Bridgeton Landfill, LLC

Monthly Data Submittals

August, 2015

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

September 18, 2015

Commentary on Data

September 20, 2015

The following observations and comments are offered for the August 2015 data:

Gas Volume

- As seen in Attachment B-1, gas collection volumetric rate in August averaged 4,460 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 contains gas temperature as measured at the wellheads. Two (2) vertical wells (excluding GIW wells) decreased by 30°F or more in August. Additionally, four (4) 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.

- Attachment E-1 details vertical wells which had oxygen levels over 5% at one or more weekly monitoring events in August. These consisted of 10 older GEW wells (<#-120) that are experiencing low flows; 8 new GEW wells (>#-120) that are experiencing restricted flows; 6 GIW wells that have low gas flow. 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, except the new GEWs 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.

- A detailed review of the gas extraction wells in the neck area was conducted. Temperature is consistent with previous months in each of the gas extraction wells in vicinity to the neck. Carbon monoxide (CO) results from August showed stable month-over-month based on historic levels within the GIW wells. The CO concentrations within the Neck Area vertical wells exhibit stable CO concentrations within historic levels.

- All wells in the North Quarry continue to exhibit a maximum wellhead temperature under 145° F for the month of July, with the exception of GEW-054, that had a maximum temperature of 150.6° F during the month, which is within the historical operational range for this well. Therefore, monthly carbon monoxide testing has continued until this well gas temperature is below 140° F. Carbon monoxide (CO) results were 33 ppm for this well (GEW-054) during the August 2015 sample event. GEW-053 (59 ppm) continues to show low level or non-detect concentrations similar to

previous monthly sampling events. 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 **1.8 feet (see Attachment F)** for the month of August; 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 August 2015 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.

ATTACHMENT A

WORK COMPLETED AND PLANNED

Bridgeton Landfill, LLC
Monthly Summary of Work Completed and Planned

Work Completed in August 2015

Gas Collection and Control System

- Continued operation and maintenance of GCCS System and GIW wells.
- Completed installation of 18" diameter header upgrades.
- Continued additional GCCS System enhancements.

Alternative Heat Extraction System

- Continued operation and maintenance of the HES.

Leachate Management System

- Continued routine operation of previously installed and upgraded features.

Pre-Treatment Facility

- Continued ongoing operation of facility.

Other Projects:

- Completed low area fill project on east side of south quarry fill area.

Work Planned for September 2015

Gas Collection and Control System

- Continue operation and maintenance of GCCS system.
- Continue upgrades to GCCS system as required.
- Plan and initiate winterization processes.
- Plan to install two liquid collection sumps in the South gas interceptor trench.

Alternative Heat Extraction System

- Continue operation and maintenance of the HES.

Leachate Management System

- Continue routine operation of previously installed and upgraded features.

Pre-Treatment Facility

- Ongoing operation of facility.

Other Projects:

- Begin acceptance of clean fill materials for future fill projects.

ATTACHMENT B

DAILY FLARE MONITORING DATA

ATTACHMENT B-1

FLOW DATA TABLE

Daily Flare Monitoring Data - Bridgeton Landfill
August 2015

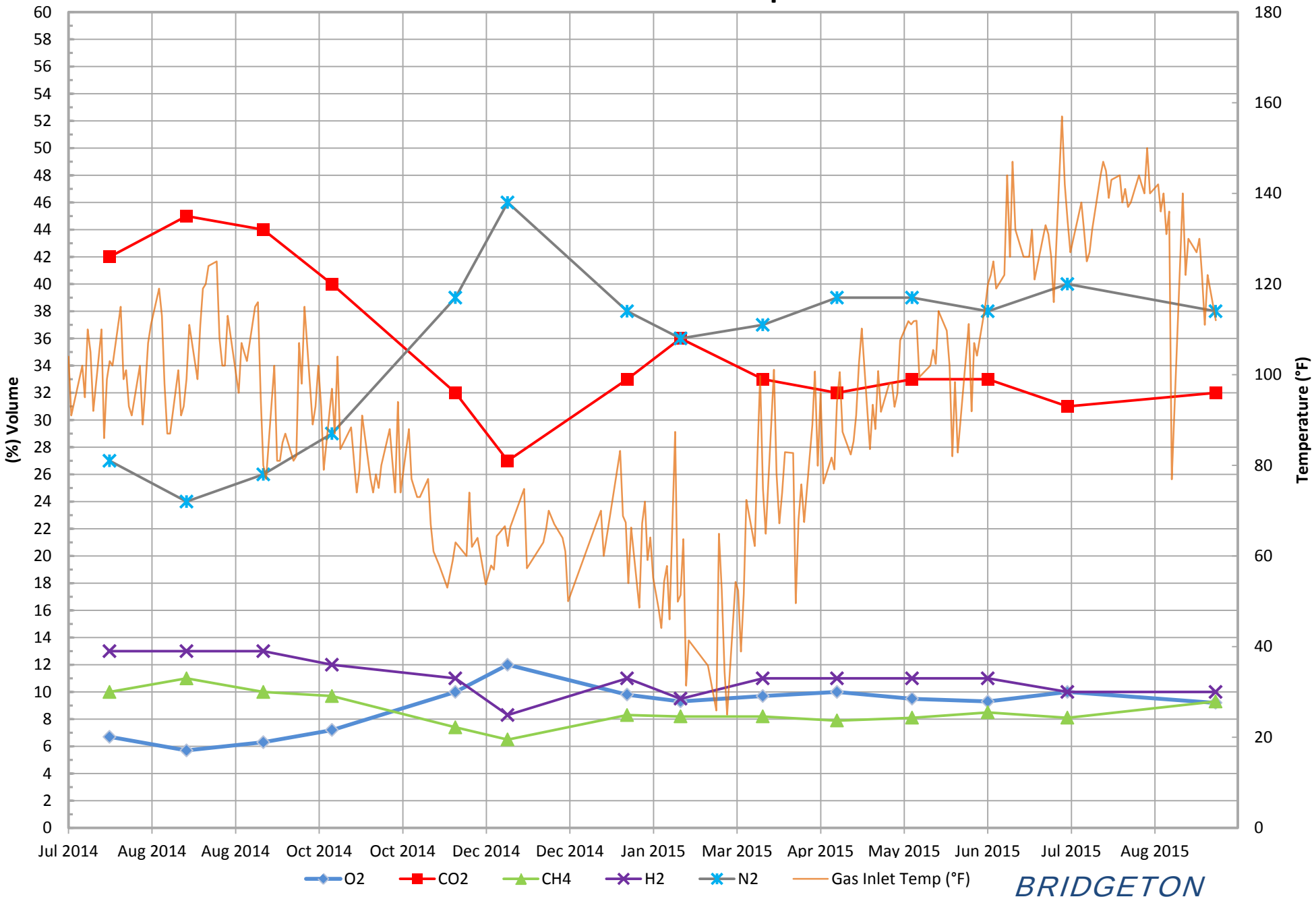
Date	Average Device Flow* (scfm)				Total Avg. Flow** (scfm)
	Utility Flare (FL-100)	Utility Flare (FL-120)	Utility Flare (FL-140)	E. Aux. Utility Flare	
8/1/2015	1,419	1,486	1,466		4,370
8/2/2015	1,437	1,421	1,478		4,335
8/3/2015	1,448	1,209	1,422		4,080
8/4/2015	1,528	1,528	1,504		4,559
8/5/2015	1,196	1,589	1,350		4,134
8/6/2015	1,399	1,490	1,407		4,296
8/7/2015	1,394	1,480	1,470		4,344
8/8/2015	1,459	1,505	1,505		4,470
8/9/2015	1,407	1,479	1,505		4,391
8/10/2015	1,401	1,490	1,501		4,391
8/11/2015	1,478	1,476	1,524		4,479
8/12/2015	1,491	1,497	1,302		4,290
8/13/2015	1,453	1,643	1,583		4,679
8/14/2015	1,648	1,717	1,646		5,011
8/15/2015	1,666	1,710	1,658		5,034
8/16/2015	1,625	1,687	1,642		4,954
8/17/2015	1,475	1,606	1,552		4,633
8/18/2015	1,457	1,629	1,559		4,644
8/19/2015	1,447	1,596	1,639		4,682
8/20/2015	1,436	1,534	1,707		4,677
8/21/2015	1,275	1,437	1,706		4,418
8/22/2015	1,438	1,466	1,711		4,615
8/23/2015	1,165	1,279	1,459		3,904
8/24/2015	1,120	1,295	1,602		4,018
8/25/2015	1,307	1,457	1,679		4,443
8/26/2015	1,277	1,508	1,627		4,412
8/27/2015	1,271	1,505	1,633		4,409
8/28/2015	1,320	1,440	1,642		4,402
8/29/2015	1,325	1,448	1,618		4,391
8/30/2015	1,347	1,457	1,597		4,402
8/31/2015	1,410	1,355	1,639		4,403
				Average	**4,460**

