



January 29, 2016

Reference No. 086120

Mr. David Rozeboom  
Wisconsin Department of Natural Resources  
1300 W. Clairemont Avenue  
Eau Claire, Wisconsin 54701

Dear Mr. Rozeboom:

**Re: Annual Operation, Maintenance, and Monitoring Report  
November 2014 through December 2015  
Former Holtz Krause Closed Landfill  
Wausau, Wisconsin**

GHD Services Inc. (GHD) is submitting the Annual Operation, Maintenance, and Monitoring (OM&M) Report on behalf of the City of Wausau for the former Holtz Krause Landfill in Wausau, Wisconsin. The report covers the period of November 2014 through December 2015.

One hard copy of the report is being sent to your attention for review.

Please review the report at your earliest convenience and contact me if you have any questions or require additional information.

Sincerely,

GHD

A handwritten signature in black ink that reads "Thomas F. Hobday". The signature is written in a cursive style with a long horizontal flourish at the end.

Thomas F. Hobday

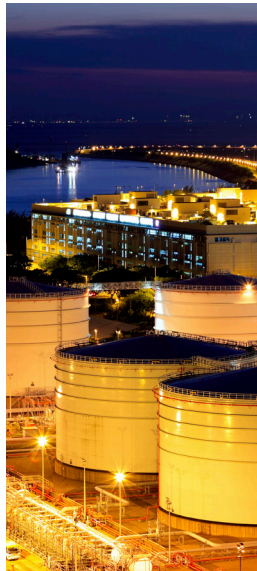
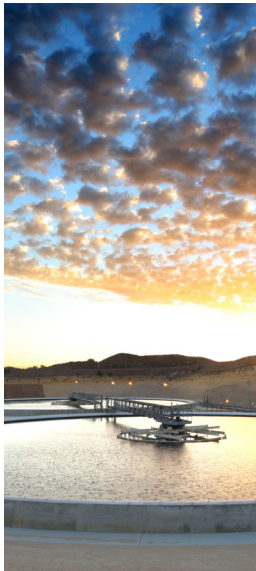
TH/sb/1

Encl.

cc: Kevin Fabel, City of Wausau (via email)  
Ron Frehner, GHD (via email)



Final



# Annual Operation, Maintenance, and Monitoring Report November 2014 through December 2015

Former Holtz Krause Landfill  
Wausau, Wisconsin

City of Wausau

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# 1. Introduction

GHD Services, Inc. (GHD) has prepared this Operation, Maintenance, and Monitoring (OM&M) Report (Report) for the former Holtz Krause Landfill in Wausau, Wisconsin, on behalf of the City of Wausau. This Report presents the results of OM&M activities at the Site from November 2014 through December 2015 as required by the Operation and Maintenance Plan. Future annual reports will be prepared on a calendar year basis.

Since 1995, the City of Wausau has operated the landfill gas system, maintained the cap, measured settlement, and monitored groundwater at and near the landfill. Under the September 25, 2012 Purchase Agreement, Marathon County purchased the landfill property and the Holtz Krause Steering Committee developed the landfill into a soccer complex. Figure 1.1 shows the landfill, soccer complex, and gas extraction system components.

The September 25, 2012 Purchase Agreement states that the City of Wausau will continue to operate and maintain the landfill gas collection system and landfill cap outside the soccer field area. The Parks department, serving the County and City, is responsible for Operation and Maintenance of the soccer complex, which includes the irrigation system, under-drains, field turf, concession building, maintenance building, parking lots, and Championship Field lights. As part of the 2012 Agreement, the Holtz Krause Steering Committee is to provide \$54,000 in funds to the County for the purpose of funding the future replacement of the flare which would likely occur after the flare is 15 to 20 years old (i.e. 2028 to 2033).

This report provides the results of the OM&M performed that is the responsibility of the City of Wausau (landfill gas collection system OM&M, site inspections, and landfill cover areas outside of the soccer complex).

## 1.1 Site Description

The Holtz Krause Landfill and vicinity is a 64 acre site that operated between 1957 and 1980. The Site is located at the end of East Kent Street, east of Grand Avenue. This landfill received approximately 2.0 million cubic yards (CY) of waste including municipal solid waste, non-combustible waste, demolition material, and wood waste.

The landfill is surrounded by a wetland (south), single residence, Curling Club (west), cemetery (northwest), cell tower (north), and railroad operations (north and east).

In 2013, construction of the soccer complex and modifications and repairs of the gas extraction system were conducted. The landfill gas collection system now consists of the following:

- 32 gas extraction wells housed in flush-mounted vaults
- Header pipe, control valves, and condensate drainage system
- Landfill gas flare consisting of blower skid, flare, controls, and other associated equipment
- 13 gas monitoring probes

The landfill cover system consists of the following (from ground surface)

- A vegetative layer consisting of 6 to 8 inches of topsoil and 3 feet of rooting zone soil.

- Primary barrier layer consisting of a 40-mil very low density polyethylene (VLDPE) geomembrane liner.
- Secondary barrier layer consisting of 2 feet of compacted clay
- The 1982 soil cover (0 to 2 feet thick)

The soccer field utilities are entirely installed above the liner within the rooting zone. These include the irrigation system, under drains, storm drains, water, sanitary and electrical. The landfill gas header piping is installed below the liner.

## 1.2 Objectives and Requirements

As required in the O&M Plan for the Site, the City is responsible for the following OM&M items:

- Weekly monitoring and inspections of the flare station
- Twice monthly monitoring of landfill gas composition at the flare station from October through March
- Monthly monitoring of landfill gas composition at the flare station from April through September
- Semi-annual preventative maintenance of the flare station
- Monthly monitoring and inspection of landfill gas extraction wells (gas composition, flow rate, header vacuum, and well condition) from April through September
- Quarterly monitoring and inspection of landfill gas extraction wells (gas composition, flow rate, header vacuum, and well condition) from October through March
- Quarterly gas probe monitoring
- Monthly general Site inspections

Results of the OM&M items noted above are presented in the following sections.

# 2. Gas Extraction System and Flare Station

## 2.1 Overview and System Components

The landfill gas extraction system consists of the following components:

- 32 gas extraction wells housed in flush-mounted vaults
- Header pipe, control valves, and condensate drainage system
- Landfill gas flare consisting of blower skid, flare, controls, and other associated equipment
- 13 gas monitoring probes

Through the use of a blower at the flare station, vacuum is applied to the landfill gas extraction wells, via the header pipe network, to extract landfill gas from the landfill and transfer it to the flare station. At the flare station, extracted landfill gas is supplied to a candlestick flare for combustion and destruction. Landfill gas condensate that accumulates in the header piping or at the flare station drains to the City of Wausau sanitary sewer via a condensate sump and drip leg.

Gas monitoring probes are installed around the perimeter of the landfill to allow monitoring of any landfill gas migration beyond the landfill limits.

The components of the gas extraction system are shown on Figure 1.1.

## 2.2 Flare Station OM&M

The required flare station OM&M consists of the following:

- Weekly monitoring and inspection of the flare station operation
- Twice weekly remote flare station monitoring
- Monthly monitoring of flare station landfill gas composition from April through September, and twice monthly monitoring of flare station landfill gas composition from October through March
- Semi-annual preventative maintenance of flare station

Weekly flare station inspections consist of recording all current operating conditions (flow rate, oxygen content, gas/flare temperatures, gas pressures, header vacuum, system hours, etc.) listed on the “Weekly Flare Station Inspection Form” (included in the O&M Plan). A summary of weekly inspection results are presented in Table 2.1. Weekly flare inspection forms are included in Appendix A.

In addition to on-Site inspections, the flare station was monitored at least twice per week via the remote (internet) connection to verify operation. Any issues or shutdowns discovered during remote monitoring were logged, and are detailed in Section 2.2.1.

Monitoring of landfill gas composition (percent each: methane, carbon dioxide, and oxygen) was completed a minimum of one time per month from April to September, and a minimum of two times per month from October to March. The results of landfill gas monitoring at the flare station are presented in Tables 2.1 and 2.2.

Semi-annual flare station maintenance consists of performing all flare manufacturer specified inspections and preventative maintenance. The semi-annual inspection and maintenance events were performed by GHD Services, Inc. on behalf of the City of Wausau in April 2015 and October 2015. The semi-annual maintenance reports are included in Appendix B.

### 2.2.1 Unscheduled Flare Station Shutdowns

During the reporting period (November 2014 through December 2015), the flare station experienced 9 unscheduled shutdowns. Details of the shutdowns are as follows:

- January 13, 2015: The flare station shut down due to a high condensate level caused by the drain pipe freezing. The flare station restarted once the pipe was thawed.
- February 24, 2015: The flare station experienced a low flow rate shutdown caused by a frozen flowmeter. The flare station restarted once the flowmeter was thawed out on February 25, 2015.
- March 13, 2015: The flare station experienced a low flow rate shutdown. The flare station was restarted on March 16, 2015.
- June 22, 2015: The flare station shut down due to utility outage. The flare station restarted once the power was restored.

- July 26, 2015: The flare station shut down due to a pilot flame fail. The flare station was restarted on July 28, 2015.
- August 2, 2015: The flare station shut down due to utility outage caused by a lightning storm. The flare station restarted once power was restored.
- August 28, 2015: The flare station shut down to a pilot flame fail. The flare station was restarted on August 31, 2015.
- November 11, 2015: The flare station experienced a high oxygen shutdown. The valves were reset and the flare was restarted on November 13, 2015.
- November 20, 2015: The flare station shut down to a pilot flame fail caused by high winds. The flare station was restarted on November 22, 2015.

The flare station operated for 9,901 of the 10,224 available hours (97-percent) during the reporting period.

### 2.3 Gas Extraction Well Monitoring

Gas extraction well monitoring is performed on a monthly basis April through September, and on a quarterly basis October through March, in accordance with the O&M Plan and consists of monitoring the landfill gas concentration, flow rate, and vacuum at each gas extraction well. Additionally, at the time of monitoring, the condition of each well is inspected and evaluated. Any maintenance needs found are then completed as necessary.

During gas well monitoring, extraction well flow rates were adjusted based upon the composition of landfill gas within the individual wells. Wells were adjusted to supply landfill gas to the flare station with a nominal methane concentration of 30-percent. To begin the reporting period, landfill gas was extracted from the wellfield at 90 cubic feet per minute (cfm). Gas flow was reduced in December 2014 due to reduced methane concentrations reaching the flare station.

Results of the gas extraction well monitoring are presented in Table 2.2.

### 2.4 Gas Probe Monitoring

Landfill gas probe monitoring is conducted on a quarterly basis at the thirteen gas probes installed around the perimeter of the site. Locations of the gas probes are presented on Figure 1.1. Monitoring at each probe consisted of the gas composition (methane, carbon dioxide, oxygen, and balance). Probes were purged for a minimum of 210 seconds before a final measurement was recorded.

Results of the gas probe monitoring are presented in Table 2.3. Methane was non-detect at all probes during the reporting period monitoring events, indicating that the gas extraction system has been effective at controlling landfill gas migration from the Site.

### 2.5 Landfill Gas Condensate

Landfill gas condensate collected in the landfill gas header and at the flare station gravity drains to a drip leg near the flare station before draining to the City of Wausau sanitary sewer. Landfill gas condensate is sampled at the direction/discretion of the City of Wausau Wastewater Treatment Facility.

### 3. Landfill Cover

In accordance with the O&M Plan, the City was responsible for completing general Site inspections on a monthly basis. Any issues identified in monthly inspections were then reported to the responsible party (i.e. county for soccer complex/field issues, city for landfill areas outside of the soccer complex, etc.).

The Site inspections focused on the following main components:

- Landfill cover area
- Landfill gas extraction wells
- Landfill gas monitoring probes
- Flare station area
- Access roads/paths associated with the Site

Inspections are completed on the "Landfill Site Inspection" form previously provided in the Site O&M Plan. Copies of the monthly inspection forms are provide in Appendix C.

No major issues were noted during the monthly Site inspections requiring further maintenance work. The perimeter of the landfill was twice noted to require mowing in May 2015 and July 2015. In each instance, the area had been mowed by the next inspection.

### 4. Conclusions

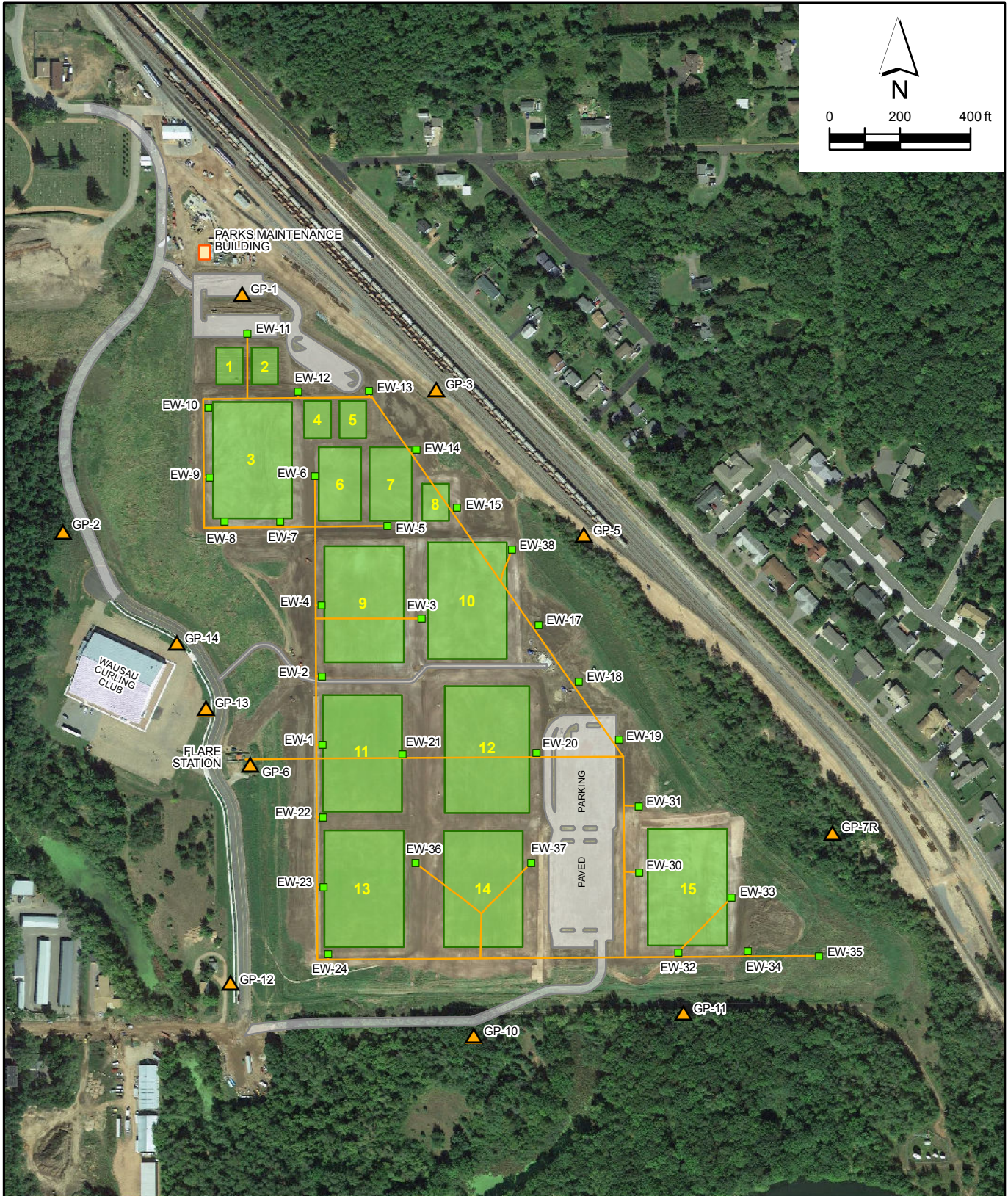
Based upon the OM&M activities performed in the reporting period, the following conclusions are made:

- The new flare station provided consistent, reliable operation throughout the reporting period with 97-percent up-time from November 1, 2014 through December 31, 2015.
- The flare station controls allowed extraction amounts to closely match landfill production (approximately 80 to 90 cfm at 31 to 40 percent methane). Additionally, this resulted in minimal amounts of oxygen within the landfill waste, ensuring the landfill remains in anaerobic gas production and limits the potential for subsurface fires.
- Landfill gas monitoring probes were all non-detect for methane during the reporting period, indicating that landfill gas extraction rates are sufficient to prevent off-Site gas migration.
- The general Site was noted to be in good condition throughout the reporting period, with no significant concerns. No issues were noted where erosion had been previously observed due to snow melt in spring of 2014.
- Gas composition at gas extraction wells was noted to be very consistent throughout the reporting period. This consistency supports that the current frequency of gas extraction well monitoring is sufficient (monthly April through September, quarterly October through March).



## 5. Recommendations

Based upon the consistent performance of the gas extraction and flare system, it is recommended that the current monitoring frequency for the flare station, gas extraction wells, and probes be maintained for 2016.



**LEGEND**

- GAS EXTRACTION WELL
- ▲ GAS PROBE LOCATION
- GAS EXTRACTION HEADER
- SOCCER FIELD
- PAVED ROAD/PARKING



figure 1.1  
**SITE PLAN**  
**FORMER HOLTZ KRAUSE LANDFILL**  
*Wausau, Wisconsin*

Table 2.1

**Flare Station Operational Data  
November 2014 through December 2015  
Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>Date</b> | <b>Header Pressure</b><br>(in H <sub>2</sub> O) | <b>Methane</b><br>(%) | <b>Carbon Dioxide</b><br>(%) | <b>Oxygen</b><br>(%) | <b>Flow Rate</b><br>(scfm) | <b>Inlet Gas Temp</b><br>(°F) | <b>Flare Temp</b><br>(°F) | <b>Status</b><br>(on/off) | <b>System Hours</b><br>(hours) |
|-------------|---|-----------------------|------------------------------|----------------------|----------------------------|-------------------------------|---------------------------|---------------------------|--------------------------------|
| 11/7/2014   | -3.5  | N/R                   | N/R                          | N/R                  | 93                         | 59                            | 1,310                     | on                        | 9,393                          |
| 11/13/2014  | -4.3  | 32.6                  | 31.8                         | 0.4                  | 92                         | 58                            | 1,358                     | on                        | 9,538                          |
| 11/18/2014  | -4.6  | N/R                   | N/R                          | N/R                  | 86                         | 57                            | 1,340                     | on                        | 9,659                          |
| 11/25/2014  | -6.6  | 30.7                  | 31.1                         | 0.6                  | 93                         | 56                            | 1,391                     | on                        | 9,825                          |
| 12/3/2014   | -4.5  | 32.5                  | 31.5                         | 0.5                  | 76                         | 55                            | 1,370                     | on                        | 10,018                         |
| 12/9/2014   | -4.8  | N/R                   | N/R                          | N/R                  | 77                         | 54                            | 1,283                     | on                        | 10,162                         |
| 12/16/2014  | -4.3  | N/R                   | N/R                          | N/R                  | 76                         | 54                            | 1,359                     | on                        | 10,330                         |
| 12/22/2014  | -2.7  | 35.1                  | 32.7                         | 0.2                  | 76                         | 53                            | 1,412                     | on                        | 10,474                         |
| 1/6/2015    | -2.7  | 38.1                  | 33.5                         | 0.2                  | 79                         | 51                            | 1,181                     | on                        | 10,835                         |
| 1/13/2015   | -3.5  | N/R                   | N/R                          | N/R                  | 84                         | 50                            | 1,385                     | on                        | 11,003                         |
| 1/21/2015   | -4.0  | 33.4                  | 31.1                         | 0.4                  | 76                         | 50                            | 1,303                     | on                        | 11,193                         |
| 1/27/2015   | -4.6  | N/R                   | N/R                          | N/R                  | 77                         | 50                            | 1,385                     | on                        | 11,336                         |
| 2/3/2015    | -3.6  | 32.8                  | 31                           | 0.5                  | 76                         | 49                            | 1,244                     | on                        | 11,504                         |
| 2/10/2015   | -3.5  | N/R                   | N/R                          | N/R                  | 83                         | 49                            | 1,466                     | on                        | 11,671                         |
| 2/17/2015   | -3.0  | N/R                   | N/R                          | N/R                  | 77                         | 48                            | 1,342                     | on                        | 11,839                         |
| 2/24/2015   | -1.0  | 37.6                  | 33.1                         | 0.2                  | 76                         | 48                            | 1,319                     | on                        | 12,008                         |
| 3/3/2015    | -0.6  | 39.4                  | 31.4                         | 0                    | 81                         | 48                            | 1,420                     | on                        | 12,161                         |
| 3/10/2015   | -2.9  | 34.1                  | 30.1                         | 0.1                  | 80                         | 48                            | 1,412                     | on                        | 12,328                         |
| 3/17/2015   | -5.1  | N/R                   | N/R                          | N/R                  | 82                         | 48                            | 1,320                     | on                        | 12,459                         |
| 3/24/2015   | -3.0  | N/R                   | N/R                          | N/R                  | 82                         | 48                            | 1,426                     | on                        | 12,629                         |
| 4/1/2015    | -3.5  | N/R                   | N/R                          | N/R                  | 77                         | 48                            | 1,282                     | on                        | 12,795                         |
| 4/8/2015    | -2.8  | N/R                   | N/R                          | N/R                  | 77                         | 48                            | 1,481                     | on                        | 12,987                         |
| 4/15/2015   | -4.4  | 32                    | 28.5                         | 0.2                  | 78                         | 48                            | 1,217                     | on                        | 13,131                         |
| 4/21/2015   | -3.6  | N/R                   | N/R                          | N/R                  | 80                         | 49                            | 1,340                     | on                        | 13,295                         |
| 4/28/2015   | -3.4  | N/R                   | N/R                          | N/R                  | 80                         | 50                            | 1,428                     | on                        | 13,465                         |
| 5/6/2015    | -3.0  | N/R                   | N/R                          | N/R                  | 81                         | 50                            | 1,383                     | on                        | 13,655                         |
| 5/12/2015   | -4.4  | 34.6                  | 29.9                         | 0.1                  | 75                         | 51                            | 1,344                     | on                        | 13,800                         |
| 5/19/2015   | -4.9  | N/R                   | N/R                          | N/R                  | 77                         | 51                            | 1,343                     | on                        | 13,968                         |
| 5/26/2015   | -4.1  | N/R                   | N/R                          | N/R                  | 81                         | 53                            | 1,272                     | on                        | 14,137                         |
| 6/2/2015    | -3.6  | N/R                   | N/R                          | N/R                  | 79                         | 54                            | 1,377                     | on                        | 14,309                         |
| 6/10/2015   | -4.8  | 33.7                  | 29.2                         | 0.2                  | 76                         | 55                            | 1,330                     | on                        | 14,497                         |
| 6/16/2015   | -5.2  | N/R                   | N/R                          | N/R                  | 77                         | 56                            | 1,333                     | on                        | 14,639                         |

