3	53	1.9	17	24	1,400	
GIW-03	11/6/2017	2.9	47	2.1	25	23	1,300	
GIW-03	12/12/2017	1.1	59	ND	ND	37	1,900	
GIW-03	1/8/2018	1.5	54	ND	ND	41	1,700	
GIW-03	2/5/2018	1.4	61	ND	ND	34	1,600	
GIW-04	10/9/2017	3.3	53	3	15	26	1,400	
GIW-04	11/6/2017	1.5	48	4.5	18	27	1,500	
GIW-04	12/12/2017	0.096	5.6	20	69	6	280	See Note 4
GIW-04	1/8/2018	0.53	46	1.5	5.1	46	1,700	
GIW-04	2/5/2018	0.50	36	5.7	20	37	1,200	See Note 4
GIW-05	10/9/2017	0.36	7.2	18	66	8.2	150	See Note 4
GIW-05	11/6/2017	0.21	4.1	20	73	2.3	68	See Note 4
GIW-05	12/12/2017	0.32	8.7	18	62	11	120	See Note 4
GIW-05	1/8/2018	0.92	28	10	36	25	350	See Note 3
GIW-05	2/5/2018	0.45	9.7	17	59	14	180	See Note 4
GIW-06	10/9/2017	15	43	ND	25	15	340	
GIW-06	11/6/2017	17	43	1.6	25	14	320	
GIW-06	12/13/2017	1.7	50	ND	3.5	43	830	
GIW-06	1/8/2018	12	48	ND	9.5	29	560	
GIW-06	2/5/2018	2.6	47	1.6	9.0	39	740	
GIW-07	10/9/2017	22	61	ND	10	5	210	
GIW-07	11/6/2017	21	62	1.9	11	4.3	250	
GIW-07	12/13/2017	19	58	2.6	14	6.3	340	
GIW-07	1/9/2018	30	56	ND	7.1	6.1	350	
GIW-07	2/5/2018	25	56	1.4	11	6.1	310	
GIW-08	10/9/2017	24	55	ND	19	0.49	78	
GIW-08	11/6/2017	22	52	1.8	24	0.48	67	
GIW-08	12/13/2017	25	51	ND	22	0.68	82	
GIW-08	1/9/2018	29	54	ND	15	0.49	68	
GIW-08	2/5/2018	22	52	ND	25	0.47	64	
GIW-09	10/9/2017	3.9	17	9.8	66	2.6	160	See Note 4
GIW-09	11/6/2017	4	15	12	67	2.4	150	See Note 4
GIW-09	12/13/2017	13	21	5.9	55	5	150	See Note 3
GIW-09	1/9/2018	4.9	14	14	65	2.1	120	See Note 4
GIW-09	2/5/2018	3.9	13	12	66	5.0	200	See Note 4
GIW-10	10/9/2017	14	36	ND	34	15	470	
GIW-10	11/6/2017	11	31	ND	41	15	470	
GIW-10	12/12/2017	6.1	42	ND	17	34	660	
GIW-10	1/9/2018	4.9	41	1.8	17	36	650	
GIW-10	2/5/2018	6.9	40	ND	24	28	560	
GIW-11	10/9/2017	15	40	2.6	30	12	560	
GIW-11	11/6/2017	13	38	1.7	33	14	620	
GIW-11	12/12/2017	29	46	ND	6.4	18	590	
GIW-11	1/9/2018	9.2	47	ND	20	22	910	
GIW-11	2/5/2018	7.7	44	ND	27	20	860	
GIW-12	10/9/2017	6.2	33	8.7	37	15	990	See Note 4
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-13	10/9/2017	20	57	ND	5.2	16	550	
GIW-13	11/6/2017	24	56	ND	3.9	15	540	
GIW-13	12/12/2017	17	56	ND	5.5	20	610	
GIW-13	1/9/2018	18	58	ND	3.2	20	560	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO ₂	O ₂ /Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)	(ppm)					
GIW-13	2/5/2018	18	59	ND	4.1	18	490	
Flare Station ²	10/10/2017	12.1	33.6	7.8	36.0	9.5	535	See Note 6
Flare Station ²	11/2/2017	11.5	32.3	8.3	37.6	9.5	530	See Note 6
Flare Station ²	12/5/2017	11.9	33.8	7.7	35.4	10.5	555	See Note 6
Flare Station ²	1/3/2018	12.4	33.7	8.1	34.6	10.7	545	See Note 6
Flare Station ²	2/5/2018	12.2	33.0	7.6	36.2	10.3	505	See Note 6

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

ND = Analyte not detected in sample.

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

ATTACHMENT D-2

LAB ANALYSIS REPORTS



February 14, 2018



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

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

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

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

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: J020705-01/35

Enclosed are results for sample(s) received 2/07/18 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

Preliminary results were e-mailed to Mike Lambrich and Erin Fanning; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group; and Jan Feezor, Feezor Engineering on 2/14/18.

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,

A handwritten signature in blue ink that appears to read "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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



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

CHAIN OF CUSTODY RECORD

				TURNAROUND TIME		DELIVERABLES		PAGE: 1 OF 4	
Project No.:				Standard <input type="checkbox"/>	48 hours <input type="checkbox"/>	EDD <input type="checkbox"/>	Condition upon receipt: Sealed Yes <input type="checkbox"/> No <input type="checkbox"/> Intact Yes <input type="checkbox"/> No <input type="checkbox"/> Chilled _____ deg C		
Project Name: Bridgeton Landfill				Same Day <input type="checkbox"/>	72 hours <input type="checkbox"/>	EDF <input type="checkbox"/>			
Report To: Mike Lambrich				24 hours <input type="checkbox"/>	96 hours <input type="checkbox"/>	Level 3 <input type="checkbox"/>			
Company: Republic Services				Other: 5 Day		Level 4 <input type="checkbox"/>			
Street: 13570 St. Charles Rock Rd.				BILLING			ANALYSIS REQUEST		
City/State/Zip: Bridgeton, MO 63044				P.O. No.: PO7112802					
Phone& Fax: 314-683-3921				Bill to: Republic Services					
e-mail: Mlambrich@republicservices.com				Attn: Mike Lambrich					
				13570 St. Charles Rock Rd.					
				Bridgeton, MO 63044					

LAB USE ONLY	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER	ACTV/TYPE	MATRIX	PRESERVATION	D1946 + CO ₂ , H2	INTEGRITY
	Cannister ID	Sample Start	Sample End									
J020705-01	3128	-21.5	-5	GIW 1	2/5/2018	9:07	C	LFG	NA	X		-3
-02	A7814	-21.4	-5	GIW 2	2/5/2018	9:19	C	LFG	NA	X		-3
-03	5318	-21.6	-5	GIW 3	2/5/2018	9:50	C	LFG	NA	X		-3
-04	6160	-21.7	-5	GIW 4	2/5/2018	10:01	C	LFG	NA	X		-3
-05	A7764	-21.2	-5	GIW 5	2/5/2018	11:01	C	LFG	NA	X		-3
-06	5306	-21.3	-5	GIW 6	2/5/2018	11:17	C	LFG	NA	X		-3
-07	A7807	-21.1	-5	GIW 7	2/5/2018	11:36	C	LFG	NA	X		-3
-08	A7794	-21.4	-5	GIW 8	2/5/2018	13:24	C	LFG	NA	X		-3
-09	4656	-21.4	-5	GIW 9	2/5/2018	13:35	C	LFG	NA	X		-3
-10	5833	-21	-5	GIW 10	2/5/2018	13:46	C	LFG	NA	X		-3.5

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	COMMENTS	
SAMPLED BY: Tim Ahrens	COMPANY: Cornerstone Env.	DATE/TIME	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
METHOD OF TRANSPORT (circle one): Walk-In (FedEx) UPS Courier ATLI Other			

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

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



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CHAIN OF CUSTODY RECORD

		TURNAROUND TIME		DELIVERABLES		PAGE: 2 OF 4	
Project No.:		Standard <input type="checkbox"/>	48 hours <input type="checkbox"/>	EDD <input type="checkbox"/>		Condition upon receipt:	
Project Name:	Bridgeton Landfill	Same Day <input type="checkbox"/>	72 hours <input type="checkbox"/>	EDF <input type="checkbox"/>		Sealed Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report To:	Mike Lambrich	24 hours <input type="checkbox"/>	96 hours <input type="checkbox"/>	Level 3 <input type="checkbox"/>		Intact Yes <input type="checkbox"/> No <input type="checkbox"/>	
Company:	Republic Services	Other: 5 Day		Level 4 <input type="checkbox"/>		Chilled _____ deg C	
Street:	13570 St. Charles Rock Rd.	BILLING				ANALYSIS REQUEST	
City/State/Zip:	Bridgeton, MO 63044	P.O. No.: PO7112802					
Phone & Fax:	314-683-3921	Bill to: Republic Services					
e-mail:	Mlambrich@republicservices.com	Attn: Mike Lambrich					
		13570 St. Charles Rock Rd.					
		Bridgeton, MO 63044					

LAB USE ONLY	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVA-TION	D1946 + CO ₂ , H2	INSTRUMENT PRESSURE
	Cannister ID	Sample Start	Sample End								
J020705-11	A7649	-21.2	-5	GIW 11	2/5/2018	14:00	C	LFG	NA	X	-3.5
-12	3126	-21.1	-5	GIW 12	2/5/2018	14:10	C	LFG	NA	X	-3.5
-13	5815	-21.5	-5	GIW 13	2/5/2018	14:20	C	LFG	NA	X	-3
-14	A7781	-22	-5	GEW 56R	2/6/2018	8:22	C	LFG	NA	X	-2
-15	A7775	-21.8	-5	GEW 110	2/6/2018	8:39	C	LFG	NA	X	-2
-16	A7663	-21.9	-5	GEW 10	2/6/2018	8:51	C	LFG	NA	X	-2.9
-17	5817	-21.9	-5	GEW 38	2/6/2018	9:26	C	LFG	NA	X	-2
-18	5836	-21.5	-5	GEW 109	2/6/2018	9:37	C	LFG	NA	X	-3
-19	5305	-21.6	-5	GEW 39	2/6/2018	9:48	C	LFG	NA	X	-3

AUTHORIZATION TO PERFORM WORK: Dave Penoyer		COMPANY: Republic Services		COMMENTS	
SAMPLED BY: Tim Ahrens	COMPANY: Cornerstone Env.		DATE/TIME		
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME		
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME		
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME		
METHOD OF TRANSPORT (circle one): Walk-In <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> Courier <input type="checkbox"/> ATLI <input type="checkbox"/> 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



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Fx: 626-964-5832

CHAIN OF CUSTODY RECORD

Project No.:		TURNAROUND TIME		DELIVERABLES		PAGE: 3 OF 4		
		Standard <input type="checkbox"/>	48 hours <input type="checkbox"/>	EDD <input type="checkbox"/>	Condition upon receipt:			
		Same Day <input type="checkbox"/>	72 hours <input type="checkbox"/>	EDF <input type="checkbox"/>	Sealed Yes <input type="checkbox"/> No <input type="checkbox"/>			
		24 hours <input type="checkbox"/>	96 hours <input type="checkbox"/>	Level 3 <input type="checkbox"/>	Intact Yes <input type="checkbox"/> No <input type="checkbox"/>			
		Other: 5 Day		Level 4 <input type="checkbox"/>	Chilled _____ deg C			
Project Name: Bridgeton Landfill		BILLING				ANALYSIS REQUEST		
Report To: Mike Lambrich								
Company: Republic Services		P.O. No.: PO7112802				^{INITIAL} ^{PRESS} D1946 + CO ₂ , H ₂		
Street: 13570 St. Charles Rock Rd.		Bill to: Republic Services						
City/State/Zip: Bridgeton, MO 63044		Attn: Mike Lambrich						
Phone & Fax: 314-683-3921		13570 St. Charles Rock Rd.						
e-mail: Mlambrich@republicservices.com		Bridgeton, MO 63044						

LAB USE ONLY	Cannister Pressure ("hg)			SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVA-TION	D1946 + CO ₂ , H ₂	^{INITIAL} ^{PRESS}
	Cannister ID	Sample Start	Sample End								
J020705-20	3440	-21	-5	GEW 2	2/5/2018	15:04	C	LFG	NA	X	-3
-21	5910	-21.1	-5	GEW 3	2/5/2018	15:26	C	LFG	NA	X	-3
-22	A8096	-20.9	-5	GEW 4	2/5/2018	15:38	C	LFG	NA	X	-3.5
-23	5819	-21.1	-5	GEW 5	2/6/2018	9:06	C	LFG	NA	X	-3
-24	3157	-21.5	-5	GEW 48	2/6/2018	9:19	C	LFG	NA	X	-3
-25	A7646	-21.6	-5	GEW 47R	2/6/2018	9:33	C	LFG	NA	X	-3
-26	5323	-21.8	-5	GEW 49	2/6/2018	9:48	C	LFG	NA	X	-3
-27	A7816	-21.7	-5	GEW 46R	2/6/2018	10:06	C	LFG	NA	X	-3
-28	A7770	-21.4	-5	GEW 45R	2/6/2018	10:18	C	LFG	NA	X	-3
-29	3131	-21.6	-5	GEW 42R	2/6/2018	10:38	C	LFG	NA	X	-3

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	COMMENTS			
SAMPLED BY: Anthony Kimutis	COMPANY: Republic Services	⁴⁰²⁰⁷⁰⁵			
RELINQUISHED BY	DATE/TIME			RECEIVED BY	DATE/TIME
RELINQUISHED BY	DATE/TIME			RECEIVED BY	DATE/TIME
RELINQUISHED BY	DATE/TIME			RECEIVED BY	DATE/TIME
METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other					

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



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Fx: 626-964-5832

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@publicservices.com

CHAIN OF CUSTODY RECORD

TURNAROUND TIME		DELIVERABLES		PAGE:	4	OF	4
Standard	<input type="checkbox"/>	48 hours	<input type="checkbox"/>	EDD	<input type="checkbox"/>	Condition upon receipt:	
Same Day	<input type="checkbox"/>	72 hours	<input type="checkbox"/>	EDF	<input type="checkbox"/>	Sealed	Yes <input type="checkbox"/> No <input type="checkbox"/>
24 hours	<input type="checkbox"/>	96 hours	<input type="checkbox"/>	Level 3	<input type="checkbox"/>	Intact	Yes <input type="checkbox"/> No <input type="checkbox"/>
Other: <i>5 Day</i>				Level 4	<input type="checkbox"/>	Chilled	_____ deg C

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

ANALYSIS REQUEST

AUTHORIZATION TO PERFORM WORK: **Dave Penoyer** COMPANY: **Republic Serv**

AUTHORIZATION TO PERFORM WORK: DAVE T. CHASE COMPANY: REPUBLIC SERVICES

COMMENTS

SAMPLED BY: Anthony Kimutis

COMPANY: Republic Services

DATE/TIME

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REINHOLD WINTER

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17/18

METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier AT&T Other

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

Preservation: H=HCl, N=None / Container: B=Bag, C=Can, V=VOA, O=Other Page: 03 / 57

Client: Republic Services
 Attn: Mike Lambrich
 Project Name: Bridgeton Landfill
 Project No.: NA
 Date Received: 02/07/18
 Matrix: Air
 Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-01	J020705-02	J020705-03	J020705-04
Client Sample I.D.:	GIW 1	GIW 2	GIW 3	GIW 4
Date/Time Sampled:	2/5/18 9:07	2/5/18 9:19	2/5/18 9:50	2/5/18 10:01
Date/Time Analyzed:	2/8/18 13:16	2/8/18 13:31	2/8/18 13:45	2/8/18 14:00
QC Batch No.:	180208GC8A2	180208GC8A2	180208GC8A2	180208GC8A2
Analyst Initials:	AS	AS	AS	AS
Dilution Factor:	2.8	2.8	2.8	2.8
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	27	2.8	5.6	2.8
Carbon Dioxide	61	0.028	18	0.028
Oxygen/Argon	ND	1.4	14	1.4
Nitrogen	5.2	2.8	61	2.8
Methane	4.9	0.0028	2.5	0.0028
Carbon Monoxide	0.13	0.0028	0.038	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date 2/14/18

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/07/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-05	J020705-06	J020705-07	J020705-08
Client Sample I.D.:	GIW 5	GIW 6	GIW 7	GIW 8
Date/Time Sampled:	2/5/18 11:01	2/5/18 11:17	2/5/18 11:36	2/5/18 13:24
Date/Time Analyzed:	2/8/18 14:14	2/8/18 14:29	2/8/18 14:43	2/8/18 14:58
QC Batch No.:	180208GC8A2	180208GC8A2	180208GC8A2	180208GC8A2
Analyst Initials:	AS	AS	AS	AS
Dilution Factor:	2.8	2.8	2.8	2.8
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	14	2.8	39	2.8
Carbon Dioxide	9.7	0.028	47	0.028
Oxygen/Argon	17	1.4	1.6	1.4
Nitrogen	59	2.8	9.0	2.8
Methane	0.45	0.0028	2.6	0.0028
Carbon Monoxide	0.018	0.0028	0.074	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary analysis. QC Batch: 180214GC8A1

Reviewed/Approved By: _____



Mark Johnson
Operations Manager

Date 2/14/18

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Republic Services
 Attn: Mike Lambrich
 Project Name: Bridgeton Landfill
 Project No.: NA
 Date Received: 02/07/18
 Matrix: Air
 Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-09	J020705-10		J020705-11		J020705-12		
Client Sample I.D.:	GIW 9	GIW 10		GIW 11		GIW 12		
Date/Time Sampled:	2/5/18 13:35	2/5/18 13:46		2/5/18 14:00		2/5/18 14:10		
Date/Time Analyzed:	2/8/18 15:13	2/8/18 15:27		2/8/18 15:42		2/8/18 15:56		
QC Batch No.:	180208GC8A2	180208GC8A2		180208GC8A2		180208GC8A2		
Analyst Initials:	AS	AS		AS		AS		
Dilution Factor:	2.8	2.9		2.9		2.9		
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	5.0	2.8	28	2.9	20	2.9	18	2.9
Carbon Dioxide	13	0.028	40	0.029	44	0.029	41	0.029
Oxygen/Argon	12	1.4	ND	1.4	ND	1.4	2.5	1.4
Nitrogen	66	2.8	24	2.9	27	2.9	29	2.9
Methane	3.9	0.0028	6.9	0.0029	7.7	0.0029	9.8	0.0029
Carbon Monoxide	0.020	0.0028	0.056	0.0029	0.086	0.0029	0.093	0.0029

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date 2/14/18

The cover letter is an integral part of this analytical report



Air TECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/07/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-13	J020705-14		J020705-15		J020705-16		
Client Sample I.D.:	GIW 13		GEW 56R		GEW 110		GEW 10	
Date/Time Sampled:	2/5/18 14:20		2/6/18 8:22		2/6/18 8:39		2/6/18 8:51	
Date/Time Analyzed:	2/8/18 16:11		2/8/18 16:26		2/8/18 16:40		2/8/18 16:55	
QC Batch No.:	180208GC8A2		180208GC8A2		180208GC8A2		180208GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.8		2.7		2.7		2.7	
ANALYTE	Result % v/v	RL % v/v						
Hydrogen	18	2.8	18	2.7	35	2.7	0.25	d 0.027
Carbon Dioxide	59	0.028	43	0.027	50	0.027	41	0.027
Oxygen/Argon	ND	1.4	ND	1.3	ND	1.3	ND	1.4
Nitrogen	4.1	2.8	11	2.7	ND	2.7	ND	2.7
Methane	18	0.0028	28	0.0027	11	0.0027	56	0.0027
Carbon Monoxide	0.049	0.0028	0.057	0.0027	0.13	0.0027	ND	0.0027

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary analysis. QC Batch: 180214GC8A1

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date 2/14/18

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/07/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-17	J020705-18	J020705-19	J020705-20				
Client Sample I.D.:	GEW 38	GEW 109	GEW 39	GEW 2				
Date/Time Sampled:	2/6/18 9:26	2/6/18 9:37	2/6/18 9:48	2/5/18 15:04				
Date/Time Analyzed:	2/8/18 19:35	2/8/18 19:50	2/8/18 20:04	2/8/18 20:19				
QC Batch No.:	180208GC8A3	180208GC8A3	180208GC8A3	180208GC8A3				
Analyst Initials:	AS	AS	AS	AS				
Dilution Factor:	2.7	2.8	2.8	2.8				
ANALYTE	Result % v/v	RL % v/v						
Hydrogen	31	2.7	9.1	2.8	0.042 d	0.028	ND d	0.028
Carbon Dioxide	46	0.027	31	0.028	32	0.028	40	0.028
Oxygen/Argon	2.2	1.3	2.0	1.4	4.5	1.4	ND	1.4
Nitrogen	7.4	2.7	44	2.8	37	2.8	ND	2.8
Methane	13	0.0027	14	0.0028	26	0.0028	56	0.0028
Carbon Monoxide	0.15	0.0027	0.037	0.0028	0.0042	0.0028	ND	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary analysis. QC Batch: 180214GC8A1

