



December 19, 2016

Dawn Templin, PE, Supervisor  
Florida Department of Environmental Protection  
Northwest District Office  
Solid Waste Section  
160 W. Government Street, Suite 308  
Pensacola, Florida 32502

RE: Jackson County East Landfill  
Fourth Quarter 2016 Landfill Gas Monitoring Report  
Jones Edmunds Project No.: 10170-019-01

Dear Ms. Templin:

Jones Edmunds & Associates, Inc. conducted the Fourth Quarter 2016 gas-monitoring at the Jackson County East Landfill on November 28, 2016. Measurements were collected from the following locations which are displayed on the map included as Attachment 1 to this letter:

- Six gas monitoring wells installed along the western and northern property boundaries of the landfill (GMW-1 through GMW-6).
- Ten bang-bar probes conducted along the eastern property boundary and southern boundaries of the waste disposal area (BP-1 through BP-10).
- The 36 gas vents installed into the waste disposal area of the landfill (GV-1 through GV-36).
- Five gas monitoring wells installed along the western boundary of the waste disposal area (GMW-7 through GWM-11).
- The shed that is located onsite.

Attachment 2 is a historical table of measured gas concentrations including the Fourth Quarter 2016 results. Field sheets and calibration results are included as Attachment 3.

Methane exceeded the LEL in property-line gas monitoring wells GWM-4 and GWM-5 and was reported at concentrations below the LEL in GMW-6.

Methane exceeded the LEL in western boundary waste disposal area gas monitoring wells GWM-7 and GWM-10. Methane below the LEL was reported in GMW-8, GWM-9, and GMW-11.

Methane concentrations in both the property-line wells and the western boundary waste disposal area wells were generally higher than reported during the last event.

Figure 1 charts the Methane concentration in the six perimeter gas monitoring wells since 2010.

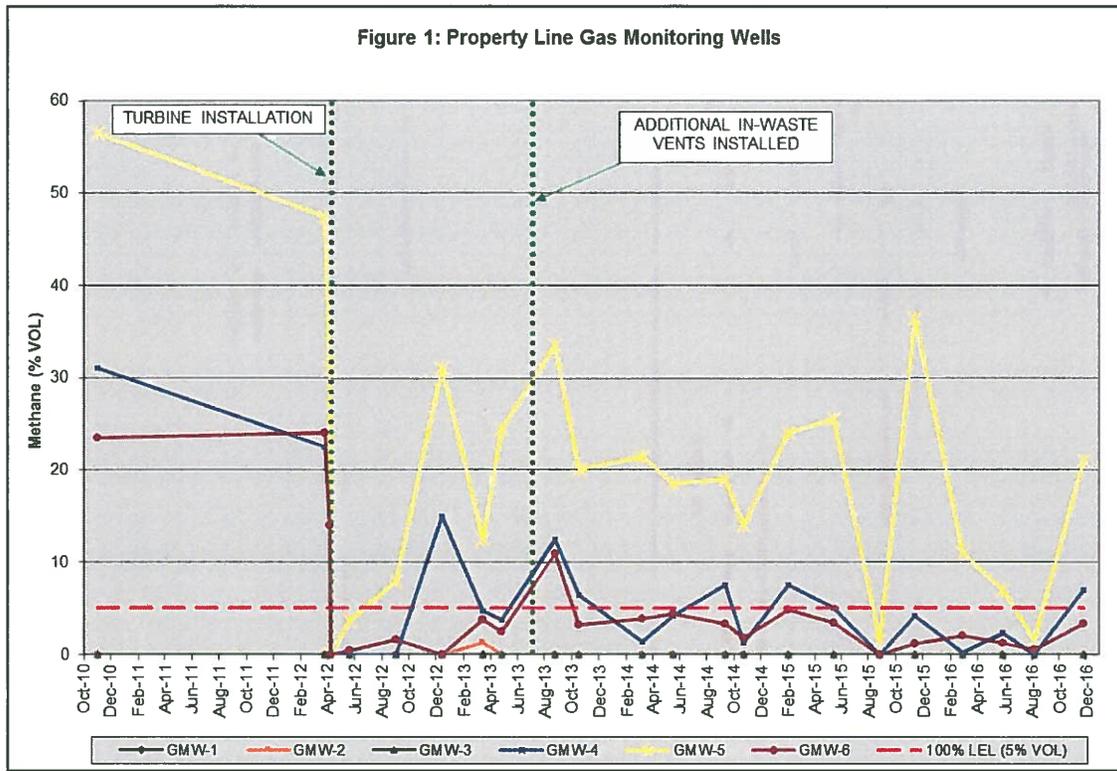
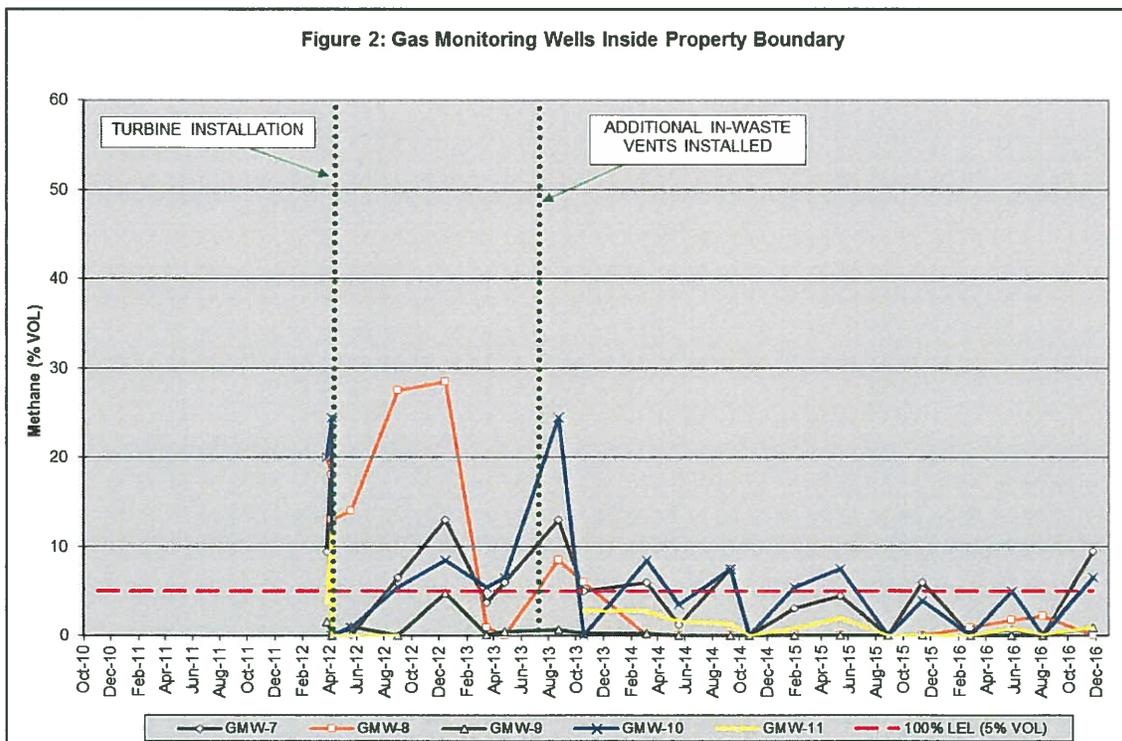


Figure 2 charts the Methane concentration in the five inside-the-property-boundary gas monitoring wells since their installation in 2012.



