

**Golder Associates Inc.**

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June 15, 2009

083-82734.6

Florida Department of Environmental Protection  
Division of Air Resource Management  
2600 Blair Stone Road  
MS 5500  
Tallahassee, Florida 32399-2400

RECEIVED  
JUN 19 2009  
DEP Central Dist.

Attention: Mr. Errin Prichard  
Program Administrator – Emissions Monitoring

**RE: ALTERNATIVE OPERATING VARIANCE REQUEST  
J.E.D. SOLID WASTE MANAGEMENT FACILITY  
OMNI WASTE OF OSCEOLA COUNTY, LLC  
ST. CLOUD, OSCEOLA COUNTY, FLORIDA  
PERMIT NUMBER: 0970079-005-AV**

Dear Mr. Prichard:

On behalf of Omni Waste of Osceola County, LLC (Omni), Golder Associates Inc. (Golder) has prepared this Alternative Operating Variance request to allow alternative operating procedures for the facility's landfill gas collection and control system (GCCS) to maintain compliance with their Title V Operation Permit. This request addresses elevated temperature at a gas extraction well at the facility. This request is in addition to the requests made on January 22, 2009, for gas wells installed in the Sequence 1, Phase 1 area and March 25, 2009, for gas wells installed in the Sequence 2, Phase 1 area. These requests have subsequently been approved by the Florida Department of Environmental Protection (FDEP) in letters dated March 19, 2009 and May 4, 2009 respectively.

**BACKGROUND**

The facility recently installed the second phase of the GCCS, which includes sixteen gas extraction wells. Since bringing these new wells online in early February 2008, several of the gas extraction wells have been operated at or near elevated temperatures of the New Source Performance Standards (NSPS) regulatory limit of 131°F (40CFR60.753(c)). In the variance request for Sequence 2, ten gas extraction wells received approval for a higher operating temperature. Since then, one additional well (GW-6) has exhibited an elevated operating temperature condition. Corrective actions included reducing vacuum at the affected well as well as additional monitoring events. This well has demonstrated good gas quality (high methane content and low oxygen content) since being placed online in February 2009. Additionally,

during operation GW-6 has been monitored for carbon monoxide (CO) to rule out the possibility of a rapid subsurface oxidation event. Monitoring results for April and May and the CO monitoring for this wells is included in Attachment A. Note that Attachment A contains all readings from the GCCS and some wells have previously been requested and approved for a temperature variance.

Based on our operational experience of GCCS's, the common method to reduce temperature in a gas extraction well is to reduce vacuum, thereby reducing flow through the wellhead. The above noted well was brought online in a conservative manner (i.e., minimal vacuum applied), yet still exhibited elevated temperature at a low vacuum (less than two inches in the water column).

Well GW-6 is currently being operated under minimal vacuum (1" W.C. or less) in order to reduce possible air intrusion (while maintaining a vacuum) until an alternative variance request is approved or denied. As shown in Attachment A, the methane and oxygen (O<sub>2</sub>) concentration in GW-6 are high and low respectively, and the CO measurement indicates no presence of fire, nor any reason to believe that methanogens are being killed by the elevated temperature condition. Golder believes that the subsurface conditions near GW-6 is highly thermophilic due to the nature of waste, moisture content, age of waste in these areas, and biologic activities. It is important to note that not all of the wells listed above are continually operating in excess of 131°F (55°C).

#### **ALTERNATIVE OPERATING LIMIT**

In accordance with §753(c), a higher operating temperature value may be requested if a demonstration is provided with supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. As discussed above, Golder considers that the information provided in Attachment A meets this demonstration requirement.

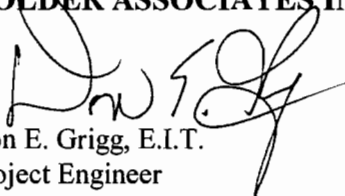
As previously requested and approved by the FDEP for the Sequence 1 and Sequence 2, Phase 1 gas wells, the facility is requesting a operating variance for the well GW-6, allowing it to be operated greater than 131°F, provided there is no evidence of fire or significant reduction in methane content (indicating possible reduction of methanogens by inhibiting anaerobic decomposition). The requested maximum temperature limit for well GW-6 is 145°F. This temperature limit will allow some flexibility in operations while protecting the GCCS and its components from being affected by the elevated temperatures. Omni will continue to monitor this well for CO concentrations on a quarterly basis (or increased frequency if needed) over the next twelve months to establish a historical record of levels. Similar procedures will be followed and a separate variance will be requested for any additional wells showing elevated temperatures.