Reviewed/Approved By: _____



Mark Johnson

Operations Manager

Date 2/14/18

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AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Republic Services
 Attn: Mike Lambrich
 Project Name: Bridgeton Landfill
 Project No.: NA
 Date Received: 02/07/18
 Matrix: Air
 Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-21	J020705-22		J020705-23		J020705-24			
Client Sample I.D.:	GEW 3	GEW 4		GEW 5		GEW 48			
Date/Time Sampled:	2/5/18 15:26	2/5/18 15:38		2/6/18 9:06		2/6/18 9:19			
Date/Time Analyzed:	2/9/18 8:22	2/9/18 8:36		2/9/18 8:51		2/9/18 9:05			
QC Batch No.:	180208GC8A3	180208GC8A3		180208GC8A3		180208GC8A3			
Analyst Initials:	AS	AS		AS		AS			
Dilution Factor:	2.8	2.9		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	0.10	d	0.028	0.070	d	0.029	ND	d	0.028
Carbon Dioxide	37	0.028	36	0.029	30	0.028	36	0.028	
Oxygen/Argon	ND	1.4	ND	1.4	ND	1.4	ND	1.4	
Nitrogen	14	2.8	15	2.9	33	2.8	13	2.8	
Methane	48	0.0028	47	0.0029	37	0.0028	51	0.0028	
Carbon Monoxide	ND	0.0028	ND	0.0029	ND	0.0028	ND	0.0028	

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary analysis. QC Batch: 180214GC8A1

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date 2/14/18

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Air TECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/07/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-25	J020705-26	J020705-27	J020705-28				
Client Sample I.D.:	GEW 47R	GEW 49	GEW 46R	GEW 45R				
Date/Time Sampled:	2/6/18 9:33	2/6/18 9:48	2/6/18 10:06	2/6/18 10:18				
Date/Time Analyzed:	2/9/18 9:20	2/9/18 9:34	2/9/18 9:49	2/9/18 10:03				
QC Batch No.:	180208GC8A3	180208GC8A3	180208GC8A3	180208GC8A3				
Analyst Initials:	AS	AS	AS	AS				
Dilution Factor:	2.8	2.8	2.8	2.8				
ANALYTE	Result % v/v	RL % v/v						
Hydrogen	ND d	0.028	ND d	0.028	0.085 d	0.028	ND d	0.028
Carbon Dioxide	36	0.028	33	0.028	36	0.028	42	0.028
Oxygen/Argon	ND	1.4	ND	1.4	ND	1.4	ND	1.4
Nitrogen	15	2.8	19	2.8	13	2.8	ND	2.8
Methane	48	0.0028	47	0.0028	51	0.0028	56	0.0028
Carbon Monoxide	ND	0.0028	ND	0.0028	ND	0.0028	ND	0.0028

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary analysis. QC Batch: 180214GC8A1

Reviewed/Approved By: _____

Mark Johnson
Mark Johnson
Operations Manager

Date 2/14/18

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AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/07/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-29		J020705-30		J020705-31		J020705-32	
Client Sample I.D.:	GEW 42R		GEW 54		GEW 53		GEW 55	
Date/Time Sampled:	2/6/18 10:38		2/6/18 10:52		2/6/18 11:05		2/6/18 11:21	
Date/Time Analyzed:	2/9/18 10:18		2/9/18 10:33		2/9/18 10:47		2/9/18 11:02	
QC Batch No.:	180208GC8A3		180208GC8A3		180208GC8A3		180208GC8A3	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	2.8		2.8		2.8		2.8	
ANALYTE	Result % v/v	RL % v/v						
Hydrogen	ND	d	0.028	2.1	d	0.028	4.7	2.8
Carbon Dioxide	39		0.028	39		0.028	39	0.028
Oxygen/Argon	ND		1.4	1.4		1.4	ND	1.4
Nitrogen	3.1		2.8	6.1		2.8	6.1	2.8
Methane	57		0.0028	52		0.0028	49	0.0028
Carbon Monoxide	ND		0.0028	0.0028		0.0060	0.0028	0.0030

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary analysis. QC Batch: 180214GC8A1

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager
Date 2/14/18

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**AirTECHNOLOGY Laboratories, Inc.**

page 1 of 1

Client: Republic Services
Attn: Mike Lambrich
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 02/07/18
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	J020705-33		J020705-34		J020705-35			
Client Sample I.D.:	GEW 40		GEW 8		GEW 9			
Date/Time Sampled:	2/6/18 11:40		2/6/18 11:52		2/6/18 12:02			
Date/Time Analyzed:	2/9/18 11:16		2/9/18 11:31		2/9/18 11:45			
QC Batch No.:	180208GC8A3		180208GC8A3		180208GC8A3			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	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		
Hydrogen	ND	d	0.028	0.55	d	0.028	1.1	d
Carbon Dioxide	35		0.028	41		0.028	37	
Oxygen/Argon	1.4		1.4	ND		1.4	ND	
Nitrogen	7.7		2.8	3.9		2.8	12	
Methane	56		0.0028	54		0.0028	49	
Carbon Monoxide	ND		0.0028	ND		0.0028	ND	

Results normalized including non-methane hydrocarbons

ND = Not Detected (below RL)

RL = Reporting Limit

d = Reported from a secondary analysis. QC Batch: 180214GC8A1

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date 2/14/18

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AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

QC Batch No: 180208GC8A2
 Matrix: Air
 Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK		LCS		LCSD			Limits			
	Date Analyzed:	2/8/18 12:32		2/8/18 11:48		2/8/18 12:03		Low %Rec	High %Rec	Max. RPD	
Analyst Initials:	AS		AS		AS			Low %Rec	High %Rec	Max. RPD	
Dilution Factor:	1.0		1.0		1.0			Low %Rec	High %Rec	Max. RPD	
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	5.75	115	5.66	113	1.6	70	130	30
Carbon Dioxide	ND	0.010	10	9.36	93	9.35	93	0.0	70	130	30
Oxygen/Argon	ND	0.50	15	15.7	106	15.7	106	0.0	70	130	30
Nitrogen	ND	1.0	70	71.2	102	71.1	102	0.1	70	130	30
Methane	ND	0.0010	0.10	0.109	109	0.109	109	0.1	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.108	108	0.108	108	0.4	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
 Operations Manager

Date 2/14/18

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AirTECHNOLOGY Laboratories, Inc.

QC Batch No: 180208GC8A3

Matrix: Air

Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK		LCS	LCSD			Limits				
Date Analyzed:	2/8/18 19:21		2/8/18 18:22	2/8/18 18:37							
Analyst Initials:	AS		AS	AS							
Dilution Factor:	1.0		1.0	1.0							
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Hydrogen	ND	1.0	5.0	5.08	102	5.04	101	0.8	70	130	30
Carbon Dioxide	ND	0.010	10	9.11	91	9.07	91	0.4	70	130	30
Oxygen/Argon	ND	0.50	15	16.1	108	16.1	109	0.1	70	130	30
Nitrogen	ND	1.0	70	71.8	103	71.7	103	0.1	70	130	30
Methane	ND	0.0010	0.10	0.107	107	0.106	106	0.2	70	130	30
Carbon Monoxide	ND	0.0010	0.10	0.106	106	0.106	106	0.4	70	130	30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date 2/14/18

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**AirTECHNOLOGY Laboratories, Inc.**

QC Batch # 180214GC8A1
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	2/14/2018 8:54		2/14/2018 8:44		2/14/2018 8:49			
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	98	70-130	96	70-130	1.9	<20

ND = Not Detected (Below RL)

RL = PQL X Dilution Factor

Reviewed/Approved By:


Mark Johnson
Operations Manager

Date: 2/14/18

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AirTECHNOLOGY Laboratories, Inc.

ATTACHMENT E

GAS WELLFIELD DATA

ATTACHMENT E-1

WELLFIELD DATA TABLE

February 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 ₂ O		
GEW-002	2/1/2018 15:09	54.9	41.4	0.0	3.7	115.1	115.0	34.0	32.8	-0.3	-0.3	-12.9
GEW-002	2/5/2018 14:59	57.0	41.3	0.0	1.7	115.3	115.3	19.6	20.2	0.3	0.4	-13.6
GEW-002	2/5/2018 15:09	56.1	42.1	0.0	1.8	115.0	115.0	18.1	18.5	0.2	0.2	-13.4
GEW-002	2/6/2018 8:48	55.3	42.8	0.0	1.9	115.7	115.7	20.0	18.6	-0.3	-0.3	-14.6
GEW-002	2/12/2018 15:00	55.4	39.7	0.0	4.9	116.8	116.8	20.0	23.9	-0.4	-0.3	-15.2
GEW-002	2/20/2018 10:25	54.5	42.6	0.0	2.9	117.2	117.1	22.2	23.6	-0.2	-0.3	-13.6
GEW-002	2/26/2018 13:41	55.7	39.3	0.0	5.0	117.4	117.3	21.7	21.7	-0.2	-0.2	-14.0
GEW-003	2/1/2018 15:19	38.8	32.0	0.0	29.2	105.7	106.0	11.9	16.5	-0.8	-0.7	-13.3
GEW-003	2/1/2018 15:21	37.1	33.8	0.0	29.1	103.2	102.9	6.1	2.9	-0.7	-0.7	-13.2
GEW-003	2/5/2018 15:23	48.6	38.5	0.0	12.9	103.3	103.0	7.9	9.2	0.3	0.3	-12.9
GEW-003	2/5/2018 15:31	48.1	39.0	0.0	12.9	103.3	103.5	5.8	8.8	0.2	0.2	-12.9
GEW-003	2/6/2018 8:52	40.3	35.2	0.0	24.5	101.1	102.1	4.1	5.4	-0.3	-0.3	-12.6
GEW-003	2/6/2018 8:53	40.1	36.0	0.0	23.9	101.8	101.8	7.2	4.7	-0.3	-0.3	-13.2
GEW-003	2/12/2018 15:04	41.4	36.1	0.0	22.5	104.8	104.5	4.4	2.3	-0.2	-0.2	-14.7
GEW-003	2/12/2018 15:06	41.4	36.5	0.0	22.1	104.9	104.8	20.9	20.7	-0.2	-0.2	-14.7
GEW-003	2/20/2018 10:30	43.6	37.5	0.0	18.9	106.2	106.2	9.4	9.4	-0.2	-0.2	-13.0
GEW-003	2/20/2018 10:32	43.1	37.8	0.0	19.1	106.2	106.3	20.2	20.0	-0.3	-0.3	-13.2
GEW-003	2/26/2018 13:45	45.7	37.7	0.0	16.6	107.9	108.0	6.9	6.9	0.0	0.0	-13.1
GEW-003	2/26/2018 13:47	45.6	38.3	0.0	16.1	108.0	108.2	4.1	5.6	0.0	0.0	-13.2
GEW-003	2/27/2018 10:47	45.5	38.5	0.0	16.0	108.0	108.0	10.8	11.0	0.0	0.0	-13.2
GEW-003	2/27/2018 10:49	45.4	38.2	0.0	16.4	108.2	108.0	10.2	11.8	0.0	0.0	-12.9
GEW-003	2/28/2018 13:51	46.7	36.8	0.0	16.5	114.0	114.0	16.0	17.9	-0.1	-0.1	-13.0
GEW-004	2/1/2018 15:24	41.8	35.4	0.0	22.8	115.1	115.0	14.5	14.5	-0.8	-0.8	-13.2
GEW-004	2/1/2018 15:26	41.6	36.2	0.0	22.2	113.5	113.5	9.8	11.1	-0.8	-0.7	-13.8
GEW-004	2/5/2018 15:34	46.4	38.4	0.0	15.2	111.7	112.2	8.3	8.3	0.1	0.1	-13.2
GEW-004	2/5/2018 15:42	47.0	37.6	0.0	15.4	112.7	112.0	8.3	8.5	0.0	-0.1	-12.5
GEW-004	2/12/2018 15:09	47.5	37.3	0.0	15.2	113.7	113.5	11.6	11.6	-0.3	-0.3	-14.5
GEW-004	2/20/2018 10:36	48.7	38.8	0.0	12.5	114.0	113.2	26.1	26.7	-0.2	-0.3	-13.0
GEW-004	2/26/2018 13:50	49.4	38.3	0.0	12.3	114.0	114.0	13.8	13.8	-0.1	-0.1	-13.2
GEW-005	2/1/2018 15:46	33.8	29.9	0.0	36.3	84.9	84.9	9.2	10.4	-0.5	-0.4	-14.2
GEW-005	2/1/2018 15:48	33.2	30.9	0.0	35.9	83.3	83.4	4.9	5.6	-0.4	-0.4	-13.7
GEW-005	2/6/2018 9:02	35.8	32.4	0.0	31.8	80.3	79.8	28.5	28.2	-0.1	-0.2	-13.1
GEW-005	2/6/2018 9:10	36.4	32.0	0.0	31.6	80.5	80.3	27.9	28.6	-0.1	-0.1	-12.8
GEW-005	2/12/2018 15:19	38.5	33.6	0.0	27.9	84.7	84.9	22.8	25.2	-0.1	-0.1	-14.3
GEW-005	2/20/2018 10:50	40.3	35.1	0.0	24.6	86.5	86.5	0.0	3.9	-0.1	-0.1	-13.2
GEW-005	2/26/2018 14:14	43.1	33.7	0.0	23.2	86.3	86.1	11.5	8.8	0.1	0.0	-13.3
GEW-005	2/26/2018 14:16	43.2	34.5	0.0	22.3	86.3	86.1	5.0	4.2	0.0	0.0	-13.2
GEW-005	2/27/2018 10:59	42.3	35.2	0.0	22.5	86.8	86.8	8.3	14.9	0.2	0.2	-13.1
GEW-005	2/27/2018 11:01	42.6	35.0	0.0	22.4	87.0	87.0	9.2	6.2	0.2	0.2	-13.1
GEW-005	2/28/2018 13:45	43.8	35.7	0.0	20.5	91.7	91.9	21.3	23.7	-0.1	-0.1	-13.6
GEW-006	2/2/2018 8:53	37.0	31.4	0.2	31.4	77.1	77.3	13.3	16.2	-0.3	-0.3	-13.1

February 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 ₂ O		
GEW-006	2/2/2018 8:54	37.2	31.7	0.2	30.9	73.9	73.8	10.8	6.2	-0.1	-0.1	-12.6
GEW-006	2/7/2018 8:47	45.3	35.0	0.0	19.7	61.6	61.6	5.6	11.9	-0.1	-0.1	-15.3
GEW-006	2/12/2018 15:27	52.1	36.2	0.0	11.7	74.5	74.6	7.2	5.8	0.1	0.0	-14.6
GEW-006	2/12/2018 15:29	52.1	36.7	0.0	11.2	75.2	75.5	5.4	4.9	0.0	0.1	-14.8
GEW-006	2/13/2018 11:06	53.8	35.5	0.0	10.7	77.5	77.7	10.0	9.6	0.1	0.1	-13.6
GEW-006	2/13/2018 11:09	53.1	36.1	0.0	10.8	80.8	81.0	5.5	5.9	0.1	0.1	-14.5
GEW-006	2/14/2018 8:33	53.4	37.2	0.0	9.4	81.9	82.1	12.3	12.2	0.0	0.0	-14.4
GEW-006	2/14/2018 8:35	53.3	36.6	0.0	10.1	82.3	82.5	11.7	11.6	0.0	0.0	-14.3
GEW-006	2/20/2018 11:01	49.4	36.8	0.0	13.8	83.4	83.5	5.4	9.4	-0.1	-0.1	-13.4
GEW-006	2/26/2018 14:26	52.3	36.5	0.0	11.2	87.5	87.7	0.0	0.0	0.0	0.0	-13.4
GEW-006	2/26/2018 14:27	52.5	37.0	0.0	10.5	87.7	87.8	5.0	5.7	-0.1	-0.1	-13.7
GEW-007	2/1/2018 10:11	57.7	39.5	0.0	2.8	82.3	82.6	12.3	9.5	-3.6	-3.6	-14.4
GEW-007	2/1/2018 10:13	57.5	39.0	0.0	3.5	81.5	81.7	31.3	31.5	-3.6	-3.6	-14.6
GEW-007	2/7/2018 9:10	57.5	40.2	0.0	2.3	81.9	81.9	11.3	10.6	-2.6	-2.6	-15.2
GEW-007	2/7/2018 9:12	56.9	40.4	0.0	2.7	79.6	79.4	32.8	32.5	-1.7	-1.7	-15.2
GEW-007	2/12/2018 10:42	58.5	39.5	0.0	2.0	80.3	80.2	10.3	10.3	-1.6	-1.6	-14.6
GEW-007	2/12/2018 10:43	57.4	40.2	0.0	2.4	80.2	79.8	8.3	8.3	-1.6	-1.6	-14.5
GEW-007	2/20/2018 11:33	57.0	41.0	0.0	2.0	83.1	83.3	12.3	10.7	-0.8	-0.8	-13.5
GEW-007	2/20/2018 11:34	57.0	41.6	0.0	1.4	83.2	83.1	8.7	9.5	-0.8	-0.8	-13.2
GEW-007	2/26/2018 10:04	56.5	39.0	0.0	4.5	83.0	83.0	9.2	10.0	-1.2	-1.2	-13.7
GEW-008	2/1/2018 10:18	52.9	41.6	0.0	5.5	109.3	109.5	12.1	15.5	-1.4	-1.4	-14.7
GEW-008	2/6/2018 11:49	56.8	38.2	0.0	5.0	109.2	110.0	14.0	15.9	-0.7	-0.7	-12.0
GEW-008	2/6/2018 11:55	53.3	41.1	0.0	5.6	109.2	109.5	15.7	15.9	-0.6	-0.6	-12.5
GEW-008	2/12/2018 10:48	51.9	41.7	0.0	6.4	110.7	111.5	11.4	14.7	-1.0	-1.0	-14.7
GEW-008	2/20/2018 11:38	52.7	44.0	0.0	3.3	111.7	112.0	16.8	13.7	-0.6	-0.7	-13.3
GEW-008	2/26/2018 10:09	51.9	40.8	0.0	7.3	111.2	111.7	16.2	13.2	-0.9	-0.9	-13.6
GEW-009	2/1/2018 10:22	41.8	38.7	0.0	19.5	113.5	113.8	17.5	18.5	-0.7	-0.7	-18.9
GEW-009	2/1/2018 10:23	41.8	38.1	0.0	20.1	113.2	113.5	22.9	22.7	-0.5	-0.5	-19.5
GEW-009	2/6/2018 11:58	47.9	39.8	0.0	12.3	115.2	114.8	3.8	8.9	-0.1	-0.1	-17.4
GEW-009	2/6/2018 12:05	49.6	38.2	0.0	12.2	115.5	115.3	9.7	7.6	-0.1	-0.1	-17.5
GEW-009	2/12/2018 10:51	45.4	39.7	0.0	14.9	114.8	115.4	6.0	3.8	-0.3	-0.3	-17.6
GEW-009	2/20/2018 11:42	47.5	40.8	0.0	11.7	118.9	118.7	10.0	12.5	-0.1	-0.2	-17.1
GEW-009	2/26/2018 10:13	48.8	40.2	0.0	11.0	116.8	116.6	14.4	14.4	-0.1	-0.1	-8.4
GEW-010	2/6/2018 8:48	57.3	42.6	0.1	0.0	21.5	21.5	1.3	1.3	-1.7	-1.7	-21.1
GEW-010	2/6/2018 8:54	58.6	41.3	0.1	0.0	21.9	21.9	3.7	3.7	-1.7	-1.7	-20.9
GEW-010	2/12/2018 8:31	54.1	42.9	0.1	2.9	22.5	22.6	6.0	6.0	-2.2	-2.2	-20.0
GEW-010	2/19/2018 9:37	52.9	45.8	0.0	1.3	61.8	61.8	3.6	4.8	-2.1	-2.1	-19.9
GEW-010	2/26/2018 8:11	52.5	44.3	0.2	3.0	45.5	45.5	4.5	4.5	-2.2	-2.2	-19.4
GEW-013A	2/8/2018 11:00	13.8	37.9	7.3	41.0	116.8	116.6	106.7	106.8	-2.4	-2.4	-17.2
GEW-013A	2/8/2018 11:02	13.4	39.1	7.2	40.3	119.2	119.1	99.6	98.8	-2.0	-2.0	-19.3
GEW-013A	2/21/2018 11:06	9.1	27.7	12.0	51.2	115.8	116.3	97.8	99.2	-2.1	-2.0	-18.0