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

ATTACHMENT B-2

FLOW DATA GRAPHS

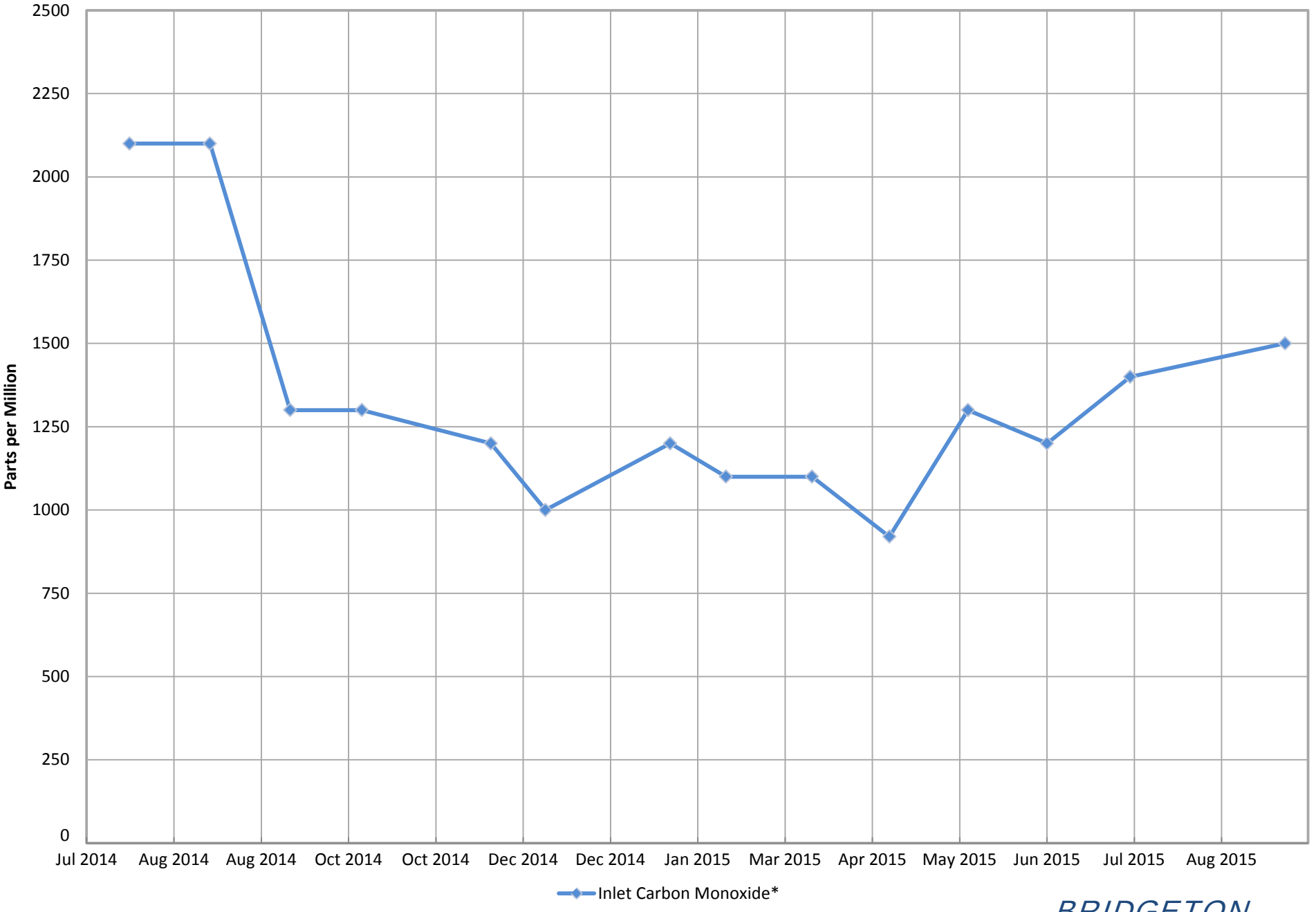
Inlet Gas and Temperature*



*Gas data collected from Laboratory Reports. Temperature data

BRIDGETON LANDFILL

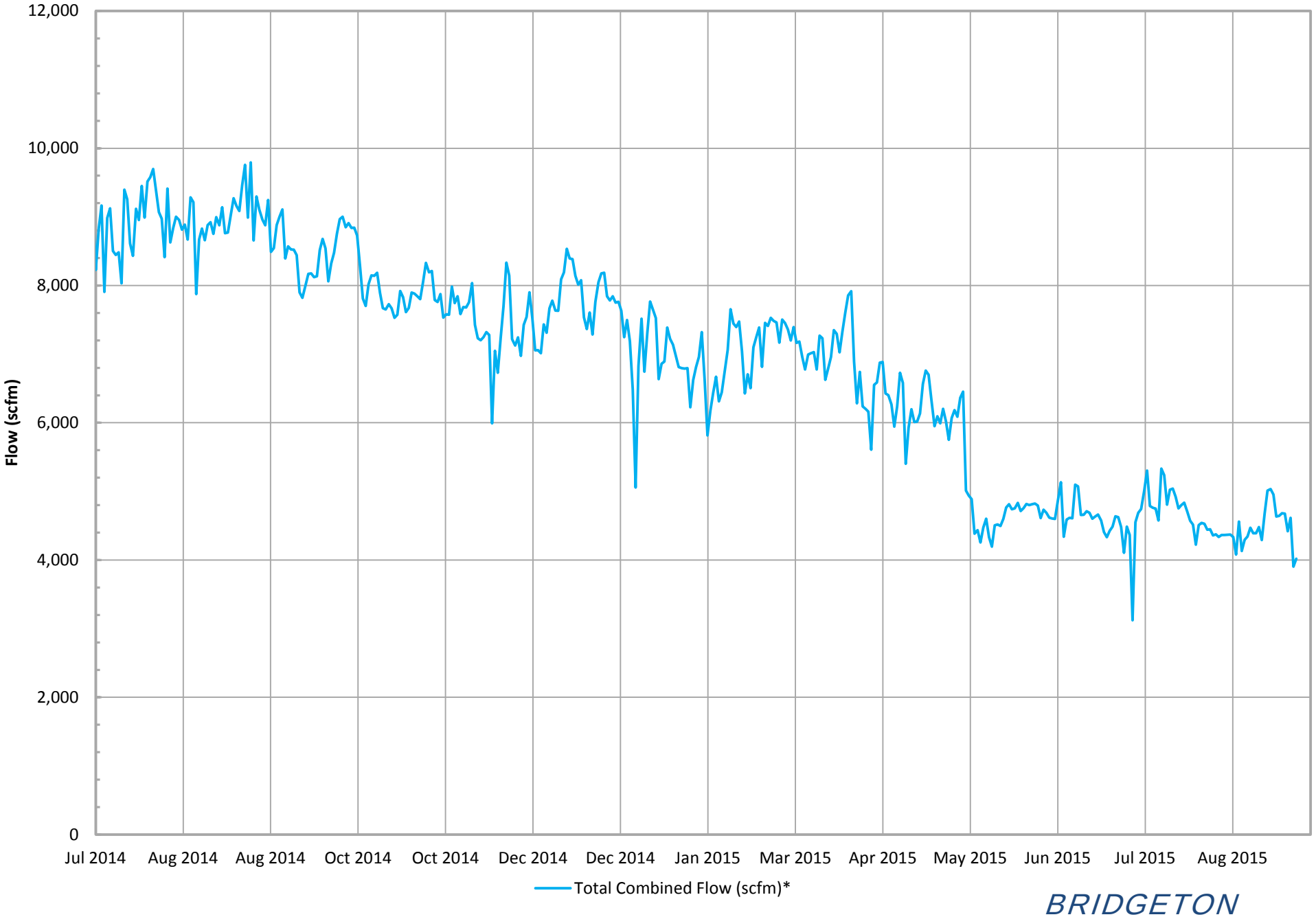
Inlet Carbon Monoxide*



*Data collected from

BRIDGETON LANDFILL

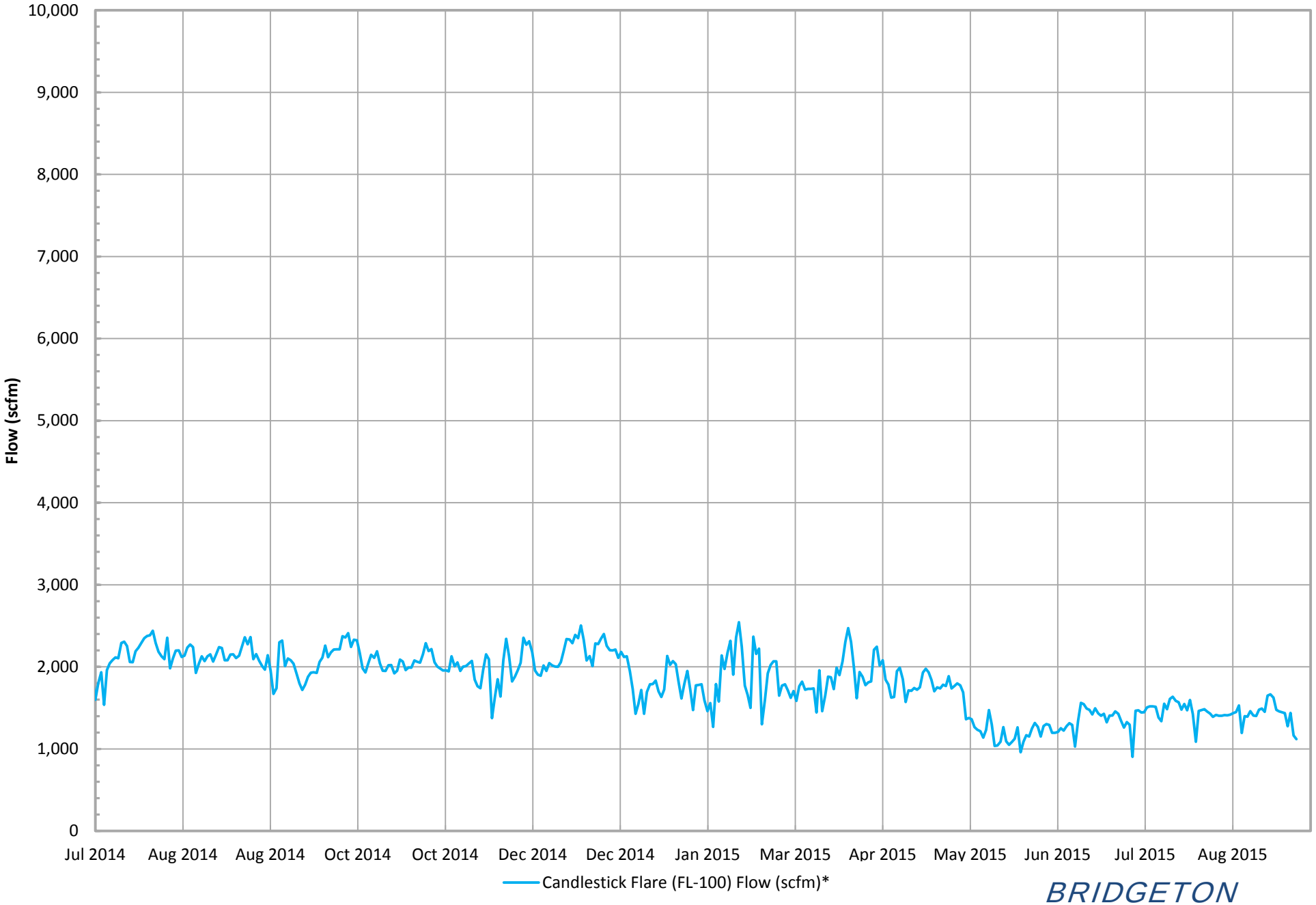
Total Combined Flow (scfm)*



*Combined flow is based on tabulated flow data

BRIDGETON LANDFILL

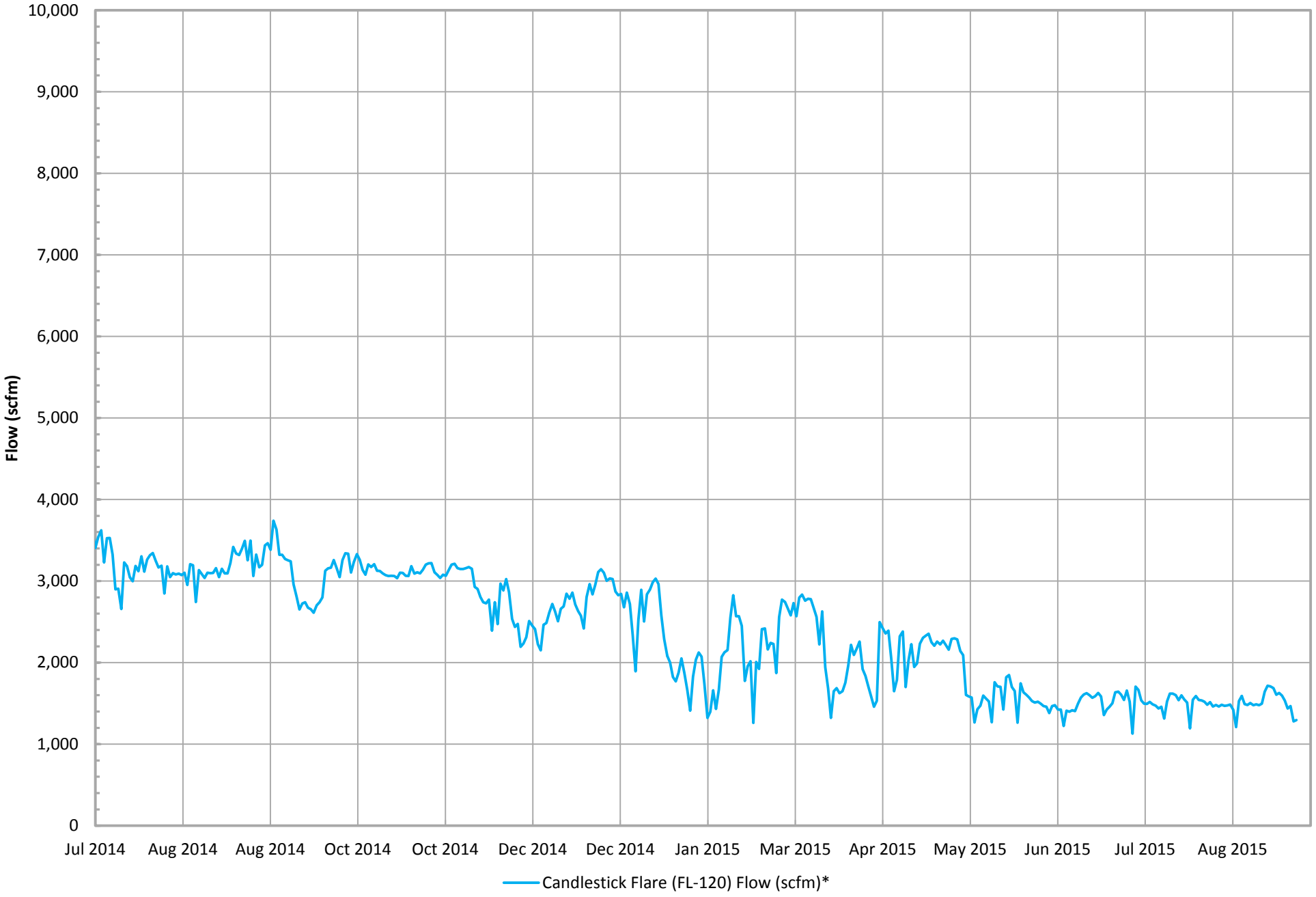
Candlestick Flare (FL-100) Flow (scfm)*



*Flow is based on tabulated flow data collected

BRIDGETON LANDFILL

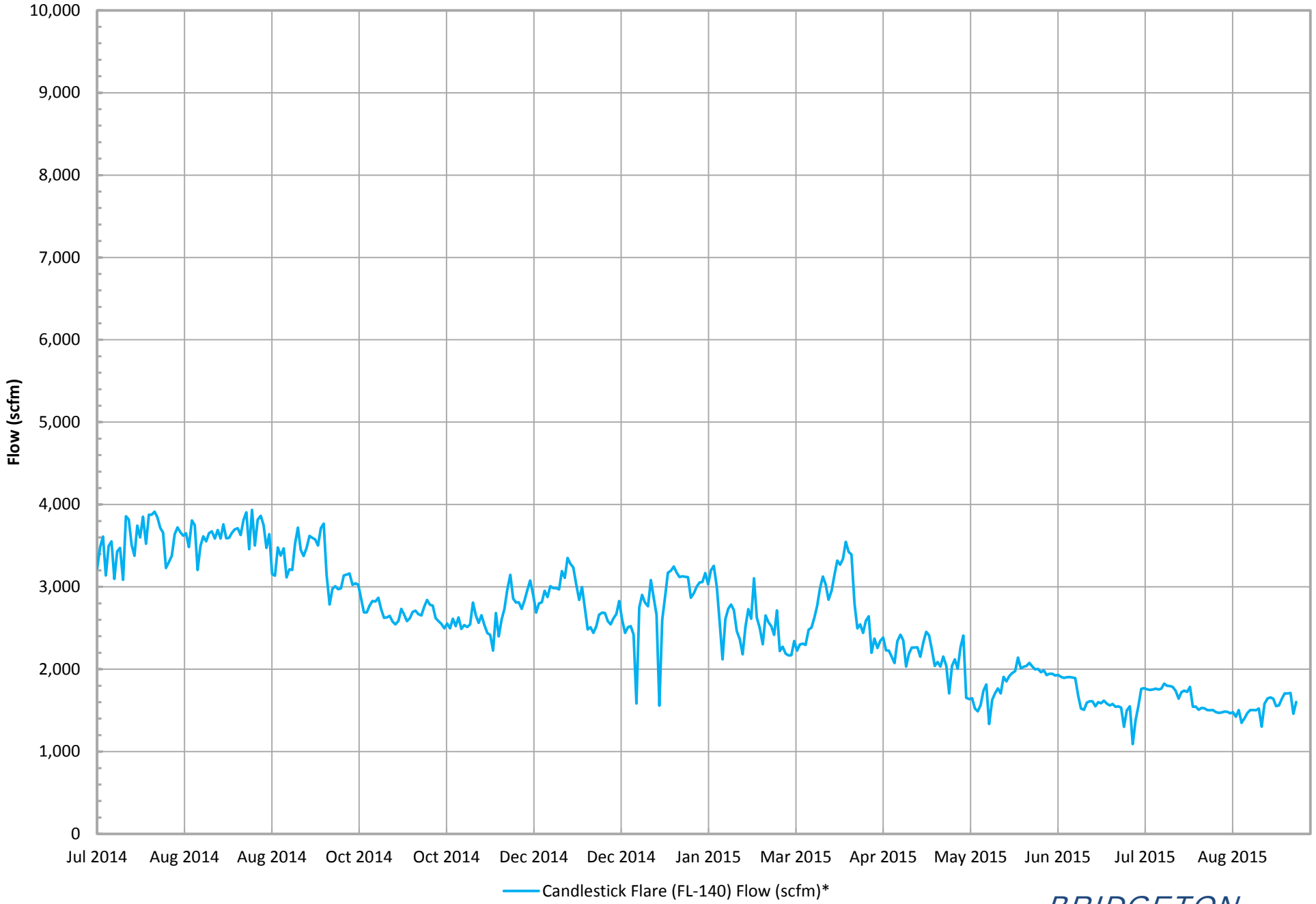
Candlestick Flare (FL-120) Flow (scfm)*



*Flow is based on tabulated flow data collected

BRIDGETON LANDFILL

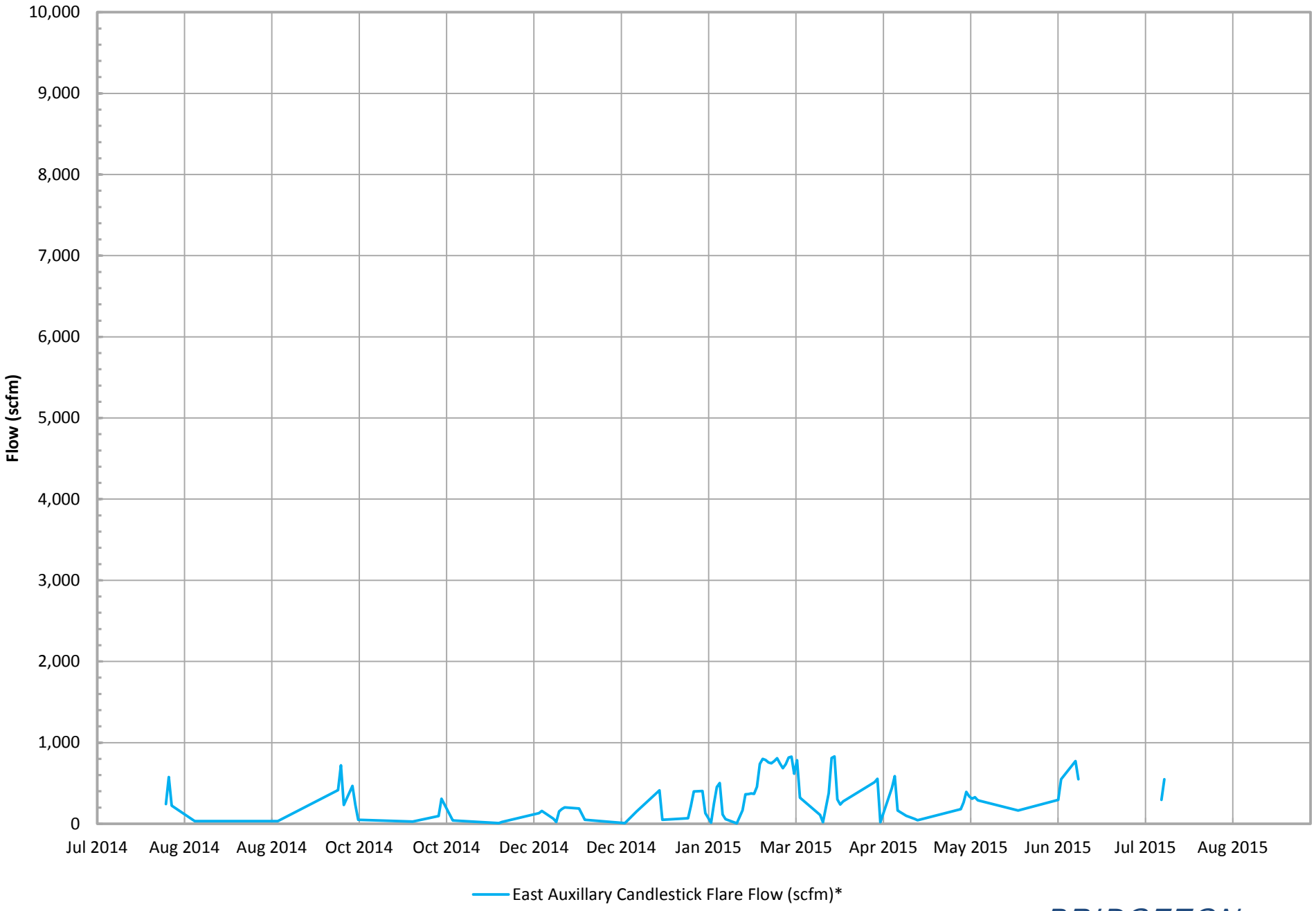
Candlestick Flare (FL-140) Flow (scfm)*



*Flow is based on tabulated flow data collected

BRIDGETON LANDFILL

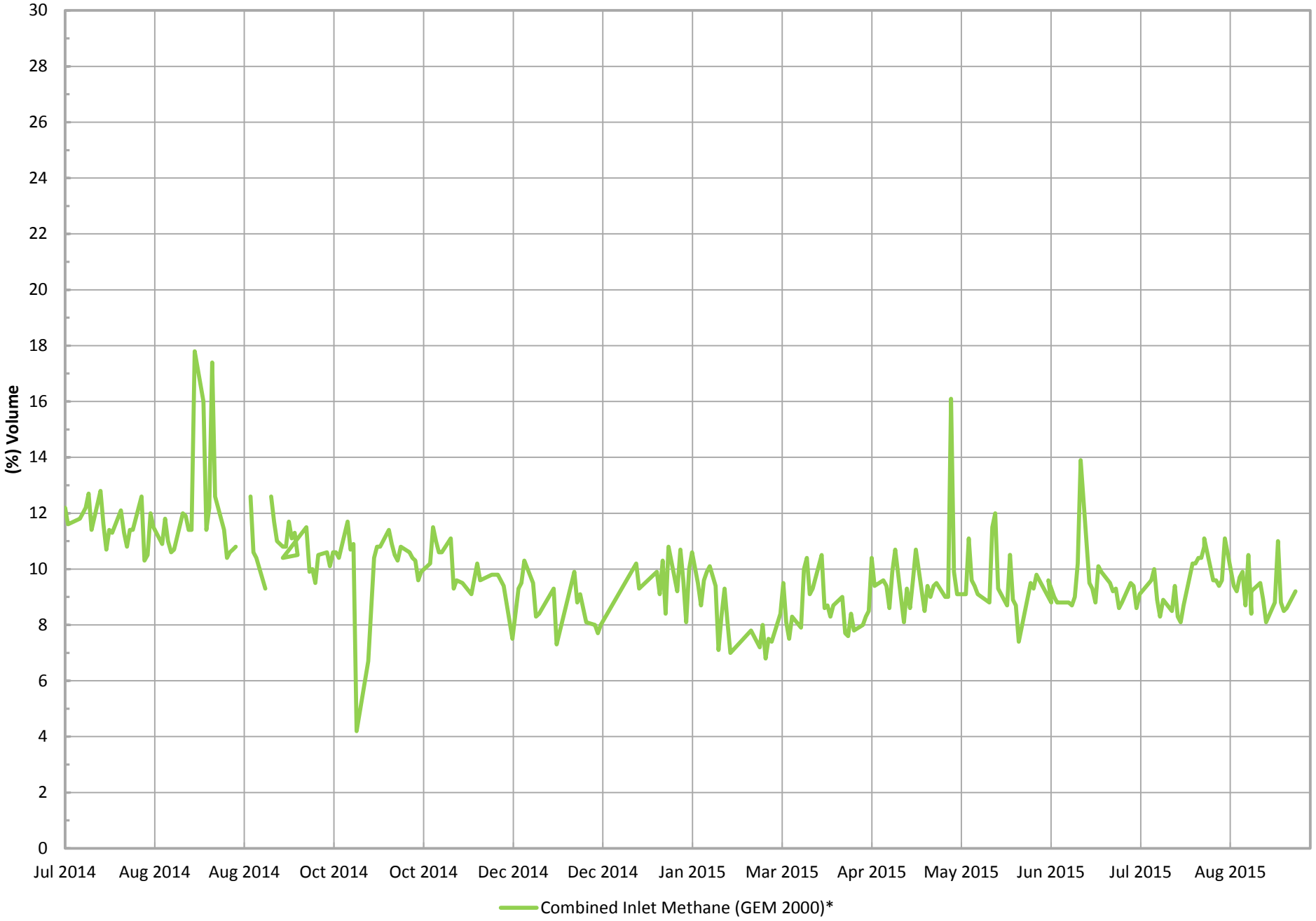
East Auxillary Candlestick Flare Flow (scfm)*



*Flow is based on tabulated flow data collected

BRIDGETON LANDFILL

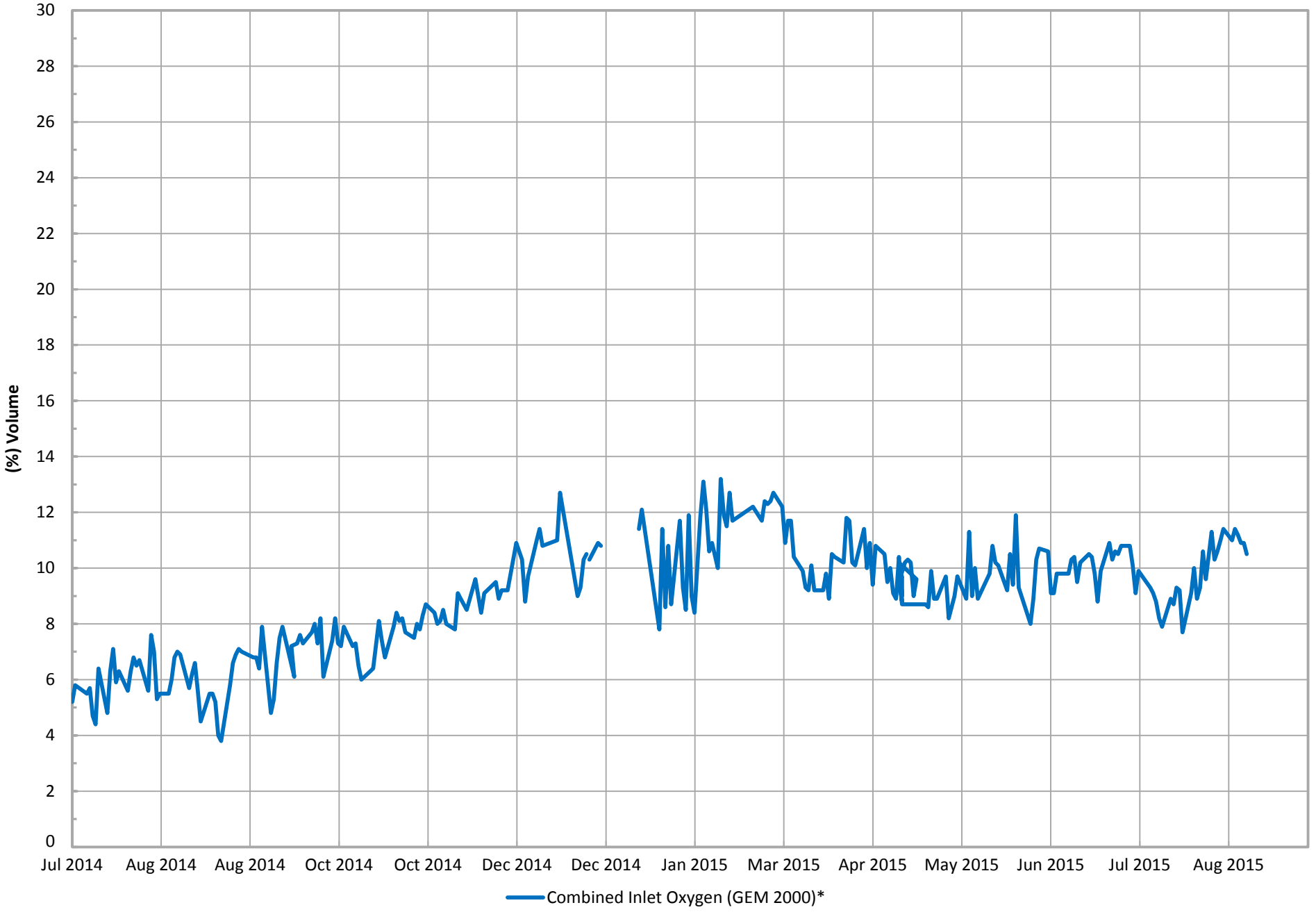
Combined Inlet Methane (GEM 2000)*



*Gas data collected from GEM 2000

BRIDGETON LANDFILL

Combined Inlet Oxygen (GEM 2000)*

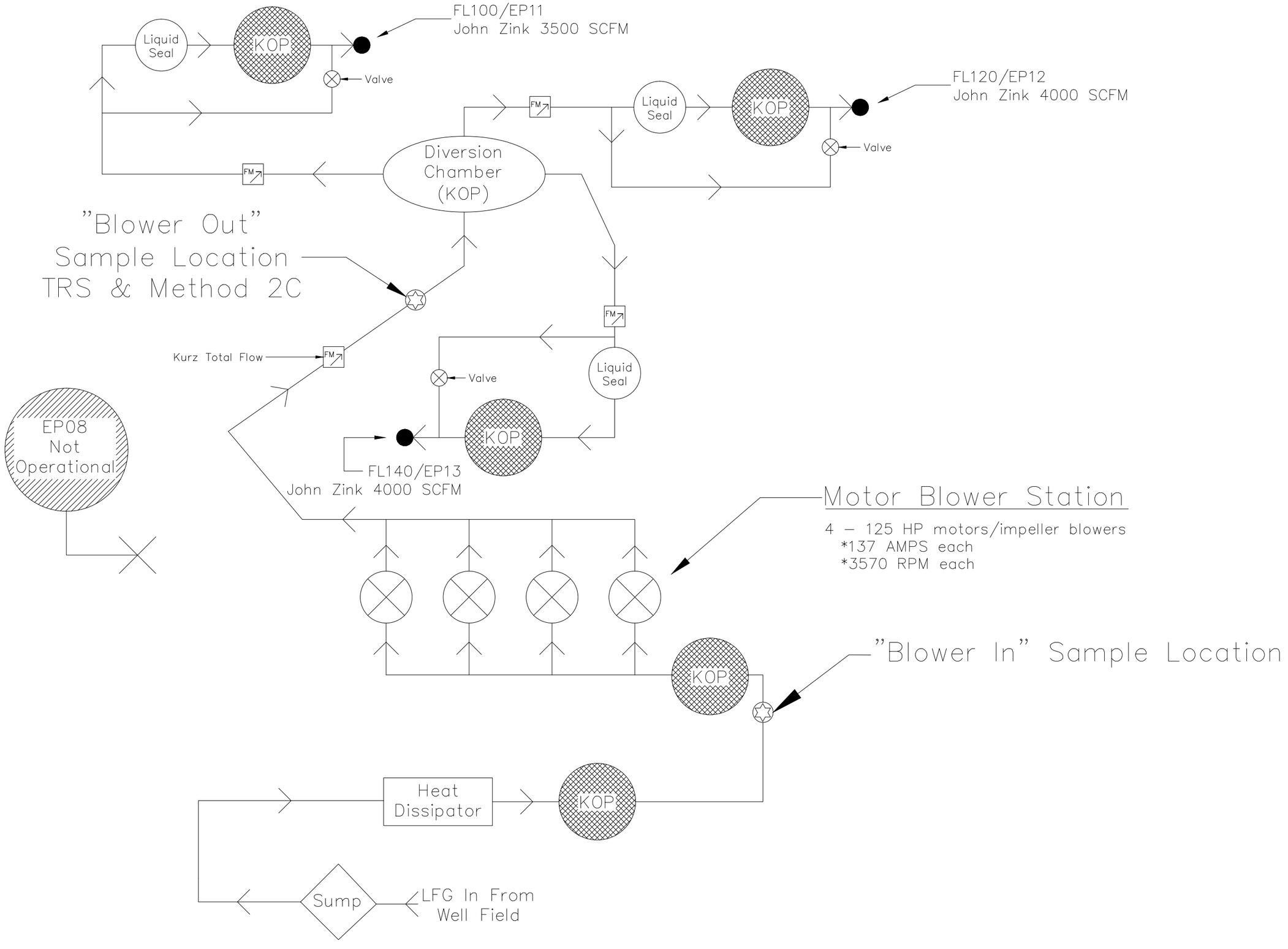


*Gas data collected from GEM 2000

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 **August 1, 2015 through August 31, 2015**

Flare Compound: *Blower Outlet*

SAMPLE EVENT #	DATE	VELOCITY ft/sec	FLOW dscfm	TRS[2] ppm_{vd}
22[1]	8/4/2015	51.76	3218	1600
				1400
23[1]	8/11/2015	62.37	4075	1300
				1900
24	8/18/2015	50.77	4112	1300
				1500
25	8/24/2015	53.01	4294	1500
				1500

Notes:

1. Flow based on EPA Method 2C (& Method 3C and 4) data ccollection from "Blower Outlet" Location

2. TRS analyzed per EPA metohd 15/16, collected from "Blower Outlet" location

	PARAMETER				Blower Out
Date	Test Date				8/4/15
Start	Run Start Time				7:34
	Run Finish Time				9:13
	Net Traversing Points				16 (2 x 8)
Θ	Net Run Time, minutes				1:38:54
C_p	Pitot Tube Coeficient				0.99
P_{Br}	Barometric Pressure, inches of Mercury				29.54
% H_2O	Moisture Content of LFG, %				15.81
% RH	Relative Humidity, %				50.50
M_{fd}	Dry Mole Fraction				0.842
%CH_4	Methane, %				9.50
%CO_2	Carbon Dioxide, %				37.00
%O_2	Oxygen, %				7.95
%Balance	Assumed as Nitorgen, %				32.50
%H_2	Hydrogen, %				11.50
M_d	Dry Molecular Weight, lb/lb-Mole				29.69
M_s	Wet Molecular weight, lb/lb-Mole				27.84
P_g	Flue Gas Static Pressure, inches of H_2O				21.73
P_s	Absolute Flue Gas Pressure, inches of Mercury				31.14
t_s	Average Stack Gas Temperature, °F				144
ΔP_{avg}	Average Velocity Head, inches of H_2O				0.537
v_s	Average LFG Velocity, feet/second				51.76
A_s	Stack Crossectional Area, square feet				1.35
Q_{sd}	Dry Volumetric Flow Rate, dry scfm				3,218
Q_s	Standard Volumetric Flow Rate, scfm				3,727
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm				4,202
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr				14,879
LFG_{CH4}	Methane, lb/hr				764.1
	Methane, grains/dscf				27.70
LFG_{CO2}	Carbon Dioxide, lb/hr				8,163.7
	Carbon Dioxide, grains/dscf				295.93
LFG_{O2}	Oxygen, lb/hr				1275.4
	Oxygen, grains/dscf				46.23
LFG_{N2}	Balance gas as Nitrogen, lb/hr				4,564.4
	Balance gas as Nitrogen, grains/dscf				165.46
LFG_{H4}	Hydrogen, lb/hr				116.2
	Hydrogen, grains/dscf				4.21

				Blower Out Sample #1	Blower Out Sample #2
H_2S	Hydrogen Sulfide Concentration, ppmd			59.00	6.80
	Hydrogen Sulfide Rate, lb/hr			1.01	0.12
	Hydrogen Sulfide Rate, grains/dscf			0.037	0.004
COS	Carbonyl Sulfide Concentration, ppmd			0.59	0.59
	Carboynl Sulfide Rate, lb/hr			0.02	0.02
	Carbonyl Sulfide Rate, grains/dscf			0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd			200.00	170.00
	Methyl Mercaptan Rate, lb/hr			4.82	4.10
	Methyl Mercaptan Rate, grains/dscf			0.175	0.149
C_2H_6S	Ethyl Mercaptan Concentration, ppmd			2.60	2.60
	Ethyl Mercaptan Rate, lb/hr			0.08	0.08
	Ethyl Mercaptan Rate, grains/dscf			0.003	0.003
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd			1,200.00	990.00
	Dimethyl Sulfide Rate, lb/hr			37.38	30.84
	Dimethyl Sulfide Rate, grains/dscf			1.355	1.118
CS_2	Carbon Disulfide Concentration, ppmd			0.87	1.10
	Carbon Disulfide Rate, lb/hr			0.03	0.04
	Carbon Disulfide Rate, grains/dscf			0.001	0.002
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd			98.00	130.00
	Dimethyl Disulfide Rate, lb/hr			4.63	4.96
	Dimethyl Disulfide Rate, grains/dscf			0.168	0.180
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd			1,600.00	1,400.00
	TRS-->SO2 Emission Rate, lb/hr			51.39	44.97
	TRS-->SO2 Emission Rate, grains/dscf			1.863	1.630

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

Tuesday, August 04, 2015

LOCATION	TIME	Q -SCFM		Δ	KURZ	Δ
		METHOD 2	FLEETZOOM			M2 vs Kurz
BLOWER OUT	7:34	3,727	4,044	7.8%	3,972	-6.6%
FL100						
FL120						
FL 140						

Air TECHNOLOGY Laboratories, Inc.

August 7, 2015

ADE-1461
EPA Methods TO-3,TO14A,TO15 SIM & Scan, ASTM D1946

LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-09-TX
EPA Methods TO14A, TO15
UT Cert CA0133332014-1
EPA Methods TO3, TO14A, TO15, RSK-175

Republic Services
ATTN: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: G080501-01/02

Enclosed are results for sample(s) received 8/05/15 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 Jim Getting, Mike Lambrich and Ryan Ayers on 8/7/15.

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

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: 7 Days				Level 4	☐	Chilled _____ deg C

		BILLING	
Project No.:			
Project Name:	Bridgeton Landfill		
Report To:	Jim Getting		
Company:	Republic Services	***P.O. No.:***	PO4862452
Street:	13570 St. Charles Rock Rd.	***Bill to:***	Republic Services
City/State/Zip:	Bridgeton , MO 63044		Attn: Mike Lambrich
Phone& Fax:	314-683-3921		13570 St. Charles Rock Rd.
e-mail:	JGetting@republicservices.com		Bridgeton, MO 63044

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	ANALYSIS REQUEST: EPA 15/16 + TRS & ASTM1946 + H2					
G080501-01	Outlet A	8/4/2015	742	C	LFG	NA	X					
-02	Outlet B	8/4/2015	753	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
Ryan Ayers	8-4-15 1100		
FedEx		Kathy C	8/5/15 8:56

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:	**Jim Getting**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**08/05/15**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	G080501-01		G080501-02					
Client Sample I.D.:	Outlet A		Outlet B					
Date/Time Sampled:	8/4/15 7:42		8/4/15 7:53					
Date/Time Analyzed:	8/5/15 17:38		8/5/15 17:53					
QC Batch No.:	150805GC8A1		150805GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		3.0					
ANALYTE	**Result % v/v**	**RL % v/v**	**Result % v/v**	**RL % v/v**				
Hydrogen	11	3.0	12	3.0				
Carbon Dioxide	36	0.030	38	0.030				
Oxygen/Argon	8.4	1.5	7.5	1.5				
Nitrogen	34	3.0	31	3.0				
Methane	9.3	0.0030	9.9	0.0030				

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

Reviewed/Approved By: _____ **Date** 8-7-15

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.: 150805GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/5/15 12:36		8/5/15 11:52		8/5/15 12:07			
Analyst Initials:	AS		AS		AS			
Datafile:	05aug010		05aug007		05aug008			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	**Results**	**RL**	**% Rec.**	**Criteria**	**% Rec.**	**Criteria**	**%RPD**	**Criteria**
Hydrogen	ND	1.0	115	70-130%	115	70-130%	0.2	<30
Carbon Dioxide	ND	0.010	100	70-130%	100	70-130%	0.1	<30
Oxygen/Argon	ND	0.50	100	70-130%	100	70-130%	0.0	<30
Nitrogen	ND	1.0	100	70-130%	100	70-130%	0.1	<30
Methane	ND	0.0010	93	70-130%	91	70-130%	1.9	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ Date: 8-7-15

Mark J. Johnson
Operations Manager

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

Client:	**Republic Services**
Attn:	**Jim Getting**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**08/05/15**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA 15/16

Lab No.:	G080501-01		G080501-02					
Client Sample I.D.:	Outlet A		Outlet B					
Date/Time Sampled:	8/4/15 7:42		8/4/15 7:53					
Date/Time Analyzed:	8/5/15 9:59		8/5/15 10:36					
QC Batch No.:	150805GC3A1		150805GC3A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		3.0					
ANALYTE	**Result ppmv**	**RL ppmv**	**Result ppmv**	**RL ppmv**				
Hydrogen Sulfide	59 d	5.9	6.8	0.59				
Carbonyl Sulfide	ND	0.59	ND	0.59				
Methyl Mercaptan	200 d	5.9	170 d	5.9				
Ethyl Mercaptan	2.6	0.59	2.6	0.59				
Dimethyl Sulfide	1,200 d	59.0	990 d	59.0				
Carbon Disulfide	0.87	0.59	1.1	0.59				
Dimethyl Disulfide	98 d	5.9	130 d	5.9				
Total Reduced Sulfur	1,600	0.59	1,400	0.59				

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

Reviewed/Approved By: _____ Date 8-7-15

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 150805GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/5/15 8:46		8/5/15 8:23		8/5/15 8:34			
Analyst Initials:	AS		AS		AS			
Datafile:	05aug003		05aug001		05aug002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	93	70-130%	91	70-130%	2.0	<30
Carbonyl Sulfide	ND	0.20	102	70-130%	100	70-130%	1.7	<30
Methyl Mercaptan	ND	0.20	102	70-130%	102	70-130%	0.2	<30
Ethyl Mercaptan	ND	0.20	123	70-130%	124	70-130%	0.6	<30
Dimethyl Sulfide	ND	0.20	98	70-130%	98	70-130%	0.7	<30
Carbon Disulfide	ND	0.20	91	70-130%	91	70-130%	0.2	<30
Dimethyl Disulfide	ND	0.20	109	70-130%	107	70-130%	1.9	<30

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

Reviewed/Approved By: _____ Date: 8-7-15
Mark J. Johnson
Operations Manager

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

	PARAMETER				Blower Out
Date	Test Date				8/11/15
Start	Run Start Time				9:54
	Run Finish Time				11:14
	Net Traversing Points				16 (2 x 8)
Θ	Net Run Time, minutes				1:19:50
C_p	Pitot Tube Coeficient				0.99
P_{Br}	Barometric Pressure, inches of Mercury				29.73
% H_2O	Moisture Content of LFG, %				11.42
% RH	Relative Humidity, %				50.50
M_{fd}	Dry Mole Fraction				0.886
%CH_4	Methane, %				9.10
%CO_2	Carbon Dioxide, %				30.50
%O_2	Oxygen, %				9.55
%Balance	Assumed as Nitorgen, %				39.50
%H_2	Hydrogen, %				9.55
M_d	Dry Molecular Weight, lb/lb-Mole				29.20
M_s	Wet Molecular weight, lb/lb-Mole				27.92
P_g	Flue Gas Static Pressure, inches of H_2O				21.73
P_s	Absolute Flue Gas Pressure, inches of Mercury				31.32
t_s	Average Stack Gas Temperature, °F				148
ΔP_{avg}	Average Velocity Head, inches of H_2O				0.781
v_s	Average LFG Velocity, feet/second				62.37
A_s	Stack Crossectional Area, square feet				1.35
Q_{sd}	Dry Volumetric Flow Rate, dry scfm				4,075
Q_s	Standard Volumetric Flow Rate, scfm				4,541
Q_{aw}	Actual Wet Volumetric Flue Gas Flow Rate, acfm				5,063
$Q_{lb/hr}$	Dry Air Flow Rate at Standard Conditions, lb/hr				18,528
LFG_{CH4}	Methane, lb/hr				926.7
	Methane, grains/dscf				26.53
LFG_{CO2}	Carbon Dioxide, lb/hr				8,521.0
	Carbon Dioxide, grains/dscf				243.94
LFG_{O2}	Oxygen, lb/hr				1939.9
	Oxygen, grains/dscf				55.54
LFG_{N2}	Balance gas as Nitrogen, lb/hr				7,024.4
	Balance gas as Nitrogen, grains/dscf				201.09
LFG_{H4}	Hydrogen, lb/hr				122.2
	Hydrogen, grains/dscf				3.50

				Blower Out Sample #1	Blower Out Sample #2
H_2S	Hydrogen Sulfide Concentration, ppmd			0.56	0.58
	Hydrogen Sulfide Rate, lb/hr			0.01	0.01
	Hydrogen Sulfide Rate, grains/dscf			0.000	0.000
COS	Carbonyl Sulfide Concentration, ppmd			0.56	0.58
	Carboynl Sulfide Rate, lb/hr			0.02	0.02
	Carbonyl Sulfide Rate, grains/dscf			0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd			110.00	0.58
	Methyl Mercaptan Rate, lb/hr			3.36	0.02
	Methyl Mercaptan Rate, grains/dscf			0.096	0.001
C_2H_6S	Ethyl Mercaptan Concentration, ppmd			1.50	0.58
	Ethyl Mercaptan Rate, lb/hr			0.06	0.02
	Ethyl Mercaptan Rate, grains/dscf			0.002	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd			870.00	1,000.00
	Dimethyl Sulfide Rate, lb/hr			34.32	39.44
	Dimethyl Sulfide Rate, grains/dscf			0.982	1.129
CS_2	Carbon Disulfide Concentration, ppmd			0.69	0.81
	Carbon Disulfide Rate, lb/hr			0.03	0.04
	Carbon Disulfide Rate, grains/dscf			0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd			140.00	410.00
	Dimethyl Disulfide Rate, lb/hr			8.37	19.82
	Dimethyl Disulfide Rate, grains/dscf			0.240	0.567
❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd			1,300.00	1,900.00
	TRS-->SO2 Emission Rate, lb/hr			52.87	77.27
	TRS-->SO2 Emission Rate, grains/dscf			1.514	2.212

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, August 11, 2015

LOCATION	TIME	Q -SCFM		Δ	KURZ	Δ
		METHOD 2	FLEETZOOM	M2 vs Fleetzoom		M2 vs Kurz
BLOWER OUT	9:54	4,541	4,761	4.6%	4,473	-1.5%
FL100						
FL120						
FL 140						

Air TECHNOLOGY Laboratories, Inc.