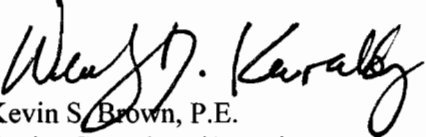
**CLOSING**

Omni appreciates your immediate attention to this request in order to maintain compliance timelines required of the NSPS's. Should you have any questions regarding this request, please call Mr. Mike Kaiser of Omni at (904) 673-0446, [mkaiser@wsii.us](mailto:mkaiser@wsii.us), or either of the undersigned at (904) 363-3430.

Sincerely,

**GOLDER ASSOCIATES INC.**

  
Don E. Grigg, E.I.T.  
Project Engineer

*for*   
Kevin S. Brown, P.E.  
Senior Consultant/Associate

Attachment

cc: Caroline Shine, FDEP Central District  
Tom Lubozynski, FDEP Central District  
Michael Kaiser – Omni Waste of Osceola County, LLC  
Leigh-Ann Pell, FDEP Tallahassee

FN: G:\Projects\083\083-82\083-82734\083-82734.2\High Temp Wells\GW-6\JED Alt Op Request June 2009.doc

# GAS WELL FIELD MONITORING LOG

## J.E.D. SOLID WASTE MANAGEMENT FACILITY

Technician: Keith Lunsford

Date: 4/13/2009 Initial Readings

| Monitoring Location | Date/Time       | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                                    |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|---------------------------------------------|
| CALIBRAT            | 4/13/2009 7:17  | 49.9                | 34.9                | 0                  | 15.2        | 74             | -0.1                               | Initial Reading/No Adj.                     |
| FIRINLET            | 4/13/2009 7:27  | 50.5                | 41.6                | 0.3                | 7.6         | 76             | -24.7                              | Initial Reading/No Adj.                     |
| FIROUTLE            | 4/13/2009 7:31  | 52.2                | 42.3                | 0                  | 5.5         | 105            | 0.7                                | Initial Reading/No Adj.                     |
| JEDGW024            | 4/13/2009 8:13  | 55.5                | 44.4                | 0                  | 0.1         | 130            | -0.2                               | Initial Reading/Adj 6 turns down            |
| JEDGW020            | 4/13/2009 8:33  | 54                  | 43                  | 0.3                | 2.7         | 119            | -0.4                               | Initial Reading/Adj. 6 turns down           |
| JEDGW012            | 4/13/2009 8:49  | 54.7                | 45.2                | 0                  | 0.1         | 137            | -0.4                               | Initial Reading/Adj 4.5 turns down/Variance |
| JEDGW010            | 4/13/2009 8:54  | 55.6                | 44.3                | 0                  | 0.1         | 124            | -1.3                               | Initial Reading/Adj. 2 turns down           |
| JEDGW003            | 4/13/2009 9:37  | 55.8                | 43.9                | 0                  | 0.3         | 112            | -1                                 | Initial Reading/Adj .25 turns down          |
| JEDGW005            | 4/13/2009 9:38  | 56.1                | 43.2                | 0                  | 0.7         | 113            | -1.1                               | Initial Reading/No Adj.                     |
| JEDGW007            | 4/13/2009 9:43  | 54.7                | 43                  | 0                  | 2.3         | 115            | -1.1                               | Initial Reading/No Adj.                     |
| JEDGW008            | 4/13/2009 12:55 | 56.9                | 42.2                | 0                  | 0.9         | 110            | -1.9                               | Initial Reading/Adj 2 turns down            |
| JEDGW009            | 4/13/2009 13:02 | 44.7                | 36.9                | 1.2                | 17.2        | 119            | -1.6                               | Initial Reading/Adj 1.5 turns down          |
| JEDGW011            | 4/13/2009 13:06 | 34.2                | 33.4                | 0                  | 32.4        | 114            | -1.8                               | Initial Reading/Adj 6 turns down            |
| JEDGW013            | 4/13/2009 13:12 | 46.6                | 40.8                | 0                  | 12.6        | 122            | -0.6                               | Initial Reading/Adj 5.75 turns down         |
| JEDGW016            | 4/13/2009 13:18 | 46.9                | 40.2                | 0.2                | 12.7        | 109            | -1.7                               | Initial Reading/No Adj.                     |
| JEDGW019            | 4/13/2009 13:21 | 44.6                | 38.5                | 0                  | 16.9        | 110            | -1.7                               | Initial Reading/No Adj.                     |
| JEDGW023            | 4/13/2009 13:24 | 54.9                | 43.2                | 0                  | 1.9         | 108            | -1.2                               | Initial Reading/No Adj.                     |
| JEDGW025            | 4/13/2009 13:26 | 55.3                | 43.3                | 0                  | 1.4         | 117            | -1.8                               | Initial Reading/Adj 4.5 turns down          |
| JEDGW029            | 4/13/2009 13:29 | 55.2                | 43.4                | 0                  | 1.4         | 106            | -1.2                               | Initial Reading/No Adj.                     |
| JEDGW032            | 4/13/2009 13:32 | 55.5                | 43.7                | 0                  | 0.8         | 120            | -1.8                               | Initial Reading/Adj 3.5 turns down          |