February 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 ₂ O			
GEW-013A	2/21/2018 11:08	8.6	28.7	11.8	50.9	116.8	117.1	98.4	95.3	-1.9	-1.9	-18.5	
GEW-015	2/8/2018 13:15	13.4	47.6	0.0	39.0	165.2	165.2	8.4	7.5	-4.9	-4.9	-19.5	
GEW-015	2/8/2018 13:17	13.4	48.1	0.0	38.5	165.2	165.2	8.7	6.7	-4.9	-4.9	-19.2	
GEW-015	2/21/2018 13:40	15.3	46.3	0.1	38.3	154.0	154.0	6.2	6.8	-5.6	-5.6	-19.4	
GEW-015	2/21/2018 13:41	15.0	46.2	0.0	38.8	154.0	154.0	4.7	1.4	-5.7	-5.7	-19.4	
GEW-016R	2/8/2018 13:28	8.9	47.1	0.5	43.5	180.2	179.7	NFD	NFD	-16.2	-18.5	-16.0	
GEW-016R	2/8/2018 13:29	8.8	47.2	0.5	43.5	179.7	180.2	NFD	NFD	-19.0	-19.1	-19.0	
GEW-016R	2/21/2018 13:50	7.5	43.4	0.6	48.5	178.6	179.2	NFD	NFD	-19.3	-19.3	-19.3	
GEW-016R	2/21/2018 13:51	7.2	44.0	0.6	48.2	178.6	179.2	NFD	NFD	-19.7	-19.7	-18.8	
GEW-018B	2/8/2018 15:13	0.9	48.0	1.7	49.4	165.2	164.8	7.1	7.2	-0.1	-0.1	-19.1	
GEW-018B	2/8/2018 15:14	0.9	49.3	1.4	48.4	165.4	165.4	7.0	7.0	-0.2	-0.2	-19.0	
GEW-018B	2/22/2018 11:32	0.4	42.1	4.3	53.2	157.7	157.4	5.2	4.9	-0.3	-0.3	-18.9	
GEW-018B	2/22/2018 11:33	0.4	42.7	4.1	52.8	156.9	157.3	3.3	3.4	-0.3	-0.3	-19.2	
GEW-022R	2/8/2018 14:45	1.2	55.6	2.4	40.8	60.8	60.9	4.5	3.1	-19.4	-19.4	-19.2	
GEW-022R	2/22/2018 10:35	1.2	49.0	4.3	45.5	42.1	42.1	4.5	4.8	-18.9	-18.9	-19.2	
GEW-038	2/6/2018 9:22	13.8	46.9	1.9	37.4	21.9	21.9	5.3	5.3	-1.7	-1.6	-20.8	
GEW-038	2/6/2018 9:29	14.6	48.4	1.8	35.2	21.8	21.8	4.2	3.9	-1.5	-1.5	-21.3	
GEW-038	2/12/2018 9:57	13.0	47.6	1.6	37.8	38.9	39.1	2.2	2.2	-1.8	-1.8	-19.6	
GEW-038	2/19/2018 10:54	3.3	56.6	0.0	40.1	60.2	60.1	3.2	3.0	-1.0	-1.0	-19.7	
GEW-038	2/26/2018 9:13	0.5	31.8	10.3	57.4	58.9	58.8	2.7	2.4	-0.7	-0.7	-19.2	
GEW-038	2/26/2018 9:15	0.4	31.6	10.5	57.5	59.0	59.0	2.5	2.5	-0.7	-0.7	-19.0	
GEW-039	2/6/2018 9:45	28.2	36.5	3.4	31.9	113.5	113.6	25.4	19.7	-1.9	-1.9	-21.8	
GEW-039	2/6/2018 9:51	27.4	35.6	3.5	33.5	114.3	114.3	24.6	22.6	-2.0	-2.0	-20.7	
GEW-039	2/12/2018 10:07	24.6	35.7	3.5	36.2	115.8	115.9	22.9	24.4	-1.8	-1.9	-18.5	
GEW-039	2/19/2018 11:04	25.5	36.7	3.8	34.0	116.3	116.3	30.0	25.9	-1.8	-1.8	-18.8	
GEW-039	2/26/2018 9:26	24.5	35.2	3.5	36.8	119.4	119.4	26.1	26.1	-1.9	-1.9	-18.9	
GEW-040	2/1/2018 11:48	55.3	38.4	0.0	6.3	36.9	36.9	9.6	9.6	-0.7	-0.7	-13.3	
GEW-040	2/6/2018 11:37	55.7	39.1	0.0	5.2	32.9	33.0	7.7	5.8	-0.4	-0.4	-12.8	
GEW-040	2/6/2018 11:43	56.7	36.6	0.0	6.7	33.1	33.0	10.4	10.0	-0.4	-0.4	-12.8	
GEW-040	2/12/2018 13:47	53.2	39.5	0.0	7.3	52.6	52.7	8.8	9.4	-0.6	-0.6	-14.7	
GEW-040	2/19/2018 14:45	55.0	39.5	0.0	5.5	61.4	61.4	7.3	7.3	-0.6	-0.6	-13.7	
GEW-040	2/26/2018 10:52	53.7	38.5	0.0	7.8	59.3	59.2	9.4	10.2	-0.6	-0.6	-13.2	
GEW-041R	2/1/2018 13:56	48.2	34.6	0.0	17.2	87.2	87.0	18.9	16.4	-0.6	-0.6	-12.7	
GEW-041R	2/7/2018 9:25	47.5	36.8	0.0	15.7	90.5	90.3	8.7	9.5	-0.4	-0.4	-15.0	
GEW-041R	2/12/2018 13:53	47.3	35.9	0.0	16.8	90.1	90.8	9.8	5.9	-0.4	-0.4	-14.5	
GEW-041R	2/19/2018 14:49	50.1	36.4	0.0	13.5	96.2	96.2	12.7	12.4	-0.4	-0.4	-13.7	
GEW-041R	2/26/2018 10:56	48.6	36.1	0.0	15.3	96.7	96.7	8.2	11.6	-0.5	-0.5	-13.5	
GEW-041R	2/26/2018 10:58	49.4	35.9	0.0	14.7	96.6	96.7	7.2	8.2	-0.4	-0.4	-13.3	
GEW-042R	2/1/2018 14:00	56.7	38.0	0.0	5.3	85.6	85.9	10.0	10.0	-0.6	-0.5	-13.7	
GEW-042R	2/6/2018 10:34	55.0	40.6	0.0	4.4	84.0	84.6	2.8	2.8	-0.5	-0.5	-12.9	
GEW-042R	2/6/2018 10:42	54.5	40.9	0.3	4.3	84.9	84.0	24.3	24.3	-0.5	-0.5	-12.8	

February 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 ₂ O			
GEW-042R	2/12/2018 13:57	55.8	40.1	0.0	4.1	91.3	91.5	5.9	8.1	-0.6	-0.6	-14.6	
GEW-042R	2/19/2018 14:53	55.9	41.6	0.0	2.5	95.0	95.3	22.9	22.9	-0.4	-0.4	-13.7	
GEW-042R	2/26/2018 11:02	54.6	39.6	0.0	5.8	94.9	95.1	30.8	30.6	-0.6	-0.6	-13.3	
GEW-043R	2/1/2018 14:03	55.3	38.6	0.0	6.1	115.3	115.0	24.5	23.8	-0.9	-1.1	-14.2	
GEW-043R	2/7/2018 9:43	53.4	41.2	0.0	5.4	116.3	116.0	13.0	13.0	-1.0	-1.0	-15.3	
GEW-043R	2/12/2018 14:01	54.1	39.7	0.0	6.2	116.3	116.0	28.0	29.5	-0.9	-0.9	-14.7	
GEW-043R	2/19/2018 15:01	53.1	40.9	0.0	6.0	117.3	117.4	37.3	37.6	-0.8	-0.8	-14.1	
GEW-043R	2/26/2018 11:06	52.7	39.7	0.0	7.6	117.1	117.3	15.4	15.4	-0.9	-0.9	-13.9	
GEW-044	2/1/2018 14:10	42.3	33.6	0.0	24.1	78.8	78.4	4.9	6.3	-0.9	-0.9	-13.7	
GEW-044	2/1/2018 14:12	42.6	34.1	0.0	23.3	77.7	79.1	6.3	6.4	-0.9	-1.0	-13.8	
GEW-044	2/7/2018 9:48	44.5	37.0	0.0	18.5	79.6	79.0	34.8	34.3	-0.8	-0.8	-14.7	
GEW-044	2/7/2018 9:50	45.0	36.4	0.0	18.6	79.4	79.0	25.8	26.1	-0.8	-0.7	-15.0	
GEW-044	2/12/2018 14:07	44.9	36.0	0.0	19.1	83.3	83.0	9.0	2.6	-0.7	-0.7	-14.7	
GEW-044	2/12/2018 14:09	45.4	35.3	0.0	19.3	83.3	82.1	5.2	5.7	-0.7	-0.7	-15.1	
GEW-044	2/19/2018 15:05	47.3	37.3	0.0	15.4	81.4	81.2	10.6	10.2	-0.5	-0.5	-13.6	
GEW-044	2/19/2018 15:06	47.7	36.5	0.0	15.8	82.4	82.6	32.1	32.1	-0.6	-0.6	-13.6	
GEW-044	2/26/2018 11:09	45.3	35.9	0.0	18.8	82.6	82.6	32.0	32.0	-0.6	-0.6	-13.3	
GEW-044	2/26/2018 11:11	45.3	35.0	0.0	19.7	84.0	83.9	6.2	5.5	-0.8	-0.8	-13.3	
GEW-045R	2/1/2018 14:15	56.8	39.3	0.0	3.9	34.9	34.9	10.6	9.7	1.6	1.6	-13.7	
GEW-045R	2/1/2018 14:18	54.8	41.4	0.0	3.8	56.6	56.9	8.6	8.6	-0.8	-0.8	-13.2	
GEW-045R	2/6/2018 10:14	55.4	41.7	0.0	2.9	32.7	32.8	9.6	8.2	1.5	1.5	-13.3	
GEW-045R	2/6/2018 10:25	54.6	42.9	0.0	2.5	50.2	50.8	4.2	4.3	-0.1	-0.1	-12.7	
GEW-045R	2/12/2018 14:13	56.2	41.1	0.0	2.7	80.3	80.5	5.3	5.3	-1.8	-1.8	-14.6	
GEW-045R	2/19/2018 15:13	55.7	41.2	0.0	3.1	84.2	84.2	7.1	7.1	-1.8	-1.8	-13.6	
GEW-045R	2/19/2018 15:16	54.8	41.3	0.0	3.9	84.2	83.9	7.1	7.1	-1.8	-1.8	-13.7	
GEW-045R	2/26/2018 11:14	55.5	39.5	0.0	5.0	86.1	86.1	11.0	11.0	-1.9	-1.9	-13.3	
GEW-045R	2/26/2018 11:16	55.0	40.9	0.0	4.1	85.9	85.9	10.3	10.3	-1.8	-1.8	-12.3	
GEW-046R	2/1/2018 14:22	47.1	38.1	0.0	14.8	86.1	85.1	5.8	5.8	-0.4	-0.4	-13.7	
GEW-046R	2/6/2018 10:02	50.1	36.1	0.0	13.8	83.7	84.4	7.8	9.9	-0.3	-0.3	-12.8	
GEW-046R	2/6/2018 10:10	50.0	36.4	0.0	13.6	84.7	84.4	9.1	6.7	-0.3	-0.3	-12.9	
GEW-046R	2/12/2018 14:19	47.8	38.1	0.0	14.1	87.3	87.6	2.3	4.5	-0.2	-0.2	-14.7	
GEW-046R	2/19/2018 15:20	49.5	38.7	0.0	11.8	89.3	89.6	7.1	9.0	-0.2	-0.2	-13.7	
GEW-046R	2/26/2018 11:19	48.3	38.1	0.0	13.6	90.0	90.5	4.8	2.8	-0.4	-0.3	-13.8	
GEW-046R	2/26/2018 11:21	48.1	38.1	0.0	13.8	90.8	90.8	21.5	21.1	-0.3	-0.3	-13.3	
GEW-047R	2/1/2018 15:32	33.8	32.8	0.0	33.4	101.9	102.1	33.5	33.5	-0.7	-0.7	-14.5	
GEW-047R	2/1/2018 15:35	34.1	32.4	0.0	33.5	92.2	89.1	3.4	4.1	-0.5	-0.4	-14.0	
GEW-047R	2/6/2018 9:29	48.0	36.7	0.0	15.3	51.2	51.8	4.9	4.9	0.1	0.1	-12.9	
GEW-047R	2/6/2018 9:38	47.5	38.2	0.0	14.3	54.4	54.2	5.7	5.7	0.1	0.1	-12.9	
GEW-047R	2/7/2018 8:35	48.7	39.5	0.0	11.8	33.4	33.4	11.2	11.6	-0.1	-0.1	-15.5	
GEW-047R	2/12/2018 15:15	50.2	38.7	0.0	11.1	70.9	71.1	8.7	9.5	-0.1	-0.1	-14.6	
GEW-047R	2/20/2018 10:43	51.8	42.3	0.0	5.9	78.0	78.1	8.1	8.1	0.0	0.0	-13.2	

February 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 ₂ O		
GEW-047R	2/20/2018 10:45	51.7	42.2	0.0	6.1	78.4	78.5	16.5	16.1	0.0	0.0	-13.2
GEW-047R	2/26/2018 13:58	53.4	40.4	0.0	6.2	85.8	85.6	3.2	3.6	0.1	0.1	-13.3
GEW-047R	2/26/2018 14:00	53.3	41.6	0.0	5.1	85.9	86.1	5.0	5.0	0.1	0.1	-13.3
GEW-047R	2/27/2018 10:53	53.7	38.5	0.0	7.8	82.1	87.0	27.7	27.0	0.2	0.2	-12.9
GEW-047R	2/27/2018 10:55	53.8	41.7	0.0	4.5	88.2	88.5	37.9	37.2	0.2	0.2	-13.0
GEW-047R	2/28/2018 13:41	48.8	38.0	0.0	13.2	113.5	113.5	27.8	29.6	-0.1	-0.1	-14.0
GEW-048	2/1/2018 15:52	47.3	36.2	0.0	16.5	98.2	98.0	41.0	41.9	-0.7	-0.8	-6.1
GEW-048	2/1/2018 15:53	47.1	37.7	0.0	15.2	97.2	97.4	7.3	11.6	-0.7	-0.7	-11.8
GEW-048	2/6/2018 9:16	49.7	37.0	0.0	13.3	97.0	97.2	27.2	25.7	-0.3	-0.3	-8.5
GEW-048	2/6/2018 9:23	49.6	37.4	0.0	13.0	97.4	97.3	31.7	31.2	-0.2	-0.2	-8.5
GEW-048	2/12/2018 15:23	50.4	37.0	0.0	12.6	98.4	98.7	13.0	15.3	-0.3	-0.3	-10.1
GEW-048	2/20/2018 10:54	50.9	38.8	0.0	10.3	99.6	99.1	10.9	3.4	-0.2	-0.3	-8.7
GEW-048	2/20/2018 10:56	50.6	39.2	0.0	10.2	98.7	99.3	9.5	11.8	-0.2	-0.2	-8.4
GEW-048	2/26/2018 14:19	51.9	37.4	0.0	10.7	99.1	98.9	26.4	26.4	-0.1	-0.1	-7.2
GEW-049	2/1/2018 15:39	38.8	32.6	0.0	28.6	99.9	100.3	12.2	14.2	-0.7	-0.7	-12.6
GEW-049	2/1/2018 15:41	39.3	32.9	0.0	27.8	99.1	98.9	12.2	12.8	-0.8	-0.8	-14.0
GEW-049	2/6/2018 9:44	45.1	36.0	0.0	18.9	99.7	100.3	7.7	3.8	-0.2	-0.2	-12.8
GEW-049	2/6/2018 9:52	46.5	35.6	0.0	17.9	99.9	100.3	35.0	35.0	-0.2	-0.2	-13.0
GEW-049	2/12/2018 15:40	46.6	35.3	0.0	18.1	101.1	101.1	10.8	8.9	-0.2	-0.3	-14.6
GEW-049	2/20/2018 11:14	46.2	36.4	0.0	17.4	103.8	103.8	27.5	27.9	-0.3	-0.3	-13.2
GEW-049	2/20/2018 11:16	46.2	36.8	0.0	17.0	103.7	103.8	25.5	24.7	-0.3	-0.3	-13.0
GEW-049	2/26/2018 11:26	43.2	35.1	0.0	21.7	102.8	102.8	11.9	11.6	-0.3	-0.4	-13.3
GEW-049	2/26/2018 11:27	43.5	35.4	0.0	21.1	102.3	102.3	29.3	28.7	-0.3	-0.3	-13.4
GEW-050	2/1/2018 9:58	42.6	34.4	0.0	23.0	102.6	102.7	13.9	16.0	-0.9	-1.0	-6.1
GEW-050	2/1/2018 10:01	42.5	34.0	0.0	23.5	101.6	101.6	22.6	17.0	-0.9	-0.8	-11.8
GEW-050	2/7/2018 9:02	48.8	35.9	0.0	15.3	101.3	101.6	33.4	35.6	-0.3	-0.3	-10.0
GEW-050	2/12/2018 10:33	49.0	34.7	0.0	16.3	102.1	102.0	24.1	27.2	-0.5	-0.5	-8.5
GEW-050	2/20/2018 11:20	52.1	38.2	0.0	9.7	103.8	103.3	21.6	21.8	-0.2	-0.2	-8.3
GEW-050	2/26/2018 9:57	50.3	35.8	0.0	13.9	103.3	103.3	15.9	9.8	-0.4	-0.4	-8.7
GEW-051	2/1/2018 10:28	53.3	40.4	0.0	6.3	119.9	119.7	11.1	10.0	-1.8	-1.8	-13.7
GEW-051	2/1/2018 10:30	53.5	41.2	0.0	5.3	119.7	119.4	24.4	23.9	-1.8	-1.8	-13.6
GEW-051	2/7/2018 9:18	53.7	40.3	0.0	6.0	121.3	120.7	26.6	26.9	-0.8	-0.8	-14.7
GEW-051	2/7/2018 9:20	52.8	41.3	0.0	5.9	121.5	120.7	19.2	19.2	-0.8	-0.8	-14.8
GEW-051	2/12/2018 13:21	54.9	39.5	0.0	5.6	120.8	120.8	14.3	16.6	-0.8	-0.8	-14.3
GEW-051	2/12/2018 13:22	54.3	39.7	0.0	6.0	120.5	120.7	16.8	15.7	-0.8	-0.8	-14.4
GEW-051	2/19/2018 14:16	55.1	40.3	0.0	4.6	122.1	121.8	19.1	20.0	-0.7	-0.6	-13.4
GEW-051	2/26/2018 10:18	52.6	40.3	0.0	7.1	120.8	120.9	19.4	19.8	-0.9	-0.9	-13.3
GEW-051	2/26/2018 10:20	52.2	40.7	0.0	7.1	120.7	120.8	12.0	10.7	-0.9	-0.9	-13.3
GEW-052	2/1/2018 10:04	25.7	27.9	0.0	46.4	103.9	103.8	11.8	15.4	-0.9	-0.9	-14.4
GEW-052	2/1/2018 10:06	25.3	28.0	0.0	46.7	100.1	100.0	7.2	6.7	-0.6	-0.6	-14.3
GEW-052	2/7/2018 9:06	30.9	30.3	0.0	38.8	100.1	100.1	7.1	6.9	-0.1	-0.1	-15.1

February 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 ₂ O			
GEW-052	2/12/2018 10:37	30.8	28.6	0.0	40.6	102.3	102.0	9.0	4.7	-0.1	-0.1	-14.8	
GEW-052	2/12/2018 10:38	30.4	29.2	0.0	40.4	102.8	102.1	7.2	3.8	-0.1	-0.1	-14.7	
GEW-052	2/20/2018 11:27	45.4	36.6	0.0	18.0	105.7	106.2	7.9	7.6	0.2	0.1	-13.5	
GEW-052	2/20/2018 11:29	45.5	36.7	0.0	17.8	105.7	106.3	6.6	4.7	0.1	0.1	-13.4	
GEW-052	2/21/2018 8:55	31.3	29.9	0.0	38.8	99.9	99.9	8.2	2.7	-0.4	-0.4	-14.7	
GEW-052	2/21/2018 8:57	31.5	28.8	0.0	39.7	95.8	95.8	7.3	9.1	-0.4	-0.4	-14.8	
GEW-052	2/23/2018 8:09	51.8	39.3	0.0	8.9	91.2	90.4	10.7	9.9	-0.1	-0.2	-13.6	
GEW-052	2/26/2018 10:01	45.7	34.9	0.0	19.4	94.6	94.6	8.7	8.4	-0.1	-0.1	-13.4	
GEW-053	2/1/2018 10:37	49.0	40.1	0.0	10.9	134.4	134.1	31.0	31.1	-1.9	-1.9	-14.5	
GEW-053	2/1/2018 10:38	48.7	41.2	0.0	10.1	134.1	134.4	15.6	14.2	-1.9	-1.9	-14.4	
GEW-053	2/6/2018 11:01	49.4	39.6	0.0	11.0	134.7	135.3	13.2	15.6	-1.0	-1.0	-13.2	
GEW-053	2/6/2018 11:08	49.2	40.5	0.0	10.3	134.9	134.8	21.1	20.9	-1.0	-1.0	-13.0	
GEW-053	2/12/2018 13:29	47.7	39.1	0.0	13.2	135.6	135.9	33.7	34.9	-1.2	-1.2	-14.7	
GEW-053	2/12/2018 13:30	47.3	40.0	0.0	12.7	135.6	135.9	28.0	29.1	-1.2	-1.2	-14.5	
GEW-053	2/19/2018 14:23	48.0	41.2	0.0	10.8	136.6	136.1	32.2	32.2	-0.8	-0.8	-14.0	
GEW-053	2/19/2018 14:25	47.4	41.7	0.0	10.9	136.2	136.5	27.7	27.1	-0.8	-0.8	-13.9	
GEW-053	2/26/2018 10:26	46.7	39.9	0.0	13.4	136.5	136.5	15.2	15.2	-1.2	-1.2	-13.9	
GEW-053	2/26/2018 10:28	46.5	40.5	0.0	13.0	135.6	135.8	14.5	14.2	-1.0	-1.0	-13.6	
GEW-054	2/1/2018 10:42	51.7	41.7	0.0	6.6	142.9	142.9	39.0	36.4	-4.4	-4.4	-15.0	
GEW-054	2/1/2018 10:43	51.9	41.6	0.0	6.5	142.9	142.9	38.5	38.5	-4.4	-4.4	-14.4	
GEW-054	2/6/2018 10:48	53.0	40.4	0.0	6.6	143.2	143.2	38.1	40.3	-3.6	-3.5	-14.0	
GEW-054	2/6/2018 10:55	53.0	40.8	0.0	6.2	143.2	143.2	36.4	40.0	-3.5	-3.5	-13.4	
GEW-054	2/12/2018 13:33	52.2	41.5	0.0	6.3	141.1	141.2	36.6	39.7	-4.2	-4.2	-14.7	
GEW-054	2/12/2018 13:35	52.0	41.6	0.0	6.4	141.2	141.2	36.9	42.5	-4.3	-4.3	-14.9	
GEW-054	2/19/2018 14:29	51.8	42.6	0.0	5.6	142.9	142.9	42.4	39.4	-3.4	-3.4	-13.9	
GEW-054	2/19/2018 14:31	51.5	42.6	0.0	5.9	142.9	142.9	38.3	40.0	-3.4	-3.4	-14.4	
GEW-054	2/26/2018 10:34	49.9	40.7	0.0	9.4	143.5	143.6	39.3	39.2	-3.6	-3.6	-13.8	
GEW-054	2/26/2018 10:36	49.9	41.4	0.0	8.7	143.7	143.6	39.9	37.8	-3.5	-3.4	-13.8	
GEW-055	2/1/2018 13:49	49.4	37.6	0.3	12.7	132.0	132.0	14.3	15.5	-1.1	-1.1	-14.1	
GEW-055	2/1/2018 13:50	48.6	38.2	0.3	12.9	132.6	132.3	13.0	13.0	-1.1	-1.0	-13.7	
GEW-055	2/6/2018 11:17	48.4	39.9	0.1	11.6	132.6	132.6	7.9	13.7	-0.9	-0.9	-13.2	
GEW-055	2/6/2018 11:25	48.2	39.4	0.2	12.2	132.6	132.5	38.3	37.9	-1.0	-1.0	-13.4	
GEW-055	2/12/2018 13:42	47.8	39.4	0.2	12.6	133.2	133.5	23.4	23.5	-1.1	-1.1	-14.7	
GEW-055	2/12/2018 13:43	47.7	39.3	0.1	12.9	133.2	133.2	11.1	13.1	-1.0	-1.0	-14.8	
GEW-055	2/19/2018 14:39	46.7	40.2	0.2	12.9	134.1	134.3	32.2	32.8	-1.0	-1.0	-13.7	
GEW-055	2/19/2018 14:41	46.6	40.6	0.3	12.5	134.1	134.1	28.9	28.1	-1.0	-1.0	-13.6	
GEW-055	2/26/2018 10:47	45.5	39.6	0.3	14.6	133.2	133.5	7.5	5.9	-1.1	-1.1	-13.5	
GEW-055	2/26/2018 10:49	45.6	39.9	0.3	14.2	133.4	133.2	30.9	31.2	-1.1	-1.1	-13.7	
GEW-056R	2/6/2018 8:18	29.4	43.2	0.0	27.4	51.0	51.2	6.6	5.4	-0.6	-0.6	-20.9	
GEW-056R	2/6/2018 8:28	29.6	45.5	0.0	24.9	51.0	50.9	3.3	2.5	-0.6	-0.6	-20.7	
GEW-056R	2/12/2018 8:48	26.5	48.9	0.0	24.6	62.5	62.6	4.7	3.6	-0.6	-0.6	-19.9	