Table 2.1

**Flare Station Operational Data  
November 2014 through December 2015  
Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>Date</b> | <b>Header Pressure</b><br>(in H <sub>2</sub> O) | <b>Methane</b><br>(%) | <b>Carbon Dioxide</b><br>(%) | <b>Oxygen</b><br>(%) | <b>Flow Rate</b><br>(scfm) | <b>Inlet Gas Temp</b><br>(°F) | <b>Flare Temp</b><br>(°F) | <b>Status</b><br>(on/off) | <b>System Hours</b><br>(hours) |
|-------------|---|-----------------------|------------------------------|----------------------|----------------------------|-------------------------------|---------------------------|---------------------------|--------------------------------|
| 6/23/2015   | -5.6  | N/R                   | N/R                          | N/R                  | 78                         | 57                            | 1,327                     | on                        | 14,804                         |
| 6/30/2015   | -4.7  | N/R                   | N/R                          | N/R                  | 76                         | 58                            | 1,354                     | on                        | 14,971                         |
| 7/7/2015    | -5.0  | 31.2                  | 29.3                         | 0.3                  | 76                         | 58                            | 1,318                     | on                        | 15,138                         |
| 7/14/2015   | -5.1  | N/R                   | N/R                          | N/R                  | 76                         | 59                            | 1,370                     | on                        | 15,302                         |
| 7/21/2015   | -5.4  | N/R                   | N/R                          | N/R                  | 85                         | 60                            | 1,388                     | on                        | 15,470                         |
| 7/28/2015   | -2.7  | N/R                   | N/R                          | N/R                  | 76                         | 60                            | 1,400                     | on                        | 15,561                         |
| 8/4/2015    | -5.3  | N/R                   | N/R                          | N/R                  | 83                         | 60                            | 1,423                     | on                        | 15,720                         |
| 8/12/2015   | -4.9  | N/R                   | N/R                          | N/R                  | 85                         | 61                            | 1,342                     | on                        | 15,914                         |
| 8/19/2015   | -3.2  | 33.8                  | 32.1                         | 0.2                  | 82                         | 61                            | 1,412                     | on                        | 16,082                         |
| 8/25/2015   | -4.5  | N/R                   | N/R                          | N/R                  | 77                         | 62                            | 1,361                     | on                        | 16,225                         |
| 9/2/2015    | -4.0  | 36.3                  | 32.4                         | 0.2                  | 77                         | 62                            | 1,385                     | on                        | 16,351                         |
| 9/10/2015   | -4.3  | 35.1                  | 31.6                         | 0.3                  | 80                         | 62                            | 1,461                     | on                        | 16,533                         |
| 9/15/2015   | -4.4  | N/R                   | N/R                          | N/R                  | 77                         | 63                            | 1,430                     | on                        | 16,653                         |
| 9/22/2015   | -4.3  | N/R                   | N/R                          | N/R                  | 78                         | 62                            | 1,448                     | on                        | 16,819                         |
| 9/30/2015   | -4.8  | N/R                   | N/R                          | N/R                  | 81                         | 62                            | 1,476                     | on                        | 17,012                         |
| 10/7/2015   | -4.5  | 37.3                  | 32.7                         | 0.3                  | 77                         | 61                            | 1,400                     | on                        | 17,179                         |
| 10/15/2015  | -3.8  | N/R                   | N/R                          | N/R                  | 81                         | 61                            | 1,443                     | on                        | 17,367                         |
| 10/21/2015  | -3.8  | N/R                   | N/R                          | N/R                  | 84                         | 61                            | 1,440                     | on                        | 17,511                         |
| 10/27/2015  | -3.8  | N/R                   | N/R                          | N/R                  | 83                         | 60                            | 1,350                     | on                        | 17,656                         |
| 11/3/2015   | -4.0  | 37.9                  | 34.2                         | 0.2                  | 85                         | 60                            | 1,414                     | on                        | 17,830                         |
| 11/10/2015  | -3.8  | N/R                   | N/R                          | N/R                  | 79                         | 59                            | 1,410                     | on                        | 17,994                         |
| 11/17/2015  | -4.0  | 40.1                  | 35.1                         | 0.2                  | 82                         | 58                            | 1,337                     | on                        | 18,115                         |
| 11/24/2015  | -5.2  | N/R                   | N/R                          | N/R                  | 79                         | 57                            | 1,420                     | on                        | 18,237                         |
| 12/2/2015   | -4.5  | 39.9                  | 35.1                         | 0.3                  | 76                         | 56                            | 1,437                     | on                        | 18,428                         |
| 12/9/2015   | -4.2  | N/R                   | N/R                          | N/R                  | 76                         | 56                            | 1,423                     | on                        | 18,597                         |
| 12/15/2015  | -6.9  | N/R                   | N/R                          | N/R                  | 79                         | 55                            | 1,480                     | on                        | 18,740                         |
| 12/22/2015  | -4.7  | 40.1                  | 35                           | 0.3                  | 80                         | 54                            | 1,397                     | on                        | 18,910                         |
| 12/28/2015  | -3.8  | N/R                   | N/R                          | N/R                  | 84                         | 54                            | 1,506                     | on                        | 19,055                         |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> | <b>Temp<br/>(°F)</b> | <b>Flow<br/>Rate<br/>(scfm)</b> | <b>Header<br/>Pressure<br/>(in. H<sub>2</sub>O)</b> | <b>Status<br/>(on/off)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|----------------------|---------------------------------|---|----------------------------|
| Flare     | 11/13/2014  | 32.6                   | 31.8                              | 0.4                   | 58                   | 92                              | -4.3  | On                         |
| Flare     | 11/25/2014  | 30.7                   | 31.1                              | 0.6                   | 56                   | 93                              | -6.6  | On                         |
| Flare     | 12/3/2014   | 32.5                   | 31.5                              | 0.5                   | 55                   | 76                              | -4.5  | On                         |
| Flare     | 12/22/2014  | 35.1                   | 32.7                              | 0.2                   | 53                   | 76                              | -2.7  | On                         |
| Flare     | 1/8/2015    | 38.1                   | 33.5                              | 0.2                   | 51                   | 79                              | -2.7  | On                         |
| Flare     | 1/21/2015   | 33.4                   | 31.1                              | 0.4                   | 50                   | 76                              | -4.0  | On                         |
| Flare     | 2/4/2015    | 32.8                   | 31.0                              | 0.5                   | 49                   | 76                              | -3.6  | On                         |
| Flare     | 2/24/2015   | 37.6                   | 33.1                              | 0.2                   | 48                   | 76                              | -1.0  | On                         |
| Flare     | 3/3/2015    | 39.4                   | 31.4                              | 0.0                   | 48                   | 81                              | -0.6  | On                         |
| Flare     | 3/12/2015   | 34.1                   | 30.1                              | 0.1                   | 48                   | 80                              | -2.9  | On                         |
| Flare     | 4/14/2015   | 32.0                   | 28.5                              | 0.2                   | 48                   | 78                              | -4.4  | On                         |
| Flare     | 5/14/2015   | 34.6                   | 29.9                              | 0.1                   | 51                   | 75                              | -4.4  | On                         |
| Flare     | 6/9/2015    | 33.7                   | 29.2                              | 0.2                   | 55                   | 76                              | -4.8  | On                         |
| Flare     | 7/7/2015    | 31.2                   | 29.3                              | 0.3                   | 58                   | 76                              | -5.0  | On                         |
| Flare     | 8/18/2015   | 33.8                   | 32.1                              | 0.2                   | 61                   | 82                              | -3.2  | On                         |
| Flare     | 9/2/2015    | 36.3                   | 32.4                              | 0.2                   | 62                   | 77                              | -4.0  | On                         |
| Flare     | 9/9/2015    | 35.1                   | 31.6                              | 0.3                   | 62                   | 80                              | -4.3  | On                         |
| Flare     | 10/7/2015   | 37.3                   | 32.7                              | 0.3                   | 61                   | 77                              | -4.5  | On                         |
| Flare     | 11/3/2015   | 37.9                   | 34.2                              | 0.2                   | 60                   | 85                              | -4.0  | On                         |
| Flare     | 11/17/2015  | 40.1                   | 35.1                              | 0.2                   | 58                   | 82                              | -4.0  | On                         |
| Flare     | 12/2/2015   | 39.9                   | 35.1                              | 0.3                   | 56                   | 76                              | -4.5  | On                         |
| Flare     | 12/22/2015  | 40.1                   | 35.0                              | 0.3                   | 54                   | 80                              | -4.7  | On                         |
| EW-01     | 3/12/2015   | 0.0                    | 0.1                               | 21.4                  | 34                   | 0                               | -3.4  | Off                        |
| EW-01     | 4/14/2015   | 11.3                   | 20.4                              | 1.0                   | 47                   | 0                               | -3.7  | Off                        |
| EW-01     | 5/14/2015   | 11.3                   | 21.3                              | 0.2                   | 51                   | 0                               | -2.4  | Off                        |
| EW-01     | 6/9/2015    | 11.5                   | 21.6                              | 0.1                   | 67                   | 0                               | -3.8  | Off                        |
| EW-01     | 7/7/2015    | 8.0                    | 18.8                              | 3.1                   | 63                   | 0                               | -4.5  | Off                        |
| EW-01     | 8/18/2015   | 13.1                   | 23.2                              | 0.2                   | 68                   | 0                               | -3.6  | Off                        |
| EW-01     | 9/9/2015    | 16.7                   | 22.6                              | 1.5                   | 64                   | 0                               | -4.0  | Off                        |
| EW-01     | 10/7/2015   | 8.3                    | 9.9                               | 13.2                  | 56                   | 0                               | -3.9  | Off                        |
| EW-02     | 3/12/2015   | 15.2                   | 23.2                              | 0.7                   | 39                   | 0                               | -3.3  | Off                        |
| EW-02     | 4/14/2015   | 15.0                   | 22.2                              | 1.0                   | 45                   | 0                               | -3.6  | Off                        |
| EW-02     | 5/14/2015   | 17.6                   | 23.7                              | 0.2                   | 50                   | 0                               | -2.4  | Off                        |
| EW-02     | 6/9/2015    | 19.0                   | 24.3                              | 0.2                   | 58                   | 0                               | -3.8  | Off                        |
| EW-02     | 7/7/2015    | 14.3                   | 22.2                              | 2.2                   | 60                   | 0                               | -4.4  | Off                        |
| EW-02     | 8/18/2015   | 20.8                   | 26.8                              | 0.3                   | 66                   | 0                               | -3.5  | Off                        |
| EW-02     | 9/9/2015    | 24.3                   | 27.6                              | 0.2                   | ***                  | ***                             | ***   | On                         |
| EW-02     | 9/9/2015    | 24.3                   | 27.4                              | 0.2                   | 65                   | 0                               | -4.0  | Off                        |
| EW-02     | 10/7/2015   | 25.1                   | 28.1                              | 0.2                   | 57                   | 0                               | -3.9  | Off                        |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> | <b>Temp<br/>(°F)</b> | <b>Flow<br/>Rate<br/>(scfm)</b> | <b>Header<br/>Pressure<br/>(in. H<sub>2</sub>O)</b> | <b>Status<br/>(on/off)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|----------------------|---------------------------------|---|----------------------------|
| EW-03     | 3/12/2015   | 38.4                   | 27.3                              | 2.5                   | 48                   | 13                              | -3.0  | On                         |
| EW-03     | 4/14/2015   | 31.3                   | 22.3                              | 5.5                   | 48                   | 3                               | -3.6  | On                         |
| EW-03     | 5/14/2015   | 41.5                   | 28.6                              | 0.9                   | 50                   | 18                              | -2.3  | On                         |
| EW-03     | 6/9/2015    | 41.9                   | 28.7                              | 1.2                   | 56                   | 7                               | -3.7  | On                         |
| EW-03     | 7/7/2015    | 37.6                   | 27.3                              | 2.6                   | 57                   | 4                               | -4.3  | On                         |
| EW-03     | 8/18/2015   | 45.0                   | 32.4                              | 0.6                   | 59                   | 9                               | -3.3  | On                         |
| EW-03     | 9/9/2015    | 48.5                   | 33.9                              | 0.1                   | 58                   | 9                               | -3.9  | On                         |
| EW-03     | 10/7/2015   | 51.0                   | 35.2                              | 0.2                   | 55                   | 9                               | -3.8  | On                         |
| EW-04     | 3/12/2015   | 26.1                   | 25.5                              | 1.4                   | 44                   | 3                               | -3.3  | On                         |
| EW-04     | 4/14/2015   | 23.6                   | 22.6                              | 3.3                   | 47                   | 6                               | -3.6  | On                         |
| EW-04     | 5/14/2015   | 29.4                   | 26.6                              | 0.5                   | 49                   | 5                               | -2.3  | On                         |
| EW-04     | 6/9/2015    | 31.0                   | 26.7                              | 0.8                   | 56                   | 8                               | -3.6  | On                         |
| EW-04     | 7/7/2015    | 29.6                   | 28.2                              | 0.0                   | 58                   | 12                              | -4.4  | On                         |
| EW-04     | 8/18/2015   | 31.2                   | 30.2                              | 0.2                   | 61                   | 7                               | -3.2  | On                         |
| EW-04     | 9/9/2015    | 33.1                   | 30.7                              | 0.2                   | 61                   | 12                              | -4.0  | On                         |
| EW-04     | 10/7/2015   | 35.2                   | 31.7                              | 0.2                   | 56                   | 14                              | -3.7  | On                         |
| EW-05     | 3/12/2015   | 22.3                   | 23.6                              | 1.2                   | 44                   | ***                             | -3.2  | On                         |
| EW-05     | 4/14/2015   | 18.4                   | 21.3                              | 1.9                   | 49                   | 0                               | -3.6  | Off                        |
| EW-05     | 5/14/2015   | 22.9                   | 23.5                              | 0.6                   | 50                   | 0                               | -2.3  | Off                        |
| EW-05     | 6/9/2015    | 23.7                   | 23.9                              | 0.2                   | 57                   | 0                               | -3.6  | Off                        |
| EW-05     | 7/7/2015    | 18.3                   | 22.4                              | 1.8                   | 58                   | 0                               | -4.3  | Off                        |
| EW-05     | 8/18/2015   | 28.7                   | 26.3                              | 0.4                   | 60                   | 6                               | -3.2  | On                         |
| EW-05     | 9/9/2015    | 30.4                   | 27.1                              | 0.2                   | 61                   | 6                               | -3.9  | On                         |
| EW-05     | 10/7/2015   | 30.8                   | 28.2                              | 0.2                   | 55                   | 4                               | -3.8  | On                         |
| EW-06     | 3/12/2015   | 26.7                   | 27.6                              | 0.4                   | 45                   | 7                               | -2.1  | On                         |
| EW-06     | 4/14/2015   | 25.4                   | 25.8                              | 1.0                   | 50                   | 10                              | -2.9  | On                         |
| EW-06     | 5/14/2015   | 24.5                   | 26.6                              | 0.6                   | 51                   | 0                               | -2.4  | Off                        |
| EW-06     | 6/9/2015    | 25.6                   | 26.6                              | 0.7                   | 60                   | 0                               | -3.6  | Off                        |
| EW-06     | 7/7/2015    | 22.5                   | 26.1                              | 1.1                   | 59                   | 0                               | -4.3  | Off                        |
| EW-06     | 8/18/2015   | 30.3                   | 29.5                              | 0.2                   | 63                   | 5                               | -2.9  | On                         |
| EW-06     | 9/9/2015    | 31.7                   | 30.1                              | 0.1                   | 62                   | 7                               | -3.8  | On                         |
| EW-06     | 10/7/2015   | 33.2                   | 31.1                              | 0.2                   | 56                   | 2                               | -4.4  | On                         |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> | <b>Temp<br/>(°F)</b> | <b>Flow<br/>Rate<br/>(scfm)</b> | <b>Header<br/>Pressure<br/>(in. H<sub>2</sub>O)</b> | <b>Status<br/>(on/off)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|----------------------|---------------------------------|---|----------------------------|
| EW-07     | 3/12/2015   | 29.4                   | 27.7                              | 0.5                   | 48                   | 9                               | -2.6  | On                         |
| EW-07     | 4/14/2015   | 30.2                   | 27.1                              | 0.5                   | 51                   | 12                              | -3.2  | On                         |
| EW-07     | 5/14/2015   | 29.1                   | 26.4                              | 1.1                   | 51                   | 5                               | -2.5  | On                         |
| EW-07     | 6/9/2015    | 32.4                   | 27.8                              | 0.4                   | 60                   | 8                               | -3.5  | On                         |
| EW-07     | 7/7/2015    | 29.9                   | 26.3                              | 2.2                   | 59                   | 7                               | -4.2  | On                         |
| EW-07     | 8/18/2015   | 33.7                   | 30.4                              | 0.2                   | 62                   | 7                               | -2.9  | On                         |
| EW-07     | 9/9/2015    | 35.1                   | 30.7                              | 0.1                   | 61                   | 8                               | -3.8  | On                         |
| EW-07     | 10/7/2015   | 37.1                   | 31.8                              | 0.1                   | 56                   | ***                             | -3.7  | On                         |
| EW-08     | 3/12/2015   | 8.7                    | 22.3                              | 0.3                   | 38                   | 0                               | -2.6  | Off                        |
| EW-08     | 4/14/2015   | 8.6                    | 20.7                              | 0.9                   | 49                   | 0                               | -3.0  | Off                        |
| EW-08     | 5/14/2015   | 8.2                    | 21.5                              | 0.4                   | 51                   | 0                               | -2.5  | Off                        |
| EW-08     | 6/9/2015    | 11.1                   | 21.8                              | 0.2                   | 66                   | 0                               | -3.5  | Off                        |
| EW-08     | 7/7/2015    | 9.7                    | 20.4                              | 1.8                   | 66                   | 0                               | -4.2  | Off                        |
| EW-08     | 8/18/2015   | 13.2                   | 23.6                              | 0.2                   | 68                   | 0                               | -2.9  | Off                        |
| EW-08     | 9/9/2015    | 15.5                   | 24.0                              | 0.1                   | 69                   | 0                               | -3.7  | Off                        |
| EW-08     | 10/7/2015   | 14.9                   | 25.2                              | 0.2                   | 57                   | 0                               | -3.8  | Off                        |
| EW-09     | 3/12/2015   | 13.6                   | 23.8                              | 0.3                   | 41                   | 0                               | -3.1  | Off                        |
| EW-09     | 4/14/2015   | 14.3                   | 22.2                              | 1.2                   | 48                   | 0                               | -3.5  | Off                        |
| EW-09     | 5/14/2015   | 15.9                   | 23.2                              | 0.8                   | 49                   | 0                               | -2.5  | Off                        |
| EW-09     | 6/9/2015    | 20.8                   | 24.7                              | 0.3                   | 60                   | 0                               | -3.6  | Off                        |
| EW-09     | 7/7/2015    | 16.8                   | 22.6                              | 2.1                   | 61                   | 0                               | -4.2  | Off                        |
| EW-09     | 8/18/2015   | 23.2                   | 27.4                              | 0.2                   | 64                   | 0                               | -2.8  | Off                        |
| EW-09     | 9/9/2015    | 21.2                   | 26.2                              | 0.9                   | 65                   | 0                               | -3.7  | Off                        |
| EW-09     | 10/7/2015   | 21.7                   | 28.1                              | 0.1                   | 57                   | 0                               | -3.8  | Off                        |
| EW-10     | 3/12/2015   | 27.0                   | 27.2                              | 0.5                   | 48                   | 7                               | -3.0  | On                         |
| EW-10     | 4/14/2015   | 27.8                   | 26.9                              | 0.0                   | 52                   | 11                              | -3.5  | On                         |
| EW-10     | 5/14/2015   | 25.9                   | 25.5                              | 1.4                   | 50                   | 6                               | -2.7  | On                         |
| EW-10     | 6/9/2015    | 27.5                   | 26.5                              | 0.6                   | 56                   | 9                               | -3.6  | On                         |
| EW-10     | 7/7/2015    | 25.8                   | 25.7                              | 1.4                   | 56                   | 7                               | -4.5  | On                         |
| EW-10     | 8/18/2015   | 29.4                   | 28.9                              | 0.3                   | 60                   | 5                               | -3.0  | On                         |
| EW-10     | 9/9/2015    | 31.3                   | 29.2                              | 0.4                   | 62                   | 6                               | -1.2  | On                         |
| EW-10     | 10/7/2015   | 33.9                   | 30.8                              | 0.2                   | 54                   | 5                               | -3.8  | On                         |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> | <b>Temp<br/>(°F)</b> | <b>Flow<br/>Rate<br/>(scfm)</b> | <b>Header<br/>Pressure<br/>(in. H<sub>2</sub>O)</b> | <b>Status<br/>(on/off)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|----------------------|---------------------------------|---|----------------------------|
| EW-11     | 3/12/2015   | 0.0                    | 4.6                               | 16.6                  | 39                   | 0                               | -3.1  | Off                        |
| EW-11     | 4/14/2015   | 0.2                    | 16.0                              | 0.1                   | 52                   | 0                               | -3.6  | Off                        |
| EW-11     | 5/14/2015   | 0.1                    | 8.4                               | 11.1                  | 54                   | 0                               | -2.6  | Off                        |
| EW-11     | 6/9/2015    | 0.7                    | 12.0                              | 7.0                   | 69                   | 0                               | -3.5  | Off                        |
| EW-11     | 7/7/2015    | 0.9                    | 17.6                              | 1.3                   | 68                   | 0                               | -4.2  | Off                        |
| EW-11     | 8/18/2015   | 4.1                    | 20.8                              | 0.7                   | 70                   | 0                               | -2.9  | Off                        |
| EW-11     | 9/9/2015    | 6.7                    | 18.8                              | 4.4                   | 68                   | 0                               | -3.7  | Off                        |
| EW-11     | 10/7/2015   | 4.0                    | 11.8                              | 10.8                  | 55                   | 0                               | -3.8  | Off                        |
| EW-12     | 3/12/2015   | 3.8                    | 5.0                               | 18.6                  | 34                   | 0                               | -3.2  | Off                        |
| EW-12     | 4/14/2015   | 22.6                   | 25.7                              | 0.4                   | 46                   | 8                               | -3.5  | On                         |
| EW-12     | 5/14/2015   | 20.7                   | 26.5                              | 0.1                   | 52                   | 0                               | -2.6  | Off                        |
| EW-12     | 6/9/2015    | 21.9                   | 26.7                              | 0.1                   | 65                   | 0                               | -3.5  | Off                        |
| EW-12     | 7/7/2015    | 19.4                   | 26.8                              | 0.0                   | 67                   | 0                               | -4.5  | Off                        |
| EW-12     | 8/18/2015   | 28.6                   | 29.4                              | 0.2                   | 68                   | 0                               | -3.0  | Off                        |
| EW-12     | 9/9/2015    | 30.0                   | 29.6                              | 0.2                   | 67                   | 4                               | -3.7  | On                         |
| EW-12     | 10/7/2015   | 30.1                   | 30.9                              | 0.2                   | 56                   | 8                               | -3.9  | On                         |
| EW-13     | 3/12/2015   | 2.7                    | 18.8                              | 1.8                   | 38                   | 0                               | -3.2  | Off                        |
| EW-13     | 4/14/2015   | 2.0                    | 17.5                              | 1.9                   | 52                   | 0                               | -3.5  | Off                        |
| EW-13     | 5/14/2015   | 2.0                    | 18.0                              | 2.2                   | 52                   | 0                               | -2.6  | Off                        |
| EW-13     | 6/9/2015    | 3.2                    | 18.2                              | 1.5                   | 65                   | 0                               | -3.6  | Off                        |
| EW-13     | 7/7/2015    | 2.7                    | 19.3                              | 0.9                   | 65                   | 0                               | -4.5  | Off                        |
| EW-13     | 8/18/2015   | 6.2                    | 21.6                              | 0.9                   | 68                   | 0                               | -2.8  | Off                        |
| EW-13     | 9/9/2015    | 6.7                    | 21.2                              | 1.1                   | 67                   | 0                               | -3.7  | Off                        |
| EW-13     | 10/7/2015   | 5.6                    | 22.0                              | 1.0                   | 60                   | 0                               | -3.9  | Off                        |
| EW-14     | 3/12/2015   | 7.0                    | 21.0                              | 0.8                   | 36                   | 0                               | -2.7  | Off                        |
| EW-14     | 4/14/2015   | 0.3                    | 1.3                               | 19.9                  | 54                   | 0                               | -3.2  | Off                        |
| EW-14     | 5/14/2015   | 7.7                    | 22.3                              | 0.2                   | 53                   | 0                               | -2.1  | Off                        |
| EW-14     | 6/9/2015    | 0.0                    | 0.2                               | 20.8                  | 68                   | 0                               | -3.4  | Off                        |
| EW-14     | 7/7/2015    | 0.0                    | 0.1                               | 20.9                  | 67                   | 0                               | -4.4  | Off                        |
| EW-14     | 8/18/2015   | 11.7                   | 23.7                              | 0.2                   | 69                   | 0                               | -2.8  | Off                        |
| EW-14     | 9/9/2015    | 13.3                   | 21.9                              | 0.3                   | 66                   | 0                               | -3.7  | Off                        |
| EW-14     | 10/7/2015   | 9.9                    | 21.6                              | 1.5                   | 57                   | 0                               | -3.7  | Off                        |



Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> | <b>Temp<br/>(°F)</b> | <b>Flow<br/>Rate<br/>(scfm)</b> | <b>Header<br/>Pressure<br/>(in. H<sub>2</sub>O)</b> | <b>Status<br/>(on/off)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|----------------------|---------------------------------|---|----------------------------|
| EW-15     | 3/12/2015   | 2.0                    | 16.0                              | 4.6                   | 43                   | 0                               | -2.9  | Off                        |
| EW-15     | 4/14/2015   | 0.1                    | 14.2                              | 5.6                   | 55                   | 0                               | -3.3  | Off                        |
| EW-15     | 5/14/2015   | 1.4                    | 16.9                              | 2.0                   | 52                   | 0                               | -2.1  | Off                        |
| EW-15     | 6/9/2015    | 2.3                    | 17.3                              | 1.0                   | 64                   | 0                               | -3.4  | Off                        |
| EW-15     | 7/7/2015    | 1.0                    | 16.2                              | 3.0                   | 65                   | 0                               | -4.4  | Off                        |
| EW-15     | 8/18/2015   | 7.7                    | 20.7                              | 0.3                   | 66                   | 0                               | -2.7  | Off                        |
| EW-15     | 9/9/2015    | 5.1                    | 19.7                              | 0.2                   | 66                   | 0                               | -3.7  | Off                        |
| EW-15     | 10/7/2015   | 3.2                    | 20.1                              | 0.9                   | 60                   | 0                               | -3.9  | Off                        |
| EW-17     | 3/12/2015   | 37.2                   | 29.8                              | 0.6                   | 46                   | 15                              | -2.8  | On                         |
| EW-17     | 4/14/2015   | 31.9                   | 27.2                              | 1.8                   | 49                   | 19                              | -3.8  | On                         |
| EW-17     | 5/14/2015   | 34.8                   | 28.6                              | 0.4                   | 50                   | 5                               | -2.3  | On                         |
| EW-17     | 6/9/2015    | 35.4                   | 28.9                              | 0.8                   | 58                   | 10                              | -3.4  | On                         |
| EW-17     | 7/7/2015    | 31.1                   | 26.6                              | 3.1                   | 56                   | 7                               | -4.5  | On                         |
| EW-17     | 8/18/2015   | 40.3                   | 33.2                              | 0.2                   | 61                   | 6                               | -2.7  | On                         |
| EW-17     | 9/9/2015    | 44.4                   | 33.7                              | 0.1                   | 64                   | 8                               | -3.5  | On                         |
| EW-17     | 10/7/2015   | 45.2                   | 34.9                              | 0.1                   | 56                   | 6                               | -3.9  | On                         |
| EW-18     | 3/12/2015   | 51.8                   | 34.3                              | 0.8                   | 41                   | 3                               | -2.8  | On**                       |
| EW-18     | 4/14/2015   | 50.7                   | 33.0                              | 0.9                   | 48                   | 9                               | -3.5  | On**                       |
| EW-18     | 5/14/2015   | 41.6                   | 30.0                              | 3.4                   | 48                   | 1                               | -2.3  | On                         |
| EW-18     | 6/9/2015    | 49.0                   | 33.7                              | 1.7                   | 60                   | 7                               | -3.3  | On                         |
| EW-18     | 7/7/2015    | 46.1                   | 34.0                              | 2.3                   | 59                   | 4                               | -4.5  | On                         |
| EW-18     | 8/18/2015   | 44.2                   | 35.3                              | 2.6                   | 61                   | 3                               | -2.9  | On                         |
| EW-18     | 9/9/2015    | 50.8                   | 38.2                              | 1.2                   | 67                   | 5                               | -3.7  | On                         |
| EW-18     | 10/7/2015   | 55.4                   | 40.3                              | 0.9                   | 57                   | ***                             | -3.8  | On                         |
| EW-19     | 3/12/2015   | 47.1                   | 36.5                              | 0.8                   | 44                   | 16                              | -2.0  | On                         |
| EW-19     | 4/14/2015   | 49.2                   | 35.5                              | 1.2                   | 49                   | 14                              | -2.8  | On                         |
| EW-19     | 5/14/2015   | 43.0                   | 33.9                              | 1.6                   | 49                   | 8                               | -2.3  | On                         |
| EW-19     | 6/9/2015    | 41.5                   | 33.2                              | 1.4                   | 55                   | 11                              | -3.3  | On                         |
| EW-19     | 7/7/2015    | 37.3                   | 32.5                              | 1.8                   | 55                   | 10                              | -4.4  | On                         |
| EW-19     | 8/18/2015   | 30.0                   | 28.4                              | 5.1                   | 58                   | 5                               | -3.1  | On                         |
| EW-19     | 9/9/2015    | 43.4                   | 36.6                              | 1.0                   | 62                   | 7                               | -3.8  | On                         |
| EW-19     | 10/7/2015   | 41.2                   | 34.7                              | 3.0                   | 56                   | 2                               | -3.9  | On                         |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> | <b>Temp<br/>(°F)</b> | <b>Flow<br/>Rate<br/>(scfm)</b> | <b>Header<br/>Pressure<br/>(in. H<sub>2</sub>O)</b> | <b>Status<br/>(on/off)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|----------------------|---------------------------------|---|----------------------------|
| EW-20     | 3/12/2015   | 43.7                   | 32.7                              | 0.8                   | 46                   | 7                               | -2.7  | On                         |
| EW-20     | 4/14/2015   | 40.4                   | 30.1                              | 1.6                   | 49                   | 15                              | -3.4  | On                         |
| EW-20     | 5/14/2015   | 43.8                   | 31.4                              | 1.3                   | 50                   | 11                              | -2.5  | On                         |
| EW-20     | 6/9/2015    | 43.6                   | 32.4                              | 0.9                   | 55                   | 13                              | -3.4  | On                         |
| EW-20     | 7/7/2015    | 35.9                   | 30.2                              | 2.3                   | 56                   | 12                              | -4.6  | On                         |
| EW-20     | 8/18/2015   | 39.7                   | 34.3                              | 1.1                   | 57                   | 6                               | -3.5  | On                         |
| EW-20     | 9/9/2015    | 41.5                   | 34.9                              | 0.7                   | 61                   | 8                               | -3.8  | On                         |
| EW-20     | 10/7/2015   | 43.1                   | 35.6                              | 1.1                   | 57                   | 5                               | -4.0  | On                         |
| EW-21     | 3/12/2015   | 0.0                    | 0.2                               | 21.7                  | 39                   | 0                               | 1.2   | Off                        |
| EW-21     | 4/14/2015   | 12.8                   | 10.5                              | 12.2                  | 57                   | 0                               | -1.2  | Off                        |
| EW-21     | 5/14/2015   | 7.6                    | 5.6                               | 16.8                  | 56                   | 0                               | -0.1  | Off                        |
| EW-21     | 6/9/2015    | 31.1                   | 26.4                              | 0.8                   | 57                   | 8                               | -3.5  | On                         |
| EW-21     | 7/7/2015    | 27.9                   | 27.0                              | 1.0                   | 58                   | 5                               | -4.8  | On                         |
| EW-21     | 8/18/2015   | 31.0                   | 30.6                              | 0.2                   | 62                   | 4                               | -3.5  | On                         |
| EW-21     | 9/9/2015    | 33.6                   | 30.9                              | 0.1                   | 62                   | 11                              | -0.1  | On*                        |
| EW-21     | 10/7/2015   | 35.6                   | 31.1                              | 1.0                   | 57                   | 3                               | -3.7  | On                         |
| EW-22     | 3/12/2015   | 8.3                    | 12.3                              | 10.3                  | 40                   | 0                               | -3.1  | Off                        |
| EW-22     | 4/14/2015   | 13.6                   | 19.2                              | 0.5                   | 59                   | 0                               | -3.7  | Off                        |
| EW-22     | 5/14/2015   | 13.0                   | 21.1                              | 0.0                   | 55                   | 0                               | -2.7  | Off                        |
| EW-22     | 6/9/2015    | 12.2                   | 20.8                              | 0.2                   | 70                   | 0                               | -3.6  | Off                        |
| EW-22     | 7/7/2015    | 10.9                   | 21.1                              | 0.8                   | 66                   | 0                               | -4.8  | Off                        |
| EW-22     | 8/18/2015   | 17.1                   | 24.4                              | 0.2                   | 68                   | 0                               | -3.6  | Off                        |
| EW-22     | 9/9/2015    | 22.7                   | 25.0                              | 0.2                   | 71                   | 0                               | -3.9  | Off                        |
| EW-22     | 10/7/2015   | 25.1                   | 24.8                              | 2.0                   | 56                   | 0                               | -4.1  | Off                        |
| EW-23     | 3/12/2015   | 0.0                    | 0.2                               | 21.7                  | 40                   | 0                               | -3.1  | Off                        |
| EW-23     | 4/14/2015   | 0.0                    | 0.1                               | 20.9                  | 64                   | 0                               | -3.7  | Off                        |
| EW-23     | 5/14/2015   | 8.0                    | 18.5                              | 0.6                   | 57                   | 0                               | -2.7  | Off                        |
| EW-23     | 6/9/2015    | 0.0                    | 0.1                               | 20.9                  | 73                   | 0                               | -3.6  | Off                        |
| EW-23     | 7/7/2015    | 0.0                    | 0.1                               | 21.7                  | 67                   | 0                               | -4.8  | Off                        |
| EW-23     | 8/18/2015   | 8.1                    | 21.2                              | 0.3                   | 69                   | 0                               | -3.5  | Off                        |
| EW-23     | 9/9/2015    | 0.1                    | 0.1                               | 21.0                  | 76                   | 0                               | -3.3  | Off                        |
| EW-23     | 10/7/2015   | 0.3                    | 0.1                               | 21.4                  | 57                   | 0                               | -4.2  | Off                        |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> | <b>Temp<br/>(°F)</b> | <b>Flow<br/>Rate<br/>(scfm)</b> | <b>Header<br/>Pressure<br/>(in. H<sub>2</sub>O)</b> | <b>Status<br/>(on/off)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|----------------------|---------------------------------|---|----------------------------|
| EW-24     | 3/12/2015   | 3.2                    | 3.4                               | 19.1                  | 40                   | 0                               | -3.0  | Off                        |
| EW-24     | 4/14/2015   | 15.7                   | 12.7                              | 9.6                   | 61                   | 0                               | -3.6  | Off                        |
| EW-24     | 5/14/2015   | 24.5                   | 23.5                              | 0.0                   | 56                   | 0                               | -2.6  | Off                        |
| EW-24     | 6/9/2015    | 21.8                   | 23.1                              | 0.6                   | 70                   | 0                               | -3.6  | Off                        |
| EW-24     | 7/7/2015    | 19.8                   | 24.3                              | 0.6                   | 66                   | 0                               | -4.8  | Off                        |
| EW-24     | 8/18/2015   | 24.3                   | 27.2                              | 0.3                   | 67                   | 0                               | -3.6  | Off                        |
| EW-24     | 9/9/2015    | 27.3                   | 26.4                              | 1.6                   | 68                   | 0                               | -3.8  | Off                        |
| EW-24     | 10/7/2015   | 33.3                   | 28.8                              | 1.3                   | 54                   | ***                             | -3.9  | On                         |
| EW-30     | 3/12/2015   | 31.9                   | 33.2                              | 0.1                   | 43                   | 4                               | -2.6  | On                         |
| EW-30     | 4/14/2015   | 28.4                   | 29.9                              | 1.3                   | 49                   | 9                               | -3.3  | On                         |
| EW-30     | 5/14/2015   | 25.8                   | 30.2                              | 0.5                   | 52                   | 0                               | -2.0  | Off                        |
| EW-30     | 6/9/2015    | 22.5                   | 28.3                              | 1.7                   | 63                   | 0                               | -2.8  | Off                        |
| EW-30     | 7/7/2015    | 21.3                   | 26.5                              | 3.7                   | 64                   | 0                               | -4.4  | Off                        |
| EW-30     | 8/18/2015   | 31.7                   | 35.3                              | 0.2                   | 62                   | 3                               | -3.3  | On                         |
| EW-30     | 9/9/2015    | 34.2                   | 34.8                              | 0.4                   | 63                   | 8                               | -3.5  | On                         |
| EW-30     | 10/7/2015   | 39.6                   | 37.6                              | 0.2                   | 55                   | ***                             | -3.9  | On                         |
| EW-31     | 3/12/2015   | 38.0                   | 34.9                              | 0.0                   | 44                   | 10                              | -1.8  | On                         |
| EW-31     | 4/14/2015   | 38.9                   | 33.2                              | 0.9                   | 50                   | 16                              | -3.0  | On                         |
| EW-31     | 5/14/2015   | 38.2                   | 33.0                              | 0.5                   | 51                   | 12                              | -1.9  | On                         |
| EW-31     | 6/9/2015    | 31.7                   | 31.1                              | 1.5                   | 56                   | 10                              | -3.1  | On                         |
| EW-31     | 7/7/2015    | 27.2                   | 30.4                              | 2.0                   | 59                   | 7                               | -4.3  | On                         |
| EW-31     | 8/18/2015   | 33.5                   | 36.0                              | 0.2                   | 58                   | 4                               | -3.1  | On                         |
| EW-31     | 9/9/2015    | 38.7                   | 36.0                              | 0.3                   | 61                   | 7                               | -3.6  | On                         |
| EW-31     | 10/7/2015   | 44.2                   | 38.4                              | 0.6                   | 57                   | 6                               | -3.7  | On                         |
| EW-32     | 3/12/2015   | 13.3                   | 19.2                              | 8.2                   | 37                   | 0                               | -2.4  | Off                        |
| EW-32     | 4/14/2015   | 17.7                   | 27.5                              | 0.1                   | 59                   | 0                               | -3.4  | Off                        |
| EW-32     | 5/14/2015   | 14.6                   | 26.8                              | 0.0                   | 65                   | 0                               | -2.2  | Off                        |
| EW-32     | 6/9/2015    | 16.5                   | 27.2                              | 0.2                   | 75                   | 0                               | -3.0  | Off                        |
| EW-32     | 7/7/2015    | 17.2                   | 27.2                              | 1.1                   | 71                   | 0                               | -4.3  | Off                        |
| EW-32     | 8/18/2015   | 0.7                    | 0.8                               | 21.4                  | 64                   | 0                               | 0.0   | Off*                       |
| EW-32     | 9/9/2015    | 28.3                   | 32.3                              | 0.3                   | 70                   | 0                               | -3.5  | Off                        |
| EW-32     | 10/7/2015   | 35.3                   | 36.7                              | 0.1                   | 60                   | 3                               | -3.7  | On                         |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| ID    | Date      | Methane<br>(%) | Carbon<br>Dioxide<br>(%) | Oxygen<br>(%) | Temp<br>(°F) | Flow<br>Rate<br>(scfm) | Header<br>Pressure<br>(in. H <sub>2</sub> O) | Status<br>(on/off) |
|-------|-----------|----------------|--------------------------|---------------|--------------|------------------------|--|--------------------|
| EW-33 | 3/12/2015 | 35.7           | 32.5                     | 0.1           | 41           | ***                    | -2.4   | On                 |
| EW-33 | 4/14/2015 | 35.1           | 32.3                     | 0.1           | 47           | 20                     | -3.3   | On                 |
| EW-33 | 5/14/2015 | 31.7           | 31.6                     | 0.0           | 53           | 7                      | -2.0   | On                 |
| EW-33 | 6/9/2015  | 29.3           | 32.0                     | 0.1           | 60           | 12                     | -3.0   | On                 |
| EW-33 | 7/7/2015  | 26.5           | 32.3                     | 0.8           | 58           | 6                      | -4.3   | On                 |
| EW-33 | 8/18/2015 | 36.9           | 37.9                     | 0.2           | 63           | 4                      | -3.1   | On                 |
| EW-33 | 9/9/2015  | 36.6           | 36.9                     | 0.3           | 67           | 13                     | -0.9   | On                 |
| EW-33 | 10/7/2015 | 41.1           | 38.5                     | 0.1           | 58           | 4                      | -3.5   | On                 |
| EW-34 | 3/12/2015 | 32.8           | 31.3                     | 0.8           | 37           | ***                    | -0.3   | On                 |
| EW-34 | 4/14/2015 | 1.9            | 2.7                      | 19.4          | 57           | 0                      | -0.8   | Off                |
| EW-34 | 5/14/2015 | 25.9           | 27.0                     | 2.5           | 63           | 0                      | 0.3  | Off                |
| EW-34 | 6/9/2015  | 14.4           | 14.8                     | 9.7           | 80           | 0                      | -0.2   | Off                |
| EW-34 | 7/7/2015  | 1.3            | 2.2                      | 19.9          | 71           | 0                      | -1.5   | Off                |
| EW-34 | 8/18/2015 | 35.4           | 37.6                     | 0.2           | 67           | 10                     | -0.1   | On                 |
| EW-34 | 9/9/2015  | 35.9           | 36.6                     | 0.1           | 59           | 13                     | -3.7   | On                 |
| EW-34 | 10/7/2015 | 44.1           | 39.1                     | 0.1           | 57           | 12                     | -0.6   | On                 |
| EW-35 | 3/12/2015 | 26.5           | 32.0                     | 0.0           | 48           | ***                    | -0.1   | On                 |
| EW-35 | 4/14/2015 | 22.5           | 29.2                     | 0.7           | 77           | 0                      | -0.7   | Off                |
| EW-35 | 5/14/2015 | 20.5           | 29.6                     | 0.1           | 71           | 0                      | 0.3  | Off                |
| EW-35 | 6/9/2015  | 18.2           | 27.9                     | 0.7           | 93           | 0                      | -0.1   | Off                |
| EW-35 | 7/7/2015  | 18.8           | 28.8                     | 0.9           | 84           | 0                      | -1.5   | Off                |
| EW-35 | 8/18/2015 | 30.0           | 33.8                     | 0.2           | 66           | 0                      | -0.2   | Off                |
| EW-35 | 9/9/2015  | 33.7           | 33.1                     | 1.1           | 71           | 0                      | -0.9   | Off                |
| EW-35 | 10/7/2015 | 40.1           | 36.4                     | 0.8           | 62           | 3                      | -0.7   | On                 |
| EW-36 | 3/12/2015 | 47.1           | 33.1                     | 0.1           | 42           | 15                     | -0.9   | On                 |
| EW-36 | 4/14/2015 | 44.0           | 31.7                     | 0.1           | 48           | ***                    | -1.2   | On**               |
| EW-36 | 5/14/2015 | 41.5           | 31.1                     | 0.0           | 53           | 8                      | 0.1  | On                 |
| EW-36 | 6/9/2015  | 37.8           | 30.8                     | 0.3           | 67           | 9                      | -0.3   | On                 |
| EW-36 | 7/7/2015  | 10.9           | 8.8                      | 16.3          | 67           | 0                      | -1.4   | Off                |
| EW-36 | 8/18/2015 | 34.3           | 28.1                     | 4.2           | 67           | 0                      | 0.0  | Off                |
| EW-36 | 9/9/2015  | 22.0           | 17.3                     | 11.0          | 69           | 0                      | -0.8   | Off                |
| EW-36 | 10/7/2015 | 20.3           | 15.8                     | 11.7          | 62           | 0                      | -0.9   | Off                |

