Bridgeton Landfill, LLC

Monthly Data Submittals

April, 2016

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

Contents:

Provided Separately:

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

May 20, 2016

Commentary on Data

May 20, 2016

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

Gas Volume

- As seen in Attachment B-1, gas collection volumetric rate in for this month averaged 2,700 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 details vertical wells which had oxygen levels over 5% at one or more weekly monitoring events during this reporting period. These consisted of 8 older GEW wells (<#-120) that are experiencing low flows; 20 new GEW wells (>#-120) that are experiencing restricted flows; 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, the majority of these wells still exhibited oxygen at the wellhead at or greater than 5%. All these wells are low-flow/vacuum sensitive wells with valves only slightly open. On-going tuning, maintenance and pump operation is being performed to manage the oxygen content. These wells are in the south quarry area where the flexible membrane liner cap is in place to prevent atmospheric intrusion into the waste mass.

- Attachment E-2 contains gas temperatures as measured at the wellheads. Eight (8) vertical wells (excluding GIW wells) decreased by 30°F during this reporting period. Additionally, three (3) vertical wells (excluding GIW wells) increased by 30°F or more. All wells that exhibited changes greater than 30 degrees are all within the historical gas temperature norms for these wells or within the range of temperatures of nearby vertical wells.

- A detailed review of the gas extraction wells in the neck area was conducted. Well GEW-162 exhibited wellhead temperature increases greater than 30°F. Well GEW-162 was installed in December 2015 within the south quarry area/neck area and vacuum has been increased slightly over time as part of normal GCCS operations. The wellhead temperatures at GEW-162 are similar as the wellhead temperatures of nearby wells. Maximum temperatures are consistent with previous months in each of the gas extraction wells in vicinity to the neck. Carbon monoxide (CO) results during this reporting period showed stable month-over-month based on historic levels within the Neck Area wells.

- All wells in the North Quarry during this reporting period exhibited a maximum wellhead temperature under 145°F with the exception of GEW-054. The well had a maximum well head temperature of 155°F which is consistent with historic readings. The only North Quarry wells that had detections of carbon monoxide during this reporting period was GEW-053 (81 ppm) and GEW-054 (41 ppm). Carbon monoxide (CO) results showed non-detect (ND) for all other North quarry wells.

- Review of weekly gas quality in Attachment E reveals that all of the active North Quarry gas wells continue to have low, if any, oxygen and healthy methane and carbon dioxide levels indicating normal wellfield conditions for aged waste at all locations, consistent with GCCS wellfield conditions observed in the North Quarry for some time.

Settlement

- The South Quarry exhibited monthly maximum settlement up to 1.35 feet over 30 days for this reporting period (see Attachment F); which is comparable to last month's rate. The rate of settlement directly south of the neck continues to be small and stable compared to previous months.

Bird Monitoring and Mitigation

- Bridgeton Landfill conducted bird monitoring during this reporting period in accordance with the Approved Bird Hazard Monitoring and Mitigation Plan. Logs of bird population observations were provided to the Airport on a weekly basis. No change in bird population or bird hazards were observed and no bird mitigation measures were necessary.

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 four (4) of this approval is satisfied via the text below and the accompanying figure.

- Clean fill activities commenced in late December and have continued into early May on a region of differential settlement located in the southeast portions of the South Quarry. The total cubic yardage of fill material used is still to be determined. The enclosed figure indicates this fill area as well as clean fill materials stockpile areas on the West Lake OU2 portion of the property and the Bridgeton Landfill North Quarry portion of the property in support of this project. Upon conclusion of the fill project the requested cubic yardage, drainage features (if applicable), and drawings showing the completed location area shall be provided with the following monthly report.

ATTACHMENT A

WORK COMPLETED AND PLANNED

Bridgeton Landfill, LLC
Monthly Summary of Work Completed and Planned

Work Completed in April 2016

Gas Collection and Control System

- Continued operation and maintenance of GCCS System and GIW wells.
- Continued header realignment project to improve condensate management and header vacuum distribution.

Alternative Heat Extraction System

- Continued operation and maintenance of the HES.

Leachate Management System

- Continued routine operation of previously installed and upgraded features.
- Began work on West Lift Station including the replacement of flow meters and valves.

Pre-Treatment Facility

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

Other Projects

- Continued North Quarry cap enhancements.
- Continued low area-fill project in South Quarry.
- Continued acceptance of clean fill.

Work Planned for May 2016

Gas Collection and Control System

- Continue operation and maintenance of GCCS system.
- Continue header realignment project to improve condensate management and header vacuum distribution.
- Continue upgrades to GCCS system as necessary.
- Install separate header on the south perimeter of the landfill to collect gas from the interceptor trench.

Alternative Heat Extraction System

- Continued operation and maintenance of the HES.
- Begin installation of Neck HES.

Leachate Management System

- Continued routine operation of previously installed and upgraded features.
- Continued work on West Lift Station including installation of a condensate sump

Pre-Treatment Facility

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

Other Projects:

- Continue acceptance of clean fill materials for future fill projects.
- Complete north quarry cap enhancement project (weather permitting).
- Complete low-area fill project in South Quarry
- Upgrades to Outfall 007
- Stormwater enhancements around the Simpson asphalt facility
- Demolition of buildings in the Southwest portion of the property.

ATTACHMENT B

DAILY FLARE MONITORING DATA

ATTACHMENT B-1

FLOW DATA TABLE

Daily Flare Monitoring Data - Bridgeton Landfill
April 2016

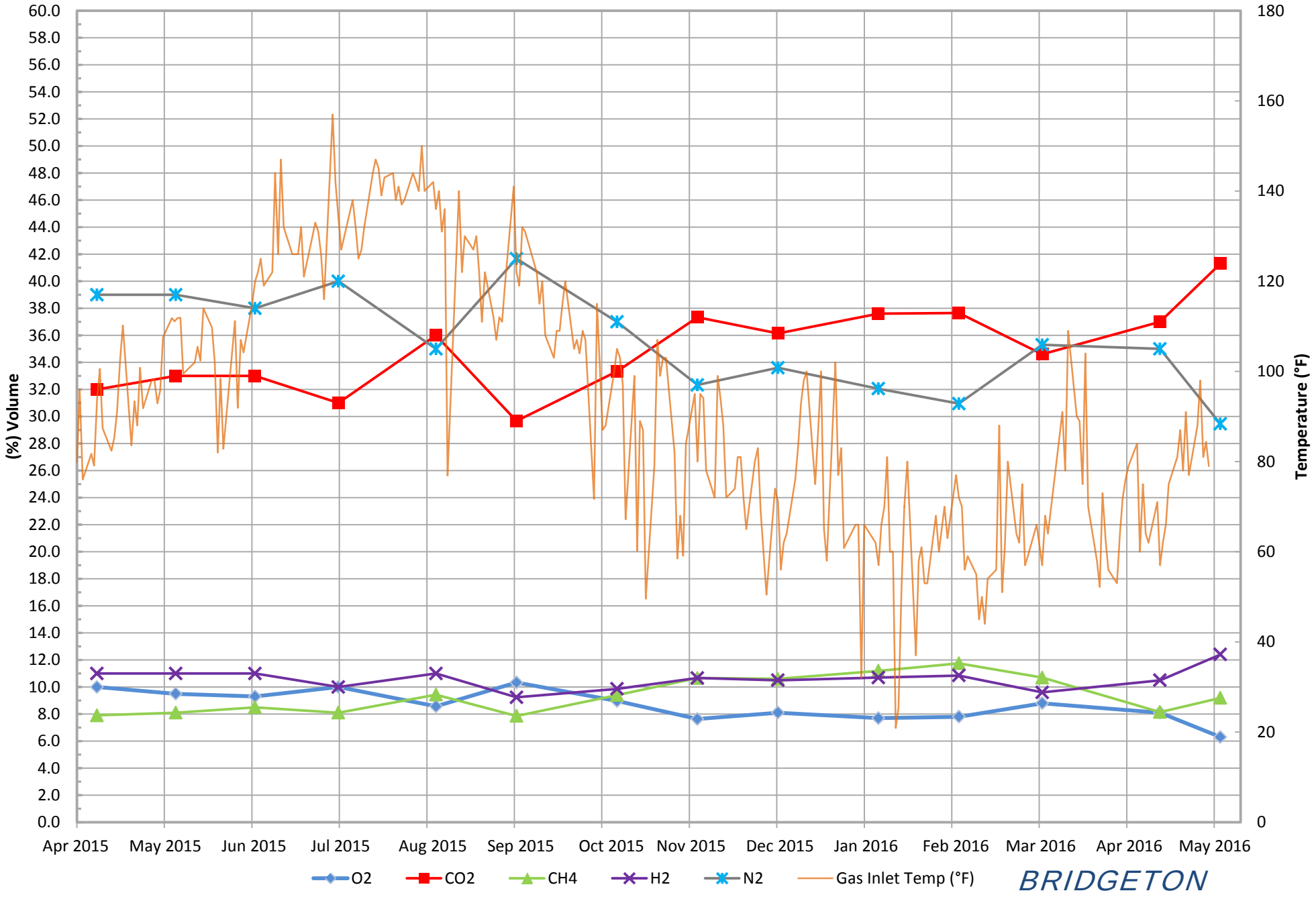
Date	Average Device Flow* (scfm)				Total Avg. Flow** (scfm)
	Utility Flare (FL-100)	Utility Flare (FL-120)	Utility Flare (FL-140)	Aux. Utility Flare***	
4/1/2016	0	509	2,187	203	2,826
4/2/2016	0	0	2,646	325	2,971
4/3/2016	0	0	2,677	328	3,005
4/4/2016	0	0	2,739	321	3,061
4/5/2016	0	0	2,712	325	3,037
4/6/2016	0	722	1,922	298	2,942
4/7/2016	0	1,260	1,375	262	2,897
4/8/2016	0	1,286	1,320	253	2,859
4/9/2016	0	1,252	1,355	241	2,849
4/10/2016	0	1,229	1,337	225	2,791
4/11/2016	0	1,205	1,307	198	2,710
4/12/2016	0	1,176	1,355	193	2,725
4/13/2016	0	1,141	1,362	222	2,725
4/14/2016	0	961	1,384	262	2,607
4/15/2016	0	999	1,241	268	2,508
4/16/2016	0	1,083	1,155	269	2,507
4/17/2016	0	1,130	1,148	270	2,547
4/18/2016	0	1,160	1,137	273	2,570
4/19/2016	0	1,183	1,125	279	2,587
4/20/2016	0	1,166	1,090	271	2,527
4/21/2016	0	1,128	1,110	270	2,507
4/22/2016	0	1,135	1,095	248	2,477
4/23/2016	0	1,144	1,114	235	2,493
4/24/2016	0	1,123	1,152	235	2,510
4/25/2016	0	1,128	1,162	234	2,524
4/26/2016	0	532	1,734	227	2,493
4/27/2016	0	0	2,312	235	2,547
4/28/2016	0	0	2,445	266	2,711
4/29/2016	0	0	2,484	273	2,757
4/30/2016	0	0	2,409	262	2,670
				Average	**2,700**

* 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

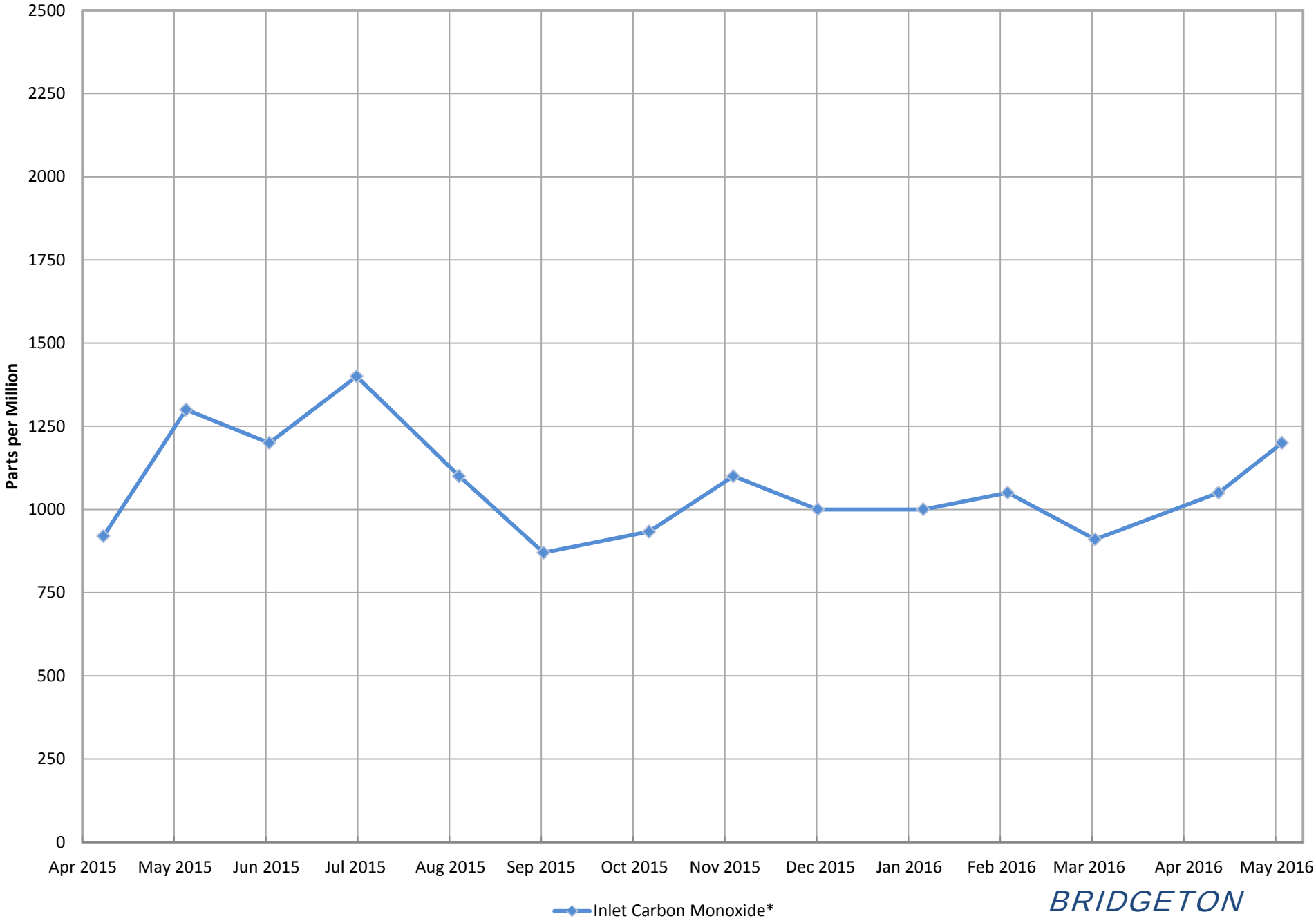
Inlet Gas and Temperature*



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

BRIDGETON LANDFILL

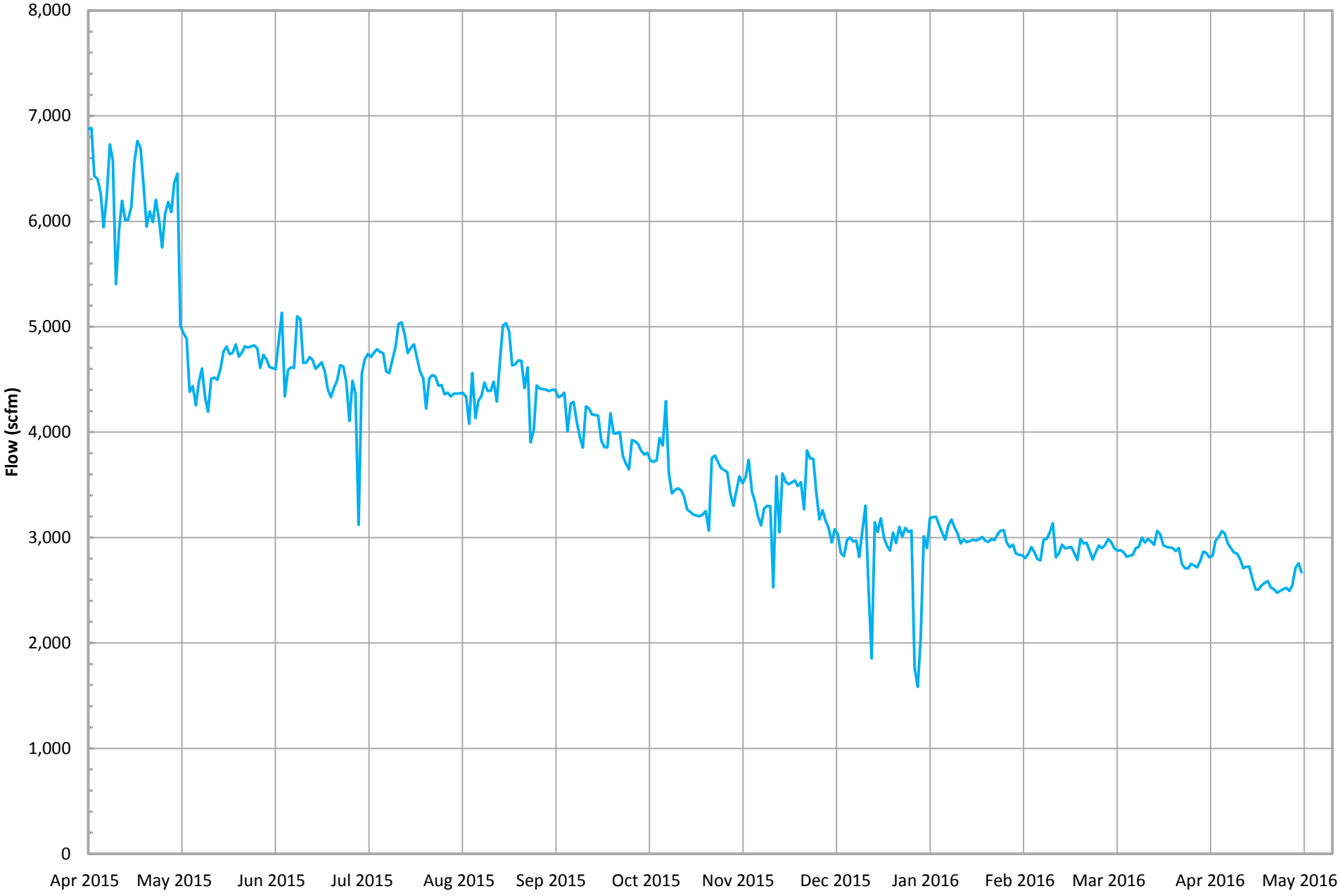
Inlet Carbon Monoxide*



*Data collected from Laboratory Reports.

BRIDGETON LANDFILL

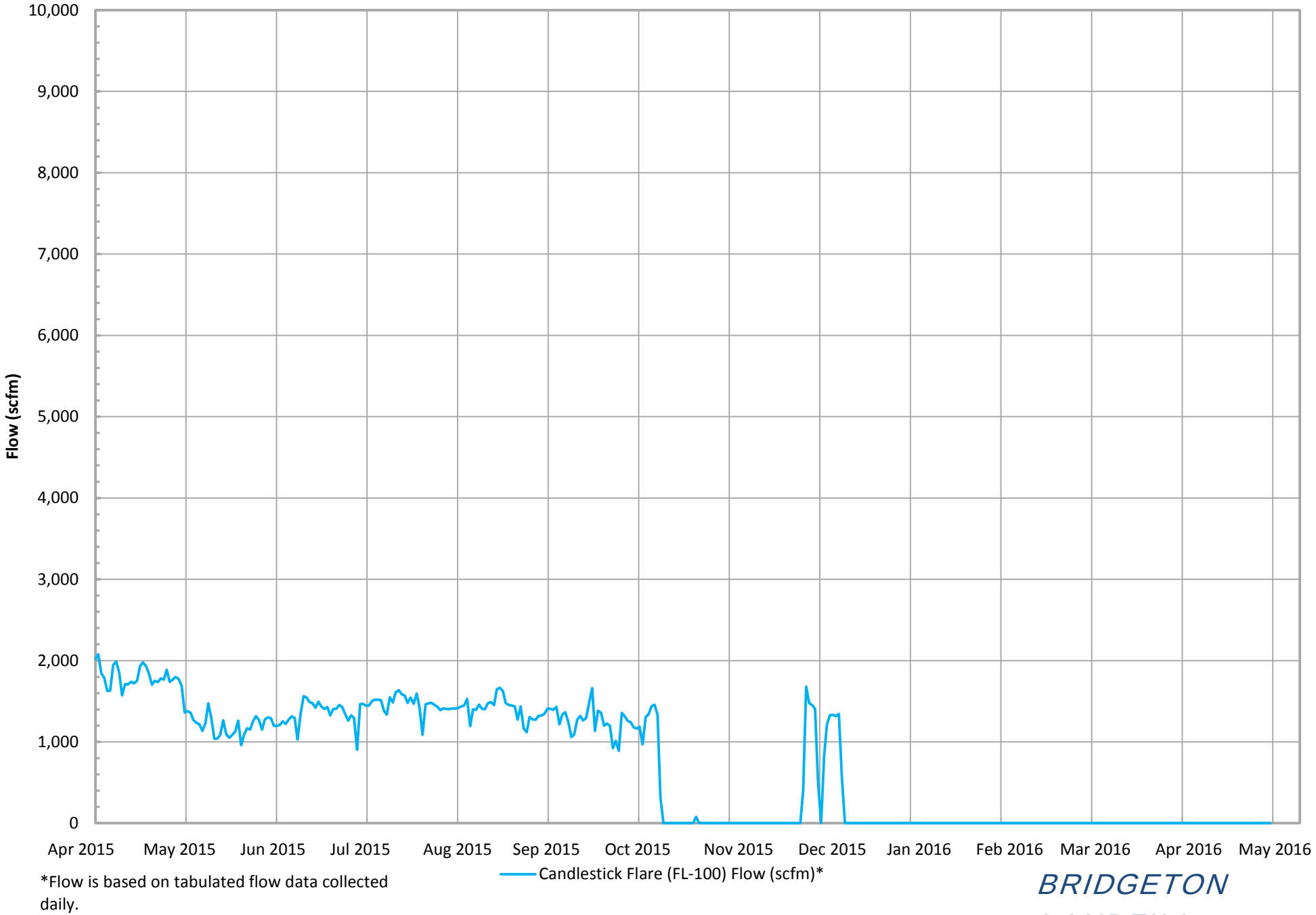
Total Combined Flow (scfm)*



*Combined flow is based on tabulated flow data collected daily from each device.

BRIDGETON LANDFILL

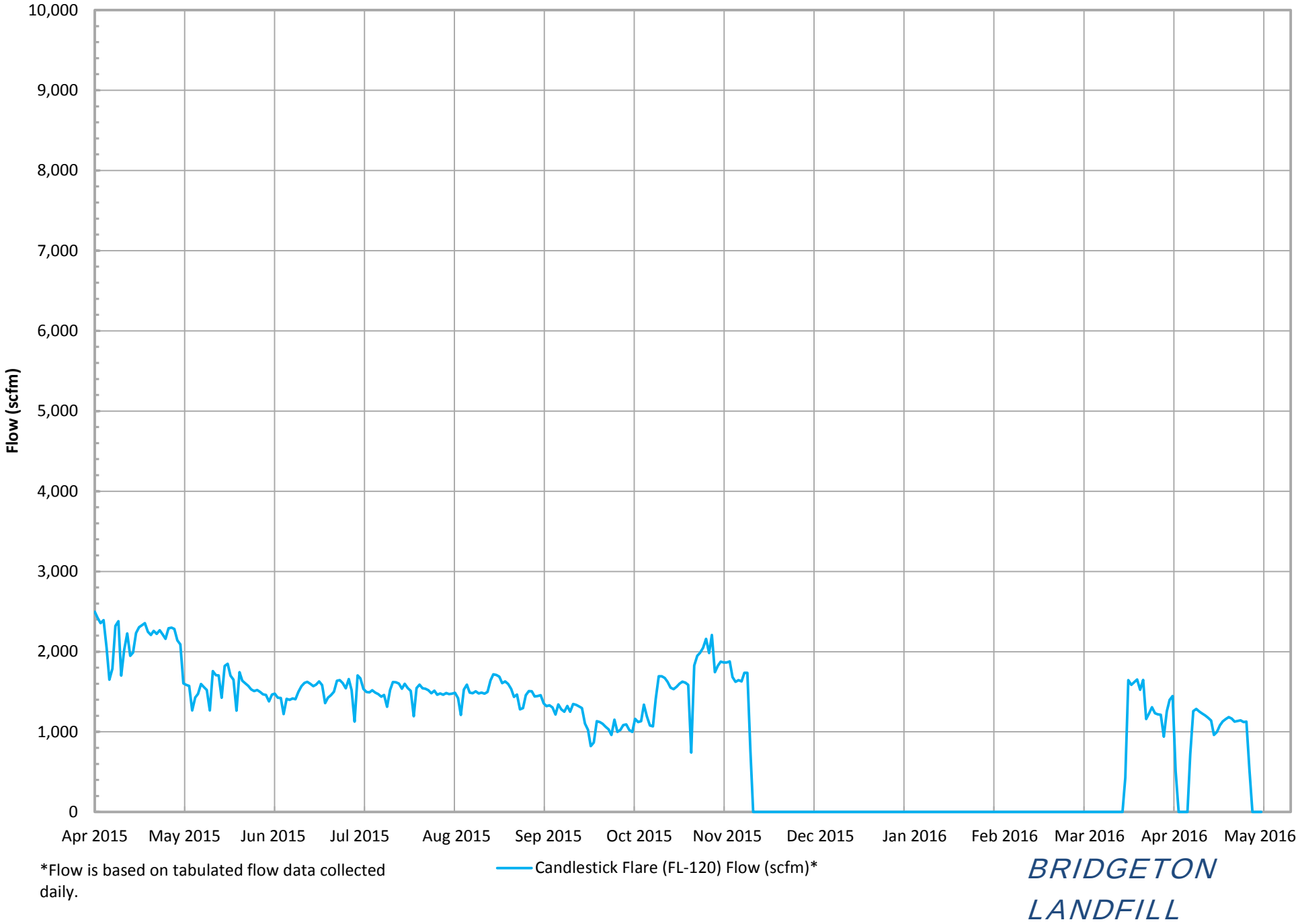
Candlestick Flare (FL-100) Flow (scfm)*



*Flow is based on tabulated flow data collected daily.

BRIDGETON LANDFILL

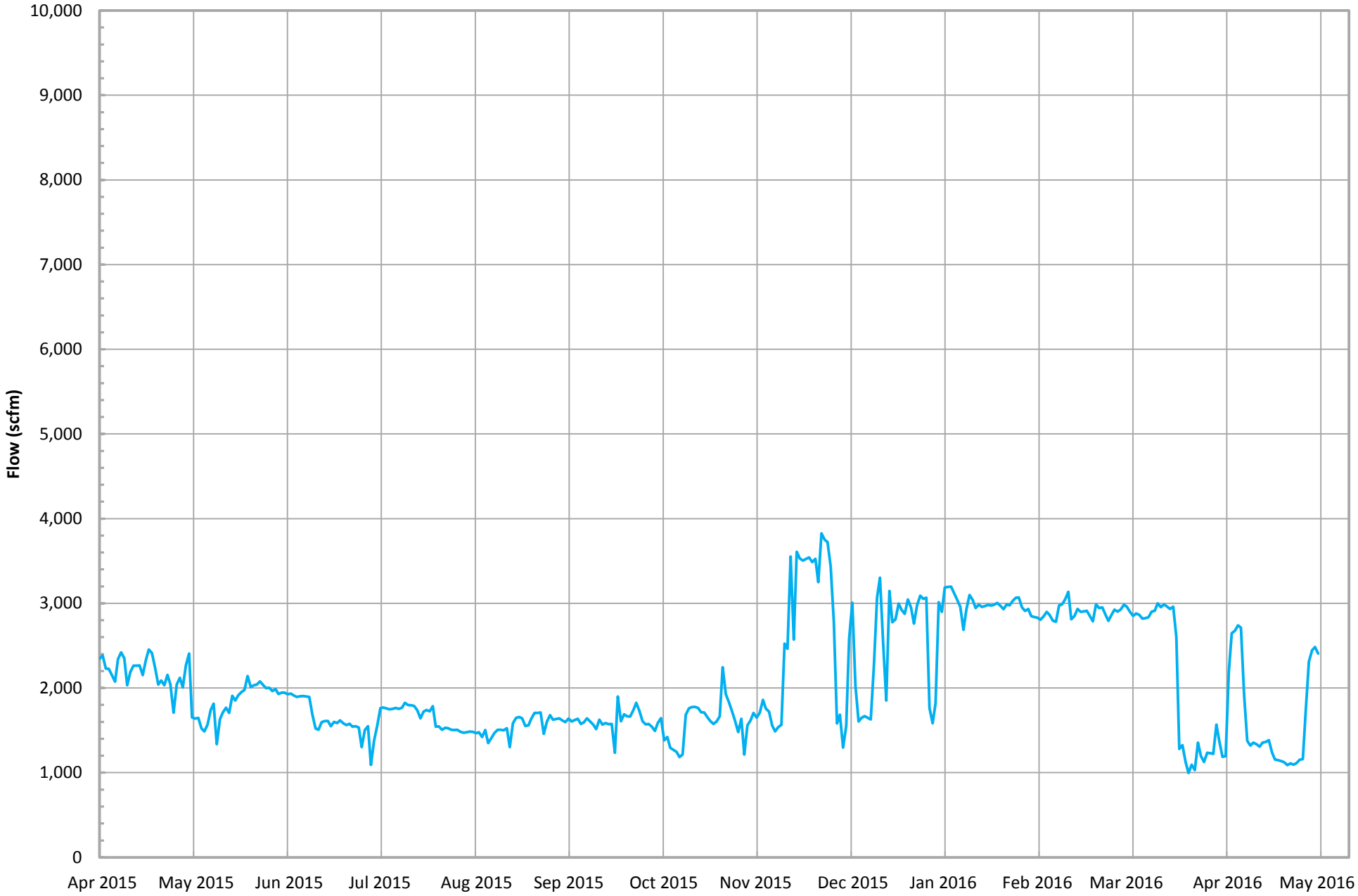
Candlestick Flare (FL-120) Flow (scfm)*



*Flow is based on tabulated flow data collected daily.

BRIDGETON LANDFILL

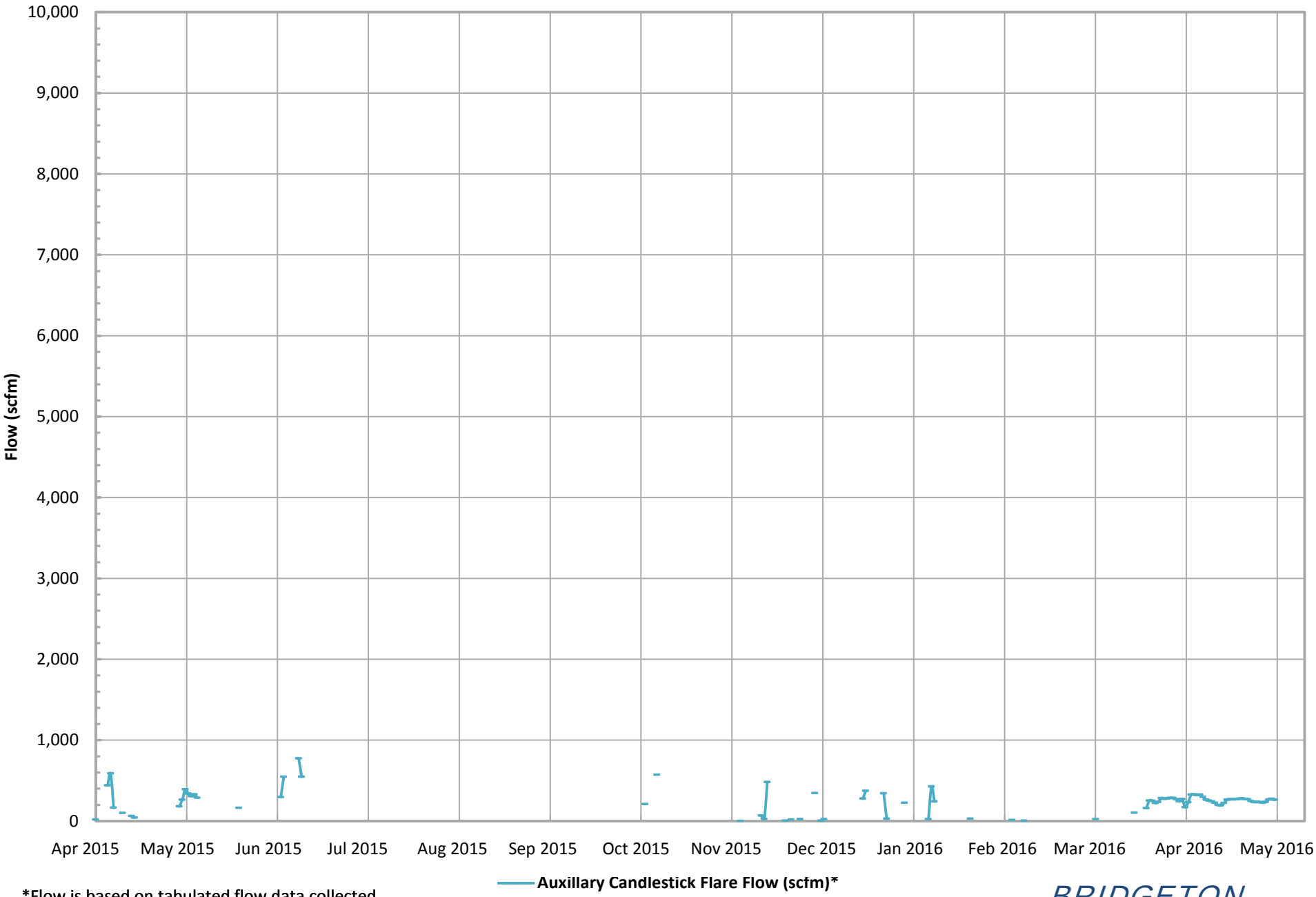
Candlestick Flare (FL-140) Flow (scfm)*



*Flow is based on tabulated flow data collected daily.