February 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 ₂ O			
GEW-056R	2/19/2018 9:54	27.9	48.7	0.0	23.4	83.3	82.8	2.8	2.6	-0.6	-0.6	-19.7	
GEW-056R	2/26/2018 8:29	27.0	45.8	0.0	27.2	87.0	87.0	3.1	3.8	-0.5	-0.5	-19.3	
GEW-057B	2/7/2018 15:38	4.6	30.6	7.3	57.5	40.2	40.2	7.9	6.4	-12.6	-13.0	-19.7	
GEW-057B	2/7/2018 15:39	4.6	32.8	7.1	55.5	39.7	39.6	4.4	7.7	-12.5	-12.5	-19.6	
GEW-057B	2/20/2018 15:10	10.5	48.4	2.6	38.5	55.5	55.5	1.7	2.6	-19.5	-19.5	-19.5	
GEW-057R	2/7/2018 15:42	0.7	9.1	19.2	71.0	40.2	40.3	1.2	2.1	-18.9	-18.9	-19.6	
GEW-057R	2/7/2018 15:44	1.2	3.3	20.1	75.4	40.5	40.5	2.1	2.1	-18.9	-18.9	-19.5	
GEW-057R	2/21/2018 9:07	14.3	32.9	11.7	41.1	29.5	29.8	3.0	2.8	-18.4	-18.5	-19.2	
GEW-057R	2/21/2018 9:09	10.3	26.0	14.5	49.2	29.9	29.9	2.5	2.2	-18.0	-18.0	-19.2	
GEW-058	2/7/2018 14:03	0.7	53.0	0.0	46.3	46.6	43.8	10.3	11.5	0.6	0.7	-19.2	
GEW-058	2/7/2018 14:08	0.7	52.4	0.0	46.9	40.6	40.5	10.2	7.3	-4.6	-4.7	-19.2	
GEW-058A	2/7/2018 13:58	2.3	38.2	3.2	56.3	43.6	43.7	2.8	2.8	-0.4	-0.4	-19.3	
GEW-059R	2/7/2018 13:44	22.5	42.9	0.0	34.6	157.7	157.7	6.7	6.7	-19.0	-19.0	-19.3	
GEW-059R	2/7/2018 13:45	22.1	44.3	0.0	33.6	156.9	157.3	5.5	5.7	-19.2	-18.8	-19.2	
GEW-059R	2/20/2018 14:12	20.7	44.4	0.0	34.9	162.6	162.4	8.0	8.3	-18.6	-18.6	-19.0	
GEW-059R	2/20/2018 14:13	20.4	45.3	0.0	34.3	162.9	162.9	7.7	7.7	-18.6	-18.6	-19.0	
GEW-067A	2/8/2018 10:20	3.0	30.5	10.3	56.2	92.9	93.1	7.3	6.4	-0.1	-0.1	-20.0	
GEW-067A	2/8/2018 10:22	3.0	30.6	10.1	56.3	93.6	94.1	3.6	10.6	-0.1	-0.2	-18.5	
GEW-067A	2/21/2018 9:12	5.0	30.1	9.7	55.2	70.4	70.4	25.0	25.3	-0.1	-0.1	-19.0	
GEW-067A	2/21/2018 9:13	4.8	30.2	9.8	55.2	70.3	70.4	24.3	24.7	-0.1	-0.1	-17.6	
GEW-068A	2/8/2018 9:59	17.0	45.4	1.8	35.8	173.6	173.6	23.3	25.4	-16.7	-16.7	-19.9	
GEW-068A	2/8/2018 10:01	16.5	46.9	1.6	35.0	174.2	174.0	22.9	26.3	-16.1	-16.2	-20.2	
GEW-068A	2/21/2018 9:53	17.3	44.6	1.7	36.4	174.2	174.0	21.7	25.0	-15.1	-15.1	-19.7	
GEW-068A	2/21/2018 9:55	16.2	47.2	1.5	35.1	174.2	174.2	26.8	25.7	-15.0	-14.9	-19.1	
GEW-077	2/8/2018 11:11	0.5	57.5	0.0	42.0	98.2	98.2	4.0	2.6	-19.8	-19.7	-20.0	
GEW-078R	2/8/2018 14:13	10.1	38.4	0.0	51.5	157.4	157.3	7.7	9.0	-18.3	-18.2	-18.5	
GEW-078R	2/8/2018 14:14	10.0	39.9	0.0	50.1	157.7	157.7	9.9	9.3	-18.6	-18.6	-19.0	
GEW-078R	2/22/2018 13:27	11.5	42.9	0.0	45.6	154.0	154.1	10.0	8.3	-18.7	-18.7	-18.8	
GEW-078R	2/22/2018 13:28	11.9	42.9	0.0	45.2	154.4	154.0	7.3	5.9	-18.7	-18.8	-18.8	
GEW-081	2/8/2018 14:37	0.8	55.8	0.6	42.8	63.7	63.7	9.9	9.9	-18.4	-18.4	-18.6	
GEW-082R	2/8/2018 14:22	12.7	39.6	0.0	47.7	176.4	176.4	2.0	5.6	-17.6	-17.7	-18.4	
GEW-082R	2/8/2018 14:23	12.8	40.3	0.0	46.9	176.9	176.9	5.1	2.2	-17.7	-18.0	-19.2	
GEW-082R	2/22/2018 13:35	10.7	39.9	0.0	49.4	174.7	174.7	5.5	3.6	-17.2	-17.2	-18.2	
GEW-082R	2/22/2018 13:36	10.7	40.0	0.0	49.3	174.2	174.2	5.2	6.1	-17.3	-17.2	-18.3	
GEW-086	2/8/2018 10:06	12.2	30.8	7.0	50.0	59.3	59.3	8.5	8.3	-0.3	-0.3	-19.1	
GEW-086	2/8/2018 10:08	12.2	30.9	7.0	49.9	59.1	59.1	8.5	8.9	-0.3	-0.2	-20.3	
GEW-086	2/21/2018 9:42	8.8	26.8	9.4	55.0	42.7	42.7	7.0	8.3	-0.3	-0.3	-18.7	
GEW-086	2/21/2018 9:44	9.2	26.3	9.3	55.2	42.5	42.5	6.6	9.9	-0.4	-0.4	-18.8	
GEW-087	2/8/2018 10:37	12.9	22.7	13.5	50.9	104.8	104.8	NFD		-19.6	-19.6	-19.9	
GEW-087	2/8/2018 10:38	13.2	21.3	13.7	51.8	105.0	105.0	NFD		-19.1	-19.1	-19.4	
GEW-087	2/21/2018 10:51	9.5	23.7	14.8	52.0	95.6	95.8	NFD		-19.7	-19.7	-19.9	

February 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 ₂ O		
GEW-087	2/21/2018 10:52	11.0	18.3	15.5	55.2	95.8	95.5	NFD		-19.7	-19.7	-19.9
GEW-088	2/8/2018 10:28	3.0	46.4	0.6	50.0	193.8	194.2	30.7	27.9	-0.9	-1.0	-19.3
GEW-088	2/8/2018 10:30	3.7	46.4	0.8	49.1	193.6	194.3	15.8	9.4	-2.2	-2.3	-19.4
GEW-088	2/21/2018 10:35	3.6	45.1	0.5	50.8	191.6	190.9	51.1	52.1	-0.2	-0.3	-19.4
GEW-088	2/21/2018 10:36	3.5	45.5	0.8	50.2	190.9	190.9	45.9	44.8	-0.8	-0.6	-19.4
GEW-090	2/8/2018 9:32	25.5	43.7	0.2	30.6	146.3	146.1	5.7	2.6	-19.6	-19.4	-20.1
GEW-090	2/8/2018 9:34	24.4	45.6	0.0	30.0	146.0	146.2	11.2	15.5	-19.6	-19.6	-20.0
GEW-090	2/21/2018 8:56	23.2	44.5	0.0	32.3	129.2	129.4	8.4	6.2	-19.1	-19.2	-19.4
GEW-091	2/8/2018 9:13	1.4	17.0	17.3	64.3	107.0	107.0	20.4	21.0	-20.1	-20.1	-20.0
GEW-091	2/8/2018 9:15	1.5	12.1	18.1	68.3	106.9	107.0	14.6	12.1	-19.6	-19.6	-19.9
GEW-091	2/21/2018 8:35	0.7	3.2	19.6	76.5	97.7	97.7	26.8	25.4	-19.1	-19.2	-19.3
GEW-091	2/21/2018 8:37	0.6	6.9	19.1	73.4	97.2	97.3	33.0	30.0	-19.1	-19.2	-19.4
GEW-100	2/8/2018 10:32	1.0	48.6	5.6	44.8	48.5	48.5	3.6	6.2	-12.9	-13.2	-19.6
GEW-100	2/8/2018 10:33	1.0	47.8	6.2	45.0	49.1	49.1	2.4	1.2	-8.9	-8.8	-20.0
GEW-100	2/21/2018 10:33	1.0	46.9	6.0	46.1	30.4	30.5	5.5	4.2	-12.6	-12.4	-20.0
GEW-100	2/21/2018 10:35	0.9	46.0	6.4	46.7	30.7	30.6	2.6	6.1	-6.3	-6.3	-20.1
GEW-101	2/8/2018 9:45	17.7	57.5	2.3	22.5	54.7	54.7	9.4	9.3	-0.2	-0.2	-19.7
GEW-101	2/21/2018 9:36	16.9	63.0	0.1	20.0	51.8	51.8	13.2	13.0	-0.1	-0.1	-19.6
GEW-101	2/21/2018 9:38	17.0	63.6	0.0	19.4	52.5	52.5	11.9	11.3	-0.2	-0.2	-19.8
GEW-102	2/8/2018 9:40	7.5	48.1	0.5	43.9	44.8	44.8	4.6	5.8	-19.7	-19.7	-19.9
GEW-104	2/7/2018 14:50	1.1	50.9	0.6	47.4	40.5	40.5	3.2	1.7	-18.4	-18.4	-19.1
GEW-106	2/7/2018 14:13	8.1	41.7	6.1	44.1	63.0	63.2	2.7	1.7	-4.0	-4.0	-19.1
GEW-106	2/7/2018 14:15	7.9	41.3	6.6	44.2	61.6	61.6	1.7	2.1	-2.8	-2.8	-19.3
GEW-106	2/20/2018 14:17	6.8	48.6	4.0	40.6	76.1	76.3	1.2	2.6	-2.3	-2.3	-18.2
GEW-107	2/7/2018 13:49	32.2	55.4	0.0	12.4	113.1	113.0	6.1	6.1	-18.9	-18.9	-19.0
GEW-108	2/7/2018 13:36	37.1	42.8	0.1	20.0	117.9	117.6	3.1	3.0	-19.3	-19.2	-19.1
GEW-108	2/7/2018 13:37	36.5	43.2	0.0	20.3	119.9	119.7	2.3	2.3	-19.2	-19.3	-19.1
GEW-109	2/6/2018 9:33	16.4	38.1	0.0	45.5	49.3	49.3	3.4	3.2	-15.7	-15.7	-21.0
GEW-109	2/6/2018 9:40	16.4	36.5	0.0	47.1	50.2	50.3	3.8	4.0	-15.7	-15.7	-20.7
GEW-109	2/12/2018 10:04	17.8	33.2	0.0	49.0	62.2	62.0	3.5	4.1	-14.2	-14.2	-18.3
GEW-109	2/19/2018 11:01	17.8	41.0	0.0	41.2	90.6	90.8	2.7	2.7	-12.3	-12.3	-19.7
GEW-109	2/26/2018 9:23	16.7	36.6	0.2	46.5	88.9	88.9	2.5	1.9	-12.5	-12.5	-19.3
GEW-110	2/6/2018 8:35	13.3	53.3	0.0	33.4	22.8	22.9	18.2	22.7	-0.5	-0.6	-21.0
GEW-110	2/6/2018 8:41	14.4	52.2	0.4	33.0	25.7	25.7	19.5	19.3	-0.5	-0.5	-20.8
GEW-110	2/12/2018 8:36	9.9	27.9	9.9	52.3	24.3	24.2	24.5	25.7	-0.6	-0.7	-20.0
GEW-110	2/12/2018 8:39	9.0	30.9	9.8	50.3	25.6	25.3	23.2	23.0	-0.4	-0.4	-19.9
GEW-110	2/19/2018 9:40	12.4	51.6	0.0	36.0	62.1	62.1	4.2	2.7	0.2	0.2	-19.7
GEW-110	2/19/2018 9:45	11.8	52.9	0.0	35.3	65.1	65.2	2.1	2.1	-0.2	-0.2	-19.4
GEW-110	2/26/2018 8:15	11.0	25.1	11.0	52.9	48.2	48.2	27.7	29.1	0.7	0.7	-19.3
GEW-110	2/26/2018 8:19	11.9	24.8	10.1	53.2	48.1	48.1	2.2	1.3	-0.1	-0.1	-19.7
GEW-113	2/8/2018 13:22	10.5	45.1	2.2	42.2	151.7	151.7	12.3	12.3	-4.8	-4.8	-19.5

February 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 ₂ O			
GEW-113	2/8/2018 13:24	10.6	45.9	2.2	41.3	150.9	151.0	11.8	9.5	-4.3	-4.3	-19.4	
GEW-113	2/21/2018 13:55	9.6	44.1	3.7	42.6	148.2	148.2	13.3	11.5	-4.3	-4.3	-19.5	
GEW-113	2/21/2018 13:56	9.7	44.5	3.6	42.2	148.4	148.4	9.6	10.3	-4.3	-4.3	-19.4	
GEW-116	2/8/2018 14:29	5.3	45.1	5.1	44.5	121.0	121.0	11.0	15.6	-17.3	-17.7	-19.1	
GEW-116	2/8/2018 14:31	5.3	46.1	5.1	43.5	121.3	121.3	9.3	2.8	-17.1	-17.2	-18.7	
GEW-116	2/22/2018 11:24	3.3	46.1	5.8	44.8	108.7	108.7	15.3	15.3	-16.0	-16.0	-16.9	
GEW-116	2/22/2018 11:25	3.2	45.7	5.9	45.2	108.0	108.0	6.3	6.3	-15.2	-15.2	-18.6	
GEW-117	2/8/2018 15:09	39.8	52.0	0.4	7.8	93.1	92.7	NFD		-17.5	-17.8	-19.1	
GEW-118	2/8/2018 15:03	1.6	57.5	0.0	40.9	64.0	64.1	2.5	4.6	0.2	0.1	-18.5	
GEW-118	2/8/2018 15:05	1.8	59.6	0.0	38.6	182.7	187.6	5.0	5.1	-0.1	-0.1	-19.1	
GEW-118	2/22/2018 10:51	2.0	55.4	0.0	42.6	195.7	195.7	9.6	9.3	-0.1	-0.1	-19.0	
GEW-118	2/22/2018 10:53	1.7	59.3	0.0	39.0	196.4	196.4	9.6	11.0	-0.2	-0.3	-19.1	
GEW-120	2/8/2018 9:03	11.7	41.4	2.8	44.1	160.3	160.3	35.3	36.7	-18.2	-18.1	-19.6	
GEW-120	2/8/2018 9:06	11.3	42.1	2.7	43.9	158.9	158.5	33.6	35.1	-15.7	-15.7	-20.1	
GEW-120	2/15/2018 14:32	15.5	53.5	0.2	30.8	158.5	158.6	35.7	34.0	-15.6	-15.7	-20.4	
GEW-120	2/15/2018 14:35	15.6	54.4	0.2	29.8	118.5	156.1	20.2	20.4	-7.7	-7.6	-20.6	
GEW-120	2/22/2018 10:46	12.4	48.2	0.5	38.9	156.9	156.9	17.5	19.1	-7.2	-7.2	-19.0	
GEW-120	2/22/2018 10:47	12.5	48.8	0.5	38.2	157.3	157.3	19.3	20.1	-7.2	-7.2	-19.3	
GEW-121	2/8/2018 14:51	6.9	43.2	0.8	49.1	171.5	171.5	24.5	19.8	-15.9	-15.5	-18.2	
GEW-121	2/8/2018 14:53	6.9	42.7	0.8	49.6	171.6	171.1	24.0	28.6	-15.6	-16.0	-18.1	
GEW-121	2/22/2018 10:42	8.3	45.4	1.2	45.1	167.1	167.1	28.2	26.8	-16.5	-16.5	-18.2	
GEW-121	2/22/2018 10:43	7.5	44.4	1.2	46.9	167.1	167.1	22.5	29.9	-16.5	-16.9	-18.5	
GEW-122	2/8/2018 14:33	5.5	53.7	0.0	40.8	181.1	181.5	31.8	33.1	-17.2	-17.0	-19.1	
GEW-122	2/8/2018 14:34	6.2	54.6	0.0	39.2	181.5	181.5	35.4	35.9	-16.8	-16.7	-18.6	
GEW-122	2/22/2018 10:22	3.9	49.4	0.0	46.7	185.7	185.7	33.7	35.3	-17.1	-17.1	-19.3	
GEW-122	2/22/2018 10:23	3.2	54.3	0.0	42.5	186.3	186.2	35.4	35.4	-17.0	-17.0	-19.4	
GEW-123	2/8/2018 14:48	13.9	50.1	0.0	36.0	160.6	160.3	16.6	19.2	-12.5	-12.5	-19.2	
GEW-123	2/8/2018 14:49	14.4	48.6	0.0	37.0	160.2	160.2	17.8	18.5	-12.5	-12.5	-18.9	
GEW-123	2/22/2018 10:38	15.0	51.1	0.0	33.9	150.3	150.6	7.6	12.5	-12.2	-12.2	-19.3	
GEW-123	2/22/2018 10:39	16.0	49.3	0.0	34.7	149.1	149.1	6.6	5.3	-12.1	-12.1	-19.2	
GEW-124	2/8/2018 14:42	39.3	37.8	4.2	18.7	60.7	60.7	3.0	3.2	-11.0	-11.0	-11.3	
GEW-124	2/22/2018 10:30	40.0	38.8	4.0	17.2	45.1	44.9	1.7	1.7	-10.1	-10.1	-12.2	
GEW-125	2/8/2018 14:09	5.3	39.0	4.9	50.8	171.1	171.0	23.3	23.1	-14.0	-14.0	-18.2	
GEW-125	2/8/2018 14:11	5.2	38.2	4.9	51.7	170.0	170.0	13.3	17.7	-12.0	-11.6	-18.7	
GEW-125	2/22/2018 10:00	4.3	37.5	5.6	52.6	170.0	170.0	20.1	17.2	-10.9	-10.9	-18.8	
GEW-125	2/22/2018 10:06	3.6	39.2	5.4	51.8	124.8	124.7	3.1	1.9	-0.9	-0.9	-19.0	
GEW-126	2/8/2018 14:04	15.6	47.1	0.0	37.3	75.7	75.7	11.2	10.5	-6.6	-6.6	-6.3	
GEW-127	2/8/2018 13:42	5.6	34.3	8.9	51.2	150.6	150.6	32.7	35.0	-18.3	-18.7	-19.1	
GEW-127	2/8/2018 13:46	5.6	32.4	9.1	52.9	151.8	151.7	27.0	30.5	-17.3	-17.3	-18.8	
GEW-127	2/22/2018 9:23	5.0	40.1	8.6	46.3	154.0	154.0	29.9	31.3	-17.0	-16.9	-19.0	
GEW-127	2/22/2018 9:27	5.9	35.4	8.3	50.4	122.1	121.5	2.9	2.7	-0.3	-0.3	-19.2	