August 21, 2015

ADE-1461
EPA Methods TO-3,TO14A,TO15 SIM & Scan, ASTM D1946

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

TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

UT Cert CA0133332014-1
EPA Methods TO3, TO14A, TO15, RSK-175

Republic Services
ATTN: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Weekly GCCS TRS Sampling
Lab Number: G081203-01/02

Enclosed are results for sample(s) received 8/12/15 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 Jim Getting, Mike Lambrich and Ryan Ayers, David Penoyer, Niki Wuestenberg and Mike Beaudoin on 8/21/15.

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

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:				Level 4	☐	Chilled _____ deg C

Project No.:	0120-131-10-47
Project Name:	Bridgeton Weekly GCCS TRS Sampling
Report To:	David A. Randall/Jim Getting
Company:	Bridgeton Landfill, LLC./Weaver Consultants Group
Street:	6301 East Highway AB
City/State/Zip:	Columbia, MO 65201
Phone& Fax:	888-660-0346
e-mail:	drandall@weaverboos.com

BILLING

P.O. No.:

Bill to: Mr. Jim Getting

ANALYSIS REQUEST

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA 15/16 + TRS & ASTM1946 + H2					
G081203-01	Blower Outlet #1, Can # 1531	8/11/2015	0959	C -1L	LFG		X					
" -02	Blower Outlet #2, Can # 1538	8/11/2015	1042	C-1L	LFG		X					

AUTHORIZATION TO PERFORM WORK	COMPANY	DATE/TIME
David A. Ranall	Weaver Consultants Group	03/26/2015
SAMPLED BY	COMPANY	DATE/TIME
J Holt/D Randall	Weaver Consultants Group	08/11/15 8-12
RELINQUISHED BY	DATE/TIME	RECEIVED BY / DATE/TIME
[signature]	08/11/15 1330	
RELINQUISHED BY	DATE/TIME	RECEIVED BY / DATE/TIME
Fed EX		Kathy C 8/12/15 1209
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: Jim Getting
Project Name: Bridgeton Weekly GCCS TRS Sampling
Project No.: 0120-131-10-47
Date Received: 08/12/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081203-01		G081203-02					
Client Sample I.D.:	Blower Outlet #1 - Can 1531		Blower Outlet #2 - Can 1538					
Date/Time Sampled:	8/11/15 9:59		8/11/15 10:42					
Date/Time Analyzed:	8/20/15 14:49		8/20/15 15:04					
QC Batch No.:	150820GC8A1		150820GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	2.8		2.9					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	9.1	2.8	10	2.9				
Carbon Dioxide	29	0.028	32	0.029				
Oxygen/Argon	10	1.4	9.1	1.4				
Nitrogen	41	2.8	38	2.9				
Methane	8.7	0.0028	9.5	0.0029				

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

Reviewed/Approved By: _____ Date 8/21/15
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.: 150820GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/20/15 14:05		8/20/15 13:21		8/20/15 13:36			
Analyst Initials:	AS		AS		AS			
Datafile:	20aug007		20aug004		20aug005			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	**Results**	**RL**	**% Rec.**	**Criteria**	**% Rec.**	**Criteria**	**%RPD**	**Criteria**
Hydrogen	ND	1.0	99	70-130%	99	70-130%	0.2	<30
Carbon Dioxide	ND	0.010	91	70-130%	91	70-130%	0.1	<30
Oxygen/Argon	ND	0.50	101	70-130%	101	70-130%	0.0	<30
Nitrogen	ND	1.0	101	70-130%	101	70-130%	0.0	<30
Methane	ND	0.0010	102	70-130%	100	70-130%	1.8	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ **Date:** 8/21/15

Mark J. Johnson
Operations Manager

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

Client: Republic Services
Attn: Jim Getting
Project Name: Bridgeton Weekly GCCS TRS Sampling
Project No.: 0120-131-10-47
Date Received: 08/12/15
Matrix: Air
Reporting Units: ppmv

EPA 15/16

Lab No.:	G081203-01		G081203-02					
Client Sample I.D.:	Blower Outlet #1 - Can 1531		Blower Outlet #2 - Can 1538					
Date/Time Sampled:	8/11/15 9:59		8/11/15 10:42					
Date/Time Analyzed:	8/13/15 9:18		8/13/15 9:56					
QC Batch No.:	150813GC3A1		150813GC3A1					
Analyst Initials:	AS		AS					
Dilution Factor:	2.8		2.9					
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv				
Hydrogen Sulfide	ND	0.56	ND	0.58				
Carbonyl Sulfide	ND	0.56	ND	0.58				
Methyl Mercaptan	110 d	5.6	ND	0.58				
Ethyl Mercaptan	1.5	0.56	ND	0.58				
Dimethyl Sulfide	870 d	56.0	1,000 d	58.0				
Carbon Disulfide	0.69	0.56	0.81	0.58				
Dimethyl Disulfide	140 d	5.6	410 d	58.0				
Total Reduced Sulfur	1,300	0.56	1,900	0.58				

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

Reviewed/Approved By: _____ Date 8/21/15
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 150813GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/13/15 8:56		8/13/15 8:32		8/13/15 8:43			
Analyst Initials:	AS		AS		AS			
Datafile:	13aug004		13aug002		13aug003			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	91	70-130%	90	70-130%	0.8	<30
Carbonyl Sulfide	ND	0.20	95	70-130%	92	70-130%	3.4	<30
Methyl Mercaptan	ND	0.20	100	70-130%	95	70-130%	4.5	<30
Ethyl Mercaptan	ND	0.20	118	70-130%	116	70-130%	1.9	<30
Dimethyl Sulfide	ND	0.20	92	70-130%	89	70-130%	2.6	<30
Carbon Disulfide	ND	0.20	86	70-130%	84	70-130%	2.4	<30
Dimethyl Disulfide	ND	0.20	90	70-130%	89	70-130%	1.3	<30

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

Reviewed/Approved By: _____ Date: 8/21/15
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weeklty TRS Sampling Summary

Kurz FM =	**4,569**	**scfm**
Fleetzoom Total =	**4,794**	**scfm**

$\Delta =$ **4.7%**

	PARAMETER	Blower Out #1	Blower Out #2
Date	Test Date		8/18/15
Time	Start - Finish	9:01	9:22
%CH_4	Methane, %	8.50	8.60
%CO_2	Carbon Dioxide, %	29.00	29.00
%O_2	Oxygen, %	10.00	10.00
%Balance	Assumed as Nitorgen, %	42.00	42.00
%H_2	Hydrogen, %	8.90	9.10
P_g	Flue Gas Static Pressure, inches of H_2O	22.89	22.89
t_s	Blower Outlet LFG Temperature, °F	130	130
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 10%H2O)	4,112	
Q_s	Kurz FM, Standard Volumetric Flow Rate, scfm	4,569	
LFG_{CH4}	Methane, lb/hr	873.5	883.8
	Methane, grains/dscf	24.78	25.07
LFG_{CO2}	Carbon Dioxide, lb/hr	8,175.9	8,175.9
	Carbon Dioxide, grains/dscf	231.94	231.94
LFG_{O2}	Oxygen, lb/hr	2,049.9	2,049.9
	Oxygen, grains/dscf	58.15	58.15
LFG_{N2}	Balance gas as Nitrogen, lb/hr	7,537.1	7,537.1
	Balance gas as Nitrogen, grains/dscf	213.82	213.82
LFG_{H4}	Hydrogen, lb/hr	114.9	117.5
	Hydrogen, grains/dscf	3.26	3.33

		Blower Out #1	Blower Out #2
H_2S	Hydrogen Sulfide Concentration, ppmd	0.59	0.59
	Hydrogen Sulfide Rate, lb/hr	0.01	0.01
	Hydrogen Sulfide Rate, grains/dscf	0.000	0.000
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.02	0.02
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	80.00	7.20
	Methyl Mercaptan Rate, lb/hr	2.47	0.22
	Methyl Mercaptan Rate, grains/dscf	0.070	0.006
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.30	0.59
	Ethyl Mercaptan Rate, lb/hr	0.05	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	830.00	920.00
	Dimethyl Sulfide Rate, lb/hr	33.04	36.62
	Dimethyl Sulfide Rate, grains/dscf	0.937	1.039
CS_2	Carbon Disulfide Concentration, ppmd	0.69	0.74
	Carbon Disulfide Rate, lb/hr	0.03	0.04
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	180.00	290.00
	Dimethyl Disulfide Rate, lb/hr	10.86	17.50
	Dimethyl Disulfide Rate, grains/dscf	0.308	0.496

❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,300.00	1,500.00
	TRS-->SO2 Emission Rate, lb/hr	53.35	61.56
	TRS-->SO2 Emission Rate, grains/dscf	1.514	1.746

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

Air TECHNOLOGY Laboratories, Inc.

August 21, 2015

ADE-1461
EPA Methods TO-3,TO14A,TO15 SIM & Scan, ASTM D1946

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

TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

UT Cert CA0133332014-1
EPA Methods TO3, TO14A, TO15, RSK-175

Republic Services
ATTN: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill; 4862452
Lab Number: G081903-01/02

Enclosed are results for sample(s) received 8/19/15 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 Jim Getting, Mike Lambrich and Ryan Ayers, David Penoyer, Niki Wuestenberg and Mike Beaudoin on 8/21/15.

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

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: 7 Days

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:	Jim Getting
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: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA 15/16 + TRS & ASTM1946 + H2					
G081903-01	Outlet A	8/18/2015	901	C	LFG	NA	X					
↓ -02	Outlet B	8/18/2015	912	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY: FedEx	DATE/TIME	RECEIVED BY: Kathye	DATE/TIME: 8/19/15 1136
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: Jim Getting
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 08/19/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081903-01		G081903-02					
Client Sample I.D.:	Outlet A		Outlet B					
Date/Time Sampled:	8/18/15 9:01		8/18/15 9:12					
Date/Time Analyzed:	8/20/15 14:20		8/20/15 14:35					
QC Batch No.:	150820GC8A1		150820GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		3.0					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	8.9	3.0	9.1	3.0				
Carbon Dioxide	29	0.030	29	0.030				
Oxygen/Argon	10	1.5	10	1.5				
Nitrogen	42	3.0	42	3.0				
Methane	8.5	0.0030	8.6	0.0030				
Carbon Monoxide	0.089	0.0030	0.092	0.0030				

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

Reviewed/Approved By: _____ **Date** 8/21/15
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.: 150820GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/20/15 14:05		8/20/15 13:21		8/20/15 13:36			
Analyst Initials:	AS		AS		AS			
Datafile:	20aug007		20aug004		20aug005			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	99	70-130%	99	70-130%	0.2	<30
Carbon Dioxide	ND	0.010	91	70-130%	91	70-130%	0.1	<30
Oxygen/Argon	ND	0.50	101	70-130%	101	70-130%	0.0	<30
Nitrogen	ND	1.0	101	70-130%	101	70-130%	0.0	<30
Methane	ND	0.0010	102	70-130%	100	70-130%	1.8	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ **Date:** 8/21/15

Mark J. Johnson
Operations Manager

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

Client:	**Republic Services**
Attn:	**Jim Getting**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**08/19/15**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA 15/16

Lab No.:	G081903-01		G081903-02					
Client Sample I.D.:	Outlet A		Outlet B					
Date/Time Sampled:	8/18/15 9:01		8/18/15 9:12					
Date/Time Analyzed:	8/20/15 11:29		8/20/15 12:14					
QC Batch No.:	150820GC3A1		150820GC3A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.0		3.0					
ANALYTE	**Result ppmv**	**RL ppmv**	**Result ppmv**	**RL ppmv**				
Hydrogen Sulfide	ND	0.59	ND	0.59				
Carbonyl Sulfide	ND	0.59	ND	0.59				
Methyl Mercaptan	80 d	5.9	7.2	0.59				
Ethyl Mercaptan	1.3	0.59	ND	0.59				
Dimethyl Sulfide	830 d	59.0	920 d	59.0				
Carbon Disulfide	0.69	0.59	0.74	0.59				
Dimethyl Disulfide	180 d	59.0	290 d	59.0				
Total Reduced Sulfur	1,300	0.59	1,500	0.59				

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

Reviewed/Approved By: _____ **Date** 8/21/15

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 150820GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/20/15 11:17		8/20/15 10:55		8/20/15 11:06			
Analyst Initials:	AS		AS		AS			
Datafile:	20aug004		20aug002		20aug003			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	98	70-130%	97	70-130%	1.7	<30
Carbonyl Sulfide	ND	0.20	106	70-130%	105	70-130%	0.7	<30
Methyl Mercaptan	ND	0.20	110	70-130%	107	70-130%	3.0	<30
Ethyl Mercaptan	ND	0.20	106	70-130%	107	70-130%	0.6	<30
Dimethyl Sulfide	ND	0.20	113	70-130%	111	70-130%	1.7	<30
Carbon Disulfide	ND	0.20	109	70-130%	108	70-130%	1.1	<30
Dimethyl Disulfide	ND	0.20	123	70-130%	118	70-130%	4.4	<30

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

Reviewed/Approved By: _____ Date: 8/21/15
Mark J. Johnson
Operations Manager

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

Bridgeton Landfill, LLC.
Weeklty TRS Sampling Summary

Kurz FM =	**4,569**	**scfm**
Fleetzoom Total =	**4,794**	**scfm**

$\Delta =$ **4.7%**

	PARAMETER	Blower Out #1	Blower Out #2
Date	Test Date		8/18/15
Time	Start - Finish	9:01	9:22
%CH_4	Methane, %	8.50	8.60
%CO_2	Carbon Dioxide, %	29.00	29.00
%O_2	Oxygen, %	10.00	10.00
%Balance	Assumed as Nitorgen, %	42.00	42.00
%H_2	Hydrogen, %	8.90	9.10
P_g	Flue Gas Static Pressure, inches of H_2O	22.89	22.89
t_s	Blower Outlet LFG Temperature, °F	130	130
Q_{sd}	Dry Volumetric Flow Rate, dry scfm (assumes 10%H2O)	4,112	
Q_s	Kurz FM, Standard Volumetric Flow Rate, scfm	4,569	
LFG_{CH4}	Methane, lb/hr	873.5	883.8
	Methane, grains/dscf	24.78	25.07
LFG_{CO2}	Carbon Dioxide, lb/hr	8,175.9	8,175.9
	Carbon Dioxide, grains/dscf	231.94	231.94
LFG_{O2}	Oxygen, lb/hr	2,049.9	2,049.9
	Oxygen, grains/dscf	58.15	58.15
LFG_{N2}	Balance gas as Nitrogen, lb/hr	7,537.1	7,537.1
	Balance gas as Nitrogen, grains/dscf	213.82	213.82
LFG_{H4}	Hydrogen, lb/hr	114.9	117.5
	Hydrogen, grains/dscf	3.26	3.33

		Blower Out #1	Blower Out #2
H_2S	Hydrogen Sulfide Concentration, ppmd	0.59	0.59
	Hydrogen Sulfide Rate, lb/hr	0.01	0.01
	Hydrogen Sulfide Rate, grains/dscf	0.000	0.000
COS	Carbonyl Sulfide Concentration, ppmd	0.59	0.59
	Carboynl Sulfide Rate, lb/hr	0.02	0.02
	Carbonyl Sulfide Rate, grains/dscf	0.001	0.001
CH_4S	Methyl Mercaptan Concentration, ppmd	80.00	7.20
	Methyl Mercaptan Rate, lb/hr	2.47	0.22
	Methyl Mercaptan Rate, grains/dscf	0.070	0.006
C_2H_6S	Ethyl Mercaptan Concentration, ppmd	1.30	0.59
	Ethyl Mercaptan Rate, lb/hr	0.05	0.02
	Ethyl Mercaptan Rate, grains/dscf	0.001	0.001
$(CH_3)_2S$	Dimethyl Sulfide Concentration, ppmd	830.00	920.00
	Dimethyl Sulfide Rate, lb/hr	33.04	36.62
	Dimethyl Sulfide Rate, grains/dscf	0.937	1.039
CS_2	Carbon Disulfide Concentration, ppmd	0.69	0.74
	Carbon Disulfide Rate, lb/hr	0.03	0.04
	Carbon Disulfide Rate, grains/dscf	0.001	0.001
$C_2H_6S_2$	Dimethyl Disulfide Concentration, ppmd	180.00	290.00
	Dimethyl Disulfide Rate, lb/hr	10.86	17.50
	Dimethyl Disulfide Rate, grains/dscf	0.308	0.496

❶$E_{TRS-SO2}$	TRS-->SO2 Emission Concentration, ppmd	1,300.00	1,500.00
	TRS-->SO2 Emission Rate, lb/hr	53.35	61.56
	TRS-->SO2 Emission Rate, grains/dscf	1.514	1.746

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

AirTECHNOLOGY Laboratories, Inc.

August 27, 2015

ADE-1461
EPA Methods TO-3,TO14A,TO15 SIM & Scan, ASTM D1946

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

TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

UT Cert CA0133332014-1
EPA Methods TO3, TO14A, TO15, RSK-175

Republic Services
ATTN: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill; 4862452
Lab Number: G082503-01/02

Enclosed are results for sample(s) received 8/25/15 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 Jim Getting, Mike Lambrich, Brian Power, Ryan Ayers, David Penoyer, Niki Wuestenberg, Mike Beaudoin, David Randall and Jesse Varsho on 8/27/15.

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

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: 7 Days

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:	Jim Getting
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: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	EPA 15/16 + TRS & ASTM1946 + H2					
B082503-01	Outlet A	8/24/2015	1119	C	LFG	NA	X					
-02	Outlet B	8/24/2015	1209	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
[signature]	8-24-15 1230		
FedEx		Kathy C	8/25/15 1208

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: Jim Getting
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 08/25/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G082503-01		G082503-02					
Client Sample I.D.:	Outlet A		Outlet B					
Date/Time Sampled:	8/24/15 11:19		8/24/15 12:09					
Date/Time Analyzed:	8/25/15 15:45		8/25/15 16:00					
QC Batch No.:	150825GC8A2		150825GC8A2					
Analyst Initials:	AS		AS					
Dilution Factor:	3.2		3.2					
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v				
Hydrogen	9.3	3.2	10.0	3.2				
Carbon Dioxide	30	0.032	32	0.032				
Oxygen/Argon	10	1.6	9.2	1.6				
Nitrogen	42	3.2	38	3.2				
Methane	8.1	0.0032	9.3	0.0032				

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

Reviewed/Approved By: _____ Date 8/27/15
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.: 150825GC8A2
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/25/15 15:30		8/25/15 14:46		8/25/15 15:01			
Analyst Initials:	AS		AS		AS			
Datafile:	25aug028		25aug025		25aug026			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	105	70-130%	101	70-130%	4.5	<30
Carbon Dioxide	ND	0.010	94	70-130%	90	70-130%	5.0	<30
Oxygen/Argon	ND	0.50	100	70-130%	95	70-130%	4.9	<30
Nitrogen	ND	1.0	100	70-130%	95	70-130%	4.9	<30
Methane	ND	0.0010	102	70-130%	100	70-130%	1.8	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: MJJ for Date: 8/27/15

Mark J. Johnson
Operations Manager

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

Client:	**Republic Services**
Attn:	**Jim Getting**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**08/25/15**
Matrix:	**Air**
Reporting Units:	**ppmv**

EPA 15/16

Lab No.:	G082503-01		G082503-02					
Client Sample I.D.:	Outlet A		Outlet B					
Date/Time Sampled:	8/24/15 11:19		8/24/15 12:09					
Date/Time Analyzed:	8/25/15 13:47		8/25/15 14:09					
QC Batch No.:	150825GC3A1		150825GC3A1					
Analyst Initials:	AS		AS					
Dilution Factor:	3.2		3.2					
ANALYTE	**Result ppmv**	**RL ppmv**	**Result ppmv**	**RL ppmv**				
Hydrogen Sulfide	ND	0.63	35 d	6.3				
Carbonyl Sulfide	ND	0.63	ND	0.63				
Methyl Mercaptan	4.8	0.63	170 d	6.3				
Ethyl Mercaptan	ND	0.63	2.4	0.63				
Dimethyl Sulfide	930 d	63.0	1,100 d	63.0				
Carbon Disulfide	0.70	0.63	0.77	0.63				
Dimethyl Disulfide	300 d	63.0	120 d	6.3				
Total Reduced Sulfur	1,500	0.63	1,500	0.63				

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

Reviewed/Approved By: _____ Date 8/27/15

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.: 150825GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/25/15 13:35		8/25/15 13:12		8/25/15 13:24			
Analyst Initials:	AS		AS		AS			
Datafile:	25aug005		25aug003		25aug004			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	74	70-130%	78	70-130%	5.1	<30
Carbonyl Sulfide	ND	0.20	87	70-130%	90	70-130%	2.9	<30
Methyl Mercaptan	ND	0.20	90	70-130%	92	70-130%	2.0	<30
Ethyl Mercaptan	ND	0.20	92	70-130%	94	70-130%	2.5	<30
Dimethyl Sulfide	ND	0.20	97	70-130%	102	70-130%	4.9	<30
Carbon Disulfide	ND	0.20	88	70-130%	91	70-130%	3.2	<30
Dimethyl Disulfide	ND	0.20	101	70-130%	101	70-130%	0.4	<30

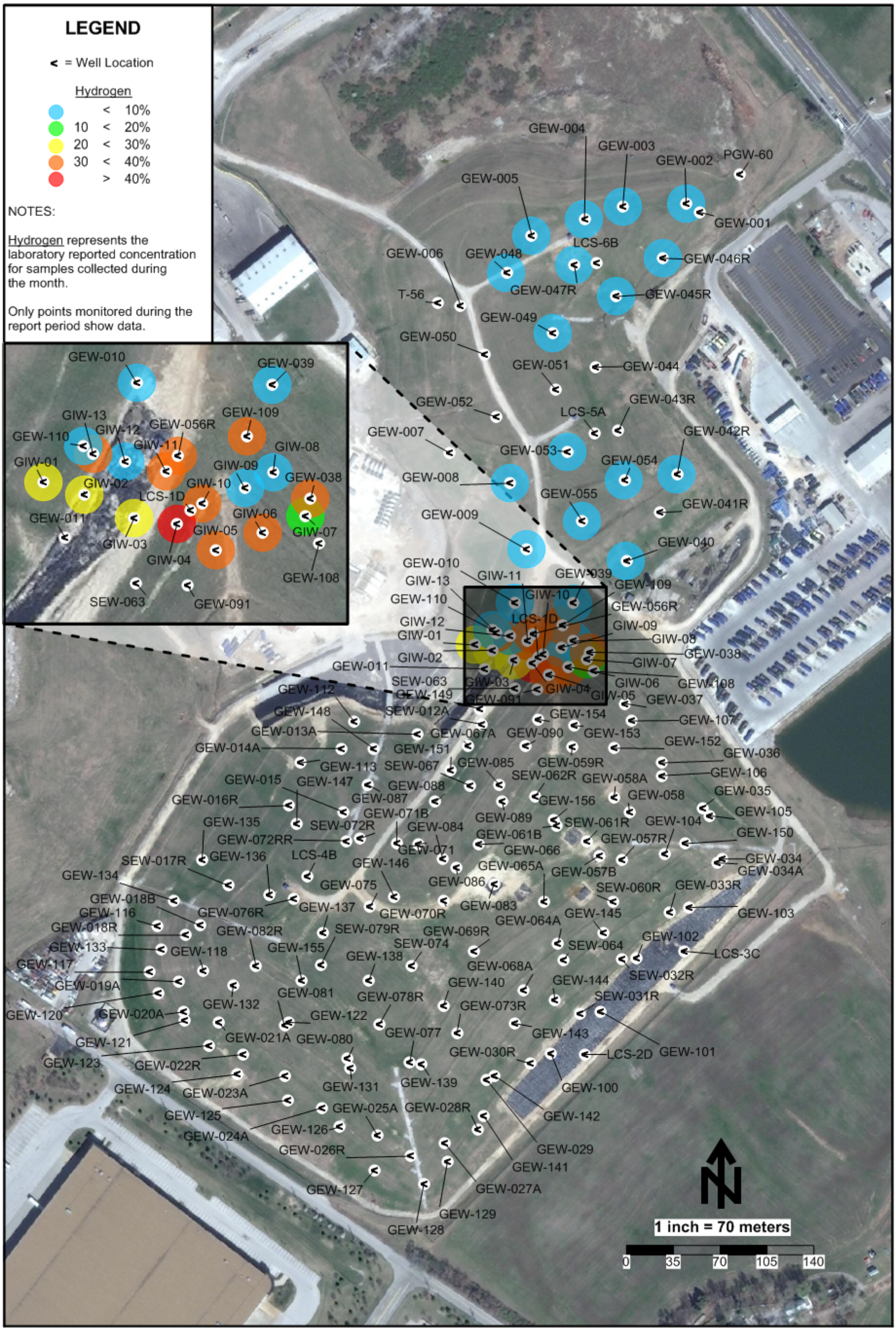
ND = Not Detected (Below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date: 8/27/15
Mark J. Johnson
Operations Manager

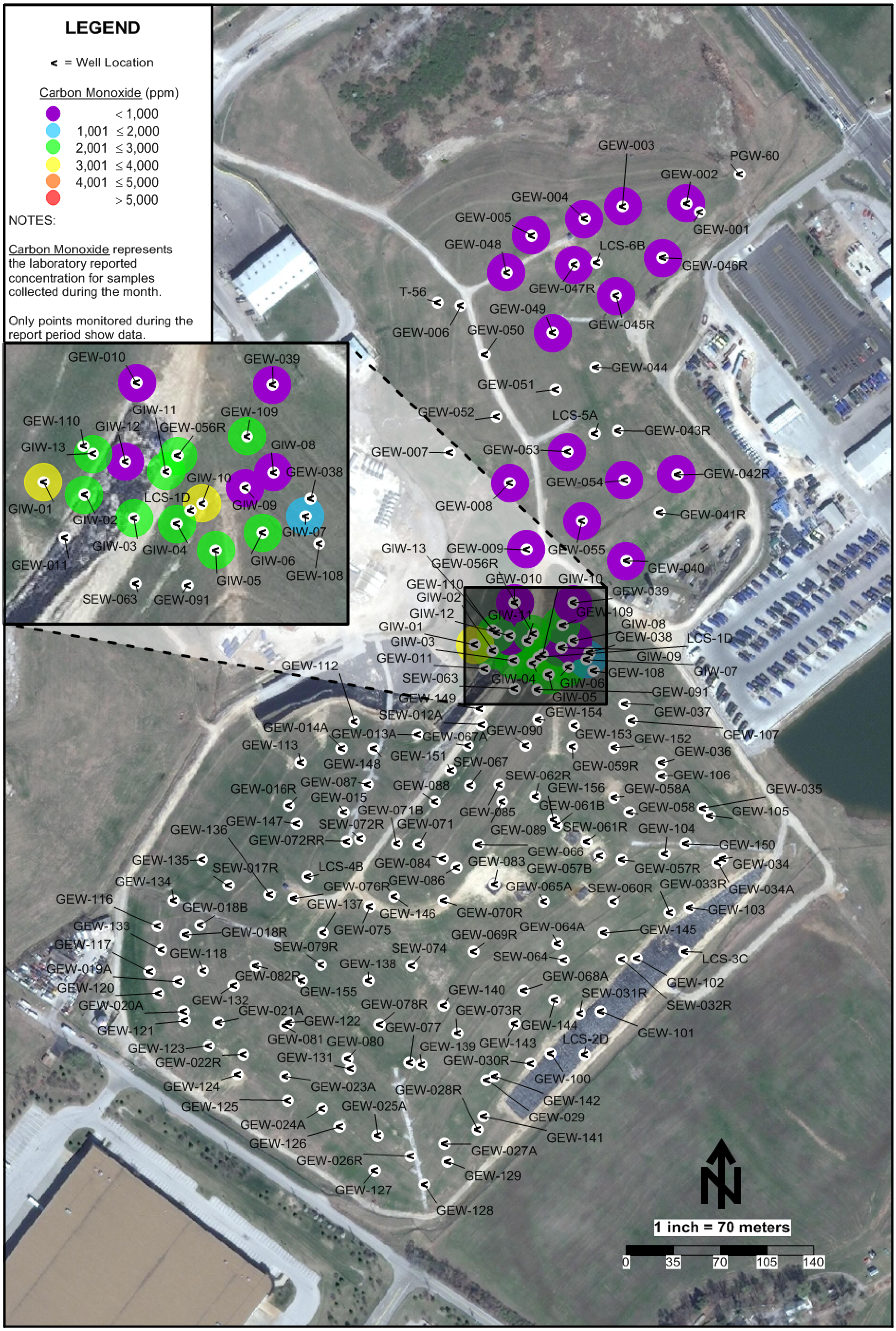
The cover letter is an integral part of this analytical report.

ATTACHMENT C

GAS WELL ANALYSES MAPS



Hydrogen Data Map - August 2015 - Bridgeton Landfill



Carbon Monoxide Data Map - August 2015 - Bridgeton Landfill

LEGEND

< = Well Location

Maximum Temperature

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

NOTES:

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

Only points monitored during the report period show data.