FIR=Flare Initial Readings  
 FAR=Flare After Readings

| Monitoring Location | Date            | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                                         |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|--------------------------------------------------|
| JEDGW034            | 4/13/2009 13:35 | 30.4                | 13.5                | 2.3                | 53.8        | 112            | -0.6                               | Initial Reading/Adj .75 turns down               |
| CALIBRAT            | 4/16/2009 12:25 | 50.4                | 34.6                | 0                  | 15          |                |                                    | Recorded on Notes/See Note # 1                   |
| JEDGW001            | 4/16/2009 12:29 | 55                  | 43.8                | 0.2                | 1           | 113            | -1.1                               | Initial Reading/No Adj.                          |
| JEDGW038            | 4/16/2009 12:33 | 55.3                | 43.5                | 0                  | 1.2         | 122            | -1.9                               | Initial Reading/No Adj.                          |
| JEDGW041            | 4/16/2009 12:36 | 54.9                | 43.9                | 0                  | 1.2         | 121            | -1.8                               | Initial Reading/No Adj.                          |
| JEDGW042            | 4/16/2009 12:38 | 55.9                | 43.6                | 0                  | 0.5         | 112            | -1.1                               | Initial Reading/No Adj.                          |
| JEDGW044            | 4/16/2009 12:41 | 55.5                | 42.9                | 0                  | 1.6         | 124            | -0.5                               | Initial Reading/No Adj.                          |
| JEDGW046            | 4/16/2009 12:44 | 55.6                | 43.4                | 0                  | 1           | 125            | -0.5                               | Initial Reading/No Adj.                          |
| JEDGW052            | 4/16/2009 12:48 | 56                  | 43                  | 0                  | 1           | 128            | -0.7                               | Initial Reading/No Adj.                          |
| JEDGW055            | 4/16/2009 12:51 | 55.5                | 43.8                | 0                  | 0.7         | 121            | -0.9                               | Initial Reading/No Adj.                          |
| JEDGW056            | 4/16/2009 12:53 | 54.9                | 44.2                | 0                  | 0.9         | 124            | -1.1                               | Initial Reading/No Adj.                          |
| JEDGW059            | 4/16/2009 13:02 | 56.3                | 43.4                | 0.1                | 0.2         | 114            | -0.7                               | Initial Reading/No Adj.                          |
| JEDGW062            | 4/16/2009 13:08 | 55.9                | 44                  | 0                  | 0.1         | 105            | -1.4                               | Initial Reading/No Adj.                          |
| JEDGW053            | 4/16/2009 13:20 | 55.1                | 44.8                | 0                  | 0.1         | 129            | -0.3                               | Initial Reading/Adj 1.5 turns down               |
| JEDGW043            | 4/16/2009 13:35 | 55.3                | 44.6                | 0                  | 0.1         | 129            | -0.2                               | Initial Reading/Adj 3 turns down                 |
| JEDGW039            | 4/16/2009 13:41 | 55.3                | 43.2                | 0.1                | 1.4         | 135            | -0.1                               | Initial Reading/Adj 3 turns down/Variance        |
| JEDGW002            | 4/16/2009 13:47 | 55.7                | 44.2                | 0                  | 0.1         | 132            | -0.5                               | Initial Reading/.75 turns down/Variance          |
| JEDGW060            | 4/16/2009 13:14 | 54.8                | 45.1                | 0                  | 0.1         | 146            | -0.4                               | Initial Reading/ No Adj. /High Temp.             |
| JEDGW057            | 4/16/2009 13:17 | 54.9                | 45                  | 0                  | 0.1         | 143            | -0.1                               | Initial Reading/No Adj. /High Temp.              |
| JEDGW047            | 4/16/2009 13:28 | 55.4                | 44.5                | 0                  | 0.1         | 132            | -0.3                               | Initial Reading/ Adj. .25 turns down /High Temp. |
| FARINLET            | 4/16/2009 14:18 | 54.6                | 42.8                | 0                  | 2.6         | 83             | -24.3                              | Initial Reading/No Adj.                          |
| FAROUTLE            | 4/16/2009 14:21 | 54.6                | 42.8                | 1.6                | 1           | 111            | 1.6                                | Initial Reading/No Adj.                          |
| CALIBRAT            | 4/20/2009 7:20  | 50                  | 35                  | 0.1                | 14.9        | 0              | -0.2                               | Initial Reading/No Adj.                          |
| FIRINLET            | 4/20/2009 12:17 | 53.4                | 42.3                | 0.5                | 3.8         | 91             | -24.7                              | Initial Reading/No Adj.                          |
| FIROUTLE            | 4/20/2009 12:21 | 55.5                | 43.8                | 0                  | 0.7         | 107            | 0.8                                | Initial Reading/No Adj.                          |