February 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 ₂ O			
GEW-128	2/8/2018 13:31	15.0	53.7	2.7	28.6	136.5	136.5	36.6	38.8	-17.3	-17.3	-18.3	
GEW-128	2/8/2018 13:32	15.3	53.1	2.7	28.9	136.8	136.8	35.5	37.1	-16.9	-17.0	-17.8	
GEW-128	2/22/2018 9:05	13.7	55.3	3.1	27.9	129.0	129.1	44.4	44.4	-16.5	-16.5	-18.2	
GEW-129	2/8/2018 11:32	17.4	57.0	0.0	25.6	167.6	167.6	17.9	15.0	-18.6	-18.2	-19.7	
GEW-129	2/8/2018 11:33	17.3	59.5	0.0	23.2	167.6	167.6	16.8	14.0	-18.6	-18.2	-19.8	
GEW-129	2/22/2018 9:01	14.8	61.1	0.0	24.1	170.0	170.0	20.4	16.1	-17.7	-17.5	-19.0	
GEW-129	2/22/2018 9:02	15.6	62.7	0.0	21.7	169.5	169.5	20.3	19.6	-17.6	-17.5	-19.0	
GEW-130	2/8/2018 13:51	4.3	41.7	4.8	49.2	175.3	175.3	32.4	30.6	-8.6	-8.6	-19.0	
GEW-130	2/8/2018 13:53	4.2	43.1	4.7	48.0	175.8	175.8	30.9	24.9	-7.2	-7.2	-19.6	
GEW-130	2/22/2018 9:34	4.1	40.5	6.3	49.1	174.7	174.8	30.9	28.7	-6.8	-6.8	-19.7	
GEW-130	2/22/2018 9:38	1.5	52.7	1.5	44.3	180.9	181.5	13.9	8.8	-0.4	-0.4	-19.9	
GEW-131	2/8/2018 14:00	19.1	41.0	0.0	39.9	159.8	159.8	14.9	14.0	-11.0	-11.0	-18.6	
GEW-131	2/8/2018 14:01	19.3	40.7	0.0	40.0	160.2	160.2	15.5	14.9	-10.9	-10.7	-19.4	
GEW-131	2/22/2018 9:55	20.5	45.5	0.0	34.0	159.4	159.8	12.0	12.3	-11.2	-11.2	-19.5	
GEW-131	2/22/2018 9:56	21.3	44.5	0.0	34.2	159.5	159.4	14.2	12.6	-11.2	-11.2	-19.5	
GEW-132	2/8/2018 14:59	1.3	43.2	3.6	51.9	157.7	157.7	2.6	2.6	-0.2	-0.2	-18.6	
GEW-132	2/8/2018 15:01	1.2	44.0	3.6	51.2	159.8	159.0	3.2	2.9	-0.2	-0.2	-19.0	
GEW-132	2/22/2018 10:56	1.4	37.8	6.0	54.8	174.7	175.3	3.7	4.2	-0.2	-0.2	-18.8	
GEW-132	2/22/2018 10:57	1.5	36.9	6.1	55.5	169.0	170.0	2.0	3.5	-0.1	-0.1	-19.1	
GEW-133	2/8/2018 14:35	1.5	18.2	16.0	64.3	58.0	57.9	4.6	6.7	-19.1	-19.1	-19.4	
GEW-133	2/8/2018 14:37	1.7	15.8	16.2	66.3	57.5	57.5	5.8	2.0	-19.1	-19.1	-19.4	
GEW-133	2/22/2018 11:18	3.7	47.6	0.0	48.7	51.0	51.0	22.2	24.6	-12.6	-12.1	-19.1	
GEW-134	2/8/2018 13:49	14.2	40.2	2.3	43.3	117.0	117.3	4.5	5.1	-0.7	-0.7	-18.8	
GEW-135	2/8/2018 13:42	11.4	43.8	1.9	42.9	153.3	153.3	8.5	6.7	-3.2	-3.2	-18.8	
GEW-135	2/8/2018 13:44	11.2	45.1	1.9	41.8	153.3	153.7	10.7	9.5	-3.0	-3.0	-19.3	
GEW-135	2/22/2018 13:20	6.0	41.9	2.7	49.4	149.6	149.6	10.4	10.4	-3.2	-3.2	-19.3	
GEW-135	2/22/2018 13:21	5.8	43.3	2.5	48.4	149.9	149.5	25.7	28.2	-4.1	-4.3	-19.0	
GEW-136	2/8/2018 13:57	9.5	38.2	3.3	49.0	114.3	114.0	14.1	21.4	0.0	0.0	-6.8	
GEW-137	2/8/2018 15:20	33.4	38.6	0.0	28.0	64.4	64.4	2.2	4.9	-10.5	-10.5	-19.3	
GEW-138	2/8/2018 14:08	7.2	29.7	2.8	60.3	95.8	95.8	1.0	4.7	-0.2	-0.2	-18.8	
GEW-139	2/8/2018 11:07	1.9	55.4	0.0	42.7	146.2	146.3	4.2	3.7	-1.5	-1.5	-20.1	
GEW-139	2/8/2018 11:08	1.8	57.1	0.0	41.1	147.3	147.4	3.6	2.7	-1.5	-1.5	-19.7	
GEW-139	2/21/2018 11:14	2.3	56.9	0.0	40.8	124.7	124.3	5.2	3.0	-2.0	-2.1	-20.1	
GEW-140	2/8/2018 10:21	19.1	47.7	0.6	32.6	116.4	116.3	5.9	5.7	-3.5	-3.5	-20.3	
GEW-141	2/8/2018 10:52	0.1	24.7	13.4	61.8	51.8	51.8	2.8	2.8	-0.8	-0.8	-20.1	
GEW-141	2/8/2018 10:54	0.1	26.2	13.2	60.5	51.0	50.9	2.1	2.5	-0.4	-0.4	-19.6	
GEW-141	2/21/2018 11:03	0.3	57.9	0.3	41.5	32.7	32.7	4.5	4.5	0.0	0.0	-20.3	
GEW-141	2/21/2018 11:05	0.2	57.7	2.2	39.9	32.1	32.0	3.2	3.7	-0.5	-0.4	-20.1	
GEW-142	2/8/2018 10:44	0.0	4.1	21.1	74.8	45.1	45.8	3.6	2.7	-14.2	-14.2	-19.5	
GEW-142	2/8/2018 10:48	0.1	5.0	20.5	74.4	47.0	47.0	5.8	7.9	-17.2	-17.2	-19.9	
GEW-142	2/21/2018 10:45	0.0	8.4	20.2	71.4	32.2	32.2	6.3	6.4	-12.1	-12.1	-20.1	

February 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 ₂ O			
GEW-142	2/21/2018 10:47	0.0	0.0	18.7	81.3	32.2	32.2	4.0	3.1	-12.5	-12.5	-20.0	
GEW-143	2/8/2018 10:26	0.1	9.1	19.6	71.2	54.7	54.9	4.2	4.6	-16.7	-16.7	-19.7	
GEW-143	2/8/2018 10:27	0.1	5.6	20.2	74.1	56.4	56.4	3.1	2.6	-17.7	-17.7	-19.6	
GEW-143	2/21/2018 10:26	0.1	9.7	21.0	69.2	30.6	30.6	7.9	7.6	-5.9	-5.8	-20.1	
GEW-143	2/21/2018 10:29	0.0	3.2	21.2	75.6	30.7	30.7	3.8	3.8	-4.8	-4.8	-19.9	
GEW-144	2/8/2018 9:51	0.7	18.3	16.0	65.0	45.2	45.2	3.6	3.2	-19.6	-19.5	-19.6	
GEW-144	2/8/2018 9:52	0.8	16.2	16.4	66.6	45.6	45.7	2.4	3.6	-19.6	-19.7	-19.9	
GEW-144	2/21/2018 9:44	0.2	15.2	19.1	65.5	29.1	29.1	6.5	6.6	-17.5	-17.5	-19.0	
GEW-144	2/21/2018 9:45	0.2	11.2	19.7	68.9	29.0	29.0	4.3	4.3	-17.7	-17.7	-19.0	
GEW-145	2/8/2018 9:34	0.0	8.3	20.4	71.3	40.5	40.5	6.8	6.3	-2.6	-2.6	-19.9	
GEW-145	2/8/2018 9:36	0.0	5.2	21.0	73.8	40.3	40.3	4.9	4.7	-2.7	-2.7	-19.8	
GEW-145	2/15/2018 10:07	1.3	51.0	0.0	47.7	81.9	81.7	6.0	7.2	27.7	27.7	-18.8	
GEW-145	2/15/2018 10:10	1.7	53.0	0.0	45.3	87.4	86.4	4.5	4.3	-8.5	-8.5	-18.5	
GEW-145	2/21/2018 9:31	4.6	48.7	0.0	46.7	44.8	44.6	3.6	3.2	-17.5	-17.6	-19.5	
GEW-146	2/8/2018 13:07	3.4	5.6	14.9	76.1	80.5	80.5	7.0	8.7	0.0	0.0	-18.7	
GEW-146	2/8/2018 13:09	3.3	7.0	14.8	74.9	80.1	80.3	7.9	7.2	0.0	0.0	-18.7	
GEW-146	2/21/2018 13:29	1.6	1.8	17.1	79.5	64.9	64.8	6.7	7.2	0.0	0.0	-19.5	
GEW-146	2/21/2018 13:30	1.6	3.1	17.0	78.3	64.4	64.5	6.5	7.5	0.0	0.0	-19.4	
GEW-147	2/8/2018 13:35	12.6	42.7	0.2	44.5	178.0	178.0	35.6	35.3	-17.6	-17.6	-19.1	
GEW-147	2/8/2018 13:37	12.7	43.0	0.2	44.1	178.0	178.0	34.4	35.2	-17.2	-17.5	-18.6	
GEW-147	2/21/2018 14:09	10.4	41.9	0.3	47.4	180.9	180.9	36.5	36.5	-17.4	-17.4	-19.2	
GEW-147	2/21/2018 14:10	10.5	42.1	0.3	47.1	181.2	181.0	37.6	36.9	-17.4	-17.4	-19.0	
GEW-148	2/8/2018 11:08	12.9	49.1	1.9	36.1	58.5	58.6	1.7	3.9	-18.7	-18.7	-19.9	
GEW-149	2/8/2018 9:45	7.6	26.2	9.3	56.9	93.4	93.3	15.1	17.8	-0.2	-0.2	-8.0	
GEW-149	2/8/2018 9:47	7.7	25.6	9.4	57.3	92.7	92.7	15.5	16.2	-0.2	-0.2	-7.8	
GEW-149	2/21/2018 9:07	9.4	29.8	6.3	54.5	113.5	113.5	13.2	11.9	-0.2	-0.2	-4.4	
GEW-149	2/21/2018 9:11	9.1	31.1	6.3	53.5	113.5	113.5	14.3	11.8	-0.2	-0.2	-4.4	
GEW-150	2/7/2018 14:41	11.4	36.3	7.4	44.9	120.7	120.7	18.7	15.8	-10.5	-10.5	-16.6	
GEW-150	2/7/2018 14:44	10.9	36.7	7.6	44.8	114.5	114.3	14.4	10.0	-3.2	-3.1	-19.7	
GEW-150	2/20/2018 14:57	9.3	43.0	6.0	41.7	186.4	186.3	10.2	8.1	-0.9	-0.9	-20.0	
GEW-150	2/20/2018 14:58	9.2	43.8	6.0	41.0	184.5	184.7	5.5	5.5	-0.6	-0.6	-18.5	
GEW-151	2/8/2018 10:14	9.9	36.2	6.2	47.7	156.9	156.9	3.7	3.6	-1.2	-1.2	-19.7	
GEW-151	2/8/2018 10:16	9.8	36.9	6.0	47.3	151.3	151.6	3.6	5.0	-0.7	-0.7	-19.9	
GEW-151	2/21/2018 10:29	11.8	49.4	0.7	38.1	120.2	119.9	2.7	7.1	-0.2	-0.2	-19.4	
GEW-152	2/7/2018 13:52	28.4	48.1	0.0	23.5	115.5	116.0	2.2	1.5	-8.5	-8.5	-19.1	
GEW-153	2/7/2018 13:41	49.6	37.9	0.0	12.5	44.0	43.9	1.8	1.3	-1.6	-1.6	-18.7	
GEW-154	2/8/2018 9:23	7.9	8.6	15.9	67.6	43.4	43.4	2.5	2.5	-1.4	-1.4	-19.9	
GEW-154	2/8/2018 9:26	7.8	8.2	16.0	68.0	42.8	42.8	3.3	3.3	-1.3	-1.3	-19.9	
GEW-154	2/21/2018 8:46	0.0	4.5	20.3	75.2	30.6	30.6	1.8	1.8	-1.5	-1.5	-19.5	
GEW-154	2/21/2018 8:47	0.0	3.8	20.4	75.8	30.2	30.2	2.6	1.3	-1.5	-1.5	-19.6	
GEW-155	2/8/2018 15:23	1.5	26.4	0.2	71.9	102.3	102.5	6.0	4.8	-0.1	-0.1	-17.7	

February 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 ₂ O			
GEW-156	2/7/2018 15:49	11.0	14.2	13.3	61.5	69.1	69.1	2.4	1.2	-0.1	-0.1	-19.8	
GEW-156	2/7/2018 15:50	10.8	15.3	13.2	60.7	69.7	69.5	4.0	2.7	-0.1	-0.1	-19.6	
GEW-156	2/21/2018 9:16	11.7	20.5	11.8	56.0	55.2	55.7	3.5	2.8	-0.2	-0.1	-19.5	
GEW-156	2/21/2018 9:17	12.1	19.6	11.8	56.5	54.9	55.2	2.8	2.7	-0.1	-0.1	-19.6	
GEW-157	2/7/2018 15:32	0.8	8.3	18.0	72.9	39.9	39.9	3.8	3.6	-0.4	-0.5	-19.4	
GEW-157	2/7/2018 15:34	0.8	6.1	18.4	74.7	40.0	40.0	1.3	1.8	-0.2	-0.2	-19.5	
GEW-157	2/14/2018 13:44	2.1	52.0	0.0	45.9	93.4	93.4	3.1	7.3	47.9	47.7	-19.6	
GEW-157	2/14/2018 13:48	3.7	52.8	0.0	43.5	124.5	124.7	9.9	9.8	-2.5	-2.5	-20.1	
GEW-157	2/20/2018 15:07	11.8	48.0	2.3	37.9	94.1	93.9	8.2	3.8	-17.4	-17.5	-19.5	
GEW-158	2/7/2018 14:19	17.1	54.6	0.0	28.3	182.1	182.1	6.2	3.9	-0.7	-0.7	-13.5	
GEW-158	2/7/2018 14:20	17.4	56.5	0.0	26.1	181.8	182.1	5.6	7.2	-0.6	-0.6	-13.4	
GEW-158	2/20/2018 14:39	19.1	57.0	0.0	23.9	156.9	156.8	7.6	4.2	-2.0	-2.0	-12.7	
GEW-158	2/20/2018 14:40	18.5	57.5	0.0	24.0	156.0	156.0	4.7	3.7	-1.9	-1.9	-11.2	
GEW-159	2/7/2018 13:30	2.8	7.7	18.1	71.4	44.7	44.7	2.7	2.1	-18.8	-18.9	-18.8	
GEW-159	2/7/2018 13:32	1.0	3.6	19.7	75.7	45.2	45.2	2.4	1.2	-18.8	-18.7	-19.0	
GEW-159	2/20/2018 14:32	0.1	2.9	20.5	76.5	59.1	59.1	4.5	4.7	-15.5	-15.5	-19.3	
GEW-159	2/20/2018 14:33	0.0	0.9	20.9	78.2	59.0	59.0	3.1	3.3	-13.2	-13.2	-19.1	
GEW-160	2/8/2018 9:01	9.5	42.7	2.9	44.9	44.3	44.3	15.0	17.3	-20.1	-20.1	-19.9	
GEW-161	2/8/2018 9:04	0.6	39.0	6.5	53.9	39.2	39.2	8.0	3.9	-14.3	-14.3	-19.9	
GEW-161	2/8/2018 9:06	0.6	40.7	6.4	52.3	38.8	38.8	9.0	6.4	-10.4	-10.4	-20.1	
GEW-161	2/22/2018 13:45	0.8	54.9	0.0	44.3	48.2	48.2	2.4	3.4	-13.4	-13.4	-19.1	
GEW-161	2/22/2018 13:46	0.7	56.8	0.0	42.5	48.2	48.2	4.8	4.5	-13.4	-13.4	-18.8	
GEW-162	2/8/2018 9:41	13.9	59.2	0.0	26.9	67.9	67.9	6.4	8.2	-9.4	-9.4	-20.2	
GEW-163	2/1/2018 8:46	7.8	36.5	8.1	47.6	171.0	170.5	4.1	6.3	0.0	0.0	-19.3	
GEW-163	2/1/2018 8:48	7.7	36.9	8.0	47.4	171.0	171.8	8.9	12.2	0.0	0.0	-19.5	
GEW-163	2/7/2018 11:00	4.7	51.1	3.0	41.2	189.0	188.9	16.1	13.9	0.0	0.0	-18.1	
GEW-163	2/7/2018 11:01	5.2	50.0	3.9	40.9	188.3	188.9	17.7	24.4	-0.1	-0.1	-18.9	
GEW-163	2/13/2018 10:45	13.3	37.9	7.6	41.2	168.1	168.1	17.8	4.2	-0.1	-0.1	-18.4	
GEW-163	2/13/2018 10:47	13.1	39.4	7.5	40.0	168.1	167.6	4.2	10.2	-0.1	-0.1	-17.3	
GEW-163	2/20/2018 10:43	10.6	43.5	5.8	40.1	178.6	178.6	16.7	21.2	-0.1	-0.1	-17.9	
GEW-163	2/20/2018 10:45	10.5	44.0	5.8	39.7	178.6	179.2	16.5	20.9	-0.1	-0.1	-17.7	
GEW-163	2/26/2018 14:53	13.1	43.7	3.9	39.3	174.2	174.2	14.5	15.7	-0.1	-0.1	-18.4	
GEW-163	2/26/2018 14:55	12.6	46.1	3.9	37.4	173.6	173.1	11.2	10.7	-0.1	-0.1	-18.5	
GEW-164	2/1/2018 8:52	21.1	49.7	3.5	25.7	150.3	150.6	22.7	18.5	-0.5	-0.5	-20.1	
GEW-164	2/1/2018 8:53	21.0	49.9	3.5	25.6	150.2	150.3	40.2	25.3	-0.5	-0.5	-20.4	
GEW-164	2/7/2018 11:06	24.1	49.4	2.9	23.6	148.0	148.3	26.8	20.4	-0.5	-0.4	-19.1	
GEW-164	2/7/2018 11:07	24.2	49.5	2.8	23.5	148.0	148.0	33.2	18.0	-0.4	-0.4	-18.8	
GEW-164	2/13/2018 10:51	24.9	52.5	2.2	20.4	152.5	152.5	11.8	16.1	-0.4	-0.4	-19.5	
GEW-164	2/13/2018 11:01	24.7	52.7	2.2	20.4	152.1	152.1	28.9	35.7	-0.4	-0.4	-19.3	
GEW-164	2/20/2018 10:48	23.6	54.6	1.6	20.2	155.6	155.6	18.1	23.7	-0.5	-0.5	-18.6	
GEW-164	2/20/2018 10:50	23.7	54.2	1.6	20.5	155.6	155.6	17.2	7.9	-0.6	-0.5	-18.3	

