de maximis, inc.

450 Montbrook Lane
Knoxville, TN 37919
(865) 691-5052
(865) 691-6485 FAX
(865) 691-9835 ACCT. FAX

US EPA RECORDS CENTER REGION 5
473062

***Via Electronic and Certified Mail***

December 10, 2013

Mr. Dion Novak
Remedial Project Manager
U. S. Environmental protection Agency
77 W. Jackson Blvd.
Mail Stop SR-6J
Chicago, Illinois 60604

Mr. Steve Renninger
On-Scene Coordinator
U. S. Environmental Protection Agency
26 West Martin Luther King Drive, G-41
Cincinnati, Ohio 45268

**Re: Monthly Progress Report #226 – November 2013**
**North Sanitary Landfill - Dayton, Montgomery County, Ohio**

Dear Mr. Novak and Mr. Renninger:

In accordance with Section V, Subsection 2.5, of the Administrative Order by Consent for the North Sanitary Landfill, please find enclosed a summary of site-related activities for November 2013.

Should you have any questions or comments, please do not hesitate to contact me at (865) 691-5052.

Sincerely,
***de maximis, inc.***

for Diana L. Bee

Michael H. Samples
Alternate Project Coordinator

MHS:dlb

Attachments

cc: H. Cole (w/ attachment; via U.S. Mail)
S. Glum (w/ attachment; via U.S. Mail)
T. Hut (w/ attachment; via U.S. Mail)
J. Weatherington-Rice (w/ attachment; via U.S. Mail)
N. Wood-Chi (w/ attachment; via U.S. Mail)
VLSG Distribution (w/ attachments; via e-mail)



PAPER

# Monthly Progress Report
**Report #226 – November 2013**
**North Sanitary Landfill**
**Dayton, Ohio**

## A. Actions Taken Toward Compliance with the Order

- Operation and monitoring of the landfill gas abatement system (LGAS) was continued;
- The site fence was inspected during the reporting period and any necessary repairs were addressed; and,
- The fourth quarter 2013 combustible gas indicator checks were performed on November 18, 2013.

## B/C. Problems Encountered/Actions to Rectify Problems

- None.

## D. Changes in Removal Action Activities

- None.

## E. Site Data

- Bi-weekly LGAS compliance data summaries for the month of November 2013 are presented in Attachment A of this report.

## F. Planned Activities for the Next Reporting Period (December 2013)

- Develop Monthly Progress Report (MPR) #226 summarizing activities in November 2013; and,
- Continue LGAS operation and performance monitoring.

## G. Schedule of Significant Activities and Deliverables (December 2013)

- December 10 - Anticipated submittal of the November 2013 MPR to U.S. EPA.

## H. Changes in Personnel During Reporting Period

- None.

PAPER

## I. Significant Correspondence, Telephone Conversations, or Discussions

| Communication | Date | Recipient(s) | Subject |
|---|---|---|---|
| dmi transmittal | 11/08/13 | U.S. EPA | Monthly Progress Report for the Month of October 2013. |

# ATTACHMENT A

## (BI-WEEKLY LGAS SUMMARIES)

PAPER

# R. M. BROYLES COMPANY, L. L. C.

P.O. Box 13154, Dayton, OH 45413 MOB # 937-776-5304 email: rmbcom@woh.rr.com


## REPORT COVER PAGE

To: Gary Saylor SCS <gsaylor@scsengineers.com> Pages: 5

From: Mike Broyles <rmbcom@woh.rr.com>

Date: 11/8/2013

Subject: LFG Monitoring Summary - Week of 10/28/13 - 11/03/13

Summary: All CPs remained in compliance this two week period.
There were three (3) flare flame failures due to low methane or other issues.
Flare operating cycles were 180 to 300 mins. ON and 540 mins. OFF.
Bi-Weekly Gas Vent, Extraction & Supplemental Well monitoring was performed November 3, 2013 with temps of 53 to 52°F with mostly cloudy conditions.
Vacuum readings were last taken on November 3, 2013.
Valves were open to Legs 1b, 2, 3A, 3B, 4 and 5; and
Wells open were NW 1-8, WC 1 & 4, SW 1 & 2, EW 1-4, 7, 8, 10, 11 & 12.