1 inch = 70 meters

0 35 70 105 140

Initial Temperature Maximums - August 2015 - 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	5/12/2015	57	40	ND	ND	ND	ND	
GEW-002	6/2/2015	55	39	ND	4.2	ND	ND	
GEW-002	7/9/2015	46	36	4.1	15	ND	ND	See Note 1
GEW-002	7/22/2015	56	41	ND	ND	ND	ND	See Note 2
GEW-002	8/13/2015	57	40	ND	ND	ND	ND	
GEW-003	5/12/2015	53	38	ND	8.4	0.1	ND	
GEW-003	6/2/2015	53	38	ND	6.8	0.1	ND	
GEW-003	7/9/2015	51	39	ND	9.1	0.1	ND	
GEW-003	7/22/2015	54	40	ND	5.8	0.1	ND	See Note 2
GEW-003	8/13/2015	53	38	1.6	8.1	0.1	ND	
GEW-004	5/12/2015	57	39	ND	ND	ND	ND	
GEW-004	6/2/2015	54	39	ND	5.3	ND	ND	
GEW-004	7/9/2015	53	40	ND	6.8	0.1	ND	
GEW-004	8/13/2015	53	39	ND	7.9	0.1	ND	
GEW-005	5/12/2015	56	36	ND	6.6	ND	ND	
GEW-005	6/3/2015	48	34	ND	16	ND	ND	
GEW-005	7/10/2015	24	21	9.5	46	ND	ND	See Note 1
GEW-005	8/13/2015	43	35	ND	21	ND	ND	
GEW-006	5/12/2015	57	37	ND	4.9	ND	ND	
GEW-007	5/13/2015	58	39	ND	ND	ND	ND	
GEW-007	7/9/2015	54	38	ND	6	ND	ND	
GEW-008	4/10/2015	51	44	ND	ND	2.6	33	
GEW-008	5/13/2015	52	42	ND	3.4	2.2	ND	
GEW-008	6/4/2015	52	43	ND	ND	1.7	32	
GEW-008	7/9/2015	46	41	2.4	8.4	1.8	ND	
GEW-008	8/13/2015	51	44	ND	ND	1.5	ND	
GEW-009	4/10/2015	49	40	ND	8.5	0.6	ND	
GEW-009	5/13/2015	53	40	ND	5.4	0.7	ND	
GEW-009	6/4/2015	53	40	ND	5	0.6	ND	
GEW-009	7/9/2015	50	41	ND	6.6	0.6	ND	
GEW-009	8/13/2015	53	41	ND	4.3	0.5	ND	
GEW-040	4/10/2015	54	43	ND	ND	ND	ND	
GEW-040	5/12/2015	57	40	ND	ND	ND	ND	
GEW-040	6/3/2015	48	34	3.8	14	ND	ND	
GEW-040	7/9/2015	56	40	ND	ND	ND	ND	
GEW-040	8/13/2015	57	38	ND	3.4	ND	ND	
GEW-041R	5/12/2015	58	39	ND	ND	ND	ND	
GEW-041R	7/9/2015	48	34	3.7	14	ND	ND	See Note 1
GEW-042R	5/12/2015	52	34	3.0	11	ND	ND	
GEW-042R	6/3/2015	49	34	3.1	13	ND	ND	
GEW-042R	7/9/2015	49	35	3.3	12	ND	ND	
GEW-042R	8/13/2015	57	39	ND	3	ND	ND	
GEW-043R	5/12/2015	57	41	ND	ND	0.0	ND	
GEW-043R	7/9/2015	56	42	ND	ND	0.2	ND	
GEW-044	5/12/2015	53	34	ND	12	ND	ND	
GEW-044	7/9/2015	43	31	4.0	22	ND	ND	See Note 1
GEW-045R	5/12/2015	60	37	ND	ND	ND	ND	
GEW-045R	6/4/2015	57	39	ND	ND	ND	ND	
GEW-045R	7/9/2015	57	38	ND	3	ND	ND	
GEW-045R	8/13/2015	57	37	ND	4	ND	ND	
GEW-046R	5/12/2015	56	38	ND	5.2	0.1	ND	
GEW-046R	6/4/2015	54	37	ND	6.9	ND	ND	
GEW-046R	7/9/2015	52	38	ND	8.2	0.1	ND	
GEW-046R	8/13/2015	54	39	ND	5.9	0.1	ND	
GEW-047R	5/12/2015	56	40	ND	3.7	ND	ND	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-047R	7/9/2015	43	35	2.0	20	ND	ND	
GEW-047R	8/13/2015	41	35	ND	22	0.1	ND	
GEW-048	5/12/2015	57	38	ND	4.3	ND	ND	
GEW-048	6/3/2015	52	36	ND	11	ND	ND	
GEW-048	8/13/2015	54	38	ND	8	ND	ND	
GEW-049	5/12/2015	54	37	ND	7.8	0.1	ND	
GEW-049	6/4/2015	43	32	2.0	22	ND	ND	
GEW-049	7/10/2015	33	27	6.0	34	ND	ND	See Note 1
GEW-049	8/13/2015	42	34	ND	23	ND	ND	
GEW-050	5/12/2015	58	39	ND	ND	0.1	ND	
GEW-051	5/12/2015	57	39	ND	ND	1.3	ND	
GEW-051	7/10/2015	55	41	ND	ND	1	ND	
GEW-052	5/12/2015	54	38	ND	7.7	ND	ND	
GEW-052	7/10/2015	49	39	ND	11	ND	ND	
GEW-053	5/13/2015	51	40	ND	ND	5.2	ND	
GEW-053	6/4/2015	51	41	ND	ND	5.8	71	
GEW-053	7/10/2015	49	40	2.0	6	3.3	41	
GEW-053	8/13/2015	51	41	ND	ND	5.2	59	
GEW-054	4/24/2015	51	41	ND	ND	4.6	ND	
GEW-054	5/13/2015	53	41	ND	ND	4.4	ND	
GEW-054	6/4/2015	53	41	ND	ND	2.9	35	
GEW-054	7/10/2015	50	43	ND	ND	4.2	ND	
GEW-054	8/13/2015	54	41	ND	ND	3.0	33	
GEW-055	4/10/2015	52	41	ND	3.9	2	ND	
GEW-055	5/13/2015	55	41	ND	ND	1.5	ND	
GEW-055	6/3/2015	49	37	3.0	9	1.2	ND	
GEW-055	7/10/2015	51	40	1.8	6.4	1.5	39	
GEW-055	8/13/2015	54	41	ND	ND	1.5	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

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
South Quarry								
GEW-010	4/10/2015	54	39	ND	4.3	0.5	83	
GEW-010	5/7/2015	41	36	2.6	20	0.7	75	
GEW-010	6/1/2015	50	36	2.5	9.9	ND	32	
GEW-010	7/9/2015	52	43	ND	3.3	0.2	ND	
GEW-010	8/6/2015	49	36	2.9	11.0	0.2	ND	See Note 1
GEW-011	5/13/2015	3.4	50	ND	21	23	2,200	
GEW-011	7/22/2015	3	61	ND	ND	32	2,300	See Note 2
GEW-016R	5/13/2015	0.6	55	ND	ND	41	2,500	
GEW-022R	5/13/2015	1.9	62	ND	ND	32	4,000	
GEW-023A	5/13/2015	0.1	65	ND	ND	31	4,800	
GEW-025A	5/13/2015	0.2	64	ND	ND	30	6,000	
GEW-028R	5/13/2015	1.9	50	3.6	13	30	3,400	
GEW-028R	7/9/2015	0.4	40	8.1	29	22	2,700	
GEW-028R	7/22/2015	19.0	45	6.4	23	23	2,700	See Note 2
GEW-029	5/13/2015	0.2	55	ND	ND	40	4,100	
GEW-038	4/15/2015	0.2	41	6.5	24	28	2,600	
GEW-038	5/7/2015	0.1	25	12.0	44	17	1,900	
GEW-038	7/9/2015	0.4	45	5.8	21	27	2,400	
GEW-038	8/6/2015	0.2	47	4.5	16	31	3,100	
GEW-039	4/15/2015	32	57	ND	ND	8.2	450	
GEW-039	5/7/2015	36	52	ND	4.9	5.2	250	
GEW-039	6/1/2015	37	53	ND	4.3	5.3	240	
GEW-039	7/9/2015	36	51	ND	7.2	4.2	280	
GEW-039	7/22/2015	37	51	ND	6.9	3.4	280	See Note 2
GEW-039	8/6/2015	40	52	ND	ND	4.2	200	
GEW-056R	4/10/2015	14	41	1.9	32	10	680	
GEW-056R	5/7/2015	12	51	ND	9.7	26	1,400	
GEW-056R	6/16/2015	17	44	ND	23	15	890	
GEW-056R	7/9/2015	7.1	31	5.6	44	12	1,100	
GEW-056R	8/6/2015	2.2	52	ND	5	38	2,100	
GEW-057R	5/12/2015	0.5	55	ND	3.4	39	2,600	
GEW-057R	7/9/2015	0.5	55	ND	ND	40	2,500	
GEW-058	5/8/2015	0.9	54	1.7	7.3	35	2,600	
GEW-058	7/9/2015	4	55	ND	ND	37	2,200	
GEW-058A	5/8/2015	0.4	46	4.3	16	33	2,300	
GEW-058A	7/9/2015	0.4	49	2.3	8.2	39	2,700	
GEW-059R	5/8/2015	1.5	51	1.5	5.3	39	1,600	
GEW-059R	7/9/2015	0.4	52	ND	ND	43	1,900	
GEW-065A	5/12/2015	0.4	59	ND	ND	37	3,400	
GEW-065A	7/9/2015	0.4	45	5.5	20	28	2,800	
GEW-065A	7/22/2015	0.5	58	ND	ND	37	2,900	See Note 2
GEW-071	5/13/2015	0.5	53	ND	ND	43	2,500	
GEW-080	5/13/2015	0.3	59	ND	3.3	35	4,000	
GEW-081	5/13/2015	0.3	61	ND	ND	35	3,900	
GEW-082R	5/13/2015	0.9	52	1.7	5.8	38	2,500	
GEW-082R	7/9/2015	1.0	55	ND	ND	40	2,100	
GEW-086	7/9/2015	13	46	3.2	17	20	1,200	
GEW-090	5/13/2015	6.3	50	ND	ND	39	2,400	
GEW-090	7/9/2015	4.1	50	ND	3.4	41	2,100	
GEW-107	5/13/2015	0.3	50	3.5	13	30	3,200	
GEW-109	4/15/2015	1.6	52	2.4	8.4	34	2,400	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GEW-109	5/7/2015	2.6	54	1.7	6	35	2,200	
GEW-109	6/1/2015	2.8	55	ND	ND	38	2,400	
GEW-109	7/9/2015	4	52	ND	10	32	1,700	
GEW-109	7/22/2015	4.2	52	ND	10	31	1,900	See Note 2
GEW-109	8/6/2015	2.7	50	ND	11	33	2,200	
GEW-110	4/10/2015	15	40	3.6	27	14	1,200	
GEW-110	5/7/2015	11	32	5.4	41	10	970	
GEW-110	6/1/2015	12	37	4.7	32	14	1,200	
GEW-110	8/6/2015	1.4	9	18	69	3	320	
GEW-117	7/9/2015	10	65	ND	ND	20	1,900	
GEW-120	7/15/2015	26	68	ND	ND	2.2	230	
GEW-121	7/14/2015	2.4	58	ND	3.3	17	2,200	
GEW-123	7/15/2015	5.6	61	ND	3.6	28	2,700	
GEW-123	7/22/2015	ND	64	ND	ND	25	2,800	See Note 2
GEW-124	7/13/2015	16	61	ND	4.2	17	1,400	
GEW-124	7/22/2015	19	63	ND	ND	14	1,600	See Note 2
GEW-127	7/14/2015	0.7	63	ND	ND	31	3,800	
GEW-128	7/14/2015	1.3	62	ND	ND	30	3,200	
GEW-129	7/14/2015	1.3	52	3.0	11	31	2,700	
GEW-131	7/14/2015	16	51	ND	3.6	27	1,700	
GEW-132	7/15/2015	13	52	1.9	9.3	23	1,200	
GEW-134	7/14/2015	10	55	ND	9.7	22	1,700	
GEW-135	7/14/2015	3.9	57	ND	ND	33	1,900	
GEW-138	7/14/2015	4.9	42	3.0	28	20	2,000	
GEW-139	7/14/2015	0.5	60	ND	ND	35	4,200	
GEW-140	7/14/2015	10	57	ND	ND	29	2,500	
GEW-140	7/22/2015	10	56	ND	ND	28	2,400	See Note 2
GEW-141	7/15/2015	4.2	64	ND	3.5	26	2,900	
GEW-143	7/14/2015	0.2	53	ND	ND	40	3,300	
GEW-147	7/14/2015	3	53	ND	5	36	2,200	
GEW-152	7/15/2015	5.8	52	ND	ND	37	2,900	
GEW-153	7/15/2015	20	47	2.0	15	15	920	
GEW-155	7/15/2015	5.8	49	2.5	21	21	1,100	
GIW-01	4/10/2015	3	67	ND	ND	27	2,600	
GIW-01	5/6/2015	4	65	ND	ND	26	2,800	
GIW-01	6/5/2015	3.6	65	ND	ND	27	2,800	
GIW-01	7/15/2015	1.6	67	ND	ND	28	3,000	
GIW-01	8/6/2015	1.6	66	ND	ND	28	3,300	
GIW-02	4/10/2015	10	57	ND	6	25	1,600	
GIW-02	5/6/2015	9.4	41	3.6	26	19	1,300	
GIW-02	6/5/2015	4.9	50	3.3	14	27	1,900	
GIW-02	7/15/2015	0.6	65	ND	ND	31	3,400	
GIW-02	8/6/2015	0.4	59	3.4	12	24	2,900	
GIW-03	4/10/2015	0.5	62	ND	ND	34	3,300	
GIW-03	5/6/2015	0.4	51	3.4	12	31	2,800	
GIW-03	6/5/2015	0.4	49	4.2	15	30	2,800	
GIW-03	7/15/2015	0.3	37	9.5	34	19	2,200	
GIW-03	8/6/2015	0.3	50	4.5	16	28	2,900	
GIW-04	4/8/2015	0.4	52	3.4	12	31	3,000	
GIW-04	5/6/2015	0.4	49	3.4	12	34	2,800	
GIW-04	6/5/2015	0.5	51	ND	4.8	42	3,200	
GIW-04	7/15/2015	0.5	52	2.0	7.2	38	2,800	
GIW-04	8/6/2015	0.7	54	ND	ND	42	2,800	
GIW-05	4/10/2015	0.7	60	ND	3.5	34	3,000	
GIW-05	5/6/2015	2.1	48	4.7	17	28	2,200	

Laboratory Analysis - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2/Argon	Nitrogen	Hydrogen	Carbon Monoxide	Comments
		(%)					(ppm)	
GIW-05	6/5/2015	1.8	34	7.8	28	28	1,700	
GIW-05	7/15/2015	1.6	41	6.6	24	26	1,800	
GIW-05	8/6/2015	2.5	58	ND	ND	35	2,200	
GIW-06	4/8/2015	0.8	63	ND	ND	32	1,900	
GIW-06	5/6/2015	0.8	64	ND	ND	32	2,300	
GIW-06	6/5/2015	0.6	40	7.0	25	27	1,600	
GIW-06	7/15/2015	0.8	63	ND	ND	33	1,800	
GIW-06	8/6/2015	0.8	61	ND	ND	34	2,100	
GIW-07	4/8/2015	29	58	ND	ND	9.6	800	
GIW-07	5/6/2015	28	58	ND	3.2	9.7	970	
GIW-07	6/5/2015	26	61	ND	ND	11	1,200	
GIW-07	7/15/2015	21	65	ND	ND	11	990	
GIW-07	8/6/2015	23	60	ND	3.7	12	1,200	
GIW-08	4/8/2015	23	65	ND	3.3	7.5	1,100	
GIW-08	5/6/2015	23	66	ND	ND	7	1,300	
GIW-08	6/5/2015	22	66	ND	ND	8.7	1,500	
GIW-08	7/15/2015	17	53	5.5	23	2	460	
GIW-08	8/6/2015	18	48	6.9	25	2.4	590	
GIW-09	4/8/2015	0.8	64	ND	3.6	28	3,400	
GIW-09	5/6/2015	0.8	67	ND	3.5	26	3,400	
GIW-09	6/5/2015	0.8	64	1.6	5.7	26	3,200	
GIW-09	7/15/2015	12	44	3.3	30	10	850	
GIW-09	8/6/2015	15	36	6.7	35	7	590	
GIW-10	4/8/2015	0.7	54	ND	ND	42	3,200	
GIW-10	5/6/2015	3.5	53	ND	ND	39	2,600	
GIW-10	6/5/2015	3.8	54	ND	ND	39	2,700	
GIW-10	7/15/2015	0.3	35	7.2	26	31	3,500	
GIW-10	8/6/2015	0.4	38	5.6	21	35	3,500	
GIW-11	4/10/2015	2.5	53	2.5	10	30	2,700	
GIW-11	5/6/2015	2.1	54	2.5	9.9	30	2,700	
GIW-11	6/5/2015	2.3	44	5.0	21	27	2,200	
GIW-11	7/15/2015	34	3.1	8.0	37	18	1,600	
GIW-11	8/6/2015	1.7	52	3.1	13	30	3,000	
GIW-12	4/10/2015	2.3	55	3.4	14	25	2,300	
GIW-12	5/6/2015	3.5	62	1.6	6.9	25	2,500	
GIW-12	6/5/2015	4.3	46	4.8	23	21	1,900	
GIW-12	7/15/2015	5.1	20	11.0	60	4.1	490	
GIW-12	8/6/2015	6.7	24	8.9	54	5.3	470	
GIW-13	4/10/2015	4.6	58	ND	6.6	29	2,100	
GIW-13	5/6/2015	3.7	60	ND	3.7	30	2,400	
GIW-13	6/5/2015	6.1	56	1.5	7.3	28	2,300	
GIW-13	7/15/2015	1.4	60	ND	ND	34	2,800	
GIW-13	8/6/2015	2.9	62	ND	ND	31	2,800	
Flare Station[2]	4/8/2015	6.8	28	12.0	44	9.1	960	
Flare Station[2]	5/5/2015	7.9	32	9.7	39	10	1,300	
Flare Station[2]	6/2/2015	8.3	31	9.9	40	11	1,100	
Flare Station[2]	7/1/2015	8.1	31	10	40	10	1,400	
Flare Station[2]	8/11/2015	9.5	32	9.1	38	10	1,500	

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

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.

August 27, 2015

ADE-1461
EPA Methods TO-3,TO14A,TO15 SIM & Scan, ASTM D1946

LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-09-TX
EPA Methods TO14A, TO15
UT Cert CA0133332014-1
EPA Methods TO3, TO14A, TO15, RSK-175

Republic Services
ATTN: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

LABORATORY TEST RESULTS

Project Reference: Bridgeton Landfill
Lab Number: G081704-01/35

Enclosed are results for sample(s) received 8/17/15 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 Jim Getting, Mike Lambrich, Ryan Ayers, David Penoyer, Niki Wuestenberg, Mike Beaudoin, David Randall and Jesse Varsho on 8/26/15.

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

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

AirTECHNOLOGY Laboratories, Inc.

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

CHAIN OF CUSTODY RECORD

TURNAROUND TIME

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

DELIVERABLES

EDD ☒
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 1 OF 4

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

Project No.:	
Project Name:	Bridgeton Landfill
Report To:	Jim Getting
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: Jim Getting
13570 St. Charles Rock Rd.
Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					
G08704-01	GEW-38	8/6/2015	915	C	LFG	NA	X					
-02	GEW-39	8/6/2015	924	C	LFG	NA	X					
-03	GEW-109	8/6/2015	935	C	LFG	NA	X					
-04	GEW-56R	8/6/2015	954	C	LFG	NA	X					
-05	GEW-10	8/6/2015	1006	C	LFG	NA	X					
-06	GEW-110	8/6/2015	1028	C	LFG	NA	X					
-07	GIW-6	8/6/2015	831	C	LFG	NA	X					
-08	GIW-7	8/6/2015	840	C	LFG	NA	X					
-09	GIW-9	8/6/2015	848	C	LFG	NA	X					
-10	GIW-10	8/6/2015	859	C	LFG	NA	X					

AUTHORIZATION TO PERFORM WORK: Dave Penoyer COMPANY: Republic Services

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

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
FedEx		Kathy C	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
			8/17/15 1142
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

COMMENTS

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

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

Rev. 03 - 5/7/09

AirTECHNOLOGY Laboratories, Inc.

01 E. Gale Ave., Suite 130
of Industry, CA 91748
626-964-4032
626-964-5832

CHAIN OF CUSTODY RECORD

TURNAROUND TIME

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

DELIVERABLES

EDD ☐
EDF ☐
Level 3 ☐
Level 4 ☐

PAGE: 2 **OF** 4

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

Project No.:	
Project Name:	Bridgeton Landfill
Report To:	Jim Getting
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: Jim Getting
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					
G0817041	GIW-4	8/6/2015	910	C	LFG	NA	X					
-12	GIW-3	8/6/2015	918	C	LFG	NA	X					
-13	GIW-2	8/6/2015	926	C	LFG	NA	X					
-14	GIW-1	8/6/2015	944	C	LFG	NA	X					
-15	GIW-13	8/6/2015	951	C	LFG	NA	X					
-16	GIW-12	8/6/2015	1000	C	LFG	NA	X					
-17	GIW-11	8/6/2015	1006	C	LFG	NA	X					
-18	GIW-8	8/6/2015	1015	C	LFG	NA	X					
-19	GIW-5	8/6/2015	1023	C	LFG	NA	X					
-20	GEW-40	8/13/2015	833	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	DATE/TIME	RECEIVED BY	DATE/TIME
FedEx		Kathy C	8/17/15 1142

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

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CHAIN OF CUSTODY RECORD

Air TECHNOLOGY Laboratories, Inc.
01 E. Gale Ave., Suite 130
of Industry, CA 91748
626-964-4032
626-964-5832

TURNAROUND TIME

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

DELIVERABLES

EDD	☐
EDF	☐
Level 3	☐
Level 4	☐

PAGE: 3 **OF** 4

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

Project No.:	
Project Name:	Bridgeton Landfill
Report To:	Jim Getting
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: Jim Getting
	13570 St. Charles Rock Rd.
	Bridgeton, MO 63044

ANALYSIS REQUEST

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					
G081704-21	GEW-42R	8/13/2015	844	C	LFG	NA	X					
-22	GEW-45R	8/13/2015	902	C	LFG	NA	X					
-23	GEW-46R	8/13/2015	910	C	LFG	NA	X					
-24	GEW-2	8/13/2015	948	C	LFG	NA	X					
-25	GEW-3	8/13/2015	955	C	LFG	NA	X					
-26	GEW-4	8/13/2015	1001	C	LFG	NA	X					
-27	GEW-47R	8/13/2015	1012	C	LFG	NA	X					
-28	GEW-5	8/13/2015	1018	C	LFG	NA	X					
-29	GEW-48	8/13/2015	1026	C	LFG	NA	X					
-30	GEW-49	8/13/2015	1043	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	DATE/TIME	RECEIVED BY	DATE/TIME
FedEx		Kathy C	8/17/15 1142
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

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

COMMENTS

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

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CHAIN OF CUSTODY RECORD

Air TECHNOLOGY Laboratories, Inc.
01 E. Gale Ave., Suite 130
of Industry, CA 91748
626-964-4032
626-964-5832

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:				Level 4	☐	Chilled _____ deg C

Project No.:	
Project Name:	Bridgeton Landfill
Report To:	Jim Getting
Company:	Republic Services
Street:	13570 St. Charles Rock Rd.
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ANALYSIS REQUEST

LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	CONTAINER QTY/TYPE	MATRIX	PRESERVATION	D1946 + CO, H2					
G0817044-31	GEW-53	8/13/2015	1104	C	LFG	NA	X					
-32	GEW-54	8/13/2015	1111	C	LFG	NA	X					
-33	GEW-55	8/13/2015	1117	C	LFG	NA	X					
-34	GEW-9	8/13/2015	1125	C	LFG	NA	X					
V -35	GEW-8	8/13/2015	1133	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: FedEx	DATE/TIME	RECEIVED BY: Kathy C	DATE/TIME: 8/17/15 1142	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	

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

COMMENTS

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

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

Client: Republic Services, Inc.
Attn: Jim Getting
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 08/17/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081704-01		G081704-02		G081704-03		G081704-04	
Client Sample I.D.:	GEW-38		GEW-39		GEW-109		GEW-56R	
Date/Time Sampled:	8/6/15 9:15		8/6/15 9:24		8/6/15 9:35		8/6/15 9:54	
Date/Time Analyzed:	8/25/15 9:12		8/25/15 9:26		8/25/15 9:41		8/25/15 9:55	
QC Batch No.:	150825GC8A1		150825GC8A1		150825GC8A1		150825GC8A1	
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	4.2	3.2	33	3.2	38	3.2
Carbon Dioxide	47	0.032	52	0.032	50	0.032	52	0.032
Oxygen/Argon	4.5	1.6	ND	1.6	ND	1.6	ND	1.6
Nitrogen	16	3.2	ND	3.2	11	3.2	4.9	3.2
Methane	0.22	0.0032	40	0.0032	2.7	0.0032	2.2	0.0032
Carbon Monoxide	0.31	0.0032	0.020	0.0032	0.22	0.0032	0.21	0.0032

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

Reviewed/Approved By: _____ Date 8/26/15

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

Client: Republic Services, Inc.
Attn: Jim Getting
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 08/17/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081704-05		G081704-06		G081704-07		G081704-08	
Client Sample I.D.:	GEW-10		GEW-110		GIW-6		GIW-7	
Date/Time Sampled:	8/6/15 10:06		8/6/15 10:28		8/6/15 8:31		8/6/15 8:40	
Date/Time Analyzed:	8/25/15 10:10		8/25/15 10:24		8/25/15 10:39		8/25/15 10:53	
QC Batch No.:	150825GC8A1		150825GC8A1		150825GC8A1		150825GC8A1	
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	0.24 d	0.032	2.6 d	0.032	34	3.2	12	3.2
Carbon Dioxide	36	0.032	8.8	0.032	61	0.032	60	0.032
Oxygen/Argon	2.9	1.6	18	1.6	ND	1.6	ND	1.6
Nitrogen	11	3.2	69	3.2	ND	3.2	3.7	3.2
Methane	49	0.0032	1.4	0.0032	0.80	0.0032	23	0.0032
Carbon Monoxide	ND	0.0032	0.032	0.0032	0.21	0.0032	0.12	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 150826GC8A1

Reviewed/Approved By: _____ Date 8/26/15
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Operations Manager

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Attn: Jim Getting
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 08/17/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081704-09		G081704-10		G081704-11		G081704-12	
Client Sample I.D.:	GIW-9		GIW-10		GIW-4		GIW-3	
Date/Time Sampled:	8/6/15 8:48		8/6/15 8:59		8/6/15 9:10		8/6/15 9:18	
Date/Time Analyzed:	8/25/15 11:08		8/25/15 11:23		8/25/15 11:37		8/25/15 11:52	
QC Batch No.:	150825GC8A1		150825GC8A1		150825GC8A1		150825GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.0		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	6.8	3.2	35	3.2	42	3.0	28	3.2
Carbon Dioxide	36	0.032	38	0.032	54	0.030	50	0.032
Oxygen/Argon	6.7	1.6	5.6	1.6	ND	1.5	4.5	1.6
Nitrogen	35	3.2	21	3.2	ND	3.0	16	3.2
Methane	15	0.0032	0.40	0.0032	0.68	0.0030	0.34	0.0032
Carbon Monoxide	0.059	0.0032	0.35	0.0032	0.28	0.0030	0.29	0.0032

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Attn: Jim Getting
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 08/17/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081704-13		G081704-14		G081704-15		G081704-16	
Client Sample I.D.:	GIW-2		GIW-1		GIW-13		GIW-12	
Date/Time Sampled:	8/6/15 9:26		8/6/15 9:44		8/6/15 9:51		8/6/15 10:00	
Date/Time Analyzed:	8/25/15 12:06		8/25/15 12:21		8/25/15 12:35		8/25/15 12:50	
QC Batch No.:	150825GC8A1		150825GC8A1		150825GC8A1		150825GC8A1	
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	24	3.2	28	3.2	31	3.2	5.3	3.2
Carbon Dioxide	59	0.032	66	0.032	62	0.032	24	0.032
Oxygen/Argon	3.4	1.6	ND	1.6	ND	1.6	8.9	1.6
Nitrogen	12	3.2	ND	3.2	ND	3.2	54	3.2
Methane	0.41	0.0032	1.6	0.0032	2.9	0.0032	6.7	0.0032
Carbon Monoxide	0.29	0.0032	0.33	0.0032	0.28	0.0032	0.047	0.0032