BRIDGETON LANDFILL

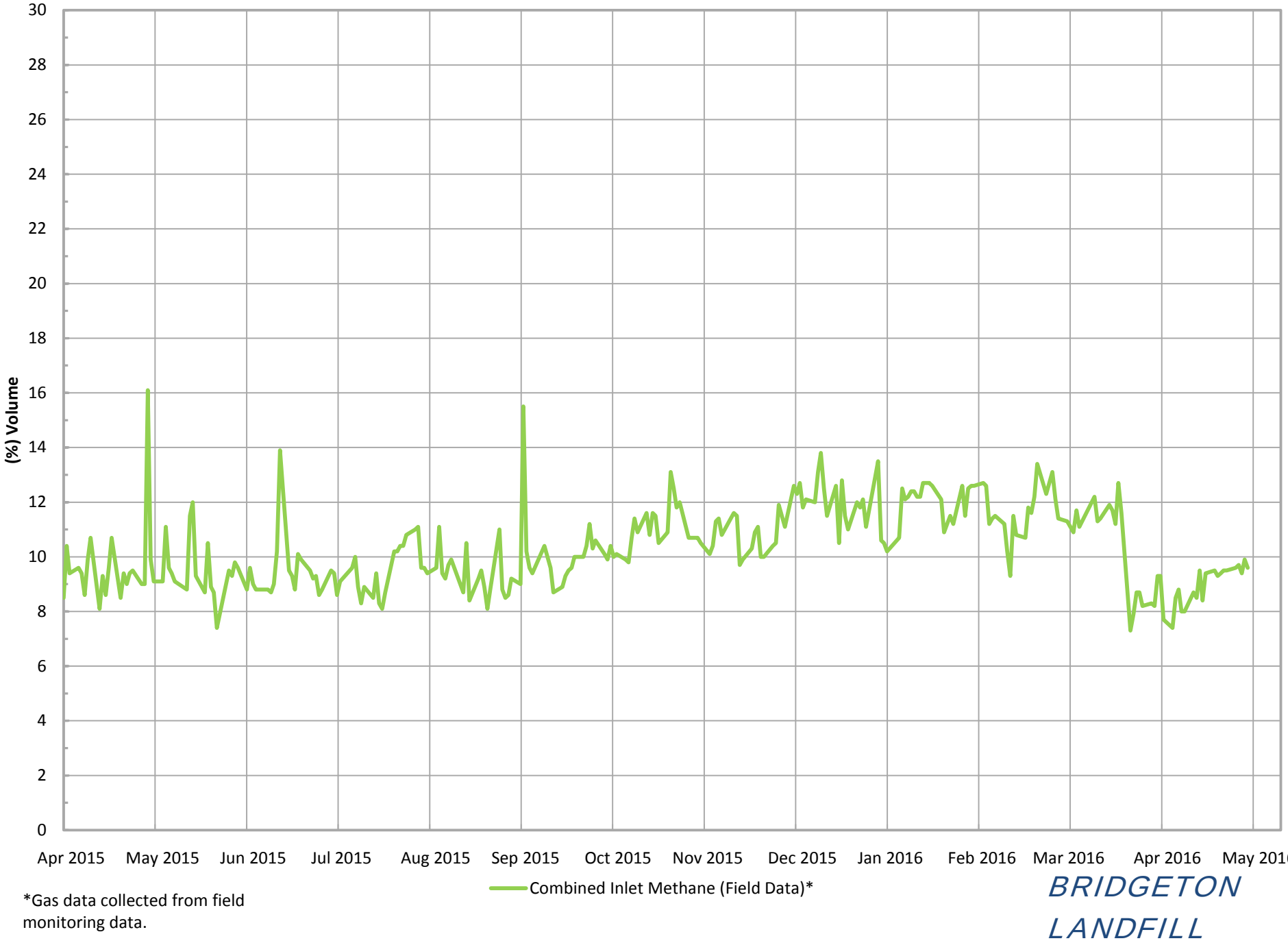
Auxillary Candlestick Flare Flow (scfm)*



*Flow is based on tabulated flow data collected daily.

BRIDGETON LANDFILL

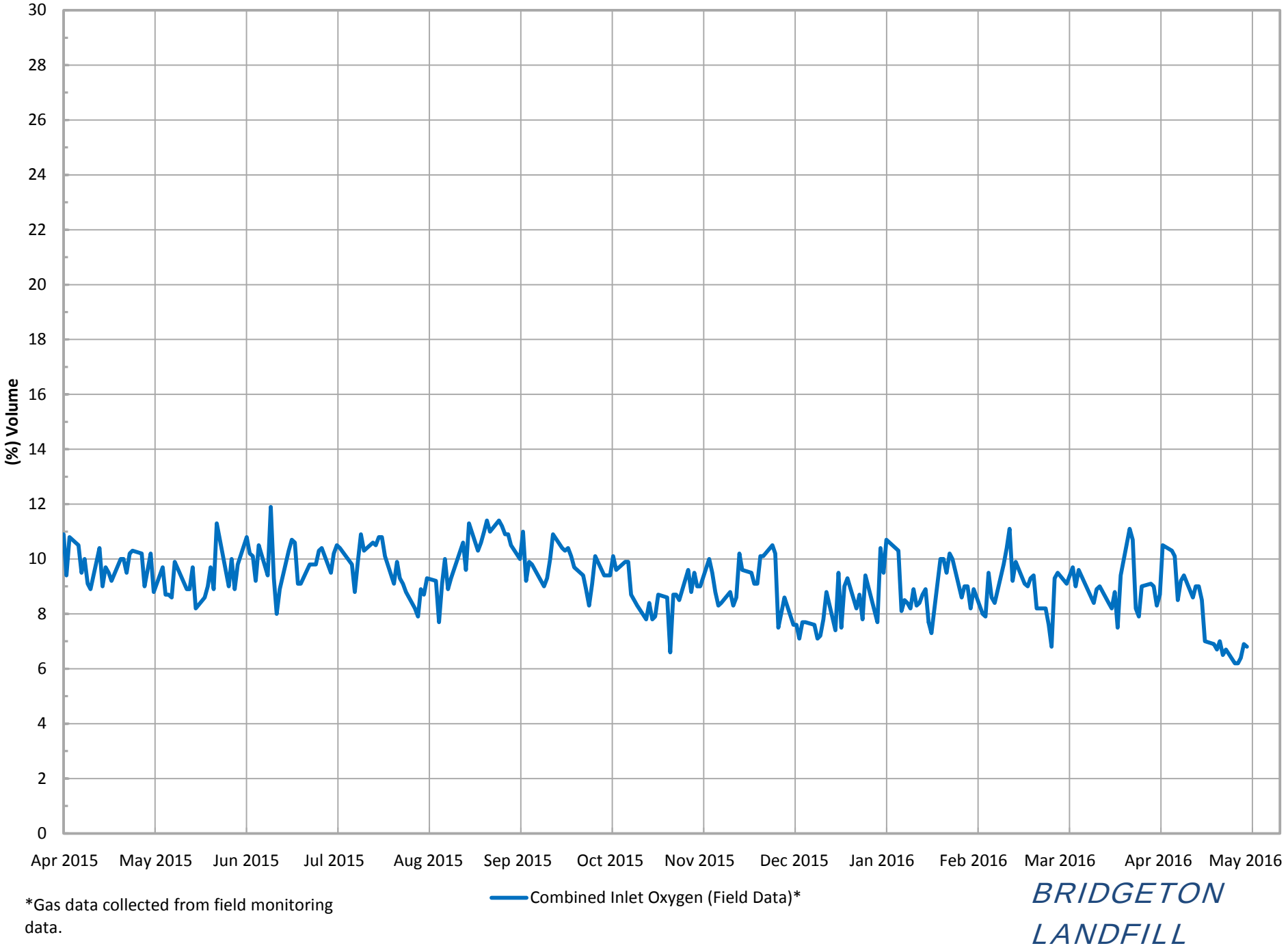
Combined Inlet Methane (Field Data)*



*Gas data collected from field monitoring data.

BRIDGETON LANDFILL

Combined Inlet Oxygen (Field Data)*

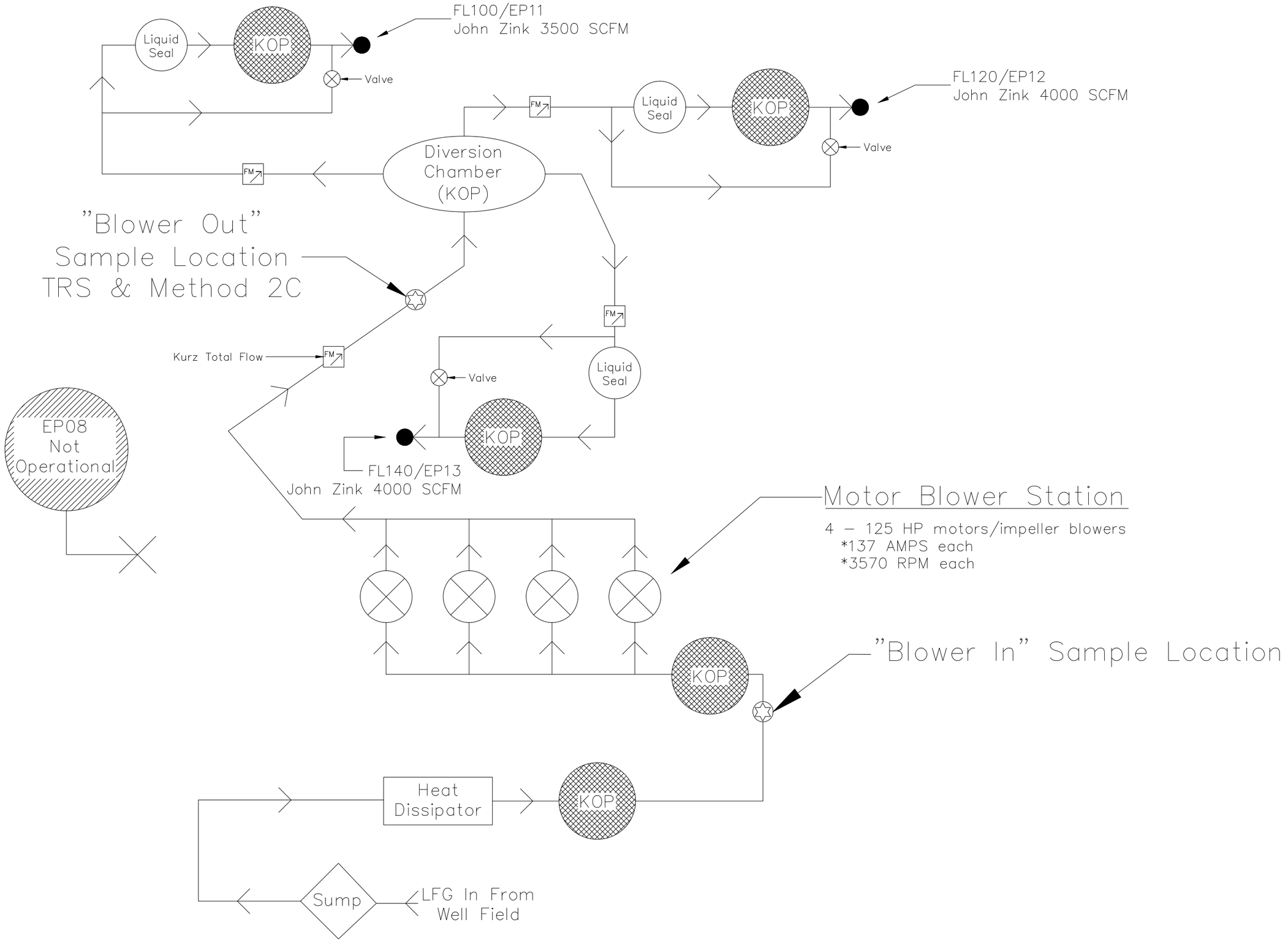


*Gas data collected from field monitoring data.

BRIDGETON LANDFILL

ATTACHMENT B-3

FLARE TRS / FLARE STATION FLOW



PREPARED FOR:
BRIDGETON LANDFILL, LLC

FIGURE 1 - FLARE COMPOUND
PROCESS FLOW DIAGRAM
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MISSOURI

No.	DATE	REVISION DESCRIPTION

Weaver Consultants Group

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

DRAWN BY:	DT
REVIEWED BY:	DAR
DATE:	5/20/2015
FILE:	0120-131-10
CAD:	Figure 1 - Flow Diagram - REV.dwg

SHEET 1 OF 1

TABLE 1 **Bridgeton Landfill, LLC.**

Summary of Key LFG Tested Parameters **April 7, 2016 to May 3, 2016**

Flare Compound: *Blower Outlet*

SAMPLE EVENT #	DATE	VELOCITY ft/sec	FLOW dscfm	TRS ppm_{vd}
61-18 [1]	5/3/2016	25.61	2086	1400
				1600
60-17 [2]	4/26/2016	27.59	2180	950
				1300
59-16 [2]	4/21/2016	27.10	2195	1400
				1400
58-15 [1]	4/12/2016	31.32	2394	1700
				1300
57-14 [2]	4/7/2016	31.20	2527	1000
				980

Notes:

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

[2] Indicates velocity/flow determined by KURZ

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 61-18
05/03/2016

	PARAMETER	Blower Out
SOUTH QUARRY LFG ONLY - MAIN FLARE COMPOUND BLOWER OUTLET (FL140)		
Date	Test Date	5/3/16
Start	Run Start Time	8:01
	Run Finish Time	9:28
	Net Traversing Points	8 (2 x 4)
Θ	Net Run Time, minutes	1:27:00
C_p	Pitot Tube Coeficient	0.99
P_{Br}	Barometric Pressure, inches of Mercury	29.64
% H_2O	Moisture Content of LFG, %	1.81
% RH	Relative Humidity, %	62.90
M_{fd}	Dry Mole Fraction	0.982
%CH_4	Methane, %	9.20
%CO_2	Carbon Dioxide, %	41.30
%O_2	Oxygen, %	6.30
%Balance	Assumed as Nitrogen, %	29.50
%H_2	Hydrogen, %	12.40
%CO	Carbon Monoxide, %	0.12
M_d	Dry Molecular Weight, lb/lb-Mole	30.22
M_s	Wet Molecular weight, lb/lb-Mole	29.99
P_g	Flue Gas Static Pressure, inches of H_2O	19.96
P_s	Absolute Flue Gas Pressure, inches of Mercury	31.10
t_s	Average Stack Gas Temperature, °F	77
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.159
v_s	Average LFG Velocity, feet/second	25.61
A_s	Stack Crossectional Area, square feet	1.35
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	2,086
Q_s	Standard Volumetric Flow Rate, scfm	2,124
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	2,079
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	9,815
NHV	Net Heating Value, Btu/scf	147
LFG_{CH4}	Methane, lb/hr	479.6
	Methane, grains/dscf	26.82
LFG_{CO2}	Carbon Dioxide, lb/hr	5,905.8
	Carbon Dioxide, grains/dscf	330.32
LFG_{O2}	Oxygen, lb/hr	655.0
	Oxygen, grains/dscf	36.64
LFG_{N2}	Balance gas as Nitrogen, lb/hr	2,685.2
	Balance gas as Nitrogen, grains/dscf	150.18
LFG_{H4}	Hydrogen, lb/hr	81.2
	Hydrogen, grains/dscf	4.54
LFG_{CO}	Carbon Monoxide, lb/hr	10.9
	Carbon Monoxide, grains/dscf	0.61

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	19.00	30.00
	Hydrogen Sulfide Rate, lb/hr	0.21	0.33
	Hydrogen Sulfide Rate, grains/dscf	0.012	0.019
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.63
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	220.00	220.00
	Methyl Mercaptan Rate, lb/hr	3.44	3.44
	Methyl Mercaptan Rate, grains/dscf	0.192	0.192
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	2.50	2.80
	Ethyl Mercaptan Rate, lb/hr	0.05	0.06
	Ethyl Mercaptan Rate, grains/dscf	0.003	0.003
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	970.00	1,100.00
	Dimethyl Sulfide Rate, lb/hr	19.58	22.21
	Dimethyl Sulfide Rate, grains/dscf	1.095	1.242
CS_2	Carbon Disulfide Concentration, ppmd	0.71	0.80
	Carbon Disulfide Rate, lb/hr	0.02	0.02
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	99.00	110.00
	Dimethyl Disulfide Rate, lb/hr	3.03	2.72
	Dimethyl Disulfide Rate, grains/dscf	0.169	0.152

❶**$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	1,400.00	1,600.00
	TRS-->SO2 Emission Rate, lb/hr	29.14	33.31
	TRS-->SO2 Emission Rate, grains/dscf	1.630	1.863

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

Tuesday, May 03, 2016

LOCATION	TIME	FLOW -SCFM			Method 2 vs. Fleetzoom	Method 2 vs Kurz	Kurz vs Fleetzoom
		Method 2	FleetZoom	Kurz FM			
BLOWER OUT	8:01	2,124	2,206	2,188	-3.9%	-3.0%	-0.8%

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 61-18
05/03/2016

	PARAMETER	Blower Out
	EP14 NORTH QUARRY LFG ONLY	
Date	Test Date	5/3/16
Start	Run Start Time	7:45
	Run Finish Time	9:17
	Net Traversing Points	8 (2 x 4)
Θ	Net Run Time, minutes	1:32:00
C_p	Pitot Tube Coeficient	0.99
P_{Br}	Barometric Pressure, inches of Mercury	29.62
% H_2O	Moisture Content of LFG, %	1.82
% RH	Relative Humidity, %	69.00
M_{fd}	Dry Mole Fraction	0.982
%CH_4	Methane, %	48.95
%CO_2	Carbon Dioxide, %	37.15
%O_2	Oxygen, %	1.65
%Balance	Assumed as Nitorgen, %	12.40
%H_2	Hydrogen, %	0.00
%CO	Carbon Monoxide, %	0.00
M_d	Dry Molecular Weight, lb/lb-Mole	28.20
M_s	Wet Molecular weight, lb/lb-Mole	28.02
P_g	Flue Gas Static Pressure, inches of H_2O	1.23
P_s	Absolute Flue Gas Pressure, inches of Mercury	29.71
t_s	Average Stack Gas Temperature, °F	69
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.022
v_s	Average LFG Velocity, feet/second	10.01
A_s	Stack Crossectional Area, square feet	0.51
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	300
Q_s	Standard Volumetric Flow Rate, scfm	305
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	308
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	1,317
NHV	Net Heating Value, Btu/scf	445
LFG_{CH4}	Methane, lb/hr	366.7
	Methane, grains/dscf	142.71
LFG_{CO2}	Carbon Dioxide, lb/hr	763.5
	Carbon Dioxide, grains/dscf	297.13
LFG_{O2}	Oxygen, lb/hr	24.7
	Oxygen, grains/dscf	9.60
LFG_{N2}	Balance gas as Nitrogen, lb/hr	162.2
	Balance gas as Nitrogen, grains/dscf	63.13
LFG_{H4}	Hydrogen, lb/hr	0.0
	Hydrogen, grains/dscf	0.00
LFG_{CO}	Carbon Monoxide, lb/hr	0.0
	Carbon Monoxide, grains/dscf	0.02

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	59.00	63.00
	Hydrogen Sulfide Rate, lb/hr	0.09	0.10
	Hydrogen Sulfide Rate, grains/dscf	0.037	0.039
COS	Carbonyl Sulfide Concentration, ppmd	0.72	0.59
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	1.40	1.40
	Methyl Mercaptan Rate, lb/hr	0.00	0.00
	Methyl Mercaptan Rate, grains/dscf	0.001	0.001
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.72	0.59
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	5.80	5.80
	Dimethyl Sulfide Rate, lb/hr	0.02	0.02
	Dimethyl Sulfide Rate, grains/dscf	0.007	0.007
CS_2	Carbon Disulfide Concentration, ppmd	0.72	0.59
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.72	0.59
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001

❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	66.00	71.00
	TRS-->SO2 Emission Rate, lb/hr	0.20	0.21
	TRS-->SO2 Emission Rate, grains/dscf	0.077	0.083

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

Air TECHNOLOGY Laboratories, Inc.

May 6, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

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

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

Republic Services
ATTN: Nick Bauer
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: H050402-01/04

Enclosed are results for sample(s) received 5/04/16 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 Nick Bauer, Mike Lambrich and Ryan Ayer; David Randall, Dustin Thoenen and Don Murphy, Weaver Consultants Group, on 5/06/16.

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME

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

DELIVERABLES

EDD	☐
EDF	☐
Level 3	☐
Level 4	☐

PAGE: 1 OF 1

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

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

BILLING

P.O. No.: ~~PO4862452~~ 5544160
Bill to: Republic Services
Attn: Nick Bauer
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA 15/16 + TRS	ASTM 1946 +H2 + CO & BTU/SCF		ASTM 1946 +H2 + CO & BTU/SCF (by CH4 ONLY)		
H050402-01	5936	-19.99	-3.92	-4	Blower Outlet 1	5/3/2016	813	C	LFG	NA	X	X				
-02	4432	-19.78	-3.92	-5	Blower Outlet 2	5/3/2016	843	C	LFG	NA	X	X				
-03	2875	-16.43	-2.69	-7	NQ EP14 1	5/3/2016	748	C	LFG	NA	X			X		
-04	7131	-20.41	-3.87	-4	NQ EP14 2	5/3/2016	806	C	LFG	NA	X			X		

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

SAMPLED BY: Ryan Ayers — COMPANY: Republic Services — DATE/TIME

RELINQUISHED BY: Ryan Ayers — 5-3-16 1100 — RECEIVED BY: — DATE/TIME:

RELINQUISHED BY: TED — RECEIVED BY: — 5/4/16 1059

RELINQUISHED BY: — RECEIVED BY: — DATE/TIME:

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

COMMENTS

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

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 05/04/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H050402-01		H050402-02					
Client Sample I.D.:	Blower Outlet 1		Blower Outlet 2					
Date/Time Sampled:	5/3/16 8:13		5/3/16 8:43					
Date/Time Analyzed:	5/4/16 17:12		5/4/16 17:27					
QC Batch No.:	160504GC8A1		160504GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		3.2					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	12.3	3.0	12.5	3.2				
Carbon Dioxide	41.3	0.030	41.3	0.032				
Oxygen/Argon	6.3	1.5	6.3	1.6				
Nitrogen	29.6	3.0	29.3	3.2				
Methane	9.2	0.0030	9.2	0.0032				
Carbon Monoxide	0.12	0.0030	0.12	0.0032				
Net Heating Value (BTU/ft3)	145.0	3.0	148.9	3.2				
Gross Heating Value (BTU/ft3)	165.0	3.0	169.3	3.2				

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

Reviewed/Approved By: _____ Date 5/6/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 05/04/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H050402-03		H050402-04					
Client Sample I.D.:	NQ EP14 1		NQ EP14 2					
Date/Time Sampled:	5/3/16 7:48		5/3/16 8:06					
Date/Time Analyzed:	5/4/16 17:42		5/4/16 17:56					
QC Batch No.:	160504GC8A1		160504GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.6		3.0					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	ND	3.6	ND	3.0				
Carbon Dioxide	37.1	0.036	37.2	0.030				
Oxygen/Argon	ND	1.8	ND	1.5				
Nitrogen	11.7	3.6	11.8	3.0				
Methane	49.0	0.0036	48.9	0.0030				
Carbon Monoxide	ND	0.0036	ND	0.0030				
Net Heating Value (BTU/ft3) methane only	445.9	3.6	445.0	3.0				
Gross Heating Value (BTU/ft3) methane only	495.2	3.6	494.3	3.0				

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

Reviewed/Approved By: _____ Date 5/6/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 160504GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	5/4/16 11:40		5/4/16 10:56		5/4/16 15:44			
Analyst Initials:	AS		AS		AS			
Datafile:	04may013		04may011		04may028			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	110	70-130%	108	70-130%	1.6	<30
Carbon Dioxide	ND	0.010	93	70-130%	93	70-130%	0.7	<30
Oxygen/Argon	ND	0.50	96	70-130%	97	70-130%	0.6	<30
Nitrogen	ND	1.0	97	70-130%	97	70-130%	0.1	<30
Methane	ND	0.0010	93	70-130%	94	70-130%	0.7	<30
Carbon Monoxide	ND	0.0010	109	70-130%	111	70-130%	1.5	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ Date: 5/6/16

Mark J. Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 05/04/16
Matrix: Air
Reporting Units: ppmv

EPA 15/16

Lab No.:	H050402-01		H050402-02		H050402-03		H050402-04	
Client Sample I.D.:	Blower Outlet 1		Blower Outlet 2		NQ EP14 1		NQ EP14 2	
Date/Time Sampled:	5/3/16 8:13		5/3/16 8:43		5/3/16 7:48		5/3/16 8:06	
Date/Time Analyzed:	5/5/16 12:50		5/5/16 13:30		5/5/16 14:09		5/5/16 14:35	
QC Batch No.:	160505GC3A1		160505GC3A1		160505GC3A1		160505GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.0		3.2		3.6		3.0	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	19 d	5.9	30 d	6.3	59 d	7.2	63 d	5.9
Carbonyl Sulfide	ND	0.59	ND	0.63	ND	0.72	ND	0.59
Methyl Mercaptan	220 d	5.9	220 d	6.3	1.4	0.72	1.4	0.59
Ethyl Mercaptan	2.5	0.59	2.8	0.63	ND	0.72	ND	0.59
Dimethyl Sulfide	970 d	59.0	1,100 d	63.0	5.8	0.72	5.8	0.59
Carbon Disulfide	0.71	0.59	0.80	0.63	ND	0.72	ND	0.59
Dimethyl Disulfide	99 d	5.9	110 d	6.3	ND	0.72	ND	0.59
Total Reduced Sulfur	1,400	0.59	1,600	0.63	66	0.72	71	0.59

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

Reviewed/Approved By: _____ Date 5/6/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 160505GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	5/5/16 9:56		5/5/16 9:19		5/5/16 9:31			
Analyst Initials:	AS		AS		AS			
Datafile:	05may004		05may001		05may002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	87	70-130%	87	70-130%	0.2	<30
Carbonyl Sulfide	ND	0.20	105	70-130%	104	70-130%	0.5	<30
Methyl Mercaptan	ND	0.20	82	70-130%	82	70-130%	0.2	<30
Ethyl Mercaptan	ND	0.20	107	70-130%	105	70-130%	2.5	<30
Dimethyl Sulfide	ND	0.20	88	70-130%	86	70-130%	2.6	<30
Carbon Disulfide	ND	0.20	90	70-130%	88	70-130%	1.9	<30
Dimethyl Disulfide	ND	0.20	98	70-130%	99	70-130%	0.3	<30

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

Reviewed/Approved By: _____ Date: 5/6/16
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 60-17
04/26/2016

Kurz FM =	**2,295**	**scfm**
Fleetzoom Total =	**2,373**	**scfm**

$\Delta =$ **3.3%**

	PARAMETER	Outlet A	Outlet B
SOUTH QUARRY LFG ONLY - MAIN FLARE COMPOUND BLOWER OUTLET (FL120 & FL140)			
Date	Test Date		4/26/16
Time	Start - Finish	8:43	9:08
***%CH_4**	Methane, %	9.70	9.70
***%CO_2**	Carbon Dioxide, %	42.90	43.90
***'%O_2**	Oxygen, %	6.20	6.00
***%Balance**	Assumed as Nitrogen, %	41.20	40.40
P_g	Flue Gas Static Pressure, inches of H_2O	18.74	19.72
t_s	Blower Outlet LFG Temperature, °F	98	108
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	2,180	
Q_s	Kurz FM, Standard Volumetric Flow Rate, scfm	2,295	
LFG_{CH4}	Methane, lb/hr	528.4	528.4
	Methane, grains/dscf	28.28	28.28
LFG_{CO2}	Carbon Dioxide, lb/hr	6,410.8	6,560.2
	Carbon Dioxide, grains/dscf	343.12	351.11
LFG_{O2}	Oxygen, lb/hr	673.6	651.9
	Oxygen, grains/dscf	36.05	34.89
LFG_{N2}	Balance gas as Nitrogen, lb/hr	3,919.0	3,842.9
	Balance gas as Nitrogen, grains/dscf	209.75	205.68

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

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	8.20	29.00
	Hydrogen Sulfide Rate, lb/hr	0.09	0.34
	Hydrogen Sulfide Rate, grains/dscf	0.005	0.018
COS	Carbonyl Sulfide Concentration, ppmd	0.61	0.63
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	150.00	220.00
	Methyl Mercaptan Rate, lb/hr	2.45	3.59
	Methyl Mercaptan Rate, grains/dscf	0.131	0.192
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	2.10	2.50
	Ethyl Mercaptan Rate, lb/hr	0.04	0.05
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.003
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	730.00	840.00
	Dimethyl Sulfide Rate, lb/hr	15.40	17.72
	Dimethyl Sulfide Rate, grains/dscf	0.824	0.949
CS_2	Carbon Disulfide Concentration, ppmd	0.66	0.79
	Carbon Disulfide Rate, lb/hr	0.02	0.02
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	31.00	95.00
	Dimethyl Disulfide Rate, lb/hr	0.99	3.04
	Dimethyl Disulfide Rate, grains/dscf	0.053	0.163
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	950.00	1,300.00
	TRS-->SO2 Emission Rate, lb/hr	20.67	28.28
	TRS-->SO2 Emission Rate, grains/dscf	1.106	1.514
	TPY =	90.51	123.86

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 60-17
04/26/2016

Fleetzoom Total = **239** scfm

	PARAMETER	EP14 NQ	EP14 NQ-2
EP14 NORTH QUARRY LFG ONLY			
Date	Test Date		4/26/16
Time	Start	10:08	10:29
***%CH_4**	Methane, %	47.50	47.50
***%CO_2**	Carbon Dioxide, %	39.00	38.90
***'%O_2**	Oxygen, %	1.80	1.80
***%Balance**	Assumed as Nitorgen, %	11.70	11.80
P_g	Flue Gas Static Pressure, inches of H_2O	1.38	1.29
t_s	Blower Outlet LFG Temperature, °F	97.80	104.50
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	228	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	239	
LFG_{CH4}	Methane, lb/hr	270.1	270.1
	Methane, grains/dscf	138.48	138.48
LFG_{CO2}	Carbon Dioxide, lb/hr	608.3	606.7
	Carbon Dioxide, grains/dscf	311.92	311.12
LFG_{O2}	Oxygen, lb/hr	20.4	20.4
	Oxygen, grains/dscf	10.47	10.47
LFG_{N2}	Balance gas as Nitrogen, lb/hr	116.2	117.2
	Balance gas as Nitrogen, grains/dscf	59.56	60.07

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

		EP14 NQ	EP14 NQ-2
H_2S	Hydrogen Sulfide Concentration, ppmd	0.63	36.00
	Hydrogen Sulfide Rate, lb/hr	0.00	0.04
	Hydrogen Sulfide Rate, grains/dscf	0.000	0.022
COS	Carbonyl Sulfide Concentration, ppmd	0.63	0.63
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	0.63	0.63
	Methyl Mercaptan Rate, lb/hr	0.00	0.00
	Methyl Mercaptan Rate, grains/dscf	0.001	0.001
C_2H_6S		0.63	0.63
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	80.00	86.00
	Dimethyl Sulfide Rate, lb/hr	0.18	0.19
	Dimethyl Sulfide Rate, grains/dscf	0.090	0.097
CS_2	Carbon Disulfide Concentration, ppmd	0.63	0.63
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	0.63	0.63
	Dimethyl Disulfide Rate, lb/hr	0.00	0.00
	Dimethyl Disulfide Rate, grains/dscf	0.001	0.001
❶**$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	98.00	140.00
	TRS-->SO2 Emission Rate, lb/hr	0.22	0.32
	TRS-->SO2 Emission Rate, grains/dscf	0.114	0.163
	TPY =	0.97	1.39

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

Air TECHNOLOGY Laboratories, Inc.