Flare Operating Hours:

| | AM | | | | PM | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Date | on | off | on | off | on | off | on | off | "ON" Hours |
| 10/28/2013 | -- | -- | 9:30 | -- | -- | 12:30 | 9:30 | 10:30# | 4.0 |
| 10/29/2013 | -- | -- | -- | -- | -- | -- | -- | -- | 0.0 |
| 10/30/2013 | -- | -- | -- | -- | -- | -- | -- | -- | 0.0 |
| 10/31/2013 | -- | -- | 10:00 | -- | -- | 3:00 | -- | -- | 5.0 |
| 11/1/2013 | 12:00 | 5:00 | -- | -- | 2:00 | 7:00 | -- | -- | 10.0 |
| 11/2/2013 | 4:00 | 9:00 | -- | -- | 6:00 | 7:30# | -- | -- | 6.5 |
| 11/3/2013 | -- | -- | -- | -- | 1:30 | 5:00# | -- | -- | 3.5 |
| | | | | | | | | Total Hrs. = | 29.0 |

Notes: # = Flare shut down during operation.
* = Flare reset to operate full time with propane.
@ = Flare reset to operate full time with methane.
+ = Other reason
Times represent Flare Clock which is currently set to EST.
Flow rate was 190 - 220 scfm. Temperature range (middle thermocouple) 1520 - 1570° F.

Daily/Weekly Monitoring Times:

| Date | Probes/Wells Monitored | Sampling Period | Readings | Barometric Pressure | Trend |
|---|---|---|---|---|---|
| 10/28/2013 | -- | -- | -- | -- | -- |
| 10/29/2013 | -- | -- | -- | -- | -- |
| 10/30/2013 | -- | -- | -- | -- | -- |
| 10/31/2013 | -- | -- | -- | -- | -- |
| 11/1/2013 | -- | -- | -- | -- | -- |
| 11/2/2013 | CPs 1-5, TGP/GPs | 2:00 - 6:00P | 0.0 | 29.98 - 29.95 | F |
| 11/3/2013 | TGP/GP, GVs, E&SWs | 1:30 - 5:00P | 0.0 | 30.33 | S |

Notes: CPs = Compliance Probes;
S&EW = Supplemental and Extraction Wells; and
Leg numbers = 1, 1b, 2, 3A, 3B, 4 & 5.
Readings in **BOLD** represent **Compliance Probe (CP)** readings greater than 5.0%
Barometric Pressure represents pressure and range during Sampling Period. Trend: R = rising, F = falling, S = steady


CONFIDENTIALITY NOTE: THIS MESSAGE IS INTENDED ONLY FOR THE INDIVIDUAL/S OR ENTITY/IES TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT/S, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT/S. YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY R. M. BROYLES COMPANY, L. L. C. IMMEDIATELY BY TELEPHONE AT (937) 890-6985, AND RETURN THE ORIGINAL MESSAGE TO R. M. BROYLES COMPANY, L. L. C. AT THE ABOVE ADDRESS VIA THE U. S. POSTAL SERVICE.