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Client: Republic Services, Inc.
Attn: Jim Getting
Project Name: Bridgeton Landfill
Project No.: NA
Date Received: 08/17/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081704-17		G081704-18		G081704-19		G081704-20	
Client Sample I.D.:	GIW-11		GIW-8		GIW-5		GEW-40	
Date/Time Sampled:	8/6/15 10:06		8/6/15 10:15		8/6/15 10:23		8/13/15 8:33	
Date/Time Analyzed:	8/25/15 13:04		8/25/15 13:19		8/25/15 13:33		8/25/15 13:48	
QC Batch No.:	150825GC8A1		150825GC8A1		150825GC8A1		150825GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.2		3.2	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Hydrogen	30	3.2	2.4 d	0.032	35	3.2	ND d	0.032
Carbon Dioxide	52	0.032	48	0.032	58	0.032	38	0.032
Oxygen/Argon	3.1	1.6	6.9	1.6	ND	1.6	ND	1.6
Nitrogen	13	3.2	25	3.2	ND	3.2	3.4	3.2
Methane	1.7	0.0032	18	0.0032	2.5	0.0032	57	0.0032
Carbon Monoxide	0.30	0.0032	0.059	0.0032	0.22	0.0032	ND	0.0032

Results normalized including non-methane hydrocarbons
ND = Not Detected (below RL)
RL = Reporting Limit
d = Reported from a secondary analysis. QC Batch: 150826GC8A1

Reviewed/Approved By: _____ Date 8/26/15
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Operations Manager

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Client:	**Republic Services, Inc.**
Attn:	**Jim Getting**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**08/17/15**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	G081704-21		G081704-22		G081704-23		G081704-24	
Client Sample I.D.:	GEW-42R		GEW-45R		GEW-46R		GEW-2	
Date/Time Sampled:	8/13/15 8:44		8/13/15 9:02		8/13/15 9:10		8/13/15 9:48	
Date/Time Analyzed:	8/25/15 16:15		8/25/15 16:30		8/25/15 16:44		8/25/15 16:59	
QC Batch No.:	150825GC8A2		150825GC8A2		150825GC8A2		150825GC8A2	
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	0.085 d	0.032	ND d	0.032
Carbon Dioxide	39	0.032	37	0.032	39	0.032	40	0.032
Oxygen/Argon	ND	1.6	ND	1.6	ND	1.6	ND	1.6
Nitrogen	3.2	3.2	4.4	3.2	5.9	3.2	ND	3.2
Methane	57	0.0032	57	0.0032	54	0.0032	57	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)
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Reviewed/Approved By: _____ **Date** 8/26/15

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Client:	**Republic Services, Inc.**
Attn:	**Jim Getting**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**08/17/15**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	G081704-25		G081704-26		G081704-27		G081704-28	
Client Sample I.D.:	GEW-3		GEW-4		GEW-47R		GEW-5	
Date/Time Sampled:	8/13/15 9:55		8/13/15 10:01		8/13/15 10:12		8/13/15 10:18	
Date/Time Analyzed:	8/25/15 17:13		8/25/15 17:28		8/25/15 17:43		8/25/15 17:57	
QC Batch No.:	150825GC8A2		150825GC8A2		150825GC8A2		150825GC8A2	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	3.2		3.2		3.4		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	0.056 d	0.032	0.071 d	0.032	0.050 d	0.034	ND d	0.032
Carbon Dioxide	38	0.032	39	0.032	35	0.034	35	0.032
Oxygen/Argon	1.6	1.6	ND	1.6	ND	1.7	ND	1.6
Nitrogen	8.1	3.2	7.9	3.2	22	3.4	21	3.2
Methane	53	0.0032	53	0.0032	41	0.0034	43	0.0032
Carbon Monoxide	ND	0.0032	ND	0.0032	ND	0.0034	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: 150826GC8A1

Reviewed/Approved By: _____ **Date** 8/26/15

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Client:	**Republic Services, Inc.**
Attn:	**Jim Getting**
Project Name:	**Bridgeton Landfill**
Project No.:	**NA**
Date Received:	**08/17/15**
Matrix:	**Air**
Reporting Units:	**% v/v**

ASTM D1946

Lab No.:	G081704-29		G081704-30		G081704-31		G081704-32	
Client Sample I.D.:	GEW-48		GEW-49		GEW-53		GEW-54	
Date/Time Sampled:	8/13/15 10:26		8/13/15 10:43		8/13/15 11:04		8/13/15 11:11	
Date/Time Analyzed:	8/25/15 18:12		8/25/15 18:26		8/25/15 18:41		8/25/15 18:55	
QC Batch No.:	150825GC8A2		150825GC8A2		150825GC8A2		150825GC8A2	
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	5.2	3.2	3.0 d	0.032
Carbon Dioxide	38	0.032	34	0.032	41	0.032	41	0.032
Oxygen/Argon	ND	1.6	ND	1.6	ND	1.6	ND	1.6
Nitrogen	7.6	3.2	23	3.2	ND	3.2	ND	3.2
Methane	54	0.0032	42	0.0032	51	0.0032	54	0.0032
Carbon Monoxide	ND	0.0032	ND	0.0032	0.0059	0.0032	0.0033	0.0032

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Project No.: NA
Date Received: 08/17/15
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	G081704-33		G081704-34		G081704-35			
Client Sample I.D.:	GEW-55		GEW-9		GEW-8			
Date/Time Sampled:	8/13/15 11:17		8/13/15 11:25		8/13/15 11:33			
Date/Time Analyzed:	8/25/15 19:10		8/25/15 19:24		8/25/15 19:39			
QC Batch No.:	150825GC8A2		150825GC8A2		150825GC8A2			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	3.4		3.2		3.2			
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v		
Hydrogen	1.5 d	0.034	0.54 d	0.032	1.5 d	0.032		
Carbon Dioxide	41	0.034	41	0.032	44	0.032		
Oxygen/Argon	ND	1.7	ND	1.6	ND	1.6		
Nitrogen	ND	3.4	4.3	3.2	ND	3.2		
Methane	54	0.0034	53	0.0032	51	0.0032		
Carbon Monoxide	ND	0.0034	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: 150826GC8A1

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QC Batch No.: 150825GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/25/15 8:56		8/24/15 17:28		8/24/15 17:42			
Analyst Initials:	AS		AS		AS			
Datafile:	25aug001		24aug029		24aug030			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	107	70-130%	108	70-130%	1.0	<30
Carbon Dioxide	ND	0.010	93	70-130%	95	70-130%	1.7	<30
Oxygen/Argon	ND	0.50	97	70-130%	99	70-130%	1.7	<30
Nitrogen	ND	1.0	98	70-130%	99	70-130%	1.8	<30
Methane	ND	0.0010	94	70-130%	93	70-130%	0.8	<30
Carbon Monoxide	ND	0.0010	121	70-130%	120	70-130%	0.8	<30

ND = Not Detected (Below RL)

Reviewed/Approved By: _____ **Date:** 8/26/15

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Operations Manager

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QC Batch No.: 150825GC8A2
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date/Time Analyzed:	8/25/15 15:30		8/25/15 14:46		8/25/15 15:01			
Analyst Initials:	AS		AS		AS			
Datafile:	25aug028		25aug025		25aug026			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen	ND	1.0	105	70-130%	101	70-130%	4.5	<30
Carbon Dioxide	ND	0.010	94	70-130%	90	70-130%	5.0	<30
Oxygen/Argon	ND	0.50	100	70-130%	95	70-130%	4.9	<30
Nitrogen	ND	1.0	100	70-130%	95	70-130%	4.9	<30
Methane	ND	0.0010	102	70-130%	100	70-130%	1.8	<30
Carbon Monoxide	ND	0.0010	122	70-130%	122	70-130%	0.7	<30

ND = Not Detected (Below RL)

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Operations Manager

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QC Batch # 150826GC8A1
Matrix: Air
Units: % v/v

QC for Low Level Hydrogen Analysis

Lab No.:	Blank		LCS		LCSD			
Date Analyzed:	8/26/2015 9:02		8/26/2015 8:34		8/26/2015 8:39			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	%Rec	Criteria	%Rec	Criteria	RPD	Criteria
Hydrogen	ND	0.01	99	70-130	99	70-130	0.3	<20

ND = Not Detected (Below RL)

RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 8/26/15

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Operations Manager

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ATTACHMENT E

GAS WELLFIELD DATA

ATTACHMENT E-1

WELLFIELD DATA TABLE

August 2015 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	8/7/2015	56.0	41.8	0.0	2.2	124.2		49	49	-0.7	-0.9	-30.3
GEW-002	8/7/2015	56.0	42.0	0.0	2.0	123.4		15	15	-0.3	-0.3	-30.5
GEW-002	8/13/2015	56.6	41.1	0.0	2.3	121.1		17	18	-0.4	-0.4	-30.6
GEW-002	8/13/2015	56.3	41.9	0.0	1.8	121.6		15	16	-0.6	-0.6	-29.4
GEW-002	8/18/2015	59.0	39.4	0.0	1.6	121.9		51	50	-1.1	-1.1	-25.3
GEW-002	8/18/2015	58.0	40.8	0.0	1.2	122.9		65	64	-1.5	-1.5	-26.1
GEW-002	8/25/2015	56.8	39.7	0.0	3.5	123.7		42	42	-0.6	-0.6	-28.9
GEW-003	8/31/2015	54.9	42.1	0.0	3.0	119.3		27	27	-0.6	-0.6	-16.9
GEW-003	8/7/2015	53.3	40.5	0.0	6.2	118.3		13	12	-0.1	-0.1	-31.4
GEW-003	8/13/2015	53.4	39.5	0.2	6.9	113.5		19	17	-1.1	-1.1	-28.2
GEW-003	8/13/2015	54.8	40.8	0.0	4.4	114.5		15	16	-0.9	-0.9	-30.6
GEW-003	8/18/2015	55.8	41.0	0.0	3.2	112.0		50	50	-0.4	-0.4	-25.8
GEW-003	8/18/2015	55.7	41.0	0.0	3.3	112.9		33	33	-0.6	-0.6	-25.3
GEW-003	8/25/2015	53.8	38.4	0.0	7.8	115.3		0	0	-1.2	-1.2	-27.7
GEW-003	8/25/2015	53.8	38.6	0.0	7.6	115.3		22	21	-1.2	-1.2	-27.1
GEW-003	8/31/2015	52.1	40.3	0.0	7.6	115.7		15	17	-0.7	-0.7	-27.4
GEW-003	8/31/2015	52.2	40.4	0.0	7.4	115.5		14	13	-0.6	-0.6	-27.4
GEW-004	8/7/2015	54.8	40.8	0.0	4.4	119.9		12	13	0.3	0.3	-30.1
GEW-004	8/13/2015	52.1	39.4	0.0	8.5	122.3		26	18	-1.0	-1.0	-30.7
GEW-004	8/13/2015	52.4	39.7	0.0	7.9	122.3		0	0	-1.0	-0.9	-29.4
GEW-004	8/18/2015	54.0	39.9	0.0	6.1	121.2		7	15	0.0	0.0	-25.8
GEW-004	8/18/2015	54.1	40.8	0.0	5.1	122.1		23	21	-0.1	-0.1	-24.8
GEW-004	8/25/2015	51.0	38.4	0.0	10.6	123.1		23	13	-1.2	-1.3	-27.7
GEW-004	8/25/2015	51.2	38.3	0.0	10.5	122.9		36	40	-1.3	-1.4	-27.7
GEW-004	8/31/2015	49.4	39.5	0.0	11.1	121.8		12	13	-0.6	-0.6	-28.5
GEW-004	8/31/2015	49.5	39.5	0.0	11.0	121.5		16	12	-0.6	-0.5	-27.6
GEW-005	8/7/2015	53.2	40.2	0.0	6.6	95.0		0	0	0.3	0.3	-28.4
GEW-005	8/7/2015	53.3	39.3	0.0	7.4	102.1		11	8	-0.1	-0.1	-28.4
GEW-005	8/13/2015	43.6	36.4	0.0	20.0	96.9		19	19	-0.6	-0.6	-30.2
GEW-005	8/13/2015	43.5	36.1	0.0	20.4	96.9		0	0	-0.6	-0.6	-29.9
GEW-005	8/18/2015	49.3	37.2	0.0	13.5	98.6		31	31	0.2	0.2	-25.7
GEW-005	8/18/2015	49.3	37.5	0.0	13.2	98.5		31	32	0.1	0.2	-26.2
GEW-005	8/25/2015	41.0	34.8	0.0	24.2	95.3		31	32	-0.7	-0.7	-27.6
GEW-005	8/25/2015	41.1	34.8	0.0	24.1	95.2		33	34	-0.7	-0.7	-27.1
GEW-006	8/7/2015	55.5	39.8	0.0	4.7	92.2		18	20	-0.1	-0.1	-29.3
GEW-006	8/13/2015	53.3	37.2	0.0	9.5	92.1		17	15	-0.5	-0.5	-30.6
GEW-006	8/18/2015	57.2	36.7	0.0	6.1	92.9		5	7	0.1	0.1	-25.0
GEW-006	8/18/2015	57.7	38.9	0.0	3.4	93.0		9	4	0.0	0.0	-24.6
GEW-006	8/25/2015	52.6	37.1	0.0	10.3	87.5		19	19	-0.7	-0.7	-27.5
GEW-006	8/25/2015	52.5	37.5	0.0	10.0	87.5		19	21	-0.7	-0.7	-27.9
GEW-006	8/31/2015	51.9	38.2	0.0	9.9	92.7		19	19	-0.4	-0.4	-27.6
GEW-006	8/31/2015	51.7	38.4	0.0	9.9	92.7		16	18	-0.4	-0.4	-27.6

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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-007	8/7/2015	56.8	40.8	0.0	2.4	102.3		11	8	-0.3	-0.3	-27.9
GEW-007	8/13/2015	54.6	41.5	0.1	3.8	102.3		9	7	-1.3	-1.3	-26.5
GEW-007	8/19/2015	56.7	37.7	0.0	5.6	100.5		13	11	-1.0	-1.0	-24.7
GEW-007	8/25/2015	57.6	40.3	0.0	2.1	101.3		0	5	-0.9	-0.9	-29.4
GEW-008	8/7/2015	50.7	44.1	0.0	5.2	118.9		22	21	0.1	0.1	-28.1
GEW-008	8/7/2015	50.9	45.4	0.0	3.7	119.2		22	20	-0.1	-0.1	-28.7
GEW-008	8/13/2015	50.6	40.8	0.1	8.5	116.9		19	18	-0.7	-0.7	-26.2
GEW-008	8/13/2015	50.7	42.2	0.1	7.0	117.2		19	20	-0.7	-0.8	-26.4
GEW-008	8/19/2015	52.0	42.6	0.0	5.4	115.5		22	16	-0.6	-0.6	-25.9
GEW-008	8/25/2015	51.4	43.5	0.0	5.1	117.4		15	18	-0.6	-0.5	-29.3
GEW-009	8/7/2015	52.0	43.1	0.0	4.9	126.9		14	16	-0.1	-0.2	-24.1
GEW-009	8/13/2015	52.2	41.4	0.1	6.3	123.7		13	9	-0.4	-0.4	-25.1
GEW-009	8/13/2015	51.4	39.4	0.1	9.1	123.7		15	15	-0.4	-0.4	-23.3
GEW-009	8/19/2015	48.7	43.1	0.0	8.2	124.3		13	12	-0.4	-0.4	-25.0
GEW-009	8/25/2015	53.0	43.1	0.0	3.9	126.1		0	0	-0.2	-0.2	-15.6
GEW-010	8/6/2015	49.7	38.3	2.4	9.6	83.5				-11.5	-11.5	-20.4
GEW-010	8/6/2015	50.5	36.8	2.6	10.1	84.4				-11.0	-11.2	-23.4
GEW-010	8/14/2015	51.2	37.1	1.7	10.0	91.7				-7.3	-7.3	-24.7
GEW-010	8/19/2015	47.7	41.9	1.8	8.6	88.8				-6.3	-6.3	-24.0
GEW-010	8/19/2015	48.9	41.8	0.9	8.4	91.3				-5.7	-5.8	-24.2
GEW-010	8/25/2015	57.5	40.3	0.0	2.2	93.7				-0.2	-0.2	-21.3
GEW-026R	8/20/2015	0.7	27.3	16.5	55.5	91.3				-17.2	-17.1	-17.7
GEW-026R	8/20/2015	0.5	18.7	16.0	64.8	91.9				-17.1	-17.1	-18.5
GEW-027A	8/20/2015	0.5	52.1	0.2	47.2	115.3				-0.1	-0.1	-18.0
GEW-028R	8/20/2015	1.0	38.4	6.7	53.9	187.4				-18.6	-18.6	-19.1
GEW-028R	8/20/2015	0.7	43.4	6.1	49.8	188.5				-18.6	-18.6	-19.2
GEW-038	8/6/2015	0.3	50.8	3.8	45.1	114.7				-26.3	-26.9	-26.4
GEW-038	8/6/2015	0.3	48.7	4.0	47.0	113.5				-26.2	-27.7	-26.5
GEW-038	8/14/2015	1.4	42.4	7.9	48.3	118.0				-26.9	-26.7	-27.0
GEW-038	8/14/2015	0.5	41.9	7.4	50.2	118.3				-26.3	-26.3	-26.5
GEW-038	8/19/2015	2.8	47.5	5.5	44.2	112.5				-26.4	-26.4	-26.1
GEW-038	8/19/2015	1.2	48.4	5.4	45.0	111.8				-26.4	-26.4	-26.2
GEW-038	8/25/2015	0.3	48.7	4.6	46.4	118.1				-28.7	-28.7	-28.2
GEW-038	8/25/2015	0.4	48.9	4.4	46.3	118.4				-28.7	-28.4	-28.1
GEW-039	8/6/2015	40.2	51.7	0.0	8.1	134.1				-0.6	-0.6	-27.5
GEW-039	8/6/2015	40.2	50.3	0.0	9.5	134.1				-0.6	-0.6	-27.6
GEW-039	8/14/2015	38.1	50.9	0.0	11.0	134.3				-0.7	-0.7	-25.1
GEW-039	8/14/2015	39.1	50.9	0.1	9.9	134.3				-0.7	-0.7	-23.1
GEW-039	8/19/2015	43.9	48.3	0.2	7.6	131.8				-0.8	-0.8	-24.0
GEW-039	8/19/2015	42.6	50.7	0.1	6.6	131.8				-0.8	-0.8	-26.5
GEW-039	8/25/2015	41.0	51.0	0.0	8.0	133.2				-0.7	-0.7	-27.6
GEW-039	8/25/2015	41.0	50.8	0.0	8.2	133.2				-0.7	-0.7	-26.2

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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-040	8/7/2015	57.5	41.0	0.0	1.5	96.8		9	9	0.0	0.0	-28.5
GEW-040	8/7/2015	56.8	40.7	0.0	2.5	97.0		12	12	-0.2	-0.2	-32.7
GEW-040	8/13/2015	57.8	41.1	0.0	1.1	95.8		39	39	-0.5	-0.5	-30.1
GEW-040	8/13/2015	58.0	39.7	0.0	2.3	96.1		11	11	-0.7	-0.7	-30.9
GEW-040	8/18/2015	59.3	40.1	0.2	0.4	96.5		8	11	-0.4	-0.4	-27.2
GEW-040	8/25/2015	58.4	39.1	0.0	2.5	94.8		0	0	-0.5	-0.5	-27.6
GEW-040	8/31/2015	57.1	40.0	0.0	2.9	97.3		12	13	-0.4	-0.4	-29.9
GEW-041R	8/7/2015	57.0	40.7	0.0	2.3	110.2		16	16	-0.1	-0.1	-32.8
GEW-041R	8/7/2015	56.6	41.1	0.0	2.3	110.4		17	14	-0.1	-0.1	-31.4
GEW-041R	8/13/2015	57.6	40.4	0.0	2.0	107.6		12	12	-0.6	-0.6	-31.2
GEW-041R	8/18/2015	58.2	40.4	0.1	1.3	107.4		16	12	-0.2	-0.2	-27.0
GEW-041R	8/25/2015	58.3	38.7	0.0	3.0	109.5		17	18	-0.4	-0.4	-27.2
GEW-041R	8/31/2015	57.5	38.5	0.0	4.0	109.4		13	16	-0.1	0.1	-26.1
GEW-041R	8/31/2015	57.3	39.9	0.0	2.8	110.2		17	18	-0.2	-0.2	-29.6
GEW-042R	8/7/2015	56.4	41.2	0.0	2.4	98.4		12	12	-0.1	-0.1	-28.7
GEW-042R	8/13/2015	57.2	40.9	0.0	1.9	98.7		9	9	-0.8	-0.8	-26.8
GEW-042R	8/13/2015	57.6	40.7	0.0	1.7	98.7		8	10	-0.8	-0.8	-26.3
GEW-042R	8/18/2015	57.5	40.6	0.1	1.8	101.5		7	7	-0.2	-0.2	-21.2
GEW-042R	8/25/2015	57.4	39.6	0.0	3.0	98.0		7	9	-0.5	-0.5	-23.2
GEW-042R	8/31/2015	56.1	41.2	0.0	2.7	102.5		10	10	-0.2	-0.2	-22.8
GEW-043R	8/7/2015	55.7	41.5	0.0	2.8	135.9		51	54	-0.1	-0.1	-30.7
GEW-043R	8/7/2015	55.8	42.2	0.0	2.0	135.9		56	54	-0.2	-0.3	-29.9
GEW-043R	8/13/2015	56.0	39.6	0.0	4.4	130.2		36	38	-3.7	-3.7	-30.6
GEW-043R	8/13/2015	55.9	41.8	0.0	2.3	130.8		26	27	-2.5	-2.5	-32.3
GEW-043R	8/18/2015	56.3	41.5	0.2	2.0	130.2		30	30	-1.3	-1.3	-25.2
GEW-043R	8/25/2015	56.2	40.1	0.0	3.7	131.8		56	57	-2.3	-2.3	-28.2
GEW-043R	8/25/2015	56.3	40.2	0.0	3.5	131.4		38	40	-2.0	-1.9	-26.6
GEW-043R	8/31/2015	54.6	41.8	0.0	3.6	130.2		29	30	-1.2	-1.2	-28.8
GEW-043R	8/31/2015	54.8	41.5	0.0	3.7	130.1		25	28	-0.9	-0.9	-27.2
GEW-044	8/7/2015	53.7	39.7	0.0	6.6	96.0		10	9	-0.1	-0.1	-31.3
GEW-044	8/13/2015	51.4	37.7	0.0	10.9	90.3		0	0	-1.0	-1.0	-25.6
GEW-044	8/18/2015	54.2	38.3	0.1	7.4	96.0		0	0	-0.2	-0.2	-21.8
GEW-044	8/25/2015	49.3	35.6	0.0	15.1	85.4		3	3	-0.7	-0.7	-25.8
GEW-044	8/31/2015	51.5	38.4	0.0	10.1	95.0		6	5	-0.3	-0.3	-27.3
GEW-044	8/31/2015	51.5	38.3	0.0	10.2	95.2		7	6	0.3	-0.3	-26.5
GEW-045R	8/7/2015	57.1	39.3	0.0	3.6	99.6		12	4	-3.5	-3.5	-30.1
GEW-045R	8/7/2015	56.8	39.7	0.0	3.5	100.6		4	4	-2.5	-2.5	-30.9
GEW-045R	8/13/2015	56.8	38.2	0.0	5.0	95.8		0	0	-2.7	-2.7	-29.8
GEW-045R	8/13/2015	58.2	40.0	0.0	1.8	96.2		0	7	-1.5	-1.5	-31.1
GEW-045R	8/18/2015	59.4	38.9	0.1	1.6	97.2		5	12	-0.2	-0.2	-26.0
GEW-045R	8/25/2015	58.8	38.3	0.0	2.9	92.0		4	5	-0.8	-0.8	-27.9
GEW-045R	8/31/2015	58.1	39.0	0.0	2.9	99.4		7	7	-0.3	-0.3	-28.2

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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-046R	8/7/2015	53.0	40.7	0.0	6.3	101.8		16	16	-0.2	-0.2	-31.6
GEW-046R	8/13/2015	53.5	39.7	0.0	6.8	99.4		12	12	-0.5	-0.5	-29.7
GEW-046R	8/13/2015	53.7	40.8	0.0	5.5	99.4		12	11	-0.5	-0.5	-30.8
GEW-046R	8/18/2015	54.8	40.1	0.2	4.9	100.9		12	12	-0.1	-0.1	-26.2
GEW-046R	8/25/2015	54.3	39.1	0.0	6.6	97.0		12	12	-0.5	-0.5	-29.6
GEW-046R	8/31/2015	53.7	40.5	0.0	5.8	100.6		11	11	-0.2	-0.2	-27.7
GEW-046R	8/31/2015	54.0	40.6	0.0	5.4	100.8		9	12	-0.2	-0.2	-28.2
GEW-047R	8/7/2015	55.5	42.1	0.0	2.4	94.9		0	0	0.4	0.4	-30.7
GEW-047R	8/7/2015	55.5	42.0	0.0	2.5	121.8		24	24	-0.2	-0.2	-29.0
GEW-047R	8/13/2015	42.4	36.0	0.2	21.4	115.2		29	29	-1.0	-1.0	-29.1
GEW-047R	8/13/2015	42.9	37.2	0.2	19.7	114.7		20	22	-0.7	-0.7	-29.8
GEW-047R	8/18/2015	49.3	39.2	0.0	11.5	116.8		14	13	0.1	0.1	-25.2
GEW-047R	8/18/2015	49.0	38.9	0.0	12.1	117.0		36	36	0.1	0.1	-25.1
GEW-047R	8/25/2015	35.6	32.9	0.4	31.1	113.5		15	11	-0.8	-0.9	-26.9
GEW-047R	8/25/2015	35.2	32.5	0.3	32.0	113.5		16	16	-0.8	-0.8	-27.5
GEW-048	8/7/2015	55.8	40.2	0.0	4.0	108.5		21	23	-0.2	-0.1	-28.9
GEW-048	8/13/2015	53.1	39.3	0.0	7.6	106.7		0	0	-0.8	-0.8	-30.5
GEW-048	8/13/2015	53.5	39.5	0.0	7.0	106.7		42	43	-0.8	-0.8	-29.0
GEW-048	8/18/2015	55.8	39.4	0.0	4.8	107.4		16	19	0.2	0.2	-25.4
GEW-048	8/18/2015	55.9	39.9	0.0	4.2	107.5		13	20	0.1	0.1	-20.9
GEW-048	8/25/2015	52.0	38.3	0.0	9.7	106.3		20	19	-1.0	-1.0	-27.4
GEW-048	8/25/2015	51.9	38.3	0.0	9.8	106.3		22	20	-0.9	-0.9	-27.1
GEW-048	8/31/2015	52.4	39.4	0.0	8.2	107.2		16	16	-0.5	-0.5	-26.9
GEW-048	8/31/2015	52.6	39.1	0.0	8.3	107.0		17	20	-0.4	-0.4	-27.7
GEW-049	8/7/2015	56.5	40.1	0.0	3.4	93.2		14	15	-0.1	-0.1	-28.1
GEW-049	8/13/2015	41.0	36.5	0.1	22.4	110.9		36	37	-0.7	-0.7	-25.2
GEW-049	8/13/2015	42.1	35.9	0.1	21.9	110.6		16	16	-0.6	-0.6	-26.9
GEW-049	8/18/2015	56.7	39.2	0.0	4.1	113.1		0	0	0.4	0.4	-20.2
GEW-049	8/18/2015	57.5	40.1	0.0	2.4	114.7		5	0	0.2	0.3	-20.5
GEW-049	8/25/2015	46.7	36.9	0.1	16.3	110.7		41	42	-0.6	-0.6	-26.8
GEW-049	8/25/2015	47.2	36.9	0.1	15.8	110.6		23	24	-0.6	-0.6	-22.7
GEW-049	8/31/2015	46.2	39.3	0.1	14.4	109.7		16	13	-0.5	-0.5	-25.9
GEW-049	8/31/2015	48.0	38.1	0.0	13.9	107.2		0	0	-0.2	-0.2	-25.8
GEW-050	8/7/2015	55.8	39.2	0.0	5.0	111.1		16	16	-0.1	-0.1	-20.9
GEW-050	8/13/2015	54.7	38.0	0.0	7.3	109.5		14	19	-0.7	-0.7	-22.5
GEW-050	8/18/2015	57.2	40.4	0.0	2.4	109.7		16	16	-0.1	0.0	-24.7
GEW-050	8/18/2015	56.9	40.6	0.0	2.5	109.9		13	27	-0.1	-0.1	-23.9
GEW-050	8/25/2015	56.0	39.4	0.0	4.6	110.5		19	19	-0.7	-0.7	-22.3
GEW-050	8/31/2015	53.4	40.0	0.0	6.6	109.3		8	12	-0.4	-0.4	-24.8
GEW-051	8/7/2015	55.4	40.4	0.0	4.2	127.8		15	15	0.1	0.1	-27.6
GEW-051	8/7/2015	54.9	40.9	0.0	4.2	128.3		19	15	-0.1	-0.1	-28.8
GEW-051	8/13/2015	55.4	41.1	0.0	3.5	126.3		16	18	-1.2	-1.2	-31.6