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Although landfill gas concentrations for this event are generally higher across the site than during the past 3 events, the system continues to vent substantial amounts of landfill gas and concentrations are lower than historical highs.

As required by permit, quarterly landfill gas monitoring will continue. Please contact me at 352-377-5821, if you have any questions or comments.

Sincerely,



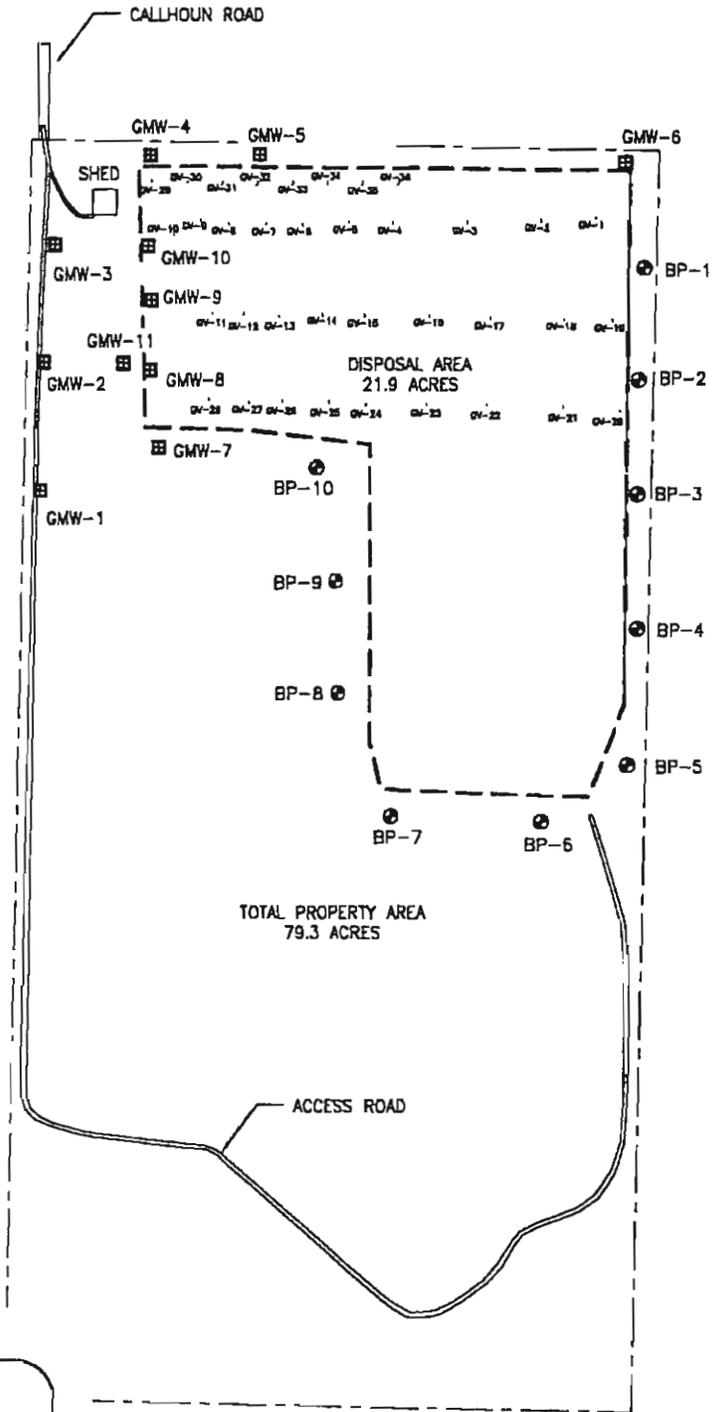
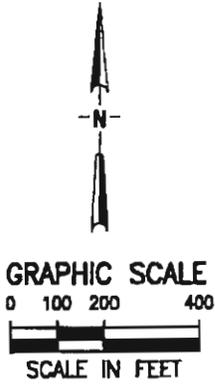
Elizabeth Kennelly, MS  
Project Manager