April 29, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

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

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

Republic Services
ATTN: Nick Bauer
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: H042702-01/04

Enclosed are results for sample(s) received 4/27/16 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 Nick Bauer, Mike Lambrich, Ryan Ayer and David Randall, Weaver Consultants Group, on 4/29/16.

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME				DELIVERABLES		PAGE: 1 OF 1
Standard	☐	48 hours	■	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	☐	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4862452 ~~5514160~~
Bill to:	Republic Services 90 4/26/16
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

LAB USE ONLY	Canister Pressures ("hg)				SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST: EPA 15/16 + TRS
	Canister ID	Sample Start	Sample End	Lab Receive							
H0427052-01	1615	-17.8	-3.4	-4.5	South Quary Outlet 1	.4/26/16	843	C	LFG	NA	X
-02	J1718	-18.3	-3.5	-5	South Quary Outlet 2	.4/26/16	908	C	LFG	NA	X
-03	1532	-18.1	-3.5	-5	North Quary Outlet 1	.4/26/16	1008	C	LFG	NA	X
-04	1621	-17.45	-3.35	-5	North Quary Outlet 2	.4/26/16	1029	C	LFG	NA	X
					90 4/26/16						

AUTHORIZATION TO PERFORM WORK: Dave Penoyer		COMPANY: Republic Services	DATE/TIME:
SAMPLED BY: Corey McMillen		COMPANY: Republic Services	DATE/TIME
RELINQUISHED BY: Corey Mcmillen	4/26/16	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FED EX		RECEIVED BY	DATE/TIME: 4/27/16 1203
RELINQUISHED BY		RECEIVED BY	DATE/TIME

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

COMMENTS

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

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/27/16
Matrix: Air
Reporting Units: ppmv

EPA 15/16

Lab No.:	H042702-01		H042702-02		H042702-03		H042702-04	
Client Sample I.D.:	South Quarry Outlet 1		South Quarry Outlet 2		North Quarry Outlet 1		North Quarry Outlet 2	
Date/Time Sampled:	4/26/16 8:43		4/26/16 9:08		4/26/16 10:08		4/26/16 10:29	
Date/Time Analyzed:	4/28/16 8:47		4/28/16 9:41		4/28/16 10:22		4/28/16 10:49	
QC Batch No.:	160428GC3A1		160428GC3A1		160428GC3A1		160428GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.1		3.2		3.2		3.2	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	8.2	0.61	29 d	6.3	ND	0.63	36 d	6.3
Carbonyl Sulfide	ND	0.61	ND	0.63	ND	0.63	ND	0.63
Methyl Mercaptan	150 d	6.1	220 d	6.3	ND	0.63	10	0.63
Ethyl Mercaptan	2.1	0.61	2.5	0.63	ND	0.63	ND	0.63
Dimethyl Sulfide	730 d	61.0	840 d	63.0	80 d	6.3	86 d	6.3
Carbon Disulfide	0.66	0.61	0.79	0.63	ND	0.63	ND	0.63
Dimethyl Disulfide	31	0.61	95 d	6.3	8.6	0.63	5.2	0.63
Total Reduced Sulfur	950	0.61	1,300	0.63	98	0.63	140	0.63

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

Reviewed/Approved By: _____ Date 4/29/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 160428GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/28/16 8:35		4/28/16 8:10		4/28/16 8:22			
Analyst Initials:	AS		AS		AS			
Datafile:	28apr003		28apr001		28apr002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	84	70-130%	81	70-130%	3.7	<30
Carbonyl Sulfide	ND	0.20	89	70-130%	89	70-130%	0.3	<30
Methyl Mercaptan	ND	0.20	83	70-130%	84	70-130%	1.1	<30
Ethyl Mercaptan	ND	0.20	86	70-130%	86	70-130%	0.5	<30
Dimethyl Sulfide	ND	0.20	89	70-130%	90	70-130%	1.4	<30
Carbon Disulfide	ND	0.20	92	70-130%	92	70-130%	0.4	<30
Dimethyl Disulfide	ND	0.20	103	70-130%	100	70-130%	2.8	<30

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

Reviewed/Approved By: _____ Date: 4/29/16
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 59-16
04/21/2016

Kurz FM =	**2,311**	**scfm**
Fleetzoom Total =	**2,391**	**scfm**

$\Delta =$ **3.3%**

	PARAMETER	Outlet A	Outlet B
SOUTH QUARRY LFG ONLY - MAIN FLARE COMPOUND BLOWER OUTLET (FL120 & FL140)			
Date	Test Date		4/21/16
Time	Start	14:14	14:38
***%CH_4**	Methane, %	9.90	9.90
***%CO_2**	Carbon Dioxide, %	44.10	43.60
***'%O_2**	Oxygen, %	5.90	6.20
***%Balance**	Assumed as Nitorgen, %	40.10	40.30
P_g	Flue Gas Static Pressure, inches of H_2O	18.19	21.61
t_s	Blower Outlet LFG Temperature, °F	91	103
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	2,195	
Q_s	Kurz FM, Standard Volumetric Flow Rate, scfm	2,311	
LFG_{CH4}	Methane, lb/hr	543.1	543.1
	Methane, grains/dscf	28.86	28.86
LFG_{CO2}	Carbon Dioxide, lb/hr	6,636.4	6,561.1
	Carbon Dioxide, grains/dscf	352.71	348.71
LFG_{O2}	Oxygen, lb/hr	645.6	678.4
	Oxygen, grains/dscf	34.31	36.05
LFG_{N2}	Balance gas as Nitrogen, lb/hr	3,841.1	3,860.2
	Balance gas as Nitrogen, grains/dscf	204.15	205.17

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

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	12.00	4.60
	Hydrogen Sulfide Rate, lb/hr	0.14	0.05
	Hydrogen Sulfide Rate, grains/dscf	0.007	0.003
COS	Carbonyl Sulfide Concentration, ppmd	0.63	0.63
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	210.00	170.00
	Methyl Mercaptan Rate, lb/hr	3.45	2.80
	Methyl Mercaptan Rate, grains/dscf	0.184	0.149
C_2H_6S		2.00	2.30
	Ethyl Mercaptan Rate, lb/hr	0.04	0.05
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.003
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	970.00	960.00
	Dimethyl Sulfide Rate, lb/hr	20.61	20.40
	Dimethyl Sulfide Rate, grains/dscf	1.095	1.084
CS_2	Carbon Disulfide Concentration, ppmd	0.78	0.79
	Carbon Disulfide Rate, lb/hr	0.02	0.02
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	110.00	110.00
	Dimethyl Disulfide Rate, lb/hr	3.54	3.54
	Dimethyl Disulfide Rate, grains/dscf	0.188	0.188
❶**$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	1,400.00	1,400.00
	TRS-->SO2 Emission Rate, lb/hr	30.67	30.67
	TRS-->SO2 Emission Rate, grains/dscf	1.630	1.630
	TPY =	134.33	134.33

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 59-16
04/21/2016

Fleetzoom Total = 274 scfm

	PARAMETER	EP14 NQ	EP14 NQ-2
EP14 NORTH QUARRY LFG ONLY			
Date	Test Date		4/21/16
Time	Start	15:22	15:46
%CH_4	Methane, %	47.80	48.70
%CO_2	Carbon Dioxide, %	39.00	38.50
%O_2	Oxygen, %	1.60	1.50
%Balance	Assumed as Nitorgen, %	11.60	11.30
P_g	Flue Gas Static Pressure, inches of H_2O	1.68	1.69
t_s	Blower Outlet LFG Temperature, °F	89.20	88.60
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	260	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	274	
LFG_{CH4}	Methane, lb/hr	310.8	316.7
	Methane, grains/dscf	139.36	141.98
LFG_{CO2}	Carbon Dioxide, lb/hr	695.8	686.8
	Carbon Dioxide, grains/dscf	311.92	307.92
LFG_{O2}	Oxygen, lb/hr	20.8	19.5
	Oxygen, grains/dscf	9.30	8.72
LFG_{N2}	Balance gas as Nitrogen, lb/hr	131.7	128.3
	Balance gas as Nitrogen, grains/dscf	59.06	57.53

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

		EP14 NQ	EP14 NQ-2
H_2S	Hydrogen Sulfide Concentration, ppmd	11.00	33.00
	Hydrogen Sulfide Rate, lb/hr	0.02	0.05
	Hydrogen Sulfide Rate, grains/dscf	0.007	0.020
COS	Carbonyl Sulfide Concentration, ppmd	0.63	0.63
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	9.80	11.00
	Methyl Mercaptan Rate, lb/hr	0.02	0.02
	Methyl Mercaptan Rate, grains/dscf	0.009	0.010
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.63	0.63
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	92.00	96.00
	Dimethyl Sulfide Rate, lb/hr	0.23	0.24
	Dimethyl Sulfide Rate, grains/dscf	0.104	0.108
CS_2	Carbon Disulfide Concentration, ppmd	0.63	0.63
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	6.30	6.00
	Dimethyl Disulfide Rate, lb/hr	0.02	0.02
	Dimethyl Disulfide Rate, grains/dscf	0.011	0.010
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	130.00	150.00
	TRS-->SO2 Emission Rate, lb/hr	0.34	0.39
	TRS-->SO2 Emission Rate, grains/dscf	0.151	0.175
	TPY =	1.48	1.71

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

AirTECHNOLOGY
Laboratories, Inc.

April 27, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

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

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

Republic Services
ATTN: Nick Bauer
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: H042202-01/04

Enclosed are results for sample(s) received 4/26/16 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 Nick Bauer, Mike Lambrich, Ryan Ayer, David Randall and Dustin Thoenen, Weaver Consultants Group, on 4/26/16.

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

CHAIN OF CUSTODY RECORD

AirTECHNOLOGY Laboratories, Inc.

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

TURNAROUND TIME				DELIVERABLES		PAGE: 1 OF 1
Standard	☐	48 hours	■	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	☐	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4862452 5514160
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	TRS					
H042202-01	1533	-18.6	-3.2	-5	OU 1	4/21/2016	1414	C	LFG	NA	X					
-02	J1724	-18.7	-3.3	-5	OU 2	4/21/2016	1438	C	LFG	NA	X					
-03	J1719	-18.7	-3.5	-5	NQ OU 1	4/21/2016	1522	C	LFG	NA	X					
-04	1619	-18.7	-3.5	-5	NQ OU 2	4/21/2016	1546	C	LFG	NA	X					

EPA 15/16 4/22/16

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	DATE/TIME:	
SAMPLED BY: Corey McMillen	COMPANY: Republic Services	DATE/TIME	
RELINQUISHED BY: Corey Mcmillen	DATE	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FEDEX	DATE	RECEIVED BY	DATE/TIME 4/22/16 0922
RELINQUISHED BY	DATE	RECEIVED BY	DATE/TIME

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

COMMENTS

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

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/22/16
Matrix: Air
Reporting Units: ppmv

EPA 15/16

Lab No.:	H042202-01		H042202-02		H042202-03		H042202-04	
Client Sample I.D.:	OU 1		OU 2		NQ OU 1		NQ OU 2	
Date/Time Sampled:	4/21/16 14:14		4/21/16 14:38		4/21/16 15:22		4/21/16 15:46	
Date/Time Analyzed:	4/22/16 10:37		4/22/16 11:15		4/22/16 12:12		4/22/16 13:09	
QC Batch No.:	160422GC3A1		160422GC3A1		160422GC3A1		160422GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	12	0.63	4.6	0.63	11	0.63	33 d	6.3
Carbonyl Sulfide	ND	0.63	ND	0.63	ND	0.63	ND	0.63
Methyl Mercaptan	210 d	6.3	170 d	6.3	9.8	0.63	11	0.63
Ethyl Mercaptan	2.0	0.63	2.6	0.63	ND	0.63	ND	0.63
Dimethyl Sulfide	970 d	63.0	960 d	63.0	92 d	6.3	96 d	6.3
Carbon Disulfide	0.78	0.63	0.79	0.63	ND	0.63	ND	0.63
Dimethyl Disulfide	110 d	6.3	110 d	6.3	6.3	0.63	6.0	0.63
Total Reduced Sulfur	1,400	0.63	1,400	0.63	130	0.63	150	0.63

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

Reviewed/Approved By: _____ Date 4/26/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 160422GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/22/16 9:39		4/22/16 9:02		4/22/16 9:14			
Analyst Initials:	AS		AS		AS			
Datafile:	22apr004		22apr001		22apr002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	88	70-130%	86	70-130%	2.1	<30
Carbonyl Sulfide	ND	0.20	97	70-130%	93	70-130%	4.3	<30
Methyl Mercaptan	ND	0.20	89	70-130%	88	70-130%	1.2	<30
Ethyl Mercaptan	ND	0.20	90	70-130%	91	70-130%	1.0	<30
Dimethyl Sulfide	ND	0.20	95	70-130%	91	70-130%	4.0	<30
Carbon Disulfide	ND	0.20	93	70-130%	94	70-130%	0.2	<30
Dimethyl Disulfide	ND	0.20	101	70-130%	99	70-130%	1.9	<30

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

Reviewed/Approved By: _____ Date: 4/26/16
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC
Weekly TRS
Monthly Method 2C
Event 58-15
04/12/2016

	PARAMETER	Blower Out
	SOUTH QUARRY LFG ONLY (FL120 & FL140)	
Date	Test Date	4/12/16
Start	Run Start Time	14:20
	Run Finish Time	15:20
	Net Traversing Points	8 (2 x 4)
Θ	Net Run Time, minutes	0:59:30
C_p	Pitot Tube Coeficient	0.99
P_{Br}	Barometric Pressure, inches of Mercury	29.80
% H_2O	Moisture Content of LFG, %	3.78
% RH	Relative Humidity, %	90.20
M_{fd}	Dry Mole Fraction	0.962
%CH_4	Methane, %	8.15
%CO_2	Carbon Dioxide, %	37.00
%O_2	Oxygen, %	8.10
%Balance	Assumed as Nitorgen, %	35.00
%H_2	Hydrogen, %	10.50
%CO	Carbon Monoxide, %	0.11
M_d	Dry Molecular Weight, lb/lb-Mole	30.23
M_s	Wet Molecular weight, lb/lb-Mole	29.77
P_g	Flue Gas Static Pressure, inches of H_2O	19.47
P_s	Absolute Flue Gas Pressure, inches of Mercury	31.22
t_s	Average Stack Gas Temperature, °F	103
ΔP_{avg}	Average Velocity Head, inches of H_2O	0.226
v_s	Average LFG Velocity, feet/second	31.32
A_s	Stack Crossectional Area, square feet	1.35
Q_{sd}	Dry Volumetric Flow Rate, dry scfm	2,394
Q_s	Standard Volumetric Flow Rate, scfm	2,484
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm	2,542
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr	11,269
NHV	Net Heating Value, Btu/scf	135
LFG_{CH4}	Methane, lb/hr	487.5
	Methane, grains/dscf	23.76
LFG_{CO2}	Carbon Dioxide, lb/hr	6,072.1
	Carbon Dioxide, grains/dscf	295.93
LFG_{O2}	Oxygen, lb/hr	966.5
	Oxygen, grains/dscf	47.10
LFG_{N2}	Balance gas as Nitrogen, lb/hr	3,656.1
	Balance gas as Nitrogen, grains/dscf	178.18
LFG_{H4}	Hydrogen, lb/hr	78.9
	Hydrogen, grains/dscf	3.85
LFG_{CO}	Carbon Monoxide, lb/hr	11.0
	Carbon Monoxide, grains/dscf	0.53

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	8.80	46.00
	Hydrogen Sulfide Rate, lb/hr	0.11	0.58
	Hydrogen Sulfide Rate, grains/dscf	0.005	0.028
COS	Carbonyl Sulfide Concentration, ppmd	0.67	0.59
	Carboynl Sulfide Rate, lb/hr	0.02	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	180.00	170.00
	Methyl Mercaptan Rate, lb/hr	3.23	3.05
	Methyl Mercaptan Rate, grains/dscf	0.157	0.149
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	2.30	2.40
	Ethyl Mercaptan Rate, lb/hr	0.05	0.06
	Ethyl Mercaptan Rate, grains/dscf	0.003	0.003
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	1,300.00	940.00
	Dimethyl Sulfide Rate, lb/hr	30.12	21.78
	Dimethyl Sulfide Rate, grains/dscf	1.468	1.061
CS_2	Carbon Disulfide Concentration, ppmd	0.71	0.65
	Carbon Disulfide Rate, lb/hr	0.02	0.02
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	100.00	94.00
	Dimethyl Disulfide Rate, lb/hr	3.51	2.67
	Dimethyl Disulfide Rate, grains/dscf	0.171	0.130

❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,700.00	1,300.00
	TRS-->SO2 Emission Rate, lb/hr	40.61	31.06
	TRS-->SO2 Emission Rate, grains/dscf	1.979	1.514

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

Tuesday, April 12, 2016

LOCATION	TIME	FLOW -SCFM			Method 2 vs. Fleetzoom	Method 2 vs Kurz
		Method 2	FleetZoom	Kurz FM		
BLOWER OUT	14:20	2,484	2,680	2,561	-7.9%	-3.1%

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 58-15
04/12/2016

Monthly Method 2C was attempted at FXA1212 (NQ Gas) but high moisture and watered-in sumps skewed results. Determination below was made using flow data from Fleetzoom instead.

Fleetzoom Total = **217** scfm

	PARAMETER	EP14 NQ	EP14 NQ-2
EP14 NORTH QUARRY LFG ONLY			
Date	Test Date		4/11/16
Time	Start - Finish	15:15	15:43
%CH_4	Methane, %	47.00	47.00
%CO_2	Carbon Dioxide, %	38.00	38.00
%O_2	Oxygen, %	1.80	1.70
%Balance	Assumed as Nitorgen, %	12.00	11.00
%H_2	Hydrogen, %	3.20	3.20
%CO	Carbon Monoxide, %	0.005	0.005
P_g	Flue Gas Static Pressure, inches of H_2O	0.32	0.32
t_s	Blower Outlet LFG Temperature, °F	80	80
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	206	
Q_s	Fleetzoom Standard Volumetric Flow Rate, scfm	217	
NHV	Net Heating Value, Btu/scf	431.0	438.0
LFG_{CH4}	Methane, lb/hr	241.8	241.8
	Methane, grains/dscf	137.03	137.03
LFG_{CO2}	Carbon Dioxide, lb/hr	536.2	536.2
	Carbon Dioxide, grains/dscf	303.92	303.92
LFG_{O2}	Oxygen, lb/hr	18.5	17.4
	Oxygen, grains/dscf	10.47	9.89
LFG_{N2}	Balance gas as Nitrogen, lb/hr	107.8	98.8
	Balance gas as Nitrogen, grains/dscf	61.09	56.00
LFG_{H4}	Hydrogen, lb/hr	2.1	2.1
	Hydrogen, grains/dscf	1.17	1.17
LFG_{CO}	Carbon Monoxide, lb/hr	0.0	0.0
	Carbon Monoxide, grains/dscf	0.02	0.02

		EP14 NQ	EP14 NQ-2
H_2S	Hydrogen Sulfide Concentration, ppmd	31.00	0.63
	Hydrogen Sulfide Rate, lb/hr	0.03	0.00
	Hydrogen Sulfide Rate, grains/dscf	0.019	0.000
COS	Carbonyl Sulfide Concentration, ppmd	0.63	0.63
	Carboynl Sulfide Rate, lb/hr	0.00	0.00
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	7.50	5.60
	Methyl Mercaptan Rate, lb/hr	0.01	0.01
	Methyl Mercaptan Rate, grains/dscf	0.007	0.005
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	0.63	0.63
	Ethyl Mercaptan Rate, lb/hr	0.00	0.00
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	110.00	110.00
	Dimethyl Sulfide Rate, lb/hr	0.22	0.22
	Dimethyl Sulfide Rate, grains/dscf	0.124	0.124
CS_2	Carbon Disulfide Concentration, ppmd	0.63	0.63
	Carbon Disulfide Rate, lb/hr	0.00	0.00
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	8.50	9.00
	Dimethyl Disulfide Rate, lb/hr	0.03	0.03
	Dimethyl Disulfide Rate, grains/dscf	0.015	0.015
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	170.00	130.00
	TRS-->SO2 Emission Rate, lb/hr	0.35	0.27
	TRS-->SO2 Emission Rate, grains/dscf	0.198	0.151
	TPY =	1.53	1.17

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

Air TECHNOLOGY Laboratories, Inc.

April 15, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

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

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

Republic Services
ATTN: Nick Bauer
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: H041302-01/04

Enclosed are results for sample(s) received 4/13/16 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 Nick Bauer, Mike Lambrich, Ryan Ayer, Jim Getting, David Randall and Dustin Thoenen, Weaver Consultants Group, on 4/14/16.

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME				DELIVERABLES		PAGE: 1 OF 1
Standard	☐	48 hours	■	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	■	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	☐	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4662452 5544160
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA 15/16 + TRS	ASTM 1946 +H2 + CO & BTU/SCF	EPA Method 25C			
H041302-01	1290	-20.35	-4.92	-6	Blower Outlet 1	4/12/2016	1523	C	LFG	NA	X	X	X			
-02	5227	-18.97	-2.65	-4	Blower Outlet 2	4/12/2016	1548	C	LFG	NA	X	X	X			
-03	6009	-20.27	-3.2	-5	EP14 NQ	4/12/2016	1515	C	LFG	NA	X	X	X			
-04	1295	-20.21	-3.76	-5	EP14 NQ-2	4/12/2016	1543	C	LFG	NA	X	X	X			

AUTHORIZATION TO PERFORM WORK: Dave Penoyer		COMPANY: Republic Services	DATE/TIME:
SAMPLED BY: Ryan Ayers		COMPANY: Republic Services	DATE/TIME
RELINQUISHED BY	DATE: 4-12-16 1700	RECEIVED BY	DATE/TIME
RELINQUISHED BY FEDEX	DATE:	RECEIVED BY	DATE/TIME 4/13/16 1140
RELINQUISHED BY	DATE:	RECEIVED BY	DATE/TIME

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

COMMENTS

*24 hr TAT Please!

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: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/13/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041302-01		H041302-02		H041302-03		H041302-04	
Client Sample I.D.:	Blower Outlet 1		Blower Outlet 2		EP14 NQ		EP14 NQ-2	
Date/Time Sampled:	4/12/16 15:23		4/12/16 15:48		4/12/16 15:15		4/12/16 15:43	
Date/Time Analyzed:	4/13/16 13:11		4/13/16 14:40		4/13/16 17:14		4/13/16 17:29	
QC Batch No.:	160413GC8A1		160413GC8A1		160413GC8A1		160413GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		3.0		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	11	3.4	10	3.0	ND	3.2	ND	3.2
Carbon Dioxide	38	0.034	36	0.030	38	0.032	38	0.032
Oxygen/Argon	7.7	1.7	8.5	1.5	1.8	1.6	1.7	1.6
Nitrogen	34	3.4	36	3.0	12	3.2	11	3.2
Methane	8.4	0.0034	7.9	0.0030	47	0.0032	47	0.0032
Carbon Monoxide	0.11	0.0034	0.10	0.0030	0.0047	0.0032	0.0048	0.0032
Net Heating Value (BTU/ft3)	139	3.4	130	3.0	431	3.2	438	3.2
Gross Heating Value (BTU/ft3)	157	3.4	148	3.0	479	3.2	487	3.2

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

Reviewed/Approved By: _____ Date 4/14/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 160413GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/13/16 9:58		4/13/16 9:29		4/13/16 9:43			
Analyst Initials:	AS		AS		AS			
Datafile:	13apr008		13apr006		13apr007			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	114	70-130%	113	70-130%	0.7	<30
Carbon Dioxide	ND	0.010	103	70-130%	102	70-130%	1.3	<30
Oxygen/Argon	ND	0.50	100	70-130%	99	70-130%	1.2	<30
Nitrogen	ND	1.0	100	70-130%	99	70-130%	1.3	<30
Methane	ND	0.0010	97	70-130%	97	70-130%	0.3	<30
Carbon Monoxide	ND	0.0010	115	70-130%	114	70-130%	0.5	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ Date: 4/14/16

Mark J. Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer

Project Name: Bridgeton Landfill
Project Number: NA
Date Received: 4/13/2016
Matrix: Vapor

TNMOC by EPA METHOD 25C

Lab Number:		H041302-01		H041302-02		H041302-03		H041302-04			
Client Sample ID:		Blower Outlet 1		Blower Outlet 2		EP14 NQ		EP14 NQ-2			
Date/Time Collected:		4/12/16 15:23		4/12/16 15:48		4/12/16 15:15		4/12/16 15:43			
Date/Time Analyzed:		4/13/16 13:55		4/14/16 12:48		4/14/16 10:36		4/14/16 11:34			
Analyst Initials:		AS		AS		AS		AS			
QC Batch:		160413GC8A1		160414GC8A1		160414GC8A1		160414GC8A1			
Dilution Factor:		33.7		29.7		3.2		3.2			
ANALYTE	Units	Result	RL	Result	RL	Result	RL	Result	RL		
TNMOC	ppmv C	121,000	337	110,000	297	6,700	32	7,300	32		
TNMOC uncorr*	ppmv C	44,000	337	37,000	297	5,500	32	6,000	32		

ND = Not detected at or above reporting limit.
TNMOC = Total Non-Methane Organic Carbon.
TNMOC uncorr* = TNMOC concentration in sample without nitrogen/moisture correction.
NA = Nitrogen/moisture correction causes division by zero.

Reviewed/Approved By: _____ Date: 4/14/16
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/13/16
Matrix: Air
Reporting Units: ppmv

EPA 15/16

Lab No.:	H041302-01		H041302-02		H041302-03		H041302-04	
Client Sample I.D.:	Blower Outlet 1		Blower Outlet 2		EP14 NQ		EP14 NQ-2	
Date/Time Sampled:	4/12/16 15:23		4/12/16 15:48		4/12/16 15:15		4/12/16 15:43	
Date/Time Analyzed:	4/13/16 14:17		4/13/16 13:32		4/13/16 14:57		4/13/16 15:33	
QC Batch No.:	160413GC3A1		160413GC3A1		160413GC3A1		160413GC3A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		3.0		3.2		3.2	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	8.8	0.67	46 d	5.9	31 d	6.3	ND	0.63
Carbonyl Sulfide	ND	0.67	ND	0.59	ND	0.63	ND	0.63
Methyl Mercaptan	180 d	6.7	170 d	5.9	7.5	0.63	5.6	0.63
Ethyl Mercaptan	2.3	0.67	2.4	0.59	ND	0.63	ND	0.63
Dimethyl Sulfide	1,300 d	67.0	940 d	59.0	110 d	6.3	110 d	6.3
Carbon Disulfide	0.71	0.67	0.65	0.59	ND	0.63	ND	0.63
Dimethyl Disulfide	100 d	6.7	94 d	5.9	8.5	0.63	9.0	0.63
Total Reduced Sulfur	1,700	0.67	1,300	0.59	170	0.63	130	0.63

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

Reviewed/Approved By: _____ Date 4/14/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 160413GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/13/16 13:20		4/13/16 12:55		4/13/16 13:08			
Analyst Initials:	AS		AS		AS			
Datafile:	13apr003		13apr001		13apr002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	88	70-130%	87	70-130%	0.8	<30
Carbonyl Sulfide	ND	0.20	96	70-130%	93	70-130%	2.6	<30
Methyl Mercaptan	ND	0.20	86	70-130%	89	70-130%	3.7	<30
Ethyl Mercaptan	ND	0.20	92	70-130%	92	70-130%	0.3	<30
Dimethyl Sulfide	ND	0.20	95	70-130%	95	70-130%	0.7	<30
Carbon Disulfide	ND	0.20	89	70-130%	91	70-130%	2.0	<30
Dimethyl Disulfide	ND	0.20	100	70-130%	96	70-130%	4.1	<30

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

Reviewed/Approved By: _____ Date: 4/14/16
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weekly TRS Sampling Summary
Event 57-14
04/07/2016

Kurz FM =	**2,660**	**scfm**
Fleetzoom Total =	**2,749**	**scfm**

$\Delta =$ **3.2%**

	PARAMETER	Outlet A	Outlet B
Date	Test Date		4/7/16
Time	Start - Finish	14:21	14:31
%CH_4	Methane, %	6.70	7.50
%CO_2	Carbon Dioxide, %	31.40	36.00
%O_2	Oxygen, %	10.30	8.50
%Balance	Assumed as Nitorgen, %	41.60	35.90
%H_2	Hydrogen, %	9.10	10.80
%CO	Carbon Monoxide, %	0.089	0.100
P_g	Flue Gas Static Pressure, inches of H_2O	21.31	21.31
t_s	Blower Outlet LFG Temperature, °F	90	90
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 5%H2O)	2,527	
Q_s	Kurz FM, Standard Volumetric Flow Rate, scfm	2,660	
NHV	Net Heating Value, Btu/scf	105.8	125.6
LFG_{CH4}	Methane, lb/hr	423.1	473.7
	Methane, grains/dscf	19.53	21.87
LFG_{CO2}	Carbon Dioxide, lb/hr	5,440.1	6,237.1
	Carbon Dioxide, grains/dscf	251.14	287.93
LFG_{O2}	Oxygen, lb/hr	1,297.5	1,070.7
	Oxygen, grains/dscf	59.90	49.43
LFG_{N2}	Balance gas as Nitrogen, lb/hr	4,587.7	3,959.1
	Balance gas as Nitrogen, grains/dscf	211.79	182.77
LFG_{H4}	Hydrogen, lb/hr	72.2	85.7
	Hydrogen, grains/dscf	3.33	3.96
LFG_{CO}	Carbon Monoxide, lb/hr	9.8	11.0
	Carbon Monoxide, grains/dscf	0.43	0.48

		Outlet A	Outlet B
H_2S	Hydrogen Sulfide Concentration, ppmd	22.00	0.59
	Hydrogen Sulfide Rate, lb/hr	0.30	0.01
	Hydrogen Sulfide Rate, grains/dscf	0.014	0.000
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.01	0.01
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	150.00	120.00
	Methyl Mercaptan Rate, lb/hr	2.84	2.27
	Methyl Mercaptan Rate, grains/dscf	0.131	0.105
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	2.10	1.80
	Ethyl Mercaptan Rate, lb/hr	0.05	0.04
	Ethyl Mercaptan Rate, grains/dscf	0.002	0.002
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	800.00	800.00
	Dimethyl Sulfide Rate, lb/hr	19.57	19.57
	Dimethyl Sulfide Rate, grains/dscf	0.903	0.903
CS_2	Carbon Disulfide Concentration, ppmd	0.59	0.59
	Carbon Disulfide Rate, lb/hr	0.02	0.02
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	29.00	28.00
	Dimethyl Disulfide Rate, lb/hr	1.08	1.04
	Dimethyl Disulfide Rate, grains/dscf	0.050	0.048