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Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure	
		(% vol)				°F		scfm		H ₂ O			
GEW-164	2/26/2018 14:57	22.9	53.3	1.1	22.7	156.5	156.1	23.7	21.1	-0.4	-0.4	-19.2	
GEW-164	2/26/2018 14:59	22.8	55.2	1.1	20.9	156.0	156.0	25.7	25.7	-0.4	-0.4	-19.3	
GEW-165	2/1/2018 9:00	11.2	58.2	1.1	29.5	180.9	181.4	8.1	9.4	-0.2	-0.3	-20.3	
GEW-165	2/1/2018 9:02	11.1	60.7	1.1	27.1	181.0	180.9	14.7	15.4	-0.2	-0.2	-20.4	
GEW-165	2/7/2018 11:14	11.1	44.0	5.8	39.1	165.2	165.2	39.3	33.1	-1.1	-1.1	-19.3	
GEW-165	2/7/2018 11:16	10.9	45.5	5.9	37.7	165.2	165.2	7.2	27.3	-1.2	-1.1	-19.4	
GEW-165	2/13/2018 14:15	7.3	38.6	7.9	46.2	158.1	158.5	13.5	48.5	-1.0	-1.0	-18.8	
GEW-165	2/13/2018 14:17	7.5	40.8	7.8	43.9	158.5	158.5	34.9	19.8	-1.1	-0.9	-18.9	
GEW-165	2/20/2018 10:57	11.5	57.6	1.3	29.6	181.5	181.0	15.6	15.5	-0.3	-0.3	-17.5	
GEW-165	2/20/2018 10:59	11.4	58.8	1.4	28.4	180.9	181.3	18.7	20.0	-0.5	-0.4	-18.5	
GEW-165	2/26/2018 15:03	11.7	57.5	0.6	30.2	182.1	182.2	32.2	30.3	-0.3	-0.3	-17.7	
GEW-165	2/26/2018 15:05	11.4	60.3	0.7	27.6	182.1	182.7	29.8	37.9	-0.4	-0.4	-17.9	
GEW-166	2/1/2018 9:07	2.1	52.3	1.3	44.3	185.7	185.7	34.2	31.0	-17.6	-17.7	-18.2	
GEW-166	2/1/2018 9:08	2.0	53.5	1.3	43.2	186.4	185.7	31.5	26.2	-17.2	-17.2	-18.2	
GEW-166	2/7/2018 11:21	1.9	52.9	0.8	44.4	190.9	190.9	24.2	43.9	-15.7	-15.7	-16.3	
GEW-166	2/7/2018 11:22	1.9	53.8	0.8	43.5	190.9	191.2	58.4	49.1	-15.7	-16.2	-17.3	
GEW-166	2/13/2018 14:10	1.4	52.5	0.6	45.5	194.3	194.3	14.3	27.6	-13.3	-13.3	-14.1	
GEW-166	2/13/2018 14:11	1.2	53.1	0.6	45.1	194.3	194.3	37.9	17.1	-14.2	-13.7	-13.6	
GEW-166	2/20/2018 11:03	1.8	54.5	0.5	43.2	193.6	193.9	11.3	8.7	-13.0	-13.0	-12.1	
GEW-166	2/20/2018 11:05	1.8	54.0	0.5	43.7	193.7	193.6	12.6	16.3	-13.0	-13.1	-12.1	
GEW-166	2/26/2018 15:08	2.0	53.6	0.4	44.0	189.6	189.6	35.5	31.1	-15.7	-15.8	-17.1	
GEW-166	2/26/2018 15:09	1.4	54.7	0.4	43.5	189.6	189.8	39.0	42.0	-15.2	-15.7	-15.7	
GEW-167	2/1/2018 9:26	1.9	30.9	12.5	54.7	180.5	180.8	16.8	19.4	-0.5	-0.5	-17.7	
GEW-167	2/1/2018 9:28	2.0	29.9	12.9	55.2	180.3	180.3	12.9	12.0	-0.5	-0.5	-17.7	
GEW-167	2/7/2018 11:28	1.7	37.8	6.1	54.4	185.2	185.1	16.0	11.7	-0.3	-0.3	-16.2	
GEW-167	2/7/2018 11:29	1.8	38.7	6.4	53.1	184.5	184.5	8.1	15.7	-0.4	-0.4	-15.9	
GEW-167	2/13/2018 11:06	0.8	40.3	6.5	52.4	187.6	187.5	17.9	11.6	-0.1	-0.2	-15.7	
GEW-167	2/13/2018 11:08	0.7	41.4	6.5	51.4	187.6	187.2	23.7	22.9	-0.2	-0.3	-15.5	
GEW-167	2/20/2018 11:16	1.4	46.3	4.6	47.7	189.6	189.6	6.3	19.6	-0.1	-0.1	-15.9	
GEW-167	2/20/2018 11:18	1.5	45.7	4.7	48.1	189.6	189.6	18.8	24.0	-0.1	-0.2	-16.9	
GEW-167	2/26/2018 15:24	0.8	43.5	4.5	51.2	187.6	187.7	16.4	14.7	-0.2	-0.2	-16.2	
GEW-167	2/26/2018 15:25	0.8	43.7	4.5	51.0	187.9	187.6	13.1	13.1	-0.3	-0.3	-15.9	
GEW-168	2/1/2018 9:39	16.7	56.4	0.2	26.7	170.0	170.5	171.4	172.4	-3.0	-2.9	-19.6	
GEW-168	2/1/2018 9:41	16.2	57.4	0.1	26.3	170.5	170.5	172.0	172.0	-2.8	-2.9	-19.9	
GEW-168	2/7/2018 11:35	16.5	55.1	0.1	28.3	170.0	170.0	167.5	168.5	-2.9	-2.8	-18.8	
GEW-168	2/7/2018 11:36	16.4	55.9	0.1	27.6	169.5	169.5	171.0	169.0	-2.9	-2.8	-19.4	
GEW-168	2/13/2018 11:15	14.6	55.5	0.2	29.7	172.1	171.9	168.6	167.5	-2.6	-2.6	-18.2	
GEW-168	2/13/2018 11:17	14.6	56.2	0.1	29.1	171.6	171.6	170.0	171.3	-2.6	-2.6	-18.8	
GEW-168	2/20/2018 11:33	16.2	57.4	0.0	26.4	168.5	169.0	170.3	170.7	-2.5	-2.4	-18.2	
GEW-168	2/20/2018 11:34	16.4	57.2	0.0	26.4	169.1	169.0	168.8	168.7	-2.6	-2.6	-18.2	
GEW-168	2/26/2018 15:29	12.5	55.5	0.0	32.0	169.2	169.5	172.6	172.3	-2.5	-2.5	-18.7	

February 2018 Wellfield Monitoring Data - Bridgeton Landfill													
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		(% vol)				°F		scfm		H ₂ O			
GEW-168	2/26/2018 15:30	12.4	56.9	0.0	30.7	170.5	170.5	172.7	173.3	-2.5	-2.5	-18.7	
GEW-169	2/1/2018 9:47	5.3	50.4	3.4	40.9	184.5	184.9	11.2	12.8	-1.2	-1.2	-19.3	
GEW-169	2/1/2018 9:48	5.0	53.5	3.3	38.2	184.5	184.5	23.0	30.7	-1.3	-1.3	-19.3	
GEW-169	2/7/2018 11:41	5.1	52.7	3.1	39.1	183.9	184.5	20.1	16.3	-1.2	-1.3	-18.7	
GEW-169	2/7/2018 11:43	5.0	53.5	3.1	38.4	184.5	184.5	17.4	9.0	-1.3	-1.3	-18.6	
GEW-169	2/13/2018 11:22	5.1	55.2	1.9	37.8	187.6	187.6	11.4	19.4	-1.0	-1.0	-18.0	
GEW-169	2/13/2018 11:23	5.0	56.6	1.8	36.6	187.6	187.6	19.4	10.6	-1.0	-1.0	-18.8	
GEW-169	2/20/2018 11:23	7.4	58.4	1.0	33.2	187.1	187.6	8.8	21.5	-0.6	-0.6	-18.0	
GEW-169	2/20/2018 11:24	7.6	58.2	0.9	33.3	187.0	187.6	12.2	4.4	-0.6	-0.6	-18.2	
GEW-169	2/26/2018 15:33	5.1	61.0	0.0	33.9	188.3	187.6	11.3	12.5	-0.6	-0.6	-18.7	
GEW-169	2/26/2018 15:34	5.1	62.1	0.0	32.8	188.3	188.3	14.6	19.0	-0.9	-0.9	-18.7	
GEW-170	2/8/2018 13:35	8.0	40.6	6.6	44.8	162.0	162.0	18.7	24.4	-7.5	-7.5	-15.3	
GEW-170	2/8/2018 13:38	8.1	39.9	6.6	45.4	149.5	149.1	1.6	1.9	-1.7	-1.7	-14.8	
GEW-170	2/14/2018 10:07	6.7	63.5	0.0	29.8	172.1	171.6	9.1	8.5	0.9	0.9	-8.1	
GEW-170	2/14/2018 10:11	6.2	65.2	0.0	28.6	189.6	190.2	4.6	5.4	-0.6	-0.6	-8.8	
GEW-170	2/22/2018 9:18	7.8	48.9	4.1	39.2	181.5	181.5	6.2	9.4	-1.7	-1.7	-12.3	
GEW-170	2/22/2018 9:20	7.7	50.9	4.1	37.3	180.9	180.9	6.2	4.1	-1.6	-1.6	-13.4	
GEW-171	2/8/2018 10:37	0.1	16.4	17.6	65.9	47.3	47.2	10.2	10.5	-19.1	-19.1	-19.6	
GEW-171	2/8/2018 10:40	0.0	8.1	20.3	71.6	47.4	47.4	9.4	9.4	-16.7	-16.5	-19.5	
GEW-171	2/12/2018 14:29	6.1	58.8	0.0	35.1	53.9	53.7	5.8	5.5	66.4	66.4	-19.1	
GEW-171	2/12/2018 14:32	6.5	63.4	0.0	30.1	80.7	80.0	5.1	6.4	-9.1	-9.1	-19.3	
GEW-171	2/21/2018 10:40	6.7	58.0	0.5	34.8	44.6	44.4	9.9	5.5	-16.0	-16.0	-20.1	
GEW-172	2/8/2018 11:02	0.6	47.8	3.3	48.3	56.3	56.2	5.5	5.5	-19.8	-20.0	-20.0	
GEW-173	2/8/2018 10:11	4.5	16.9	10.2	68.4	95.5	96.2	54.6	52.0	-2.1	-2.1	-4.8	
GEW-173	2/8/2018 10:15	4.7	16.2	10.3	68.8	89.6	89.1	7.3	7.8	-0.1	-0.1	-20.0	
GEW-173	2/21/2018 10:18	18.2	35.0	2.7	44.1	90.9	90.8	6.1	9.1	-0.1	-0.1	-20.0	
GEW-174	2/8/2018 10:04	19.8	46.1	0.0	34.1	143.5	143.5	24.6	28.2	-4.2	-4.3	-19.0	
GEW-174	2/8/2018 10:05	20.0	45.8	0.0	34.2	143.5	143.6	26.0	20.1	-4.2	-4.3	-19.8	
GEW-174	2/21/2018 9:59	18.5	44.1	0.0	37.4	140.2	140.9	31.2	31.2	-4.3	-4.3	-20.2	
GEW-174	2/21/2018 10:00	19.1	44.4	0.0	36.5	141.2	140.8	35.4	35.4	-4.4	-4.4	-19.7	
GEW-175	2/7/2018 14:34	18.7	41.6	4.8	34.9	113.7	113.3	45.7	51.0	-0.6	-0.6	-19.6	
GEW-175	2/7/2018 14:35	18.6	42.3	4.7	34.4	113.3	113.5	49.0	42.4	-0.5	-0.6	-19.6	
GEW-176	2/7/2018 14:27	17.5	32.0	9.3	41.2	48.2	48.2	8.2	9.5	-0.3	-0.3	-19.3	
GEW-176	2/7/2018 14:28	18.0	30.1	9.4	42.5	47.2	47.1	10.9	10.9	-0.1	-0.1	-19.3	
GEW-176	2/20/2018 14:45	17.6	28.6	10.0	43.8	59.2	59.2	7.1	7.2	-0.1	-0.1	-19.4	
GEW-176	2/20/2018 14:47	18.1	26.8	10.2	44.9	59.2	59.2	7.1	7.1	-0.1	-0.1	-19.4	
GEW-177	2/8/2018 11:26	0.1	38.5	8.7	52.7	54.6	54.7	10.7	15.7	-19.7	-19.7	-19.6	
GEW-177	2/8/2018 11:28	0.1	43.4	7.9	48.6	54.6	54.6	8.3	6.8	-19.5	-19.2	-19.5	
GEW-177	2/22/2018 8:43	0.4	45.5	6.2	47.9	39.2	39.2	2.9	3.6	-19.0	-19.0	-19.1	
GEW-177	2/22/2018 8:57	0.2	48.8	4.9	46.1	38.8	38.8	4.1	4.1	-17.5	-17.5	-18.7	
GEW-178	2/7/2018 8:51	12.2	42.8	7.1	37.9	44.4	44.3	2.5	2.5	0.0	0.0	-19.9	

February 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 ₂ O		
GEW-178	2/7/2018 8:53	12.2	43.3	7.1	37.4	44.3	44.4	1.8	2.0	0.0	0.0	-19.8
GEW-178	2/9/2018 10:43	15.4	64.8	0.0	19.8	74.1	74.3	4.9	3.3	0.0	0.0	-19.7
GEW-178	2/9/2018 10:45	15.1	65.9	0.0	19.0	83.7	84.0	4.9	4.6	-0.1	-0.1	-20.0
GEW-178	2/13/2018 8:44	9.8	43.6	7.8	38.8	87.2	87.7	6.9	6.8	-0.1	-0.2	-19.1
GEW-178	2/13/2018 8:45	9.6	44.8	7.4	38.2	87.5	86.9	5.2	2.3	-0.1	-0.1	-19.0
GEW-178	2/20/2018 8:16	12.7	50.7	4.8	31.8	105.4	105.8	6.1	2.9	-0.1	-0.1	-20.1
GEW-178	2/28/2018 8:55	15.4	61.0	0.3	23.3	100.8	101.1	6.1	6.1	-0.1	-0.2	-20.0
GEW-178	2/28/2018 8:57	15.5	61.3	0.2	23.0	103.1	103.0	7.5	9.4	-0.3	-0.3	-20.1
GEW-179	2/7/2018 9:03	1.4	9.6	19.6	69.4	32.3	32.3	4.1	3.9	-17.7	-17.7	-19.3
GEW-179	2/7/2018 9:04	2.3	8.3	19.4	70.0	32.6	32.6	3.3	2.8	-17.7	-17.7	-19.5
GEW-179	2/13/2018 8:53	21.8	48.8	5.3	24.1	45.2	45.3	2.2	2.5	-2.0	-2.0	-18.7
GEW-179	2/13/2018 8:55	21.8	48.2	5.5	24.5	46.1	46.1	3.9	4.3	-2.1	-2.1	-18.8
GEW-179	2/16/2018 11:45	17.2	64.3	0.0	18.5	44.7	44.7	5.4	3.3	0.8	0.8	-19.8
GEW-179	2/16/2018 11:47	16.7	66.6	0.0	16.7	46.2	46.2	5.9	8.6	-0.7	-0.8	-20.0
GEW-179	2/20/2018 8:28	14.2	63.1	0.5	22.2	66.1	66.1	6.8	6.7	-19.9	-19.9	-19.9
GEW-179	2/28/2018 14:50	17.3	62.9	0.0	19.8	67.2	67.2	15.6	14.9	-0.2	-0.2	-20.1
GEW-179	2/28/2018 14:52	17.0	65.1	0.0	17.9	68.6	68.8	9.9	9.7	-1.4	-1.4	-18.2
GEW-180	2/7/2018 9:11	0.1	0.9	21.1	77.9	31.1	31.1	1.3	0.0	-11.3	-11.3	-19.8
GEW-180	2/7/2018 9:13	0.1	0.8	21.1	78.0	30.7	30.6	1.3	1.3	-11.3	-11.3	-19.8
GEW-180	2/9/2018 10:40	9.6	57.9	1.5	31.0	78.2	78.0	3.7	5.9	-5.9	-5.9	-19.7
GEW-180	2/13/2018 9:02	10.2	59.5	1.9	28.4	74.9	74.8	3.1	3.9	-2.9	-3.0	-18.4
GEW-180	2/20/2018 8:32	11.8	62.4	0.0	25.8	106.5	106.3	8.1	7.1	2.0	2.1	-20.2
GEW-180	2/20/2018 8:34	11.2	65.5	0.0	23.3	118.1	118.6	8.5	6.5	-2.2	-2.3	-20.1
GEW-180	2/28/2018 9:08	0.1	10.3	20.0	69.6	53.5	53.4	4.7	4.7	-19.4	-19.4	-19.6
GEW-180	2/28/2018 9:11	0.0	4.0	21.4	74.6	53.1	53.1	3.6	3.8	-17.4	-17.4	-19.6
GEW-181	2/7/2018 9:18	11.1	62.0	0.0	26.9	99.6	99.2	10.2	8.1	-4.0	-4.1	-19.6
GEW-181	2/13/2018 9:07	12.6	64.3	0.0	23.1	159.8	160.3	4.7	2.6	6.8	6.8	-18.5
GEW-181	2/13/2018 9:10	12.5	67.4	0.0	20.1	169.0	169.0	13.5	6.9	-1.0	-1.1	-18.7
GEW-181	2/20/2018 8:38	10.9	62.1	0.1	26.9	167.4	167.1	5.1	8.7	-5.7	-5.7	-20.1
GEW-181	2/20/2018 8:40	10.8	64.0	0.1	25.1	166.1	166.1	9.6	5.1	-5.9	-6.2	-20.4
GEW-181	2/28/2018 9:21	12.2	62.2	0.0	25.6	168.1	167.6	7.3	9.1	0.0	0.0	-21.1
GEW-181	2/28/2018 9:24	11.9	63.2	0.0	24.9	168.0	168.1	10.8	10.2	-0.5	-0.5	-20.2
GEW-182	2/7/2018 10:33	11.1	55.2	0.0	33.7	159.8	160.2	5.6	10.1	0.4	0.4	-9.5
GEW-182	2/7/2018 10:36	11.1	57.3	0.0	31.6	173.9	174.2	10.6	18.2	-1.1	-1.1	-13.1
GEW-182	2/13/2018 10:12	12.4	41.4	6.4	39.8	157.7	157.9	6.7	25.0	-0.6	-0.7	-15.7
GEW-182	2/13/2018 10:14	12.7	42.6	6.6	38.1	157.7	157.7	11.6	9.5	-0.5	-0.5	-17.5
GEW-182	2/20/2018 10:01	12.6	50.7	2.6	34.1	152.9	153.1	6.6	19.1	-0.3	-0.4	-16.0
GEW-182	2/20/2018 10:03	13.0	52.1	2.6	32.3	153.5	153.3	13.5	12.4	-0.4	-0.4	-15.0
GEW-182	2/28/2018 15:10	13.9	48.0	3.2	34.9	148.0	148.0	18.7	16.6	-0.7	-0.7	-20.9
GEW-182	2/28/2018 15:11	13.9	49.0	3.2	33.9	148.0	148.0	16.3	13.5	-0.9	-0.9	-20.5
GEW-184	2/7/2018 10:20	20.5	34.8	8.8	35.9	60.4	60.8	2.4	4.0	-0.1	-0.1	-19.3

February 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 ₂ O			
GEW-184	2/7/2018 10:21	20.4	34.9	8.8	35.9	60.7	60.2	3.0	4.0	-0.1	-0.1	-19.3	
GEW-184	2/8/2018 8:14	18.8	35.0	9.6	36.6	58.5	58.2	1.7	2.7	-0.1	-0.1	-19.7	
GEW-184	2/8/2018 8:38	12.1	25.4	14.0	48.5	80.5	80.3	10.3	6.9	-0.2	-0.2	-19.8	
GEW-184	2/8/2018 8:53	13.5	24.8	13.7	48.0	79.1	78.9	12.7	6.4	-0.2	-0.2	-19.9	
GEW-184	2/8/2018 8:55	12.2	24.2	14.3	49.3	68.3	69.1	2.3	2.3	-0.1	-0.1	-20.0	
GEW-184	2/13/2018 9:57	19.8	37.3	9.3	33.6	83.0	82.8	1.2	2.3	0.0	0.0	-18.5	
GEW-184	2/13/2018 9:58	19.7	37.6	9.3	33.4	83.3	83.3	3.5	2.3	0.0	0.0	-18.5	
GEW-184	2/15/2018 14:26	22.6	47.5	5.1	24.8	108.7	108.8	2.2	1.6	-0.1	-0.1	-20.5	
GEW-184	2/15/2018 14:28	22.6	46.8	5.2	25.4	112.7	113.5	4.2	3.7	-0.1	-0.1	-19.7	
GEW-184	2/16/2018 11:15	12.4	23.2	14.1	50.3	81.9	81.9	7.6	3.1	-0.1	-0.1	-19.9	
GEW-184	2/16/2018 11:16	12.7	23.6	14.0	49.7	72.8	72.9	2.9	1.1	-0.1	-0.1	-20.0	
GEW-184	2/20/2018 9:47	26.4	44.9	5.3	23.4	90.1	90.2	13.9	14.0	-0.2	-0.3	-19.7	
GEW-184	2/20/2018 9:49	25.8	45.0	5.2	24.0	90.1	90.1	10.4	10.2	-0.1	-0.1	-18.8	
GEW-184	2/28/2018 9:53	24.4	45.3	5.2	25.1	86.3	86.5	3.0	3.1	0.0	0.0	-19.7	
GEW-184	2/28/2018 9:56	24.4	45.1	5.3	25.2	91.2	91.9	2.3	3.8	-0.1	-0.1	-19.3	
GEW-185	2/7/2018 10:25	17.8	54.8	0.0	27.4	147.7	148.0	8.8	8.4	-0.3	-0.3	-19.2	
GEW-185	2/7/2018 10:26	17.2	59.7	0.0	23.1	148.4	148.1	8.0	9.8	-0.3	-0.3	-18.7	
GEW-185	2/13/2018 10:03	16.2	60.2	0.0	23.6	156.0	156.0	9.4	6.8	-0.1	-0.1	-18.6	
GEW-185	2/13/2018 10:05	16.2	59.8	0.0	24.0	156.4	155.6	3.6	4.3	-0.1	-0.1	-18.5	
GEW-185	2/20/2018 9:53	16.1	57.3	0.0	26.6	157.3	157.3	10.1	11.7	-0.2	-0.1	-18.5	
GEW-185	2/20/2018 9:54	15.3	60.7	0.0	24.0	157.0	157.0	9.5	12.4	-0.1	-0.1	-18.4	
GEW-185	2/28/2018 10:01	15.1	59.4	0.0	25.5	161.6	161.1	4.7	4.7	0.0	0.0	-19.6	
GEW-185	2/28/2018 10:03	15.2	61.1	0.0	23.7	161.9	162.0	6.4	4.1	-0.1	-0.1	-19.7	
GEW-186	2/7/2018 9:27	9.1	37.4	9.4	44.1	79.9	79.8	5.3	5.1	-0.1	-0.1	-19.9	
GEW-186	2/7/2018 9:29	9.3	37.4	9.5	43.8	73.2	73.0	2.1	2.1	-0.1	-0.1	-19.9	
GEW-186	2/9/2018 14:09	17.6	54.2	3.2	25.0	126.1	126.4	5.0	5.6	-0.1	-0.1	-19.1	
GEW-186	2/13/2018 9:25	20.6	51.8	3.9	23.7	127.2	127.8	4.6	6.2	0.0	0.0	-18.5	
GEW-186	2/20/2018 9:24	22.2	49.9	4.0	23.9	135.3	135.0	6.3	11.2	-0.2	-0.1	-20.0	
GEW-186	2/20/2018 9:25	22.1	50.3	3.4	24.2	134.7	134.4	9.6	7.4	-0.2	-0.2	-19.2	
GEW-186	2/28/2018 9:35	23.0	51.6	3.2	22.2	138.3	137.4	5.0	4.9	-0.1	-0.1	-19.4	
GEW-186	2/28/2018 9:39	22.9	50.3	3.3	23.5	141.5	141.5	7.5	6.6	-0.1	-0.1	-19.2	
GEW-187	2/7/2018 8:42	11.0	42.3	4.8	41.9	79.8	79.8	4.2	4.2	-1.0	-1.0	-19.8	
GEW-187	2/13/2018 8:34	3.0	13.1	17.2	66.7	133.5	133.7	9.3	9.1	-1.0	-1.0	-19.2	
GEW-187	2/13/2018 8:36	2.9	14.8	17.0	65.3	133.5	133.5	9.0	8.9	-1.0	-1.0	-19.1	
GEW-187	2/20/2018 8:06	3.0	27.5	12.4	57.1	170.0	169.5	10.4	10.4	-0.2	-0.2	-20.5	
GEW-187	2/20/2018 8:09	3.0	28.0	12.3	56.7	170.0	170.0	8.1	7.1	-0.1	-0.1	-20.3	
GEW-187	2/28/2018 8:32	9.3	55.0	1.0	34.7	174.8	174.7	7.6	7.6	-2.6	-2.6	-20.1	
GEW-187	2/28/2018 8:34	9.3	56.1	0.8	33.8	174.7	174.7	6.9	8.5	-2.6	-2.6	-19.7	
GEW-188	2/7/2018 10:02	1.2	23.1	12.0	63.7	90.5	91.0	26.0	26.8	-0.4	-0.4	-18.5	
GEW-188	2/7/2018 10:03	1.3	23.4	12.0	63.3	93.2	93.9	23.1	21.1	-0.3	-0.2	-16.8	
GEW-188	2/13/2018 9:42	2.5	25.2	13.3	59.0	92.2	92.2	24.7	10.4	-0.3	-0.2	-14.5	