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Attachments

# **ATTACHMENT 1**

## **Site Map**



**LEGEND**

- ⊕ BP-9 BANG BAR PROBE LOCATION
- ⊞ GMW-1 GAS MONITOR WELL
- PROPERTY BOUNDARY
- WASTE DISPOSAL AREA

LANDFILL GAS  
MONITORING NETWORK  
JACKSON COUNTY EAST LANDFILL  
JACKSON COUNTY, FLORIDA



**ATTACHMENT 2**

**Landfill Gas Concentrations Table**





Table 1  
Jackson East County Landfill  
Gas System Measurements

Station ID	Fourth Quarter 2012				First Quarter 2013				Second Quarter 2013			
	12/17/2012				3/19/2013				4/29/2013			
	O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane	
	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume
GMW-1	7.9	7.8	0.0	-	14.4	4.2	0.0	-	12.1	4.8	0.0	-
GMW-2	12.0	8.4	0.0	-	20.5	0.0	24.5	-	20.4	0.6	0.0	-
GMW-3	9.1	13.2	0.0	-	18.0	2.2	0.0	-	20.9	0.0	0.0	-
GMW-4	0.3	20.0	-	15.0	1.7	12.0	95.0	-	10.3	9.0	75.0	-
GMW-5	0.0	27.4	-	31.0	1.6	15.2	-	12.5	1.0	22.4	-	24.5
GMW-6	20.7	0.0	0.0	-	6.0	9.6	75.0	-	2.2	14.8	49.0	-
GMW-7	0.0	26.0	-	13.0	5.5	14.2	74.0	-	0.0	20.0	-	6.0
GMW-8	0.0	30.0	-	28.5	19.3	1.0	18.0	-	20.9	0.0	0.0	-
GMW-9	15.0	5.0	95.0	-	19.7	0.4	4.0	-	19.5	1.0	10.0	-
GMW-10	1.9	19.6	-	8.5	4.9	15.0	-	5.5	1.9	9.2	-	6.5
GMW-11	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
GV-1	11.4	14.6	-	26.5	20.9	0.4	0.0	-	18.6	0.8	0.0	-
GV-2	8.2	26.0	-	36.0	20.9	0.0	0.0	-	2.4	28.8	-	58.0
GV-3	7.5	22.4	-	36.0	20.9	0.0	0.0	-	18.2	0.8	44.0	-
GV-4	1.3	37.4	-	64.5	20.9	0.0	0.0	-	5.0	26.8	-	55.5
GV-5	8.1	19.4	-	23.5	20.9	0.0	1.0	-	7.1	20.8	-	52.0
GV-6	0.0	34.4	-	66.0	13.5	4.6	24.0	-	18.6	1.2	22.0	-
GV-7	12.2	12.4	-	19.5	20.9	0.4	5.0	-	18.6	0.8	6.0	-
GV-8	0.0	40.2	-	64.0	20.9	0.0	0.0	-	0.0	37.8	-	71.0
GV-9	2.4	28.8	-	32.0	20.9	0.0	0.0	-	12.5	8.8	-	10.0
GV-10	0.0	39.2	-	64.0	20.9	0.0	0.0	-	5.0	26.6	-	5.0
GV-11	0.1	30.8	-	44.5	20.9	0.0	0.0	-	0.4	29.4	-	54.5
GV-12	6.4	21.8	-	29.0	20.9	0.2	6.0	-	13.3	9.6	-	18.0
GV-13	2.4	33.6	-	61.5	20.9	0.0	0.0	-	1.1	32.6	-	72.5
GV-14	11.6	12.6	-	25.5	20.8	1.0	29.0	-	16.5	4.2	-	9.5
GV-15	6.7	24.4	-	41.5	20.9	0.4	3.0	-	19.4	0.4	0.0	-
GV-16	13.4	4.4	0.0	-	20.9	0.2	0.0	-	20.7	0.0	0.0	-
GV-17	12.0	6.6	-	5.0	20.9	0.0	0.0	-	20.2	0.4	0.0	-
GV-18	19.9	0.6	-	19.0	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GV-19	6.5	11.4	-	9.0	20.9	0.0	0.0	-	20.5	0.0	0.0	-
GV-20	13.3	10.2	-	17.5	20.9	0.0	0.0	-	14.8	8.8	42.0	-
GV-21	14.7	7.4	-	15.5	20.9	0.0	8.0	-	19.3	0.6	30.0	-
GV-22	8.6	18.6	-	41.5	20.5	0.6	0.0	-	20.0	0.4	0.0	-
GV-23	2.5	29.6	-	60.0	20.9	0.2	4.0	-	17.4	2.4	82.0	-
GV-24	0.8	36.6	-	66.0	20.2	0.6	4.0	-	18.4	2.0	43.0	-
GV-25	1.4	35.2	-	64.0	20.9	0.0	0.0	-	12.7	10.6	-	24.0
GV-26	5.3	28.6	-	56.0	20.9	0.0	0.0	-	19.2	0.6	0.0	-
GV-27	0.0	36.2	-	63.5	20.9	0.0	0.0	-	0.0	30.6	-	70.5
GV-28	0.0	27.4	-	39.5	20.9	0.0	0.0	-	1.3	26.0	-	91.0
GV-29	-	-	-	-	-	-	-	-	-	-	-	-
GV-30	-	-	-	-	-	-	-	-	-	-	-	-
GV-31	-	-	-	-	-	-	-	-	-	-	-	-
GV-32	-	-	-	-	-	-	-	-	-	-	-	-
GV-33	-	-	-	-	-	-	-	-	-	-	-	-
GV-34	-	-	-	-	-	-	-	-	-	-	-	-
GV-35	-	-	-	-	-	-	-	-	-	-	-	-
GV-36	-	-	-	-	-	-	-	-	-	-	-	-
Shed	20.9	0.0	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
BP-1	19.7	0.6	0.0	-	20.1	0.0	0.0	-	19.4	1.2	0.0	-
BP-2	20.9	0.0	0.0	-	20.3	0.0	0.0	-	20.9	0.4	0.0	-
BP-3	20.9	0.0	0.0	-	19.4	0.2	0.0	-	18.4	1.4	0.0	-
BP-4	20.9	0.0	0.0	-	19.7	0.0	0.0	-	19.4	0.8	0.0	-
BP-5	20.9	0.0	0.0	-	20.3	0.0	0.0	-	20.9	0.4	0.0	-
BP-6	20.9	0.0	0.0	-	20.5	0.0	0.0	-	20.7	1.0	0.0	-
BP-7	20.2	0.6	0.0	-	20.4	0.0	0.0	-	20.9	0.4	0.0	-
BP-8	20.9	0.0	0.0	-	20.5	0.0	0.0	-	20.7	0.8	0.0	-
BP-9	20.9	0.0	0.0	-	20.5	0.0	0.0	-	20.7	0.4	0.0	-
BP-10	20.9	0.0	0.0	-	20.4	0.0	0.0	-	20.6	0.4	0.0	-