❶**$E_{TRS-SO2}$**	TRS-->SO2 Emission Concentration, ppmd	1,000.00	980.00
	TRS-->SO2 Emission Rate, lb/hr	25.22	24.72
	TRS-->SO2 Emission Rate, grains/dscf	1.164	1.141
	TPY =	110.46	108.25

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

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME

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

DELIVERABLES

EDD	☐
EDF	☐
Level 3	☐
Level 4	☐

PAGE: 1 OF 1

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

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

BILLING

P.O. No.:	PO4862452
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA 15/16 + TRS	ASTM 1946 +H2 + CO & BTU/SCF		ASTM 1946 +H2 + CO & BTU/SCF (by CH4 ONLY)		
H040805-01	J1721	-19.9	-3.5	-4	Outlet A	4/7/2016	1421	C	LFG	NA	X	X				
-02	1539	-19.7	-3.5	-4	Outlet B	4/7/2016	1431	C	LFG	NA	X	X				
-03	1616	-20.2	-3.5	-4	NQ Outlet #1	4/7/2016	1333	C	LFG	NA	X			X		
-04	J1717	-18.9	-3.5	-4	NQ Outlet #2	4/7/2016	1343	C	LFG	NA	X			X		

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

SAMPLED BY: Ryan Ayers — COMPANY: Republic Services — DATE/TIME

RELINQUISHED BY: Ryan Ayers — 4-7-16 1500 — DATE/TIME — RECEIVED BY — DATE/TIME

RELINQUISHED BY: FED EX — DATE/TIME — RECEIVED BY: [signature] — 4/8/16 1215 — DATE/TIME

RELINQUISHED BY — DATE/TIME — RECEIVED BY — DATE/TIME

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

COMMENTS

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

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

Rev. 03 - 5/7/09

Client:	**Republic Services**
Attn:	**Nick Bauer**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**04/08/16**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA 15/16

Lab No.:	H040805-01		H040805-02		H040805-03		H040805-04	
Client Sample I.D.:	Outlet A		Outlet B		NQ Outlet #1		NQ Outlet #2	
Date/Time Sampled:	4/7/16 14:21		4/7/16 14:31		4/7/16 13:33		4/7/16 13:43	
Date/Time Analyzed:	4/8/16 14:31		4/8/16 13:55		4/8/16 15:08		4/8/16 15:33	
QC Batch No.:	160408GC3A1		160408GC3A1		160408GC3A1		160408GC3A1	
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	22 d	5.9	ND	0.59	ND	0.59	ND	0.59
Carbonyl Sulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Methyl Mercaptan	150 d	5.9	120 d	5.9	ND	0.59	2.5	0.59
Ethyl Mercaptan	2.1	0.59	1.8	0.59	ND	0.59	ND	0.59
Dimethyl Sulfide	800 d	59.0	800 d	59.0	48 d	5.9	50 d	5.9
Carbon Disulfide	ND	0.59	ND	0.59	ND	0.59	ND	0.59
Dimethyl Disulfide	29	0.59	28	0.59	7.3	0.59	4.7	0.59
Total Reduced Sulfur	1,000	0.59	980	0.59	64	0.59	62	0.59

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

Reviewed/Approved By: _____ Date 4-12-16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 160408GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/8/16 9:36		4/8/16 9:11		4/8/16 9:23			
Analyst Initials:	AS		AS		AS			
Datafile:	08apr003		08apr001		08apr002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	84	70-130%	84	70-130%	0.1	<30
Carbonyl Sulfide	ND	0.20	89	70-130%	89	70-130%	0.4	<30
Methyl Mercaptan	ND	0.20	85	70-130%	85	70-130%	1.0	<30
Ethyl Mercaptan	ND	0.20	87	70-130%	84	70-130%	2.6	<30
Dimethyl Sulfide	ND	0.20	87	70-130%	87	70-130%	0.1	<30
Carbon Disulfide	ND	0.20	88	70-130%	88	70-130%	0.3	<30
Dimethyl Disulfide	ND	0.20	90	70-130%	92	70-130%	2.1	<30

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

Reviewed/Approved By: _____ Date: 4-12-16
Mark J. Johnson
Operations Manager

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

Client:	**Republic Services**
Attn:	**Nick Bauer**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**04/08/16**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	H040805-01		H040805-02					
Client Sample I.D.:	Outlet A		Outlet B					
Date/Time Sampled:	4/7/16 14:21		4/7/16 14:31					
Date/Time Analyzed:	4/8/16 14:50		4/8/16 15:05					
QC Batch No.:	160408GC8A1		160408GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		3.0					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	9.1	3.0	10.8	3.0				
Carbon Dioxide	31.4	0.030	36.0	0.030				
Oxygen/Argon	10.3	1.5	8.5	1.5				
Nitrogen	41.6	3.0	35.9	3.0				
Methane	6.7	0.0030	7.5	0.0030				
Carbon Monoxide	0.089	0.0030	0.10	0.0030				
Net Heating Value (BTU/ft3)	105.8	3.0	125.6	3.0				
Gross Heating Value (BTU/ft3)	120.4	3.0	142.9	3.0				

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

Reviewed/Approved By: _____ Date 4-12-16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

Client:	**Republic Services**
Attn:	**Nick Bauer**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**04/08/16**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	H040805-03		H040805-04					
Client Sample I.D.:	NQ Outlet #1		NQ Outlet #2					
Date/Time Sampled:	4/7/16 13:33		4/7/16 13:43					
Date/Time Analyzed:	4/8/16 15:20		4/8/16 15:35					
QC Batch No.:	160408GC8A1		160408GC8A1					
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	31.0	0.030	30.5	0.030				
Oxygen/Argon	5.2	1.5	5.3	1.5				
Nitrogen	23.9	3.0	25.6	3.0				
Methane	39.0	0.0030	37.7	0.0030				
Carbon Monoxide	0.0032	0.0030	ND	0.0030				
Net Heating Value (BTU/ft3) methane only	354.7	3.0	343.1	3.0				
Gross Heating Value (BTU/ft3) methane only	393.9	3.0	381.1	3.0				

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

Reviewed/Approved By: _____ **Date** 4-12-16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 160408GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/8/16 13:15		4/8/16 10:16		4/8/16 10:30			
Analyst Initials:	AS		AS		AS			
Datafile:	08apr009		08apr006		08apr007			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	97	70-130%	95	70-130%	2.7	<30
Carbon Dioxide	ND	0.010	96	70-130%	92	70-130%	3.8	<30
Oxygen/Argon	ND	0.50	103	70-130%	99	70-130%	3.2	<30
Nitrogen	ND	1.0	102	70-130%	99	70-130%	3.0	<30
Methane	ND	0.0010	109	70-130%	108	70-130%	0.7	<30
Carbon Monoxide	ND	0.0010	116	70-130%	115	70-130%	0.6	<30

ND = Not Detected (Below RL)

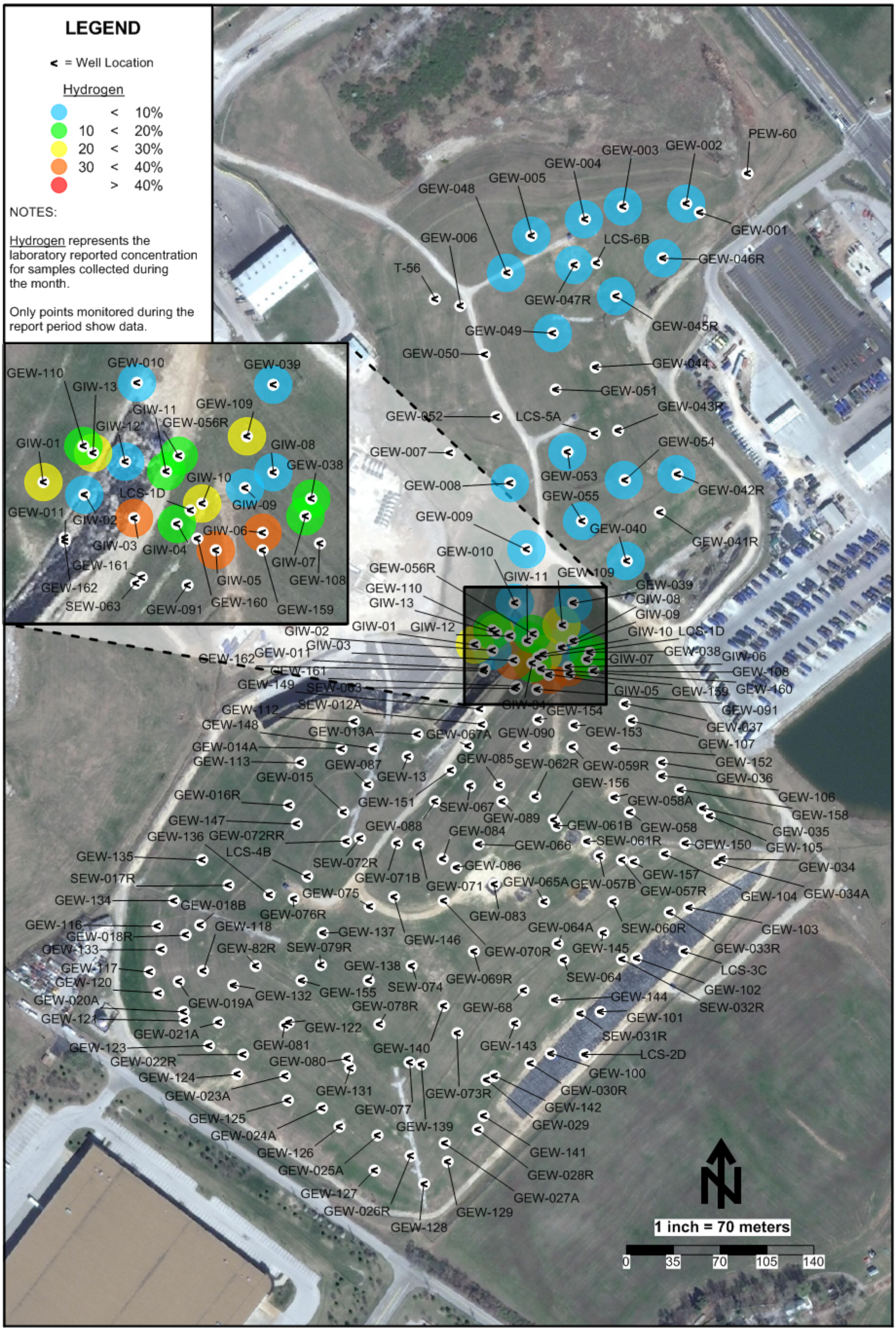
Reviewed/Approved By: _____ Date: 4-12-16

Mark J. Johnson
Operations Manager

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

ATTACHMENT C

GAS WELL ANALYSIS MAPS



Hydrogen Data Map - April 2016 - Bridgeton Landfill

LEGEND

< = Well Location

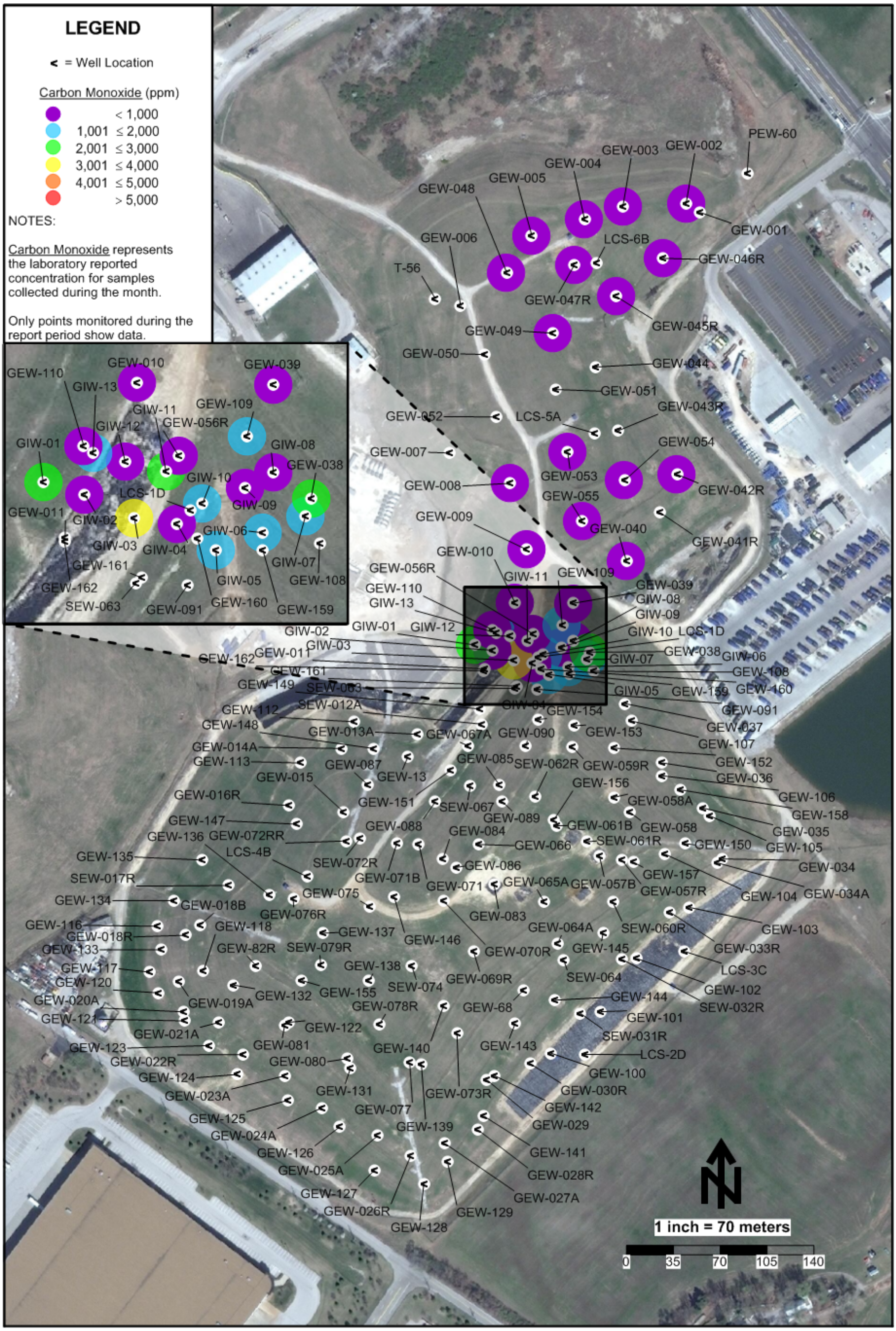
Carbon Monoxide (ppm)

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

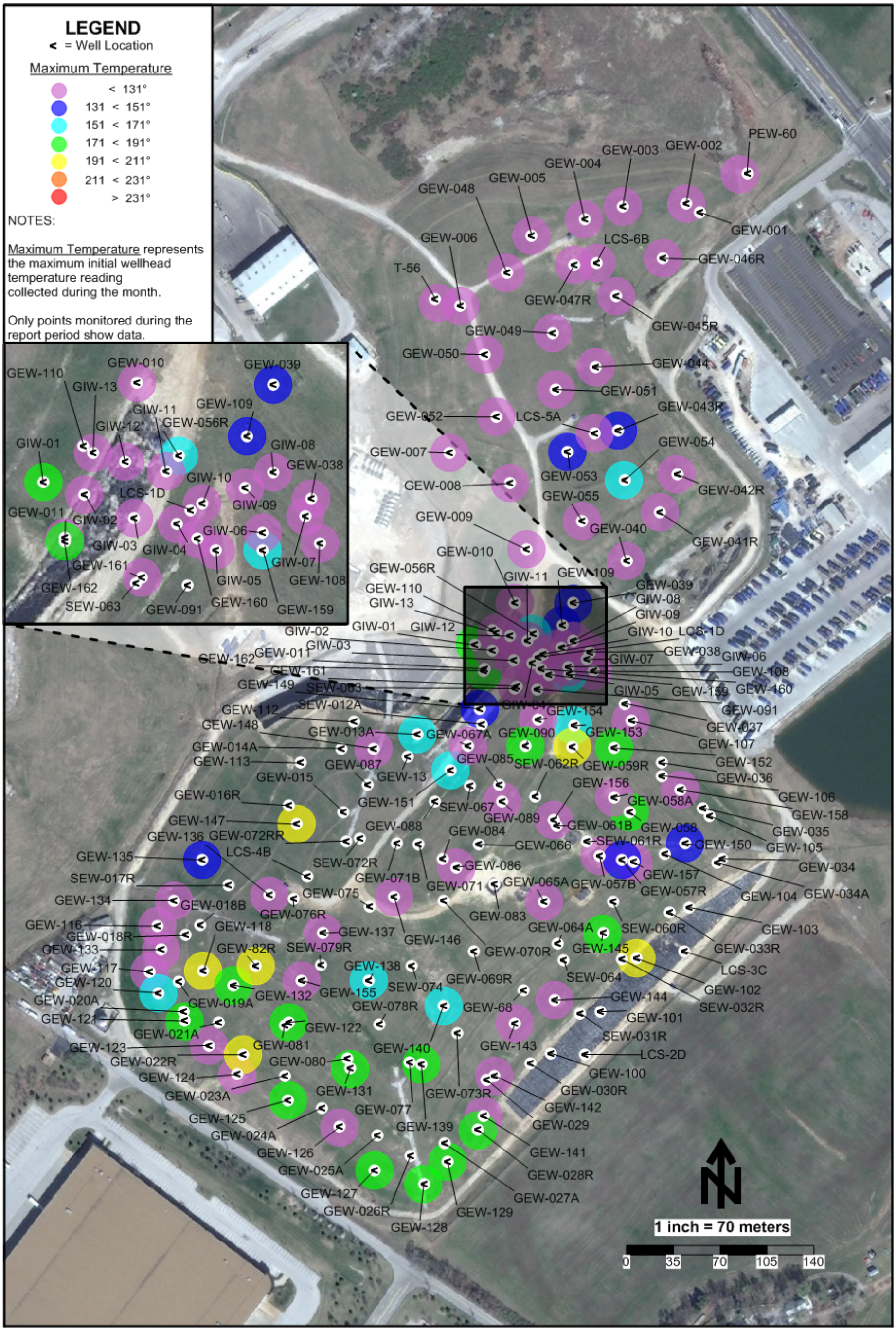
NOTES:

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

Only points monitored during the report period show data.



Carbon Monoxide Data Map - April 2016 - Bridgeton Landfill



Initial Temperature Maximums - April 2016 - Bridgeton Landfill

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	12/14/2015	41	32	3.2	23	ND	35	See Note 3
GEW-002	12/31/2015	53	40	ND	5.7	0.1	ND	Resample
GEW-002	1/14/2016	55	43	ND	ND	ND	ND	
GEW-002	2/15/2016	52	41	1.7	5.8	ND	ND	See Note 3
GEW-002	3/7/2016	56	42	ND	ND	0.04	ND	
GEW-002	4/14/2016	54	42	ND	3.6	ND	ND	
GEW-003	12/14/2015	42	37	ND	20	ND	ND	
GEW-003	1/14/2016	52	39	ND	6.7	0.1	ND	
GEW-003	2/15/2016	56	42	ND	ND	0.1	ND	
GEW-003	3/7/2016	54	40	ND	5	0.1	ND	
GEW-003	4/14/2016	45	37	1.9	16	0.09	ND	See Note 3
GEW-004	12/14/2015	45	37	ND	16	ND	ND	
GEW-004	1/14/2016	52	40	ND	6.7	0.1	ND	
GEW-004	2/15/2016	52	41	1.7	5.8	ND	ND	
GEW-004	3/7/2016	56	41	ND	ND	0.1	ND	
GEW-004	4/14/2016	51	39	ND	8.3	0.06	ND	
GEW-005	12/15/2015	41	34	ND	23	ND	ND	
GEW-005	1/14/2016	42	34	ND	24	ND	ND	
GEW-005	2/15/2016	54	38	ND	7.6	0.07	ND	
GEW-005	3/7/2016	53	38	ND	8	0.1	ND	
GEW-005	4/14/2016	50	37	ND	12	0.05	ND	
GEW-006	1/14/2016	52	37	ND	10	ND	ND	
GEW-006	3/7/2016	56	38	ND	5.4	ND	ND	
GEW-007	1/14/2016	57	41	ND	ND	ND	ND	
GEW-007	1/27/2016	56	39	ND	4	ND	ND	
GEW-007	3/7/2016	57	41	ND	ND	ND	ND	
GEW-008	12/15/2015	42	42	1.8	8.6	1.4	ND	See Note 3
GEW-008	1/27/2016	50	47	ND	ND	1.6	ND	
GEW-008	2/15/2016	50	47	ND	ND	0.7	ND	
GEW-008	3/7/2016	49	47	ND	ND	1.6	ND	
GEW-008	4/18/2016	49	46	ND	ND	ND	ND	
GEW-009	12/15/2015	39	40	ND	19	0.3	ND	
GEW-009	1/27/2016	51	41	ND	6.7	0.5	ND	
GEW-009	2/17/2016	54	43	ND	ND	0.7	ND	
GEW-009	3/7/2016	54	43	ND	ND	0.9	ND	
GEW-009	4/18/2016	50	42	ND	5.7	ND	ND	
GEW-040	12/14/2015	54	38	1.9	6.6	ND	ND	See Note 3
GEW-040	1/14/2016	57	41	ND	ND	ND	ND	
GEW-040	2/15/2016	55	38	1.4	5.2	ND	ND	See Note 3
GEW-040	3/7/2016	55	38	ND	5	ND	ND	
GEW-040	4/14/2016	57	40	ND	ND	ND	ND	
GEW-041R	1/14/2016	56	42	ND	ND	ND	ND	
GEW-041R	3/7/2016	57	41	ND	ND	ND	ND	
GEW-042R	12/14/2015	49	40	2.3	8.3	ND	ND	See Note 3
GEW-042R	1/14/2016	55	42	ND	ND	ND	ND	
GEW-042R	2/15/2016	56	41	ND	ND	0.04	ND	
GEW-042R	3/7/2016	56	42	ND	ND	ND	ND	
GEW-042R	4/14/2016	55	43	ND	ND	ND	ND	
GEW-043R	1/14/2016	55	43	ND	ND	0.2	ND	
GEW-043R	3/7/2016	55	43	ND	ND	0.05	ND	
GEW-044	1/14/2016	56	40	ND	ND	ND	ND	
GEW-044	3/7/2016	58	40	ND	ND	ND	ND	
GEW-045R	12/14/2015	57	38	ND	3.9	ND	ND	
GEW-045R	1/14/2016	56	43	ND	ND	ND	ND	
GEW-045R	2/15/2016	57	39	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	3/7/2016	58	40	ND	ND	ND	ND	
GEW-045R	4/14/2016	53	43	ND	3.3	ND	ND	
GEW-046R	12/14/2015	47	39	ND	13	ND	ND	
GEW-046R	1/14/2016	54	41	ND	4.7	0.1	ND	
GEW-046R	2/15/2016	55	40	ND	4.3	0.1	ND	
GEW-046R	3/7/2016	55	40	ND	4.4	0.1	ND	
GEW-046R	4/14/2016	50	39	ND	10	0.1	ND	
GEW-047R	12/14/2015	37	33	ND	29	ND	ND	
GEW-047R	1/14/2016	40	35	ND	24	0.05	ND	
GEW-047R	2/15/2016	50	38	ND	11	0.2	ND	
GEW-047R	3/7/2016	52	39	ND	8.1	0.1	ND	
GEW-047R	4/14/2016	54	42	ND	ND	0.07	ND	
GEW-048	12/15/2015	49	38	ND	12	ND	ND	
GEW-048	1/14/2016	52	39	ND	8.4	ND	ND	
GEW-048	2/15/2016	56	40	ND	3.8	0.03	ND	
GEW-048	3/7/2016	57	40	ND	ND	ND	ND	
GEW-048	4/14/2016	53	38	ND	8.5	ND	ND	
GEW-049	12/15/2015	46	37	ND	16	ND	ND	
GEW-049	1/27/2016	45	34	ND	20	0.1	ND	
GEW-049	2/15/2016	55	37	ND	6.3	0.1	ND	
GEW-049	3/7/2016	57	40	ND	ND	0.1	ND	
GEW-049	4/14/2016	55	38	ND	5.3	0.06	ND	
GEW-050	1/14/2016	53	39	ND	7.9	0.1	ND	
GEW-050	3/7/2016	56	39	ND	4.6	0.1	ND	
GEW-051	1/27/2016	55	41	ND	ND	1	ND	
GEW-051	3/7/2016	55	42	ND	ND	1.2	ND	
GEW-052	1/14/2016	45	36	ND	19	0.04	ND	
GEW-052	3/7/2016	53	38	ND	8.9	0.1	ND	
GEW-053	12/15/2015	49	41	ND	4.8	4.5	51	
GEW-053	1/27/2016	50	41	ND	3.9	4.7	49	
GEW-053	2/15/2016	50	41	ND	ND	5.8	57	
GEW-053	3/7/2016	49	41	ND	ND	5.7	65	
GEW-053	4/14/2016	49	42	ND	ND	6.1	81	
GEW-054	12/15/2015	50	42	ND	ND	5.1	39	
GEW-054	1/27/2016	53	42	ND	ND	4.0	ND	
GEW-054	2/15/2016	51	41	ND	3.4	4.3	ND	
GEW-054	3/7/2016	53	43	ND	ND	3.1	34	
GEW-054	4/14/2016	51	42	ND	ND	4.9	41	
GEW-055	12/15/2015	51	41	ND	5.8	1.8	ND	
GEW-055	1/27/2016	54	42	ND	ND	1.0	ND	
GEW-055	2/15/2016	54	43	ND	ND	1.4	ND	
GEW-055	3/7/2016	54	43	ND	ND	1.1	ND	
GEW-055	4/14/2016	52	41	ND	4.1	1.2	ND	

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.

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
South Quarry								
GEW-010	12/16/2015	54	40	ND	4.4	ND	35	
GEW-010	1/26/2016	53	43	ND	3.0	0.2	ND	
GEW-010	2/16/2016	50	41	1.6	6.5	0.2	31	See Note 4
GEW-010	3/3/2016	38	50	ND	9.2	1.7	130	
GEW-010	4/13/2016	41	53	ND	4.3	1.0	110	
GEW-022R	3/9/2016	0.7	65	ND	ND	30	4,300	
GEW-028R	1/26/2016	0.1	60	1.5	5.1	33	3,600	
GEW-028R	3/9/2016	0.1	61	ND	ND	34	4,300	
GEW-038	12/16/2015	0.2	33	10	36	20	2,100	See Note 4
GEW-038	1/26/2016	0.3	56	2.2	8	33	3,200	
GEW-038	2/16/2016	0.3	44	6.6	24	25	2,600	See Note 4
GEW-038	3/3/2016	0.3	44	7.4	27	21	2,500	
GEW-038	4/13/2016	0.4	35	9.6	35	19	2,200	See Note 4
GEW-039	12/16/2015	37	54	ND	4.5	3.3	150	
GEW-039	1/26/2016	42	56	ND	ND	0.7	52	
GEW-039	2/16/2016	42	55	ND	ND	0.9	75	
GEW-039	3/3/2016	39	56	ND	ND	2	160	
GEW-039	4/13/2016	37	59	ND	ND	2.8	230	
GEW-056R	12/16/2015	1.8	54	ND	5.8	37	2,000	
GEW-056R	1/26/2016	16	39	ND	31	13	700	
GEW-056R	2/16/2016	20	38	ND	30	10	620	
GEW-056R	3/3/2016	17	39	ND	32	11	610	
GEW-056R	4/13/2016	12	39	ND	35	13	750	
GEW-057R	1/14/2016	0.4	54	ND	ND	40	2,200	
GEW-058	1/14/2016	3.8	54	ND	5.5	35	2,100	
GEW-058A	1/14/2016	0.3	51	2	7.1	39	2,500	
GEW-058A	3/9/2016	0.5	43	4.9	18	33	2,100	
GEW-059R	1/14/2016	0.9	48	1.9	6.9	41	1,900	See Note 3
GEW-059R	3/9/2016	1.3	50	ND	4.4	42	2,000	
GEW-065A	1/14/2016	0.4	58	ND	ND	36	2,900	
GEW-082R	1/14/2016	0.8	56	ND	ND	40	2,000	
GEW-082R	3/9/2016	0.8	54	ND	ND	40	2,000	
GEW-090	1/26/2016	5	50	ND	ND	42	1,900	
GEW-090	3/9/2016	7.3	49	ND	ND	39	2,100	
GEW-102	1/14/2016	2.3	60	ND	ND	34	1,700	
GEW-102	3/9/2016	1.3	56	ND	3.4	36	1,400	
GEW-109	12/16/2015	3.6	42	5	24	25	1,500	See Note 3
GEW-109	1/26/2016	2.3	36	7.9	34	19	1,300	See Note 4
GEW-109	2/16/2016	3.4	63	ND	ND	32	2,300	
GEW-109	3/3/2016	11	46	2.9	21	19	1,100	
GEW-109	4/13/2016	10	52	ND	9.7	26	1,600	
GEW-110	12/16/2015	6	33	8.7	39	13	990	See Note 4
GEW-110	1/26/2016	4.2	23	11	51	11	630	See Note 4
GEW-110	2/16/2016	7	34	9	36	14	810	See Note 4
GEW-110	3/3/2016	2	36	8	32	21	1,200	
GEW-110	4/13/2016	9.7	35	5	38	11	870	See Note 4