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Well Name	Date Sampled	Methane	CO ₂	O ₂	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H ₂ O		
GEW-188	2/13/2018 9:44	2.3	22.0	13.8	61.9	92.9	92.9	7.7	22.2	-0.2	-0.3	-14.3
GEW-188	2/20/2018 9:38	1.1	19.6	15.8	63.5	99.6	99.6	11.0	19.3	-0.2	-0.1	-15.5
GEW-188	2/20/2018 9:40	0.9	16.1	16.3	66.7	99.9	100.1	19.5	18.6	-0.2	-0.1	-16.5
GEW-188	2/28/2018 10:13	2.4	19.1	15.0	63.5	94.8	94.9	25.7	18.8	-0.4	-0.1	-16.2
GEW-188	2/28/2018 10:21	2.4	18.9	13.9	64.8	84.2	83.7	8.8	11.1	-0.1	-0.1	-18.1
GEW-1A	2/1/2018 14:28	0.6	6.9	19.0	73.5	31.9	31.9	6.8	5.8	-13.2	-13.4	-14.1
GEW-1A	2/1/2018 14:29	0.4	4.4	19.8	75.4	31.5	31.5	5.0	5.3	-13.1	-13.1	-12.6
GEW-1A	2/7/2018 9:56	1.5	6.2	18.5	73.8	31.0	31.0	3.9	3.7	-14.9	-14.9	-15.1
GEW-1A	2/7/2018 9:59	0.2	1.2	21.0	77.6	31.1	31.1	1.8	1.8	-14.2	-14.2	-15.1
GEW-1A	2/12/2018 14:46	0.7	6.8	18.1	74.4	51.6	51.8	4.2	6.3	-14.6	-14.6	-14.7
GEW-1A	2/12/2018 14:47	0.8	2.4	19.2	77.6	52.1	52.1	3.6	5.1	-14.6	-14.6	-14.7
GEW-1A	2/19/2018 15:29	1.1	2.6	19.2	77.1	61.8	61.8	1.3	2.1	-13.2	-13.2	-13.7
GEW-1A	2/19/2018 15:30	0.7	1.0	19.9	78.4	61.7	61.7	0.6	0.6	-13.2	-13.2	-13.7
GEW-1A	2/26/2018 13:17	0.0	2.6	20.2	77.2	70.5	70.9	2.2	2.5	-12.9	-12.8	-13.2
GEW-1A	2/26/2018 13:18	0.0	0.5	20.6	78.9	72.7	72.7	2.1	1.9	-13.2	-13.1	-13.3
GEW-2S	2/1/2018 15:15	58.0	38.8	0.0	3.2	40.5	40.3	6.4	4.9	-6.4	-6.0	-7.5
GEW-2S	2/7/2018 10:06	56.3	37.4	0.5	5.8	44.1	44.4	14.4	12.9	-6.3	-5.8	-10.7
GEW-2S	2/12/2018 14:57	56.0	35.7	0.9	7.4	48.8	49.0	13.7	13.9	-6.3	-6.2	-9.7
GEW-2S	2/22/2018 8:00	53.2	39.1	1.2	6.5	44.6	44.6	15.9	13.7	-3.8	-3.7	-7.3
GEW-2S	2/26/2018 13:37	55.6	36.3	1.3	6.8	64.7	64.9	10.9	12.3	-3.1	-3.2	-4.4
GIW-01	2/5/2018 9:02	4.9	60.9	0.5	33.7	172.1	172.1	13.6	13.4	-4.1	-4.0	-21.1
GIW-01	2/5/2018 9:10	6.3	60.3	0.4	33.0	172.5	172.1	10.3	9.8	-4.0	-4.0	-20.8
GIW-01	2/12/2018 8:55	10.8	38.6	8.2	42.4	43.8	44.0	5.9	4.3	-19.4	-19.4	-20.0
GIW-01	2/12/2018 8:57	12.2	34.8	8.4	44.6	40.2	40.1	2.8	1.2	-10.2	-10.1	-20.3
GIW-01	2/19/2018 10:00	6.2	62.6	0.0	31.2	134.4	134.6	3.2	3.2	20.5	20.5	-20.1
GIW-01	2/19/2018 10:04	5.6	64.4	0.0	30.0	175.8	175.8	14.6	14.6	-1.4	-1.4	-20.5
GIW-01	2/26/2018 8:36	6.3	58.3	0.6	34.8	174.2	174.2	11.6	11.6	-6.7	-6.7	-20.0
GIW-01	2/26/2018 8:37	6.1	59.3	0.5	34.1	174.2	174.2	12.4	11.0	-6.7	-6.7	-20.3
GIW-02	2/5/2018 9:15	3.1	25.4	12.7	58.8	31.0	31.0	5.4	5.1	0.0	0.0	-20.4
GIW-02	2/5/2018 9:22	3.3	22.0	13.3	61.4	30.9	30.9	1.0	2.4	-0.1	-0.1	-20.4
GIW-02	2/12/2018 9:00	1.5	18.0	15.6	64.9	39.7	39.8	5.8	5.7	-0.1	-0.1	-20.0
GIW-02	2/12/2018 9:01	1.5	15.1	16.2	67.2	40.5	40.6	3.1	3.1	-0.1	-0.1	-20.0
GIW-02	2/19/2018 10:07	2.3	24.3	12.1	61.3	63.5	63.5	3.1	3.2	-0.1	-0.1	-19.6
GIW-02	2/19/2018 10:09	2.4	22.7	12.5	62.4	63.3	63.3	1.7	3.2	-0.1	-0.2	-19.7
GIW-02	2/26/2018 8:40	1.5	19.3	14.5	64.7	67.5	67.5	5.1	5.3	-0.1	-0.1	-19.5
GIW-02	2/26/2018 8:42	1.6	15.2	15.2	68.0	68.4	68.4	3.2	2.9	-0.1	-0.1	-19.6
GIW-03	2/5/2018 9:47	2.0	61.9	0.0	36.1	25.1	25.1	4.0	4.0	-0.4	-0.4	-17.4
GIW-03	2/5/2018 9:53	2.3	59.1	0.0	38.6	24.7	24.7	4.0	4.3	-0.3	-0.2	-17.0
GIW-03	2/12/2018 9:04	1.6	56.9	0.0	41.5	37.6	37.7	5.5	5.7	0.4	0.4	-17.5
GIW-03	2/12/2018 9:06	1.5	63.5	0.0	35.0	29.1	29.1	3.7	3.2	-0.1	-0.1	-17.1
GIW-03	2/19/2018 10:12	2.7	56.6	0.0	40.7	62.1	62.1	4.8	3.6	-6.9	-6.8	-17.7

February 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 ₂ O		
GIW-03	2/26/2018 8:47	5.2	55.3	0.5	39.0	62.3	62.4	4.2	4.2	-2.9	-2.9	-16.8
GIW-04	2/5/2018 9:57	1.3	42.1	4.8	51.8	32.3	32.4	7.2	7.4	-8.8	-8.8	-19.4
GIW-04	2/5/2018 10:04	1.6	41.7	4.8	51.9	31.8	31.8	4.8	10.3	-7.4	-7.4	-19.5
GIW-04	2/12/2018 9:09	0.4	33.5	9.9	56.2	37.1	37.3	5.2	3.5	-11.5	-11.3	-20.0
GIW-04	2/12/2018 9:11	0.4	31.9	10.1	57.6	37.9	38.1	2.1	1.2	-11.3	-11.3	-20.0
GIW-04	2/19/2018 10:16	0.0	6.8	20.1	73.1	61.6	61.6	3.3	4.1	-15.7	-15.7	-19.7
GIW-04	2/19/2018 10:17	0.0	5.1	20.3	74.6	61.6	61.6	2.3	3.3	-16.2	-16.2	-19.7
GIW-04	2/26/2018 8:50	3.3	50.6	2.6	43.5	63.3	63.3	2.7	3.4	-3.0	-3.0	-19.2
GIW-05	2/5/2018 10:57	1.0	8.5	19.9	70.6	31.8	32.3	0.0	0.0	-2.1	-2.1	-19.3
GIW-05	2/5/2018 11:05	1.7	18.9	13.2	66.2	31.1	31.1	9.6	9.4	-5.3	-5.2	-19.3
GIW-05	2/12/2018 9:20	0.0	8.9	20.8	70.3	34.2	36.1	0.0	0.0	0.0	0.0	-19.6
GIW-05	2/12/2018 9:23	0.0	2.3	21.2	76.5	36.4	36.4	0.0	0.0	-0.1	-0.1	-19.8
GIW-05	2/19/2018 10:26	0.0	5.2	21.0	73.8	61.4	61.4	0.0	0.0	-0.1	-0.1	-19.7
GIW-05	2/19/2018 10:28	0.0	1.5	21.1	77.4	61.4	61.4	0.0	0.0	-0.1	0.0	-19.7
GIW-05	2/26/2018 8:59	0.0	5.5	20.9	73.6	58.7	58.7	0.0	0.0	0.0	0.0	-19.5
GIW-05	2/26/2018 9:01	0.0	2.7	21.5	75.8	59.0	59.2	0.0	0.0	-0.1	0.0	-19.2
GIW-06	2/5/2018 11:13	4.5	52.5	0.2	42.8	31.8	31.7	3.5	6.0	-1.1	-1.1	-19.9
GIW-06	2/5/2018 11:20	4.9	51.9	0.4	42.8	31.8	31.9	3.8	3.5	-1.2	-1.1	-19.8
GIW-06	2/12/2018 9:48	2.1	55.0	0.2	42.7	42.6	42.5	2.5	4.4	-0.7	-0.7	-19.6
GIW-06	2/19/2018 10:47	22.3	45.4	0.0	32.3	59.5	59.6	5.0	6.6	-10.8	-10.8	-19.7
GIW-06	2/26/2018 9:05	13.4	46.7	0.0	39.9	60.9	60.9	3.8	4.0	-5.3	-5.5	-19.2
GIW-07	2/5/2018 11:32	33.0	52.1	0.8	14.1	34.4	34.4	2.0	2.0	-5.4	-5.4	-19.7
GIW-07	2/5/2018 11:38	30.9	53.0	0.7	15.4	36.4	36.4	3.2	3.5	-5.4	-5.4	-19.6
GIW-07	2/12/2018 9:51	30.6	55.5	0.4	13.5	39.8	39.9	3.9	3.9	-5.8	-5.8	-19.5
GIW-07	2/19/2018 10:49	32.1	52.8	0.0	15.1	59.4	59.4	5.8	4.8	-5.9	-5.9	-19.7
GIW-07	2/26/2018 9:07	29.7	51.2	0.4	18.7	59.1	59.2	3.0	2.7	-5.5	-5.3	-19.5
GIW-08	2/5/2018 13:21	22.0	48.8	0.0	29.2	40.0	39.9	7.3	7.4	-2.5	-2.5	-19.4
GIW-08	2/5/2018 13:27	21.7	49.8	0.0	28.5	36.1	36.2	3.8	3.8	-2.6	-2.6	-19.8
GIW-08	2/12/2018 9:54	26.6	51.2	0.0	22.2	42.5	42.8	4.0	4.0	-2.6	-2.6	-19.5
GIW-08	2/19/2018 10:52	24.1	53.1	0.0	22.8	59.6	59.6	1.7	3.2	-2.6	-2.5	-19.7
GIW-08	2/26/2018 9:10	23.9	53.9	0.0	22.2	65.5	65.6	2.1	1.7	-2.5	-2.5	-19.2
GIW-09	2/5/2018 13:32	3.0	18.7	10.3	68.0	37.8	37.8	4.6	3.8	-0.4	-0.4	-19.4
GIW-09	2/5/2018 13:38	3.2	15.6	10.6	70.6	37.3	37.2	2.6	1.8	-0.4	-0.4	-19.7
GIW-09	2/12/2018 10:00	1.1	19.6	14.1	65.2	39.2	39.5	5.5	5.5	-0.7	-0.6	-19.6
GIW-09	2/12/2018 10:01	1.2	14.4	14.8	69.6	39.9	39.9	4.4	4.4	-0.6	-0.6	-19.6
GIW-09	2/19/2018 10:57	0.8	18.3	13.2	67.7	59.4	59.4	3.2	4.0	-0.5	-0.6	-20.1
GIW-09	2/19/2018 10:58	0.8	14.5	13.8	70.9	59.4	59.4	2.1	1.7	-0.5	-0.5	-19.7
GIW-09	2/26/2018 9:18	1.0	14.1	14.3	70.6	60.4	60.4	2.4	3.0	-0.7	-0.7	-19.2
GIW-09	2/26/2018 9:19	1.0	12.8	14.4	71.8	61.4	61.5	2.1	2.1	-0.7	-0.7	-19.5
GIW-10	2/5/2018 13:43	7.4	43.2	0.0	49.4	41.9	41.9	2.2	2.8	-3.3	-3.3	-19.7
GIW-10	2/5/2018 13:50	8.1	44.6	0.0	47.3	43.4	43.4	3.3	3.5	-3.3	-3.3	-19.7

February 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 ₂ O			
GIW-10	2/12/2018 9:14	8.7	44.5	0.0	46.8	36.0	36.0	4.4	4.2	-4.3	-4.3	-19.9	
GIW-10	2/19/2018 10:21	10.3	41.3	0.0	48.4	60.7	60.7	4.5	3.4	-4.1	-4.0	-19.9	
GIW-10	2/26/2018 8:53	8.8	41.7	0.0	49.5	60.0	60.0	1.7	1.7	-4.3	-4.3	-19.6	
GIW-11	2/5/2018 13:56	9.5	47.1	0.3	43.1	42.5	42.5	3.1	2.2	-1.0	-1.0	-17.7	
GIW-11	2/5/2018 14:03	10.1	46.7	0.3	42.9	40.8	40.7	4.9	7.5	-1.2	-1.2	-15.9	
GIW-11	2/12/2018 8:51	10.4	43.2	0.2	46.2	36.0	36.0	3.8	4.4	-1.4	-1.5	-15.6	
GIW-11	2/19/2018 9:57	15.3	47.9	0.0	36.8	62.8	62.8	3.6	2.7	-1.4	-1.3	-16.2	
GIW-11	2/26/2018 8:32	16.1	44.7	0.0	39.2	60.0	60.1	5.2	4.9	-1.3	-1.3	-17.8	
GIW-12	2/5/2018 14:07	12.0	44.3	1.7	42.0	37.8	37.8	3.1	2.6	-0.1	-0.1	-19.0	
GIW-12	2/5/2018 14:13	12.2	43.0	1.7	43.1	36.7	36.7	2.2	1.8	-0.1	-0.1	-19.0	
GIW-12	2/12/2018 8:45	2.5	52.4	1.7	43.4	29.9	30.1	2.2	2.2	-0.1	-0.1	-14.7	
GIW-12	2/19/2018 9:51	9.4	41.7	4.4	44.5	62.9	62.9	2.7	4.0	-0.1	-0.1	-18.6	
GIW-12	2/26/2018 8:25	8.0	36.9	6.8	48.3	53.9	54.0	2.1	1.8	-0.2	-0.2	-18.1	
GIW-12	2/26/2018 8:26	8.0	35.2	6.9	49.9	54.8	54.9	2.5	2.5	-0.2	-0.2	-17.7	
GIW-13	2/5/2018 14:17	21.6	57.8	0.0	20.6	36.0	36.0	3.1	1.8	-1.2	-1.2	-13.6	
GIW-13	2/5/2018 14:23	21.1	56.7	0.0	22.2	34.5	34.5	2.2	2.6	-1.2	-1.2	-14.2	
GIW-13	2/12/2018 8:42	21.6	54.4	0.0	24.0	24.8	24.9	2.3	2.3	-1.5	-1.5	-13.6	
GIW-13	2/19/2018 9:48	18.9	60.2	0.0	20.9	62.3	62.3	4.3	3.0	-1.4	-1.4	-13.9	
GIW-13	2/26/2018 8:22	23.3	54.5	0.0	22.2	53.7	53.9	4.4	4.4	-1.5	-1.5	-13.3	
LCS-1D	2/14/2018 14:25	54.3	37.0	1.5	7.2	85.1	84.9	2.5	3.7	-10.8	-10.8	-19.3	
LCS-5A	2/1/2018 10:33	53.9	40.3	0.5	5.3	68.8	68.4	NFD	NFD	-14.3	-14.3	-14.6	
LCS-5A	2/7/2018 9:34	55.1	38.7	0.7	5.5	70.4	70.2	NFD	NFD	-15.2	-15.0	-15.1	
LCS-5A	2/12/2018 13:26	54.7	40.0	0.4	4.9	75.9	75.9	NFD	NFD	-14.5	-14.5	-14.6	
LCS-5A	2/19/2018 14:20	54.9	40.0	0.4	4.7	75.8	75.8	NFD	NFD	-13.7	-13.7	-13.7	
LCS-5A	2/26/2018 10:23	54.4	40.0	0.0	5.6	80.0	80.0	NFD	NFD	-13.5	-13.5	-13.7	
LCS-5B	2/1/2018 10:46	53.7	41.9	0.0	4.4	136.8	136.8	21.4	20.6	-13.8	-13.8	-14.1	
LCS-5B	2/1/2018 10:48	53.8	41.7	0.0	4.5	137.4	137.7	21.0	19.8	-13.8	-13.8	-14.1	
LCS-5B	2/7/2018 9:38	53.5	41.3	0.0	5.2	144.2	143.9	22.4	23.1	-15.0	-14.9	-15.0	
LCS-5B	2/7/2018 9:39	53.3	42.1	0.0	4.6	143.2	142.9	22.0	22.0	-14.9	-14.9	-15.0	
LCS-5B	2/12/2018 13:38	53.0	41.5	0.0	5.5	146.2	146.2	24.3	24.9	-14.2	-14.2	-14.6	
LCS-5B	2/12/2018 13:39	53.1	42.1	0.0	4.8	146.4	146.2	24.5	24.7	-14.5	-14.4	-14.5	
LCS-5B	2/19/2018 14:34	53.1	42.7	0.0	4.2	144.9	144.5	23.5	23.5	-13.6	-13.6	-13.7	
LCS-5B	2/19/2018 14:35	53.3	42.6	0.0	4.1	144.9	144.6	24.2	23.2	-13.6	-13.6	-13.7	
LCS-5B	2/26/2018 10:41	52.9	41.4	0.0	5.7	144.9	144.9	20.1	22.3	-13.0	-13.0	-13.3	
LCS-5B	2/26/2018 10:44	53.1	41.5	0.0	5.4	144.6	144.9	23.7	21.0	-13.0	-13.0	-13.3	
LCS-6B	2/1/2018 15:29	44.3	36.4	0.0	19.3	105.2	105.4	24.5	24.5	-4.0	-4.0	-14.0	
LCS-6B	2/7/2018 8:40	49.1	38.4	0.0	12.5	121.3	122.4	14.7	15.8	-4.0	-4.0	-15.6	
LCS-6B	2/12/2018 15:12	46.1	37.5	0.0	16.4	110.5	111.4	9.1	8.3	-3.1	-3.1	-14.6	
LCS-6B	2/20/2018 10:40	48.3	39.6	0.1	12.0	109.0	109.5	23.6	23.9	-1.7	-1.6	-13.3	
LCS-6B	2/21/2018 8:47	44.0	38.2	0.5	17.3	96.0	96.0	6.7	8.2	-3.6	-3.7	-14.6	
LCS-6B	2/21/2018 8:48	44.7	36.6	0.1	18.6	96.1	95.8	11.5	11.2	-3.1	-3.1	-14.6	