FIR=Flare Initial Readings  
FAR=Flare After Readings

| Monitoring Location | Date            | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                                          |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|---------------------------------------------------|
| JEDGW048            | 4/20/2009 13:51 | 55.7                | 43.6                | 0                  | 0.7         | 118            | -0.6                               | Initial Reading/No Adj.                           |
| JEDGW006            | 4/20/2009 14:34 | 54.8                | 45.1                | 0                  | 0.1         | 132            | -0.4                               | Initial Reading/ Adj. 3 turns down /High Temp.    |
| JEDGW017            | 4/20/2009 14:42 | 54                  | 45.9                | 0                  | 0.1         | 129            | -0.1                               | Initial Reading/2 turns Down                      |
| JEDGW026            | 4/20/2009 14:49 | 54.6                | 45.3                | 0                  | 0.1         | 135            | -0.4                               | Initial Reading/ Adj. 6.25 turns down /High Temp. |
| FARINLET            | 4/20/2009 15:07 | 54.9                | 42.8                | 0                  | 2.3         | 86             | -24.3                              | Initial Reading/No Adj.                           |
| FAROUTLE            | 4/20/2009 15:10 | 55.5                | 44.4                | 0                  | 0.1         | 106            | 1.8                                | Initial Reading/No Adj.                           |
| CALIBRAT            | 4/22/2009 12:35 | 50                  | 34.9                | 0.1                | 15          | 85             | 0.1                                | Initial Reading/No Adj.                           |
| FIRINLET            | 4/22/2009 12:42 | 42.1                | 33.6                | 4.4                | 19.9        | 92             | -24.4                              | Initial Reading/No Adj.                           |
| FIROUTLE            | 4/22/2009 12:45 | 55.6                | 44.2                | 0                  | 0.2         | 103            | 1                                  | Initial Reading/No Adj.                           |
| JEDGW049            | 4/22/2009 14:26 | 55.4                | 44.5                | 0                  | 0.1         | 133            | -0.1                               | Initial Reading/Adj 3 turns down/High Temp        |
| JEDGW004            | 4/22/2009 14:48 | 55.4                | 44.5                | 0                  | 0.1         | 133            | -0.3                               | Initial Reading/No Adj./High Temp.                |
| JEDGW040            | 4/22/2009 14:55 | 55.1                | 44.8                | 0                  | 0.1         | 126            | -0.3                               | Initial Reading/No Adj.                           |
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FIR=Flare Initial Readings  
 FAR=Flare After Readings

**Note # 1**

Wells #1,38,39,02,06,43,47,60,59,55,52,48,46,44,42,41,40,04,26,49,53,57 were all isolated due to repairs being performed on the system. The initial day readings for these wells were performed on 4-16-09,4-20-09,4-22-09