Table 2.2

**Landfill Gas Data**  
**November 2014 through December 2015**  
**Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane</b><br>(%) | <b>Carbon</b><br><b>Dioxide</b><br>(%) | <b>Oxygen</b><br>(%) | <b>Temp</b><br>(°F) | <b>Flow</b><br><b>Rate</b><br>(scfm) | <b>Header</b><br><b>Pressure</b><br>(in. H <sub>2</sub> O) | <b>Status</b><br>(on/off) |
|-----------|-------------|-----------------------|--|----------------------|---------------------|--------------------------------------|--|---------------------------|
| EW-37     | 3/12/2015   | 4.1                   | 3.7                                    | 19.8                 | 38                  | 0                                    | -0.8   | Off                       |
| EW-37     | 4/14/2015   | 7.2                   | 5.4                                    | 18.1                 | 60                  | 0                                    | -1.5   | Off                       |
| EW-37     | 5/14/2015   | 42.9                  | 34.7                                   | 0.3                  | 62                  | 5                                    | 0.5  | On                        |
| EW-37     | 6/9/2015    | 39.1                  | 31.9                                   | 2.1                  | 81                  | 9                                    | -0.4   | On                        |
| EW-37     | 7/7/2015    | 13.4                  | 11.7                                   | 15.1                 | 69                  | 0                                    | -1.7   | Off                       |
| EW-37     | 8/18/2015   | 36.0                  | 32.3                                   | 4.4                  | 69                  | 0                                    | -0.1   | Off                       |
| EW-37     | 9/9/2015    | 17.8                  | 14.3                                   | 13.4                 | 71                  | 0                                    | -1.0   | Off                       |
| EW-37     | 10/7/2015   | 17.0                  | 13.1                                   | 14.1                 | 63                  | 0                                    | -1.5   | Off                       |
| EW-38     | 3/12/2015   | 0.0                   | 0.8                                    | 21.4                 | 39                  | 0                                    | -0.6   | Off                       |
| EW-38     | 4/14/2015   | 0.0                   | 0.1                                    | 21.0                 | 56                  | 0                                    | -1.0   | Off                       |
| EW-38     | 5/14/2015   | 0.0                   | 3.0                                    | 18.8                 | 54                  | 0                                    | -0.1   | Off                       |
| EW-38     | 6/9/2015    | 0.1                   | 14.3                                   | 3.2                  | 68                  | 0                                    | -3.4   | Off                       |
| EW-38     | 7/7/2015    | 0.0                   | 6.4                                    | 13.6                 | 65                  | 0                                    | -4.4   | Off                       |
| EW-38     | 8/18/2015   | 0.8                   | 12.2                                   | 1.9                  | 68                  | 0                                    | -2.8   | Off                       |
| EW-38     | 9/9/2015    | 2.8                   | 13.0                                   | 2.0                  | 70                  | 0                                    | -3.7   | Off                       |
| EW-38     | 10/7/2015   | 0.4                   | 13.8                                   | 4.1                  | 58                  | 0                                    | -3.9   | Off                       |

## Notes:

\* - Sample ports frozen or well underwater preventing readings

\*\* - Well is fully open

\*\*\* - Data unavailable

Table 2.3

**Landfill Gas Probe Data  
November 2014 through December 2015  
Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|
| GP-1S     | 3/10/2015   | 0.0                    | 0.1                               | 20.8                  |
| GP-1S     | 5/7/2015    | 0.0                    | 3.4                               | 16.0                  |
| GP-1S     | 8/26/2015   | 0.0                    | 0.1                               | 20.5                  |
| GP-1S     | 10/21/2015  | 0.0                    | 10.1                              | 8.7                   |
| GP-1D     | 3/10/2015   | 0.0                    | 0.7                               | 20.0                  |
| GP-1D     | 5/7/2015    | 0.0                    | 8.2                               | 9.8                   |
| GP-1D     | 8/26/2015   | 0.0                    | 0.1                               | 20.7                  |
| GP-1D     | 10/21/2015  | 0.0                    | 9.3                               | 8.6                   |
| GP-2      | 3/10/2015   | 0.0                    | 2.6                               | 18.1                  |
| GP-2      | 5/7/2015    | 0.0                    | 3.2                               | 18.6                  |
| GP-2      | 8/26/2015   | 0.0                    | 2.5                               | 19.4                  |
| GP-2      | 10/21/2015  | 0.0                    | 2.0                               | 20.2                  |
| GP-3S     | 3/10/2015   | 0.0                    | 0.2                               | 20.9                  |
| GP-3S     | 5/7/2015    | 0.0                    | 0.3                               | 20.5                  |
| GP-3S     | 8/26/2015   | 0.0                    | 0.1                               | 20.3                  |
| GP-3S     | 10/21/2015  | 0.0                    | 0.2                               | 21.6                  |
| GP-3D     | 3/10/2015   | 0.0                    | 0.1                               | 21.0                  |
| GP-3D     | 5/7/2015    | 0.0                    | 0.1                               | 20.6                  |
| GP-3D     | 8/26/2015   | 0.0                    | 0.1                               | 20.4                  |
| GP-3D     | 10/21/2015  | 0.0                    | 0.2                               | 21.8                  |
| GP-5      | 3/10/2015   | 0.0                    | 0.1                               | 21.3                  |
| GP-5      | 5/7/2015    | 0.0                    | 0.1                               | 20.5                  |
| GP-5      | 8/26/2015   | 0.0                    | 3.7                               | 17.8                  |
| GP-5      | 10/21/2015  | 0.0                    | 4.7                               | 18.2                  |
| GP-6      | 3/10/2015   | 0.0                    | 0.2                               | 20.6                  |
| GP-6      | 5/7/2015    | 0.0                    | 0.6                               | 20.4                  |
| GP-6      | 8/26/2015   | 0.0                    | 0.1                               | 21.4                  |
| GP-6      | 10/21/2015  | 0.0                    | 2.1                               | 20.3                  |
| GP-7R     | 3/10/2015   | 0.0                    | 0.5                               | 21.4                  |
| GP-7R     | 5/7/2015    | 0.0                    | 0.5                               | 20.4                  |
| GP-7R     | 8/26/2015   | 0.0                    | 2.0                               | 19.7                  |
| GP-7R     | 10/21/2015  | 0.0                    | 0.8                               | 21.7                  |

Table 2.3

**Landfill Gas Probe Data  
November 2014 through December 2015  
Holtz Krause Closed Landfill - Wausau, Wisconsin**

| <b>ID</b> | <b>Date</b> | <b>Methane<br/>(%)</b> | <b>Carbon<br/>Dioxide<br/>(%)</b> | <b>Oxygen<br/>(%)</b> |
|-----------|-------------|------------------------|-----------------------------------|-----------------------|
| GP-10     | 3/10/2015   | 0.0                    | 0.6                               | 20.4                  |
| GP-10     | 5/7/2015    | 0.0                    | 0.5                               | 20.3                  |
| GP-10     | 8/26/2015   | 0.0                    | 1.8                               | 20.1                  |
| GP-10     | 10/21/2015  | 0.0                    | 1.2                               | 21.0                  |
| GP-11     | 3/10/2015   | 0.0                    | 1.1                               | 20.0                  |
| GP-11     | 5/7/2015    | 0.0                    | 0.3                               | 20.4                  |
| GP-11     | 8/26/2015   | 0.0                    | 1.2                               | 20.4                  |
| GP-11     | 10/21/2015  | 0.0                    | 4.0                               | 18.7                  |
| GP-12     | 3/10/2015   | 0.0                    | 2.8                               | 18.5                  |
| GP-12     | 5/7/2015    | 0.0                    | 3.3                               | 18.0                  |
| GP-12     | 8/26/2015   | 0.0                    | 7.5                               | 12.4                  |
| GP-12     | 10/21/2015  | 0.0                    | 7.5                               | 13.0                  |
| GP-13     | 3/10/2015   | 0.0                    | 0.6                               | 20.6                  |
| GP-13     | 5/7/2015    | 0.0                    | 1.2                               | 19.6                  |
| GP-13     | 8/26/2015   | 0.0                    | 0.5                               | 20.8                  |
| GP-13     | 10/21/2015  | 0.0                    | 1.1                               | 20.9                  |
| GP-14     | 3/10/2015   | 0.0                    | 4.6                               | 15.7                  |
| GP-14     | 5/7/2015    | 0.0                    | 5.0                               | 13.3                  |
| GP-14     | 8/26/2015   | 0.0                    | 0.2                               | 21.3                  |
| GP-14     | 10/21/2015  | 0.0                    | 11.1                              | 8.8                   |