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-120	1/14/2016	15	69	ND	ND	11	880	
GEW-120	3/2/2016	13	60	1.6	14	11	950	
GEW-121	1/14/2016	3.8	60	ND	ND	33	2,600	
GEW-121	3/2/2016	4.5	61	ND	ND	31	2,600	
GEW-122	1/14/2016	3.5	57	ND	ND	37	3,000	
GEW-122	3/2/2016	5.2	56	ND	3.1	34	2,900	
GEW-124	1/15/2016	`	62	ND	ND	27	1,900	
GEW-124	3/2/2016	7.2	63	ND	2.9	26	1,800	
GEW-126	1/14/2016	6.2	54	ND	ND	36	3,500	
GEW-126	3/2/2016	10	56	ND	ND	30	3,200	
GEW-127	1/14/2016	0.3	65	ND	ND	32	4,400	
GEW-127	3/2/2016	1.3	61	1.6	5.6	29	4,100	
GEW-128	1/14/2016	0.9	64	ND	ND	32	3,600	
GEW-128	3/2/2016	6.5	66	ND	ND	25	2,800	
GEW-129	1/14/2016	1.0	62	ND	ND	34	3,300	
GEW-129	3/2/2016	5.4	59	ND	ND	32	3,000	
GEW-131	1/26/2016	15	51	ND	ND	31	2,100	
GEW-131	3/2/2016	10	47	3.4	12	27	2,200	
GEW-132	1/14/2016	8.7	50	2.9	15	23	1,700	
GEW-132	3/2/2016	7.4	49	3.4	19	20	1,700	
GEW-134	1/14/2016	17	58	ND	13	11	750	
GEW-137	1/14/2016	13	36	ND	49	0.3	36	
GEW-137	3/4/2016	14	44	ND	39	1	ND	
GEW-138	1/15/2016	13	50	2.2	25	9.2	730	See Note 4
GEW-138	3/4/2016	14	65	ND	7.8	12	1,300	
GEW-139	1/14/2016	1.4	54	1.8	6.6	35	3,600	
GEW-139	3/4/2016	1	60	ND	ND	35	4,000	
GEW-140	1/15/2016	1.7	60	ND	ND	35	3,300	
GEW-140	3/4/2016	9.4	58	ND	3.7	28	2,000	
GEW-141	1/14/2016	1.1	60	ND	ND	33	3,300	
GEW-141	3/4/2016	1.3	62	ND	ND	32	3,900	
GEW-145	3/4/2016	4	56	ND	3.5	35	2,400	
GEW-147	1/15/2016	4.9	54	ND	3.5	36	2,000	
GEW-147	3/9/2016	10	49	ND	6.8	32	1,900	
GEW-149	3/9/2016	6.8	35	8.5	38	11	970	See Note 4
GEW-150	1/14/2016	4	63	1.9	6.6	23	1,700	See Note 3
GEW-150	3/9/2016	4	27	12	45	11	830	
GEW-152	3/9/2016	6.2	47	2.2	7.9	35	2,800	
GEW-153	3/9/2016	23	45	ND	12	18	810	
GEW-154	1/15/2016	21	33	ND	20	24	850	
GEW-154	3/9/2016	14	24	11	45	5.7	270	
GEW-155	3/9/2016	7.9	37	8.9	41	4.8	430	
GEW-159	3/9/2016	13	43	ND	35	7.8	660	
GIW-01	12/9/2015	2.5	68	ND	ND	26	2,500	
GIW-01	1/26/2016	0.5	16	17	60	6.6	580	See Note 4
GIW-01	2/16/2016	1.7	61	2.7	9.8	24	2,500	See Note 4
GIW-01	3/3/2016	2.3	70	ND	ND	23	2,500	
GIW-01	4/13/2016	2	68	ND	ND	26	2,800	
GIW-02	12/10/2015	5.7	33	9	44	8.5	610	See Note 4
GIW-02	1/26/2016	6.4	28	9.7	47	8.3	510	See Note 4
GIW-02	2/17/2016	8	40	7.8	33	10	620	See Note 4
GIW-02	3/3/2016	6.3	30	11	48	3.9	290	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GIW-02	4/13/2016	5.5	35	9.2	42	8.6	660	See Note 4
GIW-03	12/10/2015	0.1	24	13	47	14	1,300	See Note 4
GIW-03	1/26/2016	0.4	48	4.7	17	29	2,500	See Note 4
GIW-03	2/17/2016	0.3	36	9.3	33	21	2,100	See Note 4
GIW-03	3/3/2016	0.1	8.2	19	69	2.9	460	
GIW-03	4/13/2016	0.6	65	ND	ND	32	3,400	
GIW-04	12/10/2015	0.5	35	6.9	25	32	1,900	See Note 4
GIW-04	1/26/2016	0.5	50	1.8	6.3	41	2,300	See Note 4
GIW-04	2/17/2016	0.6	43	4.2	15	36	2,300	See Note 3
GIW-04	3/3/2016	0.4	42	3.5	12	41	1,700	
GIW-04	4/13/2016	0.2	13	17	60	10	690	See Note 4
GIW-05	12/9/2015	2.3	51	2.3	8.2	35	1,700	See Note 3
GIW-05	1/26/2016	1.7	56	1.7	5.9	34	1,400	See Note 4
GIW-05	2/16/2016	2.2	57	ND	4.7	34	1,700	
GIW-05	3/3/2016	2.8	56	1.5	5.4	33	1,500	
GIW-05	4/13/2016	4.9	56	ND	5.5	31	1,500	
GIW-06	12/10/2015	1	56	1.8	6.3	34	1,600	See Note 4
GIW-06	1/27/2016	1	59	ND	ND	36	1,500	
GIW-06	2/17/2016	1.1	59	ND	ND	36	1,500	
GIW-06	3/2/2016	1.1	61	ND	4.1	31	1,500	
GIW-06	4/13/2016	1.2	58	ND	4.8	34	1,300	
GIW-07	12/10/2015	26	58	ND	4.5	9.6	870	
GIW-07	1/27/2016	29	59	ND	3	8.6	660	
GIW-07	2/17/2016	15	68	ND	ND	15	1,500	
GIW-07	3/2/2016	19	42	6.9	25	7.2	710	
GIW-07	4/13/2016	9.3	42	8.1	30	11	1,300	See Note 4
GIW-08	12/9/2015	24	59	2	10	4.7	570	
GIW-08	12/10/2015	24	63	ND	4.9	6.7	860	See Note 2
GIW-08	1/27/2016	26	59	ND	13	2.2	320	
GIW-08	2/17/2016	25	62	ND	10	2.2	360	
GIW-08	3/2/2016	19	66	ND	12	1.7	290	
GIW-08	4/13/2016	17	51	ND	28	1.6	250	
GIW-09	12/10/2015	5	21	14	55	5.4	340	See Note 4
GIW-09	1/27/2016	11	31	9.3	40	8.9	590	See Note 4
GIW-09	2/17/2016	6.2	17	14	57	4.9	320	See Note 4
GIW-09	3/2/2016	2.4	17	15	60	5.4	400	
GIW-09	4/13/2016	1.4	9.9	17	68	2.7	270	See Note 4
GIW-10	12/10/2015	0.4	42	5.1	18	34	2,500	See Note 1
GIW-10	1/26/2016	0.3	31	7.7	28	32	2,100	See Note 4
GIW-10	2/17/2016	0.4	53	ND	ND	44	3,200	
GIW-10	3/3/2016	5.6	47	ND	15	31	1,700	
GIW-10	4/13/2016	6.8	49	ND	14	29	2,000	
GIW-11	12/9/2015	2.4	53	2.7	12	29	2,500	See Note 4
GIW-11	1/26/2016	4	46	4.1	19	27	1,900	See Note 4
GIW-11	2/16/2016	4.4	39	6	29	21	1,700	See Note 4
GIW-11	3/3/2016	5.7	40	5.2	34	15	1,600	
GIW-11	4/13/2016	4.7	49	4.3	23	18	2,100	See Note 4
GIW-12	12/9/2015	4.2	24	10	55	6.5	470	See Note 4
GIW-12	1/26/2016	4.2	20	11	61	4.9	320	See Note 4
GIW-12	2/16/2016	5.3	20	12	60	2.6	240	See Note 4
GIW-12	3/3/2016	8	25	8.5	54	4.3	340	
GIW-12	4/13/2016	8.5	31	6.4	46	6.9	570	See Note 4

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GIW-13	12/9/2015	10	58	ND	5.7	25	1,700	
GIW-13	1/26/2016	11	58	ND	6.8	22	1,500	
GIW-13	2/16/2016	13	58	ND	7.6	21	1,500	
GIW-13	3/3/2016	8.7	62	ND	7.6	21	1,700	
GIW-13	4/13/2016	9.9	62	ND	7.7	20	1,600	
Flare Station[2]	12/1/2015	10.6	36.2	8.1	33.6	10.5	1000	See Note 6
Flare Station[2]	1/5/2016	11.2	37.6	7.7	32.1	10.7	1,000	See Note 6
Flare Station[2]	2/2/2016	11.8	37.7	7.8	31.0	10.9	1,050	See Note 6
Flare Station[2]	3/2/2016	10.7	34.6	8.8	35.3	9.6	910	See Note 7
Flare Station[2]	4/12/2016	8.2	37	8.1	35.0	10.5	1,050	See Note 6
Flare Station[2]	5/3/2016	9.2	41.3	6.3	29.5	9.2	1,200	See Note 6

Notes: (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 FL-100, FL-120, and FL-140. (6) Flare station gas concentration data is an average of Outlets 1 & 2. (7) Flare station gas concentration based on data from Outlet B.

ND = Analyte not detected in sample.

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

ATTACHMENT D-2

LAB ANALYSIS REPORTS

Air TECHNOLOGY Laboratories, Inc.

April 22, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

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

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

Republic Services
ATTN: Nick Bauer
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: H041903-01/02

Enclosed are results for sample(s) received 4/19/16 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 Nick Bauer, Mike Lambrich, Ryan Ayer, Jim Getting and David Randall, Weaver Consultants Group, on 4/21/16.

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

H041903-01/02

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME				DELIVERABLES		PAGE: 1 OF 1
Standard	☐	48 hours	■	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	☐	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4862452
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST: D1946 + CO, H2
H041903-01	A7794	-19.6	-5	-5	GEW-8	4/18/2016	1050	C	LFG	NA	X
↓ -02	5269	-19.4	-5	-5	GEW-9	4/18/2016	1102	C	LFG	NA	X

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	DATE/TIME:	COMMENTS
SAMPLED BY: Ryan Ayers	COMPANY: Republic Services	DATE/TIME	
RELINQUISHED BY: Ryan Ayers	DATE: 4-18-16 1300	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FedEx	DATE: 4-19-16 11:40	RECEIVED BY	DATE/TIME: 4-19-16 11:40
RELINQUISHED BY	DATE	RECEIVED BY	DATE/TIME

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

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

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/19/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041903-01		H041903-02					
Client Sample I.D.:	GEW-8		GEW-9					
Date/Time Sampled:	4/18/16 10:50		4/18/16 11:02					
Date/Time Analyzed:	4/20/16 15:53		4/20/16 16:08					
QC Batch No.:	160420GC8A2		160420GC8A2					
Analyst Initials:.	AS		AS					
Dilution Factor:	3.2		3.2					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	ND	3.2	ND	3.2				
Carbon Dioxide	46	0.032	42	0.032				
Oxygen/Argon	ND	1.6	ND	1.6				
Nitrogen	ND	3.2	5.7	3.2				
Methane	49	0.0032	50	0.0032				
Carbon Monoxide	ND	0.0032	ND	0.0032				

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

Reviewed/Approved By: _____ Date 4/21/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 160420GC8A2
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/20/16 15:24		4/20/16 14:39		4/20/16 14:54			
Analyst Initials:	AS		AS		AS			
Datafile:	20apr029		20apr026		20apr027			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	110	70-130%	108	70-130%	2.1	<30
Carbon Dioxide	ND	0.010	97	70-130%	95	70-130%	2.1	<30
Oxygen/Argon	ND	0.50	95	70-130%	93	70-130%	2.0	<30
Nitrogen	ND	1.0	96	70-130%	94	70-130%	2.0	<30
Methane	ND	0.0010	98	70-130%	96	70-130%	1.9	<30
Carbon Monoxide	ND	0.0010	115	70-130%	115	70-130%	0.2	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ Date: 4/21/16
Mark J. Johnson
Operations Manager

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

AirTECHNOLOGY
Laboratories, Inc.

April 26, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

Republic Services
ATTN: Nick Bauer
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: H041804-01/33

Enclosed are results for sample(s) received 4/18/16 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 Nick Bauer, Mike Lambrich, Ryan Ayer, Jim Getting and David Randall, Weaver Consultants Group, on 4/25/16.

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

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

H041804-01 /33

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME				DELIVERABLES		PAGE: 1 OF 4
Standard	☐	48 hours	☐	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	■	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4862452
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

LAB USE ONLY	Canister Pressures ("hg)				SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST: D1946 + CO, H2					
	Canister ID	Sample Start	Sample End	Lab Receive												
H041804-01	6141	-20.2	-5	-5	GIW-1	4/13/2016	817	C	LFG	NA	X					
-02	A8083	-20.15	-5	-5	GIW-2	4/13/2016	830	C	LFG	NA	X					
-03	A7769	-19.95	-5	-5	GIW-3	4/13/2016	841	C	LFG	NA	X					
-04	5319	-20.2	-5	-5	GIW-4	4/13/2016	857	C	LFG	NA	X					
-05	A7781	-20.1	-5	-5	GIW-5	4/13/2016	908	C	LFG	NA	X					
-06	5318	-20	-5	-5	GIW-6	4/13/2016	956	C	LFG	NA	X					
-07	A7665	-19.9	-5	-5	GIW-7	4/13/2016	1008	C	LFG	NA	X					
-08	A8082	-20.1	-5	-5	GIW-8	4/13/2016	1020	C	LFG	NA	X					
-09	3441	-19.9	-5	-5	GEW-38	4/13/2016	1031	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer		COMPANY: Republic Services	DATE/TIME:	COMMENTS
SAMPLED BY: Ryan Ayers		COMPANY: Republic Services	DATE/TIME	
RELINQUISHED BY: Ryan Ayers FEDEX	4-15-16 1500	DATE/ RECEIVED BY	DATE/TIME	
RELINQUISHED BY		DATE/ RECEIVED BY: DGJ	DATE/TIME: 4/18/16 1123	
RELINQUISHED BY		DATE/ RECEIVED BY	DATE/TIME	

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

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

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

H041804-01/33

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME				DELIVERABLES		PAGE: 2 OF 4
Standard	☐	48 hours	☐	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	■	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4862452
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					
H041804-10	A8067	-20	-5	-5	GIW-9	4/13/2016	1042	C	LFG	NA	X					
-11	5322	-19.8	-5	-5	GEW-109	4/13/2016	1128	C	LFG	NA	X					
-12	A7804	-19.6	-5	-5	GEW-39	4/13/2016	1142	C	LFG	NA	X					
-13	5313	-19.3	-5	-5	GIW-10	4/13/2016	1338	C	LFG	NA	X					
-14	A7779	-19.6	-5	-5	GIW-11	4/13/2016	1350	C	LFG	NA	X					
-15	5310	-19.7	-5	-5	GEW-56R	4/13/2016	1403	C	LFG	NA	X					
-16	A8073	-19.3	-5	-5	GIW-13	4/13/2016	1416	C	LFG	NA	X					
-17	5921	-19.6	-5	-5	GIW-12	4/13/2016	1427	C	LFG	NA	X					
-18	A7808	-19.4	-5	-5	GEW-10	4/13/2016	1511	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer		COMPANY: Republic Services	DATE/TIME:
SAMPLED BY: Ryan Ayers		COMPANY: Republic Services	DATE/TIME
RELINQUISHED BY: Ryan Ayers	4-15-16 1500	DATE/ RECEIVED BY	DATE/TIME
RELINQUISHED BY: FedEx		DATE/ RECEIVED BY	DATE/TIME 4/18/16 1123
RELINQUISHED BY		DATE/ RECEIVED BY	DATE/TIME

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

COMMENTS

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

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

H041804-01/33

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME				DELIVERABLES		PAGE: 3 OF 4
Standard	☐	48 hours	☐	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	■	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4862452
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					
H041804 -19	A8088	-19.5	-5	-5	GEW-110	4/13/2016	1524	C	LFG	NA	X					
-20	5813	-20	-5	-5	GEW-40	4/14/2016	818	C	LFG	NA	X					
-21	6158	-19.65	-5	-5	GEW-42R	4/14/2016	851	C	LFG	NA	X					
-22	A8061	-19.4	-5	-5	GEW-45R	4/14/2016	1007	C	LFG	NA	X					
-23	4657	-19.7	-5	-5	GEW-46R	4/14/2016	1023	C	LFG	NA	X					
-24	3837	-19.5	-5	-5	GEW-2	4/14/2016	1034	C	LFG	NA	X					
-25	A8064	-19.5	-5	-6	GEW-3	4/14/2016	1048	C	LFG	NA	X					
-26	6144	-19.65	-5	-5	GEW-4	4/14/2016	1103	C	LFG	NA	X					
-27	4644	-19.5	-5	-5	GEW-47R	4/14/2016	1122	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer		COMPANY: Republic Services	DATE/TIME:
SAMPLED BY: Ryan Ayers		COMPANY: Republic Services	DATE/TIME
RELINQUISHED BY: Ryan Ayers	4-15-16 1500	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FED EX		RECEIVED BY: RJ	DATE/TIME: 4/18/16 1123
RELINQUISHED BY		RECEIVED BY	DATE/TIME

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

COMMENTS

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

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

H041804-01/33

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME				DELIVERABLES		PAGE: 4 OF 4
Standard	☐	48 hours	☐	EDD	☐	Condition upon receipt:
Same Day	☐	72 hours	☐	EDF	☐	Sealed Yes ☐ No ☐
24 hours	☐	96 hours	☐	Level 3	☐	Intact Yes ☐ No ☐
Other:		5 day	■	Level 4	☐	Chilled _____ deg C

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

BILLING

P.O. No.:	PO4862452
Bill to:	Republic Services
	Attn: Nick Bauer
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	Canister Pressures ("hg) Canister ID	Sample Start	Sample End	Lab Receive	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					
H041804 -28	A7773	-19.6	-5	-5	GEW-5	4/14/2016	1136	C	LFG	NA	X					
-29	3126	-19.5	-5	-6	GEW-48	4/14/2016	1325	C	LFG	NA	X					
-30	3440	-19.3	-5	-5	GEW-49	4/14/2016	1337	C	LFG	NA	X					
-31	A7646	-19.5	-5	-5	GEW-53	4/14/2016	1400	C	LFG	NA	X					
-32	A7803	-19.5	-5	-5	GEW-54	4/14/2016	1416	C	LFG	NA	X					
-33	4658	-19.3	-5	-5	GEW-55	4/14/2016	1430	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer	COMPANY: Republic Services	DATE/TIME:	**COMMENTS**
SAMPLED BY: Ryan Ayers	COMPANY: Republic Services	DATE/TIME	
RELINQUISHED BY: Ryan Ayers	DATE: 4-15-16 1500 RECEIVED BY	DATE/TIME	
RELINQUISHED BY: FEDEX	DATE: RECEIVED BY: [signature] 4/18/16	DATE/TIME 1123	
RELINQUISHED BY	DATE: RECEIVED BY	DATE/TIME	

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

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

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-01		H041804-02		H041804-03		H041804-04	
Client Sample I.D.:	GIW-1		GIW-2		GIW-3		GIW-4	
Date/Time Sampled:	4/13/16 8:17		4/13/16 8:30		4/13/16 8:41		4/13/16 8:57	
Date/Time Analyzed:	4/20/16 16:22		4/20/16 16:37		4/20/16 16:51		4/20/16 17:06	
QC Batch No.:	160420GC8A2		160420GC8A2		160420GC8A2		160420GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	26	3.2	8.6	3.2	32	3.2	10	3.2
Carbon Dioxide	68	0.032	35	0.032	65	0.032	13	0.032
Oxygen/Argon	ND	1.6	9.2	1.6	ND	1.6	17	1.6
Nitrogen	ND	3.2	42	3.2	ND	3.2	60	3.2
Methane	2.0	0.0032	5.5	0.0032	0.56	0.0032	0.15	0.0032
Carbon Monoxide	0.28	0.0032	0.066	0.0032	0.34	0.0032	0.069	0.0032

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

Reviewed/Approved By: _____ Date 4/25/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-05		H041804-06		H041804-07		H041804-08	
Client Sample I.D.:	GIW-5		GIW-6		GIW-7		GIW-8	
Date/Time Sampled:	4/13/16 9:08		4/13/16 9:56		4/13/16 10:08		4/13/16 10:20	
Date/Time Analyzed:	4/20/16 17:21		4/20/16 17:35		4/20/16 17:50		4/20/16 18:04	
QC Batch No.:	160420GC8A2		160420GC8A2		160420GC8A2		160420GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	31	3.2	34	3.2	11	3.2	1.6 d	0.032
Carbon Dioxide	56	0.032	58	0.032	42	0.032	51	0.032
Oxygen/Argon	ND	1.6	ND	1.6	8.1	1.6	ND	1.6
Nitrogen	5.5	3.2	4.8	3.2	30	3.2	28	3.2
Methane	4.9	0.0032	1.2	0.0032	9.3	0.0032	17	0.0032
Carbon Monoxide	0.15	0.0032	0.13	0.0032	0.13	0.0032	0.025	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution. QC Batch 160422GC8A1

Reviewed/Approved By: _____ Date 4/25/16
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-09		H041804-10		H041804-11		H041804-12	
Client Sample I.D.:	GEW-38		GIW-9		GEW-109		GEW-39	
Date/Time Sampled:	4/13/16 10:31		4/13/16 10:42		4/13/16 11:28		4/13/16 11:42	
Date/Time Analyzed:	4/20/16 18:19		4/20/16 18:34		4/20/16 18:48		4/20/16 19:03	
QC Batch No.:	160420GC8A2		160420GC8A2		160420GC8A2		160420GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	19	3.2	2.7 d	0.032	26	3.2	2.8 d	0.032
Carbon Dioxide	35	0.032	9.9	0.032	52	0.032	59	0.032
Oxygen/Argon	9.6	1.6	17	1.6	ND	1.6	ND	1.6
Nitrogen	35	3.2	68	3.2	9.7	3.2	ND	3.2
Methane	0.36	0.0032	1.4	0.0032	10	0.0032	37	0.0032
Carbon Monoxide	0.22	0.0032	0.027	0.0032	0.16	0.0032	0.023	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
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Reviewed/Approved By: _____ Date 4/25/16
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-13		H041804-14		H041804-15		H041804-16	
Client Sample I.D.:	GIW-10		GIW-11		GEW-56R		GIW-13	
Date/Time Sampled:	4/13/16 13:38		4/13/16 13:50		4/13/16 14:03		4/13/16 14:16	
Date/Time Analyzed:	4/20/16 19:17		4/20/16 19:32		4/20/16 19:47		4/20/16 20:01	
QC Batch No.:	160420GC8A2		160420GC8A2		160420GC8A2		160420GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	29	3.2	18	3.2	13	3.2	20	3.2
Carbon Dioxide	49	0.032	49	0.032	39	0.032	62	0.032
Oxygen/Argon	ND	1.6	4.3	1.6	ND	1.6	ND	1.6
Nitrogen	14	3.2	23	3.2	35	3.2	7.7	3.2
Methane	6.8	0.0032	4.7	0.0032	12	0.0032	9.9	0.0032
Carbon Monoxide	0.20	0.0032	0.21	0.0032	0.075	0.0032	0.16	0.0032

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

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Mark Johnson
Operations Manager

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Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-17		H041804-18		H041804-19		H041804-20	
Client Sample I.D.:	GIW-12		GEW-10		GEW-110		GEW-40	
Date/Time Sampled:	4/13/16 14:27		4/13/16 15:11		4/13/16 15:24		4/14/16 8:18	
Date/Time Analyzed:	4/21/16 8:21		4/21/16 10:52		4/21/16 11:07		4/21/16 11:22	
QC Batch No.:	160420GC8A2		160421GC8A1		160421GC8A1		160421GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	6.9	3.2	0.98 d	0.032	11	3.2	ND d	0.032
Carbon Dioxide	31	0.032	53	0.032	35	0.032	40	0.032
Oxygen/Argon	6.4	1.6	ND	1.6	5.0	1.6	ND	1.6
Nitrogen	46	3.2	4.3	3.2	38	3.2	ND	3.2
Methane	8.5	0.0032	41	0.0032	9.7	0.0032	57	0.0032
Carbon Monoxide	0.057	0.0032	0.011	0.0032	0.087	0.0032	ND	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution. QC Batch 160422GC8A1

Reviewed/Approved By: _____ Date 4/25/16
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-21		H041804-22		H041804-23		H041804-24	
Client Sample I.D.:	GEW-42R		GEW-45R		GEW-46R		GEW-2	
Date/Time Sampled:	4/14/16 8:51		4/14/16 10:07		4/14/16 10:23		4/14/16 10:34	
Date/Time Analyzed:	4/21/16 11:36		4/21/16 11:51		4/21/16 12:05		4/21/16 12:20	
QC Batch No.:	160421GC8A1		160421GC8A1		160421GC8A1		160421GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.032	ND d	0.032	0.096 d	0.032	ND d	0.032
Carbon Dioxide	43	0.032	43	0.032	39	0.032	42	0.032
Oxygen/Argon	ND	1.6	ND	1.6	ND	1.6	ND	1.6
Nitrogen	ND	3.2	3.3	3.2	10	3.2	3.6	3.2
Methane	55	0.0032	53	0.0032	50	0.0032	54	0.0032
Carbon Monoxide	ND	0.0032	ND	0.0032	ND	0.0032	ND	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution. QC Batch 160422GC8A1

Reviewed/Approved By: _____ Date 4/25/16
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-25		H041804-26		H041804-27		H041804-28	
Client Sample I.D.:	GEW-3		GEW-4		GEW-47R		GEW-5	
Date/Time Sampled:	4/14/16 10:48		4/14/16 11:03		4/14/16 11:22		4/14/16 11:36	
Date/Time Analyzed:	4/21/16 12:35		4/21/16 12:49		4/21/16 13:04		4/21/16 13:19	
QC Batch No.:	160421GC8A1		160421GC8A1		160421GC8A1		160421GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	0.094 d	0.034	0.056 d	0.032	0.074 d	0.032	0.051 d	0.032
Carbon Dioxide	37	0.034	39	0.032	42	0.032	37	0.032
Oxygen/Argon	1.9	1.7	ND	1.6	ND	1.6	ND	1.6
Nitrogen	16	3.4	8.3	3.2	ND	3.2	12	3.2
Methane	45	0.0034	51	0.0032	54	0.0032	50	0.0032
Carbon Monoxide	ND	0.0034	ND	0.0032	ND	0.0032	ND	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution. QC Batch 160422GC8A1

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Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-29		H041804-30		H041804-31		H041804-32	
Client Sample I.D.:	GEW-48		GEW-49		GEW-53		GEW-54	
Date/Time Sampled:	4/14/16 13:25		4/14/16 13:37		4/14/16 14:00		4/14/16 14:16	
Date/Time Analyzed:	4/21/16 13:49		4/21/16 14:03		4/21/16 14:18		4/21/16 14:32	
QC Batch No.:	160421GC8A1		160421GC8A1		160421GC8A1		160421GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.4		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	ND d	0.034	0.058 d	0.032	6.1	3.2	4.9	3.2
Carbon Dioxide	38	0.034	38	0.032	42	0.032	42	0.032
Oxygen/Argon	ND	1.7	ND	1.6	ND	1.6	ND	1.6
Nitrogen	8.5	3.4	5.3	3.2	ND	3.2	ND	3.2
Methane	53	0.0034	55	0.0032	49	0.0032	51	0.0032
Carbon Monoxide	ND	0.0034	ND	0.0032	0.0081	0.0032	0.0041	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution. QC Batch 160422GC8A1

Reviewed/Approved By: _____ Date 4/25/16
Mark Johnson
Operations Manager

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

Client: Republic Services
Attn: Nick Bauer
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 04/18/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H041804-33
Client Sample I.D.:	GEW-55
Date/Time Sampled:	4/14/16 14:30
Date/Time Analyzed:	4/21/16 14:47
QC Batch No.:	160421GC8A1
Analyst Initials:	AS
Dilution Factor:	3.2

ANALYTE	Result % v/v	RL % v/v
Hydrogen	1.2 d	0.032
Carbon Dioxide	41	0.032
Oxygen/Argon	ND	1.6
Nitrogen	4.1	3.2
Methane	52	0.0032
Carbon Monoxide	ND	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary dilution. QC Batch 160422GC8A1

Reviewed/Approved By: _____ Date 4/25/16
Mark Johnson
Operations Manager

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

QC Batch No.: 160420GC8A2
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/20/16 15:24		4/20/16 14:39		4/20/16 14:54			
Analyst Initials:	AS		AS		AS			
Datafile:	20apr029		20apr026		20apr027			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	110	70-130%	108	70-130%	2.1	<30
Carbon Dioxide	ND	0.010	97	70-130%	95	70-130%	2.1	<30
Oxygen/Argon	ND	0.50	95	70-130%	93	70-130%	2.0	<30
Nitrogen	ND	1.0	96	70-130%	94	70-130%	2.0	<30
Methane	ND	0.0010	98	70-130%	96	70-130%	1.9	<30
Carbon Monoxide	ND	0.0010	115	70-130%	115	70-130%	0.2	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ Date: 4/25/16
Mark J. Johnson
Operations Manager

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QC Batch No.: 160421GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	4/21/16 10:38		4/21/16 9:52		4/21/16 10:06			
Analyst Initials:	AS		AS		AS			
Datafile:	21apr006		21apr003		21apr004			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	106	70-130%	106	70-130%	0.1	<30
Carbon Dioxide	ND	0.010	97	70-130%	97	70-130%	0.3	<30
Oxygen/Argon	ND	0.50	96	70-130%	96	70-130%	0.3	<30
Nitrogen	ND	1.0	97	70-130%	97	70-130%	0.3	<30
Methane	ND	0.0010	105	70-130%	103	70-130%	1.9	<30
Carbon Monoxide	ND	0.0010	121	70-130%	121	70-130%	0.3	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ Date: 4/25/16

Mark J. Johnson
Operations Manager

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QC Batch # 160422GC8A1
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	4/22/2016 9:08		4/22/2016 8:58		4/22/2016 9:03			
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	97	70-130	98	70-130	1.0	<20

ND = Not Detected (Below RL)

RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 4/25/16

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Operations Manager

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ATTACHMENT E

GAS WELLFIELD DATA

ATTACHMENT E-1

WELLFIELD DATA TABLE

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GEW-002	4/6/2016 13:45	52.5	37.1	0	10.4	122.6		39.34	43.94	-1.73	-1.71	-10.78
GEW-002	4/14/2016 10:30	54.2	42.4	0	3.4	120.9		44.38	47.04	-0.85	-0.89	-11.74
GEW-002	4/14/2016 10:38	55.1	41.7	0	3.2	119.7		39.79	39.83	-0.39	-0.46	-11.74
GEW-002	4/22/2016 9:51	55	42.4	0.1	2.5	124.9		24.2	21.41	0.18	0.17	-9.91
GEW-002	4/22/2016 9:52	53.8	44	0.1	2.1	125.3		25.21	25.32	-0.06	-0.05	-10.15
GEW-002	4/27/2016 15:10	54.3	42.1	0.3	3.3	125.4		45.21	45.98	-1.76	-1.69	-10.15
GEW-002	4/28/2016 9:56	55.2	39.2	0	5.6	80.3		6.81	6.21	-0.27	-0.31	-10.53
GEW-003	4/6/2016 13:48	41	37.3	0	21.7	116		73.56	75.14	-5.84	-5.75	-8.47
GEW-003	4/6/2016 13:49	39.8	38.3	0	21.9	113.2		16.32	14.76	-3.62	-3.61	-10.78
GEW-003	4/14/2016 10:43	48.4	40.5	0	11.1	119.1		9.06	9.14	0.08	0.06	-11.31
GEW-003	4/14/2016 10:55	48	40.3	0	11.7	120.4		12.51	15.33	-0.03	-0.02	-11.07
GEW-003	4/22/2016 9:56	47.1	39.2	0.1	13.6	117.5		14.08	13.56	-0.82	-0.83	-9.97
GEW-003	4/22/2016 9:58	47.1	39.3	0.1	13.5	115.5		10.96	7.93	-0.74	-0.76	-9.6
GEW-003	4/27/2016 15:25	51.3	40	0.1	8.6	117.8		13.91	11.04	0.32	0.32	-9.97
GEW-003	4/27/2016 15:28	50.1	40.3	0.1	9.5	121.5		23.38	21.48	-0.14	-0.14	-9.24
GEW-004	4/6/2016 13:53	43.4	38.5	0	18.1	118.9		15.09	10.29	-1.93	-1.93	-11.07
GEW-004	4/6/2016 13:54	43.5	38.9	0	17.6	114.6		0	0	-1.69	-1.69	-11.41
GEW-004	4/14/2016 10:58	53.1	40.9	0	6	101.1		3.84	4.7	0.21	0.21	-11.68
GEW-004	4/14/2016 11:09	53.8	40.6	0	5.6	114.7		20.59	13.67	-0.08	-0.08	-10.95
GEW-004	4/22/2016 10:02	51.4	39.4	0.1	9.1	118.7		17.24	19.74	-0.88	-0.91	-9.48
GEW-004	4/22/2016 10:03	51.7	39.2	0.1	9	116		10.29	7.47	-0.73	-0.72	-9.79
GEW-004	4/27/2016 15:32	53.8	42.1	0	4.1	112.3		5.38	11.41	0.34	0.34	-10.15
GEW-004	4/27/2016 15:35	53.7	41	0	5.3	119.1		20.86	24.77	-0.07	-0.07	-9.42
GEW-005	4/6/2016 13:57	33.5	36.6	0	29.9	85.1		15.15	16.93	-0.54	-0.54	-10.99
GEW-005	4/6/2016 13:58	31	34.2	0	34.8	81.9		0	0	-0.5	-0.51	-11.16
GEW-005	4/14/2016 11:31	51.3	39.5	0	9.2	83.6		0	0	0.11	0.11	-10.95
GEW-005	4/14/2016 11:41	50.2	37.8	0	12	94.7		0	0	-0.02	-0.02	-10.64
GEW-005	4/22/2016 10:16	40.4	35.2	0.1	24.3	93.6		15.14	14.38	-0.6	-0.59	-9.97
GEW-005	4/22/2016 10:19	41.8	34.7	0.1	23.4	91.9		4.37	4.15	-0.43	-0.44	-10.21
GEW-005	4/27/2016 15:51	53.9	39.8	0	6.3	90.5		9.89	10.26	0.29	0.3	-9.6
GEW-005	4/27/2016 15:53	53.8	38.7	0	7.5	97.6		39.63	39.44	-0.06	-0.07	-9.72
GEW-006	4/6/2016 14:03	50.1	38.1	0	11.8	87.4		0	4.96	-0.37	-0.36	-11.74
GEW-006	4/14/2016 14:49	52.6	38.3	0	9.1	90.5		13.85	13.97	-0.02	-0.01	-9.79
GEW-006	4/22/2016 10:25	47.4	36.1	0.1	16.4	86.6		16.19	10.91	-0.71	-0.72	-10.34
GEW-006	4/22/2016 10:27	47	36.1	0.1	16.8	86.3		11.91	11.91	-0.65	-0.66	-10.52
GEW-006	4/27/2016 16:02	54.8	39.3	0	5.9	92.1		0	0	0.27	0.28	-8.81
GEW-006	4/27/2016 16:05	54.8	39	0	6.2	93.1		0	0	-0.04	-0.06	-8.38
GEW-007	4/8/2016 10:26	58.9	38.8	0	2.3	86.1		8.08	8.57	-1.29	-1.3	-10.95