# GAS WELL FIELD MONITORING LOG

## J.E.D. SOLID WASTE MANAGEMENT FACILITY

Technician: Keith Lunsford

Date: 4/20/2009 5 Day Readings

| Monitoring Location | Date/Time       | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                                     |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|----------------------------------------------|
| CALIBRAT            | 4/22/2009 12:35 | 50                  | 34.9                | 0.1                | 15          | 85             | 0.1                                |                                              |
| FIRINLET            | 4/22/2009 12:42 | 42.1                | 33.6                | 4.4                | 19.9        | 92             | -24.4                              |                                              |
| FIROUTLE            | 4/22/2009 12:45 | 55.6                | 44.2                | 0                  | 0.2         | 103            | 1                                  |                                              |
| JEDGW006            | 4/23/2009 13:38 | 55.2                | 44.7                | 0                  | 0.1         | 133            | -0.1                               | initial read 4-20-09/No Adj./High Temp       |
| JEDGW047            | 4/20/2009 13:56 | 55.4                | 44.5                | 0                  | 0.1         | 132            | -0.2                               | Initial Reading 4-16-09/ No Adj. /High Temp. |
| JEDGW060            | 4/20/2009 14:04 | 55.2                | 44.4                | 0                  | 0.4         | 145            | -0.7                               | Initial Reading4-16-09/No Adj./High Temp.    |
| JEDGW004            | 4/23/2009 9:11  | 55.6                | 44.3                | 0                  | 0.1         | 132            | -0.1                               | initial read 4-22-09/No Adj./High Temp       |
| JEDGW026            | 4/21/2009 14:16 | 55.3                | 44.5                | 0                  | 0.2         | 135            | -0.1                               | initial read 4-20-09/No Adj./High Temp       |
| JEDGW049            | 4/22/2009 14:34 | 55.2                | 44.7                | 0                  | 0.1         | 133            | -0.1                               | initial read 4-22-09/No Adj./High Temp       |
| JEDGW057            | 4/20/2009 14:28 | 54.9                | 45                  | 0                  | 0.1         | 142            | -0.1                               | Initial Reading4-16-09/No Adj./High Temp.    |
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FIR=Flare Initial Readings  
 FAR=Flare After Readings



# GAS WELL FIELD MONITORING LOG

## J.E.D. SOLID WASTE MANAGEMENT FACILITY

Technician: Keith Lunsford

Date: 4/20/2009 15 Day Readings

| Monitoring Location | Date/Time       | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                               |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|----------------------------------------|
| CALIBRAT            | 4/22/2009 12:35 | 50                  | 34.9                | 0.1                | 15          | 85             | 0.1                                |                                        |
| FIRINLET            | 4/22/2009 12:42 | 42.1                | 33.6                | 4.4                | 19.9        | 92             | -24.4                              |                                        |
| FIROUTLE            | 4/22/2009 12:45 | 55.6                | 44.2                | 0                  | 0.2         | 103            | 1                                  |                                        |
| CALIBRAT            | 4/23/2009 13:28 | 50.1                | 34.8                | 0                  | 15.1        |                |                                    | Recorded in Notes                      |
| JEDGW049            | 4/23/2009 13:33 | 55.7                | 44.2                | 0                  | 0.1         | 133            | -0.3                               | initial read 4-22-09/No Adj./High Temp |
| JEDGW006            | 4/23/2009 13:38 | 55.2                | 44.7                | 0                  | 0.1         | 133            | -0.1                               | initial read 4-20-09/No Adj./High Temp |
| JEDGW004            | 4/23/2009 13:44 | 55.1                | 44.8                | 0                  | 0.1         | 133            | -0.4                               | initial read 4-22-09/No Adj./High Temp |
| JEDGW026            | 4/27/2009 14:51 | 55.4                | 44.5                | 0                  | 0.1         | 135            | -0.1                               | initial read 4-20-09/No Adj./High Temp |
| JEDGW047            | 4/22/2009 14:30 | 55.1                | 44.8                | 0                  | 0.1         | 132            | -0.3                               | initial read 4-16-09/No Adj./High Temp |
| JEDGW060            | 4/22/2009 14:10 | 55.5                | 44.4                | 0                  | 0.1         | 147            | -0.3                               | initial read 4-16-09/No Adj./High Temp |
| JEDGW057            | 4/22/2009 14:14 | 55.1                | 44.2                | 0                  | 0.7         | 143            | -0.3                               | initial read 4-16-09/No Adj./High Temp |
|                     |                 |                     |                     |                    |             |                |                                    |                                        |
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|                     |                 |                     |                     |                    |             |                |                                    |                                        |