# VALLEYCREST COMPLIANCE PROBE REPORT
## (% Methane and Oxygen by Volume)

| | 28-Oct | | 29-Oct | | 30-Oct | | 31-Oct | | 1-Nov | | 2-Nov | | 3-Nov | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Compliance Probes** | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 |
| CP1-1R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.8 | – | – |
| CP1-2 | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.2 | – | – |
| CP1-3 | – | – | – | – | – | – | – | – | – | – | 0.0 | 11.1 | – | – |
| CP1-4 | – | – | – | – | – | – | – | – | – | – | 0.0 | 12.7 | – | – |
| CP1-5 | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.2 | – | – |
| CP1-7 | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.1 | – | – |
| CP1-9 | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.2 | – | – |
| CP1-11 | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.8 | – | – |
| CP1-13 | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.1 | – | – |
| GP-01 (for CP1-14) | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.5 | – | – |
| GP-02 (for CP1b-1R) | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.0 | – | – |
| CP1b-2R | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.7 | – | – |
| CP1b-4R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.8 | – | – |
| CP1b-6R | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – |
| TGP1b-E | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.9 | – | – |
| TGP1b-A | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.0 | – | – |
| TGP1b-F | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.6 | – | – |
| TGP1b-B | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.7 | – | – |
| TGP1b-G | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.6 | – | – |
| TGP1b-C | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.0 | – | – |
| TGP1b-H | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.6 | – | – |
| TGP1b-D | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.0 | – | – |
| GP-03 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.6 | – | – |
| TGP-82 | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.8 | – | – |
| GP-04 | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.2 | – | – |
| TGP-83 | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – |
| CP2-1 | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.2 | – | – |
| CP2-2 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.9 | – | – |
| CP2-4R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.1 | – | – |
| CP2-5R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.7 | – | – |
| CP-6R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.7 | – | – |
| CP2-7 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.0 | – | – |
| CP2-9 | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.1 | – | – |
| TGP-06 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.8 | – | – |
| TGP-East | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.6 | – | – |
| TGP-Dads | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.7 | – | – |
| CP3-1RR | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.0 | – | – |
| CP3-2R | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.2 | – | – |
| CP3-4R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.8 | – | – |
| CP3-5R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.1 | – | – |
| CP3-7R | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.4 | – | – |
| CP3-8R | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.9 | – | – |
| CP3-9 | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.9 | – | – |
| CP3-10R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.0 | – | – |
| CP3-12R | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.5 | – | – |
| CP3-13R | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.6 | – | – |
| CP3-14R | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.0 | – | – |
| CP3-15R | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.5 | – | – |
| TGP-89 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.1 | – | – |
| CP4-A | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.3 | – | – |
| CP4-B | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.2 | – | – |
| CP4-C | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.7 | – | – |
| CP4-1 | – | – | – | – | – | – | – | – | – | – | 0.0 | 4.2 | – | – |
| CP4-2 | – | – | – | – | – | – | – | – | – | – | 0.0 | 13.9 | – | – |
| CP4-3 | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.9 | – | – |
| CP4-4 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.1 | – | – |
| CP4-6 | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.0 | – | – |
| CP5-1R | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.8 | – | – |
| CP5-3R | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.7 | – | – |
| CP5-4R | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.6 | – | – |
| CP5-6 | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.3 | – | – |
| CP5-8 | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.2 | – | – |

Notes: (1) Underline reading assumed to be aberrant based on historical behavior of the monitoring location;
(2) NR = Value not recorded.
(3) NS = Not sampled due to instrument failure or snow cover;
(4) Values in **Bold** Face Type exceed applicable concentration ceilings of 5% methane by volume
(5) Sampling instrument used is a calibrated CES Landtec GEM 2000 or equivalent multi-gas meter.
(6) Per the request of OEPA, Oxygen level readings were added to the Compliance Probe monitoring report table beginning March 5, 2009.