Table 1  
Jackson East County Landfill  
Gas System Measurements

Station ID	Third Quarter 2013				Fourth Quarter 2013				First Quarter 2014			
	8/27/2013				10/21 and 23/2013				3/11/2014			
	O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane	
	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume
GMW-1	5.3	9.6	0.0	-	13.8	4.8	0.0	-	14.1	4.2	0.0	-
GMW-2	20.2	0.8	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GMW-3	11.1	10.4	0.0	-	13.6	7.6	0.0	-	20.9	0.2	0.0	-
GMW-4	5.2	14.4	-	12.5	3.9	14.0	-	6.5	18.2	2.2	28.0	-
GMW-5	0.0	28.6	-	33.5	0.0	22.8	-	20.0	3.7	18.4	-	21.5
GMW-6	0.0	21.2	-	11.0	3.8	13.2	64.0	-	5.2	12.6	77.0	-
GMW-7	0.0	28.6	-	13.0	2.3	18.8	-	5.0	1.1	21.2	-	6.0
GMW-8	16.8	5.8	-	8.5	14.8	7.8	-	6.0	20.8	0.2	1.0	-
GMW-9	20.2	1.0	13.0	-	20.9	0.2	5.0	-	20.0	0.6	5.0	-
GMW-10	0.0	28.4	-	24.5	20.9	0.0	0.0	-	3.1	18.8	-	8.5
GMW-11	NM	NM	NM	NM	2.5	17.0	54.0	-	1.0	19.6	55.0	-
GV-1	19.4	1.0	19.0	-	11.0	15.8	-	28.5	19.0	0.6	5.0	-
GV-2	8.9	21.4	-	38.5	5.8	28.4	-	42.5	20.6	0.2	0.0	-
GV-3	20.9	0.4	5.0	-	10.8	16.8	-	22.0	20.3	0.0	0.0	-
GV-4	8.6	24.4	-	33.5	5.9	31.0	-	44.0	9.3	23.2	43.0	-
GV-5	14.2	11.8	-	22.5	6.3	23.2	-	30.0	16.6	4.0	83.0	-
GV-6	15.9	5.4	-	8.5	11.0	15.0	-	27.5	20.5	0.2	0.0	-
GV-7	20.9	0.8	15.0	-	16.2	4.0	38.0	-	20.8	0.0	0.0	-
GV-8	20.9	0.8	24.0	-	1.0	42.2	-	58.0	20.6	0.0	0.0	-
GV-9	1.8	35.6	-	36.0	16.7	3.8	48.0	-	12.2	11.4	-	14.0
GV-10	13.0	15.6	-	19.5	4.1	35.4	-	48.5	7.4	23.0	-	45.5
GV-11	20.9	0.0	0.0	-	13.9	11.6	-	14.5	0.1	30.0	-	66.5
GV-12	8.6	22.2	-	38.0	13.8	11.2	-	12.5	9.1	18.0	-	36.5
GV-13	20.9	0.0	0.0	-	9.8	21.0	-	33.0	20.9	0.0	0.0	-
GV-14	19.9	1.6	52.0	-	18.9	2.6	65.0	-	20.9	0.2	0.0	-
GV-15	20.9	0.0	0.0	-	13.1	7.8	48.0	-	20.9	0.0	0.0	-
GV-16	20.9	0.0	0.0	-	20.1	1.6	0.0	-	20.9	0.0	0.0	-
GV-17	20.7	1.2	21.0	-	20.9	0.4	0.0	-	20.9	0.0	0.0	-
GV-18	20.9	0.0	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GV-19	20.9	0.0	0.0	-	2.0	15.8	72.0	-	20.9	0.0	0.0	-
GV-20	20.9	0.0	0.0	-	18.4	30.0	81.0	-	20.9	0.0	0.0	-
GV-21	20.9	0.4	18.0	-	4.6	4.4	-	8.5	20.8	0.2	22.0	-
GV-22	20.9	0.0	0.0	-	13.7	6.0	0.0	-	20.9	0.0	0.0	-
GV-23	19.9	1.4	26.0	-	4.9	16.0	-	11.5	19.5	0.8	11.0	-
GV-24	18.8	3.2	97.0	-	6.2	29.0	-	45.5	20.9	0.0	0.0	-
GV-25	20.9	0.0	0.0	-	2.7	35.2	-	56.5	18.0	4.2	-	8.0
GV-26	20.9	0.2	1.0	-	11.4	7.6	25.0	-	20.9	0.0	0.0	-
GV-27	20.9	1.2	43.0	-	0.5	37.0	-	59.5	20.8	0.0	0.0	-
GV-28	20.9	0.0	0.0	-	0.8	26.8	-	33.0	20.3	0.0	0.0	-
GV-29	0.0	38.4	-	64.0	15.7	5.4	73.0	-	20.9	0.0	0.0	-
GV-30	0.0	40.4	-	52.5	15.7	4.8	14.0	-	0.1	29.2	-	39.0
GV-31	0.0	25.2	-	52.5	20.9	0.6	0.0	-	17.1	3.8	-	9.5
GV-32	0.0	35.2	-	56.0	20.9	0.4	0.0	-	20.5	0.0	0.0	-
GV-33	0.0	40.0	-	69.0	19.8	1.4	1.0	-	17.7	3.0	-	6.5
GV-34	0.2	38.8	-	70.0	11.4	10.8	-	5.5	3.7	25.0	-	67.5
GV-35	0.0	41.4	-	69.5	19.3	1.4	5.0	-	19.5	0.2	7.0	-
GV-36	3.4	28.4	-	54.0	16.2	6.6	-	8.5	20.3	0.4	0.0	-
Shed	20.9	0.0	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
BP-1	19.3	1.0	0.0	-	20.9	0.4	0.0	-	20.9	0.2	0.0	-
BP-2	19.1	1.4	0.0	-	20.9	0.4	0.0	-	20.9	0.4	0.0	-
BP-3	14.3	4.0	0.0	-	20.9	0.4	0.0	-	16.8	1.8	0.0	-
BP-4	16.8	2.6	0.0	-	20.9	0.6	0.0	-	20.6	0.6	0.0	-
BP-5	20.2	0.8	0.0	-	20.9	0.2	0.0	-	20.9	0.0	0.0	-
BP-6	18.1	2.0	0.0	-	20.9	1.2	0.0	-	20.6	0.4	0.0	-
BP-7	20.4	0.8	0.0	-	20.9	0.2	0.0	-	20.9	0.2	0.0	-
BP-8	19.7	1.2	0.0	-	20.9	0.6	0.0	-	19.8	1.2	0.0	-
BP-9	20.3	1.0	0.0	-	20.9	0.2	0.0	-	20.8	0.4	0.0	-
BP-10	19.7	1.0	0.0	-	20.9	0.2	0.0	-	20.7	0.4	0.0	-

Table 1  
Jackson East County Landfill  
Gas System Measurements

Station ID	Second Quarter 2014				Third Quarter 2014				Fourth Quarter 2014			
	5/21/2014				9/15/2014				10/27/2014			
	O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane	
	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume
GMW-1	18.5	2.8	0.0	-	20.9	0.0	0.0	-	14.6	4.0	0.0	-
GMW-2	20.9	0.0	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GMW-3	18.3	2.8	0.0	-	13.3	7.4	0.0	-	20.7	0.8	0.0	-
GMW-4	2.7	11.4	83.0	-	2.3	14.6	-	7.5	16.7	3.0	26.0	-
GMW-5	0.1	20.8	-	18.5	0.1	22.8	-	19.0	3.7	18.0	-	14.0
GMW-6	3.3	11.8	88.0	-	2.3	13.8	66.0	-	5.9	10.8	36.0	-
GMW-7	7.6	10.4	25.0	-	0.0	22.4	-	7.5	20.9	0.0	0.0	-
GMW-8	20.9	0.0	0.0	-	20.9	0.0	0.0	-	20.9	1.0	0.0	-
GMW-9	20.9	0.0	0.0	-	20.9	0.2	1.0	-	20.9	0.0	0.0	-
GMW-10	4.9	14.4	69.0	-	2.8	20.0	-	7.5	20.9	0.0	0.0	-
GMW-11	3.2	14.0	34.0	-	0.0	19.8	26.0	-	20.9	0.0	0.0	-
GV-1	20.9	0.8	3.0	-	11.8	6.2	15.0	-	20.9	0.6	0.0	-
GV-2	14.2	9.8	-	13.0	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GV-3	20.9	0.4	0.0	-	20.5	0.6	1.0	-	19.3	2.4	48.0	-
GV-4	12.0	15.0	-	27.5	6.5	28.2	-	38.0	11.6	17.8	24.0	-
GV-5	16.6	4.8	-	6.0	20.7	0.0	0.0	-	17.1	5.0	-	5.5
GV-6	18.4	2.6	-	5.0	20.7	0.2	0.0	-	20.9	0.2	0.0	-
GV-7	20.9	0.4	4.0	-	20.9	0.0	0.0	-	20.9	0.8	6.0	-
GV-8	20.9	0.2	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GV-9	9.9	14.4	-	11.0	20.2	0.6	0.0	-	20.7	1.0	4.0	-
GV-10	14.2	11.2	-	15.5	2.1	40.4	-	54.0	14.0	12.2	-	14.4
GV-11	3.5	24.2	-	32.5	20.3	0.0	0.0	-	20.9	0.0	0.0	-
GV-12	16.5	5.4	-	8.5	15.0	5.8	-	15.5	19.6	2.0	26.0	-
GV-13	16.8	5.0	-	10.5	4.7	28.4	-	49.0	14.4	10.4	-	14.5
GV-14	20.8	0.6	5.0	-	18.4	1.4	26.0	-	20.7	1.2	14.0	-
GV-15	20.9	0.4	3.0	-	19.7	1.4	0.0	-	20.9	0.6	0.0	-
GV-16	20.9	0.0	0.0	-	20.7	0.2	0.0	-	20.9	0.2	0.0	-
GV-17	20.4	0.2	0.0	-	18.0	2.2	0.0	-	20.9	0.2	0.0	-
GV-18	20.7	0.0	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GV-19	20.9	0.0	0.0	-	15.0	4.8	-	8.5	20.9	0.2	0.0	-
GV-20	20.9	0.2	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GV-21	20.9	0.0	0.0	-	19.7	1.2	18.0	-	20.9	0.4	0.0	-
GV-22	20.9	0.2	0.0	-	15.7	4.2	9.0	-	20.9	0.2	0.0	-
GV-23	20.9	0.2	0.0	-	18.2	2.2	0.0	-	20.7	0.4	0.0	-
GV-24	20.1	0.8	9.0	-	0.5	39.2	-	66.0	7.1	26.6	36.0	-
GV-25	5.2	22.8	-	40.5	20.8	0.0	0.0	-	18.3	4.0	98.0	-
GV-26	20.9	0.0	0.0	-	20.2	0.2	0.0	-	20.9	0.4	0.0	-
GV-27	16.0	5.4	-	10.5	20.7	0.0	0.0	-	20.9	0.2	0.0	-
GV-28	15.4	4.8	-	8.5	20.5	0.8	8.0	-	16.1	4.0	66.0	-
GV-29	6.4	19.2	-	24.5	19.4	2.2	49.0	-	17.7	5.8	-	5.5
GV-30	1.0	27.6	-	26.5	18.4	2.8	62.0	-	19.0	3.0	43.0	-
GV-31	19.2	1.2	38.0	-	19.8	0.8	7.0	-	19.2	2.8	56.0	-
GV-32	20.9	0.2	0.0	-	20.1	0.8	1.0	-	20.9	0.4	0.0	-
GV-33	16.1	5.2	-	11.0	13.0	11.6	-	19.5	18.1	4.2	-	5.0
GV-34	6.0	21.2	-	41.5	13.6	10.6	-	18.5	20.9	0.0	0.0	-
GV-35	20.1	0.0	9.0	-	20.0	0.6	6.0	-	20.9	0.0	0.0	-
GV-36	15.4	6.4	-	13.0	20.9	0.0	0.0	-	18.3	4.4	-	5.5
Shed	20.9	0.0	0.0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
BP-1	20.9	0.0	0.0	-	19.8	0.8	0.0	-	20.9	0.2	0.0	-
BP-2	20.9	0.2	0.0	-	18.7	1.8	0.0	-	20.9	0.2	0.0	-
BP-3	20.5	0.4	0.0	-	18.1	1.8	0.0	-	20.9	0.2	0.0	-
BP-4	20.4	0.2	0.0	-	17.8	0.6	0.0	-	20.9	0.2	0.0	-
BP-5	20.9	0.0	0.0	-	20.1	0.8	0.0	-	20.9	0.2	0.0	-
BP-6	20.9	0.4	0.0	-	18.2	1.2	0.0	-	20.9	0.6	0.0	-
BP-7	20.9	0.0	0.0	-	20.2	0.8	0.0	-	20.9	0.0	0.0	-
BP-8	20.9	0.6	0.0	-	16.4	1.6	0.0	-	20.1	0.8	0.0	-
BP-9	20.9	0.0	0.0	-	19.8	0.8	0.0	-	20.9	0.2	0.0	-
BP-10	20.9	0.0	0.0	-	19.1	1.0	0.0	-	20.9	0.0	0.0	-