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GEW-007	4/13/2016 15:49	59.2	40.7	0.1	0	93.8		5.04	4.65	0.09	0.09	-10.21
GEW-007	4/13/2016 15:58	60.4	39.6	0.1	0	94		5.32	7.12	-0.09	-0.09	-10.34
GEW-007	4/22/2016 11:12	57.6	41	0.2	1.2	93.8		10.47	9.74	-1.57	-1.57	-11.01
GEW-007	4/22/2016 11:16	57.9	40.5	0.2	1.4	92.9		9.76	7.11	-0.86	-0.86	-11.38
GEW-007	4/28/2016 10:33	58.2	38.9	0	2.9	89.5		27.96	28.23	-0.26	-0.26	-11.26
GEW-008	4/8/2016 10:28	56.3	38	0	5.7	111.5		14.58	17.63	-0.89	-0.87	-11.07
GEW-008	4/13/2016 15:36	54.5	45.4	0.1	0	111.6		33.11	33.54	-0.2	-0.2	-10.28
GEW-008	4/13/2016 15:43	54.1	45.5	0.1	0.3	111.9		17.98	15.39	-0.18	-0.17	-10.46
GEW-008	4/18/2016 10:46	54	42.4	0	3.6	112.2		21.92	19.83	-0.57	-0.55	-9.61
GEW-008	4/18/2016 10:54	51.4	45.8	0	2.8	112.5		16.85	18.29	-0.57	-0.57	-9.73
GEW-008	4/22/2016 11:19	50.9	45.1	0.2	3.8	111.9		15.6	12.53	-0.71	-0.73	-11.38
GEW-008	4/22/2016 11:21	50.1	46.3	0.2	3.4	111.7		13.1	12.53	-0.59	-0.59	-11.01
GEW-008	4/28/2016 10:37	51	43.7	0	5.3	110.3		28.12	29.26	-0.15	-0.15	-11.2
GEW-009	4/5/2016 11:20	55.5	36.2	0	8.3	124.9		17.85	17.84	-0.04	-0.03	-16.53
GEW-009	4/13/2016 14:54	56.7	42.2	0	1.1	122.8		14.53	13.52	-0.11	-0.1	-16.94
GEW-009	4/13/2016 15:01	56.2	40.6	0	3.2	122.8		0	0	-0.11	-0.12	-16.82
GEW-009	4/18/2016 10:58	50.9	43.2	0	5.9	121.5		6.56	12.27	-0.3	-0.31	-17.26
GEW-009	4/18/2016 11:05	52.3	42	0	5.7	121.8		30.05	28.71	-0.33	-0.31	-16.89
GEW-009	4/22/2016 11:24	50.6	43.7	0.2	5.5	120.4		9.9	11.56	-0.39	-0.38	-17.49
GEW-009	4/22/2016 11:26	50.9	43.6	0.2	5.3	119.5		10.61	0	-0.24	-0.26	-17.92
GEW-009	4/28/2016 10:40	52.9	43	0	4.1	123.4		26.21	24.52	-0.16	-0.16	-19.65
GEW-010	4/4/2016 8:56	40.6	51.1	0.3	8	74.3		3.33	2.43	-16.53	-16.23	-16.83
GEW-010	4/13/2016 15:06	45.7	49.9	0.2	4.2	97.9		3.79	4.37	-16.36	-16.3	-17.06
GEW-010	4/13/2016 15:13	46.1	50.4	0.2	3.3	98.3		1.94	1.46	-16.54	-16.54	-17.13
GEW-010	4/20/2016 11:22	39.4	51.2	0.7	8.7	87.7		4.93	5.83	-17.83	-17.83	-18.35
GEW-010	4/26/2016 10:25	44.5	51	0.7	3.8	103		3.9	0	-16.96	-16.96	-17.14
GEW-010	4/26/2016 10:30	44.2	48.5	0.9	6.4	103		3.09	3.09	-12.92	-12.61	-17.2
GEW-013A	4/19/2016 11:52	9.2	49.7	3.6	37.5	156.4				-2.77	-3.37	-6.43
GEW-013A	4/19/2016 11:55	9.1	50.2	3.5	37.2	160.1				-2.62	-2.07	-9.73
GEW-022R	4/26/2016 11:19	1.5	61.7	0.3	36.5	192.5				-17.39	-17.09	-17.87
GEW-022R	4/26/2016 11:21	1.5	62.2	0.3	36	192.5				-17.39	-17.39	-18.18
GEW-028R	4/18/2016 11:52	0.2	61.4	0.1	38.3	189.1				-15.62	-15.68	-15.61
GEW-028R	4/18/2016 11:55	0.2	62	0.1	37.7	189.1				-14.7	-14.64	-15.54
GEW-038	4/4/2016 8:40	0.5	49.7	4.2	45.6	67.7		9.62	14.41	-1.6	-1.58	-16.52
GEW-038	4/4/2016 16:21	0.1	21.8	15.2	62.9	80		6.22	2.41	-16.53	-16.66	-16.83
GEW-038	4/4/2016 16:23	0.1	19.9	15.8	64.2	79.3		3.56	4.02	-1.06	-1.05	-16.83
GEW-038	4/13/2016 10:27	0.3	40.4	9.6	49.7	74.6		10.1	10.7	-2.91	-2.99	-17.86
GEW-038	4/13/2016 10:36	0.3	51.5	5	43.2	76.9		11.92	4.71	-2.09	-2.06	-17.37
GEW-038	4/20/2016 11:03	0.4	52.6	4.6	42.4	69.7		8.92	7.09	-3.7	-3.62	-16.45
GEW-038	4/20/2016 11:05	0.4	53.3	4.2	42.1	70.4		5.03	3.93	-1.91	-1.93	-16.45
GEW-038	4/26/2016 10:47	1.7	52.4	3.3	42.6	102.2		4.79	1.13	-0.15	-0.26	-13.65
GEW-039	4/4/2016 8:44	40.9	55.5	0	3.6	131.4				-0.29	-0.32	-17.32

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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_2O		
GEW-039	4/4/2016 8:45	41.1	53.7	0	5.2	131.1				-0.31	-0.31	-17.32
GEW-039	4/13/2016 11:36	38.9	55.6	0	5.5	131.9				0.14	0.13	-7.09
GEW-039	4/13/2016 11:47	38.6	54.8	0.1	6.5	134.3				-0.07	-0.05	-7.22
GEW-039	4/20/2016 11:09	38.8	53.1	0.1	8	132.1				-0.56	-0.59	-18.1
GEW-039	4/20/2016 11:10	38.8	52.8	0.1	8.3	132.4				-0.54	-0.57	-17.55
GEW-039	4/26/2016 10:38	43.4	50.4	0.1	6.1	134.7				-0.43	-0.39	-12.12
GEW-040	4/5/2016 11:15	62.3	34.7	0	3	82.6		19.85	21.25	-0.12	-0.11	-9.98
GEW-040	4/5/2016 11:16	59.5	38.5	0	2	85.6		0	0	-0.26	-0.25	-9.98
GEW-040	4/14/2016 8:14	59.1	39.9	0	1	91.5		12.18	12	-1.5	-1.49	-11.44
GEW-040	4/14/2016 8:23	59.2	40.5	0	0.3	89.3		9.87	10.95	-0.63	-0.63	-11.44
GEW-040	4/22/2016 8:52	58.3	41.3	0.1	0.3	89		46.73	46.81	-0.47	-0.47	-10.03
GEW-040	4/27/2016 14:26	58.2	40.8	0	1	92.7		10.59	11.27	-0.18	-0.18	-10.58
GEW-041R	4/5/2016 11:31	52.3	39.7	0	8	102.3		13.44	10.33	-0.15	-0.16	-10.28
GEW-041R	4/14/2016 8:32	56.8	39.7	0	3.5	102.3		89.33	97.03	-1.91	-2.21	-10.58
GEW-041R	4/14/2016 8:41	57.1	39.9	0.1	2.9	101.5		35.35	35.25	-0.25	-0.25	-10.89
GEW-041R	4/22/2016 8:56	57.3	40.3	0.1	2.3	101.9		11.11	10.07	-0.11	-0.1	-10.09
GEW-041R	4/27/2016 14:31	56	42	0	2	104.3		11.18	11.13	0.25	0.26	-10.76
GEW-041R	4/27/2016 14:34	56.2	41.8	0	2	105.8		34.6	34.81	-0.09	-0.09	-10.95
GEW-042R	4/5/2016 13:23	54.6	39.5	0	5.9	108.7		8.57	14.29	-1.19	-1.24	-1.68
GEW-042R	4/14/2016 8:46	55.9	42.3	0	1.8	110.6		11.06	11.13	-1.77	-1.83	-3.3
GEW-042R	4/14/2016 8:55	56.1	42.6	0	1.3	107.7		10.08	0	-0.68	-0.65	-2.69
GEW-042R	4/22/2016 9:00	55.1	43.2	0	1.7	98.5		0	16.95	0.37	0.26	-0.73
GEW-042R	4/22/2016 9:02	54.8	43.3	0	1.9	102.6		12.64	14.53	-0.34	-0.32	-0.73
GEW-042R	4/27/2016 14:37	55.9	42.1	0	2	110.6		15.66	14.95	-0.93	-0.98	-2.26
GEW-042R	4/27/2016 14:39	56	41.6	0	2.4	110.4		12.02	18.23	-0.58	-0.64	-2.08
GEW-043R	4/5/2016 13:27	52	41.5	0	6.5	129.7		40.17	43.1	-1.63	-1.66	-9.69
GEW-043R	4/14/2016 9:00	54.8	41.5	0	3.7	126		36.31	37.45	-2.18	-2.14	-11.87
GEW-043R	4/14/2016 9:08	55.2	41.5	0.1	3.2	121		12.78	10.32	-0.44	-0.43	-11.56
GEW-043R	4/22/2016 9:06	55.3	42.8	0.1	1.8	129.9		29.26	29.6	-0.1	-0.15	-10.09
GEW-043R	4/27/2016 14:43	55.2	42.7	0	2.1	126.6		0	0	1.73	1.73	-10.64
GEW-043R	4/27/2016 14:51	54.9	43.1	0	2	137.6		30.77	29.86	-0.1	-0.1	-10.4
GEW-044	4/5/2016 13:30	40.5	37.9	0	21.6	75		0	0	-0.22	-0.23	-3.02
GEW-044	4/14/2016 9:13	51.6	38.3	0	10.1	79.6		8.28	7.56	-0.87	-0.87	-4.89
GEW-044	4/14/2016 9:21	52.1	38.1	0	9.8	80.2		7.58	7.73	-0.8	-0.79	-4.83
GEW-044	4/22/2016 9:11	54.6	39.2	0.1	6.1	78.4		6.66	5.39	-0.67	-0.66	-3.18
GEW-044	4/27/2016 14:54	56.2	41.2	0	2.6	88.3		0	0	0.43	0.43	-3.79
GEW-044	4/27/2016 14:57	56.1	40.9	0	3	90.4		0	0	-0.04	-0.03	-3.12
GEW-045R	4/5/2016 13:33	52.8	41.4	0	5.8	62.3		8.65	9.12	2.37	2.37	-9.73
GEW-045R	4/5/2016 13:34	53.1	41.9	0	5	69.6		10.76	11.85	1.19	1.19	-9.9
GEW-045R	4/14/2016 10:03	54	43.1	0.1	2.8	84		9.22	9.24	0.77	0.77	-11.74
GEW-045R	4/14/2016 10:11	54.8	42.8	0.1	2.3	86.6		9.91	9.85	-0.19	-0.19	-11.74
GEW-045R	4/22/2016 9:15	56.6	40	0.3	3.1	98.5		0	11.2	-9.71	-9.71	-10.03

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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_2O		
GEW-045R	4/22/2016 9:20	56	41.4	0.2	2.4	95		6.56	5.96	-0.94	-0.93	-10.03
GEW-045R	4/27/2016 15:01	53.9	43	0.2	2.9	92.2		10.61	10.61	0.65	0.66	-10.15
GEW-045R	4/27/2016 15:03	54.3	42.5	0.2	3	92.9		13.67	8.64	-0.11	-0.11	-10.15
GEW-046R	4/5/2016 13:37	46	40.3	0	13.7	91.9		31.06	30.39	-0.96	-0.96	-9.82
GEW-046R	4/5/2016 13:38	45.8	39.7	0	14.5	91.2		2.86	0	-0.83	-0.82	-10.03
GEW-046R	4/14/2016 10:20	49.9	40.5	0	9.6	97.3		21.6	21.77	-0.35	-0.35	-11.68
GEW-046R	4/14/2016 10:26	50.2	39.6	0	10.2	97.3		40.36	40.18	-0.3	-0.3	-11.25
GEW-046R	4/22/2016 9:24	50.5	39.9	0.1	9.5	97.3		39.49	38.73	-0.51	-0.52	-10.4
GEW-046R	4/27/2016 15:07	50	40.4	0	9.6	98		0	0	-0.09	-0.1	-10.21
GEW-047R	4/6/2016 14:15	45.6	37.7	0.1	16.6	100.4		26.4	27.01	-0.45	-0.44	-11.16
GEW-047R	4/6/2016 14:16	46	37.9	0.1	16	97.4		0	0	-0.34	-0.32	-11.2
GEW-047R	4/14/2016 11:16	54.2	42.5	0	3.3	94.6		0	0	0.21	0.21	-11.19
GEW-047R	4/14/2016 11:27	55.3	42.3	0	2.4	94.1		35.66	35.64	-0.02	-0.02	-11.07
GEW-047R	4/22/2016 10:12	41	36.4	0.4	22.2	112.8		12.23	13.08	-0.7	-0.72	-10.09
GEW-047R	4/22/2016 10:14	41.4	36.1	0.5	22	111.9		7.96	8.4	-0.63	-0.64	-10.03
GEW-047R	4/27/2016 15:45	49	40.1	0	10.9	114.5		0	0	0.25	0.24	-9.66
GEW-047R	4/27/2016 15:48	49	38.3	0	12.7	116.5		17.14	17.14	-0.03	-0.03	-9.17
GEW-048	4/6/2016 14:01	52.7	39	0	8.3	103		0	12.47	-0.61	-0.62	-10.7
GEW-048	4/14/2016 13:22	54.3	37.9	0	7.8	103.5		17.33	20.07	-0.18	-0.19	-9.97
GEW-048	4/14/2016 13:28	53.6	38.7	0	7.7	103.7		16.24	20.96	-0.14	-0.15	-10.15
GEW-048	4/22/2016 10:22	53.6	38.2	0.1	8.1	103.4		13.46	17.48	-0.79	-0.77	-9.42
GEW-048	4/22/2016 10:23	53.1	38.5	0.1	8.3	102.8		12.63	10.41	-0.68	-0.68	-10.28
GEW-048	4/27/2016 15:56	55.9	40.3	0	3.8	103.9		30.64	30.28	0.18	0.2	-8.13
GEW-048	4/27/2016 15:58	55.2	40.6	0	4.2	105.1		38.24	37.95	-0.06	-0.05	-2.87
GEW-049	4/6/2016 14:12	48.3	38	0	13.7	101.1		0	0	-0.25	-0.24	-3.78
GEW-049	4/6/2016 14:12	47.5	38.3	0	14.2	99		20.66	21.05	-0.24	-0.22	-3.69
GEW-049	4/14/2016 13:34	56.2	40.4	0	3.4	93.6		0	0	0.18	0.15	-1.96
GEW-049	4/14/2016 13:41	56.7	39.5	0	3.8	110.9		3.35	4.5	-0.03	-0.03	-3.24
GEW-049	4/22/2016 10:44	43.8	34.3	0.5	21.4	107.4		13.94	13.94	-0.79	-0.79	-4.22
GEW-049	4/22/2016 10:45	44.1	35.2	0.4	20.3	104.7		8.01	3.62	-0.57	-0.56	-4.04
GEW-049	4/28/2016 9:08	50.8	40.9	0	8.3	103.4		2.98	2.36	-0.4	-0.41	-3.73
GEW-050	4/6/2016 14:08	51.9	37.2	0	10.9	108.2		31.58	35.48	-0.97	-1.01	-7.76
GEW-050	4/14/2016 14:45	53.9	38.7	0	7.4	108.4		21.38	23.64	-0.41	-0.43	-4.89
GEW-050	4/22/2016 10:30	50.7	37.8	0.1	11.4	107.4		14.94	23.58	-1.02	-1.15	-3.18
GEW-050	4/22/2016 10:33	50.8	37.5	0.1	11.6	106.3		10.37	12.88	-0.7	-0.7	-7.28
GEW-050	4/28/2016 10:28	55.1	36.6	0	8.3	101.3		8.17	8.62	-0.51	-0.5	-4.96
GEW-051	4/8/2016 10:49	55	39.7	0	5.3	124.3		16.15	28.55	-1.65	-1.63	-10.03
GEW-051	4/14/2016 13:47	54.9	40.9	0	4.2	123.7		29.11	27.49	-0.48	-0.46	-9.54
GEW-051	4/14/2016 13:48	55.2	41.2	0	3.6	123		22.42	20.44	-0.22	-0.22	-10.03
GEW-051	4/22/2016 10:48	55.8	40.9	0.1	3.2	123.2		15.89	13.75	-0.92	-0.92	-10.4
GEW-051	4/22/2016 10:49	55.2	41.9	0.1	2.8	120.3		5.19	5.84	-0.56	-0.57	-11.01
GEW-051	4/28/2016 9:12	55.4	40.9	0	3.7	116		31.04	30.81	-0.19	-0.2	-10.4

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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_2O		
GEW-052	4/8/2016 10:22	51.4	33.5	0.1	15	111.5		0	0	-0.45	-0.49	-10.82
GEW-052	4/14/2016 14:41	52.1	38.5	0	9.4	113.5		0	0	-0.01	-0.01	-9.54
GEW-052	4/22/2016 10:38	48.4	36.1	0.1	15.4	111.6		39.91	38.16	-0.41	-0.4	-10.58
GEW-052	4/28/2016 10:30	51.6	36.7	0	11.7	112.3		30.19	30.19	-0.24	-0.24	-11.26
GEW-053	4/1/2016 10:07	51.6	42.2	0	6.2	137.1		10.32	11.45	-0.4	-0.44	-10.78
GEW-053	4/1/2016 10:07	51.5	42.1	0	6.4	137.1		4.05	11.09	-0.43	-0.44	-10.57
GEW-053	4/8/2016 10:59	50.2	41.5	0	8.3	135.9		9.05	10.7	-0.75	-0.74	-10.82
GEW-053	4/8/2016 10:59	50.4	41.6	0	8	135.6		0	0	-0.75	-0.75	-11.12
GEW-053	4/14/2016 13:55	49.2	43.4	0	7.4	137.3		10.5	10.6	0.48	0.47	-10.03
GEW-053	4/14/2016 14:02	49.7	42.9	0	7.4	142.2		19.07	19.07	-0.03	-0.03	-10.03
GEW-053	4/22/2016 10:52	52.8	42.2	0.1	4.9	139.8		22.49	23.09	-1.1	-1.09	-10.83
GEW-053	4/22/2016 10:54	52.3	42.4	0.1	5.2	138		10.13	9.98	-0.6	-0.6	-11.01
GEW-053	4/28/2016 9:24	50.8	42.7	0	6.5	135.7		0	13.76	-0.09	-0.09	-10.34
GEW-053	4/28/2016 9:25	50.6	42.4	0	7	135.3		11.24	10.59	-0.09	-0.09	-10.65
GEW-054	4/8/2016 10:54	53.5	40	0	6.5	148.8		31.49	34.92	-2.1	-2.12	-11.7
GEW-054	4/8/2016 10:56	51.1	42.1	0	6.8	147.7		0	0	-1.06	-1.07	-10.7
GEW-054	4/14/2016 14:11	51.5	42.7	0	5.8	144.4		18.3	18.49	-0.04	-0.03	-8.93
GEW-054	4/14/2016 14:18	51.5	42.5	0	6	144		20.09	17.35	-0.04	-0.04	-8.99
GEW-054	4/22/2016 10:59	52.6	40.2	0.2	7	150.5		9.01	15.89	-0.17	-0.19	-11.5
GEW-054	4/22/2016 11:01	50.1	43.6	0.2	6.1	150.9		16.64	21.66	-0.02	-0.03	-10.52
GEW-054	4/28/2016 9:30	50.1	42.1	0	7.8	153.7		0	0	0.65	0.65	-10.83
GEW-054	4/28/2016 9:34	50.2	41.7	0	8.1	154.9		17.13	17.43	-0.07	-0.08	-10.71
GEW-055	4/5/2016 11:28	52.6	38.7	0	8.7	124.6		22.91	22.37	-0.27	-0.27	-10.11
GEW-055	4/14/2016 14:24	53.5	43.3	0	3.2	124.8		0	0	0.13	0.13	-9.91
GEW-055	4/14/2016 14:35	53.7	43.4	0	2.9	128.1		39.1	39.01	-0.44	-0.43	-9.42
GEW-055	4/22/2016 11:05	53.9	43.2	0.2	2.7	124.6		12.09	14.95	-1.16	-1.18	-11.07
GEW-055	4/22/2016 11:08	54	43	0.2	2.8	119.9		18.43	17.64	-0.58	-0.59	-11.01
GEW-055	4/28/2016 9:41	53.3	41.9	0	4.8	118		7.31	4.62	0	0	-10.28
GEW-055	4/28/2016 9:43	53.1	42.4	0	4.5	118.3		0	2.69	-0.04	-0.04	-10.16
GEW-056R	4/4/2016 8:52	15.3	43.9	0.2	40.6	155.4				-3.95	-3.95	-10.95
GEW-056R	4/4/2016 8:53	14.7	39.2	0.1	46	155.8				-3.9	-3.93	-10.83
GEW-056R	4/13/2016 13:57	13.8	41.8	0	44.4	156.6				-3.64	-3.69	-11.56
GEW-056R	4/13/2016 14:06	13.9	38.8	0	47.3	156.6				-3.6	-3.64	-10.83
GEW-056R	4/20/2016 11:17	13.2	44.6	0.1	42.1	155.1				-3.95	-4	-14.01
GEW-056R	4/20/2016 11:19	13.3	44.1	0.1	42.5	155.4				-4.1	-4.13	-11.87
GEW-056R	4/26/2016 10:34	20.2	42.4	0.1	37.3	157				-3.72	-3.73	-10.65
GEW-056R	4/26/2016 10:34	20	43.2	0.1	36.7	157				-3.74	-3.74	-11.75
GEW-057B	4/18/2016 14:00	0.6	58.1	0.2	41.1	124.9				-9.19	-8.7	-9
GEW-057B	4/18/2016 14:02	0.6	59.1	0	40.3	127.8				-9.19	-9.12	-8.94
GEW-057R	4/18/2016 13:57	15.1	57.6	0.3	27	146.6				-9.12	-9.12	-9
GEW-058	4/18/2016 11:44	3.6	51.7	2.1	42.6	183.5				-3.06	-3.06	-16.65
GEW-058A	4/18/2016 14:08	0.2	41.5	7.2	51.1	88.8				-8.27	-7.59	-8.2

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GEW-058A	4/18/2016 14:11	0.3	36.8	7.7	55.2	89.9				-5.82	-5.88	-7.53
GEW-059R	4/25/2016 13:37	0.8	53.1	0.3	45.8	191.2				0.1	0.13	0.55
GEW-059R	4/25/2016 13:39	0.5	54.2	0.2	45.1	191.3				-0.73	-0.78	0.06
GEW-065A	4/18/2016 14:23	0.2	13	16.7	70.1	91.4				-7.9	-7.72	-7.47
GEW-065A	4/18/2016 14:26	0.2	12	17.5	70.3	92.9				-6.98	-6.92	-8.02
GEW-067A	4/19/2016 14:33	2.7	10.2	18.4	68.7	84.9				-16.78	-17.33	-16.71
GEW-067A	4/19/2016 14:46	2.8	55.1	0.4	41.7	83.4				-17.15	-17.33	-17.14
GEW-082R	4/18/2016 13:29	1.9	55.4	0	42.7	194.2				-12.12	-12.19	-11.87
GEW-082R	4/18/2016 13:34	1.5	55.3	0	43.2	194.2				-11.88	-11.88	-11.38
GEW-086	4/19/2016 14:51	12.5	50.9	0	36.6	81.7				-0.05	-0.04	-17.2
GEW-089	4/20/2016 10:50	2.9	10.8	18.2	68.1	72.4				-3.38	-3.36	-17.87
GEW-089	4/20/2016 10:54	2.8	12.3	18.1	66.8	70.7				-2.02	-2.04	-17.63
GEW-090	4/18/2016 15:04	8.9	54.9	0.1	36.1	185.2				-11.21	-11.21	-16.71
GEW-090	4/18/2016 15:06	8.4	54.1	0.1	37.4	184.1				-7.65	-7.53	-17.01
GEW-102	4/18/2016 15:22	3.5	62.6	0.1	33.8	193.7				-16.29	-16.35	-15.85
GEW-102	4/18/2016 15:25	3.6	65	0.1	31.3	193.7				-16.23	-16.6	-15.79
GEW-107	4/18/2016 15:12	2.3	31.9	10.3	55.5	92.1				-17.58	-17.64	-17.32
GEW-107	4/18/2016 15:15	3	35.4	9.1	52.5	90.9				-18.49	-18.49	-17.32
GEW-108	4/28/2016 8:14	0.4	7.5	20.8	71.3	76.1				-17.09	-17.09	-19.16
GEW-108	4/28/2016 8:16	0.4	3.9	21.4	74.3	76.9				-16.6	-16.96	-18.67
GEW-109	4/4/2016 8:48	18.7	44.1	0.1	37.1	89.9		2.84	3.92	-15.86	-15.86	-17.26
GEW-109	4/13/2016 11:24	11.7	53.5	0	34.8	87.4		3.17	4.57	-6.29	-6.29	-7.4
GEW-109	4/13/2016 11:31	9.7	52.5	0	37.8	87.4		1.24	1.97	-6.35	-6.35	-7.34
GEW-109	4/20/2016 11:13	13.8	51.2	0.1	34.9	101.9		5.1	2.43	-13.49	-13.49	-17.8
GEW-109	4/26/2016 10:41	14.6	49.4	0.3	35.7	149		5.55	4.05	-11.76	-11.64	-17.99
GEW-109	4/26/2016 10:43	14.9	50.8	0.3	34	139.7		5.02	6.54	-4.36	-4.32	-17.44
GEW-110	4/4/2016 9:00	6.9	33.5	8.4	51.2	74.8		3.24	3.84	-0.03	-0.04	-17.5
GEW-110	4/4/2016 9:01	6.5	33.2	8.5	51.8	74.7		3.24	3.24	-0.05	-0.03	-17.38
GEW-110	4/13/2016 15:18	11.5	36.3	5.2	47	99.1		4.95	4.1	-0.04	-0.04	-17.31
GEW-110	4/13/2016 15:26	11.1	35.1	5.3	48.5	98.9		3.78	4.4	-0.04	-0.04	-17.19
GEW-110	4/20/2016 11:27	11.4	55	0.3	33.3	83.6		4.02	3.07	-0.01	-0.01	-18.78
GEW-110	4/26/2016 10:17	15.3	52.4	0.1	32.2	113.5		0	0	0	0	0.49
GEW-110	4/26/2016 10:22	14.9	53.3	0.2	31.6	108.6		5.33	5.21	-0.01	-0.01	-17.56
GEW-116	4/20/2016 11:06	4.3	61.2	1.7	32.8	69.7		5.23	2.61	-10.17	-10.23	-16.71
GEW-116	4/20/2016 11:11	4.4	62.9	1.5	31.2	70.4		1.8	2.53	-7.47	-7.47	-16.71
GEW-117	4/20/2016 12:09	9.1	62.5	0.4	28	100.8				-16.17	-16.11	-15.24
GEW-117	4/20/2016 12:11	9.3	63.6	0	27.1	102.1				-16.17	-16.11	-18.18
GEW-118	4/28/2016 8:40	1.4	56.3	0.3	42	194.2				-15.68	-15.74	-16.65
GEW-118	4/28/2016 8:44	1.3	58.3	0.2	40.2	194.3				-15.68	-15.25	-16.22
GEW-120	4/5/2016 9:17	16.8	53.5	1.5	28.2	165.5				-15.49	-15.43	-15.61
GEW-120	4/5/2016 9:18	16.3	54.8	1.8	27.1	165.5				-16.17	-15.86	-16.34
GEW-121	4/5/2016 9:22	6.8	52.3	0.4	40.5	175.7		20.7	22.79	-14.21	-14.27	-14.99

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GEW-121	4/5/2016 9:22	7.6	55.9	0.2	36.3	175.7		26.45	25.71	-14.51	-14.57	-15.79
GEW-122	4/5/2016 10:40	10.2	51.1	0.2	38.5	188.5				-13.96	-13.78	-14.08
GEW-122	4/5/2016 10:40	10	52.5	0.1	37.4	188.5				-14.33	-14.7	-14.69
GEW-123	4/5/2016 9:25	6.5	41.8	1	50.7	114.2		4.52	8.24	-15.19	-15.43	-15.12
GEW-124	4/5/2016 15:06	0.2	16.8	19.4	63.6	67		6.37	11.69	-14.27	-14.21	-14.26
GEW-124	4/5/2016 15:07	0.1	5.2	20.4	74.3	67.8		2.59	10.11	-14.64	-14.7	-14.63
GEW-125	4/5/2016 15:01	1.6	52.6	0.3	45.5	190.1		15.79	20.94	-13.72	-13.17	-14.57
GEW-125	4/5/2016 15:02	0.3	44.3	0.5	54.9	189.9		12.24	7.84	-13.72	-13.66	-14.2
GEW-126	4/5/2016 13:31	20.6	52.2	0.1	27.1	95.6		13.18	8.39	-14.33	-14.64	-14.38
GEW-127	4/5/2016 13:25	2.1	59.6	0.4	37.9	177.7		18.66	14.27	-14.21	-13.72	-14.69
GEW-127	4/5/2016 13:26	1.1	60.5	0.2	38.2	178.2		16.9	9.36	-13.72	-14.08	-13.89
GEW-128	4/5/2016 15:54	7.1	56.4	0.2	36.3	174.6				-14.76	-14.76	-14.81
GEW-128	4/5/2016 15:54	6.9	57.6	0.1	35.4	174.6				-14.7	-14.64	-14.69
GEW-129	4/5/2016 15:49	3.6	58.7	0.3	37.4	176.2				-14.7	-14.7	-14.81
GEW-129	4/5/2016 15:50	3.2	58.8	0.1	37.9	175.7				-14.7	-14.39	-14.69
GEW-130	4/11/2016 14:52	3.8	51	5.3	39.9	182.7		15.33	14.75	-6.29	-5.8	-15.47
GEW-131	4/5/2016 15:13	26	47.9	0.3	25.8	175.2				-9.74	-9.74	-9.79
GEW-131	4/5/2016 15:14	25	48.8	0.2	26	175.2				-10.29	-10.29	-10.28
GEW-132	4/5/2016 16:01	7.3	35.7	6.4	50.6	172.7				-5.76	-5.82	-13.83
GEW-132	4/5/2016 16:03	7.6	35.4	6.4	50.6	172.7				-5.82	-5.82	-14.69
GEW-133	4/5/2016 11:19	1.4	37.7	7.7	53.2	60.2		5.64	1.66	-14.7	-14.64	-14.69
GEW-133	4/5/2016 11:20	0.8	39.9	7.9	51.4	60.5		3.53	2.04	-14.33	-14.39	-14.69
GEW-134	4/5/2016 11:14	7.5	28.6	11.7	52.2	117.8				-14.02	-14.21	-14.57
GEW-134	4/5/2016 11:15	7.5	29.8	11.6	51.1	118.3				-14.27	-14.21	-14.69
GEW-135	4/5/2016 11:10	4.4	30.6	10.3	54.7	144.4				-10.59	-14.21	-11.02
GEW-135	4/5/2016 11:11	4.2	28.7	10.4	56.7	144.1				-10.78	-10.78	-11.2
GEW-136	4/5/2016 17:13	2	38.1	10.1	49.8	112.3				-10.72	-8.82	-10.1
GEW-136	4/5/2016 17:14	4	30.1	10	55.9	112.3				-10.29	-11.64	-10.77
GEW-137	4/5/2016 10:48	15.3	43.8	0.2	40.7	89.6				-11.45	-8.45	-10.65
GEW-138	4/5/2016 10:44	9.2	45.8	2.3	42.7	148.6				-1.64	-1.87	-6.61
GEW-138	4/5/2016 10:44	9.1	46.3	2.2	42.4	148.9				-1.73	-1.82	-8.02
GEW-138	4/5/2016 11:52	9.6	42.1	2.8	45.5	151.7				-6.43	-6.86	-6.73
GEW-139	4/5/2016 15:18	1.4	51.8	1.4	45.4	190.2				-1.62	-1.59	-14.38
GEW-139	4/5/2016 15:19	1.7	54	2.8	41.5	189.1				-8.39	-8.33	-13.46
GEW-140	4/5/2016 15:22	7.7	39.6	6.9	45.8	161.4				-14.76	-14.88	-14.69
GEW-140	4/5/2016 15:24	7.9	40.8	6.8	44.5	161.3				-15.19	-14.94	-15.06
GEW-141	4/5/2016 15:45	1.5	60.7	0.1	37.7	69.7		6.83	5.65	-15.19	-15.19	-15.24
GEW-142	4/5/2016 15:40	0.2	21.1	17.4	61.3	66.6		7.7	8.04	-15.19	-15.19	-15.3
GEW-142	4/5/2016 15:40	0.2	13.1	18.2	68.5	67.1		9.19	7.51	-15.68	-15.37	-15.48
GEW-143	4/5/2016 15:35	0.6	51.3	2.5	45.6	64.8		4.8	6.05	-15.62	-15.31	-15.42
GEW-144	4/5/2016 15:29	4.9	54.2	0.5	40.4	63.6		4.06	3.95	-15.62	-15.62	-15.61
GEW-144	4/5/2016 15:31	4.4	57.2	0.5	37.9	64		6.99	11.3	-15.62	-15.55	-15.61