# Appendix A

## Weekly Flare Station Inspection Forms



## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728      Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |            |          |            |
|---|-----------|------------|----------|------------|
| Tester (Initials)                                     | KSF       | KSF        | KSF      | KSF        |
| Date  | 11/7/2014 | 11/13/2014 | 11/18/14 | 11/25/2014 |
| Time  | 10:00 AM  | 10:00 AM   | 12:30 PM | 9:00 AM    |
| Sky Conditions  | Clear     | Cloudy     | Cloudy   | Clear      |
| Ambient Temperature, deg F                            | 35        | 20         | 10       | 20         |
| Inlet Temperature, deg F (GHS-TI-301)                 | 56        | 55         | 54       | 54         |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100        | 100      | 100        |
| LFG Vacuum, In WC (GHS-PI-301)                        | 4         | 4          | 4        | 6          |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.4       | 0.4        | 0.3      | 0.4        |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100        | 100      | 100        |
| Discharge Pressure, In WC (GHS-PI-302)                | 2         | 2          | 1.5      | 2          |
| Discharge Temperature, deg F (GHS-TI-302)             | 64        | 58         | 54       | 58         |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 10        | 10         | 10       | 10         |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.3       | 2.0        | 2.0      | 2.3        |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.8       | 1.8        | 1.8      | 1.8        |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5       | 0.25       | 0.25     | 0.5        |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 16.1      | 17.7       | 18.5     | 20.2       |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.6       | 3.6        | 3.7      | 3.7        |
| <b>YIC-1</b> From Main Menu Screen                    |           |            |          |            |
| <b>ANALOG DATA MENU</b>                               |           |            |          |            |
| <b>* PROCESS OVERVIEW</b>                             |           |            |          |            |
| Inlet Vacuum, In WC                                   | 3.5       | 4.3        | 4.6      | 6.6        |
| Inlet Temp, DegF                                      | 59        | 58         | 57       | 56         |
| Oxygen, %   | 0         | 0          | 0        | 0          |
| Blower Speed, %                                       | 20        | 22         | 22       | 27         |
| Blower Vibration, In/Sec                              | 0         | 0          | 0        | 0          |
| CP Temp, DegF   | 75        | 66         | 55       | 65         |
| FLR Flame Temp, DegF                                  | 1310      | 1358       | 1340     | 1391       |
| FLR Flow Press, In WC                                 | 2         | 1.9        | 1.8      | 2          |
| FLR Flow Temp, DegF                                   | 66        | 62         | 58       | 63         |
| Flow Rate, SCFM                                       | 93        | 92         | 86       | 93         |
| <b>* BACK</b>   |           |            |          |            |
| <b>* BLOWER DATA</b>                                  |           |            |          |            |
| Status, Run/Stop                                      | Run       | Run        | Run      | Run        |
| Run Time, Hr  | 9393      | 9538       | 9659     | 9825       |
| Speed, %  | 20        | 22         | 22       | 27         |
| Vibration, In/Sec                                     | 0         | 0          | 0        | 0          |
| Outlet Temp, DegF                                     | 66        | 62         | 58       | 63         |
| <b>* BACK</b>   |           |            |          |            |
| <b>* FLARE DATA</b>                                   |           |            |          |            |
| Flow Rate, SCFM                                       | 93        | 92         | 86       | 93         |
| Flame Temp, DegF                                      | 1360      | 1424       | 1333     | 1450       |
| BLR Speed, %  | 20        | 22         | 22       | 27         |
| Flow Pressure, In WC                                  | 2         | 2          | 1.8      | 2          |
| Hour Meter  | 9389      | 9534       | 9655     | 9821       |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 93    | 93    | 86       | 93         |
| Today's Total, MMSCF  | 0.05  | 0.06  | 0.06     | 0.05       |
| This Month's Total, MMSCF   | 0.78  | 1.57  | 2.22     | 3.13       |
| Total Flow, MMSCF   | 59.42 | 60.21 | 60.86    | 61.76      |
| Flow Press, In WC   | 2     | 2     | 1.7      | 2          |
| Flow Temp, DegF   | 66    | 62    | 58       | 63         |
| Flow Delta P, In WC   | 0.77  | 0.75  | 0.64     | 0.75       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.06  | 0.06     | 0.05       |
| 2 Day's Ago Flow, MMSCF   | 0.13  | 0.13  | 0.13     | 0.13       |
| 3 Day's Ago Flow, MMSCF   | 0.13  | 0.13  | 0.13     | 0.13       |
| 4 Day's Ago Flow, MMSCF   | 0.13  | 0.13  | 0.13     | 0.13       |
| 5 Day's Ago Flow, MMSCF   | 0.13  | 0.13  | 0.13     | 0.13       |
| 6 Day's Ago Flow, MMSCF   | 0.13  | 0.13  | 0.13     | 0.13       |
| 7 Day's Ago Flow, MMSCF   | 0.13  | 0.13  | 0.13     | 0.13       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 59.42 | 60.21 | 60.86    | 61.76      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       |          | X          |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b> 1 quart to 2 gallons of water drained routinely.                   |       |       |          |            |
| <b>Signature:</b> Kevin A. Behnke   |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |           |            |            |
|---|-----------|-----------|------------|------------|
| Tester (Initials)                                     | KSF       | KSF       | KSF        | KSF        |
| Date  | 12/3/2014 | 12/9/2014 | 12/16/2014 | 12/22/2014 |
| Time  | 10:00 AM  | 10:30 AM  | 10:00 AM   | 9:30 AM    |
| Sky Conditions  | Clear     | Cloudy    | Cloudy     | Cloudy     |
| Ambient Temperature, deg F                            | 15        | 30        | 30         | 33         |
| Inlet Temperature, deg F (GHS-TI-301)                 | 52        | 52        | 51         | 50         |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100       | 100        | 100        |
| LFG Vacuum, In WC (GHS-PI-301)                        | 3         | 4         | 4          | 3          |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3       | 0.2        | 0.3        |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100       | 100        | 100        |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.5       | 1.5       | 1.5        | 1.5        |
| Discharge Temperature, deg F (GHS-TI-302)             | 54        | 58        | 56         | 58         |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 10        | 10        | 10         | 10         |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 1.5       | 1.8       | 1.5        | 1.8        |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.0       | 1.3       | 1.0        | 1.3        |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5       | 0.5       | 0.5        | 0.5        |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 17.8      | 17.9      | 17.4       | 15.2       |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.5       | 3.6       | 3.6        | 3.7        |
| <b>YIC-1</b> From Main Menu Screen                    |           |           |            |            |
| <b>ANALOG DATA MENU</b>                               |           |           |            |            |
| <b>* PROCESS OVERVIEW</b>                             |           |           |            |            |
| Inlet Vacuum, In WC                                   | 4.5       | 4.8       | 4.3        | 2.7        |
| Inlet Temp, DegF                                      | 55        | 54        | 54         | 53         |
| Oxygen, %   | 0         | 0         | 0          | 0          |
| Blower Speed, %                                       | 20        | 21        | 20         | 16         |
| Blower Vibration, In/Sec                              | 0         | 0         | 0          | 0          |
| CP Temp, DegF   | 64        | 67        | 66         | 69         |
| FLR Flame Temp, DegF                                  | 1370      | 1283      | 1359       | 1412       |
| FLR Flow Press, In WC                                 | 1.4       | 1.5       | 1.5        | 1.4        |
| FLR Flow Temp, DegF                                   | 57        | 61        | 59         | 60         |
| Flow Rate, SCFM                                       | 76        | 77        | 76         | 76         |
| <b>* BACK</b>   |           |           |            |            |
| <b>* BLOWER DATA</b>                                  |           |           |            |            |
| Status, Run/Stop                                      | Run       | Run       | Run        | Run        |
| Run Time, Hr  | 10018     | 10162     | 10330      | 10474      |
| Speed, %  | 20        | 21        | 20         | 16         |
| Vibration, In/Sec                                     | 0.0       | 0.0       | 0.0        | 0.0        |
| Outlet Temp, DegF                                     | 57        | 61        | 59         | 60         |
| <b>* BACK</b>   |           |           |            |            |
| <b>* FLARE DATA</b>                                   |           |           |            |            |
| Flow Rate, SCFM                                       | 76        | 77        | 76         | 76         |
| Flame Temp, DegF                                      | 1331      | 1295      | 1331       | 1400       |
| BLR Speed, %  | 20        | 21        | 20         | 16         |
| Flow Pressure, In WC                                  | 1.4       | 1.4       | 1.4        | 1.4        |
| Hour Meter  | 10014     | 10158     | 10326      | 10469      |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 76    | 76    | 76       | 76         |
| Today's Total, MMSCF  | 0.05  | 0.05  | 0.05     | 0.04       |
| This Month's Total, MMSCF   | 0.24  | 0.93  | 1.75     | 2.46       |
| Total Flow, MMSCF   | 62.71 | 63.4  | 64.22    | 64.93      |
| Flow Press, In WC   | 1.4   | 1.4   | 1.4      | 1.4        |
| Flow Temp, DegF   | 57    | 61    | 59       | 60         |
| Flow Delta P, In WC   | 0.51  | 0.52  | 0.50     | 0.51       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.05  | 0.05     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.11       |
| 7 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 62.71 | 63.4  | 64.22    | 64.92      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| Comments:   |       |       |          |            |
| Signature: Kevin A. Behnke  |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |          |           |           |           |
|---|----------|-----------|-----------|-----------|
| Tester (Initials)                                     | KSF      | KSF       | KSF       | KSF       |
| Date  | 1/6/2015 | 1/13/2015 | 1/21/2015 | 1/27/2015 |
| Time  | 10:30 AM | 10:15 AM  | 10:15 AM  | 10:10 AM  |
| Sky Conditions  | Clear    | Clear     | Cloudy    | Cloudy    |
| Ambient Temperature, deg F                            | -5       | -15       | 20        | 22        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 49       | 48        | 48        | 48        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100      | 100       | 100       | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 2.5      | 3         | 3         | 3.5       |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3      | 0.3       | 0.3       | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100      | 100       | 100       | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 2        | 1.5       | 1.5       | 1.5       |
| Discharge Temperature, deg F (GHS-TI-302)             | 46       | 48        | 55        | 54        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 10       | 15        | 10        | 10        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0      | 2.0       | 1.8       | 1.5       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.5      | 1.5       | 1.3       | 1.0       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5      | 0.5       | 0.5       | 0.5       |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 15.6     | 16.8      | 16.9      | 17.7      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.6      | 3.6       | 3.6       | 3.6       |
| <b>YIC-1</b> From Main Menu Screen                    |          |           |           |           |
| <b>ANALOG DATA MENU</b>                               |          |           |           |           |
| <b>* PROCESS OVERVIEW</b>                             |          |           |           |           |
| Inlet Vacuum, In WC                                   | 2.7      | 3.5       | 4.0       | 4.6       |
| Inlet Temp, DegF                                      | 51       | 50        | 50        | 50        |
| Oxygen, %   | 0        | 0         | 0         | 0         |
| Blower Speed, %                                       | 17       | 19        | 19        | 20        |
| Blower Vibration, In/Sec                              | 0        | 0         | 0         | 0         |
| CP Temp, DegF   | 55       | 56        | 69        | 67        |
| FLR Flame Temp, DegF                                  | 1181     | 1385      | 1303      | 1385      |
| FLR Flow Press, In WC                                 | 0        | 1.7       | 1.4       | 1.4       |
| FLR Flow Temp, DegF                                   | 50       | 50        | 58        | 58        |
| Flow Rate, SCFM                                       | 79       | 84        | 76        | 77        |
| <b>* BACK</b>   |          |           |           |           |
| <b>* BLOWER DATA</b>                                  |          |           |           |           |
| Status, Run/Stop                                      | Run      | Run       | Run       | Run       |
| Run Time, Hr  | 10835    | 11003     | 11193     | 11336     |
| Speed, %  | 17       | 19        | 19        | 20        |
| Vibration, In/Sec                                     | 0.0      | 0.0       | 0.0       | 0.0       |
| Outlet Temp, DegF                                     | 50       | 50        | 58        | 58        |
| <b>* BACK</b>   |          |           |           |           |
| <b>* FLARE DATA</b>                                   |          |           |           |           |
| Flow Rate, SCFM                                       | 77       | 84        | 76        | 76        |
| Flame Temp, DegF                                      | 1333     | 1395      | 1310      | 1382      |
| BLR Speed, %  | 17       | 19        | 19        | 20        |
| Flow Pressure, In WC                                  | 0        | 1.7       | 1.4       | 1.4       |
| Hour Meter  | 10831    | 10998     | 11188     | 11332     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 76    | 83    | 76       | 77         |
| Today's Total, MMSCF  | 0.05  | 0.05  | 0.05     | 0.05       |
| This Month's Total, MMSCF   | 0.58  | 1.39  | 2.3      | 2.99       |
| Total Flow, MMSCF   | 66.67 | 67.48 | 68.39    | 69.08      |
| Flow Press, In WC   | 0     | 1.7   | 1.4      | 1.4        |
| Flow Temp, DegF   | 50    | 50    | 58       | 58         |
| Flow Delta P, In WC   | 5.40  | 0.61  | 0.50     | 1.51       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.05  | 0.05     | 0.05       |
| 2 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.12     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.11       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.11       |
| 7 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.11       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 66.67 | 67.48 | 68.39    | 69.08      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       |          | X          |
| <b>Comments:</b> Drained Condensate   |       |       |          |            |
| <b>Signature:</b> Kevin S. Fabel  |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728      Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |          |           |           |           |
|---|----------|-----------|-----------|-----------|
| Tester (Initials)                                     | KSF      | KSF       | KSF       | KSF       |
| Date  | 2/3/2015 | 2/10/2015 | 2/17/2015 | 2/24/2015 |
| Time  | 9:30 AM  | 10:00 AM  | 9:30 AM   | 10:45 AM  |
| Sky Conditions  | P. Cldy  | P. Cldy   | Clear     | P Cldy    |
| Ambient Temperature, deg F                            | 0        | 10        | -2        | 21        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 47       | 46        | 46        | 46        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100      | 100       | 100       | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 3        | 3         | 3         | 1         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3      | 0.3       | 0.2       | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100      | 100       | 100       | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1        | 1.5       | 1.5       | 1.5       |
| Discharge Temperature, deg F (GHS-TI-302)             | 48       | 51        | 46        | 50        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 10       | 10        | 11        | 10        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 1.5      | 2.0       | 1.8       | 1.5       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.0      | 1.5       | 1.3       | 1.3       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5      | 0.5       | 1.5       | 0.25      |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 16.3     | 15.5      | 15.6      | 12.4      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.7      | 3.6       | 3.6       | 3.7       |
| <b>YIC-1</b> From Main Menu Screen                    |          |           |           |           |
| <b>ANALOG DATA MENU</b>                               |          |           |           |           |
| <b>* PROCESS OVERVIEW</b>                             |          |           |           |           |
| Inlet Vacuum, In WC                                   | 3.6      | 3.5       | 3.0       | 1.0       |
| Inlet Temp, DegF                                      | 49       | 49        | 48        | 48        |
| Oxygen, %   | 0        | 0         | 0         | 0         |
| Blower Speed, %                                       | 18       | 18        | 17        | 11        |
| Blower Vibration, In/Sec                              | 0        | 0         | 0         | 0         |
| CP Temp, DegF   | 58       | 63        | 57        | 67        |
| FLR Flame Temp, DegF                                  | 1244     | 1466      | 1342      | 1319      |
| FLR Flow Press, In WC                                 | 1.4      | 1.6       | 0         | 1.4       |
| FLR Flow Temp, DegF                                   | 52       | 53        | 50        | 52        |
| Flow Rate, SCFM                                       | 76       | 83        | 77        | 76        |
| <b>* BACK</b>   |          |           |           |           |
| <b>* BLOWER DATA</b>                                  |          |           |           |           |
| Status, Run/Stop                                      | Run      | Run       | Run       | Run       |
| Run Time, Hr  | 11504    | 11671     | 1839      | 12008     |
| Speed, %  | 18       | 18        | 17        | 11        |
| Vibration, In/Sec                                     | 0.0      | 0.0       | 0.0       | 0.0       |
| Outlet Temp, DegF                                     | 52       | 53        | 50        | 52        |
| <b>* BACK</b>   |          |           |           |           |
| <b>* FLARE DATA</b>                                   |          |           |           |           |
| Flow Rate, SCFM                                       | 76       | 83        | 77        | 76        |
| Flame Temp, DegF                                      | 1180     | 1469      | 1358      | 1372      |
| BLR Speed, %  | 18       | 18        | 17        | 11        |
| Flow Pressure, In WC                                  | 1.4      | 1.6       | 0         | 1.4       |
| Hour Meter  | 11499    | 11669     | 11835     | 12004     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 76    | 83    | 77       | 76         |
| Today's Total, MMSCF  | 0.04  | 0.04  | 0.04     | 0.05       |
| This Month's Total, MMSCF   | 0.23  | 1.04  | 1.85     | 2.66       |
| Total Flow, MMSCF   | 69.89 | 70.69 | 71.51    | 72.33      |
| Flow Press, In WC   | 1.4   | 1.6   | 0        | 1.5        |
| Flow Temp, DegF   | 52    | 53    | 50       | 52         |
| Flow Delta P, In WC   | 0.50  | 0.59  | 0.51     | 0.51       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.04  | 0.04  | 0.04     | 0.05       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.11     | 0.11       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.11       |
| 7 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.11       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 69.89 | 70.69 | 71.51    | 72.33      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       |          | X          |
| <b>Comments:</b> Drained Condensate   |       |       |          |            |
| <b>Signature:</b> Kevin S. Fabel  |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |          |           |           |          |
|---|----------|-----------|-----------|----------|
| Tester (Initials)                                     | KSF      | KSF       | KSF       | KSF      |
| Date  | 3/3/2015 | 3/10/2015 | 3/17/2015 | 3/24/15  |
| Time  | 10:15 AM | 9:45 AM   | 10:00 AM  | 10:15 AM |
| Sky Conditions  | Cloudy   | Clear     | Clear     | Clear    |
| Ambient Temperature, deg F                            | 20       | 45        | 35        | 25       |
| Inlet Temperature, deg F (GHS-TI-301)                 | 46       | 46        | 46        | 46       |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100      | 100       | 100       | 100      |
| LFG Vacuum, In WC (GHS-PI-301)                        | 1        | 3         | 4.5       | 3        |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3      | 0.3       | 0.3       | 0.3      |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100      | 100       | 100       | 100      |
| Discharge Pressure, In WC (GHS-PI-302)                | 2        | 2         | 2         | 2        |
| Discharge Temperature, deg F (GHS-TI-302)             | 51       | 56        | 54        | 54       |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 10       | 14        | 10        | 16       |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0      | 1.5       | 1.5       | 1.5      |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.5      | 1.0       | 1.3       | 1.0      |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5      | 0.5       | 0.25      | 0.5      |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 12       | 15.7      | 18.6      | 15.8     |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.9      | 3.6       | 3.7       | 3.6      |
| <b>YIC-1</b> From Main Menu Screen                    |          |           |           |          |
| <b>ANALOG DATA MENU</b>                               |          |           |           |          |
| <b>* PROCESS OVERVIEW</b>                             |          |           |           |          |
| Inlet Vacuum, In WC                                   | 0.6      | 2.9       | 5.1       | 3.0      |
| Inlet Temp, DegF                                      | 48       | 48        | 48        | 48       |
| Oxygen, %   | 0        | 0         | 0         | 0        |
| Blower Speed, %                                       | 10       | 17        | 22        | 17       |
| Blower Vibration, In/Sec                              | 0        | 0         | 0         | 0        |
| CP Temp, DegF   | 67       | 75        | 72        | 73       |
| FLR Flame Temp, DegF                                  | 1420     | 1412      | 1320      | 1426     |
| FLR Flow Press, In WC                                 | 1.6      | 1.6       | 1.6       | 1.6      |
| FLR Flow Temp, DegF                                   | 53       | 58        | 57        | 56       |
| Flow Rate, SCFM                                       | 81       | 80        | 82        | 82       |
| <b>* BACK</b>   |          |           |           |          |
| <b>* BLOWER DATA</b>                                  |          |           |           |          |
| Status, Run/Stop                                      | Run      | Run       | Run       | Run      |
| Run Time, Hr  | 12161    | 12328     | 12459     | 12629    |
| Speed, %  | 10       | 17        | 22        | 17       |
| Vibration, In/Sec                                     | 0.0      | 0.0       | 0.0       | 0.0      |
| Outlet Temp, DegF                                     | 53       | 58        | 57        | 56       |
| <b>* BACK</b>   |          |           |           |          |
| <b>* FLARE DATA</b>                                   |          |           |           |          |
| Flow Rate, SCFM                                       | 81       | 79        | 81        | 81       |
| Flame Temp, DegF                                      | 1449     | 1421      | 1300      | 1442     |
| BLR Speed, %  | 10       | 17        | 22        | 17       |
| Flow Pressure, In WC                                  | 1.6      | 1.6       | 1.6       | 1.6      |
| Hour Meter  | 12156    | 12323     | 12455     | 12624    |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 80    | 80    | 82       | 81         |
| Today's Total, MMSCF  | 0.05  | 0.04  | 0.04     | 0.05       |
| This Month's Total, MMSCF   | 0.23  | 1.05  | 1.67     | 2.45       |
| Total Flow, MMSCF   | 73.07 | 73.88 | 74.5     | 75.32      |
| Flow Press, In WC   | 1.6   | 1.6   | 1.6      | 1.6        |
| Flow Temp, DegF   | 53    | 58    | 57       | 56         |
| Flow Delta P, In WC   | 0.57  | 0.55  | 0.58     | 0.57       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.04  | 0.04     | 0.05       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.00     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.00     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.00     | 0.11       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.07  | 0.11  | 0.12     | 0.12       |
| 7 Day's Ago Flow, MMSCF   | 0.09  | 0.12  | 0.12     | 0.12       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 73.07 | 73.87 | 74.5     | 75.32      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       |          | X          |
| <b>Comments:</b> Drained Condensate   |       |       |          |            |
| <b>Signature:</b> Kevin S. Fabel  |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |          |          |           |           |
|---|----------|----------|-----------|-----------|
| Tester (Initials)                                     | KSF      | KSF      | KSF       | KSF       |
| Date  | 4/1/2015 | 4/8/2015 | 4/15/2015 | 4/21/2015 |
| Time  | 10:30 AM | 10:15 AM | 10:00 AM  | 10:15 AM  |
| Sky Conditions  | Clear    | Cloudy   | Clear     | Cloudy    |
| Ambient Temperature, deg F                            | 45       | 40       | 55        | 35        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 46       | 46       | 48        | 48        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100      | 100      | 100       | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 3.5      | 3        | 4         | 3         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3      | 0.3      | 0.3       | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100      | 100      | 100       | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 2        | 2        | 2         | 1.5       |
| Discharge Temperature, deg F (GHS-TI-302)             | 58       | 54       | 64        | 57        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 13       | 9        | 14        | 9         |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 1.5      | 1.5      | 1.5       | 2.0       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.0      | 1.0      | 1.0       | 1.5       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5      | 0.5      | 0.5       | 0.5       |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 16.4     | 15.3     | 16.4      | 17.2      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.6      | 3.6      | 3.6       | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |          |          |           |           |
| <b>ANALOG DATA MENU</b>                               |          |          |           |           |
| <b>* PROCESS OVERVIEW</b>                             |          |          |           |           |
| Inlet Vacuum, In WC                                   | 3.5      | 2.8      | 4.4       | 3.6       |
| Inlet Temp, DegF                                      | 48       | 48       | 48        | 49        |
| Oxygen, %   | 0        | 0        | 0         | 0         |
| Blower Speed, %                                       | 18       | 16       | 20        | 19        |
| Blower Vibration, In/Sec                              | 0        | 0        | 0         | 0         |
| CP Temp, DegF   | 76       | 71       | 78        | 70        |
| FLR Flame Temp, DegF                                  | 1282     | 1481     | 1217      | 1340      |
| FLR Flow Press, In WC                                 | 1.4      | 1.5      | 1.5       | 1.7       |
| FLR Flow Temp, DegF                                   | 58       | 57       | 60        | 60        |
| Flow Rate, SCFM                                       | 77       | 77       | 78        | 80        |
| <b>* BACK</b>   |          |          |           |           |
| <b>* BLOWER DATA</b>                                  |          |          |           |           |
| Status, Run/Stop                                      | Run      | Run      | Run       | Run       |
| Run Time, Hr  | 12795    | 12987    | 13131     | 13295     |
| Speed, %  | 18       | 16       | 20        | 19        |
| Vibration, In/Sec                                     | 0.0      | 0.0      | 0.0       | 0.0       |
| Outlet Temp, DegF                                     | 58       | 57       | 60        | 60        |
| <b>* BACK</b>   |          |          |           |           |
| <b>* FLARE DATA</b>                                   |          |          |           |           |
| Flow Rate, SCFM                                       | 81       | 77       | 77        | 80        |
| Flame Temp, DegF                                      | 1302     | 1521     | 1207      | 1365      |
| BLR Speed, %  | 18       | 16       | 20        | 19        |
| Flow Pressure, In WC                                  | 1.4      | 1.5      | 1.4       | 1.7       |
| Hour Meter  | 12790    | 12983    | 13126     | 13291     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 77    | 76    | 79       | 80         |
| Today's Total, MMSCF  | 0.04  | 0.04  | 0.04     | 0.04       |
| This Month's Total, MMSCF   | 1.68  | 0.81  | 1.51     | 2.3        |
| Total Flow, MMSCF   | 76.13 | 77.06 | 77.74    | 78.54      |
| Flow Press, In WC   | 1.4   | 1.5   | 1.4      | 1.7        |
| Flow Temp, DegF   | 58    | 57    | 60       | 60         |
| Flow Delta P, In WC   | 0.51  | 0.51  | 0.53     | 0.56       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.04  | 0.04  | 0.04     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.11       |
| 5 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.12     | 0.10       |
| 7 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.11       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 76.13 | 77.06 | 77.74    | 78.54      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b>  |       |       |          |            |
| Signature: Kevin S. Fabel   |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728      Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |          |           |           |
|---|-----------|----------|-----------|-----------|
| Tester (Initials)                                     | KSF       | KSF      | KSF       | KSF       |
| Date  | 4/28/2015 | 5/6/2015 | 5/12/2015 | 5/19/2015 |
| Time  | 10:30 AM  | 8:00 AM  | 10:30 AM  | 10:30 AM  |
| Sky Conditions  | Clear     | Cloudy   | Cloudy    | Cldy      |
| Ambient Temperature, deg F                            | 60        | 55       | 45        | 45        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 48        | 48       | 48        | 48        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100      | 100       | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 3.5       | 3.75     | 4         | 4         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3      | 0.3       | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100      | 100       | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.75      | 1.5      | 1         | 1.25      |
| Discharge Temperature, deg F (GHS-TI-302)             | 63        | 52       | 54        | 53        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 16        | 9        | 9         | 9         |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0       | 2.0      | 1.8       | 2.0       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.8       | 1.5      | 1.5       | 1.5       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.25      | 0.5      | 0.25      | 0.5       |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 16.6      | 15.1     | 18        | 18.2      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.7       | 3.7      | 3.8       | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |           |          |           |           |
| <b>ANALOG DATA MENU</b>                               |           |          |           |           |
| <b>* PROCESS OVERVIEW</b>                             |           |          |           |           |
| Inlet Vacuum, In WC                                   | 3.4       | 3.0      | 4.4       | 4.9       |
| Inlet Temp, DegF                                      | 50        | 50       | 51        | 51        |
| Oxygen, %   | 0         | 0        | 0         | 0         |
| Blower Speed, %                                       | 18        | 17       | 20        | 21        |
| Blower Vibration, In/Sec                              | 0         | 0        | 0         | 0         |
| CP Temp, DegF   | 82        | 74       | 68        | 67        |
| FLR Flame Temp, DegF                                  | 1428      | 1383     | 1344      | 1343      |
| FLR Flow Press, In WC                                 | 1.7       | 1.8      | 1.6       | 1.6       |
| FLR Flow Temp, DegF                                   | 64        | 55       | 55        | 55        |
| Flow Rate, SCFM                                       | 80        | 81       | 75        | 77        |
| <b>* BACK</b>   |           |          |           |           |
| <b>* BLOWER DATA</b>                                  |           |          |           |           |
| Status, Run/Stop                                      | Run       | Run      | Run       | Run       |
| Run Time, Hr  | 13465     | 13655    | 13800     | 13968     |
| Speed, %  | 18        | 17       | 20        | 21        |
| Vibration, In/Sec                                     | 0.0       | 0.0      | 0.0       | 0.0       |
| Outlet Temp, DegF                                     | 64        | 55       | 55        | 55        |
| <b>* BACK</b>   |           |          |           |           |
| <b>* FLARE DATA</b>                                   |           |          |           |           |
| Flow Rate, SCFM                                       | 80        | 82       | 76        | 78        |
| Flame Temp, DegF                                      | 1407      | 1373     | 1345      | 1361      |
| BLR Speed, %  | 18        | 17       | 20        | 21        |
| Flow Pressure, In WC                                  | 1.7       | 1.7      | 1.6       | 1.6       |
| Hour Meter  | 13461     | 13650    | 13795     | 13963     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 80    | 82    | 81       | 78         |
| Today's Total, MMSCF  | 0.05  | 0.04  | 0.04     | 0.04       |
| This Month's Total, MMSCF   | 3.10  | 0.58  | 1.28     | 2.08       |
| Total Flow, MMSCF   | 79.35 | 80.27 | 80.96    | 81.77      |
| Flow Press, In WC   | 1.8   | 1.8   | 1.6      | 1.6        |
| Flow Temp, DegF   | 64    | 55    | 55       | 55         |
| Flow Delta P, In WC   | 0.57  | 0.57  | 0.50     | 0.53       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.04  | 0.04     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.12     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.11       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.12     | 0.12       |
| 7 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.12     | 0.11       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 79.35 | 80.27 | 80.96    | 81.77      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b> Turned off heat trace for year...Turned on A/C.                    |       |       |          |            |
| <b>Signature:</b> Kevin S. Fabel  |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |          |           |           |
|---|-----------|----------|-----------|-----------|
| Tester (Initials)                                     | KSF       | KSF      | KSF       | KSF       |
| Date  | 5/26/2015 | 6/2/2015 | 6/10/2015 | 6/16/2015 |
| Time  | 10:00 AM  | 10:15 AM | 10:00 AM  | 10:30 AM  |
| Sky Conditions  | Cloudy    | Clear    | Clear     | Clear     |
| Ambient Temperature, deg F                            | 65        | 60       | 70        | 65        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 50        | 51       | 53        | 54        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100      | 100       | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 4         | 4        | 5         | 5.5       |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3      | 0.3       | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100      | 100       | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.5       | 1.5      | 1.75      | 1.5       |
| Discharge Temperature, deg F (GHS-TI-302)             | 62        | 57       | 66        | 64        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 12        | 14       | 13        | 14        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0       | 2.0      | 2.0       | 2.0       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.5       | 1.5      | 1.5       | 1.5       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5       | 0.5      | 0.5       | 0.5       |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 17.5      | 16.6     | 17.7      | 18.7      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.6       | 3.7      | 3.7       | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |           |          |           |           |
| <b>ANALOG DATA MENU</b>                               |           |          |           |           |
| <b>* PROCESS OVERVIEW</b>                             |           |          |           |           |
| Inlet Vacuum, In WC                                   | 4.1       | 3.6      | 4.8       | 5.2       |
| Inlet Temp, DegF                                      | 53        | 54       | 55        | 56        |
| Oxygen, %   | 0.1       | 0        | 0.1       | 0.3       |
| Blower Speed, %                                       | 20        | 18       | 21        | 22        |
| Blower Vibration, In/Sec                              | 0         | 0        | 0         | 0         |
| CP Temp, DegF   | 85        | 81       | 84        | 81        |
| FLR Flame Temp, DegF                                  | 1272      | 1377     | 1330      | 1333      |
| FLR Flow Press, In WC                                 | 1.8       | 1.7      | 1.6       | 1.6       |
| FLR Flow Temp, DegF                                   | 64        | 59       | 67        | 63        |
| Flow Rate, SCFM                                       | 81        | 79       | 76        | 77        |
| <b>* BACK</b>   |           |          |           |           |
| <b>* BLOWER DATA</b>                                  |           |          |           |           |
| Status, Run/Stop                                      | Run       | Run      | Run       | Run       |
| Run Time, Hr  | 14137     | 14309    | 14497     | 14639     |
| Speed, %  | 20        | 18       | 21        | 22        |
| Vibration, In/Sec                                     | 0.0       | 0.0      | 0.0       | 0.0       |
| Outlet Temp, DegF                                     | 64        | 59       | 67        | 63        |
| <b>* BACK</b>   |           |          |           |           |
| <b>* FLARE DATA</b>                                   |           |          |           |           |
| Flow Rate, SCFM                                       | 81        | 78       | 79        | 77        |
| Flame Temp, DegF                                      | 1296      | 1403     | 1403      | 1335      |
| BLR Speed, %  | 20        | 18       | 21        | 22        |
| Flow Pressure, In WC                                  | 1.8       | 0        | 1.6       | 1.6       |
| Hour Meter  | 14132     | 59       | 14492     | 14635     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 81    | 79    | 76       | 77         |
| Today's Total, MMSCF  | 0.05  | 0.04  | 0.04     | 0.04       |
| This Month's Total, MMSCF   | 2.90  | 0.12  | 1.04     | 1.73       |
| Total Flow, MMSCF   | 82.59 | 83.41 | 84.33    | 85.02      |
| Flow Press, In WC   | 1.8   | 1.7   | 1.6      | 1.6        |
| Flow Temp, DegF   | 64    | 59    | 67       | 63         |
| Flow Delta P, In WC   | 0.57  | 0.54  | 0.51     | 0.52       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.04  | 0.04     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.11       |
| 7 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.12       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 82.59 | 83.41 | 84.33    | 85.02      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b>  |       |       |          |            |
| Signature: Kevin S. Fabel   |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

| Tester (Initials)                                     | KSF       | KSF       | KSF      | KSF       |
|---|-----------|-----------|----------|-----------|
| Date  | 6/23/2015 | 6/30/2015 | 7/7/2015 | 7/14/2015 |
| Time  | 10:15 AM  | 10:15 AM  | 10:00 AM | 10:15 AM  |
| Sky Conditions  | Clear     | Cloudy    | Clear    | P. Cldy   |
| Ambient Temperature, deg F                            | 75        | 65        | 65       | 75        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 54        | 56        | 55       | 56        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100       | 100      | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 5.5       | 5.5       | 6        | 5         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3       | 0.3      | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100       | 100      | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.5       | 1         | 1        | 1         |
| Discharge Temperature, deg F (GHS-TI-302)             | 65        | 64        | 64       | 68        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 11        | 12        | 10       | 9         |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0       | 1.8       | 2.0      | 1.8       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.5       | 1.5       | 1.5      | 1.5       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5       | 0.25      | 0.5      | 0.25      |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 19.3      | 18        | 19.3     | 18.8      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.8       | 3.8       | 3.8      | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |           |           |          |           |
| <b>ANALOG DATA MENU</b>                               |           |           |          |           |
| <b>* PROCESS OVERVIEW</b>                             |           |           |          |           |
| Inlet Vacuum, In WC                                   | 5.6       | 4.7       | 5.0      | 5.1       |
| Inlet Temp, DegF                                      | 57        | 58        | 58       | 59        |
| Oxygen, %   | 0.1       | 0         | 0        | 0         |
| Blower Speed, %                                       | 23        | 21        | 22       | 22        |
| Blower Vibration, In/Sec                              | 0         | 0         | 0        | 0         |
| CP Temp, DegF   | 81        | 80        | 78       | 84        |
| FLR Flame Temp, DegF                                  | 1327      | 1354      | 1318     | 1370      |
| FLR Flow Press, In WC                                 | 1.6       | 1.6       | 1.6      | 1.6       |
| FLR Flow Temp, DegF                                   | 66        | 66        | 64       | 70        |
| Flow Rate, SCFM                                       | 78        | 76        | 76       | 76        |
| <b>* BACK</b>   |           |           |          |           |
| <b>* BLOWER DATA</b>                                  |           |           |          |           |
| Status, Run/Stop                                      | Run       | Run       | Run      | Run       |
| Run Time, Hr  | 14804     | 14971     | 15138    | 15302     |
| Speed, %  | 23        | 21        | 22       | 22        |
| Vibration, In/Sec                                     | 0.0       | 0.0       | 0.0      | 0.0       |
| Outlet Temp, DegF                                     | 66        | 66        | 64       | 70        |
| <b>* BACK</b>   |           |           |          |           |
| <b>* FLARE DATA</b>                                   |           |           |          |           |
| Flow Rate, SCFM                                       | 77        | 77        | 76       | 76        |
| Flame Temp, DegF                                      | 1348      | 1350      | 1310     | 1357      |
| BLR Speed, %  | 23        | 21        | 22       | 22        |
| Flow Pressure, In WC                                  | 1.6       | 1.6       | 1.6      | 1.6       |
| Hour Meter  | 14800     | 14967     | 15134    | 15298     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 82    | 76    | 83       | 76         |
| Today's Total, MMSCF  | 0.04  | 0.04  | 0.04     | 0.04       |
| This Month's Total, MMSCF   | 2.52  | 3.33  | 0.71     | 1.51       |
| Total Flow, MMSCF   | 85.81 | 86.62 | 87.44    | 88.25      |
| Flow Press, In WC   | 1.6   | 1.6   | 1.6      | 1.6        |
| Flow Temp, DegF   | 66    | 66    | 64       | 70         |
| Flow Delta P, In WC   | 0.53  | 0.50  | 0.50     | 0.51       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.04  | 0.04  | 0.04     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 7 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.12       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 85.8  | 86.62 | 87.44    | 88.25      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b>  |       |       |          |            |
| Signature: Kevin S. Fabel   |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