February 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 ₂ O		
LCS-6B	2/26/2018 13:53	50.0	39.2	0.1	10.7	107.7	108.1	9.1	8.6	-2.0	-2.0	-13.2
LCS-6B	2/26/2018 13:55	48.2	39.5	0.0	12.3	106.4	106.7	25.4	21.9	-1.5	-1.5	-13.3
SEW-002	2/8/2018 13:24	10.8	61.2	0.6	27.4	57.2	57.2	7.3	6.7	-0.1	-0.1	-18.6
T-56	2/2/2018 9:52	22.1	25.8	0.1	52.0	42.5	42.5	10.0	10.1	0.0	0.0	-14.0
T-56	2/2/2018 9:55	22.1	26.2	0.1	51.6	42.5	42.7	10.0	8.8	0.0	0.0	-12.9
T-56	2/7/2018 8:52	45.7	34.6	0.0	19.7	38.9	39.8	11.2	11.1	0.1	0.1	-15.9
T-56	2/7/2018 8:55	46.0	34.0	0.0	20.0	41.5	42.4	15.8	17.2	-0.1	0.0	-15.6
T-56	2/12/2018 15:32	46.0	33.9	0.0	20.1	45.3	45.6	10.9	10.6	0.1	0.1	-14.5
T-56	2/12/2018 15:34	46.1	33.8	0.0	20.1	45.8	45.9	11.1	11.4	0.1	0.1	-14.4
T-56	2/13/2018 11:13	47.9	34.2	0.0	17.9	45.4	45.4	4.0	2.9	0.0	0.1	-14.7
T-56	2/13/2018 11:15	47.7	34.4	0.0	17.9	45.5	45.5	9.2	6.6	0.0	0.0	-14.4
T-56	2/14/2018 8:39	53.4	36.1	0.0	10.5	44.4	44.6	13.8	14.2	-0.1	0.0	-14.5
T-56	2/20/2018 11:07	35.0	30.9	0.5	33.6	51.3	51.3	15.9	15.8	-0.1	0.0	-13.2
T-56	2/26/2018 14:30	45.4	33.8	0.0	20.8	52.6	52.3	15.3	15.0	0.0	-0.1	-13.0

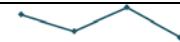
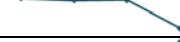
ATTACHMENT E-2

MAXIMUM WELLHEAD TEMPERATURE TABLE

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	November 2017	December 2017	January 2018	Febrbruary 2018		
GEW-002	107.1	121.5	115.0	117.4		
GEW-003	111.4	111.5	110.2	114.0		
GEW-004	116.2	117.6	116.3	115.1		
GEW-005	89.4	90.5	88.4	91.7		
GEW-006	86.5	90.3	85.8	87.7		
GEW-007	91.5	85.4	87.7	83.2		
GEW-008	111.7	111.1	111.7	111.7		
GEW-009	121.8	122.4	124.5	118.9		
GEW-010	61.8	63.9	64.4	61.8		
GEW-013A	119.7	117.2	116.3	119.2		
GEW-015	183.1	182.1	166.1	165.2		
GEW-016R	183.3	182.1	180.3	180.2		
GEW-018B	171.0	165.2	163.8	165.4		
GEW-022R	92.5	56.0	79.4	60.8		
GEW-038	71.6	70.2	65.4	60.2		
GEW-039	106.5	100.1	117.6	119.4		
GEW-040	62.8	50.8	62	61.4		
GEW-041R	99.9	97.9	97.2	96.7		
GEW-042R	97.9	98.7	108.5	95.0		
GEW-043R	118.4	118.9	117.9	117.3		
GEW-044	85.6	88.0	89.3	84.0		
GEW-045R	87.7	72.6	76.8	86.1		
GEW-046R	97.0	99.6	92.4	90.8		
GEW-047R	103.8	110.0	109.5	113.5		
GEW-048	100.6	100.8	100.8	99.6		
GEW-049	106.5	106.2	106.3	103.8		
GEW-050	104.3	105.2	105.5	103.8		
GEW-051	122.1	123.7	123.4	122.1		
GEW-052	111.5	112.8	112.0	105.7		
GEW-053	137.1	139.0	139.9	136.6		
GEW-054	143.2	144.2	142.9	143.7		
GEW-055	132.6	135.0	140.9	134.1		
GEW-056R	96.5	88.4	90.3	87.0		
GEW-057B	55.5	64.0	61.4	55.5		
GEW-057R	69.5	61.5	59.9	40.5		
GEW-058	71.8	69.5	52.6	46.6		
GEW-058A	67.5	67.7	51.3	43.6		

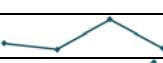
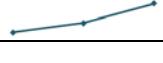
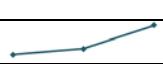
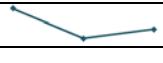
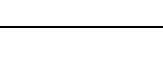
Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	November 2017	December 2017	January 2018	Febrbruary 2018		
GEW-059R	161.1	157.3	162.1	162.9		
GEW-067A	151.7	94.8	111.5	93.6		
GEW-068A	179.7	173.1	174.2	174.2		
GEW-077	--	--	91.7	98.2		
GEW-078R	162.4	157.3	160.2	157.7		
GEW-081	80.0	50.4	68.6	63.7		
GEW-082R	177.5	178.6	178.6	176.9		
GEW-086	101.8	72.3	67.7	59.3		
GEW-087	128.6	111.2	136.2	105.0		
GEW-088	190.9	185.7	194.3	193.8		
GEW-090	162.6	152.9	157.7	146.3		
GEW-091	185.7	187.6	96.2	107.0		
GEW-100	57.8	45.2	62.8	49.1		
GEW-101	81.4	55.2	68.5	54.7		
GEW-102	62.3	36.4	60.2	44.8		
GEW-104	55.2	--	61.2	40.5		
GEW-105	78.9	133.3	--	--		
GEW-106	62.3	66.8	54.2	76.1		
GEW-107	62.9	114.3	113.2	113.1		
GEW-108	141.9	142.2	122.6	119.9		
GEW-109	78.4	72.6	105.2	90.6		
GEW-110	70.0	67.5	75.0	65.1		
GEW-113	157.3	155.1	152.9	151.7		
GEW-116	187.0	184.5	174.7	121.3		
GEW-117	132.9	117.6	99.6	93.1		
GEW-118	193.0	194.3	194.3	196.4		
GEW-120	162.9	164.7	164.3	160.3		
GEW-121	174.7	171.0	176.4	171.6		
GEW-122	157.7	156.0	160.2	186.3		
GEW-123	187.1	163.5	163.3	160.6		
GEW-124	75.2	48.5	71.0	60.7		
GEW-125	184.5	181.6	174.1	171.1		
GEW-126	86.6	53.4	84.8	75.7		
GEW-127	190.2	177.5	166.1	154.0		
GEW-128	171.0	168.5	169.1	136.8		
GEW-129	146.2	145.2	130.1	170.0		
GEW-130	168.5	178.7	180.0	180.9		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	November 2017	December 2017	January 2018	Febrbruary 2018		
GEW-131	164.4	163.3	165.2	160.2		
GEW-132	195.7	186.4	152.5	174.7		
GEW-133	159.4	151.7	61.4	58.0		
GEW-134	129.2	122.9	122.9	117.0		
GEW-135	153.3	154.8	155.6	153.3		
GEW-136	134.8	128.6	101.1	114.3		
GEW-137	79.5	70.8	62.6	64.4		
GEW-138	121.5	103.5	132.1	95.8		
GEW-139	168.5	147.3	147.0	147.3		
GEW-140	75.9	51.8	117.3	116.4		
GEW-141	--	--	--	51.8		
GEW-142	76.6	44.2	62.4	47.0		
GEW-143	77.1	44.4	63.5	56.4		
GEW-144	--	23.2	63.1	45.6		
GEW-145	60.4	36.3	59.0	87.4		
GEW-146	87.8	86.1	82.6	80.5		
GEW-147	174.2	183.9	183.3	181.2		
GEW-148	51.7	76.0	61.6	58.5		
GEW-149	98.5	118.6	96	113.5		
GEW-150	116.0	63.7	149.2	186.4		
GEW-151	122.6	86.8	151.3	156.9		
GEW-152	125.0	122.9	115.3	115.5		
GEW-153	81.5	103.9	61.8	44.0		
GEW-154	88.5	70.9	61.1	43.4		
GEW-155	112.0	92.4	90.8	102.3		
GEW-156	87.2	93.1	80.5	69.7		
GEW-157	68.4	--	60.7	124.5		
GEW-158	96.3	106.9	129.7	182.1		
GEW-159	102.3	72.5	54.0	59.1		
GEW-160	48.8	83.2	51.9	44.3		
GEW-161	47.4	63.6	42.8	48.2		
GEW-162	69.6	64.1	74.6	67.9		
GEW-163	178.7	185.0	192.9	189.0		
GEW-164	167.6	164.8	152.9	156.5		
GEW-165	183.9	183.3	183.9	182.1		
GEW-166	195.7	195.0	192.9	194.3		
GEW-167	191.7	192.9	194.8	189.6		

Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend	Comments
	November 2017	December 2017	January 2018	Febrbruary 2018		
GEW-168	181.6	178.6	180.9	172.1		
GEW-169	193.6	190.9	186.7	188.3		
GEW-170	168.1	165.7	167.1	189.6		
GEW-171	--	--	--	80.7		
GEW-172	80.0	46.1	65.8	56.3		
GEW-173	98.4	86.5	97.4	95.5		
GEW-174	152.9	144.9	144.5	143.5		
GEW-175	124.4	123.1	116.9	113.7		
GEW-176	69.0	65.6	54.7	59.2		
GEW-177	80.7	50.8	194.3	54.6		
GEW-178	--	47.3	44.0	105.4		
GEW-179	--	28.5	38.5	68.6		
GEW-180	--	29.0	38.6	118.1		
GEW-181	--	28.7	72.6	169.0		
GEW-182	--	30.6	162.4	173.9		
GEW-184	--	58.0	68.7	112.7		
GEW-185	--	136.2	151.3	161.9		
GEW-186	--	42.1	67.7	141.5		
GEW-187	--	75.9	90.8	174.8		
GEW-188	--	183.9	63.3	99.9		
GEW-1A	71.1	64.4	63.5	72.7		
GEW-2S	72.8	65.5	62.2	64.7		
GIW-01	173.1	179.7	171.6	175.8		
GIW-02	70.9	67.7	64.9	68.4		
GIW-03	65.8	65.7	60.3	62.3		
GIW-04	69.5	66.2	64.2	63.3		
GIW-05	70.4	67.4	63.0	61.4		
GIW-06	73.4	69.3	62.6	60.9		
GIW-07	78.0	70.2	63.5	59.4		
GIW-08	74.5	71.6	66.8	65.5		
GIW-09	73.8	70.7	65.0	61.4		
GIW-10	72.5	67.7	64.9	60.7		
GIW-11	67.9	68.1	65.4	62.8		
GIW-12	60.1	64.5	63.7	62.9		
GIW-13	65.0	63.8	65.1	62.3		
LCS-1D	69.8	64.5	75.2	85.1		
LCS-2D	--	--	--	--		
LCS-4B	--	--	--	--		

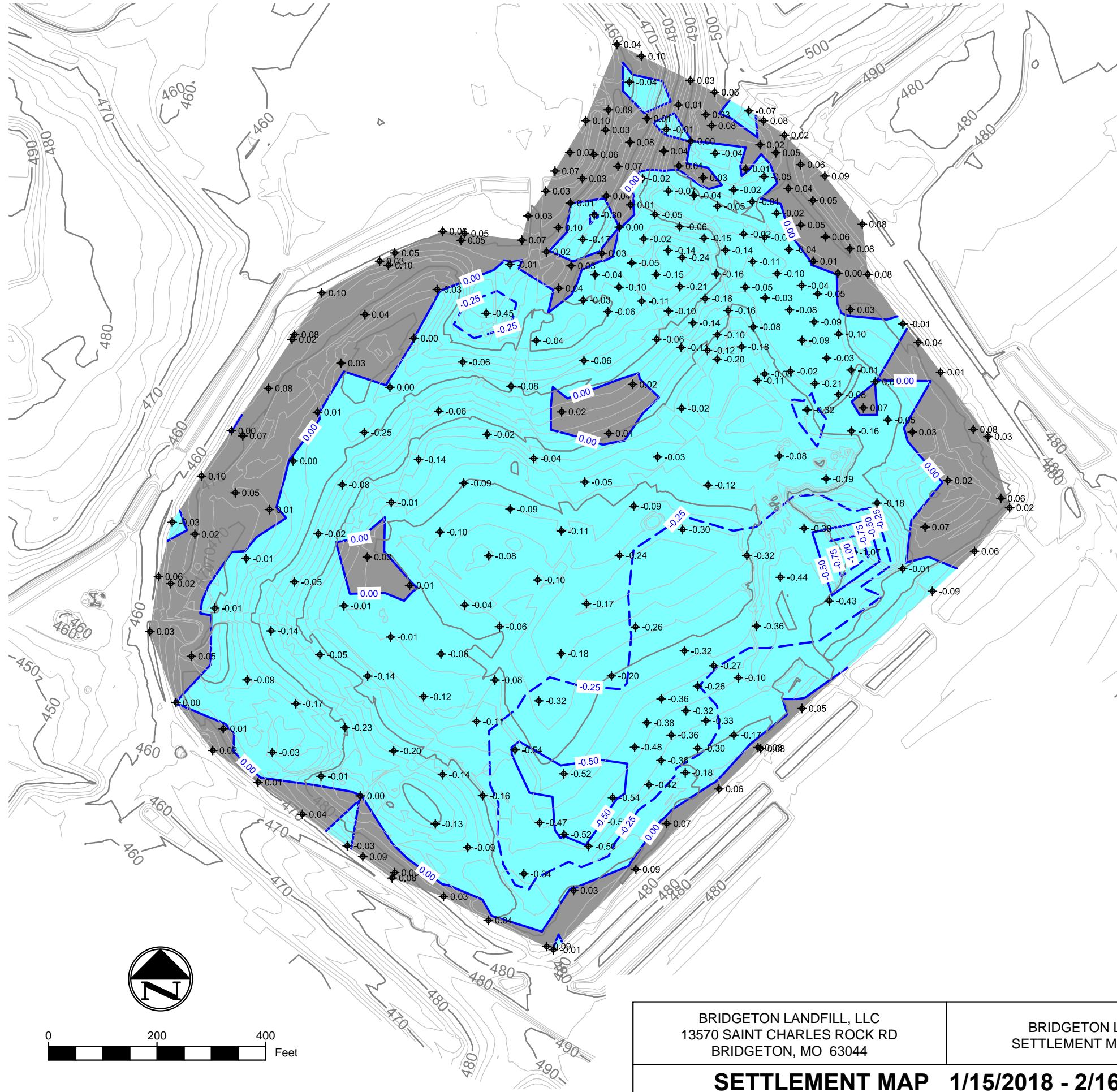
Wellfield Temperature - Bridgeton Landfill

Well Name					Temp Trend >30°F	Comments
	November 2017	December 2017	January 2018	Febräuay 2018		
LCS-5A	84.1	82.4	82.6	80.0		
LCS-5B	--	--	--	146.4		
LCS-6B	104.2	148.0	123.1	121.3		
PGW-60	83.7	100.9	--	--		
SEW-002	111.7	57.3	53.2	57.2		
T-56	60.7	55.7	47.0	52.6		

-- = 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	155.88	
5	-1.00	0.00	1,168,955.02	
6	0.00	1.00	358,970.50	

LEGEND

- | | |
|---------------|---|
| 500 | 12-2-2016 TOPOGRAPHY (2' CONTOUR) |
| | 12-2-2016 TOPOGRAPHY (10' CONTOUR) |
| <u>.25</u> | MINOR ELEVATION CHANGE CONTOUR (0.25 FEET) |
| <u>.50</u> | MAJOR ELEVATION CHANGE CONTOUR (0.50 FEET) |
| \oplus -03 | SPOT ELEVATION DIFFERENCE (TO 1-15-2018 to 2-16-2018) |
| 2-2018 | *SETTLEMENT FRONT CONTOUR FOR AREA WITH
1.44' PER 32 DAYS FOR CURRENT PERIOD OF DAYS |
| | *NONE FOR FEBRUARY 2018 |

NOTES

- NOTE:

 1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS CO. ON DECEMBER 1, 2017.
 2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 3. ELEVATION DIFFERENCE DETERMINED BY SUBTRACTING SPOT ELEVATIONS SURVEYED ON 12-15-17 FROM SPOT ELEVATIONS SURVEYED ON 2-16-18.
 4. SURVEY POINTS WERE PERFORMED USING GPS METHODS.
 5. SETTLEMENT RANGE SURFACE WAS GENERATED FROM THE SPOT ELEVATION DIFFERENCES.
 6. ELEVATION DIFFERENCES THAT ARE SHOWN AS NEGATIVE INDICATE SPOTS OF SETTLEMENT.
 7. ANY POINTS THAT ARE NOT A GROUND-TO-GROUND COMPARISON TO THE PREVIOUS MONTH'S POINTS, OR THAT WERE NOT SURVEYED IN THE SAME LOCATION AS THE PREVIOUS MONTH ARE NOT INCLUDED AND WERE NOT USED IN ANY SURFACE GENERATION.

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

BRIDGETON LANDFILL SETTLEMENT MONITORING

 Feezor
Engineering for a Better World
FEEZOR
ENGINEERING, INC.

FEBRUARY 2018
DESIGNED BY: PML
APPROVED BY: DRF

VISION DATE

DRAWING NO.:
001

ATTACHMENT G

SUMMARY OF ODOR COMPLAINTS

February 1, 2018 – February 28, 2018 / MDNR ODOR COMPLAINTS

Name: Traci Vette

Message: Odor logged February 17, 2018, at 8:15 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was reported over 3 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 western 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: Jamie Crawford

Message: Odor logged February 17, 2018, at 6:05 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was reported over 25 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: Ronnique

Message: Odor logged February 20, 2018, at 4:50 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed within an hour before the time cited in this concern did not observe Bridgeton Landfill odor. An odor patrol performed 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: Nick Dougherty

Message: Odor logged February 26, 2018, at 5:30 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. A skunk odor was observed within close proximity to this location within an hour of the time cited in this concern. 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.

ATTACHMENT H

LIQUID CHARACTERIZATION DATA AND DISCHARGE LOG

Bridgeton Landfill - Leachate PreTreatment Plant

February 2018

Liquid Characterization Data

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

Hauled Disposal to MSD – Bissell Point

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

Direct Discharge to MSD

Date	Waste	Source	Quantity (gal)
2/1/2018			117,660
2/2/2018			145,096
2/3/2018			135,608
2/4/2018			132,968
2/5/2018			132,696
2/6/2018			80,632
2/7/2018			67,320
2/8/2018			69,160
2/9/2018			50,968
2/10/2018			81,600
2/11/2018			61,816
2/12/2018			83,632
2/13/2018			160,368
2/14/2018	LPTP Permeate	Through Tank AST 97k (MSD Sampling Point 013)	142,016
2/15/2018			146,688
2/16/2018			137,760
2/17/2018			128,256
2/18/2018			119,160
2/19/2018			127,744
2/20/2018			165,528
2/21/2018			172,528
2/22/2018			147,888
2/23/2018			152,120
2/24/2018			203,808
2/25/2018			252,888
2/26/2018			197,016
2/27/2018			169,296
2/28/2018			128,208
Total			3,710,428

ATTACHMENT I

LOW FILL PROJECT AREA

ATTACHMENT I-1

LOW FILL AREA BOUNDARY



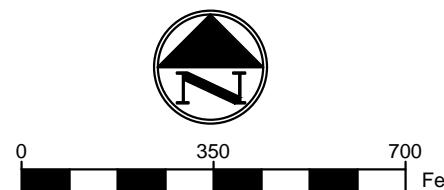
LEGEND

BOUNDARY OF FILL AREA FOR 1-15-2018 THROUGH 2-16-2018

(NOTE: NO FILL WAS PLACED BETWEEN 1-15-2018 AND 2-16-2018)

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.



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

LOW FILL AREA BOUNDARY 1/15/2018 - 2/16/2018

PROJECT NUMBER: BT-145 | FILE PATH: C:\Users\plins\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-145 (Agreed Order Reporting)\Monthly Reports\02-2018 Report\Internal Draft\Draft Site Data\Settlement\3_deliverables\Settlement And Fill 2-16-1.dwg

BRIDGETON LANDFILL
SETTLEMENT MONITORING

FEEZOR
ENGINEERING, INC.

FEBRUARY 2018
DESIGNED BY: PML
APPROVED BY: DRF

REVISION DATE

DRAWING NO.:
002