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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_2O		
GEW-145	4/5/2016 16:19	3.2	56.8	0.1	39.9	172.2				-15.74	-15.68	-15.67
GEW-145	4/5/2016 16:21	2.5	55.5	0.1	41.9	173.1				-15.74	-15.68	-15.61
GEW-146	4/5/2016 16:14	7.2	27.8	7.8	57.2	79.7				-11.21	-11.21	-11.87
GEW-146	4/5/2016 16:15	7.3	25.8	7.8	59.1	79.9				-10.9	-10.84	-12
GEW-147	4/5/2016 16:08	11.9	49.9	0.3	37.9	191.4				-14.7	-14.7	-14.69
GEW-147	4/5/2016 16:09	10.2	53.2	0.2	36.4	191.6				-15.19	-15.19	-15.18
GEW-148	4/5/2016 9:48	0.1	5.3	21.8	72.8	54.2		9.02	18.83	-9.8	-9.74	-15.18
GEW-148	4/5/2016 9:49	0.1	1.8	22.2	75.9	55.5		13.17	4.98	-8.02	-7.84	-15.24
GEW-149	4/5/2016 9:53	9.3	34	8.7	48	131.5		17.52	19.44	-0.52	-0.52	-16.89
GEW-149	4/5/2016 9:54	9	36.5	8.3	46.2	130.7		14.32	18.09	-0.53	-0.57	-16.4
GEW-150	4/5/2016 16:35	7.1	36	8.6	48.3	149.3				-8.88	-9.25	-14.63
GEW-150	4/5/2016 16:36	6.7	37.7	8.4	47.2	150.1				-8.82	-8.88	-14.69
GEW-151	4/5/2016 9:42	7.3	39.7	6.4	46.6	165.9		28.42	18.1	-2.8	-2.19	-17.81
GEW-151	4/5/2016 9:43	7	41.9	6.3	44.8	165.9		26.02	24.25	-2.53	-2.61	-16.34
GEW-152	4/5/2016 16:44	10.9	49.4	0.3	39.4	175.7		11.15	10.86	-15.8	-15.68	-16.89
GEW-152	4/5/2016 16:47	9.4	52.1	0.1	38.4	175.7		4.5	13.07	-16.29	-16.53	-16.77
GEW-153	4/5/2016 16:50	20.3	41.6	0.2	37.9	151.3		26.61	20.97	-14.51	-14.27	-17.14
GEW-153	4/5/2016 16:53	20.5	42.3	0.3	36.9	151.4		20.98	17.45	-14.64	-14.21	-17.26
GEW-154	4/5/2016 10:08	6.1	21.6	14.2	58.1	129.9		26.07	19.87	-13.23	-13.17	-16.16
GEW-154	4/5/2016 10:09	6.4	18.4	14.4	60.8	130.2		27.69	26.5	-13.23	-13.17	-16.34
GEW-155	4/5/2016 10:36	6.9	34.5	6.7	51.9	112.5				-4.2	-4.6	-5.08
GEW-155	4/5/2016 10:37	7	35.1	6.7	51.2	112.5				-4.32	-4.39	-5.26
GEW-156	4/5/2016 16:27	9.3	7.8	13.4	69.5	88.9				-16.6	-16.35	-16.65
GEW-156	4/5/2016 16:28	8.1	16.3	12.7	62.9	88.8				-16.29	-16.6	-16.65
GEW-157	4/5/2016 16:32	2.4	15.6	16.5	65.5	64.6		2.67	5.59	-5.88	-5.94	-5.88
GEW-157	4/5/2016 16:33	0.2	14.6	16.7	68.5	66		3.14	6.29	-6.49	-6.37	-6.36
GEW-158	4/5/2016 16:40	1.8	29.2	14.8	54.2	64.6		7.43	5.32	-16.66	-16.47	-16.65
GEW-158	4/5/2016 16:40	0.4	16.3	16.4	66.9	65.7		8.75	4.01	-16.6	-16.6	-16.71
GEW-159	4/5/2016 16:56	14.2	38.7	0.2	46.9	154.1		15.02	16.41	-16.17	-16.11	-16.16
GEW-159	4/5/2016 16:57	13.6	39.6	0.1	46.7	154.1		13.41	17.02	-15.68	-16.17	-15.85
GEW-160	4/5/2016 10:13	9.9	56.7	1	32.4	60		9.65	9.25	-15.98	-15.74	-15.97
GEW-161	4/5/2016 10:15	0.9	32.4	8.3	58.4	58.5		6.53	3.11	-17.09	-16.9	-17.14
GEW-161	4/5/2016 10:16	0.9	35.6	8.3	55.2	59		2.03	8.3	-16.66	-16.66	-17.14
GEW-162	4/5/2016 17:04	5	55.1	2.3	37.6	178.2		17.73	16.09	-16.47	-15.68	-16.65
GEW-162	4/5/2016 17:05	5.6	55.3	2.2	36.9	178.2		27.07	13.61	-16.66	-16.17	-16.71
GIW-01	4/1/2016 10:59	7	53.5	2.9	36.6	113.3		27.48	25.05	-16.91	-16.58	-17.11
GIW-01	4/4/2016 9:04	2.4	58	1.3	38.3	110.3		0	12.88	-15.74	-16.17	-16.03
GIW-01	4/13/2016 8:09	2.7	61.6	0.4	35.3	181.4		18.95	31.17	-17.95	-17.95	-17.86
GIW-01	4/13/2016 8:20	2	65.1	0	32.9	178.9		15.01	10.61	-17.46	-17.46	-17.49
GIW-01	4/20/2016 9:07	2.3	67	0.2	30.5	180.3		0	0	-18.38	-18.25	-18.84
GIW-01	4/20/2016 9:08	2.3	66.5	0.2	31	181.8		16.79	16.79	-18.38	-18.38	-18.47
GIW-01	4/26/2016 8:05	2.7	63	0	34.3	183.5		0	0	-17.88	-17.88	-17.63

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GIW-01	4/26/2016 8:06	2.4	65.6	0	32	183.5		0	35.06	-17.82	-17.88	-17.69
GIW-02	4/1/2016 11:01	4.6	47	10	38.4	60.7		0	0	-0.43	-0.43	-16.95
GIW-02	4/1/2016 11:02	7.3	38.1	10.5	44.1	61.4		5.73	0	-0.48	-0.45	-17.2
GIW-02	4/4/2016 9:08	4.3	31.7	11.9	52.1	67.9		5.02	5.69	-0.5	-0.5	-15.42
GIW-02	4/4/2016 9:09	4.4	31.1	12	52.5	67.7		2.53	3.88	-0.54	-0.55	-17.63
GIW-02	4/13/2016 8:26	5.9	37.5	9.6	47	59.5		4.21	5.95	-0.45	-0.45	-17.86
GIW-02	4/13/2016 8:34	6	35.8	9.8	48.4	60.5		4.2	5.55	-0.45	-0.45	-17.61
GIW-02	4/20/2016 9:13	10.4	51.9	3	34.7	63.6		2.09	4.51	-0.57	-0.57	-18.65
GIW-02	4/26/2016 8:12	13.5	55.3	0.5	30.7	82.8		4.33	4.24	-0.52	-0.5	-17.69
GIW-02	4/26/2016 8:17	13.7	55.3	0.4	30.6	84		2.23	2.14	-0.18	-0.17	-17.87
GIW-03	4/1/2016 11:04	1.7	54	3.3	41	60		21.8	9.92	-0.48	-0.42	-16.74
GIW-03	4/4/2016 9:13	0.5	46.9	7.6	45	67.2		7.94	5.84	-0.17	-0.36	-16.1
GIW-03	4/4/2016 9:14	0.5	46.9	8.1	44.5	67.2		8.55	10.32	-0.53	-0.37	-15.85
GIW-03	4/13/2016 8:37	0.6	65	0	34.4	60.3		3.65	2.72	1.36	1.38	-17.25
GIW-03	4/13/2016 8:45	0.5	63.7	0	35.8	61.4		2.65	2.82	-0.64	-0.68	-17.31
GIW-03	4/20/2016 9:17	0.4	49.5	5.6	44.5	62.7		2.09	2.41	-0.75	-0.82	-15.47
GIW-03	4/20/2016 9:19	0.5	56.8	3.5	39.2	63.5		3.62	0	-0.35	-0.32	-16.45
GIW-03	4/26/2016 8:20	0.8	58.5	1.4	39.3	85.8		2.33	2.25	-0.18	-0.12	-14.93
GIW-03	4/26/2016 8:23	0.6	60.4	1.2	37.8	86		2.85	1.16	-0.06	-0.04	-15.42
GIW-04	4/1/2016 11:08	0.1	10.2	17.4	72.3	61.8		2.61	3.09	-16.04	-15.8	-17.01
GIW-04	4/1/2016 11:09	0.1	10.2	17.4	72.3	61.6		4.82	2.34	-16.11	-16.11	-16.71
GIW-04	4/4/2016 9:20	0.2	14.2	17.4	68.2	73.2		1.43	3.33	-15.25	-15.31	-16.77
GIW-04	4/4/2016 9:21	0.2	13.3	17.5	69	73.5		2.7	6	-15.19	-15.25	-16.22
GIW-04	4/13/2016 8:53	0.2	19.3	16.8	63.7	66.2		2	3.26	-16.3	-16.48	-17.19
GIW-04	4/13/2016 8:59	0.1	11.7	18.5	69.7	68		1.14	1.62	-17.46	-17.46	-17.74
GIW-04	4/20/2016 9:22	0.2	29.8	13	57	65.9		4.47	4.32	-15.87	-15.87	-16.64
GIW-04	4/20/2016 9:26	0.2	24.2	13.9	61.7	66.7		2.83	2.83	-15.45	-15.45	-16.09
GIW-04	4/26/2016 8:26	0	0	20.8	79.2	86		2.51	2.25	-13.96	-14.02	-15.61

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GIW-04	4/26/2016 8:29	0.3	26.2	14.2	59.3	88.4		2.5	3.7	-14.45	-14.45	-15.18
GIW-05	4/1/2016 11:11	9.3	52	1.7	37	57.2		0	12.44	-8.7	-8.76	-15.36
GIW-05	4/4/2016 9:28	2.2	11.3	6	80.5	66		13.83	13.84	-11.82	-11.76	-14.93
GIW-05	4/4/2016 9:29	10	51.4	2.3	36.3	68.3		8.46	8.01	-10.78	-10.78	-15.36
GIW-05	4/13/2016 9:04	5.9	57.2	1.3	35.6	61.1		10.31	9.14	-8.73	-8.61	-17.49
GIW-05	4/13/2016 9:11	5.7	57.4	1	35.9	62.2		4.77	7.37	-8.24	-8.24	-17.61
GIW-05	4/20/2016 9:30	3	52.8	1.9	42.3	64.1		12.65	11.71	-7.08	-7.14	-15.29
GIW-05	4/26/2016 8:35	6.4	55.1	1.8	36.7	86.6		4.71	3.85	-6.49	-6.49	-13.65
GIW-05	4/26/2016 8:44	6.3	55.5	1.5	36.7	86.9		3.89	0	-2.31	-2.3	-13.28
GIW-06	4/1/2016 11:14	2	55.1	0.2	42.7	58.5		127.04	128.21	-3.11	-3.13	-17.07
GIW-06	4/4/2016 9:32	2.4	50.1	2.1	45.4	67.7				-9.31	-9.31	-15.97
GIW-06	4/13/2016 9:53	1.4	57.6	1.4	39.6	65.4				-18.01	-17.58	-18.04
GIW-06	4/13/2016 9:59	1.4	60	1.2	37.4	66.7				-17.46	-17.58	-17.25
GIW-06	4/20/2016 9:34	1.4	59.6	1.1	37.9	65.6				-16.48	-15.93	-16.51
GIW-06	4/26/2016 8:51	1.5	56	1.7	40.8	87				-15.43	-16.35	-15.24
GIW-06	4/26/2016 8:57	1.7	57.6	0.7	40	88				-15.37	-15.31	-15.24
GIW-07	4/1/2016 11:17	9.2	51.6	6.1	33.1	58.8		2.98	2.43	-2.27	-2.26	-16.59
GIW-07	4/1/2016 11:17	10.6	49.6	6.1	33.7	59.7		3.84	2.1	-2.38	-2.37	-15.91
GIW-07	4/4/2016 9:35	11.2	46.2	7.6	35	69.5		0.8	1.48	-2.77	-2.78	-15.73
GIW-07	4/4/2016 9:36	11.1	46.1	7.2	35.6	70		1.9	2.54	-2.76	-2.76	-15.85
GIW-07	4/13/2016 10:03	9.2	36.7	10.5	43.6	67.9		1.98	1.98	-3.67	-3.67	-17.74
GIW-07	4/13/2016 10:10	9.2	34.1	10.8	45.9	69.7		1.59	2.3	-3.62	-3.61	-17.68
GIW-07	4/20/2016 9:38	13.5	50.7	4.9	30.9	64.6		4.3	4.14	-3.38	-3.37	-16.33
GIW-07	4/26/2016 9:01	11.2	52.2	5.1	31.5	89.2		1.99	2.57	-2.41	-2.4	-16.65
GIW-07	4/26/2016 9:08	11.5	53.7	5.1	29.7	90.1		2.57	2.82	-1.29	-1.28	-15.24
GIW-08	4/2/2016 12:16	23.4	42	0.6	34	61.6				-11.15	-11.21	-16.4
GIW-08	4/4/2016 16:26	18.6	51.3	0.1	30	75.9		3.92	4.13	-12.31	-12.37	-16.95
GIW-08	4/13/2016 10:15	18.6	50.4	0	31	68.3		4.63	4.34	-12.15	-12.15	-17.61
GIW-08	4/13/2016 10:22	18.7	49	0	32.3	68		6.27	5.59	-12.15	-12.15	-17.19
GIW-08	4/20/2016 9:41	19.1	66.1	0.3	14.5	66.2		5.22	4.67	-11.05	-11.05	-16.02
GIW-08	4/26/2016 9:11	20.4	65.2	0.2	14.2	92.2				-9.98	-10.04	-14.75
GIW-08	4/26/2016 9:17	20.3	66.7	0.2	12.8	92.9				-3.47	-3.46	-16.4
GIW-09	4/1/2016 11:20	4.7	36.5	12	46.8	62.7				-1.66	-1.67	-16.95
GIW-09	4/1/2016 11:22	2.6	19.8	14.3	63.3	63.7				-1.69	-1.66	-17.01
GIW-09	4/4/2016 9:39	1.1	27.5	16.9	54.5	71.8				-1.68	-1.7	-16.1
GIW-09	4/4/2016 9:40	0.2	12.3	19.1	68.4	72.2				-1.69	-1.72	-16.4
GIW-09	4/13/2016 10:39	1.5	12.3	18.1	68.1	70.5				-1.85	-1.86	-18.1
GIW-09	4/13/2016 10:45	1.4	8.9	18.6	71.1	70				-1.87	-1.85	-17.61
GIW-09	4/20/2016 9:44	4.4	40.1	8	47.5	67.8				-2.02	-2.02	-16.57
GIW-09	4/20/2016 9:46	4.4	39.2	8.1	48.3	67.5				-1.28	-1.27	-16.02
GIW-09	4/26/2016 9:19	9.2	58.6	0.5	31.7	95.4				-1.19	-1.2	-15.12
GIW-10	4/1/2016 10:46	7.6	49.1	0	43.3	58.2		23.01	23.01	-16.58	-16.58	-17.11

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GIW-10	4/4/2016 9:43	7.5	49.4	0.2	42.9	70.7		9.88	12.73	-14.82	-15.74	-15.73
GIW-10	4/13/2016 13:34	8.3	50.3	0	41.4	77.1		6.31	5.3	-16.12	-16	-17.49
GIW-10	4/13/2016 13:41	7.9	48.3	0	43.8	78.1		2.31	6.2	-16	-16	-16.64
GIW-10	4/20/2016 9:53	7	52.4	0.1	40.5	67.9		3.26	10.17	-15.38	-15.38	-16.09
GIW-10	4/26/2016 9:23	8	51.1	0.1	40.8	89.5		5.46	4.73	-14.33	-14.39	-15.06
GIW-10	4/26/2016 9:27	7.5	49.5	0.1	42.9	90.3		2.54	1.13	-6.74	-6.8	-15.12
GIW-11	4/1/2016 10:49	6.1	50.5	3.9	39.5	59.4				-2.05	-2.06	-17.49
GIW-11	4/4/2016 9:46	5.9	46.1	4.8	43.2	72.8				-2.15	-2.15	-17.32
GIW-11	4/13/2016 13:46	6.2	49.6	4.1	40.1	76.1				-2.02	-2.01	-17.06
GIW-11	4/13/2016 13:53	5.3	48.4	4.2	42.1	76.4				-1.99	-2	-17.25
GIW-11	4/20/2016 9:57	5.7	48.3	3.9	42.1	68.5				-2.26	-2.23	-18.41
GIW-11	4/26/2016 10:02	7.3	48.3	1.7	42.7	95.4				-1.76	-1.75	-17.63
GIW-11	4/26/2016 10:03	7.3	50.8	1.6	40.3	96				-1.76	-1.76	-17.2
GIW-12	4/1/2016 10:51	5.3	44	8.7	42	60.5				-1.07	-1.09	-17.58
GIW-12	4/1/2016 10:51	5.7	32.6	9.2	52.5	60.5				-1.07	-1.06	-17.45
GIW-12	4/4/2016 9:50	3.3	24.7	11.6	60.4	69.4				-1.14	-1.13	-17.69
GIW-12	4/4/2016 9:51	3.5	24	11.9	60.6	69.8				-0.74	-0.74	-17.32
GIW-12	4/13/2016 14:23	10.5	33.1	5.9	50.5	76.6				-0.61	-0.62	-16.57
GIW-12	4/20/2016 10:01	3.9	31.2	8.5	56.4	68.7				-0.67	-0.67	-18.59
GIW-12	4/20/2016 10:03	3.9	30.6	8.5	57	68				-0.19	-0.18	-18.72
GIW-12	4/26/2016 10:06	0.2	1.1	21.9	76.8	91.7				-0.1	-0.1	-16.71
GIW-12	4/26/2016 10:07	0.2	0.9	21.5	77.4	91.9				-0.11	-0.11	-16.71
GIW-13	4/1/2016 10:56	12.8	41	0.3	45.9	57.3				-15.39	-15.22	-15.44
GIW-13	4/4/2016 9:55	11.6	58.8	0.1	29.5	68.5				-13.72	-13.72	-13.95
GIW-13	4/13/2016 14:11	12.9	59.6	0	27.5	80.4				-14.53	-14.71	-14.68
GIW-13	4/13/2016 14:20	12.2	58.6	0.1	29.1	81.1				-14.16	-14.16	-14.62
GIW-13	4/13/2016 14:30	10.2	31.8	6.1	51.9	75.9				-0.61	-0.62	-16.7
GIW-13	4/20/2016 10:07	11.5	60.4	0.2	27.9	68.3				-16.48	-16.79	-16.51
GIW-13	4/26/2016 10:10	14.4	58.5	0.2	26.9	98.7				-15.55	-17.09	-15.24
GIW-13	4/26/2016 10:14	13.6	60.2	0.2	26	99.4				-8.63	-8.63	-15.18
LCS-5A	4/8/2016 10:52	58.9	39.1	0	2	88.9				-10.95	-10.95	-10.28
LCS-5A	4/14/2016 14:06	57.4	41.2	0	1.4	94.4				-8.85	-8.67	-8.69
LCS-5A	4/22/2016 10:56	56.7	42.4	0.2	0.7	95.9				-11.17	-10.26	-10.95
LCS-5A	4/28/2016 9:17	59	39.3	0	1.7	94.4				-8.82	-9.12	-9.79
LCS-6B	4/6/2016 14:19	51.6	39.5	0.6	8.3	71.4		5.71	6.38	-1.62	-1.62	-11.07
LCS-6B	4/14/2016 11:13	54.4	42.6	0.2	2.8	82.1		9.15	9.55	-0.41	-0.41	-11.19
LCS-6B	4/22/2016 10:07	51.5	41.4	1	6.1	81.3		10.24	9.86	-1.09	-1.08	-10.03
LCS-6B	4/22/2016 10:09	52.1	41.1	0.9	5.9	80.2		9.49	9.49	-0.28	-0.27	-10.03
LCS-6B	4/27/2016 15:39	54	43.9	0.1	2	87.8		8.64	8.62	0.81	0.82	-9.66
LCS-6B	4/27/2016 15:42	54.3	43.7	0.1	1.9	88.6		9.1	9.89	-0.09	-0.09	-9.66

April 2016 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
PGW-60	4/5/2016 14:13	59.5	35	0.1	5.4	69.1		20.53	32.89	-6.55	-6.55	-7.34
PGW-60	4/15/2016 10:06	57.7	39.6	0.2	2.5	71.8		27.11	17.96	-7.26	-7.2	-7.95
PGW-60	4/15/2016 10:08	57.2	40.3	0.2	2.3	72.4		17.59	15.54	-5.8	-5.74	-7.95
PGW-60	4/22/2016 9:41	60.4	37.4	0.3	1.9	77.5		0	0	-8.79	-8.79	-9.97
PGW-60	4/28/2016 10:09	59.8	38.4	0	1.8	73.4		9.22	8.86	-7.35	-6.49	-9.79
SEW-002	4/15/2016 11:24	0.1	1.4	21.1	77.4	85.2		3.83	4.69	-6.72	-6.53	-15.35
T-56	4/6/2016 14:06	50.7	38	0	11.3	56		21.06	16.21	-0.05	-0.11	-11.24
T-56	4/14/2016 14:51	48.1	35.4	0.1	16.4	60.8		18.68	17.81	-0.08	-0.04	-10.09

ATTACHMENT E-2

MAXIMUM WELLHEAD TEMPERATURE TABLE

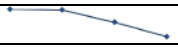
Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	Janaury 2016	February 2016	March 2016	April 2016		
GEW-001	--	--	--	--		
GEW-002	124.9	120.2	124.2	125.4		
GEW-003	113.3	110.9	115.2	121.5		
GEW-004	117.8	112.5	116.5	119.1		
GEW-005	95.6	96.2	94.0	97.6		
GEW-006	89.9	90.1	91.1	93.1		
GEW-007	96.4	94.0	92.1	94.0		
GEW-008	112.5	112.9	113.2	112.5		
GEW-009	122.3	121.5	126.4	124.9		
GEW-010	63.3	69.2	94.6	103.0		
GEW-011	--	--	--	--		
GEW-013A	--	186.8	152.2	160.1		
GEW-014A	--	--	--	--		
GEW-015	--	--	--	--		
GEW-016R	--	--	--	--		
GEW-018B	--	--	--	--		
GEW-018R	--	--	--	--		
GEW-019A	--	--	--	--		
GEW-020A	--	--	--	--		
GEW-021A	--	--	--	--		
GEW-022R	192.8	194.8	193.1	192.5		
GEW-023A	--	--	--	--		
GEW-024A	--	--	--	--		
GEW-025A	--	--	--	--		
GEW-026R	--	--	--	--		
GEW-027A	--	--	--	--		
GEW-028R	178.2	193.7	192.1	189.1		
GEW-029	--	--	--	--		
GEW-030R	--	--	--	--		
GEW-033R	--	--	--	--		
GEW-034	--	--	--	--		
GEW-034A	--	--	--	--		
GEW-035	--	--	--	--		
GEW-036	--	--	--	--		
GEW-037	--	--	--	--		
GEW-038	50.9	56.1	79.5	102.2		
GEW-039	134.1	132.7	133.4	134.7		
GEW-040	86.9	85.5	87.3	92.7		
GEW-041R	103.2	103.2	109.0	105.8		
GEW-042R	111.6	112.7	110.0	110.6		
GEW-043R	130.8	133.3	134.3	137.6		
GEW-044	73.1	81.3	85.3	90.4		
GEW-045R	83.2	82.9	84.7	98.5		

Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	Janaury 2016	February 2016	March 2016	April 2016		
GEW-046R	93.2	95.0	99.6	98.0		
GEW-047R	110.4	124.3	115.2	116.5		
GEW-048	103.6	102.2	106.0	105.1		
GEW-049	109.9	109.9	116.4	110.9		
GEW-050	106.3	106.4	108.5	108.4		
GEW-051	125.1	124.1	128.9	124.3		
GEW-052	112.6	115.0	117.4	113.5		
GEW-053	138.0	138.7	140.0	142.2		
GEW-054	154.9	147.1	147.7	154.9		
GEW-055	122.8	121.8	125.8	128.1		
GEW-056R	165.5	175.2	158.8	157.0		
GEW-057B	100.8	98.7	113.0	127.8		
GEW-057R	162.3	143.2	148.9	146.6		
GEW-058	184.6	177.7	177.2	183.5		
GEW-058A	167.8	170.7	154.5	89.9		
GEW-059R	186.3	187.4	189.1	191.3		
GEW-061B	--	--	--	--		
GEW-064A	--	--	--	--		
GEW-065A	180.8	99.4	96.1	92.9		
GEW-066	70.2	--	--	--		
GEW-067A	165.0	122.3	125.0	84.9		
GEW-068A	--	--	--	--		
GEW-069R	--	--	--	--		
GEW-070R	--	--	--	--		
GEW-071	--	--	--	--		
GEW-071B	--	--	--	--		
GEW-072RR	--	--	--	--		
GEW-073R	--	--	--	--		
GEW-075	--	--	--	--		
GEW-076R	--	--	--	--		
GEW-077	65.9	--	--	--		
GEW-078R	--	--	--	--		
GEW-080	51.5	--	--	--		
GEW-081	--	--	--	--		
GEW-082R	196.6	197.9	196.5	194.2		
GEW-083	--	--	--	--		
GEW-084	--	--	--	--		
GEW-085	--	--	--	--		
GEW-086	87.0	84.7	84.1	81.7		
GEW-087	--	--	--	--		
GEW-088	--	--	--	--		
GEW-089	86.1	94.6	74.8	72.4		
GEW-090	185.2	185.2	183.5	185.2		

Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	Janaury 2016	February 2016	March 2016	April 2016		
GEW-091	--	--	--	--		
GEW-100	--	--	--	--		
GEW-101	--	--	--	--		
GEW-102	144.0	189.1	184.1	193.7		
GEW-103	--	--	--	--		
GEW-104	--	--	--	--		
GEW-105	--	--	--	--		
GEW-106	--	--	--	--		
GEW-107	--	55.6	69.5	92.1		
GEW-108	--	--	--	76.9		
GEW-109	61.1	113.1	117.0	139.7		
GEW-110	98.0	71.3	101.1	113.5		
GEW-112	--	--	--	--		
GEW-113	--	--	--	--		
GEW-116	35.5	51.2	71.0	70.4		
GEW-117	57.4	83.3	105.0	102.1		
GEW-118	--	--	--	194.3		
GEW-120	173.1	184.1	175.2	165.5		
GEW-121	186.3	187.9	189.6	175.7		
GEW-122	190.8	190.8	181.9	188.5		
GEW-123	170.8	193.1	190.8	114.2		
GEW-124	157.6	119.0	129.3	67.8		
GEW-125	190.2	193.1	52.3	190.1		
GEW-126	189.1	191.3	190.8	95.6		
GEW-127	184.6	186.8	189.8	178.2		
GEW-128	181.9	182.4	179.9	174.6		
GEW-129	165.4	159.6	167.9	176.2		
GEW-130	--	--	--	182.7		
GEW-131	177.2	179.8	173.1	175.2		
GEW-132	171.7	173.6	169.2	172.7		
GEW-133	64.7	56.5	51.8	60.5		
GEW-134	163.2	155.6	118.6	118.3		
GEW-135	155.4	147.0	172.7	144.4		
GEW-136	112.8	110.9	109.9	112.3		
GEW-137	121.5	91.9	104.7	89.6		
GEW-138	152.9	147.4	145.1	151.7		
GEW-139	183.0	180.3	187.9	190.2		
GEW-140	160.5	191.3	174.1	161.4		
GEW-141	157.9	155.0	116.0	69.7		
GEW-142	88.2	92.9	38.8	67.1		
GEW-143	94.2	113.7	54.9	64.8		
GEW-144	70.7	64.9	92.7	64.0		
GEW-145	86.0	150.9	179.8	173.1		

Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	Janaury 2016	February 2016	March 2016	April 2016		
GEW-146	70.0	69.5	78.0	79.9		
GEW-147	191.9	178.2	169.7	191.6		
GEW-148	45.2	64.9	66.4	55.5		
GEW-149	123.7	171.2	116.3	131.5		
GEW-150	184.6	188.5	152.5	150.1		
GEW-151	47.3	57.9	135.7	165.9		
GEW-152	--	71.9	168.1	175.7		
GEW-153	--	52.4	160.1	151.4		
GEW-154	51.5	113.8	147.5	130.2		
GEW-155	111.6	113.3	117.0	112.5		
GEW-156	102.0	93.6	95.4	88.9		
GEW-157	62.1	37.9	191.3	66.0		
GEW-158	55.8	54.1	71.2	65.7		
GEW-159	64.2	27.5	161.4	154.1		
GEW-160	66.7	162.8	72.4	60.0		
GEW-161	--	37.9	73.2	59.0		
GEW-162	63.3	56.1	78.0	178.2		
GIW-01	183.0	186.3	186.8	183.5		
GIW-02	75.5	73.8	73.7	84.0		
GIW-03	75.2	64.1	75.5	86.0		
GIW-04	72.3	62.0	77.5	88.4		
GIW-05	55.8	62.4	83.0	86.9		
GIW-06	73.6	57.3	81.0	88.0		
GIW-07	73.4	55.5	78.0	90.1		
GIW-08	81.0	57.9	77.9	92.9		
GIW-09	81.3	65.4	79.0	72.2		
GIW-10	72.5	60.5	81.9	90.3		
GIW-11	61.0	76.5	86.9	96.0		
GIW-12	65.6	79.4	87.1	91.9		
GIW-13	57.0	66.1	78.4	99.4		
LCS-1D	--	--	--	--		
LCS-2D	--	--	--	--		
LCS-3C	--	--	--	--		
LCS-4B	--	--	--	--		
LCS-5A	91.2	93.3	93.6	95.9		
LCS-6B	60.1	125.1	93.9	88.6		
PGW-60	49.6	65.7	76.4	77.5		
SEW-002	36.4	64.6	69.8	85.2		
SEW-012A	--	--	--	--		
SEW-017R	--	--	--	--		
SEW-031R	--	--	--	--		
SEW-032R	--	--	--	--		
SEW-060R	--	--	--	--		

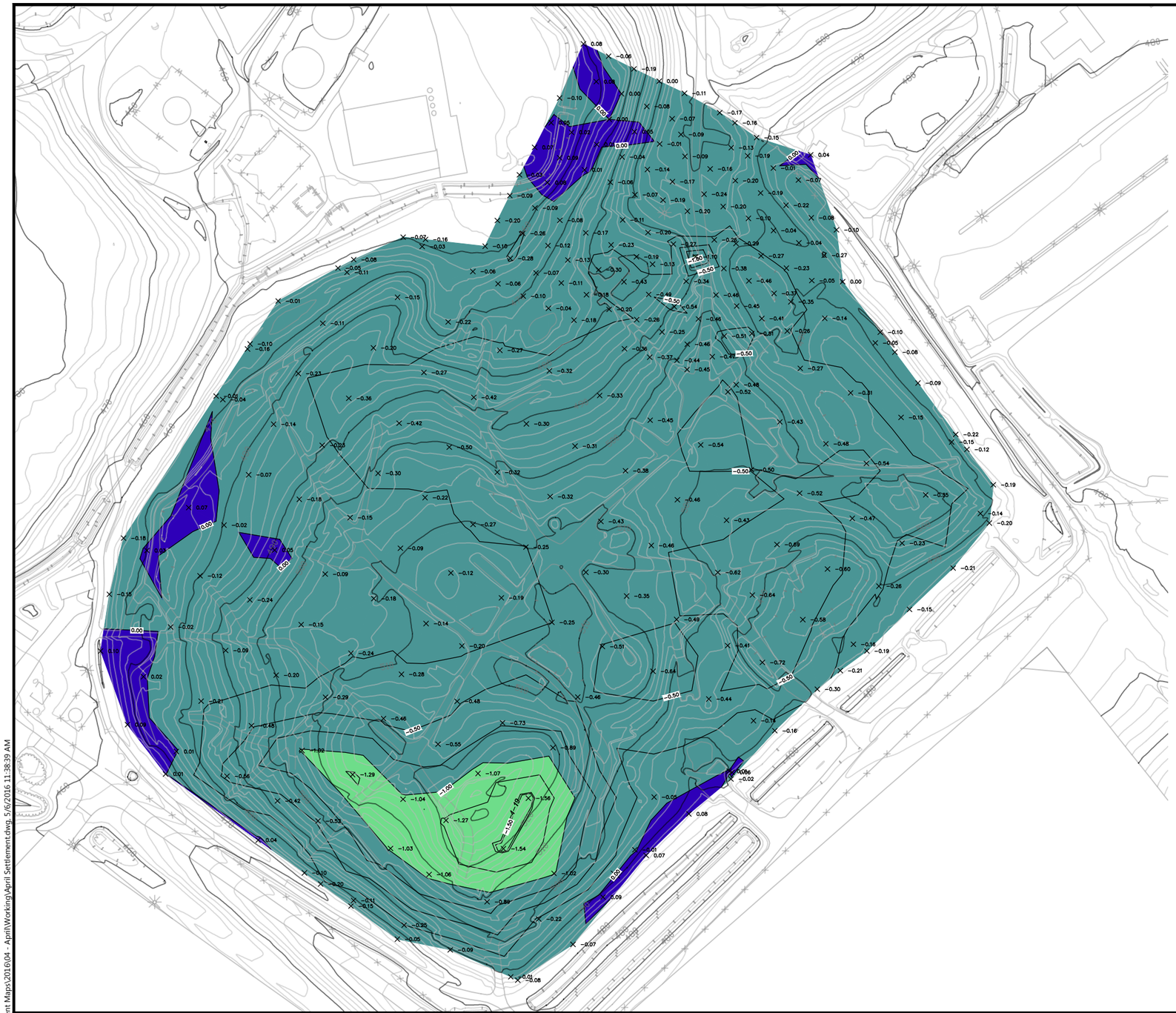
Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	Janaury 2016	February 2016	March 2016	April 2016		
SEW-061R	--	--	--	--		
SEW-062R	--	--	--	--		
SEW-063	--	--	--	--		
SEW-064	--	--	--	--		
SEW-067	--	--	--	--		
SEW-072R	--	--	--	--		
SEW-074	--	--	--	--		
SEW-079R	--	--	--	--		
T-56	47.7	47.3	47.1	60.8		

-- = Indicates no data available.