# VALLEYCREST COMPLIANCE PROBE REPORT
## (% Methane and Oxygen by Volume)

| | 28-Oct | | 29-Oct | | 30-Oct | | 31-Oct | | 1-Nov | | 2-Nov | | 3-Nov | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Compliance Probes** | **CH4** | **O2** | **CH4** | **O2** | **CH4** | **O2** | **CH4** | **16.3** | **CH4** | **O2** | **CH4** | **O2** | **CH4** | **O2** |
| TGP-76 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.4 |
| TGP-63 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.8 |
| TGP-57 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.9 |
| TGP-62 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 13.4 |
| GP-12 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.7 |
| TGP-60 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.0 |
| TGP-65 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.8 |
| TGP-66 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.0 |
| TGP-67 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.9 |
| TGP-68 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 11.6 |
| TGP-53 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 9.4 |
| TGP-59 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.1 |
| TGP-58 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.8 |
| GP-14 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.2 |
| TGP-87 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.9 |
| TGP-88 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.3 |
| TGP-69 | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.4 | – | – |
| TGP-90 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.5 | – | – |
| GP-17 | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.1 | – | – |
| TGP-91 | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.2 | – | – |
| GP-18 | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.9 | – | – |
| TGP-73 | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.8 | – | – |
| TGP-74 | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.0 | – | – |
| TGP-84 | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.5 | – | – |
| TGP-75 | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.6 | – | – |
| TGP-85 | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.0 | – | – |
| TGP-72 | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.0 | – | – |
| TGP-86 | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.2 | – | – |
| TGP-32 | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.6 | – | – |

(1) Underline reading assumed to be aberrant based on historical behavior of the monitoring location;
(2) NR = Value not recorded.
(3) NS = Not sampled due to instrument failure;
(4) Values in **Bold** Face Type exceed applicable concentration ceilings of 5% methane by volume
(5) Sampling instrument used is a calibrated CES Landtec GEM 2000 or equivalent multi-gas meter.
(6) Per the request of OEPA, Oxygen level readings were added to the Compliance Probe monitoring report table beginning March 5, 2009.