| Tester (Initials)                                     | KSF       | KSF       | KSF      | KSF       |
|---|-----------|-----------|----------|-----------|
| Date  | 7/21/2015 | 7/28/2015 | 08/04/15 | 8/12/2015 |
| Time  | 10:00 AM  | 9:00 AM   | 9:45 AM  | 10:00 AM  |
| Sky Conditions  | Clear     | Clear     | Clear    | Clear     |
| Ambient Temperature, deg F                            | 70        | 80        | 70       | 80        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 57        | 60        | 58       | 58        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100       | 100      | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 6.5       | 3.5       | 6        | 6         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3       | 0.3      | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100       | 100      | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1         | 1         | 1        | 1.5       |
| Discharge Temperature, deg F (GHS-TI-302)             | 67        | 68        | 68       | 68        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 13        | 10        | 12       | 17        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0       | 1.8       | 2.0      | 2.0       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.8       | 1.5       | 1.8      | 1.8       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.25      | 0.25      | 0.25     | 0.25      |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 18.8      | 15.4      | 19.4     | 18        |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.8       | 3.7       | 3.8      | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |           |           |          |           |
| <b>ANALOG DATA MENU</b>                               |           |           |          |           |
| <b>* PROCESS OVERVIEW</b>                             |           |           |          |           |
| Inlet Vacuum, In WC                                   | 5.4       | 2.7       | 5.3      | 4.9       |
| Inlet Temp, DegF                                      | 60        | 60        | 60       | 61        |
| Oxygen, %   | 0.1       | 0         | 0.1      | 0.1       |
| Blower Speed, %                                       | 23        | 16        | 23       | 22        |
| Blower Vibration, In/Sec                              | 0         | 0         | 0        | 0         |
| CP Temp, DegF   | 84        | 83        | 83       | 86        |
| FLR Flame Temp, DegF                                  | 1388      | 1400      | 1423     | 1342      |
| FLR Flow Press, In WC                                 | 1.9       | 1.6       | 1.9      | 1.9       |
| FLR Flow Temp, DegF                                   | 69        | 72        | 68       | 69        |
| Flow Rate, SCFM                                       | 85        | 76        | 83       | 85        |
| <b>* BACK</b>   |           |           |          |           |
| <b>* BLOWER DATA</b>                                  |           |           |          |           |
| Status, Run/Stop                                      | Run       | Run       | Run      | Run       |
| Run Time, Hr  | 15470     | 15561     | 15720    | 15914     |
| Speed, %  | 23        | 16        | 23       | 22        |
| Vibration, In/Sec                                     | 0.0       | 0.0       | 0.0      | 0.0       |
| Outlet Temp, DegF                                     | 68        | 72        | 68       | 69        |
| <b>* BACK</b>   |           |           |          |           |
| <b>* FLARE DATA</b>                                   |           |           |          |           |
| Flow Rate, SCFM                                       | 85        | 76        | 84       | 84        |
| Flame Temp, DegF                                      | 1387      | 1401      | 1389     | 1333      |
| BLR Speed, %  | 23        | 16        | 23       | 22        |
| Flow Pressure, In WC                                  | 1.8       | 1.6       | 1.9      | 1.9       |
| Hour Meter  | 15465     | 15557     | 15716    | 15909     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 84    | 76    | 83       | 85         |
| Today's Total, MMSCF  | 0.04  | 0.01  | 0.04     | 0.04       |
| This Month's Total, MMSCF   | 2.33  | 2.8   | 0.31     | 1.26       |
| Total Flow, MMSCF   | 89.07 | 89.49 | 90.26    | 91.22      |
| Flow Press, In WC   | 1.9   | 1.6   | 1.9      | 1.9        |
| Flow Temp, DegF   | 68    | 72    | 68       | 69         |
| Flow Delta P, In WC   | 0.63  | 0.52  | 0.62     | 0.63       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.04  | 0.01  | 0.04     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.00  | 0.07     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.02  | 0.12     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.12     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.11     | 0.12       |
| 7 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.07     | 0.12       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 89.07 | 89.49 | 90.26    | 91.22      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b> Drained Condensate   |       |       |          |            |
| <b>Signature:</b> Kevin S. Fabel  |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |           |          |           |
|---|-----------|-----------|----------|-----------|
| Tester (Initials)                                     | KSF       | KSF       | KSF      | KSF       |
| Date  | 8/19/2015 | 8/25/2015 | 9/2/2015 | 9/10/2015 |
| Time  | 9:15 AM   | 9:30 AM   | 10:00 AM | 10:00 AM  |
| Sky Conditions  | Cloudy    | Cloudy    | Cloudy   | Cloudy    |
| Ambient Temperature, deg F                            | 60        | 50        | 80       | 55        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 59        | 58        | 60       | 60        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100       | 100      | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 4.5       | 5         | 5        | 5         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3       | 0.3      | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100       | 100      | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1         | 1         | 1        | 1         |
| Discharge Temperature, deg F (GHS-TI-302)             | 66        | 63        | 70       | 66        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 12        | 9         | 10       | 10        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0       | 2.0       | 2.0      | 20.0      |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.5       | 1.5       | 1.5      | 1.5       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5       | 0.5       | 0.5      | 0.5       |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 16.6      | 17.9      | 17.3     | 18.1      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.7       | 3.7       | 3.7      | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |           |           |          |           |
| <b>ANALOG DATA MENU</b>                               |           |           |          |           |
| <b>* PROCESS OVERVIEW</b>                             |           |           |          |           |
| Inlet Vacuum, In WC                                   | 3.2       | 4.5       | 4.0      | 4.3       |
| Inlet Temp, DegF                                      | 61        | 62        | 62       | 62        |
| Oxygen, %   | 0         | 0         | 0        | 0         |
| Blower Speed, %                                       | 18        | 21        | 20       | 21        |
| Blower Vibration, In/Sec                              | 0         | 0         | 0        | 0         |
| CP Temp, DegF   | 82        | 77        | 85       | 81        |
| FLR Flame Temp, DegF                                  | 1412      | 1361      | 1385     | 1461      |
| FLR Flow Press, In WC                                 | 1.8       | 1.6       | 1.6      | 1.8       |
| FLR Flow Temp, DegF                                   | 68        | 66        | 71       | 68        |
| Flow Rate, SCFM                                       | 82        | 77        | 77       | 80        |
| <b>* BACK</b>   |           |           |          |           |
| <b>* BLOWER DATA</b>                                  |           |           |          |           |
| Status, Run/Stop                                      | Run       | Run       | Run      | Run       |
| Run Time, Hr  | 16082     | 16225     | 16351    | 16533     |
| Speed, %  | 18        | 21        | 20       | 21        |
| Vibration, In/Sec                                     | 0.0       | 0.0       | 0.0      | 0.0       |
| Outlet Temp, DegF                                     | 68        | 66        | 71       | 68        |
| <b>* BACK</b>   |           |           |          |           |
| <b>* FLARE DATA</b>                                   |           |           |          |           |
| Flow Rate, SCFM                                       | 82        | 77        | 77       | 80        |
| Flame Temp, DegF                                      | 1414      | 1350      | 1387     | 1450      |
| BLR Speed, %  | 18        | 21        | 20       | 21        |
| Flow Pressure, In WC                                  | 1.8       | 1.6       | 1.6      | 1.8       |
| Hour Meter  | 16077     | 16221     | 16346    | 16529     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 81    | 77    | 79       | 80         |
| Today's Total, MMSCF  | 0.05  | 0.04  | 0.04     | 0.05       |
| This Month's Total, MMSCF   | 2.08  | 2.77  | 0.11     | 0.97       |
| Total Flow, MMSCF   | 92.04 | 92.73 | 93.32    | 94.19      |
| Flow Press, In WC   | 1.8   | 1.6   | 1.6      | 1.8        |
| Flow Temp, DegF   | 68    | 66    | 71       | 68         |
| Flow Delta P, In WC   | 0.60  | 0.53  | 0.53     | 0.57       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.04  | 0.04     | 0.05       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.06     | 0.11       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.00     | 0.07       |
| 4 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.00     | 0.10       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.07     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.11       |
| 7 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.11       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 92.04 | 92.73 | 93.32    | 94.19      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b>  |       |       |          |            |
| Signature: Kevin S. Fabel   |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |           |           |           |
|---|-----------|-----------|-----------|-----------|
| Tester (Initials)                                     | KSF       | KSF       | KSF       | KSF       |
| Date  | 9/15/2015 | 9/22/2015 | 9/30/2015 | 10/7/2015 |
| Time  | 10:00 AM  | 10:00 AM  | 10:00 AM  | 8:00 AM   |
| Sky Conditions  | Clear     | Clear     | Clear     | Clear     |
| Ambient Temperature, deg F                            | 70        | 65        | 50        | 45        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 60        | 60        | 59        | 58        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100       | 100       | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 4         | 4.5       | 5         | 5         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3       | 0.3       | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100       | 100       | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.5       | 1         | 1.3       | 1         |
| Discharge Temperature, deg F (GHS-TI-302)             | 69        | 64        | 61        | 58        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 14        | 11        | 15        | 10        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 2.0       | 2.0       | 2.0       | 1.8       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.5       | 1.5       | 1.8       | 1.5       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.5       | 0.5       | 0.25      | 0.25      |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 17.9      | 17.6      | 18.5      | 17.8      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.7       | 3.7       | 3.8       | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |           |           |           |           |
| <b>ANALOG DATA MENU</b>                               |           |           |           |           |
| <b>* PROCESS OVERVIEW</b>                             |           |           |           |           |
| Inlet Vacuum, In WC                                   | 4.4       | 4.3       | 4.8       | 4.5       |
| Inlet Temp, DegF                                      | 63        | 62        | 62        | 61        |
| Oxygen, %   | 0.2       | 0         | 0         | 0         |
| Blower Speed, %                                       | 21        | 20        | 22        | 21        |
| Blower Vibration, In/Sec                              | 0         | 0         | 0         | 0         |
| CP Temp, DegF   | 88        | 79        | 76        | 71        |
| FLR Flame Temp, DegF                                  | 1430      | 1448      | 1476      | 1400      |
| FLR Flow Press, In WC                                 | 1.7       | 1.6       | 1.7       | 1.6       |
| FLR Flow Temp, DegF                                   | 71        | 66        | 64        | 63        |
| Flow Rate, SCFM                                       | 77        | 78        | 81        | 77        |
| <b>* BACK</b>   |           |           |           |           |
| <b>* BLOWER DATA</b>                                  |           |           |           |           |
| Status, Run/Stop                                      | Run       | Run       | Run       | Run       |
| Run Time, Hr  | 16653     | 16819     | 17012     | 17179     |
| Speed, %  | 21        | 20        | 22        | 21        |
| Vibration, In/Sec                                     | 0.0       | 0.0       | 0.0       | 0.0       |
| Outlet Temp, DegF                                     | 71        | 66        | 64        | 63        |
| <b>* BACK</b>   |           |           |           |           |
| <b>* FLARE DATA</b>                                   |           |           |           |           |
| Flow Rate, SCFM                                       | 77        | 77        | 78        | 77        |
| Flame Temp, DegF                                      | 1428      | 1459      | 1513      | 1395      |
| BLR Speed, %  | 21        | 20        | 22        | 21        |
| Flow Pressure, In WC                                  | 1.7       | 1.6       | 1.7       | 1.6       |
| Hour Meter  | 16648     | 16814     | 17007     | 17175     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 77    | 77    | 81       | 77         |
| Today's Total, MMSCF  | 0.05  | 0.04  | 0.04     | 0.04       |
| This Month's Total, MMSCF   | 1.55  | 2.37  | 3.29     | 0.7        |
| Total Flow, MMSCF   | 94.77 | 95.58 | 96.51    | 97.32      |
| Flow Press, In WC   | 1.7   | 1.6   | 1.7      | 1.6        |
| Flow Temp, DegF   | 71    | 66    | 64       | 63         |
| Flow Delta P, In WC   | 0.53  | 0.54  | 0.58     | 0.52       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.05  | 0.04  | 0.04     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.11     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.12     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.12       |
| 7 Day's Ago Flow, MMSCF   | 0.11  | 0.11  | 0.11     | 0.12       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 94.77 | 95.58 | 96.51    | 97.32      |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b> Drained Condensate   |       |       |          |            |
| <b>Signature:</b> Kevin S. Fabel  |       |       |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728      Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |            |            |            |           |
|---|------------|------------|------------|-----------|
| Tester (Initials)                                     | KSF        | KSF        | KSF        | KSF       |
| Date  | 10/15/2015 | 10/21/2015 | 10/27/2015 | 11/3/2015 |
| Time  | 10:00 AM   | 10:00 AM   | 9:30 AM    | 2:30 PM   |
| Sky Conditions  | Clear      | Cldy       | Clear      | Clear     |
| Ambient Temperature, deg F                            | 50         | 60         | 45         | 70        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 60         | 58         | 58         | 58        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100        | 100        | 100        | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 4          | 4          | 4          | 4.5       |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3        | 0.3        | 0.3        | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100        | 100        | 100        | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.5        | 1.5        | 1.5        | 1.5       |
| Discharge Temperature, deg F (GHS-TI-302)             | 68         | 68         | 66         | 76        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 12         | 12         | 10         | 12        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 1.8        | 2.0        | 2.0        | 2.0       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.5        | 1.5        | 1.5        | 1.5       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.3        | 0.5        | 0.5        | 0.5       |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 17.5       | 17.5       | 17.6       | 18        |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.8        | 3.8        | 3.8        | 3.7       |
| <b>YIC-1</b> From Main Menu Screen                    |            |            |            |           |
| <b>ANALOG DATA MENU</b>                               |            |            |            |           |
| <b>* PROCESS OVERVIEW</b>                             |            |            |            |           |
| Inlet Vacuum, In WC                                   | 3.8        | 3.8        | 3.8        | 4.0       |
| Inlet Temp, DegF                                      | 61         | 61         | 60         | 60        |
| Oxygen, %   | 0.4        | 0.3        | 0.3        | 0.9       |
| Blower Speed, %                                       | 20         | 20         | 20         | 21        |
| Blower Vibration, In/Sec                              | 0          | 0          | 0          | 0         |
| CP Temp, DegF   | 76         | 77         | 77         | 90        |
| FLR Flame Temp, DegF                                  | 1443       | 1440       | 1350       | 1414      |
| FLR Flow Press, In WC                                 | 1.8        | 1.9        | 1.8        | 2         |
| FLR Flow Temp, DegF                                   | 70         | 71         | 70         | 78        |
| Flow Rate, SCFM                                       | 81         | 84         | 83         | 85        |
| <b>* BACK</b>   |            |            |            |           |
| <b>* BLOWER DATA</b>                                  |            |            |            |           |
| Status, Run/Stop                                      | Run        | Run        | Run        | Run       |
| Run Time, Hr  | 17367      | 17511      | 17656      | 17830     |
| Speed, %  | 20         | 20         | 20         | 21        |
| Vibration, In/Sec                                     | 0          | 0          | 0          | 0         |
| Outlet Temp, DegF                                     | 70         | 71         | 70         | 78        |
| <b>* BACK</b>   |            |            |            |           |
| <b>* FLARE DATA</b>                                   |            |            |            |           |
| Flow Rate, SCFM                                       | 80         | 84         | 83         | 84        |
| Flame Temp, DegF                                      | 1440       | 1431       | 1281       | 1425      |
| BLR Speed, %  | 20         | 20         | 20         | 21        |
| Flow Pressure, In WC                                  | 1.8        | 1.9        | 1.9        | 2         |
| Hour Meter  | 17363      | 17506      | 17652      | 17826     |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |       |       |          |            |
|---|-------|-------|----------|------------|
| Run Clock   | On    | On    | On       | On         |
| Pilot   | Off   | Off   | Off      | Off        |
| SD Valve  | Open  | Open  | Open     | Open       |
| Flame   | On    | On    | On       | On         |
| Relight   | Off   | Off   | Off      | Off        |
| Pilot   | Ready | Ready | Ready    | Ready      |
| Vac Ramp  | Off   | Off   | Off      | Off        |
| Forced Flow   | Off   | Off   | Off      | Off        |
| <b>* BACK</b>   |       |       |          |            |
| <b>* FLOW DATA</b>  |       |       |          |            |
| Flow Rate, SCFM   | 83    | 84    | 83       | 84         |
| Today's Total, MMSCF  | 0.04  | 0.04  | 0.05     | 0.07       |
| This Month's Total, MMSCF   | 1.60  | 2.30  | 3        | 0.23       |
| Total Flow, MMSCF   | 98.22 | 98.92 | 99.63    | 100.47     |
| Flow Press, In WC   | 1.7   | 1.9   | 1.9      | 2          |
| Flow Temp, DegF   | 70    | 71    | 70       | 78         |
| Flow Delta P, In WC   | 0.58  | 0.63  | 0.61     | 0.64       |
| <b>* 7 DAY FLOW HISTORY</b>   |       |       |          |            |
| Yesterday's Flow, MMSCF   | 0.04  | 0.04  | 0.05     | 0.07       |
| 2 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.11       |
| 3 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.11     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.12     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.12  | 0.12  | 0.12     | 0.11       |
| 6 Day's Ago Flow, MMSCF   | 0.12  | 0.11  | 0.12     | 0.12       |
| 7 Day's Ago Flow, MMSCF   | 0.11  | 0.12  | 0.11     | 0.12       |
| <b>* BACK</b>   |       |       |          |            |
| <b>* RESETTABLE FLOW</b>  |       |       |          |            |
| Resettable Total Flow, MMSCF  | 98.22 | 98.92 | 99.63    | 100.47     |
| Reset Time  | 0     | 0     | 0        | 0          |
| Reset Date  | 0     | 0     | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |       |       |          |            |
|   |       |       | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |       |       | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |       |       | X        |            |
| Drain Demister (if necessary)   |       |       | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |       |       | X        |            |
| Lubricate Grease Fittings (as necessary)  |       |       | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |       |       | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |       |       | X        |            |
| Drain Flare Stack Condensate (if necessary)   |       |       | X        |            |
| <b>Comments:</b> Drained Condensate   |       |       |          |            |
| <b>Signature:</b> Kevin S. Fabel  |       |       |          |            |

**\* PUSH BUTTON**

## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728      Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |            |            |            |           |
|---|------------|------------|------------|-----------|
| Tester (Initials)                                     | KSF        | KSF        | KSF        | KSF       |
| Date  | 11/10/2015 | 11/17/2015 | 11/24/2015 | 12/2/2015 |
| Time  | 10:00 AM   | 10:00 AM   | 10:00 AM   | 10:00 AM  |
| Sky Conditions  | P Cldy     | Cldy       | Cldy       | Cldy      |
| Ambient Temperature, deg F                            | 45         | 50         | 30         | 30        |
| Inlet Temperature, deg F (GHS-TI-301)                 | 56         | 56         | 54         | 54        |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100        | 100        | 100        | 100       |
| LFG Vacuum, In WC (GHS-PI-301)                        | 4          | 4          | 4          | 4         |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3        | 0.3        | 0.3        | 0.3       |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100        | 100        | 100        | 100       |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.5        | 2          | 2          | 1.5       |
| Discharge Temperature, deg F (GHS-TI-302)             | 65         | 66         | 64         | 62        |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 11         | 9          | 9          | 11        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 1.8        | 2.0        | 1.5        | 1.5       |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.4        | 1.5        | 1.2        | 1.2       |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.4        | 0.5        | 0.3        | 0.3       |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 17.2       | 17.7       | 19.1       | 18.1      |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.7        | 3.8        | 3.9        | 3.8       |
| <b>YIC-1</b> From Main Menu Screen                    |            |            |            |           |
| <b>ANALOG DATA MENU</b>                               |            |            |            |           |
| <b>* PROCESS OVERVIEW</b>                             |            |            |            |           |
| Inlet Vacuum, In WC                                   | 3.8        | 4.0        | 5.2        | 4.5       |
| Inlet Temp, DegF                                      | 59         | 58         | 57         | 56        |
| Oxygen, %   | 0.3        | 0.2        | 0.3        | 0.2       |
| Blower Speed, %                                       | 20         | 20         | 23         | 21        |
| Blower Vibration, In/Sec                              | 0          | 0          | 0          | 0         |
| CP Temp, DegF   | 76         | 75         | 73         | 72        |
| FLR Flame Temp, DegF                                  | 1410       | 1337       | 1420       | 1437      |
| FLR Flow Press, In WC                                 | 1.7        | 1.8        | 1.7        | 1.6       |
| FLR Flow Temp, DegF                                   | 68         | 69         | 68         | 66        |
| Flow Rate, SCFM                                       | 79         | 82         | 79         | 76        |
| <b>* BACK</b>   |            |            |            |           |
| <b>* BLOWER DATA</b>                                  |            |            |            |           |
| Status, Run/Stop                                      | Run        | Run        | Run        | Run       |
| Run Time, Hr  | 17994      | 18115      | 18237      | 18428     |
| Speed, %  | 20         | 20         | 23         | 21        |
| Vibration, In/Sec                                     | 0          | 0          | 0          | 0         |
| Outlet Temp, DegF                                     | 68         | 69         | 68         | 66        |
| <b>* BACK</b>   |            |            |            |           |
| <b>* FLARE DATA</b>                                   |            |            |            |           |
| Flow Rate, SCFM                                       | 79         | 82         | 78         | 76        |
| Flame Temp, DegF                                      | 1420       | 1379       | 1420       | 1421      |
| BLR Speed, %  | 20         | 20         | 23         | 21        |
| Flow Pressure, In WC                                  | 1.7        | 1.8        | 1.7        | 1.6       |
| Hour Meter  | 17989      | 18110      | 18233      | 18424     |