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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-051	8/18/2015	56.8	39.7	0.0	3.5	127.2		16	17	0.4	0.3	-24.5
GEW-051	8/18/2015	56.0	41.8	0.0	2.2	127.6		20	21	0.2	0.2	-24.4
GEW-051	8/25/2015	56.2	41.0	0.0	2.8	126.9		23	23	-1.0	-1.0	-28.0
GEW-051	8/25/2015	56.1	40.7	0.0	3.2	126.9		22	21	-0.9	-0.9	-27.7
GEW-051	8/31/2015	55.8	40.5	0.0	3.7	125.7		22	22	-0.8	-0.8	-28.8
GEW-052	8/7/2015	56.8	39.7	0.0	3.5	105.0		13	13	0.2	0.2	-28.7
GEW-052	8/7/2015	56.4	40.3	0.0	3.3	115.6		19	17	-0.1	-0.1	-28.8
GEW-052	8/13/2015	52.0	39.5	0.0	8.5	115.0		9	9	-0.2	-0.2	-29.9
GEW-052	8/19/2015	54.6	38.4	0.0	7.0	114.3		33	33	-0.1	-0.2	-24.3
GEW-052	8/25/2015	53.6	39.9	0.0	6.5	115.8		35	34	-0.2	-0.2	-28.0
GEW-052	8/31/2015	53.6	39.5	0.0	6.9	115.2		0	0	-0.2	-0.2	-27.7
GEW-053	8/7/2015	51.6	41.0	0.0	7.4	138.0		13	13	0.0	0.0	-28.7
GEW-053	8/7/2015	51.7	41.0	0.0	7.3	138.0		19	16	-0.1	-0.1	-28.4
GEW-053	8/13/2015	51.3	42.4	0.1	6.2	139.9		0	9	-0.9	-0.9	-29.4
GEW-053	8/13/2015	51.3	42.4	0.1	6.2	140.0		18	20	-0.9	-0.9	-29.9
GEW-053	8/19/2015	50.7	42.7	0.0	6.6	139.3		15	14	-0.5	-0.5	-26.1
GEW-053	8/19/2015	50.0	43.4	0.0	6.6	139.2		15	16	-0.5	-0.5	-26.5
GEW-053	8/25/2015	51.2	41.6	0.0	7.2	140.5		16	12	-0.3	-0.3	-27.6
GEW-053	8/25/2015	51.2	41.8	0.0	7.0	140.2		12	15	-0.3	-0.3	-28.7
GEW-053	8/31/2015	51.5	41.0	0.0	7.5	140.4		13	16	-0.4	-0.4	-28.5
GEW-053	8/31/2015	50.6	42.4	0.0	7.0	139.7		10	11	-0.3	-0.3	-28.3
GEW-054	8/7/2015	51.3	42.9	0.0	5.8	150.6		32	28	0.2	0.2	-29.1
GEW-054	8/7/2015	51.2	42.7	0.0	6.1	150.3		31	28	-0.1	-0.1	-28.3
GEW-054	8/13/2015	52.8	41.2	0.1	5.9	142.6		31	29	-1.9	-1.9	-29.7
GEW-054	8/13/2015	52.5	41.9	0.1	5.5	142.2		20	24	-1.3	-1.3	-29.1
GEW-054	8/19/2015	52.1	42.6	0.0	5.3	141.5		20	7	-0.8	-0.9	-24.6
GEW-054	8/19/2015	52.5	43.2	0.0	4.3	141.5		20	20	-0.9	-0.9	-25.9
GEW-054	8/25/2015	53.2	41.9	0.0	4.9	147.3		24	23	-0.2	-0.2	-28.2
GEW-054	8/25/2015	53.1	41.8	0.0	5.1	147.5		20	16	-0.2	-0.3	-29.2
GEW-054	8/31/2015	52.6	42.2	0.0	5.2	149.3		20	20	0.1	0.1	-26.9
GEW-054	8/31/2015	52.3	42.7	0.0	5.0	149.3		22	22	-0.1	-0.2	-29.7
GEW-055	8/13/2015	53.3	42.2	0.1	4.4	126.4		5	9	-0.7	-0.7	-27.7
GEW-055	8/13/2015	53.5	42.4	0.1	4.0	126.3		25	25	-0.7	-0.7	-27.5
GEW-055	8/19/2015	53.4	42.3	0.0	4.3	126.0		36	34	-0.6	-0.6	-30.8
GEW-055	8/25/2015	54.4	41.7	0.0	3.9	128.0		25	26	-0.3	-0.3	-28.4
GEW-056R	8/6/2015	2.7	53.5	0.1	43.7	173.1				-1.0	-1.0	-15.6
GEW-056R	8/6/2015	2.6	53.5	0.0	43.9	172.6				-0.9	-0.9	-15.0
GEW-056R	8/14/2015	5.0	38.4	1.1	55.5	171.2				-1.9	-1.9	-20.7
GEW-056R	8/14/2015	4.8	42.9	0.9	51.4	171.2				-1.9	-1.9	-21.7
GEW-056R	8/19/2015	4.0	43.2	0.5	52.3	171.2				-1.7	-1.7	-17.8
GEW-056R	8/19/2015	3.7	48.3	0.4	47.6	171.2				-1.7	-1.7	-20.3
GEW-056R	8/25/2015	3.3	50.1	0.1	46.5	169.5				-1.3	-1.4	-16.6

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		(% vol)				°F		scfm		H_2O		
GEW-056R	8/25/2015	3.2	50.4	0.1	46.3	168.4				-1.3	-1.3	-13.6
GEW-057B	8/20/2015	0.6	61.1	0.0	38.3	179.3				19.9	20.0	19.9
GEW-057B	8/20/2015	1.1	60.5	0.0	38.4	179.8				19.5	19.6	19.6
GEW-057R	8/20/2015	1.0	61.6	0.0	37.4	184.1				18.7	18.8	18.7
GEW-057R	8/20/2015	1.1	60.5	0.0	38.4	184.1				18.7	19.2	19.0
GEW-058	8/20/2015	4.3	57.1	0.2	38.4	189.1				-18.8	-19.1	-24.7
GEW-058	8/20/2015	4.4	58.9	0.0	36.7	189.6				-9.4	-8.9	-25.0
GEW-058A	8/20/2015	0.9	54.0	1.6	43.5	181.4				-10.3	-11.0	-24.5
GEW-058A	8/20/2015	0.6	52.9	2.4	44.1	180.8				-12.3	-10.3	-24.5
GEW-059R	8/20/2015	3.0	52.5	0.8	43.7	185.2				-22.0	-22.0	-25.9
GEW-059R	8/20/2015	2.6	51.3	0.7	45.4	185.2				-22.5	-22.5	-26.5
GEW-061B	8/20/2015	0.7	19.7	19.6	60.0	88.8				-24.0	-24.1	-24.9
GEW-061B	8/20/2015	0.6	10.3	19.4	69.7	89.9				-24.4	-24.4	-24.4
GEW-065A	8/20/2015	1.0	42.3	0.3	56.4	196.0				-1.6	-0.1	-3.5
GEW-065A	8/20/2015	1.4	59.6	0.2	38.8	196.0				-1.3	-0.8	-3.8
GEW-067A	8/20/2015	0.8	18.6	15.7	64.9	185.2				-5.1	-4.9	-15.0
GEW-067A	8/20/2015	0.5	19.4	15.7	64.4	183.5				-5.5	-5.6	-16.0
GEW-082R	8/20/2015	1.1	63.2	0.0	35.7	192.5				-16.7	-16.7	-17.1
GEW-082R	8/20/2015	2.0	59.3	0.0	38.7	192.5				-16.7	-16.7	-17.2
GEW-086	8/21/2015	20.7	38.9	2.5	37.9	140.0				-23.0	-22.8	-23.7
GEW-086	8/21/2015	20.3	39.6	2.4	37.7	140.3				-22.7	-22.9	-23.4
GEW-086	8/21/2015	9.0	50.4	0.1	40.5	190.2				-20.0	-19.0	-20.3
GEW-086	8/21/2015	8.0	50.5	0.0	41.5	190.2				-20.5	-19.9	-21.3
GEW-089	8/21/2015	0.1	2.2	20.6	77.1	84.9				-23.2	-23.4	-23.4
GEW-089	8/21/2015	0.2	2.0	20.6	77.2	84.9				-23.6	-23.5	-23.9
GEW-090	8/26/2015	6.5	49.7	0.1	43.7	190.8				-16.7	-17.6	-16.6
GEW-090	8/26/2015	6.2	50.7	0.0	43.1	190.8				-16.1	-17.5	-17.0
GEW-104	8/20/2015	1.2	61.1	0.0	37.7	103.0				23.0	23.0	23.1
GEW-104	8/20/2015	1.0	62.3	0.0	36.7	104.7				23.4	23.4	23.4
GEW-105	8/20/2015	12.1	40.3	8.0	39.6	93.4				-6.4	-6.4	-17.0
GEW-105	8/20/2015	12.9	41.4	7.9	37.8	94.4				-8.8	-8.8	-17.1
GEW-107	8/20/2015	4.1	37.2	8.5	50.2	90.9				-27.4	-26.9	-27.5
GEW-107	8/20/2015	1.7	38.3	7.6	52.4	94.8				-27.4	-26.9	-27.2
GEW-109	8/6/2015	3.4	53.5	0.0	43.1	175.8				-27.2	-27.6	-26.9
GEW-109	8/6/2015	3.5	53.1	0.0	43.4	175.3				-27.3	-28.5	-29.3
GEW-109	8/14/2015	5.3	39.0	3.8	51.9	115.5				-23.3	-23.8	-23.1
GEW-109	8/19/2015	11.3	41.1	3.9	43.7	84.2				-27.1	-25.5	-27.0
GEW-109	8/25/2015	6.2	52.8	0.1	40.9	171.6				-24.8	-26.7	-25.7
GEW-109	8/25/2015	6.1	53.8	0.0	40.1	171.6				-27.1	-27.7	-29.6
GEW-110	8/6/2015	2.8	11.5	16.6	69.1	78.5				-0.2	-0.1	-23.0
GEW-110	8/6/2015	1.3	6.9	19.0	72.8	79.4				-0.2	-0.2	-22.5
GEW-110	8/14/2015	6.1	22.0	13.1	58.8	118.3				-0.5	-0.5	-23.8

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		(% vol)				°F		scfm		H_2O		
GEW-110	8/14/2015	3.3	19.4	13.0	64.3	118.3				-0.5	-0.5	-24.2
GEW-110	8/19/2015	4.6	19.4	15.6	60.4	95.9				-1.1	-1.1	-23.6
GEW-110	8/19/2015	2.7	16.5	15.4	65.4	95.8				-1.1	-1.1	-23.4
GEW-110	8/25/2015	5.6	12.2	14.1	68.1	106.0				-1.2	-1.2	-17.7
GEW-110	8/25/2015	5.6	12.1	14.1	68.2	105.8				-1.2	-1.2	-20.0
GEW-116	8/21/2015	6.4	18.6	17.0	58.0	91.7		4	6	-18.0	-18.0	-18.1
GEW-116	8/21/2015	6.6	13.0	17.1	63.3	93.6		5	2	-16.0	-15.9	-17.7
GEW-117	8/21/2015	10.3	50.9	4.1	34.7	89.5				-18.0	-17.5	-12.2
GEW-120	8/4/2015	16.9	66.6	0.1	16.4	159.6				-3.3	-3.4	-3.4
GEW-120	8/4/2015	16.2	66.6	0.2	17.0	158.9				-3.3	-3.3	-3.4
GEW-120	8/19/2015	1.1	46.6	4.9	47.4	80.7				-16.4	-16.5	-16.2
GEW-121	8/4/2015	3.6	60.2	0.1	36.1	191.5				-6.8	-6.9	-7.8
GEW-121	8/4/2015	3.0	63.9	0.1	33.0	191.8				-6.9	-6.4	-7.4
GEW-121	8/19/2015	4.4	57.4	0.0	38.2	189.6				-14.9	-14.2	-14.8
GEW-121	8/19/2015	4.4	57.5	0.0	38.1	189.6				-14.5	-14.9	-15.0
GEW-122	8/4/2015	7.0	54.0	0.2	38.8	196.6				-12.8	-13.1	-13.8
GEW-122	8/4/2015	5.1	59.2	0.3	35.4	196.6				-12.3	-12.8	-14.2
GEW-122	8/19/2015	8.1	54.5	0.1	37.3	187.6				-14.5	-14.6	-14.4
GEW-122	8/19/2015	8.2	54.4	0.1	37.3	187.0				-14.3	-15.1	-14.7
GEW-123	8/4/2015	7.2	62.0	0.1	30.7	185.7				-8.4	-8.3	-8.9
GEW-123	8/4/2015	7.3	62.9	0.1	29.7	186.3				-8.4	-8.4	-8.9
GEW-123	8/19/2015	8.3	62.5	0.0	29.2	181.9				-16.5	-16.5	-16.4
GEW-123	8/19/2015	9.0	62.9	0.0	28.1	182.1				-16.4	-16.4	-16.6
GEW-124	8/4/2015	19.0	62.2	0.1	18.7	136.6				-7.5	-7.4	-8.4
GEW-124	8/4/2015	20.8	62.1	0.1	17.0	136.6				-7.5	-7.5	-8.7
GEW-124	8/19/2015	18.5	62.0	0.1	19.4	147.3				-12.4	-12.6	-15.5
GEW-124	8/19/2015	18.4	59.0	0.1	22.5	143.5				-12.4	-12.4	-15.7
GEW-125	8/4/2015	3.3	60.2	0.3	36.2	194.2				-8.3	-7.9	-8.9
GEW-125	8/4/2015	2.5	62.0	0.3	35.2	194.2				-7.9	-7.8	-8.3
GEW-125	8/19/2015	5.0	57.9	0.0	37.1	192.9				-14.9	-14.9	-15.7
GEW-125	8/19/2015	5.1	58.5	0.0	36.4	192.9				-15.4	-15.4	-16.1
GEW-126	8/4/2015	3.7	54.2	2.9	39.2	190.6				-7.9	-7.9	-8.4
GEW-126	8/4/2015	4.2	52.8	3.6	39.4	190.8				-5.5	-5.9	-7.8
GEW-126	8/19/2015	8.8	46.3	3.2	41.7	184.5				-9.0	-8.2	-10.8
GEW-126	8/19/2015	9.8	47.8	3.3	39.1	182.8				-9.2	-9.2	-10.5
GEW-127	8/4/2015	2.8	56.4	0.2	40.6	189.1				-7.4	-7.4	-8.3
GEW-127	8/4/2015	1.6	63.5	0.3	34.6	189.1				-7.4	-7.7	-7.8
GEW-127	8/19/2015	2.4	61.6	0.0	36.0	188.9				-11.2	-11.5	-10.3
GEW-127	8/19/2015	2.0	60.8	0.0	37.2	188.9				-11.0	-11.1	-11.1
GEW-128	8/4/2015	1.5	64.6	0.2	33.7	182.5				-6.4	-6.8	-7.7
GEW-128	8/4/2015	1.8	65.1	0.3	32.8	182.8				-7.5	-7.5	-7.9
GEW-128	8/19/2015	2.5	59.7	0.3	37.5	181.5				-15.5	-15.4	-15.7

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		(% vol)				°F		scfm		H_2O		
GEW-128	8/19/2015	2.9	60.5	0.3	36.3	181.5				-16.4	-15.9	-16.4
GEW-129	8/4/2015	1.6	59.3	0.2	38.9	164.5				-7.3	-7.3	-7.8
GEW-129	8/4/2015	1.8	62.3	0.2	35.7	164.3				-7.8	-7.8	-7.8
GEW-129	8/19/2015	2.6	57.8	0.0	39.6	161.7				-16.9	-16.5	-16.7
GEW-129	8/19/2015	2.5	57.5	0.0	40.0	161.9				-16.5	-17.0	-16.6
GEW-131	8/4/2015	20.0	57.3	0.3	22.4	154.9				-13.3	-13.7	-13.7
GEW-131	8/4/2015	21.0	55.1	0.3	23.6	154.6				-13.9	-13.7	-14.3
GEW-131	8/19/2015	23.7	52.1	0.0	24.2	147.1				-11.6	-11.6	-11.7
GEW-131	8/19/2015	24.1	51.4	0.0	24.5	149.1				-14.5	-14.5	-14.2
GEW-132	8/4/2015	15.1	53.0	0.5	31.4	185.2				-9.3	-9.3	-15.4
GEW-132	8/4/2015	16.4	55.0	0.5	28.1	185.2				-8.9	-8.9	-14.9
GEW-132	8/19/2015	15.1	51.5	1.5	31.9	182.7				-10.6	-11.1	-15.6
GEW-132	8/19/2015	14.9	52.4	1.5	31.2	182.7				-11.1	-11.2	-17.7
GEW-134	8/4/2015	15.6	49.0	0.4	35.0	188.5				-11.3	-11.2	-16.2
GEW-134	8/4/2015	16.0	55.8	0.3	27.9	188.5				-15.6	-15.6	-16.0
GEW-134	8/19/2015	15.6	52.9	0.5	31.0	177.0				-17.0	-17.1	-16.7
GEW-134	8/19/2015	15.7	52.2	0.5	31.6	176.9				-17.0	-16.9	-16.6
GEW-135	8/4/2015	6.2	60.0	0.3	33.5	185.7				-14.2	-12.3	-15.7
GEW-135	8/4/2015	6.2	60.4	0.3	33.1	185.7				-13.2	-13.7	-14.4
GEW-135	8/19/2015	4.5	57.2	0.0	38.3	192.3				-13.3	-13.5	-12.9
GEW-135	8/19/2015	4.5	58.2	0.0	37.3	192.3				-14.5	-14.5	-16.1
GEW-136	8/4/2015	6.4	46.5	4.4	42.7	175.2				-0.7	-0.7	-16.7
GEW-136	8/4/2015	6.6	45.1	4.4	43.9	175.2				-0.6	-0.6	-16.3
GEW-136	8/19/2015	2.3	16.0	16.4	65.3	139.8				-1.8	-1.9	-15.5
GEW-136	8/19/2015	2.3	15.6	16.4	65.7	139.9				-1.9	-1.9	-16.0
GEW-137	8/4/2015	26.4	51.7	1.9	20.0	123.1				-7.4	-8.3	-9.2
GEW-137	8/4/2015	26.1	52.4	1.5	20.0	123.7				-6.9	-6.9	-6.8
GEW-137	8/19/2015	26.8	51.7	0.5	21.0	110.0				-4.5	-5.2	-5.0
GEW-138	8/4/2015	15.1	52.1	0.3	32.5	183.5				-2.7	-2.9	-8.0
GEW-138	8/4/2015	16.0	53.7	0.3	30.0	183.5				-3.0	-3.0	-9.2
GEW-138	8/19/2015	6.8	46.7	0.9	45.6	185.1				-1.1	-1.2	-4.0
GEW-138	8/19/2015	6.7	48.1	0.8	44.4	185.1				-1.4	-1.5	-4.6
GEW-139	8/4/2015	0.9	59.9	0.2	39.0	193.7				-5.4	-5.9	-7.0
GEW-139	8/4/2015	0.9	62.3	0.3	36.5	193.7				-6.9	-6.9	-7.9
GEW-139	8/19/2015	2.5	57.6	0.1	39.8	192.3				-11.8	-12.2	-12.8
GEW-139	8/19/2015	2.3	58.7	0.1	38.9	192.3				-11.4	-10.5	-11.7
GEW-140	8/4/2015	14.7	58.2	0.3	26.8	184.1				-2.4	-2.5	-2.2
GEW-140	8/4/2015	15.4	58.9	0.3	25.4	184.1				-3.1	-2.8	-3.1
GEW-140	8/4/2015	13.8	57.5	0.0	28.7	184.5				-3.8	-3.5	-3.5
GEW-140	8/4/2015	13.8	56.8	0.0	29.4	184.5				-3.3	-3.6	-3.0
GEW-140	8/19/2015	16.0	56.6	0.0	27.4	183.9				-0.2	0.0	0.0
GEW-140	8/19/2015	16.3	57.2	0.0	26.5	183.3				0.1	0.0	0.5

August 2015 Wellfield Monitoring Data - Bridgeton Landfill

Well Name	Date Sampled	Methane	CO_2	O_2	Balance Gas	Init Temp	Adj Temp	Init Flow	Adj Flow	Init Static Press	Adj Static Press	System Pressure
		(% vol)				°F		scfm		H_2O		
GEW-140	8/26/2015	12.0	54.9	0.0	33.1	184.5				-6.7	-6.8	-6.4
GEW-140	8/26/2015	11.5	55.3	0.0	33.2	184.4				-5.3	-5.7	-5.3
GEW-141	8/4/2015	6.5	57.8	1.1	34.6	138.3				-13.2	-13.2	-18.2
GEW-141	8/4/2015	6.7	60.1	1.1	32.1	140.7				-11.4	-11.3	-18.7
GEW-141	8/19/2015	6.6	60.9	0.0	32.5	131.7				-15.2	-15.5	-18.5
GEW-141	8/19/2015	6.8	62.8	0.1	30.3	136.2				-16.1	-16.0	-17.6
GEW-142	8/4/2015	0.9	61.0	0.5	37.6	172.1				-12.7	-12.7	-13.0
GEW-142	8/4/2015	1.2	60.4	0.3	38.1	173.1				-13.1	-12.8	-13.1
GEW-142	8/19/2015	1.1	57.9	0.7	40.3	170.0				-6.7	-6.7	-6.4
GEW-142	8/19/2015	1.2	58.4	0.4	40.0	169.0				-6.2	-6.2	-5.9
GEW-143	8/4/2015	0.7	57.9	0.1	41.3	152.5				-0.8	-0.7	-0.9
GEW-143	8/4/2015	0.7	58.0	0.0	41.3	153.2				-0.7	-1.0	-0.7
GEW-143	8/19/2015	1.5	56.0	0.0	42.5	197.9				-4.9	-4.8	-4.5
GEW-143	8/19/2015	1.6	55.7	0.0	42.7	197.9				-5.7	-5.7	-4.8
GEW-144	8/4/2015	1.1	53.8	2.6	42.5	115.1				-13.2	-15.7	-13.8
GEW-144	8/4/2015	1.1	55.2	2.1	41.6	115.5				-11.2	-11.0	-10.5
GEW-144	8/19/2015	4.7	57.1	1.4	36.8	108.0				-14.1	-12.5	-13.5
GEW-144	8/19/2015	5.2	57.6	0.8	36.4	106.3				-9.5	-12.9	-10.0
GEW-144	8/27/2015	4.5	58.7	0.1	36.7	137.1				-13.5	-10.4	-14.7
GEW-144	8/27/2015	4.1	59.7	0.0	36.2	137.1				-14.3	-15.9	-14.5
GEW-145	8/21/2015	0.1	2.2	20.8	76.9	90.1				-19.8	-20.1	-20.0
GEW-145	8/21/2015	0.2	2.2	20.6	77.0	90.3				-19.8	-19.7	-19.5
GEW-146	8/4/2015	14.3	42.2	4.7	38.8	108.7				-16.8	-17.1	-17.4
GEW-146	8/4/2015	15.3	41.3	4.9	38.5	109.0				-13.2	-13.5	-18.4
GEW-146	8/19/2015	5.8	24.0	9.8	60.4	98.9				-11.1	-11.1	-16.1
GEW-146	8/19/2015	6.1	22.4	9.8	61.7	100.7				-14.9	-14.9	-15.5
GEW-146	8/28/2015	9.7	29.3	6.9	54.1	99.9				-13.6	-13.6	-14.8
GEW-146	8/28/2015	9.4	29.4	6.9	54.3	100.1				-5.4	-5.4	-17.8
GEW-147	8/19/2015	6.7	57.5	0.1	35.7	193.6				-17.0	-16.9	-17.7
GEW-147	8/19/2015	7.0	58.2	0.0	34.8	193.6				-16.5	-16.5	-17.4
GEW-148	8/4/2015	1.6	20.9	8.3	69.2	108.2				-1.3	-1.3	-17.8
GEW-148	8/4/2015	1.6	19.8	8.3	70.3	108.2				-1.8	-1.8	-17.4
GEW-148	8/19/2015	1.4	5.3	17.7	75.6	71.1				-1.5	-1.5	-16.7
GEW-148	8/19/2015	1.5	4.7	17.7	76.1	72.5				-17.5	-17.4	-17.1
GEW-148	8/27/2015	0.7	34.4	8.7	556.2	77.1				-7.6	-9.0	-7.4
GEW-148	8/27/2015	0.8	35.8	8.3	55.1	76.9				-7.6	-9.0	-7.4
GEW-149	8/4/2015	20.2	54.6	0.5	24.7	147.1				-1.5	-1.6	-14.8
GEW-149	8/4/2015	20.7	55.0	0.5	23.8	147.7				-1.5	-1.5	-14.5
GEW-149	8/19/2015	21.4	43.0	3.5	32.1	143.9				-2.2	-2.2	-19.6
GEW-149	8/19/2015	21.3	44.9	3.4	30.4	144.5				-2.2	-2.2	-19.6
GEW-150	8/21/2015	4.3	65.5	0.0	30.2	181.5				26.4	26.4	26.9
GEW-150	8/21/2015	4.5	67.7	0.0	27.8	180.3				26.3	25.9	27.1

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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-151	8/4/2015	0.6	47.1	5.5	46.8	114.4				-18.2	-18.1	-18.4
GEW-151	8/4/2015	0.7	49.8	4.7	44.8	114.5				-18.1	-18.1	-18.4
GEW-151	8/19/2015	0.8	6.2	19.2	73.8	71.8				-24.1	-23.8	-23.5
GEW-151	8/19/2015	1.0	7.2	19.0	72.8	71.8				-24.3	-24.5	-24.0
GEW-151	8/28/2015	0.1	6.9	19.2	73.8	88.7				-24.2	-24.5	-24.4
GEW-151	8/28/2015	0.1	7.4	18.4	74.1	92.7				-6.2	-6.2	-25.4
GEW-151	8/31/2015	9.9	55.7	0.7	33.7	190.8				-23.1	-22.6	-26.4
GEW-151	8/31/2015	8.9	54.8	0.5	35.8	190.8				-6.8	-6.9	-26.1
GEW-152	8/4/2015	3.7	17.7	15.1	63.5	172.6				-27.8	-27.8	-28.7
GEW-152	8/4/2015	7.3	33.7	8.0	51.0	173.1				-5.0	-5.4	-28.6
GEW-152	8/19/2015	10.3	40.1	7.5	42.1	180.1				-23.5	-23.8	-26.5
GEW-152	8/19/2015	11.6	41.5	5.9	41.0	180.3				-23.8	-24.3	-26.2
GEW-152	8/28/2015	5.2	40.5	5.8	48.5	183.3				-25.7	-25.7	-27.9
GEW-152	8/28/2015	5.9	50.1	2.5	41.5	183.9				-9.1	-9.2	-27.9
GEW-153	8/4/2015	13.3	47.2	1.9	37.6	106.3				-31.3	-31.7	-31.5
GEW-153	8/19/2015	29.8	44.7	0.0	25.5	121.5				-25.7	-25.7	-25.8
GEW-153	8/27/2015	23.3	44.1	0.0	32.6	126.9				-28.5	-28.1	-28.3
GEW-154	8/4/2015	37.4	55.0	0.0	7.6	150.6				0.3	0.4	-14.1
GEW-154	8/4/2015	36.5	56.3	0.0	7.2	152.1				-0.4	-0.4	-15.5
GEW-154	8/19/2015	15.5	36.6	8.0	39.9	175.3				-0.7	-0.8	-21.4
GEW-154	8/19/2015	19.2	41.6	7.6	31.6	175.9				-1.7	-1.8	-19.1
GEW-154	8/31/2015	7.1	12.1	16.1	64.7	130.5				-11.4	-11.8	-17.5
GEW-154	8/31/2015	7.4	11.2	16.2	65.2	121.2				-1.6	-1.5	-19.6
GEW-155	8/4/2015	14.7	53.3	0.9	31.1	179.8				-1.0	-1.0	-10.6
GEW-155	8/4/2015	14.6	54.0	1.0	30.4	179.8				-0.9	-1.0	-8.8
GEW-155	8/19/2015	4.2	40.8	5.5	49.5	175.8				-0.5	-0.5	-5.9
GEW-155	8/19/2015	3.9	38.3	6.9	50.9	177.5				-1.6	-2.2	-1.3
GEW-156	8/21/2015	27.4	53.3	0.1	19.2	140.9				-21.3	-21.3	-23.5
GEW-156	8/21/2015	28.7	52.6	0.0	18.7	141.2				-21.5	-21.5	-23.3
GIW-01	8/6/2015 9:40	1.2	57.2	0.3	41.3	179.8		0	0	-4.8	-3.3	-16.8
GIW-01	8/6/2015 9:45	1.6	59	0.3	39.1	180.6		17	17	-4.4	-4.4	-17.4
GIW-01	8/12/2015 9:55	5.2	54.2	0	40.6	189.1		22	21	-16.7	-18.1	-18.5
GIW-01	8/12/2015 9:56	3.8	60.2	0	36	188.8		53	31	-14.4	-11.1	-13.5
GIW-01	8/20/2015 9:30	4.5	67.8	0	27.7	189.1		39	30	-15.8	-16.5	-18.7
GIW-01	8/20/2015 9:30	4.8	68.4	0	26.8	189.1		30	32	-11.4	-13.8	-11.5
GIW-01	8/26/2015 11:18	2.7	63.3	0	34	176.9		0	32	-14.1	-15.2	-14.2
GIW-01	8/26/2015 11:19	2.9	63	0	34.1	177.5		12	37	-15.3	-13.8	-15.5
GIW-02	8/6/2015 9:25	0.5	56.3	4.2	39	76.2		10	8	-13.9	-13.7	-19.8
GIW-02	8/6/2015 9:30	0.5	51.6	3.5	44.4	75.9		13	13	-15.8	-15.7	-20.7
GIW-02	8/12/2015 10:07	0.6	49.8	1.4	48.2	89.9		11	11	-1.2	-1.2	-20.0
GIW-02	8/20/2015 9:25	1.4	64.2	0.3	34.1	81.3		10	11	-1.2	-1.2	-20.9
GIW-02	8/27/2015 10:29	4.6	64	0	31.4	84		3	3	-0.6	-0.6	-18.4
GIW-02	8/27/2015 10:31	4.6	63.7	0	31.7	84.4		3	3	-0.6	-0.6	-17.8