Table 1  
Jackson East County Landfill  
Gas System Measurements

Station ID	First Quarter 2015				Second Quarter 2015				Third Quarter 2015			
	2/4/2015				5/18/2015				8/31/2015			
	O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane	
	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume
GMW-1	15.5	3.8	0	-	14.1	4.2	0.0	-	17.9	2.6	0.0	-
GMW-2	18.2	3.0	0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GMW-3	13.1	7.8	0	-	14.2	6.6	0.0	-	20.9	0.2	0.0	-
GMW-4	0.8	14.8	-	7.5	2.2	13.6	-	5.0	20.9	0.0	0.0	-
GMW-5	0.4	20.8	-	24.0	1.3	22.8	-	25.5	13.2	5.4	29.0	-
GMW-6	1.8	13.6	96	-	4.0	12.6	69.0	-	17.4	2.8	0.0	-
GMW-7	0.1	19.0	61	-	1.3	20.4	89.0	-	19.8	1.6	0.0	-
GMW-8	20.1	1.0	4	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GMW-9	20.9	0.0	0	-	20.9	0.2	0.0	-	20.9	0.0	0.0	-
GMW-10	2.0	17.6	-	5.5	3.1	18.8	-	7.5	11.5	11.4	0.0	-
GMW-11	2.0	15.0	16	-	1.2	19.2	40.0	-	13.3	7.0	0.0	-
GV-1	20.9	0.6	2	-	19.6	1.0	0.0	-	13.2	13.4	-	12.5
GV-2	20.9	0.0	0	-	17.4	4.8	-	7.5	13.6	13.2	-	13.5
GV-3	20.7	2.4	3	-	19.3	0.8	0.0	-	14.3	10.2	-	10.5
GV-4	1.6	17.8	-	39.5	5.1	30.8	-	65.0	11.3	23.4	-	43.0
GV-5	20.7	5.0	4	-	20.9	0.4	0.0	-	13.7	9.6	0.0	-
GV-6	20.5	0.2	2	-	20.2	1.0	0.0	-	15.4	9.0	-	7.5
GV-7	20.9	0.8	0	-	19.2	1.4	9.0	-	18.6	3.0	0.0	-
GV-8	20.7	0.0	0	-	20.9	0.0	0.0	-	11.5	24.2	-	37.0
GV-9	20.1	1.0	0	-	14.9	6.8	-	5.5	19.1	2.2	0.0	-
GV-10	7.3	12.2	-	29.5	14.5	11.0	-	16.5	11.6	24.8	-	44.5
GV-11	20.7	0.0	0	-	17.4	4.8	-	6.5	9.9	23.8	-	43.5
GV-12	16.5	2.0	-	9.5	19.0	2.2	58.0	-	18.6	3.0	0.0	-
GV-13	20.9	10.4	0	-	20.7	1.0	27.0	-	20.9	0.2	0.0	-
GV-14	20.9	1.2	0	-	20.9	0.0	0.0	-	19.4	2.0	0.0	-
GV-15	20.9	0.6	0	-	20.2	0.8	0.0	-	20.9	0.6	0.0	-
GV-16	20.9	0.2	0	-	20.9	0.0	0.0	-	20.9	0.2	0.0	-
GV-17	20.9	0.2	0	-	20.9	0.0	0.0	-	20.9	1.0	0.0	-
GV-18	20.9	0.0	0	-	20.9	0.0	0.0	-	20.9	0.0	0.0	-
GV-19	20.9	0.2	1	-	20.9	0.2	0.0	-	20.9	0.6	0.0	-
GV-20	20.9	0.0	0	-	13.0	8.8	25.5	-	14.2	11.6	-	14.5
GV-21	20.9	0.4	2	-	20.9	0.4	7.0	-	20.9	0.4	0.0	-
GV-22	20.9	0.2	0	-	20.9	0.0	0.0	-	20.5	0.8	0.0	-
GV-23	18.9	0.4	7	-	20.7	0.4	0.0	-	16.1	5.6	48.0	-
GV-24	20.9	26.6	0	-	20.5	0.4	0.0	-	13.1	17.4	-	27.5
GV-25	9.4	4.0	-	21.0	11.2	15.8	-	29.0	8.4	29.0	-	70.0
GV-26	20.9	0.4	0	-	20.5	0.4	0.0	-	20.9	0.6	0.0	-
GV-27	20.9	0.2	0	-	9.8	18.6	-	33.5	14.5	13.2	-	17.0
GV-28	20.7	4.0	0	-	16.7	3.8	-	6.0	12.6	13.6	-	10.5
GV-29	17.0	5.8	-	5.5	13.0	13.2	-	17.0	13.4	16.6	-	18.0
GV-30	20.9	3.0	19	-	12.7	10.8	-	18.0	9.3	24.6	-	34.0
GV-31	20.9	2.8	0	-	18.7	1.6	48.0	-	16.6	6.0	40.0	-
GV-32	20.9	0.4	0	-	20.8	0.2	0.0	-	15.1	7.4	0.0	-
GV-33	20.9	4.2	0	-	15.9	6.6	-	14.0	17.0	6.0	97.0	-
GV-34	20.9	0.0	0	-	16.3	6.2	-	14.5	12.3	19.0	-	39.5
GV-35	20.9	0.0	0	-	20.9	0.2	0.0	-	20.7	0.6	0.0	-
GV-36	20.9	4.4	0	-	20.2	0.8	6.0	-	16.5	7.8	-	7.0
Shed	20.9	0.0	0	-	20.9	0.0	0.0	-	20.7	0.0	0.0	-
BP-1	20.7	0.0	0	-	20.7	0.4	0.0	-	20.9	0.2	0.0	-
BP-2	19.7	0.8	0	-	20.9	0.6	0.0	-	20.9	0.0	0.0	-
BP-3	18.8	1.2	0	-	19.9	1.0	0.0	-	20.9	0.0	0.0	-
BP-4	20.8	0.0	0	-	19.8	1.0	0.0	-	20.9	0.0	0.0	-
BP-5	20.9	0.2	0	-	20.9	0.2	0.0	-	20.9	0.0	0.0	-
BP-6	20.6	0.4	0	-	20.5	1.0	0.0	-	20.9	1.2	0.0	-
BP-7	18.8	1.0	0	-	20.9	0.2	0.0	-	20.9	0.0	0.0	-
BP-8	18.3	1.0	0	-	20.9	0.6	0.0	-	20.7	1.2	0.0	-
BP-9	20.7	0.2	0	-	20.9	0.4	0.0	-	20.9	0.0	0.0	-
BP-10	20.7	0.2	0	-	20.9	0.2	0.0	-	20.9	0.0	0.0	-