FIR=Flare Initial Readings  
 FAR=Flare After Readings

# GAS WELL FIELD MONITORING LOG

## J.E.D. SOLID WASTE MANAGEMENT FACILITY

Technician: Keith Lunsford

Date: 5/18/2009 Initial          Readings

| Monitoring Location | Date/Time      | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                             |
|---------------------|----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|--------------------------------------|
| CALIBRAT            | 5/18/2009 7:26 | 49.9                | 34.8                | 0                  | 15.3        | 75             | 14                                 |                                      |
| FIRINLET            | 5/18/2009 7:54 | 56.3                | 43.5                | 0.1                | 0.1         | 85             | -24.4                              |                                      |
| FIROUTLE            | 5/18/2009 7:58 | 55.7                | 44.2                | 0                  | 0.1         | 121            | 2.2                                |                                      |
| JEDGW060            | 5/18/2009 8:24 | 55.1                | 44.8                | 0                  | 0.1         | 146            | -0.8                               | Temp. Approved for 150 (5-4-09)      |
| JEDGW057            | 5/18/2009 8:29 | 55.3                | 44.5                | 0                  | 0.2         | 143            | -0.7                               | Temp. Approved for 145 (5-4-09)      |
| JEDGW053            | 5/18/2009 8:33 | 55.1                | 44.8                | 0                  | 0.1         | 137            | -0.2                               | Temp. Approved for 145 (5-4-09)      |
| JEDGW049            | 5/18/2009 8:37 | 55.2                | 44.7                | 0                  | 0.1         | 134            | -0.2                               | Temp. Approved for 145 (5-4-09)      |
| JEDGW047            | 5/18/2009 8:42 | 54.8                | 45.1                | 0                  | 0.1         | 134            | -0.9                               | Temp. Approved for 145 (5-4-09)      |
| JEDGW043            | 5/18/2009 8:47 | 53.9                | 46                  | 0                  | 0.1         | 135            | -0.6                               | Temp. Approved for 145 (5-4-09)      |
| JEDGW039            | 5/18/2009 8:52 | 55                  | 44.9                | 0                  | 0.1         | 137            | -0.8                               | Temp. Approved for 145 (3-19-09)     |
| JEDGW002            | 5/18/2009 8:57 | 55.1                | 44.8                | 0                  | 0.1         | 131            | -1.8                               | Temp. Approved for 145 (3-19-09)     |
| JEDGW006            | 5/18/2009 9:02 | 56.1                | 43.8                | 0                  | 0.1         | 133            | -1.5                               | High Temp Adjusted Valve down 1 turn |
| JEDGW010            | 5/18/2009 9:08 | 57                  | 42.8                | 0                  | 0.2         | 122            | -0.8                               | No Adjustment                        |
| JEDGW012            | 5/18/2009 9:13 | 55.3                | 44.6                | 0                  | 0.1         | 137            | -0.1                               | Temp. Approved for 145 (3-19-09)     |
| JEDGW017            | 5/18/2009 9:18 | 56.3                | 43.6                | 0                  | 0.1         | 124            | -0.5                               | No Adjustment                        |
| JEDGW020            | 5/18/2009 9:22 | 57.2                | 42.2                | 0.4                | 0.2         | 124            | -0.7                               | Temp. Approved for 145 (3-19-09)     |
| JEDGW024            | 5/18/2009 9:25 | 56.2                | 43.7                | 0                  | 0.1         | 131            | -1.8                               | Temp. Approved for 145 (5-4-09)      |
| JEDGW026            | 5/18/2009 9:28 | 56.1                | 43.8                | 0                  | 0.1         | 135            | -0.7                               | Temp. Approved for 145 (5-4-09)      |
| JEDGW034            | 5/18/2009 9:31 | 56.9                | 42.9                | 0                  | 0.2         | 112            | -1.5                               | No Adjustment                        |
| JEDGW032            | 5/18/2009 9:34 | 56.7                | 43.2                | 0                  | 0.1         | 120            | -1.2                               | No Adjustment                        |