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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		
GIW-03	8/6/2015 9:16	0.4	58.3	4.9	36.4	78.4		0	5	-0.2	-0.3	-19.4
GIW-03	8/6/2015 9:20	0.2	52	4.6	43.2	78.4		0	0	-0.5	-0.4	-20.4
GIW-03	8/12/2015 10:11	0.3	57.8	2.2	39.7	91.3		9	9	-0.2	-0.2	-20.0
GIW-03	8/20/2015 9:18	0.5	62.7	0.6	36.2	79.1		10	0	0.0	-0.1	-20.6
GIW-03	8/20/2015 9:20	0.3	43.4	8.9	47.4	80		0	0	-3.0	-2.9	-20.7
GIW-03	8/27/2015 10:21	0.5	61.3	0.1	38.1	82.6		0	10	0.1	0.2	-18.6
GIW-03	8/27/2015 10:23	0.5	61.6	0	37.9	84		0	0	-0.3	-0.3	-19.1
GIW-04	8/6/2015 9:07	0.9	50.2	1.1	47.8	76.2		12	13	-2.1	-2.1	-19.1
GIW-04	8/6/2015 9:13	0.7	48.6	0.6	50.1	76.1		13	12	-2.6	-2.5	-20.3
GIW-04	8/12/2015 10:15	0.9	43	2.1	54	89.2		24	38	-4.0	-4.6	-19.9
GIW-04	8/20/2015 9:14	0.9	54.2	0.6	44.3	74.9		10	10	-4.1	-4.1	-19.9
GIW-04	8/27/2015 10:14	1	53.3	0.1	45.6	77.9		7	8	-1.5	-1.5	-18.1
GIW-04	8/27/2015 10:17	1	55	0	44	78.6		2	4	-2.0	-2.0	-19.6
GIW-05	8/6/2015 10:22	3.1	59.7	0.3	36.9	78.8		10	10	19.5	19.5	-16.5
GIW-05	8/6/2015 10:26	3	59.8	0.3	36.9	78.6		22	20	-20.0	-20.0	-20.4
GIW-05	8/12/2015 10:01	2.7	52.7	2.9	41.7	90.9		24	0	-20.2	-20.2	-20.0
GIW-05	8/12/2015 10:02	2.6	51.5	2.7	43.2	91.9		27	0	-19.8	-19.5	-20.0
GIW-05	8/20/2015 9:52	2.7	54.5	3.4	39.4	80.6		10	7	-19.2	-19.2	-19.9
GIW-05	8/20/2015 9:52	2.7	54.9	3.8	38.6	81.3		9	15	-19.1	-18.9	-20.1
GIW-05	8/26/2015 11:25	3	52.8	2	42.2	88.6		0	0	-17.1	-17.1	-17.7
GIW-05	8/26/2015 11:26	3.3	53.1	1.9	41.7	89.4		4	4	-17.1	-17.4	-17.5
GIW-06	8/6/2015 8:27	1.2	59.4	1	38.4	74.9		13	10	-18.4	-18.4	-20.4
GIW-06	8/6/2015 8:35	1	51.4	0.7	46.9	74.9		8	9	-5.7	-5.4	-20.4
GIW-06	8/12/2015 10:19	0.9	53.4	1.9	43.8	93.8		0	0	-19.3	-19.3	-20.4
GIW-06	8/12/2015 10:19	0.9	55.3	1.4	42.4	95.6		10	0	-17.1	-17.1	-20.5
GIW-06	8/20/2015 9:01	1.1	65	0	33.9	79.1		11	7	36.5	36.6	-19.7
GIW-06	8/20/2015 9:03	1.2	65.3	0	33.5	81.5		16	15	-6.0	-6.0	-19.8
GIW-06	8/27/2015 9:38	1.3	59.7	0.1	38.9	82.6		13	0	-8.5	-8.5	-19.1
GIW-06	8/27/2015 9:40	1.4	61	0	37.6	82.9		7	7	-3.4	-3.4	-19.1
GIW-07	8/6/2015 8:39	25.9	61.3	0.1	12.7	75.2		11	11	-0.1	-0.1	-0.2
GIW-07	8/6/2015 8:43	26	50.8	0.3	22.9	75.3		13	13	-0.2	-0.2	-0.4
GIW-07	8/12/2015 10:23	22.3	58.9	0	18.8	92.7		7	7	-0.1	-0.1	0.1
GIW-07	8/20/2015 8:57	19.9	64.3	0.1	15.7	75.5		14	13	-0.2	-0.2	-0.2
GIW-07	8/27/2015 9:54	20.1	61.4	0	18.5	84.6		4	5	-0.2	-0.2	-0.1
GIW-07	8/27/2015 9:55	20.2	61.9	0	17.9	84.6		0	0	-0.2	-0.2	-0.1
GIW-08	8/6/2015 10:13	19.1	47.9	6.4	26.6	78.8		343	344	-26.6	-26.7	-26.7
GIW-08	8/6/2015 10:17	18.4	44.7	6.8	30.1	79.8		347	347	-27.3	-27.3	-26.9
GIW-08	8/12/2015 9:47	12.6	40	8.7	38.7	91.1		347	347	-27.7	-27.7	-27.8
GIW-08	8/20/2015 9:56	15.8	49.2	6.6	28.4	82.4		341	341	-26.0	-26.1	-26.2
GIW-08	8/20/2015 9:56	15.4	47.5	6.8	30.3	82.8		336	342	-25.0	-26.0	-26.1
GIW-08	8/26/2015 11:31	12.1	36.6	8.9	42.4	85.8		360	359	-28.2	-27.8	-28.5
GIW-08	8/26/2015 11:33	14.2	36.5	6.8	42.5	87.2		356	344	-27.3	-25.4	-28.4
GIW-09	8/6/2015 8:47	14.9	39.6	6.6	38.9	95		341	335	-26.9	-26.3	-27.7

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		(% vol)				°F		scfm		H_2O		
GIW-09	8/6/2015 8:51	15.7	34.5	6.8	43	95.4		335	342	-25.8	-27.4	-27.3
GIW-09	8/12/2015 10:26	8.9	42.1	6	43	94.9		344	343	-27.3	-27.1	-29.8
GIW-09	8/20/2015 8:52	6.6	23.5	9.1	60.8	80.3		334	329	-24.5	-23.6	-25.0
GIW-09	8/20/2015 8:53	6.4	24.5	9	60.1	80.5		337	340	-25.1	-25.8	-27.0
GIW-09	8/27/2015 10:00	4	17.5	11.1	67.4	91.2		350	349	-26.7	-26.7	-28.1
GIW-09	8/27/2015 10:03	3.9	16.7	11.3	68.1	90.3		311	298	-20.9	-19.2	-29.3
GIW-10	8/6/2015 8:57	0.6	37.7	6.8	54.9	75		3	4	-15.0	-15.0	-19.9
GIW-10	8/6/2015 9:03	0.4	42.8	5	51.8	75.3		11	10	-19.4	-19.2	-19.9
GIW-10	8/20/2015 9:08	0.4	43	5.4	51.2	78.8		9	7	-19.4	-19.3	-19.9
GIW-10	8/20/2015 9:10	0.4	42.8	5.3	51.5	78.8		10	7	-19.4	-19.3	-19.9
GIW-10	8/27/2015 10:08	0.4	43.4	2.8	53.4	83.3		8	8	-18.3	-18.3	-18.6
GIW-10	8/27/2015 10:10	0.4	46.9	1.8	50.9	83.6		8	8	-18.2	-18.2	-18.6
GIW-11	8/6/2015 10:05	2.1	55.1	2.8	40	91.6		295	298	-19.2	-19.7	-19.4
GIW-11	8/6/2015 10:09	1.6	51.5	2.9	44	92.8		306	306	-20.9	-20.9	-21.2
GIW-11	8/12/2015 9:49	4.1	37.5	6.8	51.6	95.2		302	303	-20.2	-20.6	-20.7
GIW-11	8/20/2015 9:44	3.5	39.6	7.1	49.8	88.9		291	296	-18.4	-18.8	-18.5
GIW-11	8/20/2015 9:45	3.4	40.3	7.1	49.2	89.2		297	297	-19.2	-19.2	-19.3
GIW-11	8/26/2015 10:59	4.2	36.9	7.2	51.7	98.7		298	296	-18.4	-17.8	-18.2
GIW-11	8/26/2015 11:03	4.2	37.2	7.2	51.4	97.2		262	258	-13.6	-13.1	-17.6
GIW-12	8/6/2015 9:58	7.1	26.6	8.9	57.4	114.7		279	280	-17.8	-18.0	-18.3
GIW-12	8/6/2015 10:02	7.1	22.7	9.1	61.1	114.7		282	278	-18.4	-17.6	-18.6
GIW-12	8/12/2015 9:51	7.6	14.2	8.9	69.3	108.3		297	297	-20.0	-20.0	-20.3
GIW-12	8/20/2015 9:38	6.3	21.4	10.7	61.6	104.8		291	291	-18.7	-18.7	-19.3
GIW-12	8/20/2015 9:38	6.6	20.7	10.8	61.9	104.7		292	292	-19.1	-19.2	-19.6
GIW-12	8/26/2015 11:08	6.7	20.1	10.3	62.9	104.8		288	292	-17.0	-17.3	-17.5
GIW-12	8/26/2015 11:10	6.5	19	10.6	63.9	103		246	250	-12.0	-12.2	-18.0
GIW-13	8/6/2015 9:50	3.9	63.4	0.5	32.2	78.1		43	42	-0.2	-0.3	-0.5
GIW-13	8/6/2015 9:54	2.5	63.8	0.4	33.3	78.6		0	0	0.6	0.3	0.2
GIW-13	8/12/2015 9:53	6.5	29.8	1	62.7	124.9		173	172	-6.7	-6.5	-6.3
GIW-13	8/20/2015 9:34	7.2	61.2	0.3	31.3	95.8		147	144	-4.5	-4.2	-4.5
GIW-13	8/26/2015 11:14	7.5	56.9	0.5	35.1	112.1		143	134	-3.9	-3.5	-3.9
GIW-13	8/26/2015 11:14	7.8	55.6	0.7	35.9	111.2		136	137	-3.6	-3.7	-3.4
LCS-5A	8/7/2015 17:35	57.3	40.8	0	1.9	95.1				-24.9	-24.8	-28.0
LCS-5A	8/13/2015 10:55	58	39.4	0.1	2.5	95.3				-24.9	-25.8	-28.5
LCS-5A	8/25/2015 13:57	58.7	40.3	0	1	96.7				-24.8	-24.8	-27.8
LCS-5A	8/31/2015 18:23	57.8	40.1	0.2	1.9	91.1				-28.5	-28.2	-28.6
LCS-6B	8/7/2015 14:39	55.8	42	0	2.2	98.2		12	11	0.5	0.5	-31.3
LCS-6B	8/7/2015 14:41	55.3	42.2	0	2.5	98		13	12	-0.2	-0.2	-30.7
LCS-6B	8/13/2015 10:07	47.5	36.9	1.8	13.8	93		8	8	-1.2	-1.2	-30.1
LCS-6B	8/13/2015 10:07	48.6	38.2	1.7	11.5	93.6		7	8	-0.7	-0.7	-30.2
LCS-6B	8/18/2015 14:20	56.5	41	0	2.5	89		8	7	0.7	0.7	-25.6
LCS-6B	8/18/2015 14:21	56.9	42.6	0	0.5	87.6		6	6	-0.6	-0.6	-25.6
LCS-6B	8/25/2015 11:15	51.5	38	1.3	9.2	84		6	6	-1.5	-1.5	-26.8

August 2015 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		
LCS-6B	8/25/2015 11:17	51.9	38	1.2	8.9	84		6	4	-1.5	-1.5	-28.3
LCS-6B	8/31/2015 16:09	52.4	40.5	0.7	6.4	99.6		8	8	-0.7	-0.7	-27.7
LCS-6B	8/31/2015 16:11	52.2	40.4	0.6	6.8	99.6		7	7	-0.7	-0.7	-28.3
PGW-60	8/13/2015 9:43	52.9	32.4	2.3	12.4	89.9		4	11	-30.2	-30.4	-30.2
PGW-60	8/18/2015 11:31					89.5		23	18	-15.8	-14.7	-22.5
PGW-60	8/18/2015 11:32					89.7		0	0	-15.1	-15.6	-19.6
PGW-60	8/26/2015 9:00	57.6	40.3	0.2	1.9	77.1		5	5	-25.7	-25.4	-25.8
PGW-60	8/26/2015 9:07	58.7	39.8	0.1	1.4	77.9		5	7	-11.1	-11.1	-26.4
PGW-60	8/31/2015 15:35	58.1	38.1	0	3.8	89.6		0	0	-1.4	-1.5	-26.8
SEW-002	8/21/2015 9:23	4	50.1	6.1	39.8	137				-18.4	-17.7	-18.4
SEW-002	8/21/2015 9:24	4.6	54.3	4	37.1	138.7				-18.4	-18.1	-18.4

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
	May 2015	June 2015	July 2015	August 2015		
GEW-001	--	--	--	--		
GEW-002	124.0	122.6	126.0	124.2		
GEW-003	126.0	125.6	124.9	118.3		
GEW-004	122.0	124.0	122.7	123.1		
GEW-005	95.0	100.6	98.2	102.1		
GEW-006	91.3	101.8	93.1	92.9		
GEW-007	99.4	100.0	107.6	102.3		
GEW-008	120.0	118.1	119.4	119.2		
GEW-009	125.0	125.3	126.4	126.9		
GEW-010	108.8	98.5	110.5	93.7		
GEW-011	189.4	187.0	185.2	--		
GEW-013A	--	--	--	--		
GEW-014A	118.7	91.1	--	--		
GEW-015	--	--	--	--		
GEW-016R	196.6	--	--	--		
GEW-018B	--	--	--	--		
GEW-018R	193.1	92.2	--	--		
GEW-019A	--	--	--	--		
GEW-020A	84.8	99.8	70.9	--		
GEW-021A	112.8	158.5	115.8	--		
GEW-022R	191.9	191.6	187.6	--		
GEW-023A	186.9	--	--	--		
GEW-024A	--	201.6	200.1	--		
GEW-025A	193.7	117.5	--	--		
GEW-026R	115.5	131.4	84.9	91.9		
GEW-027A	176.2	181.9	175.8	115.3		
GEW-028R	184.6	179.7	184.6	188.5		
GEW-029	193.7	89.1	--	--		
GEW-030R	--	--	--	--		
GEW-033R	--	--	--	--		
GEW-034	102.6	--	--	--		
GEW-034A	--	--	--	--		
GEW-035	124.0	111.0	87.7	--		

Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	May 2015	June 2015	July 2015	August 2015		
GEW-036	--	--	--	--		
GEW-037	--	--	94.6	--		
GEW-038	165.5	138.1	149.3	118.4		
GEW-039	139.0	136.0	135.7	134.3		
GEW-040	93.2	95.2	97.4	96.8		
GEW-041R	108.1	110.2	110.9	110.4		
GEW-042R	93.0	97.7	104.5	101.5		
GEW-043R	136.3	136.0	134.7	135.9		
GEW-044	99.0	100.0	96.1	96.0		
GEW-045R	87.6	98.2	101.4	100.6		
GEW-046R	90.9	100.9	101.5	101.8		
GEW-047R	117.0	117.3	118.6	121.8		
GEW-048	106.1	107.1	109.8	108.5		
GEW-049	110.0	114.5	112.2	114.7		
GEW-050	109.3	109.6	111.5	111.1		
GEW-051	125.0	127.0	127.5	128.3		
GEW-052	114.0	115.5	116.6	115.8		
GEW-053	139.7	141.5	140.6	140.5		
GEW-054	150.0	148.0	152.9	150.6		
GEW-055	127.0	127.2	128.7	128.0		
GEW-056R	175.0	169.0	168.1	173.1		
GEW-057B	179.3	178.4	--	179.8		
GEW-057R	186.3	185.7	178.0	184.1		
GEW-058	191.9	188.5	189.8	189.6		
GEW-058A	187.9	176.2	179.7	181.4		
GEW-059R	184.1	183.0	187.2	185.2		
GEW-061B	78.9	99.2	92.1	89.9		
GEW-064A	--	--	--	--		
GEW-065A	196.0	197.9	196.0	196.0		
GEW-066	196.7	195.0	--	--		
GEW-067A	194.2	195.4	165.7	185.2		
GEW-068A	--	--	--	--		
GEW-069R	102.1	97.7	--	--		
GEW-070R	85.1	102.8	--	--		
GEW-071	196.5	113.5	--	--		

Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	May 2015	June 2015	July 2015	August 2015		
GEW-071B	--	--	--	--		
GEW-072RR	--	--	--	--		
GEW-073R	--	--	--	--		
GEW-075	72.9	93.1	--	--		
GEW-076R	--	--	--	--		
GEW-077	--	--	--	--		
GEW-078R	--	--	--	--		
GEW-080	197.8	197.2	--	--		
GEW-081	198.4	129.7	--	--		
GEW-082R	192.5	195.0	195.0	192.5		
GEW-083	92.7	112.9	--	--		
GEW-084	85.5	96.2	--	--		
GEW-085	97.1	108.1	107.0	--		
GEW-086	73.3	--	--	190.2		
GEW-087	--	--	--	--		
GEW-088	--	--	--	--		
GEW-089	77.6	99.1	93.1	84.9		
GEW-090	192.5	191.6	189.1	190.8		
GEW-091	--	--	--	--		
GEW-100	--	--	--	--		
GEW-101	92.1	107.5	130.6	--		
GEW-102	--	--	--	--		
GEW-103	84.5	--	--	--		
GEW-104	105.6	90.3	88.1	104.7		
GEW-105	83.2	111.0	98.9	94.4		
GEW-106	--	--	--	--		
GEW-107	147.0	85.9	70.2	94.8		
GEW-108	--	--	--	--		
GEW-109	178.5	179.7	178.7	175.8		
GEW-110	170.0	170.0	131.6	118.3		
GEW-112	--	100.3	--	--		
GEW-113	--	--	--	--		
GEW-116	87.4	--	65.6	93.6		
GEW-117	--	97.8	68.2	89.5		
GEW-118	--	--	--	--		

Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	May 2015	June 2015	July 2015	August 2015		
GEW-120	194.8	165.2	129.7	159.6		
GEW-121	194.8	200.1	189.6	191.8		
GEW-122	194.8	87.2	191.9	196.6		
GEW-123	190.2	189.8	189.6	186.3		
GEW-124	--	190.9	146.3	147.3		
GEW-125	190.9	194.3	99.8	194.2		
GEW-126	194.2	197.9	196.0	190.8		
GEW-127	186.3	187.0	188.9	189.1		
GEW-128	182.4	181.5	182.1	182.8		
GEW-129	164.1	163.3	164.6	164.5		
GEW-130	--	--	--	--		
GEW-131	175.2	147.7	148.1	154.9		
GEW-132	188.5	185.1	184.7	185.2		
GEW-133	195.3	114.4	123.7	--		
GEW-134	182.8	190.6	194.8	188.5		
GEW-135	191.6	194.3	190.7	192.3		
GEW-136	197.2	147.0	171.2	175.2		
GEW-137	138.0	183.9	125.6	123.7		
GEW-138	178.2	183.3	190.1	185.1		
GEW-139	193.1	195.0	194.3	193.7		
GEW-140	187.4	188.9	187.4	184.5		
GEW-141	127.8	125.0	135.6	140.7		
GEW-142	191.6	184.5	187.0	173.1		
GEW-143	195.0	195.5	194.3	197.9		
GEW-144	143.9	145.2	113.8	115.5		
GEW-145	110.4	--	--	90.3		
GEW-146	136.1	99.2	106.2	109.0		
GEW-147	194.8	196.4	194.3	193.6		
GEW-148	194.5	187.0	109.9	108.2		
GEW-149	149.3	145.2	144.4	147.7		
GEW-150	191.8	149.7	131.4	181.5		
GEW-151	166.9	98.6	103.9	114.5		

Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	May 2015	June 2015	July 2015	August 2015		
GEW-152	188.5	107.0	127.2	180.3		
GEW-153	95.3	95.6	109.7	121.5		
GEW-154	200.2	127.8	134.3	175.9		
GEW-155	150.7	150.2	187.9	179.8		
GEW-156	168.8	186.4	141.1	141.2		
GIW-01	195.0	193.0	176.7	189.1		
GIW-02	92.5	100.4	103.9	89.9		
GIW-03	90.5	97.8	103.0	91.3		
GIW-04	88.2	97.7	105.1	89.2		
GIW-05	93.4	96.3	96.2	91.9		
GIW-06	86.8	98.2	101.8	95.6		
GIW-07	88.0	95.6	99.8	92.7		
GIW-08	115.1	113.1	98.7	91.1		
GIW-09	193.7	192.0	103.0	95.4		
GIW-10	90.9	97.7	100.6	78.8		
GIW-11	170.2	169.4	112.8	98.7		
GIW-12	181.0	166.9	116.1	114.7		
GIW-13	172.5	162.8	96.2	124.9		
LCS-1D	--	--	--	--		
LCS-2D	--	--	91.5	--		
LCS-3C	--	--	--	--		
LCS-4B	--	--	--	--		
LCS-5A	94.2	95.3	95.8	96.7		
LCS-6B	90.5	102.8	99.7	98.2		
PGW-60	83.8	90.8	91.7	89.9		
SEW-002	--	--	157.5	138.7		
SEW-012A	85.7	--	--	--		
SEW-017R	136.0	107.3	96.0	--		
SEW-031R	--	194.9	197.2	--		
SEW-032R	--	--	--	--		
SEW-060R	--	--	--	--		

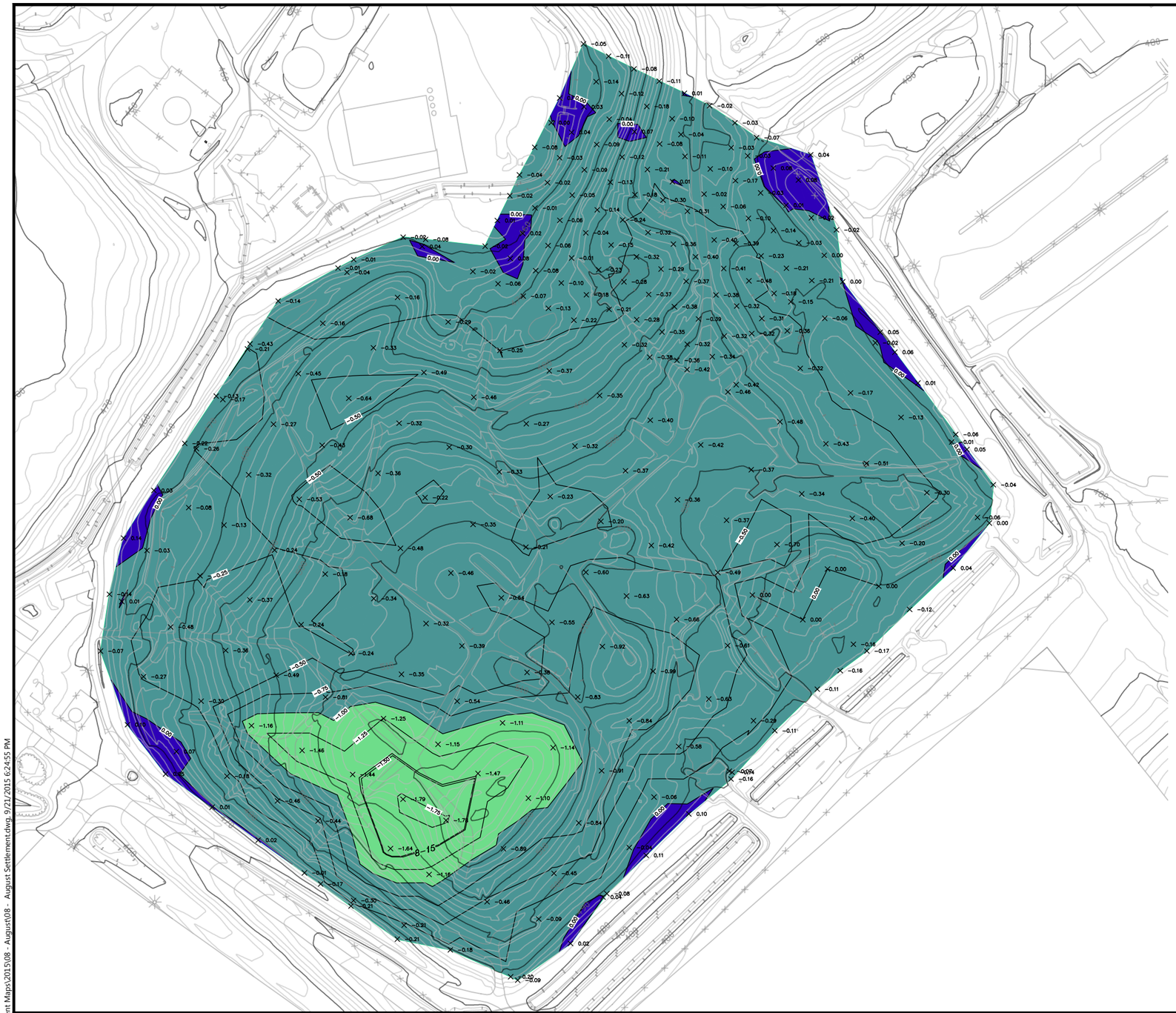
Wellfield Temperature - Bridgeton Landfill

Well Name	Maximum Initial Temperature From All Monthly Wellhead Readings (in °F)				Temp Trend ><30°F	Comments
	May 2015	June 2015	July 2015	August 2015		
SEW-061R	--	100.1	--	--		
SEW-062R	82.1	87.5	--	--		
SEW-063	185.0	190.9	144.9	--		
SEW-064	152.1	152.9	--	--		
SEW-067	89.6	115.0	--	--		
SEW-072R	66.0	96.4	--	--		
SEW-074	90.6	92.2	--	--		
SEW-079R	90.5	101.1	--	--		
T-56	69.5	82.2	92.2	--		

-- = Indicates no data available.

ATTACHMENT F

SETTLEMENT FRONT MAP



N

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 7-15-15 FROM SPOT ELEVATIONS SURVEYED ON 8-17-15.
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 (8-17-15 TO 7-15-15)
	MINOR ELEVATION CHANGE CONTOUR (0.25 FEET)
−0.50	MAJOR ELEVATION CHANGE CONTOUR (0.50 FEET)
8–15	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	113967.71	
5	−1.00	0.00	1380549.10	
6	0.00	1.00	46389.80	

REV. NO.	DATE	DESCRIPTION

BRIDGETON LANDFILL

CB&I Environmental & Infrastructure, Inc.
STATE OF ILLINOIS LICENSED DESIGN FIRM #184004093

BRIDGETON LANDFILL
BRIDGETON, MO

SETTLEMENT MAP
JULY 15, 2015 THROUGH AUGUST 17, 2015

DRAWN BY:	APPROVED BY:	PROJ. NO.:	DATE:
ZPC	JPV	155162	SEPTEMBER 2015

T:\AutoCAD\Projects\Bridgeton LF\Settlement Maps\2015\08 - August\08 - August Settlement.dwg 9/21/2015 6:24:55 PM

ATTACHMENT G

SUMMARY OF ODOR COMPLAINTS

August 1, 2015 – August 31, 2015 / MDNR ODOR COMPLAINTS

Name: meagan

Message: Odor logged August 1, 2015, at 12:24 pm strength of 10

Follow-up: The following odor concern has been investigated by Bridgeton Landfill staff. This concern is of substantial distance from the Bridgeton Landfill during a period of eastern winds, placing this location upwind of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Rhonda Steelman

Message: Odor logged August 1, 2015, at 6:00 am strength of 8

Follow-up: The following odor concern has been investigated by Bridgeton Landfill staff. This concern is of substantial distance from the Bridgeton Landfill. Winds prior to and at the time of this concern were calm with infrequent low velocity southwest winds. No odors related to the Bridgeton Landfill were observed off-site during self-inspections performed on this date and no technical disturbances occurred with potential to have caused this odor. Given the significant distance, wind data, and site observations there is no evidence to suggest that the odor referenced in this concern was associated with or originated from the Bridgeton Landfill.