**\* PUSH BUTTON**

## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |        |        |          |            |
|---|--------|--------|----------|------------|
| Run Clock   | On     | On     | On       | On         |
| Pilot   | Off    | Off    | Off      | Off        |
| SD Valve  | Open   | Open   | Open     | Open       |
| Flame   | On     | On     | On       | On         |
| Relight   | Off    | Off    | Off      | Off        |
| Pilot   | Ready  | Ready  | Ready    | Ready      |
| Vac Ramp  | Off    | Off    | Off      | Off        |
| Forced Flow   | Off    | Off    | Off      | Off        |
| <b>* BACK</b>   |        |        |          |            |
| <b>* FLOW DATA</b>  |        |        |          |            |
| Flow Rate, SCFM   | 79     | 82     | 78       | 76         |
| Today's Total, MMSCF  | 0.05   | 0.04   | 0.05     | 0.04       |
| This Month's Total, MMSCF   | 1.05   | 1.64   | 2.22     | 0.11       |
| Total Flow, MMSCF   | 101.27 | 101.85 | 102.43   | 103.36     |
| Flow Press, In WC   | 1.7    | 1.8    | 1.7      | 1.6        |
| Flow Temp, DegF   | 68     | 69     | 68       | 66         |
| Flow Delta P, In WC   | 0.56   | 0.60   | 0.55     | 0.52       |
| <b>* 7 DAY FLOW HISTORY</b>   |        |        |          |            |
| Yesterday's Flow, MMSCF   | 0.05   | 0.04   | 0.04     | 0.04       |
| 2 Day's Ago Flow, MMSCF   | 0.12   | 0.11   | 0.07     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12   | 0.12   | 0.00     | 0.11       |
| 4 Day's Ago Flow, MMSCF   | 0.11   | 0.04   | 0.05     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.12   | 0.00   | 0.11     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.12   | 0.09   | 0.11     | 0.11       |
| 7 Day's Ago Flow, MMSCF   | 0.12   | 0.11   | 0.12     | 0.12       |
| <b>* BACK</b>   |        |        |          |            |
| <b>* RESETTABLE FLOW</b>  |        |        |          |            |
| Resettable Total Flow, MMSCF  | 101.27 | 101.85 | 102.43   | 103.36     |
| Reset Time  | 0      | 0      | 0        | 0          |
| Reset Date  | 0      | 0      | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |        |        |          |            |
|   |        |        | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |        |        | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |        |        | X        |            |
| Drain Demister (if necessary)   |        |        | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |        |        | X        |            |
| Lubricate Grease Fittings (as necessary)  |        |        | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |        |        | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |        |        | X        |            |
| Drain Flare Stack Condensate (if necessary)   |        |        | X        |            |
| <b>Comments:</b> Drained Condensate   |        |        |          |            |
| <b>Signature:</b> Kevin S. Fabel  |        |        |          |            |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728      Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |            |            |            |
|---|-----------|------------|------------|------------|
| Tester (Initials)                                     | KSF       | KSF        | KSF        | KSF        |
| Date  | 12/9/2015 | 12/15/2015 | 12/22/2015 | 12/28/2015 |
| Time  | 8:15 AM   | 10:00 AM   | 10:00 AM   | 11:00 AM   |
| Sky Conditions  | Cldy      | Cldy       | Cldy       | Cldy       |
| Ambient Temperature, deg F                            | 40        | 30         | 30         | 25         |
| Inlet Temperature, deg F (GHS-TI-301)                 | 53        | 52         | 52         | 50         |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100       | 100        | 100        | 100        |
| LFG Vacuum, In WC (GHS-PI-301)                        | 4         | 6          | 4          | 4          |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.3       | 0.3        | 0.3        | 0.3        |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100       | 100        | 100        | 100        |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.5       | 1.5        | 1.5        | 1.5        |
| Discharge Temperature, deg F (GHS-TI-302)             | 62        | 63         | 61         | 54         |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 9         | 9          | 9          | 9          |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 1.5       | 1.8        | 1.8        | 2.0        |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.2       | 1.5        | 1.4        | 1.5        |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.3       | 0.3        | 0.4        | 0.5        |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 17.7      | 21.1       | 18.5       | 17.6       |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.8       | 3.9        | 3.8        | 3.9        |
| <b>YIC-1</b> From Main Menu Screen                    |           |            |            |            |
| <b>ANALOG DATA MENU</b>                               |           |            |            |            |
| <b>* PROCESS OVERVIEW</b>                             |           |            |            |            |
| Inlet Vacuum, In WC                                   | 4.2       | 6.9        | 4.7        | 3.8        |
| Inlet Temp, DegF                                      | 56        | 55         | 54         | 54         |
| Oxygen, %   | 0.3       | 0.5        | 0.2        | 0          |
| Blower Speed, %                                       | 20        | 26         | 22         | 20         |
| Blower Vibration, In/Sec                              | 0         | 0          | 0          | 0          |
| CP Temp, DegF   | 73        | 70         | 70         | 59         |
| FLR Flame Temp, DegF                                  | 1423      | 1480       | 1397       | 1506       |
| FLR Flow Press, In WC                                 | 1.6       | 1.7        | 1.7        | 1.8        |
| FLR Flow Temp, DegF                                   | 66        | 68         | 65         | 59         |
| Flow Rate, SCFM                                       | 76        | 79         | 80         | 84         |
| <b>* BACK</b>   |           |            |            |            |
| <b>* BLOWER DATA</b>                                  |           |            |            |            |
| Status, Run/Stop                                      | Run       | Run        | Run        | Run        |
| Run Time, Hr  | 18597     | 18740      | 18910      | 19055      |
| Speed, %  | 20        | 26         | 22         | 20         |
| Vibration, In/Sec                                     | 0         | 0          | 0          | 0          |
| Outlet Temp, DegF                                     | 66        | 68         | 65         | 59         |
| <b>* BACK</b>   |           |            |            |            |
| <b>* FLARE DATA</b>                                   |           |            |            |            |
| Flow Rate, SCFM                                       | 76        | 79         | 80         | 84         |
| Flame Temp, DegF                                      | 1375      | 1539       | 1412       | 1497       |
| BLR Speed, %  | 20        | 26         | 22         | 20         |
| Flow Pressure, In WC                                  | 1.6       | 1.7        | 1.7        | 1.8        |
| Hour Meter  | 18592     | 18735      | 18905      | 19050      |

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## WEEKLY FLARE STATION INSPECTION FORM

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |        |        |          |            |
|---|--------|--------|----------|------------|
| Run Clock   | On     | On     | On       | On         |
| Pilot   | Off    | Off    | Off      | Off        |
| SD Valve  | Open   | Open   | Open     | Open       |
| Flame   | On     | On     | On       | On         |
| Relight   | Off    | Off    | Off      | Off        |
| Pilot   | Ready  | Ready  | Ready    | Ready      |
| Vac Ramp  | Off    | Off    | Off      | Off        |
| Forced Flow   | Off    | Off    | Off      | Off        |
| <b>* BACK</b>   |        |        |          |            |
| <b>* FLOW DATA</b>  |        |        |          |            |
| Flow Rate, SCFM   | 75     | 79     | 80       | 83         |
| Today's Total, MMSCF  | 0.04   | 0.03   | 0.05     | 0.05       |
| This Month's Total, MMSCF   | 0.93   | 1.63   | 2.44     | 3.14       |
| Total Flow, MMSCF   | 104.17 | 104.87 | 105.69   | 106.4      |
| Flow Press, In WC   | 1.6    | 1.7    | 1.7      | 1.9        |
| Flow Temp, DegF   | 66     | 68     | 65       | 59         |
| Flow Delta P, In WC   | 0.50   | 0.56   | 0.57     | 0.61       |
| <b>* 7 DAY FLOW HISTORY</b>   |        |        |          |            |
| Yesterday's Flow, MMSCF   | 0.04   | 0.04   | 0.05     | 0.05       |
| 2 Day's Ago Flow, MMSCF   | 0.12   | 0.12   | 0.12     | 0.12       |
| 3 Day's Ago Flow, MMSCF   | 0.12   | 0.12   | 0.12     | 0.12       |
| 4 Day's Ago Flow, MMSCF   | 0.12   | 0.12   | 0.12     | 0.12       |
| 5 Day's Ago Flow, MMSCF   | 0.12   | 0.12   | 0.12     | 0.12       |
| 6 Day's Ago Flow, MMSCF   | 0.11   | 0.11   | 0.12     | 0.12       |
| 7 Day's Ago Flow, MMSCF   | 0.11   | 0.12   | 0.12     | 0.11       |
| <b>* BACK</b>   |        |        |          |            |
| <b>* RESETTABLE FLOW</b>  |        |        |          |            |
| Resettable Total Flow, MMSCF  | 104.17 | 104.87 | 105.69   | 106.4      |
| Reset Time  | 0      | 0      | 0        | 0          |
| Reset Date  | 0      | 0      | 0        | 0          |
| <b>* BACK &amp; * BACK</b>  |        |        |          |            |
|   |        |        | Adequate | Needs Work |
| Check Propane and Nitrogen Cylinders and change/fill if necessary                   |        |        | X        |            |
| Inspect Blower, Flare and Demister Structures for Loose Bolts/Cracks                |        |        | X        |            |
| Drain Demister (if necessary)   |        |        | X        |            |
| Clean Demister Filter Material (if dP indicates it is necessary)                    |        |        | X        |            |
| Lubricate Grease Fittings (as necessary)  |        |        | X        |            |
| Test Alarm Lights on Panel by pushing "RUN" and "Alarm/Shutdown" Lamps              |        |        | X        |            |
| Check if any shutdowns/alarms need re-setting (note which ones in comments section) |        |        | X        |            |
| Drain Flare Stack Condensate (if necessary)   |        |        | X        |            |
| <b>Comments:</b> Drained Condensate   |        |        |          |            |
| <b>Signature:</b> Kevin S. Fabel  |        |        |          |            |

**\* PUSH BUTTON**

Appendix B  
Semi Annual Flare Station  
Maintenance Reports

**SEMI-ANNUAL INSPECTION AND MAINTENANCE FORM  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector: Tom Hobday

The following items will be performed semi-annually by City personnel or an outside vendor:

| <i>Item</i>   | <i>Date Performed</i> | <i>Comments</i>  |
|---|-----------------------|--|
| <b><u>BLOWER/FLARE SYSTEM</u></b>   |                       |  |
| - Check igniter gap (should be 0.1" - regap if necessary).  | 4/15/2015             | Gap is correct   |
| - Verify that the spark is at the tip of the igniter.   | 4/15/2015             | Good spark present, flame lights well  |
| - Inspect igniter wiring for heat damage, worn insulation and frayed wires.   | 4/15/2015             | Wiring in good condition.  |
| - Test pilot switch to verify pilot lights and it doesn't blow out.   | 4/15/2015             | Pilot lights and burns well in Test mode   |
| - Check thermocouple voltage to verify the temperature reading.   | 4/15/2015             | 0.6 mV @ ambient (50°) ok<br>28.4 mV @ 1315° - ok  |
| - Test blower and safety shutoff operation. The blower contactor/blower start operation and safety shutoff valves shall be fully tested.                        | 4/15/2015             | All working  |
| - Zero out all pressure, differential pressure, and vacuum gauges   | 4/15/2015             | All gauges zeroed to ambient.  |
| - Check all components on the "set point sheet" to verify they have not changed. Make adjustments, if necessary.  | 4/15/2015             | Good - setpoints logged on setpoint data sheet.  |
| - Verify flow transmitter calibration (via differential pressure).  | 4/15/2015             | 0.0" at 0 cfm, and 0.56" @ 77 cfm . All within specifications.   |
| - Calibrate oxygen sensor.  | 4/15/2015             | Calibrated zero and span. 11.6 mV at 20.8% O2.   |
| - Remove demister sump clean-out cover and remove any accumulated debris  | 4/15/2015             | Clean, no debris found.  |
| - If pressure drop across the demister reaches two times (2X) the original value, remove demister element for inspection. (pressure wash element as necessary). | 4/15/2015             | Diff pressure remains normal, but removed and inspected element anyway. Nice and clean - no cleaning necessary at this time. |
| - Test demister condensate level switch (close level switch hand valve, and add water via tee to verify operation)  | 4/15/2015             | Functions as designed. Tested with water addition to tee.  |
| - Test the pilot fail shutdown (turn off propane supply)  | 4/15/2015             | Works  |
| - Test the high temperature shutdown while the flare is operating. (adjust PLC setpoint)  | N/A                   | This is a non user-programmable set-point. Unable to get the flare to produce a high enough temp to test.                    |



**SEMI-ANNUAL INSPECTION AND MAINTENANCE FORM  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector: Tom Hobday

The following items will be performed semi-annually by City personnel or an outside vendor:

| <i>Item</i>   | <i>Date Performed</i> | <i>Comments</i>  |
|---|-----------------------|--|
| - Test the oxygen safety shutdown while the flare is operating. (open O2 lines to atm.)   | 4/15/2015             | Opened oxygen sensor line to atmosphere, shutdown worked.  |
| - Test the low flow safety shutdown. (throttle blower inlet valve while in vacuum control)  | 4/15/2015             | Works  |
| - Test Blower Vibration alarm and shut down (adjust PLC setpoint)   | 4/15/2015             | Works - changed set-point to test and tapped on sensor.  |
| - Test the inlet valve fail close shutdown while flare is operating. (closed nitrogen supply)                                       | 4/15/2015             | Works - turned off nitrogen supply   |
| - Test the high inlet temperature failure (adjust PLC setpoint)   | 4/15/2015             | Works - changed set point to test  |
| - Test the high vacuum shutdown (adjust PLC setpoint)   | 4/15/2015             | Works - changed set point to test  |
| - Test the low temperature shutdown. (adjust PLC setpoint)  | N/A                   | This is a non user-programmable set-point. Unable to get the flare to produce a low enough temp to test.   |
| - Inspect transmitter housings and piping. Replace O-rings, if necessary.   | 4/15/2015             | All o-rings in good shape  |
| - Inspect and clean the solenoid valve.   | 4/15/2015             | Solenoid valve in good condition   |
| - Visually inspect for arcing contractor points. Check switches and contactors (annual).  | 4/15/2015             | Good   |
| - Re-torque all electrical components. Double check at the thermocouple leads and the main power feed going to the blower (annual). | 4/15/2015             | Checked all, tightened a few miscellaneous leads.  |
| - Check for loose bolts on structure and flanges. Tighten, as necessary.  | 4/15/2015             | Skid bolts snugged up.   |
| - Remove, inspect, and clean if necessary air conditioner filter (semi-annually)  | 4/15/2015             | Filter is clean.   |
| - Remove and inspect flame arrestor element (annually - or based on diff. pressure).  | 4/15/2015             | Some iron staining present. Flame arrestor was noted to have been leaking a minor amount of liquid from lower sealing face. Sealing face cleaned and arrestor reinstalled. Seal verified to be liquid tight now. |

**SEMI-ANNUAL INSPECTION AND MAINTENANCE FORM  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector: Tom Hobday

The following items will be performed semi-annually by City personnel or an outside vendor:

| <i>Item</i>   | <i>Date Performed</i> | <i>Comments</i>  |
|---|-----------------------|--|
| <b><u>BLOWER/FLARE SYSTEM</u></b>   |                       |  |
| - Check igniter gap (should be 0.1" - regap if necessary).  | 10/7/2015             | Gap is correct   |
| - Verify that the spark is at the tip of the igniter.   | 10/7/2015             | Good spark present at igniter tip  |
| - Inspect igniter wiring for heat damage, worn insulation and frayed wires.   | 10/7/2015             | No heat damage, wiring in good shape   |
| - Test pilot switch to verify pilot lights and it doesn't blow out.   | 10/7/2015             | lights and burns well.   |
| - Check thermocouple voltage to verify the temperature reading.   | 10/8/2015             | 0.8 mV @ ambient (69°) ok<br>30.7 mV @ 1397° - ok  |
| - Test blower and safety shutoff operation. The blower contactor/blower start operation and safety shutoff valves shall be fully tested.                        | 10/7/2015             | All working  |
| - Zero out all pressure, differential pressure, and vacuum gauges   | 10/7/2015             | All gauges zeroed to ambient.  |
| - Check all components on the "set point sheet" to verify they have not changed. Make adjustments, if necessary.  | 10/7/2015             | Good - setpoints logged on setpoint data sheet.  |
| - Verify flow transmitter calibration (via differential pressure).  | 10/8/2015             | 0.0" at 0 cfm, and 0.62" @ 84 cfm . All within specifications.   |
| - Calibrate oxygen sensor.  | 10/7/2015             | Calibrated zero and span. 11.5 mV at 20.8% O2.   |
| - Remove demister sump clean-out cover and remove any accumulated debris  | 10/7/2015             | Clean, no debris found.  |
| - If pressure drop across the demister reaches two times (2X) the original value, remove demister element for inspection. (pressure wash element as necessary). | 10/7/2015             | Diff pressure remains normal, but removed and inspected element anyway. Nice and clean - no cleaning necessary at this time. |
| - Test demister condensate level switch (close level switch hand valve, and add water via tee to verify operation)  | 10/7/2015             | Functions as designed. Tested with water addition to tee.  |
| - Test the pilot fail shutdown (turn off propane supply)  | 10/7/2015             | Propane turned off, shutdown works.  |
| - Test the high temperature shutdown while the flare is operating. (adjust PLC setpoint)  | N/A                   | This is a non user-programmable set-point. Unable to get the flare to produce a high enough temp to test.                    |

**SEMI-ANNUAL INSPECTION AND MAINTENANCE FORM  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector: Tom Hobday

The following items will be performed semi-annually by City personnel or an outside vendor:

| <i>Item</i>   | <i>Date Performed</i> | <i>Comments</i>  |
|---|-----------------------|--|
| - Test the oxygen safety shutdown while the flare is operating. (open O2 lines to atm.)   | 10/7/2015             | Opened oxygen sensor line to atmosphere, shutdown worked.  |
| - Test the low flow safety shutdown. (throttle blower inlet valve while in vacuum control)  | 10/7/2015             | Works - throttled blower in vacuum control mode  |
| - Test Blower Vibration alarm and shut down (adjust PLC setpoint)   | 10/7/2015             | Works - changed set-point to test and tapped on sensor.  |
| - Test the inlet valve fail close shutdown while flare is operating. (closed nitrogen supply)                                       | 10/7/2015             | Works - turned off nitrogen supply   |
| - Test the high inlet temperature failure (adjust PLC setpoint)   | 10/8/2015             | Works - changed set point to test  |
| - Test the high vacuum shutdown (adjust PLC setpoint)   | 10/8/2015             | Works - changed set point to test  |
| - Test the low temperature shutdown. (adjust PLC setpoint)  | N/A                   | This is a non user-programmable set-point. Unable to get the flare to produce a low enough temp to test. |
| - Inspect transmitter housings and piping. Replace O-rings, if necessary.   | 10/8/2015             | All o-rings regreased. No breakage or cracking noted.  |
| - Inspect and clean the solenoid valve.   | 10/8/2015             | Solenoid valve in good condition   |
| - Visually inspect for arcing contractor points. Check switches and contactors (annual).  | 10/8/2015             | Good   |
| - Re-torque all electrical components. Double check at the thermocouple leads and the main power feed going to the blower (annual). | 10/8/2015             | All connections tight.   |
| - Check for loose bolts on structure and flanges. Tighten, as necessary.  | 10/8/2015             | Tightened 4 corner bolts. Remaining bolts were tight.  |
| - Remove, inspect, and clean if necessary air conditioner filter (semi-annually)  | 10/7/2015             | Filter is clean.   |
| - Remove and inspect flame arrestor element (annually - or based on diff. pressure).  | 10/7/2015             | Some staining/rust present, but arrestor element is clean and dry.                                       |

# DAILY FLARE STATION DATA LOG

Project # 1728      Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|   |           |           |
|---|-----------|-----------|
| Tester  | T. Hobday | T. Hobday |
| Date  | 4/15/15   | 10/7/15   |
| Time  | 8:10      | 13:40     |
| Sky Conditions  | Clear     | clear     |
| Ambient Temperature, deg F                            | 50°       | 60°       |
| Inlet Temperature, deg F (GHS-TI-301)                 | 46°       | 58°       |
| Demister Inlet Valve Position, % Open (GHS-HV-301)    | 100%      | 100%      |
| LFG Vacuum, In WC (GHS-PI-301)                        | 5"        | 4"        |
| Demister Filter Delta P (GHS-PDI-301)                 | 0.2"      | 0.4"      |
| Blower 301 Inlet Valve Position, % Open (GHS-FCV-301) | 100%      | 100%      |
| Discharge Pressure, In WC (GHS-PI-302)                | 1.2"      | 1.0"      |
| Discharge Temperature, deg F (GHS-TI-302)             | 60°       | 66°       |
| Propane Pilot Supply Pressure, In WC (GHS-PI-101)     | 11.5"     | 9"        |
| Flame Arrester Inlet Pressure, In WC (FLR-PI-301)     | 1.6"      | 1.9"      |
| Flame Arrester Outlet Pressure, In WC (FLR-PI-301)    | 1.4"      | 1.6"      |
| Flame Arrester Delta P, In WC (FLR-PI-301)            | 0.2"      | 0.3"      |
| Blower 301 Frequency, Hz (CP-YIC-2)                   | 17.1 Hz   | 17.9 Hz   |
| Blower 301 Current, Amps (CP-YIC-2)                   | 3.6 A     | 3.7 A     |
|   |           |           |
|   |           |           |
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|   |           |           |
|   |           |           |

\* **PUSH BUTTON**

## DAILY FLARE STATION DATA LOG

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

|                                    |             |  |            |  |
|------------------------------------|-------------|--|------------|--|
| <b>YIC-1</b> From Main Menu Screen | 4/15/15     |  | 10/7/15    |  |
| <b>ANALOG DATA MENU</b>            |             |  |            |  |
| <b>* PROCESS OVERVIEW</b>          |             |  |            |  |
| Inlet Vacuum, In WC                | 4.3"        |  | 4.1"       |  |
| Inlet Temp, DegF                   | 49°         |  | 62°        |  |
| Oxygen, %                          | 0.0%        |  | 0.0%       |  |
| Blower Speed, %                    | 19%         |  | 21%        |  |
| Blower Vibration, In/Sec           | 0.00"/sec   |  | 0.00"/sec  |  |
| CP Temp, DegF                      | 79°         |  | 79°        |  |
| FLR Flame Temp, DegF               | 1282°       |  | 1344°      |  |
| FLR Flow Press, In WC              | 1.4"        |  | 1.9"       |  |
| FLR Flow Temp, DegF                | 61°         |  | 69°        |  |
| Flow Rate, SCFM                    | 76 cfm      |  | 85 cfm     |  |
| <b>* BACK</b>                      |             |  |            |  |
| <b>* BLOWER DATA</b>               |             |  |            |  |
| Status, Run/Stop                   | Run         |  | Run        |  |
| Run Time, Hr                       | 13,155 hrs. |  | 17,185 hrs |  |
| Speed, %                           | 19%         |  | 21%        |  |
| Vibration, In/Sec                  | 0.00"/sec   |  | 0.00"/sec  |  |
| Outlet Temp, DegF                  | 61°         |  | 69°        |  |
| <b>* BACK</b>                      |             |  |            |  |
| <b>* FLARE DATA</b>                |             |  |            |  |
| Flow Rate, SCFM                    | 76 cfm      |  | 85 cfm     |  |
| Flame Temp, DegF                   | 1300°       |  | 1356°      |  |
| BLR Speed, %                       | 19%         |  | 21%        |  |
| Flow Pressure, In WC               | 1.4"        |  | 1.9"       |  |
| Hour Meter                         | 13,150 hrs  |  | 17,180 hrs |  |
| Run Clock                          | on          |  | on         |  |
| Pilot                              | off         |  | off        |  |

**\* PUSH BUTTON**

## DAILY FLARE STATION DATA LOG

Project # 1728 Project Name: Holtz Krause (Min 30 SCFM, Max 200 SCFM)