FIR=Flare Initial Readings  
 FAR=Flare After Readings

| Monitoring Location | Date            | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                        |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|---------------------------------|
| JEDGW029            | 5/18/2009 9:36  | 56.8                | 43.1                | 0                  | 0.1         | 106            | -1.1                               | No Adjustment                   |
| JEDGW025            | 5/18/2009 9:40  | 56.7                | 43.2                | 0                  | 0.1         | 124            | -1.5                               | No Adjustment                   |
| JEDGW023            | 5/18/2009 9:42  | 56.6                | 43.3                | 0                  | 0.1         | 109            | -1.2                               | No Adjustment                   |
| JEDGW019            | 5/18/2009 9:45  | 56.8                | 43.1                | 0                  | 0.1         | 109            | -0.9                               | No Adjustment                   |
| JEDGW016            | 5/18/2009 9:47  | 56.8                | 43.1                | 0                  | 0.1         | 113            | -2.2                               | No Adjustment                   |
| JEDGW013            | 5/18/2009 9:50  | 56.1                | 43.8                | 0                  | 0.1         | 127            | -1.6                               | No Adjustment                   |
| JEDGW011            | 5/18/2009 9:54  | 56.5                | 43.4                | 0                  | 0.1         | 115            | -1.8                               | No Adjustment                   |
| JEDGW008            | 5/18/2009 9:59  | 57.1                | 42.8                | 0                  | 0.1         | 113            | -1.3                               | No Adjustment                   |
| JEDGW007            | 5/18/2009 10:00 | 56.5                | 43.4                | 0                  | 0.1         | 115            | -1.6                               | No Adjustment                   |
| JEDGW005            | 5/18/2009 10:02 | 57.7                | 42.2                | 0                  | 0.1         | 113            | -1.8                               | No Adjustment                   |
| JEDGW003            | 5/18/2009 10:04 | 57                  | 42.8                | 0                  | 0.2         | 113            | -1.4                               | No Adjustment                   |
| JEDGW001            | 5/18/2009 10:06 | 56.6                | 43.3                | 0                  | 0.1         | 115            | -1.4                               | No Adjustment                   |
| JEDGW038            | 5/18/2009 10:08 | 57.4                | 42.5                | 0                  | 0.1         | 124            | -1.4                               | Adj. 1/4 turn down              |
| JEDGW041            | 5/18/2009 10:09 | 55.2                | 44.7                | 0                  | 0.1         | 126            | -0.8                               | No Adjustment                   |
| JEDGW042            | 5/18/2009 10:11 | 55.4                | 44.5                | 0                  | 0.1         | 114            | -0.7                               | No Adjustment                   |
| JEDGW044            | 5/18/2009 10:13 | 55.4                | 44.5                | 0                  | 0.1         | 123            | -1.1                               | No Adjustment                   |
| JEDGW046            | 5/18/2009 10:15 | 55.4                | 44.5                | 0                  | 0.1         | 125            | -0.7                               | No Adjustment                   |
| JEDGW048            | 5/18/2009 10:18 | 56.8                | 43.1                | 0                  | 0.1         | 121            | -0.1                               | No Adjustment                   |
| JEDGW052            | 5/18/2009 10:20 | 56.3                | 43.6                | 0                  | 0.1         | 130            | -0.4                               | No Adjustment                   |
| JEDGW055            | 5/18/2009 10:22 | 56.5                | 43.4                | 0                  | 0.1         | 126            | -2.2                               | No Adjustment                   |
| JEDGW056            | 5/18/2009 10:24 | 55                  | 44.8                | 0                  | 0.2         | 127            | -0.8                               | No Adjustment                   |
| JEDGW059            | 5/18/2009 10:25 | 54.9                | 45                  | 0                  | 0.1         | 130            | -0.4                               | Temp. Approved for 145 (5-4-09) |

FIR=Flare Initial Readings  
FAR=Flare After Readings

| Monitoring Location | Date            | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                        |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|---------------------------------|
| JEDGW062            | 5/18/2009 10:27 | 55                  | 44.9                | 0                  | 0.1         | 119            | -0.9                               | No Adjustment                   |
| JEDGW004            | 5/18/2009 10:43 | 54.4                | 45.4                | 0                  | 0.2         | 131            | -1.2                               | Temp. Approved for 145 (5-4-09) |
| JEDGW040            | 5/18/2009 10:50 | 54.8                | 45.1                | 0                  | 0.1         | 129            | -1.1                               | No Adjustment                   |
| FARINLET            | 5/18/2009 11:09 | 55.4                | 44.2                | 0.3                | 0.1         | 77             | -25.1                              |                                 |
| FAROUTLET           | 5/18/2009 11:15 | 54.9                | 45                  | 0                  | 0.1         | 123            | 1.6                                |                                 |
| CALIBRAT            | 5/19/2009 7:25  | 49.9                | 35                  | 0                  | 15.1        | 73             | -0.3                               |                                 |
| FIRINLET            | 5/19/2009 11:34 | 55.8                | 44                  | 0                  | 0.2         | 82             | -24.9                              |                                 |
| FIROUTLE            | 5/19/2009 11:41 | 55.7                | 44.2                | 0                  | 0.1         | 88             | 1.9                                |                                 |
| JEDGW009            | 5/19/2009 11:46 | 56.4                | 43.5                | 0                  | 0.1         | 111            | -0.7                               | No Adjustment                   |
| FARINLET            | 5/19/2009 12:00 | 56                  | 43.7                | 0.1                | 0.2         | 81             | -24.7                              | From Field Notes                |
| FAROUTLE            | 5/19/2009 12:03 | 55.3                | 44.6                | 0                  | 0.1         | 109            | 1.5                                |                                 |
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FIR=Flare Initial Readings  
FAR=Flare After Readings