Table 1  
Jackson East County Landfill  
Gas System Measurements

Station ID	Fourth Quarter 2015				First Quarter 2016				Second Quarter 2016			
	11/16/2015				3/2/2016				5/31/2016			
	O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane	
	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume
GMW-1	13.7	5.4	0.0		18.1	2.4	0.0		15.7	4.0	0.0	
GMW-2	18.5	2.8	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GMW-3	15.7	6.8	0.0		19.4	1.2	0.0		18.5	2.8	0.0	
GMW-4	9.0	11.0	83.0		13.4	4.6	4.0		8.6	9.8	48.0	
GMW-5	5.0	23.6	-	36.4	7.4	11.4	-	11.0	15.8	6.2	-	7.0
GMW-6	5.6	15.6	23.0		11.0	7.0	41.0		8.6	11.0	26.0	
GMW-7	5.0	22.6	-	6.0	12.5	7.8	0.0		7.1	15.4	13.0	
GMW-8	20.7	0.0	0.0		19.3	1.8	18.0		18.1	3.6	36.0	
GMW-9	20.9	0.0	0.0		20.9	0.0	0.0		20.6	0.2	0.0	
GMW-10	6.0	19.2	78.0		20.9	0.0	0.0		7.5	17.0	-	5.0
GMW-11	4.9	19.8	0.0		20.9	0.0	0.0		5.3	18.2	17.0	
GV-1	20.7	0.4	0.0		20.3	0.2	0.0		17.8	3.6	0.0	
GV-2	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GV-3	20.9	0.0	0.0		20.7	0.0	0.0		20.6	0.6	9.0	
GV-4	20.7	0.6	0.0		16.3	6.8	-	6.0	20.9	0.0	0.0	
GV-5	20.9	0.0	0.0		19.6	1.2	0.0		19.3	2.0	18.0	
GV-6	20.9	0.0	0.0		20.7	0.0	0.0		17.7	3.4	68.0	
GV-7	20.9	0.0	0.0		20.7	0.0	0.0		20.2	0.8	8.0	
GV-8	20.7	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GV-9	20.3	0.0	0.0		19.3	1.2	4.0		19.9	1.0	1.0	
GV-10	12.6	20.2	38.5		15.8	6.4	-	6.5	15.5	11.4	-	17.0
GV-11	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GV-12	19.2	2.2	0.0		19.6	1.2	16.0		20.0	1.4	30.0	
GV-13	18.4	3.4	0.0		19.3	1.8	29.0		20.9	0.0	0.0	
GV-14	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GV-15	20.5	0.4	0.0		20.9	0.0	0.0		20.9	0.4	0.0	
GV-16	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.2	0.0	
GV-17	18.1	4.8	62.0		20.9	0.0	0.0		20.9	0.4	0.0	
GV-18	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.2	0.0	
GV-19	17.0	3.6	0.0		20.9	0.0	0.0		20.7	0.4	0.0	
GV-20	20.9	0.0	0.0		20.9	0.0	0.0		19.1	2.2	77.0	
GV-21	20.9	0.0	0.0		20.9	0.0	0.0		20.3	0.8	3.0	
GV-22	20.7	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GV-23	20.7	0.2	0.0		20.9	0.0	0.0		20.2	1.0	0.0	
GV-24	6.0	38.0	-	94.0	20.9	0.0	0.0		14.5	13.4	-	23.5
GV-25	17.0	6.2	-	6.5	20.9	0.0	0.0		20.9	0.0	0.0	
GV-26	20.9	0.0	0.0		20.9	0.0	0.0		20.6	0.6	0.0	
GV-27	20.9	0.0	0.0		20.9	0.0	0.0		17.3	3.8	5.0	
GV-28	20.7	0.6	0.0		20.9	0.0	0.0		12.7	9.4	-	8.5
GV-29	20.9	0.6	0.0		20.9	0.0	0.0		20.8	0.2	0.0	
GV-30	20.9	0.0	0.0		19.7	1.4	19.0		17.0	6.8	-	8.0
GV-31	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GV-32	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
GV-33	20.9	0.0	0.0		19.3	1.2	13.0		18.1	3.6	-	7.0
GV-34	16.5	8.6	-	14.0	20.9	0.0	0.0		20.9	0.0	0.0	
GV-35	19.6	1.8	3.0		20.9	0.0	0.0		20.6	0.2	0.0	
GV-36	20.9	0.0	0.0		20.9	0.0	0.0		20.2	0.8	0.0	
Shed	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
BP-1	20.7	0.0	0.0		20.2	0.2	0.0		20.9	0.0	0.0	
BP-2	20.5	0.4	0.0		20.7	0.0	0.0		20.7	0.4	0.0	
BP-3	20.5	0.4	0.0		20.3	0.4	0.0		20.5	0.4	0.0	
BP-4	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
BP-5	20.9	0.0	0.0		20.7	0.0	0.0		20.9	0.0	0.0	
BP-6	20.7	0.2	0.0		20.7	0.2	0.0		20.5	0.4	0.0	
BP-7	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.0	0.0	
BP-8	20.6	0.2	0.0		20.9	0.0	0.0		20.7	0.2	0.0	
BP-9	20.9	0.0	0.0		20.9	0.0	0.0		20.9	0.2	0.0	
BP-10	20.9	0.2	0.0		20.9	0.0	0.0		20.9	0.2	0.0	