Name: Rhonda Steelman

Message: Odor logged August 1, 2015, at 6:00 am strength of 8

Follow-up: This odor concern is a duplicate of a previously received submittal.

Name: NA

Message: Odor logged August 3, 2015, at 6:58 am strength of 9

Follow-up: The following concern was investigated by Bridgeton Landfill staff shortly after receipt. No odor associated with the Bridgeton Landfill was observed at this location or any other location during a corresponding odor self-inspection. A mild ammonia/chemical odor from an industrial facility in close proximity to this concern location was observed. A moderate/distinct garbage odor from another known odor source was also observed at an observation point in close proximity to this concern location. Winds were of a southwestern origin, placing this concern location upwind of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Debi Disser

Message: Odor logged August 4, 2015, at 6:03 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a due east origin, placing this concern location directly adjacent and immediately downwind of another known odor source. This was not a Bridgeton Landfill odor.

Name: Mason Murphy

Message: Odor logged August 6, 2015, at 8:30 pm strength of 7

Follow-up: The following odor concern has been investigated by Bridgeton Landfill staff. The concern location cited is immediately adjacent to two known odor sources with multiple observed off-site odor emissions by MDNR within the last month. This location is approximately two miles away from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Karen Nickel

Message: Odor logged August 6, 2015, at 2:47 pm strength of 10

Follow-up: The following odor was investigated shortly after receipt. A garbage odor unassociated with the Bridgeton Landfill could be detected in the vicinity of this location. This was not a Bridgeton Landfill odor.

Name: Melissa wilfong

Message: Odor logged August 10, 2015, at 11:48 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The latitude and longitude coordinates given in this concern do not match with the address entered. The latitude and longitude data is the default location within the Bridgeton Landfill boundaries and is therefore invalid. The address cited is in far closer proximity to two known odor sources than the Bridgeton Landfill. Winds were of a northwest origin at the time of this concern, placing it directly downwind of these other odor sources. Odor from one of these sources was observed by Bridgeton Landfill staff earlier on this date. This is not believed to have been a Bridgeton Landfill odor.

Name: Jamie Flores

Message: Odor logged August 11, 2015, at 6:30 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern cites a location within the property boundaries of the Bridgeton Landfill, the default location for when no location information is provided by the submitter. Without location data it is not possible to adequately investigate this concern.

Name: NA

Message: Odor logged August 11, 2015, at 7:45 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was received approximately 12 hours after the stated observation time and as a result could not be investigated in real-time by Bridgeton Landfill staff. No technical disruptions were experienced during the evening in which this concern referenced that would indicate this originated from the Bridgeton Landfill.

Name: Rick mueller

Message: Odor logged August 12, 2015, at 6:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern location is in close proximity to another known odor source with off-site odor observed on the morning of this concern. This is not believed to have been a Bridgeton Landfill odor.

Name: Loretta Copeland

Message: Odor logged August 13, 2015, at 6:07 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Loretta Copeland

Message: Odor logged August 13, 2015, at 6:09 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Emily Jacobi

Message: Odor logged August 13, 2015, at 7:18 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Kathy Bell

Message: Odor logged August 1, 2015, at 6:30 pm strength of 3

Follow-up: The following concern has been investigated by Bridgeton Landfill. This concern was submitted 12 days after the stated observation. On that date no odor related to the Bridgeton Landfill was observed during Bridgeton Landfill odor self-inspections.

Name: Kathy Bell

Message: Odor logged August 1, 2015, at 7:30 pm strength of 3

Follow-up: The following concern has been investigated by Bridgeton Landfill. This concern was submitted 12 days after the stated observation. On that date no odor related to the Bridgeton Landfill was observed during Bridgeton Landfill odor self-inspections.

Name: Kathy Bell

Message: Odor logged August 13, 2015, at 6:00 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Kathy Bell

Message: Odor logged August 1, 2015, at 8:0 pm strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill. This concern was submitted 12 days after the stated observation. On that date no odor related to the Bridgeton Landfill was observed during Bridgeton Landfill odor self-inspections.

Name: NA

Message: Odor logged August 13, 2015, at 7:43 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 13, 2015, at 7:44 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Almeda Baker

Message: Odor logged August 13, 2015, at 2:00 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Greg and Ellen Wortham

Message: Odor logged August 13, 2015, at 8:15 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Jan Huber

Message: Odor logged August 13, 2015, at 4:34 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Rhonda Steelman

Message: Odor logged August 13, 2015, at 5:43 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Rhonda Steelman

Message: Odor logged August 13, 2015, at 5:43 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Mary Conlon

Message: Odor logged August 13, 2015, at 7:20 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill. On this date a rotten garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 14, 2015, at 5:30 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Kathy Bell

Message: Odor logged August 14, 2015, at 6:14 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Vernita Wilson

Message: Odor logged August 12, 2015, at 2:16 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was submitted approximately two days after the stated observation time. The location cited in this concern is to the west of the Bridgeton Landfill. Winds were of a persistent western origin throughout the morning of this concern. Another odor source has had frequent odors and was directly upwind of this location during the time of this concern. This is not believed to have been a Bridgeton Landfill odor.

Name: Vernita Wilson

Message: Odor logged August 13, 2015, at 7:00 am strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was investigated immediately after receipt. A distinct garbage odor was observed at multiple points throughout the surrounding area, originating from a source located to the west of the Bridgeton Landfill. This odor was not consistent with any potential odor sources associated with the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Rick Mueller

Message: Odor logged August 14, 2015, at 7:18 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was investigated immediately after receipt. A distinct garbage odor was observed at multiple points throughout the surrounding area, originating from a source located to the west of the Bridgeton Landfill. This odor was not consistent with any potential odor sources associated with the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Meagan Beackermann

Message: Odor logged August 14, 2015, at 9:00 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Almeda Baker

Message: Odor logged August 14, 2015, at 11:45 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Almeda Baker

Message: Odor logged August 14, 2015, at 11:45 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Amanda Morrison

Message: Odor logged August 14, 2015, at 9:00 am strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Dawn Chapman

Message: Odor logged August 14, 2015, at 2:45 am strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: David Sontheimer

Message: Odor logged August 14, 2015, at 7:00 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a persistent western/southwestern origin, placing this concern location directly upwind of the Bridgeton Landfill. A garbage odor unrelated to the Bridgeton Landfill was prevalent throughout the area. This was not a Bridgeton Landfill odor.

Name: Christen Commuso

Message: Odor logged August 12, 2015, at 6:00 pm strength of 3

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a generally western direction, placing this location upwind of the Bridgeton Landfill. No disruptions with the potential to cause odor occurred on this date. Odor self-inspections performed before and after the time stated in this concern did not observe any odor related to the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: Christen Commuso

Message: Odor logged August 12, 2015, at 6:30 am strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was received approximately three days after the date of observation. At the time of

this concern winds were of a generally western direction, placing this location upwind of the Bridgeton Landfill. An odor self-inspection was performed approximately two hours after the time stated in this concern and did not observe odor related to the Bridgeton Landfill at a monitoring point in close proximity to this location.

Name: Christen Commuso

Message: Odor logged August 12, 2015, at 7:30 pm strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern was received approximately three days after the date of observation. At the time of this concern winds were of a generally western direction, placing this location upwind of the Bridgeton Landfill. An odor self-inspection was performed approximately one hour after this concern and did not observe odor related to the Bridgeton Landfill in the proximity of the location stated in this concern.

Name: Christen Commuso

Message: Odor logged August 12, 2015, at 7:30 pm strength of 4

Follow-up: The following concern is a duplicate of a previous concern.

Name: Debi Disser

Message: Odor logged August 15, 2015, at 4:20 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of the concern winds were of a general west/southwest origin. The location referenced in this concern is located to the southwest of the Bridgeton Landfill. A distinct garbage odor was detected during morning odor self-inspections by Bridgeton Landfill staff. This was not a Bridgeton Landfill odor.

Name: Debi Disser

Message: Odor logged August 15, 2015, at 4:38 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of the concern winds were of a general west/southwest origin. The location referenced in this concern is located to the southwest of the Bridgeton Landfill. A distinct garbage odor was detected during morning odor self-inspections by Bridgeton Landfill staff. This was not a Bridgeton Landfill odor.

Name: Debi Disser

Message: Odor logged August 15, 2015, at 4:50 am strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of the concern winds were of a general west/southwest origin. The location referenced in this concern is located to the southwest of the Bridgeton Landfill. A distinct garbage odor was detected during morning odor self-inspections by Bridgeton Landfill staff. This was not a Bridgeton Landfill odor.

Name: Emily Jacobi

Message: Odor logged August 16, 2015, at 9:07 am strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of the concern winds were of a southern origin, placing this concern upwind of the Bridgeton Landfill. No odor related to the Bridgeton Landfill was detected during odor self-inspections performed on this date.

Name: Daniel Cardosi

Message: Odor logged August 18, 2015, at 3:45 pm strength of 8

Follow-up: The following concern did not provide valid location data and as such cannot be sufficiently investigated. Bridgeton Landfill staff did perform an odor self-inspection approximately one hour before the time cited in this concern and did not observe any off-site odor related to the Bridgeton Landfill. A weak garbage odor was observed at two monitoring points located to the southwest of the Bridgeton Landfill during a period of west southwest winds.

Name: Rhonda Steelman

Message: Odor logged August 19, 2015, at 3:56 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of the concern winds were of a southwestern origin, placing this concern upwind of the Bridgeton Landfill. No odor related to the Bridgeton Landfill was detected during odor self-inspections performed on this date.

Name: Loretta Copeland

Message: Odor logged August 19, 2015, at 8:54 pm strength of 10

Follow-up: The following concern did not provide valid location data and as such cannot be sufficiently investigated. Bridgeton Landfill staff did perform an odor self-inspection in close

chronological proximity to this concern and did not observe any Bridgeton Landfill odor around the entire site perimeter. Winds were of a due west origin at that time.

Name: Ellen Wortham

Message: Odor logged August 18, 2015, at 6:02 pm strength of 8

Follow-up: The following concern was received approximately 38 hour after the stated observation time and as such could not be investigated in a prompt manner. Bridgeton Landfill staff performed odor self-inspections approximately two hours before and two hours after the time cited in this concern. Winds were of a west southwest origin during the first and a faint garbage odor was detected in close proximity to this concern location, originating form a western source. Winds were of a south southeast vector during the later investigation and did not observe any significant odor. This was not a Bridgeton Landfill odor.

Name: Greg Wortham

Message: Odor logged August 20, 2015, at 10:15 pm strength of 8

Follow-up: The time cited in this concern is approximately 14 hours in the future. As such this is obviously not a valid concern.

Name: Deanna Dickmeyer

Message: Odor logged August 21, 2015, at 8:32 am strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a west southwest origin, placing this location upwind of the Bridgeton Landfill and downwind from other known odor sources with frequent observable odor in this area. Bridgeton Landfill odor self-inspections on this date did not observe an off-site odor related to the Bridgeton Landfill.

Name: Wendy Lumetta

Message: Odor logged August 20, 2015, at 9:05 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a west southwest origin, placing this location upwind of the Bridgeton Landfill. A Bridgeton Landfill odor patrol conducted approximately one hour after the time cited in this concern observed a strong garbage odor at a point in relatively close proximity to this concern. This was not a Bridgeton Landfill odor.

Name: Sharon Bishop

Message: Odor logged August 23, 2015, at 5:08 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Emily Jacobi

Message: Odor logged August 23, 2015, at 6:24 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Meagan Beckermann

Message: Odor logged August 23, 2015, at 7:00 pm strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Kathy Bell

Message: Odor logged August 23, 2015, at 7:05 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Robbin Dailey

Message: Odor logged August 23, 2015, at 6:00 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Michael Dailey

Message: Odor logged August 23, 2015, at 6:00 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Robbin Dailey

Message: Odor logged August 23, 2015, at 7:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a

broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: NA

Message: Odor logged August 23, 2015, at 8:00 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Michael Dailey

Message: Odor logged August 23, 2015, at 7:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Almeda Baker

Message: Odor logged August 23, 2015, at 9:00 am strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. The concern location is of significant distance away from the Bridgeton Landfill, well outside the downwind pathway of the Bridgeton Landfill. Bridgeton Landfill staff observed no odor related to the Bridgeton Landfill during morning site checks and odor patrol performed on this date.

Name: NA

Message: Odor logged August 23, 2015, at 8:29 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: NA

Message: Odor logged August 23, 2015, at 8:27 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: LOretta

Message: Odor logged August 23, 2015, at 7:03 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a southern origin, placing this location upwind of the Bridgeton Landfill. On-site staff did not observe off-site odor during the odor patrol performed the morning of this concern and no infrastructure interruptions were observed during morning site checks performed shortly after the time of this concern.

Name: Loretta

Message: Odor logged August 24, 2015, at 7:06 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a southern origin, placing this location upwind of the Bridgeton Landfill. On-site staff did not observe off-site odor related to the Bridgeton landfill during the odor patrol performed the morning of this concern and no infrastructure interruptions were observed during morning site checks performed shortly after the time of this concern. A garbage odor was observed by Bridgeton Landfill staff during morning commute on I-70 and at the intersection of the I-70 off-ramp and the St. Charles Rock Road. This was not a Bridgeton Landfill odor.

Name: deb

Message: Odor logged August 23, 2015, at 6:00 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor sources located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: NA

Message: Odor logged August 24, 2015, at 6:45 am strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a southern origin, placing this location upwind of the Bridgeton Landfill. On-site staff did not observe off-site odor related to the Bridgeton landfill during the odor patrol performed the morning of this concern and no infrastructure interruptions were observed during morning site checks performed shortly after the time of this concern. A garbage odor was observed by Bridgeton Landfill staff during morning commute on I-70 and at the intersection of the I-70 off-ramp and the St. Charles Rock Road. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 24, 2015, at 7:39 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a southern origin, placing this location upwind of the Bridgeton Landfill at a significant distance from the Bridgeton Landfill. On-site staff did not observe off-site odor related to the Bridgeton landfill during the odor patrol performed the

morning of this concern and no infrastructure interruptions were observed during morning site checks performed shortly after the time of this concern. A garbage odor was observed by Bridgeton Landfill staff during morning commute on I-70 and at the intersection of the I-70 off-ramp and the St. Charles Rock Road. This was not a Bridgeton Landfill odor.

Name: David Blackwell

Message: Odor logged August 23, 2015, at 8:00 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor source located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Jan Huber

Message: Odor logged August 23, 2015, at 11:06 am strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a due west origin, placing this location outside of the downwind corridor of the Bridgeton Landfill. An odor patrol was performed by Bridgeton Landfill staff less than one hour after this concern's stated time and did not observe odor related to the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Jan Huber

Message: Odor logged August 23, 2015, at 6:11 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor source located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Jan Huber

Message: Odor logged August 23, 2015, at 9:14 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor source located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Jan Huber

Message: Odor logged August 24, 2015, at 7:16 am strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a southern origin, placing this location upwind of the Bridgeton Landfill at a significant distance from the Bridgeton Landfill. On-site staff did not observe off-site odor related to the Bridgeton landfill during the odor patrol performed the morning of this concern and no infrastructure interruptions were observed during morning site checks performed shortly after the time of this concern. A garbage odor was observed by Bridgeton Landfill staff during morning commute on I-70 and at the intersection of the I-70 off-ramp and the St. Charles Rock Road. This was not a Bridgeton Landfill odor.

Name: Sharon Bishop

Message: Odor logged August 24, 2015, at 11:41 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a southern origin, placing this location upwind of the Bridgeton Landfill at a significant distance from the Bridgeton Landfill. On-site staff did not observe off-site odor related to the Bridgeton landfill during the odor patrol performed the morning of this concern and no infrastructure interruptions were observed during morning site checks performed shortly after the time of this concern. A garbage odor was observed by Bridgeton Landfill at points in close proximity to this location during odor patrols performed approximately two hours before the time cited in this concern.

Name: Sharon Bishop

Message: Odor logged August 24, 2015, at 4:01 am strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of south and west origins, placing this location at a potentially downwind location from the Bridgeton Landfill intermittently. A brief flare outage occurred at approximately this time on this date and was corrected shortly by Bridgeton Landfill staff. Odor observations following that outage observed no off-site odor related to the Bridgeton Landfill and shortly thereafter concerns and observations from the area indicate the presence of a strong non-Bridgeton Landfill odor in the area. However, as this flare disruption and this concern coincide chronologically there is some potential for this to have been a Bridgeton Landfill odor.

Name: Amy Ryan

Message: Odor logged August 24, 2015, at 4:05 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. An odor patrol was performed at 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 August 24, 2015, at 4:15 pm strength of 6

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

Name: Christen Commuso

Message: Odor logged August 24, 2015, at 8:10 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 24, 2015, at 9:16 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and

servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Greg Wortham

Message: Odor logged August 24, 2015, at 8:15 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a southern origin, placing this location upwind of the Bridgeton Landfill at a significant distance from the Bridgeton Landfill. On-site staff did not observe off-site odor related to the Bridgeton landfill during the odor patrol performed the morning of this concern and no infrastructure interruptions were observed during morning site checks performed shortly after the time of this concern. A garbage odor was observed by Bridgeton Landfill staff during morning commute on I-70 and at the intersection of the I-70 off-ramp and the St. Charles Rock Road. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 24, 2015, at 7:30 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 24, 2015, at 7:30 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 25, 2015, at 6:40 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor. This odor was still present the following morning at the time of this concern.

Name: william budenholzer

Message: Odor logged August 23, 2015, at 7:52 pm strength of 9

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor source located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Karen Nickel

Message: Odor logged August 24, 2015, at 8:50 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 25, 2015, at 7:47 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and

servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor. This odor was still present the following morning at the time of this concern.

Name: Meagan Beckermann

Message: Odor logged August 25, 2015, at 8:47 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. On this evening Bridgeton Landfill was conducting a planned pre-treatment plant shutdown and servicing event with multiple personnel on-site. Trained odor monitoring staff performed multiple rounds of the site and the surrounding areas, no technical disruptions on the landfill or odors emanating from the site were observed. A strong fecal/garbage odor was observed throughout the area over the entire evening however, originating from a source to the west of the Bridgeton Landfill. This was not a Bridgeton Landfill odor. This odor was still present the following morning at the time of this concern. This concern location is in the immediate vicinity of the suspected source of this odor.

Name: Steve Commuso

Message: Odor logged August 23, 2015, at 8:12 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor source located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Laura Willingham

Message: Odor logged August 23, 2015, at 6:14 pm strength of NA

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Multiple concerns were received on this evening between the hours of 5:00 PM to 10:00 PM from a broad range of locations located to the southwest, southeast, and due south of the Bridgeton Landfill. Winds were of a due west origin. Bridgeton Landfill staff reported that all infrastructure was operating correctly over this time period and an earlier Bridgeton Landfill

self-inspection did not observe any odor originating from the Bridgeton Landfill site. As locations came from a wide range of locations including multiple concerns from upwind of the Bridgeton Landfill this odor is believed to have originated from another odor source located to the west of both the Bridgeton Landfill and the westernmost concerns.

Name: Ed

Message: Odor logged August 25, 2015, at 6:48 pm strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location outside the downwind pathway of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: Meghan Cousino

Message: Odor logged August 25, 2015, at 7:50 pm strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a due west origin throughout this evening, placing this location well-upwind of the Bridgeton Landfill. An odor patrol performed shortly after this concern did not observe any odor related to the Bridgeton Landfill. This concern location is immediately adjacent to another odor source with frequent off-sit odor emissions over the past several months, especially the past two days. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 25, 2015, at 8:58 pm strength of 4

Follow-up: The following concern cites a location within the boundaries of the Bridgeton Landfill property and therefore is an invalid concern.

Name: Meghan Cousino

Message: Odor logged August 25, 2015, at 6:06 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location outside the downwind pathway of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: Steve Commuso

Message: Odor logged August 25, 2015, at 6:15 pm strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location outside the downwind pathway of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: Debi Disser

Message: Odor logged August 25, 2015, at 12:05 pm strength of 4

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a west to northwest origin at the time of this concern. Odor self-inspections performed when this was received (approximately two hours after the stated observation time) did not observe any odor related to the Bridgeton Landfill.

Name: Debi Disser

Message: Odor logged August 25, 2015, at 12:35 pm strength of 2

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a west to northwest origin at the time of this concern. Odor self-inspections performed when this was received (approximately two hours after the stated observation time) did not observe any odor related to the Bridgeton Landfill.

Name: Debi Disser

Message: Odor logged August 25, 2015, at 12:44 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a west to northwest origin at the time of this concern. Odor self-inspections performed when this was received (approximately two hours after the stated observation time) did not observe any odor related to the Bridgeton Landfill. The location cited in this concern was upwind of the Bridgeton Landfill, this was not a Bridgeton Landfill odor.

Name: Robbin Dailey

Message: Odor logged August 26, 2015, at 1:51 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a low velocity due west origin at the time of this concern, placing this location directly

upwind of the Bridgeton Landfill. Odor patrols performed before and after this concern did not observe off-site odor related to the Bridgeton Landfill.

Name: Sharon Bishop

Message: Odor logged August 26, 2015, at 8:27 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a low velocity due west origin at the time of this concern, placing this location directly upwind of the Bridgeton Landfill. Odor patrols performed after this concern did not observe off-site odor related to the Bridgeton Landfill and no technical disruptions were observed on the Bridgeton Landfill at this time.

Name: M.B.

Message: Odor logged August 26, 2015, at 9:25 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a low velocity due west origin at the time of this concern, placing this location directly upwind of the Bridgeton Landfill. Odor patrols performed before and after this concern did not observe off-site odor related to the Bridgeton Landfill.

Name: Karen Nickel

Message: Odor logged August 26, 2015, at 8:30 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a low velocity due west origin at the time of this concern, placing this location directly upwind of the Bridgeton Landfill. Odor patrols performed before and after this concern did not observe off-site odor related to the Bridgeton Landfill.

Name: Meagan beckermann

Message: Odor logged August 25, 2015, at 8:45 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location outside the downwind pathway of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: Richard Beckermann

Message: Odor logged August 25, 2015, at 8:39 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location outside the downwind pathway of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: Mason murphy

Message: Odor logged August 25, 2015, at 12:00 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern location is of significant distance and at the time of this concern upwind of the Bridgeton Landfill. It is immediately adjacent to two other known odor sources with frequent off-site emissions. This was not a Bridgeton Landfill odor.

Name: Mel Leib

Message: Odor logged August 25, 2015, at 12:00 pm strength of 10

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location outside the downwind pathway of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: Loretta Copeland

Message: Odor logged August 26, 2015, at 14:07 pm strength of 10

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

Name: Loretta Copeland

Message: Odor logged August 26, 2015, at 2:12 pm strength of 10

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

Name: Loretta Copeland

Message: Odor logged August 26, 2015, at 6:22 am strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a western origin, placing this concern location at a significant upwind location from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Loretta Copeland

Message: Odor logged August 26, 2015, at 2:24 pm strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. At the time of this concern winds were of a western origin, placing this concern location at a significant upwind location from the Bridgeton Landfill. An odor patrol was performed in close proximity to this concern, with no odor from the Bridgeton Landfill observed. This was not a Bridgeton Landfill odor.

Name: Dawn Chapman

Message: Odor logged August 26, 2015, at 8:44 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Bridgeton Landfill staff performed an odor patrol shortly after the time cited in this concern and observed no odor related to the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 26, 2015, at 9:19 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Bridgeton Landfill staff performed an odor patrol shortly after the time cited in this concern and observed no odor related to the Bridgeton Landfill. This was not a Bridgeton Landfill odor. The location of this concern is of significant distance from the Bridgeton Landfill and immediately adjacent to two other known odor sources with far more frequent off-site odor in the past several months than the Bridgeton Landfill.

Name: Cindy Finnegan

Message: Odor logged August 25, 2015, at 9:30 pm strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location upwind of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 25, 2015, at 8:01 pm strength of 6

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Odor patrols performed before and after this concern did not observe odor related to the Bridgeton Landfill at multiple points in the vicinity of this location. Winds were of a due west origin placing this location upwind of the Bridgeton Landfill. This is not believed to have been a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 25, 2015, at 2:30 am strength of 3

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern is of significant distance and upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: Debi Disser

Message: Odor logged August 27, 2015, at 2:34 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern is of significant distance and upwind from the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

Name: richard

Message: Odor logged August 27, 2015, at 7:06 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern is of significant distance and upwind from the Bridgeton Landfill and directly adjacent to another known odor source. This was not a Bridgeton Landfill odor.

Name: richard

Message: Odor logged August 25, 2015, at 7:35 am strength of 8

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern is directly upwind of the Bridgeton Landfill and directly downwind of another known odor source with off-site odor observed at locations in the vicinity of this concern on this date and time. This was not a Bridgeton Landfill odor.

Name: Kathy Baumann

Message: Odor logged August 27, 2015, at 8:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. This concern is directly adjacent to two other known odor sources with frequent off-site emissions. Odor patrols on this date around the Bridgeton Landfill did not observe Bridgeton Landfill related odor. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 30, 2015, at 8:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a persistent southern origin placing this location upwind of the Bridgeton Landfill. Odor patrols conducted approximately two to three hours after this concern did not observe Bridgeton Landfill related odor. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 30, 2015, at 8:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a persistent southern origin placing this location upwind of the Bridgeton Landfill. Odor patrols conducted shortly before the time cited this concern did not observe Bridgeton Landfill related odor. This was not a Bridgeton Landfill odor.

Name: NA

Message: Odor logged August 30, 2015, at 8:00 pm strength of 7

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a persistent southern origin placing this location upwind of the Bridgeton Landfill. Odor patrols conducted shortly before the time cited this concern did not observe Bridgeton Landfill related odor. This was not a Bridgeton Landfill odor.

Name: David Blackwell

Message: Odor logged August 31, 2015, at 9:00 am strength of 5

Follow-up: The following concern has been investigated by Bridgeton Landfill staff. Winds were of a persistent southern origin placing this location upwind of the Bridgeton Landfill. Odor patrols conducted shortly after receipt of this concern did not observe any odor related to the Bridgeton Landfill. This was not a Bridgeton Landfill odor.

ATTACHMENT H

LIQUID CHARACTERIZATION DATA AND DISCHARGE LOG

Bridgeton Landfill - Leachate PreTreatment Plant

August 2015

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
8/1/2015	LPTP Activated Sludge/ Permeate	Tank 1 (T1)	MBI	0
8/2/2015				0
8/3/2015				120,000
8/4/2015				135,000
8/5/2015				247,500
8/6/2015				247,500
8/7/2015				247,500
8/8/2015				330,000
8/9/2015				330,000
8/10/2015				187,500
8/11/2015				142,500
8/12/2015				142,500
8/13/2015				172,500
8/14/2015				187,500
8/15/2015				0
8/16/2015				0
8/17/2015				172,500
8/18/2015				187,500
8/19/2015				187,500
8/20/2015				172,500
8/21/2015				187,500
8/22/2015				285,000
8/23/2015				0
8/24/2015				0
8/25/2015				45,000
8/26/2015				187,500
8/27/2015				97,500
8/28/2015				0
8/29/2015				0
8/30/2015				0
8/31/2015				0
			Total =	**4,012,500**

Direct Discharge to MSD

Date	Waste	Source	Quantity (gal)
8/15/2015	LPTP Permeate	Through Tank AST 97k (MSD Sampling Point 013)	43,343
8/2/2015			258,646
8/3/2015			229,041
8/4/2015			245,195
8/5/2015			268,088
8/6/2015			245,508
8/7/2015			247,130
8/8/2015			187,356
8/9/2015			166,871
8/10/2015			145,442
8/11/2015			151,075
8/12/2015			187,437
8/13/2015			194,512
8/14/2015			268,059
8/15/2015			283,958
8/16/2015			282,400
8/17/2015			281,152
8/18/2015			279,920
8/19/2015			278,469
8/20/2015			272,434
8/21/2015			260,798
8/22/2015			254,893
8/23/2015			249,131
8/24/2015			225,542
8/25/2015			240,574
8/26/2015			135,360
8/27/2015			209,728
8/28/2015			255,357
8/29/2015			252,608
8/30/2015			176,572
8/31/2015			292,801
		Total =	**6,776,599**