ATTACHMENT F

SETTLEMENT FRONT MAP



0 200'

GRAPHIC SCALE

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS, CO. ON FEBRUARY 10, 2015.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. ELEVATION DIFFERENCE DETERMINED BY SUBTRACTING SPOT ELEVATIONS SURVEYED ON 3-17-16 FROM SPOT ELEVATIONS SURVEYED ON 4-19-16.
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.

LEGEND

× −0.42 — SPOT ELEVATION DIFFERENCE (4-19-16 TO 3-17-16)

MINOR ELEVATION CHANGE CONTOUR (0.25 FEET)

−0.50 — MAJOR ELEVATION CHANGE CONTOUR (0.50 FEET)

4−19 — SETTLEMENT FRONT CONTOUR FOR AREA WITH 1.35' PER 30 DAYS FOR CURRENT PERIOD OF DAYS (AREA REPRESENTS 1.485' OVER 33 DAYS BASED ON CONVERSION)

ELEVATION CHANGE (FEET)

Number	Minimum Elev. Change	Maximum Elev. Change	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	70480.61	
5	−1.00	0.00	1405556.26	
6	0.00	1.00	66157.71	

REV. NO.	DATE	DESCRIPTION

BRIDGETON LANDFILL

CB&I Environmental & Infrastructure, Inc.

STATE OF ILLINOIS LICENSED DESIGN FIRM #184004093

BRIDGETON LANDFILL
BRIDGETON, MO

SETTLEMENT MAP
MARCH 17, 2016 THROUGH APRIL 19, 2016

DRAWN BY:	ORC	APPROVED BY:	JPV	PROJ. NO.:	155162	DATE:	APRIL 2016

T:\AutoCAD\Projects\Bridgeton LF\Settlement Maps\2016\04 - April\Working\April Settlement.dwg, 5/6/2016 11:38:39 AM

ATTACHMENT G

SUMMARY OF ODOR COMPLAINTS

April 1, 2015 – April 30, 2015 / MDNR ODOR COMPLAINTS

Name: Richard N Chatfield

Message: Odor logged April 1, 2016, at 5:45 am strength of 10

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: Margie menke

Message: Odor logged April 1, 2016, at 6:45 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 1, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 1, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 1, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 1, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 1, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 1, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: David Sontheimer

Message: Odor logged March 30, 2016, at 9:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location cited in this submittal is of greater distance from the Bridgeton Landfill than any documented observation by either MDNR or the Bridgeton Landfill. This concern 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: Connie Nolan

Message: Odor logged April 1, 2016, at 4:17 pm strength of 10

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: Greg Wortham

Message: Odor logged April 2, 2016, at 9:45 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. An odor patrol performed by Bridgeton Landfill staff within an hour of the time referenced in this concern did not observe any Bridgeton Landfill related odor at multiple points in close proximity to this concern location. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: William Siegler

Message: Odor logged April 3, 2016, at 7:33 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location cited in this submittal is of greater distance from the Bridgeton Landfill than any documented observation by either MDNR or the Bridgeton Landfill. The date referenced in this concern coincides with observations of a strong non-Bridgeton Landfill odor emanating from a source to the south of the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Greg and Ellen Wortham

Message: Odor logged April 4, 2016, at 8:05 am strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol was performed by Bridgeton Landfill staff in concurrence with the time cited in this concern, no odor related to the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 4, 2016, at 7:00 am strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol was performed by Bridgeton Landfill staff within an hour of the time cited in this concern, no odor related to the Bridgeton Landfill was observed at multiple points between this location and the Bridgeton Landfill. The concern location cited is of significantly closer proximity to another known odor source with frequent off-site odor emissions. This was not a Bridgeton Landfill odor.

Name: Robbin Dailey

Message: Odor logged April 4, 2016, at 11:50 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Bridgeton Landfill staff investigated this concern shortly after receipt, no odor related to the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: David Blackwell

Message: Odor logged April 4, 2016, at 12:30 pm strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Bridgeton Landfill staff investigated this concern shortly after receipt, no odor related to the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: Bob Labeaume

Message: Odor logged April 4, 2016, at 5:46 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time cited in this concern the location provided was immediately downwind of another known odor source and outside of the downwind pathway of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Connie Nolan

Message: Odor logged April 6, 2016, at 4:17 pm strength of 10

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: Bob Labeaume

Message: Odor logged April 6, 2016, at 4:25 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time cited in this concern the location provided was immediately downwind of another known odor source and outside of the downwind pathway of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Bob Labeaume

Message: Odor logged April 6, 2016, at 9:40 am strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed within the our prior to the submittal of this concern did not observe Bridgeton Landfill related odor at multiple points between this location and the Bridgeton Landfill including a point in close proximity to this location. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Bob Nowlin

Message: Odor logged April 6, 2016, at 10:40 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed within one hour of the submittal of this concern no odor related to the Bridgeton Landfill was observed at multiple points between this location and the Bridgeton Landfill including a point in close proximity to this location. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Connie Nolan

Message: Odor logged April 7, 2016, at 7:22 am strength of 10

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: NA

Message: Odor logged April 7, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 7, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 7, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 8, 2016, at 7:10 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 8, 2016, at 7:11 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 8, 2016, at 7:12 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 8, 2016, at 7:15 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 8, 2016, at 7:20 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 7, 2016, at 5:15 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 7, 2016, at 5:16 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: David Sontheimer

Message: Odor logged April 7, 2016, at 6:00 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location well outside the downwind pathway of the Bridgeton Landfill and immediately downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: David Sontheimer

Message: Odor logged April 7, 2016, at 8:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location well outside the downwind pathway of the Bridgeton Landfill and immediately

downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 7, 2016, at 7:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location well outside the downwind pathway of the Bridgeton Landfill and immediately downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Leslie Horkman

Message: Odor logged April 5, 2016, at 12:29 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of far too significant a distance for observed odors to be related to the Bridgeton Landfill. The submittal of this concern occurred three days after the stated observation. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 7, 2016, at 5:20 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location upwind of the Bridgeton Landfill and downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Rebecca Kelleher

Message: Odor logged April 9, 2016, at 1:21 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time cited in this concern the location provided was immediately downwind of another known odor source and outside of the downwind pathway of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Dawn Chapman

Message: Odor logged April 10, 2016, at 11:00 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed by Bridgeton Landfill staff immediately before the time cited in this concern did not observe any odor related to the Bridgeton Landfill at multiple points between this concern location and the Bridgeton Landfill.

Name: Connie Nolan

Message: Odor logged April 11, 2016, at 5:14 am strength of 8

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: Erin Rich

Message: Odor logged April 11, 2016, at 6:18 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. On the date and time cited in this concern winds were of a persistent western origin, placing this concern location well outside the downwind pathway of the Bridgeton Landfill and immediately downwind of another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 11, 2016, at 6:50 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol was performed by Bridgeton Landfill staff shortly after the time cited in this concern. No odor related to the Bridgeton Landfill was observed at multiple points between this location and the Bridgeton Landfill.

Name: NA

Message: Odor logged April 11, 2016, at 7:30 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. An odor patrol was performed in concurrence with the time cited in this concern, no odor related to the Bridgeton Landfill was observed. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 11, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. An odor patrol was performed in concurrence with the time cited in this concern, no odor related to the Bridgeton Landfill was observed. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 11, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. An odor patrol was performed in concurrence with the time cited in this concern, no odor related to the Bridgeton Landfill was observed. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Clay Kuykendall

Message: Odor logged April 11, 2016, at 6:49 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. An odor patrol was performed within the hour following the time cited in this concern, no odor related to the Bridgeton Landfill was observed. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Meghan Cousino

Message: Odor logged April 11, 2016, at 4:34 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was immediately downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Connie Nolan

Message: Odor logged April 11, 2016, at 4:44 pm strength of 10

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: NA

Message: Odor logged April 11, 2016, at 5:37 pm strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 11, 2016, at 5:38 pm strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 11, 2016, at 5:41 pm strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Katie Keeven

Message: Odor logged April 11, 2016, at 7:36 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was immediately downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Katie Keeven

Message: Odor logged April 11, 2016, at 7:58 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Rhonda Steelman

Message: Odor logged April 11, 2016, at 5:45 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was immediately downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 10, 2016, at 11:46 am strength of 6

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Ruwanganie Weltig

Message: Odor logged April 11, 2016, at 7:15 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 6:47 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is in close proximity to another known odor source with frequent

off-site odor emissions. That odor has been frequently observed in close proximity to this concern location while no Bridgeton Landfill odor has been detected in this location during any odor patrols or MDNR odor monitoring patrols in the last year. There is no evidence to suggest this was a Bridgeton Landfill odor.

Name: Kathy Baumann

Message: Odor logged April 12, 2016, at 7:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of far too significant a distance for observed odors to be related to the Bridgeton Landfill.

Name: NA

Message: Odor logged April 12, 2016, at 7:28 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:27 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:28 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:31 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:31 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:31 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:32 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:33 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:33 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:35 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:29 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:40 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:25 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:38 am strength of 10

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:31 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 12, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Jaime

Message: Odor logged April 11, 2016, at 7:15 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Jaimw Wittmaier

Message: Odor logged April 12, 2016, at 10:48 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Jamie Crawford

Message: Odor logged April 11, 2016, at 9:00 pm strength of 7

Follow-up: The following concern references a location on a highway immediately adjacent to another known odor source. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Liz spector

Message: Odor logged April 12, 2016, at 6:13 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed

historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols concurrent with the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Monica Brady

Message: Odor logged April 11, 2016, at 9:15 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols on this evening did not observe off-site odor related to the Bridgeton Landfill.

Name: Kischa

Message: Odor logged April 13, 2016, at 8:31 am strength of 9

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: Jennifer Tucker

Message: Odor logged April 14, 2016, at 6:35 am strength of 8

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: Nikkie

Message: Odor logged April 14, 2016, at 6:02 am strength of 9

Follow-up: The following concern lacks essential location data necessary for follow-up investigation.

Name: Jennifer Shakhnovich

Message: Odor logged April 14, 2016, at 7:10 am strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 14, 2016, at 7:25 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Tracy L. Bouslog

Message: Odor logged April 14, 2016, at 6:45 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. The concern location was downwind of another known odor source on this date and time. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Desiree Friedrich

Message: Odor logged April 14, 2016, at 6:00 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Linda Michely

Message: Odor logged April 14, 2016, at 6:39 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 14, 2016, at 6:00 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location provided is of greater distance from the Bridgeton Landfill than any observed historic Bridgeton Landfill odor by MDNR or the Bridgeton Landfill. Bridgeton Landfill odor patrols before and after the time cited in this concern did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Connie Usry

Message: Odor logged April 13, 2016, at 5:35 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is immediately adjacent 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: Connie Usry

Message: Odor logged April 13, 2016, at 5:35 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is immediately adjacent 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: Tia Kern

Message: Odor logged April 16, 2016, at 9:35 pm strength of 10

Follow-up: A Bridgeton Landfill odor patrol was performed immediately after the time cited in this concern. No odor related to the Bridgeton Landfill was observed at multiple points between this location and the Bridgeton Landfill.

Name: Taylor Meyer

Message: Odor logged April 16, 2016, at 7:21 am strength of 10

Follow-up: A Bridgeton Landfill odor patrol was performed immediately after the time cited in this concern. No odor related to the Bridgeton Landfill was observed at multiple points between this location and the Bridgeton Landfill, including a location in the immediate proximity of this concern observed less than half an hour after the time cited.

Name: NA

Message: Odor logged April 18, 2016, at 5:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed on the morning of this concern observed a garbage odor in the immediate vicinity of this concern location, unassociated with the Bridgeton Landfill.

Name: NA

Message: Odor logged April 18, 2016, at 6:40 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed on the morning of this concern observed a garbage odor in the immediate vicinity of this concern location, unassociated with the Bridgeton Landfill.

Name: Deanna Cullen

Message: Odor logged April 18, 2016, at 7:35 am strength of 3

Follow-up: A Bridgeton Landfill odor patrol was performed immediately after the time cited in this concern. No odor related to the Bridgeton Landfill was observed at multiple points between this location and the Bridgeton Landfill.

Name: NA

Message: Odor logged April 18, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed in close timing with this concern observed a garbage odor at an observation point in close proximity to the location cited in this concern. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 18, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed in close timing with this concern observed a garbage odor at an observation point in close proximity to the location cited in this concern. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 18, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed in close timing with this concern observed a garbage odor at an observation point in close proximity to the location cited in this concern. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 18, 2016, at 7:49 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On the date and time cited in this concern winds were of a persistent southern/southeastern origin placing this location upwind of the Bridgeton Landfill. Odor patrols performed prior to and after the time referenced in this concern did not observe an odor related to the Bridgeton Landfill at this location. There is no evidence suggesting that this was a Bridgeton Landfill related odor.

Name: Chris Meister

Message: Odor logged April 18, 2016, at 4:35 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location provided in this concern is directly adjacent to another known odor source with off-site odor emissions observed on this date. This was not a Bridgeton Landfill odor.

Name: Chris Meister

Message: Odor logged April 16, 2016, at 9:36 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location provided in this concern is directly adjacent to another known odor source with off-site odor emissions observed on this date. This was not a Bridgeton Landfill odor.

Name: Sharon Bishop

Message: Odor logged April 19, 2016, at 6:40 am strength of 8

Follow-up: The following concern was investigated during a Bridgeton Landfill odor patrol shortly after submittal of this concern. The only odor observed at multiple points between the location cited in this concern and the Bridgeton Landfill originated from the operations of a petroleum fuel service station in the immediate vicinity of the concern. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:40 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location on a major highway of substantial distance from the Bridgeton Landfill at a time when wind conditions place the location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:40 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in immediate proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:41 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in immediate proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:41 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in immediate proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:42 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in immediate proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:39 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in immediate proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:39 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in immediate proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:45 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location on a major highway of substantial distance from the Bridgeton Landfill at a time when wind conditions place the location well outside the downwind pathway of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:45 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location on a major highway of substantial distance from the Bridgeton Landfill at a time when wind conditions place the location well outside the downwind pathway of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:40 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location on a major highway of substantial distance from the Bridgeton Landfill at a time when wind conditions place the location well outside the downwind pathway of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:40 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in immediate proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:41 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location on a major highway of substantial distance from the Bridgeton Landfill at a time when wind conditions place the location well outside the downwind pathway of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:41 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in close proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:40 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in close proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 19, 2016, at 7:51 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in close proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Amy Comer

Message: Odor logged April 19, 2016, at 7:02 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in close proximity of another odor source. At this time wind conditions place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Sarah

Message: Odor logged April 19, 2016, at 5:00 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were calm at the time cited in this concern. Odor patrols by Bridgeton Landfill staff prior to and after the time cited in this concern did not observe odor related to the Bridgeton Landfill at multiple points between this location and the Bridgeton Landfill. There is no evidence to indicate this was a Bridgeton Landfill odor.

Name: Matt Foulon

Message: Odor logged April 19, 2016, at 6:00 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were calm at the time cited in this concern. Odor patrols by Bridgeton Landfill staff prior to and after the time cited in this concern did not observe odor related to the Bridgeton Landfill at multiple points between this location and the Bridgeton Landfill. There is no evidence to indicate this was a Bridgeton Landfill odor.

Name: Kathy Luther

Message: Odor logged April 19, 2016, at 8:00 am strength of 8

Follow-up: Bridgeton Landfill staff performed an odor patrol immediately after the time stated in this concern. No odor related to the Bridgeton Landfill was observed, including at multiple points between this concern location and the Bridgeton Landfill.

Name: NA

Message: Odor logged April 19, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cites a location in close proximity of another odor source. At this time wind conditions

place this location directly upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Monica Brady

Message: Odor logged April 19, 2016, at 1:00 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. A garbage odor unassociated with the Bridgeton Landfill was observed at an observation point in close proximity to this concern approximately 1.5 hours prior to the time stated in this concern. This odor was not related to the Bridgeton Landfill.

Name: Amanda Dent

Message: Odor logged April 20, 2016, at 9:07 am strength of 3

Follow-up: The following concern is of substantial distance from the Bridgeton Landfill. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: Bob Nowlin

Message: Odor logged April 20, 2016, at 5:42 pm strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern cited is of close proximity to and at the time of this concern immediately downwind from another known odor source while directly upwind of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Brieann McCormick

Message: Odor logged April 20, 2016, at 8:14 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time cited in this concern wind direction was of a southern origin, placing this location downwind of another known odor source and upwind of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Monica Brady

Message: Odor logged April 21, 2016, at 1:50 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time cited in this concern wind direction was of a southern origin, placing this location downwind of another known odor source and upwind of the Bridgeton Landfill. Odor patrols

prior to and following this concern did not observe odor related to the Bridgeton Landfill at observation points between the Bridgeton Landfill and this concern location. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 21, 2016, at 7:25 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location of close proximity to a known odor source with frequent off-site emissions. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 21, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location of close proximity to a known odor source with frequent off-site emissions. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 21, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location of close proximity to a known odor source with frequent off-site emissions. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 21, 2016, at 9:06 am strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location cited is of significant distance away from the Bridgeton Landfill. On this date a non-Bridgeton Landfill odor was observed during a Bridgeton Landfill odor patrol that was between this concern location and the suspected odor source. This is not believed to have been a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 21, 2016, at 4:25 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The time and date cited in this concern coincides with a Bridgeton Landfill odor patrol. No odor

associated with the Bridgeton Landfill was observed at multiple points between this location and the Bridgeton Landfill.

Name: NA

Message: Odor logged April 21, 2016, at 5:55 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is immediately adjacent to another known odor source with frequent off-site odor emissions, including such emissions observed on this date. A Bridgeton Landfill odor patrol performed in the hour prior to this concern did not observe any odor related to the Bridgeton Landfill.

Name: Kevin R. Toal

Message: Odor logged April 21, 2016, at 5:55 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is immediately adjacent to another known odor source with frequent off-site odor emissions, including such emissions observed on this date. A Bridgeton Landfill odor patrol performed in the hour prior to this concern did not observe any odor related to the Bridgeton Landfill.

Name: Kevin R. Toal

Message: Odor logged April 21, 2016, at 5:54 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is immediately adjacent to another known odor source with frequent off-site odor emissions, including such emissions observed on this date. A Bridgeton Landfill odor patrol performed in the hour prior to this concern did not observe any odor related to the Bridgeton Landfill.

Name: Susan Folle

Message: Odor logged April 21, 2016, at 5:11 pm strength of 5

Follow-up: The following concern lacks essential location data.

Name: Jay Black

Message: Odor logged April 22, 2016, at 7:58 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is immediately adjacent to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff was performing an odor patrol at the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: Jay Black

Message: Odor logged April 22, 2016, at 7:58 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is immediately adjacent to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff was performing an odor patrol at the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:31 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:31 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this

concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:33 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:34 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:35 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:35 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:35 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:35 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:35 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 7:36 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is very close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff shortly after the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 22, 2016, at 8:36 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is of close proximity to another known odor source with frequent off-site odor emissions. Bridgeton Landfill staff performed an odor patrol shortly before the time cited in this concern, no odor associated with the Bridgeton Landfill was observed. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 21, 2016, at 4:41 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was submitted approximately 16 hours after the stated observation time. Bridgeton Landfill staff performed an odor patrol shortly before the time cited in this concern. No evidence indicates that this was a Bridgeton Landfill odor.

Name: Robbin Dailey

Message: Odor logged April 22, 2016, at 11:47 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor related to the Bridgeton Landfill was observed in the vicinity of the cited location during Bridgeton Landfill odor patrols on this date. There is no evidence to indicate that this was a Bridgeton Landfill odor.

Name: Michael Dailey

Message: Odor logged April 22, 2016, at 12:15 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. No odor related to the Bridgeton Landfill was observed in the vicinity of the cited location during Bridgeton Landfill odor patrols on this date. There is no evidence to indicate that this was a Bridgeton Landfill odor.

Name: Robbin Dailey

Message: Odor logged April 22, 2016, at 3:01 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed by Bridgeton Landfill staff coincided with the time cited in this concern. No odor related to the Bridgeton Landfill was observed in the vicinity of this concern.

Name: Michael Dailey

Message: Odor logged April 22, 2016, at 3:02 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol performed by Bridgeton Landfill staff coincided with the time cited in this concern. No odor related to the Bridgeton Landfill was observed in the vicinity of this concern.

Name: Robbin Dailey

Message: Odor logged April 22, 2016, at 6:30 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols prior to and following the time cited in this concern did not observe odor related to the Bridgeton Landfill in close proximity to the concern location provided.

Name: Michael Dailey

Message: Odor logged April 22, 2016, at 6:30 pm strength of 10

Follow-up: The following concern lacks essential location data.

Name: NA

Message: Odor logged April 22, 2016, at 9:39 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is of close proximity to another known odor source with frequent off-site odor emissions. This concern was submitted approximately nine hours after the stated time of observation. Odor patrols on this date did not observe odor related to the Bridgeton Landfill at multiple points between this location and the Bridgeton Landfill.

Name: Jeff Pillman

Message: Odor logged April 23, 2016, at 2:48 am strength of 9

Follow-up: The following concern lacks essential location data.

Name: Jeff Pillman

Message: Odor logged April 22, 2016, at 2:55 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The location cited in this concern is of close proximity to another known odor source with frequent off-site odor emissions. Winds were of a southern origin at this time placing this location upwind of the Bridgeton Landfill and downwind of this other odor source. Odor patrols on this

date did not observe odor related to the Bridgeton Landfill at multiple points between this location and the Bridgeton Landfill.

Name: Ellen Wortham

Message: Odor logged April 22, 2016, at 5:25 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was submitted approximately nineteen hours after the stated time of observation. Bridgeton Landfill staff did not observe odor related to the Bridgeton Landfill in the proximity of this concern during odor patrols on this date.

Name: NA

Message: Odor logged April 25, 2016, at 7:16 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location in very close proximity to another known odor source with observed off-site odor on the date and of close chronological proximity to the time cited in this concern. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 25, 2016, at 7:17 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location in very close proximity to another known odor source with observed off-site odor on the date and of close chronological proximity to the time cited in this concern. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 25, 2016, at 7:17 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location in very close proximity to another known odor source with observed off-site odor on the date and of close chronological proximity to the time cited in this concern. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 26, 2016, at 7:00 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location in very close proximity to another known odor source with frequent off-site odor emissions. A Bridgeton Landfill odor patrol performed shortly after the time cited in this concern did not observe odor related to the Bridgeton Landfill.

Name: NA

Message: Odor logged April 26, 2016, at 7:00 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location in very close proximity to another known odor source with frequent off-site odor emissions. A Bridgeton Landfill odor patrol performed shortly after the time cited in this concern did not observe odor related to the Bridgeton Landfill.

Name: NA

Message: Odor logged April 26, 2016, at 7:01 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location in very close proximity to another known odor source with frequent off-site odor emissions. A Bridgeton Landfill odor patrol performed shortly after the time cited in this concern did not observe odor related to the Bridgeton Landfill.

Name: NA

Message: Odor logged April 27, 2016, at 6:35 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The time cited in this concern coincides with a regionally significant gust of southwestern wind placing this location upwind of the Bridgeton Landfill and downwind of another known odor source at the time of this concern. Bridgeton Landfill staff observed odor associated with this other source throughout the area in close chronological proximity to the time cited in this concern. This was not a Bridgeton Landfill odor.

Name: Amanda Cooper

Message: Odor logged April 27, 2016, at 8:00 am strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location of substantial distance from the Bridgeton Landfill and far closer to another known odor source with observed off-site odor on this date. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 29, 2016, at 8:00 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location of substantial distance from the Bridgeton Landfill and far closer to another known odor source with frequent off-site odor observations. A Bridgeton Landfill odor patrol performed shortly after the time cited in this observation did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 29, 2016, at 8:01 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location of substantial distance from the Bridgeton Landfill and far closer to another known odor source with frequent off-site odor observations. A Bridgeton Landfill odor patrol performed shortly after the time cited in this observation did not observe any Bridgeton Landfill related odor. There is no evidence to suggest that this was a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 29, 2016, at 8:02 am strength of 10

Follow-up: The following concern is of such significant distance from the Bridgeton Landfill to be clearly not related to the Bridgeton Landfill.

Name: NA

Message: Odor logged April 28, 2016, at 7:41 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was submitted approximately nineteen hours after the stated observation time. On this prior date an odor associated with another known odor source of closer proximity to this concern location was observed by Bridgeton Landfill staff during routine odor patrols. No odor related to the Bridgeton Landfill was observed at points between this location and the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged April 30, 2016, at 9:38 pm strength of 3

Follow-up: The following concern is of such significant distance from the Bridgeton Landfill to clearly not be related to the Bridgeton Landfill.

ATTACHMENT H

LIQUID CHARACTERIZATION DATA AND DISCHARGE LOG

Bridgeton Landfill - Leachate PreTreatment Plant

April 2016

Liquid Characterization Data

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

Hauled Disposal to MSD – Bissell Point

Date	Waste	Source	Transporter	Quantity
4/1/2016	LPTP Activated Sludge/ Permeate	Tank 1 (T1)	MBI	0
4/2/2016				0
4/3/2016				0
4/4/2016				0
4/5/2016				0
4/6/2016				0
4/7/2016				0
4/8/2016				0
4/9/2016				0
4/10/2016				0
4/11/2016				0
4/12/2016				0
4/13/2016				0
4/14/2016				0
4/15/2016				0
4/16/2016				0
4/17/2016				0
4/18/2016				0
4/19/2016				0
4/20/2016				0
4/21/2016				0
4/22/2016				0
4/23/2016				0
4/24/2016				0
4/25/2016				0
4/26/2016				0
4/27/2016				0
4/28/2016				0
4/29/2016				0
4/30/2016				0
			Total=	**0**

Direct Discharge to MSD

Date	Waste	Source	Quantity (gal)
4/1/2016	LPTP Permeate	Through Tank AST 97k (MSD Sampling Point 013)	299,015
4/2/2016			305,045
4/3/2016			308,963
4/4/2016			311,874
4/5/2016			313,297
4/6/2016			312,688
4/7/2016			119,080
4/8/2016			311,766
4/9/2016			291,818
4/10/2016			145,044
4/11/2016			141,930
4/12/2016			141,230
4/13/2016			139,640
4/14/2016			0
4/15/2016			0
4/16/2016			0
4/17/2016			0
4/18/2016			0
4/19/2016			0
4/20/2016			150,240
4/21/2016			147,240
4/22/2016			161,844
4/23/2016			158,302
4/24/2016			160,546
4/25/2016			161,356
4/26/2016			137,976
4/27/2016			0
4/28/2016			0
4/29/2016			0
4/30/2016			0
		Total =	**4,218,894**

ATTACHMENT I

LOW FILL PROJECT AREA

N

0 350'

GRAPHIC SCALE

NOTES

1. SITE AERIAL TOPOGRAPHIC SURVEY BY COOPER AERIAL SURVEYS, CO. ON AUGUST 1, 2015.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. SURVEY POINTS WERE PERFORMED USING GPS METHODS.

LEGEND

BOUNDARY OF FILL AREA FOR 3-17-16 THROUGH 4-19-16

REV. NO.	DATE	DESCRIPTION

BRIDGETON LANDFILL

CB&I Environmental & Infrastructure, Inc.

STATE OF ILLINOIS LICENSED DESIGN FIRM #184004093

BRIDGETON LANDFILL
BRIDGETON, MO

LOW FILL AREA BOUNDARY
APRIL 2016

DRAWN BY:	ORC	APPROVED BY:	JPV	PROJ. NO.:	155162	DATE:	MAY 2016

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