Table 1  
Jackson East County Landfill  
Gas System Measurements

Station ID	Third Quarter 2016				Fourth Quarter 2016			
	8/10/2016				11/28/2016			
	O <sub>2</sub>	CO <sub>2</sub>	Methane		O <sub>2</sub>	CO <sub>2</sub>	Methane	
% Volume	% Volume	%LEL	%Volume	% Volume	% Volume	%LEL	%Volume	
GMW-1	18.4	2.4	0.0		10.3	6.0	0.0	
GMW-2	20.9	0.0	0.0		14.4	5.8	0.0	
GMW-3	20.9	0.0	0.0		12.5	8.8	0.0	
GMW-4	20.9	0.0	0.0		4.1	12.6		7.0
GMW-5	16.8	2.8	31.0		1.8	21.8		21.0
GMW-6	17.9	2.4	10.0		0.9	17.2	66.0	
GMW-7	20.9	0.0	0.0		0.5	23.2		9.5
GMW-8	17.3	5.2	43.0		16.5	5.6	1.0	
GMW-9	20.9	0.0	0.0		20.7	1.2	19.0	
GMW-10	20.9	0.0	0.0		1.0	19.8		6.5
GMW-11	18.6	2.4	3.0		0.3	20.8	18.0	
GV-1	10.5	13.8	-	13.5	14.6	7.8		12.0
GV-2	20.5	0.4	2.0		10.9	18.0		24.5
GV-3	9.5	20.4	-	15.0	11.3	15.6		22.0
GV-4	15.7	8.8	-	14.0	5.1	32.8		50.5
GV-5	10.3	16.2	-	5.0	11.4	9.8	58.0	
GV-6	20.3	0.0	0.0		14.6	9.0		13.0
GV-7	19.1	2.2	43.0		19.1	2.6	53.0	
GV-8	8.8	27.0	-	27.5	13.4	15.6		21.0
GV-9	19.4	1.0	0.0		19.8	1.4	1.0	
GV-10	11.7	20.6	-	28.5	12.8	15.8		21.0
GV-11	20.8	0.0	0.0		15.6	6.6		7.0
GV-12	6.5	24.2	-	10.5	17.4	3.2	24.0	
GV-13	20.6	0.2	2.0		18.2	3.0	91.0	
GV-14	17.8	3.0	51.0		18.2	2.6	28.0	
GV-15	20.1	0.8	2.0		19.3	2.2	59.0	
GV-16	20.9	0.0	0.0		19.2	2.2	60.0	
GV-17	20.7	0.4	0.0		20.2	2.2	58.0	
GV-18	20.9	0.2	0.0		20.9	0.0	0.0	
GV-19	19.8	1.2	1.0		20.9	0.8	7.0	
GV-20	10.4	12.2	-	7.5	19.7	2.6	58.0	
GV-21	19.8	1.0	6.0		20.9	0.4	10.0	
GV-22	20.7	0.2	2.0		20.9	0.2	3.0	
GV-23	13.5	7.8	48.0		16.9	5.4		10.0
GV-24	10.4	22.0	-	27.0	18.4	5.2		6.5
GV-25	20.9	0.2	1.0		15.8	9.4		14.0
GV-26	20.3	0.4	1.0		20.6	1.8	38.0	
GV-27	17.6	4.4	81.0		18.1	5.4		7.0
GV-28	10.2	15.4	-	14.5	12.9	9.2	81.0	
GV-29	20.9	0.0	1.0		13.0	14.0		18.5
GV-30	20.9	0.0	0.0		14.4	9.6		10.0
GV-31	15.4	10.0	-	9.0	19.1	2.4	68.0	
GV-32	12.9	9.8	2.0		18.8	2.2	12.0	
GV-33	20.5	0.4	0.0		18.7	3.0	5.0	
GV-34	20.5	0.6	20.0		15.1	9.6	17.0	
GV-35	20.7	0.2	5.0		20.5	27.0		
GV-36	13.9	12.0	-	11.0	18.6	3.2	5.5	
Shed	20.9	0.0	0.0		20.9	0.0	0.0	
BP-1	20.9	0.0	0.0		20.9	0.6	0.0	
BP-2	20.9	0.2	0.0		20.9	0.0	0.0	
BP-3	20.5	0.4	0.0		20.9	0.0	0.0	
BP-4	20.9	0.0	0.0		20.9	0.0	0.0	
BP-5	20.9	0.0	0.0		20.9	0.0	0.0	
BP-6	20.7	0.4	0.0		19.8	0.6	0.0	
BP-7	20.9	0.0	0.0		20.9	0.0	0.0	
BP-8	20.7	0.2	0.0		20.9	1.0	0.0	
BP-9	20.9	0.2	0.0		20.9	0.0	0.0	
BP-10	20.9	0.0	0.0		20.9	0.0	0.0	

## **ATTACHMENT 3**

### **Field Data**

JACKSON COUNTY EAST LANDFILL

SAMPLING EVENT: 16Q4  
PROJECT NO: 10170-018-01-6508

General Data: 019  
Am

Methane Concentrations Recorded in:  
% Volume      %LEL  
(Circle One)  
As marked

Date: 11-28-16	Sampler: Steve Massick
Time: 1430	Sky Conditions: Cloudy - wind 0-8mph S
Air Temperature (deg C): 24° C	Measuring Device: RKI Eagle
Barometric Pressure (in Hg): 29.8" Hg	Serial No.: E084039      Rented From: N/A

Sampling Data

STATION I.D.	TIME SAMPLED	O2		CO2		METHANE				STATION TYPE	STATION LOCATION	COMMENTS
		% Volume	% Volume	PEAK CONCENTRATION % LEL	PEAK CONCENTRATION % Volume	CONCENTRATIONS RECORDED AT (Optional):						
						30 Sec.	45 Sec.	60 Sec.	90 Sec.			
GMW-1	1447	10.3	6.0	Ø	—					Well		
GMW-2	1450	14.4	5.8	Ø	—					Well		
GMW-3	1452	12.5	8.8	Ø	—					Well		
Building	1441	20.9	0.0	Ø	—					Structure		walk thru
GMW-4	1456	4.1	12.6	—	7.0					Well		
GMW-5	1458	1.8	21.8	—	21.0					Well		
GMW-6	1501	0.9	17.2	66	—					Well		
GMW-7	1508	0.5	23.2	—	9.5					Well		
GMW-8	1515	16.5	5.6	1	—					Well		
GMW-9	1518	20.7	1.2	19	—					Well		
GMW-10	1520	1.0	19.8	—	6.5					Well		
GMW-11	1522	0.3	20.8	18	—					Well		
BP-1	1658	20.9	0.6	Ø	—					Probe		
BP-2	1701	20.9	0.0	Ø	—					Probe		
BP-3	1703	20.9	0.0	Ø	—					Probe		
BP-4	1705	20.9	0.0	Ø	—					Probe		
BP-5	1707	20.9	0.0	Ø	—					Probe		
BP-6	1710	19.8	0.6	Ø	—					Probe		
BP-7	1713	20.9	0.0	Ø	—					Probe		
BP-8	1715	20.9	1.0	Ø	—					Probe		
BP-9	1717	20.9	0.0	Ø	—					Probe		
BP-10	1719	20.9	0.0	Ø	—					Probe		