4/15/15

10/7/15

|                              |                  |  |                  |  |
|------------------------------|------------------|--|------------------|--|
| SD Valve                     | <u>open</u>      |  | <u>open</u>      |  |
| Flame                        | <u>on</u>        |  | <u>on</u>        |  |
| Relight                      | <u>off</u>       |  | <u>off</u>       |  |
| Pilot                        | <u>ready</u>     |  | <u>ready</u>     |  |
| Vac Ramp                     | <u>off</u>       |  | <u>off</u>       |  |
| Forced Flow                  | <u>off</u>       |  | <u>off</u>       |  |
| <b>* BACK</b>                |                  |  |                  |  |
| <b>* FLOW DATA</b>           |                  |  |                  |  |
| Flow Rate, SCFM              | <u>77 cfm</u>    |  | <u>85 cfm</u>    |  |
| Today's Total, MMSCF         | <u>0.0379340</u> |  | <u>0.0638631</u> |  |
| This Month's Total, MMSCF    | <u>1.618887</u>  |  | <u>0.703460</u>  |  |
| Total Flow, MMSCF            | <u>77.857</u>    |  | <u>97.349</u>    |  |
| Flow Press, In WC            | <u>1.4"</u>      |  | <u>1.9"</u>      |  |
| Flow Temp, DegF              | <u>61°</u>       |  | <u>69°</u>       |  |
| Flow Delta P, In WC          | <u>0.52"</u>     |  | <u>0.64"</u>     |  |
| <b>* 7 DAY FLOW HISTORY</b>  |                  |  |                  |  |
| Yesterday's Flow, MMSCF      | <u>0.0379340</u> |  | <u>0.0638631</u> |  |
| 2 Day's Ago Flow, MMSCF      | <u>0.1128233</u> |  | <u>0.1168134</u> |  |
| 3 Day's Ago Flow, MMSCF      | <u>0.1157893</u> |  | <u>0.1164243</u> |  |
| 4 Day's Ago Flow, MMSCF      | <u>0.1179982</u> |  | <u>0.1180050</u> |  |
| 5 Day's Ago Flow, MMSCF      | <u>0.1108066</u> |  | <u>0.1189440</u> |  |
| 6 Day's Ago Flow, MMSCF      | <u>0.1181179</u> |  | <u>0.1166438</u> |  |
| 7 Day's Ago Flow, MMSCF      | <u>0.1151337</u> |  | <u>0.1181449</u> |  |
| <b>* BACK</b>                |                  |  |                  |  |
| <b>* RESETTABLE FLOW</b>     |                  |  |                  |  |
| Resettable Total Flow, MMSCF | <u>77.85652</u>  |  | <u>97.34888</u>  |  |
| Reset Time                   | <u>0:0:0</u>     |  | <u>0:0:0</u>     |  |
| Reset Date                   | <u>0/00/00</u>   |  | <u>0/00/00</u>   |  |
| <b>* BACK</b>                |                  |  |                  |  |

**\* PUSH BUTTON**

## FLARE SYSTEM SETPOINTS

All Setpoints depend on Biogas Pressure and Flow

Project # 1728

Project Name: Holtz Krause

Initials: T. Holiday

| Description                 | Setpoint | DATE    | Setpoint | DATE    |
|-----------------------------|----------|---------|----------|---------|
| <b>SETPOINT MENU</b>        |          |         |          |         |
| * VACUUM/FLOW               |          |         |          |         |
| Vacuum/Flow                 | Flow     | 4/15/15 | Flow     | 10/7/15 |
| * MANUAL/AUTO               |          |         |          |         |
| Min % Speed                 | 10%      | 4/15/15 | 10%      | 10/7/15 |
| Auto/Manual                 | Auto     | ↓       | Auto     | ↓       |
| Manual % Speed              | 20%      | ↓       | 20%      | ↓       |
| * BACK                      |          |         |          |         |
| * VACUUM CONTROL            |          |         |          |         |
| * SETPOINTS                 |          |         |          |         |
| Setpoint, In WC             | 5.0"     | 4/15/15 | 5.0"     | 10/7/15 |
| Ramp Increment, In WC       | 4.0"     | ↓       | 4.0"     | ↓       |
| * BACK                      |          |         |          |         |
| * PID SPs                   |          |         |          |         |
| Gain                        | 2.50     | 4/15/15 | 2.50     | 10/7/15 |
| Sample Rate, Sec            | 0.50 sec | ↓       | 0.50 sec | ↓       |
| Derivative, Sec             | 0.01 sec | ↓       | 0.01 sec | ↓       |
| Reset, Sec/Min              | 0.50 sec | ↓       | 0.50 sec | ↓       |
| Deadband, In WC             | 0.5"     | ↓       | 0.5"     | ↓       |
| * BACK                      |          |         |          |         |
| * BACK                      |          |         |          |         |
| * FLOW CONTROL              |          |         |          |         |
| * SETPOINTS                 |          |         |          |         |
| Flow Control Setpoint, SCFM | 80 cfm   | 4/15/15 | 80 cfm   | 10/7/15 |
| * BACK                      |          |         |          |         |
| * PID SETPOINTS             |          |         |          |         |
| Gain                        | 0.80     | 4/15/15 | 0.80     | 10/7/15 |
| Sample Rate, Sec            | 0.70 sec | ↓       | 0.70 sec | ↓       |
| Derivative, Sec             | 0.01 sec | ↓       | 0.01 sec | ↓       |
| Reset, Sec/Min              | 1.10 sec | ↓       | 1.10 sec | ↓       |
| Deadband, SCFM              | 5 cfm    | ↓       | 5 cfm    | ↓       |
| * BACK                      |          |         |          |         |
| * BACK                      |          |         |          |         |
| * BACK                      |          |         |          |         |
| * FLARE MENU                |          |         |          |         |

## FLARE SYSTEM SETPOINTS

All Setpoints depend on Biogas Pressure and Flow

Project # 1728

Project Name: Holtz Krause

Initials: T. Hobday

|  |          |         |          |         |
|--|----------|---------|----------|---------|
| <b>* START SPs</b>                         |          |         |          |         |
| Pilot Enable, Secs                         | 75 sec   | 4/15/15 | 75 sec   | 10/7/15 |
| Pilot On Sequence, Secs                    | 10 sec   | ↓       | 10 sec   | ↓       |
| Pilot Off Sequence, Secs                   | 3 sec    | ↓       | 3 sec    | ↓       |
| Delay Blower Start, Secs                   | 3 sec    | ↓       | 3 sec    | ↓       |
| Delay Shutdown Valve Open, Secs            | 3 sec    | ↓       | 3 sec    | ↓       |
| <b>* BACK</b>                              |          |         |          |         |
| <b>* PILOT</b>                             |          |         |          |         |
| FLR Pilot Assumed on Above This Temp, DegF | 250°     | 4/15/15 | 250°     | 10/7/15 |
| <b>* BACK</b>                              |          |         |          |         |
| <b>* FLR RUN CLOCK</b>                     |          |         |          |         |
| Start Time of Day, Hr.Min                  | 0.00     | 4/15/15 | 0.00     | 10/7/15 |
| On Cycle Duration, Mins                    | 1440 min | ↓       | 1440 min | ↓       |
| Off Cycle Duration, Mins                   | 1 min    | ↓       | 1 min    | ↓       |
| Cycles per Day                             | 1        | ↓       | 1        | ↓       |
| <b>* BACK</b>                              |          |         |          |         |
| <b>* BACK</b>                              |          |         |          |         |
| <b>* FLOW CALC</b>                         |          |         |          |         |
| CH4%                                       | 31.0%    | 4/15/15 | 31.0%    | 10/7/15 |
| O2%  | 0.1%     | ↓       | 0.1%     | ↓       |
| CO2%                                       | 32.5%    | ↓       | 32.5%    | ↓       |
| Elevation, Ft                              | 1225 ft. | ↓       | 1225 ft. | ↓       |
| Manual Input                               | 0.975    | ↓       | 0.975    | ↓       |
| <b>* BACK</b>                              |          |         |          |         |
| <b>* OXYGEN CALIBRATION</b>                |          |         |          |         |
| <b>* BACK</b>                              |          |         |          |         |
| <b>* ALARMS &amp; SHUTDOWNS</b>            |          |         |          |         |
| <b>* INLET MENU</b>                        |          |         |          |         |
| <b>* HIGH VACUUM</b>                       |          |         |          |         |
| Alarm SP, In WC                            | 52.0"    | 4/15/15 | 52.0"    | 10/7/15 |
| Alarm Delay, Sec                           | 45 sec   | ↓       | 45 sec   | ↓       |
| Shutdown SP, In WC                         | 55.0"    | ↓       | 55.0"    | ↓       |
| Shutdown Delay, Sec                        | 45 sec   | ↓       | 45 sec   | ↓       |
| <b>* BACK</b>                              |          |         |          |         |
| <b>* INLET TEMPERATURE</b>                 |          |         |          |         |
| Alarm SP, DegF                             | 98°      | 4/15/15 | 98°      | 10/7/15 |



## FLARE SYSTEM SETPOINTS

All Setpoints depend on Biogas Pressure and Flow

Project # 1728

Project Name: Holtz Krause

Initials: T. Hobday

|   |           |         |           |         |
|---|-----------|---------|-----------|---------|
| Alarm Delay, Sec                                  | 45 sec    | 4/15/15 | 45 sec    | 10/7/15 |
| Shutdown SP, DegF                                 | 100°      | ↓       | 100°      | ↓       |
| Shutdown Delay, Sec                               | 45 sec    | ↓       | 45 sec    | ↓       |
| * BACK  |           |         |           |         |
| * BACK  |           |         |           |         |
| * FLT-301 COND LEVEL                              |           |         |           |         |
| Shutdown Delay, Sec                               | 35 sec    | 4/15/15 | 35 sec    | 10/7/15 |
| * BACK  |           |         |           |         |
| * BLOWER MENU                                     |           |         |           |         |
| * VIBRATION                                       |           |         |           |         |
| Alarm SP, In/S                                    | 0.18"/sec | 4/15/15 | 0.18"/sec | 10/7/15 |
| Alarm Delay, Sec                                  | 45 sec    | ↓       | 45 sec    | ↓       |
| Shutdown SP, In/S                                 | 0.20"/sec | ↓       | 0.20"/sec | ↓       |
| Shutdown Delay, Sec                               | 45 sec    | ↓       | 45 sec    | ↓       |
| * BACK  |           |         |           |         |
| * HIGH OUTLET GAS TEMP                            |           |         |           |         |
| Alarm SP, DegF                                    | 170°      | 4/15/15 | 170°      | 10/7/15 |
| Alarm Delay, Sec                                  | 45 sec    | ↓       | 45 sec    | ↓       |
| Shutdown SP, DegF                                 | 174°      | ↓       | 174°      | ↓       |
| Shutdown Delay, Sec                               | 45 sec    | ↓       | 45 sec    | ↓       |
| * BACK  |           |         |           |         |
| * BACK  |           |         |           |         |
| * FLARE MENU                                      |           |         |           |         |
| * HIGH FLAME TEMP <i>Not shown on touchscreen</i> |           |         |           |         |
| Alarm SP, DegF                                    | NA        |         | NA        |         |
| Alarm Delay, Sec                                  | ↓         |         | ↓         |         |
| Shutdown SP, DegF                                 |           |         |           |         |
| Shutdown Delay, Sec                               |           |         |           |         |
| * BACK  |           |         |           |         |
| * LOW FLAME TEMP                                  |           |         |           |         |
| Alarm SP, DegF                                    | 150°      | 4/15/15 | 150°      | 10/7/15 |
| Alarm Delay, Sec                                  | 45 sec    | ↓       | 45 sec    | ↓       |
| Shutdown SP, DegF                                 | 200°      | ↓       | 200°      | ↓       |
| Shutdown Delay, Sec                               | 45 sec    | ↓       | 45 sec    | ↓       |
| * BACK  |           |         |           |         |
| * HIGH FLOW RATE                                  |           |         |           |         |

## FLARE SYSTEM SETPOINTS

All Setpoints depend on Biogas Pressure and Flow

Project # 1728

Project Name: Holtz Krause

Initials: T. Hobday

|                                |         |         |         |         |
|--------------------------------|---------|---------|---------|---------|
| Alarm SP, SCFM                 | 220 cfm | 4/15/15 | 220 cfm | 10/7/15 |
| Alarm Delay, Sec               | 45 sec  | ↓       | 45 sec  | ↓       |
| * BACK                         |         |         |         |         |
| * LOW FLOW RATE                |         |         |         |         |
| Alarm SP, SCFM                 | 35 cfm  | 4/15/15 | 35 cfm  | 10/7/15 |
| Alarm Delay, Sec               | 35 sec  | ↓       | 35 sec  | ↓       |
| Shutdown SP, SCFM              | 30 cfm  | ↓       | 30 cfm  | ↓       |
| Shutdown Delay, Sec            | 35 sec  | ↓       | 35 sec  | ↓       |
| * BACK                         |         |         |         |         |
| * FLARE RELIGHT                |         |         |         |         |
| Relight Delay, Secs            | 600 sec | 4/15/15 | 600 sec | 10/7/15 |
| Number of Relight Attempts     | 3       | ↓       | 3       | ↓       |
| * BACK                         |         |         |         |         |
| * BACK                         |         |         |         |         |
| * OXYGEN SENSOR                |         |         |         |         |
| * HIGH OXYGEN OE-301           |         |         |         |         |
| Alarm SP, %                    | 3.5%    | 4/15/15 | 3.5%    | 10/7/15 |
| Alarm Delay, Sec               | 120 sec | ↓       | 120 sec | ↓       |
| Shutdown SP, %                 | 5.0%    | ↓       | 5.0%    | ↓       |
| Shutdown Delay, Sec            | 120 sec | ↓       | 120 sec | ↓       |
| * BACK                         |         |         |         |         |
| * BACK                         |         |         |         |         |
| * UTILITY OUTAGE RESTART DELAY |         |         |         |         |
| System Restart Delay, Secs     | 60 sec  | 4/15/15 | 60 sec  | 10/7/15 |
| * BACK                         |         |         |         |         |
| * PANEL TEMP                   |         |         |         |         |
| Low Temp Alarm SP, degF        | 35°     | 4/15/15 | 35°     | 10/7/15 |
| Low Temp Alarm Delay, Sec      | 120 sec | ↓       | 120 sec | ↓       |
| High Temp Alarm SP, degF       | 120°    | ↓       | 120°    | ↓       |
| High Temp Alarm Delay, Sec     | 120 sec | ↓       | 120 sec | ↓       |
| * BACK                         |         |         |         |         |
| * BACK                         |         |         |         |         |
| * BACK                         |         |         |         |         |

# Appendix C

## Monthly Site Inspection Forms

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector

Karin Hase

Date:

11-11-14

| <u>Item</u>                              | <u>Yes</u> | <u>No</u> | <u>Comments</u> |
|--|------------|-----------|-----------------|
| Cover intact and free of erosion?        | y          | n         | _____           |
| Vegetation cover intact?                 | y          | n         | _____           |
| Is cover free of surface water ponding?  | y          | n         | _____           |
| Is cover free of exposed refuse?         | y          | n         | _____           |
| Is cover free of leachate seeps?         | y          | n         | _____           |
| Is cover free of animal burrows?         | y          | n         | _____           |
| Is cover free of noxious weeds?          | y          | n         | _____           |
| Is cover in need of mowing?              | y          | n         | _____           |
| Evidence of settlement of fill?          | y          | n         | _____           |
| Nuisance odors present?                  | y          | n         | _____           |
|  |            |           |                 |
| On-site access road drivable?            | y          | n         | _____           |
| Fence around flare secured?              | y          | n         | _____           |
| Evidence of trespassers or encroachment? | y          | n         | _____           |
| Illegal disposal/dumping present?        | y          | n         | _____           |
| Gas wells free of damage?                | y          | n         | _____           |
| Water mon wells secured/free of damage?  | y          | n         | _____           |
| Gas probes secured/free of damage?       | y          | n         | _____           |
|  |            |           |                 |
| Flare station modem operational?         | y          | n         | _____           |

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Kean Fuboz

Inspector

Date:

12-26-14

| <u>Item</u>                              | <u>Yes</u> | <u>No</u> | <u>Comments</u> |
|--|------------|-----------|-----------------|
| Cover intact and free of erosion?        | y          | n         | _____           |
| Vegetation cover intact?                 | y          | n         | _____           |
| Is cover free of surface water ponding?  | y          | n         | _____           |
| Is cover free of exposed refuse?         | y          | n         | _____           |
| Is cover free of leachate seeps?         | y          | n         | _____           |
| Is cover free of animal burrows?         | y          | n         | _____           |
| Is cover free of noxious weeds?          | y          | n         | _____           |
| Is cover in need of mowing?              | y          | n         | _____           |
| Evidence of settlement of fill?          | y          | n         | _____           |
| Nuisance odors present?                  | y          | n         | _____           |
|  |            |           |                 |
| On-site access road drivable?            | y          | n         | _____           |
| Fence around flare secured?              | y          | n         | _____           |
| Evidence of trespassers or encroachment? | y          | n         | _____           |
| Illegal disposal/dumping present?        | y          | n         | _____           |
| Gas wells free of damage?                | y          | n         | _____           |
| Water mon wells secured/free of damage?  | y          | n         | _____           |
| Gas probes secured/free of damage?       | y          | n         | _____           |
|  |            |           |                 |
| Flare station modem operational?         | y          | n         | _____           |

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Kevin Faber

Inspector

Date:

1-29-15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | n                                  | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover in need of mowing?              | y                                  | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | y                                  | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | y                                  | <input checked="" type="radio"/> n | _____           |
|  |                                    |                                    |                 |
| On-site access road drivable?            | <input checked="" type="radio"/> y | n                                  | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | n                                  | _____           |
| Evidence of trespassers or encroachment? | y                                  | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | y                                  | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | n                                  | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | n                                  | _____           |
|  |                                    |                                    |                 |
| Flare station modern operational?        | <input checked="" type="radio"/> y | n                                  | _____           |

Comments:

Snow Covered.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector: Kevin Faber  
Date: 2.10.15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover in need of mowing?              | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| On-site access road drivable?            | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Evidence of trespassers or encroachment? | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Flare station modem operational?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |

Comments:

Snow on Site. Everything looks good.

\_\_\_\_\_

\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Kevin FASOR

Inspector

Date:

3.12.15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover in need of mowing?              | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
|  |                                    |                                    |                 |
| On-site access road drivable?            | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Evidence of trespassers or encroachment? | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
|  |                                    |                                    |                 |
| Flare station modern operational?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |

Comments:

1st EW monitoring round of Spring.  
Site looks good - no issues.



**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector Kevin Sager  
Date: 4-14-15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | n                                  | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover in need of mowing?              | y                                  | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | y                                  | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | y                                  | <input checked="" type="radio"/> n | _____           |
|  |                                    |                                    |                 |
| On-site access road drivable?            | <input checked="" type="radio"/> y | n                                  | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | n                                  | _____           |
| Evidence of trespassers or encroachment? | y                                  | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | y                                  | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | n                                  | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | n                                  | _____           |
|  |                                    |                                    |                 |
| Flare station modern operational?        | <input checked="" type="radio"/> y | n                                  | _____           |

Comments:

No Issues  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector KEVIN FABER  
Date: 5-14-15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover in need of mowing?              | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| On-site access road drivable?            | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Evidence of trespassers or encroachment? | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Flare station modem operational?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |

Comments:  
\* Public Works to now perimeter of landfill  
late Spring

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Kevin Fager

Inspector

Date:

6.9.15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover in need of mowing?              | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| On-site access road drivable?            | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Evidence of trespassers or encroachment? | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Flare station modern operational?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |

Comments:

Perimeter of landfill recently mowed.

\_\_\_\_\_

\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Kevin Foster

Inspector

Date:

7.7.15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | n                                  | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover in need of mowing?              | y                                  | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | y                                  | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | y                                  | <input checked="" type="radio"/> n | _____           |
| On-site access road drivable?            | <input checked="" type="radio"/> y | n                                  | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | n                                  | _____           |
| Evidence of trespassers or encroachment? | y                                  | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | y                                  | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | n                                  | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | n                                  | _____           |
| Flare station moderm operational?        | <input checked="" type="radio"/> y | n                                  | _____           |

Comments:

Sidehill areas will need to be mowed 8/2015.

\_\_\_\_\_  
\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector KEVIN FASER  
Date: 8/13/15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | n                                  |                 |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | n                                  |                 |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | n                                  |                 |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | n                                  |                 |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | n                                  |                 |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | n                                  |                 |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | n                                  |                 |
| Is cover in need of mowing?              | y                                  | <input checked="" type="radio"/> n | just mowed      |
| Evidence of settlement of fill?          | y                                  | <input checked="" type="radio"/> n |                 |
| Nuisance odors present?                  | y                                  | <input checked="" type="radio"/> n |                 |
| On-site access road drivable?            | <input checked="" type="radio"/> y | n                                  |                 |
| Fence around flare secured?              | <input checked="" type="radio"/> y | n                                  |                 |
| Evidence of trespassers or encroachment? | y                                  | <input checked="" type="radio"/> n |                 |
| Illegal disposal/dumping present?        | y                                  | <input checked="" type="radio"/> n |                 |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | n                                  |                 |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | n                                  |                 |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | n                                  |                 |
| Flare station modern operational?        | <input checked="" type="radio"/> y | n                                  |                 |

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Kevin Faber

Inspector

Date:

9/9/15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover in need of mowing?              | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
|  |                                    |                                    |                 |
| On-site access road drivable?            | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Evidence of trespassers or encroachment? | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
|  |                                    |                                    |                 |
| Flare station modem operational?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Kevin Fabel

Inspector

Date:

10.9.15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover in need of mowing?              | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| <br>                                     |                                    |                                    |                 |
| On-site access road drivable?            | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Evidence of trespassers or encroachment? | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| <br>                                     |                                    |                                    |                 |
| Flare station modem operational?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |

Comments:

Looks in good shape

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Karin Frazee

Inspector

Date:

11/17/15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | n                                  | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | n                                  | _____           |
| Is cover in need of mowing?              | y                                  | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | y                                  | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | y                                  | <input checked="" type="radio"/> n | _____           |
|  |                                    |                                    |                 |
| On-site access road drivable?            | <input checked="" type="radio"/> y | n                                  | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | n                                  | _____           |
| Evidence of trespassers or encroachment? | y                                  | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | y                                  | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | n                                  | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | n                                  | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | n                                  | _____           |
|  |                                    |                                    |                 |
| Flare station modem operational?         | <input checked="" type="radio"/> y | n                                  | _____           |

Comments:

Area in good shape

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**LANDFILL SITE INSPECTION  
FORMER HOLTZ KRAUSE LANDFILL**

Inspector Kevin Fager  
Date: 12/28/15

| <u>Item</u>                              | <u>Yes</u>                         | <u>No</u>                          | <u>Comments</u> |
|--|------------------------------------|------------------------------------|-----------------|
| Cover intact and free of erosion?        | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Vegetation cover intact?                 | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of surface water ponding?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of exposed refuse?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of leachate seeps?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of animal burrows?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover free of noxious weeds?          | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Is cover in need of mowing?              | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Evidence of settlement of fill?          | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Nuisance odors present?                  | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| On-site access road drivable?            | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Fence around flare secured?              | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Evidence of trespassers or encroachment? | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Illegal disposal/dumping present?        | <input type="radio"/> y            | <input checked="" type="radio"/> n | _____           |
| Gas wells free of damage?                | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Water mon wells secured/free of damage?  | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Gas probes secured/free of damage?       | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |
| Flare station modem operational?         | <input checked="" type="radio"/> y | <input type="radio"/> n            | _____           |

Comments:

Cycled power to modem.

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