## GAS WELL FIELD MONITORING LOG

### J.E.D. SOLID WASTE MANAGEMENT FACILITY

Technician: Keith Lunsford

Date: 5/19/2009 5Day Readings

| Monitoring Location | Date/Time       | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                        |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|---------------------------------|
| CALIBRAT            | 5/19/2009 7:25  | 49.9                | 35                  | 0                  | 15.1        | 73             | -0.3                               |                                 |
| FIRINLET            | 5/19/2009 11:34 | 55.8                | 44                  | 0                  | 0.2         | 82             | -24.9                              |                                 |
| FIROUTLE            | 5/19/2009 11:41 | 55.7                | 44.2                | 0                  | 0.1         | 88             | 1.9                                |                                 |
| JEDGW006            | 5/19/2009 11:52 | 54.7                | 45.2                | 0                  | 0.1         | 134            | -0.2                               | High Temp./Initial Read 5-18-09 |
| FARINLET            | 5/19/2009 12:00 | 56                  | 43.7                | 0.1                | 0.2         | 81             | -24.7                              | From Field Notes                |
| FAROUTLE            | 5/19/2009 12:03 | 55.3                | 44.6                | 0                  | 0.1         | 109            | 1.5                                |                                 |
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FIR=Flare Initial Readings  
 FAR=Flare After Readings

# GAS WELL FIELD MONITORING LOG

## J.E.D. SOLID WASTE MANAGEMENT FACILITY

Technician: Keith Lunsford

Date: 5/28/2009    15    Readings

| Monitoring Location | Date/Time       | CH <sub>4</sub> (%) | CO <sub>2</sub> (%) | O <sub>2</sub> (%) | Balance (%) | Gas Temp. (°F) | Well Vacuum (In. H <sub>2</sub> O) | Comments                                                |
|---------------------|-----------------|---------------------|---------------------|--------------------|-------------|----------------|------------------------------------|---------------------------------------------------------|
| CALIBRAT            | 5/28/2009 8:30  | 50                  | 35                  | 0.1                | 14.9        | 93             | 15.1                               |                                                         |
| FIRINLET            | 5/28/2009 8:34  | 54.1                | 43.4                | 0.1                | 2.4         | 94             | -29.4                              |                                                         |
| FIROUTLE            | 5/28/2009 8:38  | 55.9                | 44                  | 0                  | 0.1         | 126            | -2.6                               |                                                         |
| JEDGW006            | 5/28/2009 10:02 | 55.2                | 44.6                | 0                  | 0.2         | 132            | -0.7                               | High Temp/3 Turns Down/15 Day Read/Initial Read 5-18-09 |
| FARINLET            | 5/28/2009 11:57 | 54.7                | 43.7                | 0.3                | 1.3         | 98             | -31.8                              | SCFM=1978                                               |
| FAROUTLE            | 5/28/2009 12:01 | 55.3                | 44                  | 0                  | 0.7         | 129            | 2.5                                | SCFM=1978                                               |
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FIR=Flare Initial Readings  
 FAR=Flare After Readings

# GAS WELL FIELD MONITORING LOG

J.E.D. SOLID WASTE MANAGEMENT FACILITY

Carbon Monoxide Test

Technician: K.Lunsford

Date: 6/8/2009

| Monitoring Location | Date/Time      | PPM           | Gas Temp. (°F) |     |
|---------------------|----------------|---------------|----------------|-----|
| JEDGW060            | 6/8/09-11:25   | < 50 ppm      | 143            |     |
| JEDGW057            | 6/8/09-11:30   | < 10ppm       | 140            |     |
| JEDGW053            | 6/8/2009-11:39 | 10ppm         | 139            |     |
| JEDGW049            | 6/8/09-11:45   | 0ppm          | 135            |     |
| JEDGW047            | 6/8/09-11:50   | <10ppm        | 137            |     |
| JEDGW043            | 6/8/09-11:56   | <10ppm        | 133            |     |
| JEDGW004            | 6/8/09-11:10   | <50ppm        | 137            |     |
| JEDGW059            | 6/8/2009-11:20 | <10ppm        | 132            |     |
| JEDGW026            | 6/8/09-12:30   | <10ppm        | 132            |     |
| JEDGW024            | 6/8/09-12:22   | <10ppm        | 130            |     |
| Initial CO test     | JEDGW006       | 6/8/009-12:10 | <10ppm         | 135 |
| JEDGW039            | 6/8/09-12:03   | <10ppm        | 137            |     |
| JEDGW002            | 6/8/09-12:08   | <10ppm        | 135            |     |
| JEDGW012            | 6/8/09-12:13   | <10ppm        | 136            |     |
| JEDGW020            | 6/8/09-12:17   | <10ppm        | 134            |     |
| JEDGW013            | 6/8/09-12:37   | <10ppm        | 128            |     |