## JACKSON COUNTY EAST LANDFILL

SAMPLING EVENT: 16Q4  
 PROJECT NO: 10170-018-01-6508

General Data: *017*  
*Jim*

Methane Concentrations Recorded in:

% Volume      %LEL  
 (Circle One)  
AS MARKED

Date: 11-28-16	Sampler: Steve Messick
Time: 1430	Sky Conditions: Cloudy - Wind 0-8mph S
Air Temperature (deg C): 24°C	Measuring Device: RKI Eagle
Barometric Pressure (in Hg): 29.8" Hg	Serial No.: E084039      Rented From: N/A

Sampling Data

STATION I.D.	TIME SAMPLED	O2		CO2		METHANE				STATION TYPE	STATION LOCATION	COMMENTS
		% Volume	% Volume	PEAK CONCENTRATION % LEL	PEAK CONCENTRATION % Volume	CONCENTRATIONS RECORDED AT (Optional):						
						30 Sec.	45 Sec.	60 Sec.	90 Sec.			
GV-1	1606	14.6	7.8	—	12.0					Vent		
GV-2	1604	10.9	18.0	—	24.5					Vent		
GV-3	1602	11.3	15.6	—	22.0					Vent		
GV-4	1600	5.1	32.8	—	50.5					Vent		
GV-5	1557	11.4	9.8	58	—					Vent		
GV-6	1555	14.6	9.0	—	13.0					Vent		
GV-7	1553	19.1	2.6	53	—					Vent		
GV-8	1551	13.4	15.6	—	21.0					Vent		
GV-9	1549	19.8	1.4	1	—					Vent		
GV-10	1546	12.8	15.8	—	21.0					Vent		
GV-11	1609	15.6	6.6	—	7.0					Vent		
GV-12	1611	17.4	3.2	24	—					Vent		
GV-13	1613	18.2	3.0	91	—					Vent		
GV-14	1615	18.2	2.6	28	—					Vent		
GV-15	1617	19.3	2.2	59	—					Vent		
GV-16	1621	19.2	2.2	60	—					Vent		
GV-17	1623	20.2	2.2	58	—					Vent		
GV-18	1625	20.9	0.0	8	—					Vent		
GV-19	1628	20.9	0.8	7	—					Vent		
GV-20	1655	19.7	2.6	58	—					Vent		
GV-21	1653	20.9	0.4	10	—					Vent		
GV-22	1651	20.9	0.2	3	—					Vent		
GV-23	1648	16.9	5.4	—	10.0					Vent		
GV-24	1646	18.4	5.2	—	6.5					Vent		

JACKSON COUNTY EAST LANDFILL

SAMPLING EVENT: 16Q4  
 PROJECT NO: 10170-018-01-6508

General Data: <sup>019</sup>  
 mm

Methane Concentrations Recorded in:  
 % Volume      %LEL  
 (Circle One)  
As marked

Date: 11-28-16	Sampler: Steve Messick
Time: 1430	Sky Conditions: Cloudy - Wind 0-8 S
Air Temperature (deg C): 24°C	Measuring Device: RKI Eagle
Barometric Pressure (in Hg): 29.8" Hg	Serial No.: E084039      Rented From: N/A

Sampling Data

STATION I.D.	TIME SAMPLED	O2		CO2		METHANE				STATION TYPE	STATION LOCATION	COMMENTS
		% Volume	% Volume	PEAK CONCENTRATION % LEL	PEAK CONCENTRATION % Volume	CONCENTRATIONS RECORDED AT (Optional):						
						30 Sec.	45 Sec.	60 Sec.	90 Sec.			
GV-25	1643	15.8	9.4	—	14.0					Vent		
GV-26	1639	20.6	1.8	38	—					Vent		
GV-27	1637	18.1	5.4	—	7.0					Vent		
GV-28	1635	12.9	9.2	81	—					Vent		
GV-29	1526	13.0	14.0	—	18.5					Vent		
GV-30	1528	14.4	9.6	—	10.0					Vent		
GV-31	1530	19.1	2.4	68	—					Vent		
GV-32	1532	18.8	2.2	12	—					Vent		
GV-33	1534	18.7	3.0	—	5.0					Vent		
GV-34	1536	15.1	9.6	—	17.0					Vent		
GV-35	1538	20.5	1.2	27	—					Vent		
GV-36	1540	18.6	3.2	—	5.5					Vent		

**Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS**

SITE NAME Jackson County-East LF. DATE 11-28-16

INSTRUMENT (MAKE/MODEL#) Eagle Multi-Gas Detector INSTRUMENT # GNV 80023\*

Instrument Calibration Date August 7, 2012 Reference Meter Book Eagle Meter Book 1

PARAMETER: [check only one]

- TEMPERATURE     CONDUCTIVITY     SALINITY     pH     ORP  
 TURBIDITY     RESIDUAL Cl     DO     OTHER LANDFILL GAS

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 14.75 % Methane (Volume), 14.97% CO<sub>2</sub> (Volume), Balance Nitrogen

Standard Source Airgas Lot # 122-124512810-2

Standard B Zero Air (0 % Methane) (0% CO<sub>2</sub>) ( 21.0 % O<sub>2</sub>)

Standard Source Airgas Lot # 55-400483127-1

Standard C % LEL Methane, % CO<sub>2</sub> (Volume), 0% O<sub>2</sub> (Volume), Bal Nitrogen

Standard Source \_\_\_\_\_ Lot # \_\_\_\_\_

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	CH <sub>4</sub> STD VALUE (% Vol)	CO <sub>2</sub> STD VALUE (% Vol)	O <sub>2</sub> STD VALUE (% Vol)	INSTRUMENT RESPONSE (%) DEVIATION (LIMITS +/- 5%)						CALIB- RATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
						CH <sub>4</sub>		CO <sub>2</sub>		O <sub>2</sub>				
						RES	DEV	RES	DEV	RES	DEV			
16/11/28	1425	A	14.75	14.97	—	15.0	<2	15.2	<2	—	—	Yes	Init.	Am
	1427	B	—	—	21.0	—	—	—	—	20.9	<1	Yes	Init.	Am
	1723	A	14.75	14.97	—	15.5	<5	15.4	<3	—	—	Yes	Cont.	Am
	1726	B	—	—	21.0	—	—	—	—	20.9	<1	Yes	Cont.	Am

\* Eagle SN E084039