# VALLEYCREST GAS VENT AND WELL REPORT
## (% Gas by Volume)

| Week of: | Oct 14 - Oct 20 | | | | | | Week of: | Oct 28 - Nov 03 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Wellhead ID** | **Vacuum** | **Temp** | **CH4** | **O2** | **CO2** | **Bal** | **Wellhead ID** | **Vacuum** | **Temp** | **CH4** | **O2** | **CO2** | **Bal** |
| **LEG 1** | – | – | – | – | – | – | **LEG 1** | -1.80 | – | – | – | – | – |
| GV1-1 | – | 66 | 12.1 | 2.2 | 19 | 67 | GV1-1 | – | 50 | 27.6 | 0.4 | 28 | 44 |
| GV1-2 | – | – | 12.4 | 6.2 | 18 | 63 | GV1-2 | – | – | 14.4 | 0.0 | 26 | 60 |
| GV1-3 | – | – | 22.8 | 3.4 | 25 | 49 | GV1-3 | – | – | 28.8 | 0.0 | 31 | 40 |
| GV1-4 | – | – | 13.4 | 5.8 | 17 | 64 | GV1-4 | – | – | 32.1 | 0.0 | 29 | 39 |
| GV1-5 | – | – | 3.4 | 12.8 | 7.0 | 77 | GV1-5 | – | – | 30.4 | 0.0 | 28 | 42 |
| GV1-6 | – | – | 3.0 | 14.9 | 5.4 | 77 | GV1-6 | – | – | 25.7 | 0.0 | 28 | 46 |
| GV1-7 | – | 60 | 0.0 | 16.1 | 2.5 | 81 | GV1-7 | – | – | 0.4 | 12.4 | 2.4 | 85 |
| GV1-8 | – | – | 5.8 | 6.0 | 16 | 72 | GV1-8 | – | – | 19.3 | 0.6 | 26 | 54 |
| GV1-9 | – | – | 8.2 | 6.7 | 11 | 74 | GV1-9 | – | – | 19.5 | 0.0 | 25 | 56 |
| **GV1-10X** | – | – | 8.1 | 4.1 | 18 | 70 | **GV1-10X** | – | – | 15.7 | 0.0 | 25 | 59 |
| GV1-11 | – | – | 1.7 | 17.0 | 4.9 | 76 | GV1-11 | – | – | 3.5 | 10.2 | 6.6 | 80 |
| GV1-12 | – | – | 13.2 | 4.1 | 14 | 69 | GV1-12 | – | – | 21.4 | 3.2 | 23 | 52 |
| GV1-13 | – | – | 2.9 | 8.3 | 11 | 78 | GV1-13 | – | – | 9.3 | 3.9 | 18 | 69 |
| **LEG 1b** | – | – | – | – | – | – | **LEG 1b** | -1.19 | – | – | – | – | – |
| GV1b-1 | – | – | 0.7 | 9.6 | 7.0 | 83 | GV1b-1 | – | – | 0.8 | 8.7 | 9.3 | 81 |
| GV1b-2 | – | – | 0.2 | 15.4 | 4.1 | 80 | GV1b-2 | – | – | 4.7 | 15.3 | 6.6 | 73 |
| GV1b-3 | – | – | 1.5 | 16.6 | 4.6 | 77 | GV1b-3 | – | – | 2.9 | 11.3 | 10 | 76 |
| GV1b-4 | – | – | 0.8 | 15.2 | 9.4 | 75 | GV1b-4 | – | – | 1.0 | 10.0 | 10 | 79 |
| GV1b-5 | – | 60 | 0.5 | 8.7 | 12 | 79 | GV1b-5 | – | 60 | 1.2 | 13.8 | 4.9 | 80 |
| **LEG 2** | – | – | – | – | – | – | **LEG 2** | -0.15 | – | – | – | – | – |
| GV2-1 | – | – | 2.1 | 14.1 | 7.1 | 77 | GV2-1 | – | – | 2.9 | 12.0 | 9.7 | 75 |
| GV2-2 | – | 82 | 0.1 | 14.6 | 7.1 | 78 | GV2-2 | – | 76 | 0.2 | 11.9 | 8.4 | 80 |
| GV2-3 | – | 82 | 0.3 | 9.5 | 4.7 | 86 | GV2-3 | – | 80 | 4.4 | 6.3 | 15 | 74 |
| GV2-4 | – | 86 | 0.5 | 8.0 | 13 | 79 | GV2-4 | – | 86 | 4.9 | 4.6 | 15 | 76 |
| **LEG 3** | – | – | – | – | – | – | **LEG 3** | -0.40 | – | – | – | – | – |
| GV3-1 | – | – | 38.4 | 5.1 | 29 | 28 | GV3-1 | – | – | 58.5 | 0.0 | 32 | 10 |
| GV3-2 | – | – | 42.6 | 1.5 | 26 | 30 | GV3-2 | – | – | 49.1 | 0.5 | 29 | 21 |
| GV3-3 | – | – | 1.8 | 13.5 | 4.9 | 80 | GV3-3 | – | – | 4.6 | 11.7 | 9.3 | 74 |
| GV3-4 | – | 60 | 3.1 | 8.8 | 4.4 | 84 | GV3-4 | – | 58 | 12.8 | 1.7 | 19 | 67 |
| GV3-5 | – | – | 7.7 | 4.5 | 16 | 72 | GV3-5 | – | – | 9.9 | 1.8 | 17 | 71 |
| GV3-6 | – | – | 5.1 | 2.6 | 13 | 79 | GV3-6 | – | – | 4.7 | 1.4 | 15 | 79 |
| GV3-7 | – | – | 4.5 | 1.7 | 15 | 79 | GV3-7 | – | – | 3.3 | 0.8 | 15 | 81 |
| GV3-8 | – | – | 4.1 | 4.8 | 15 | 76 | GV3-8 | – | – | 2.1 | 2.3 | 14 | 82 |
| GV3-9 | – | – | 4.8 | 2.7 | 15 | 78 | GV3-9 | – | – | 7.5 | 3.6 | 13 | 76 |
| **GV3-10 X** | – | – | 1.5 | 3.4 | 10 | 85 | **GV3-10 X** | – | – | 0.5 | 3.5 | 14 | 82 |
| GV3-11 | – | – | 3.0 | 1.2 | 18 | 78 | GV3-11 | – | – | 5.0 | 0.6 | 18 | 76 |
| GV3-12 | – | – | 4.5 | 3.3 | 16 | 76 | GV3-12 | – | – | 9.0 | 1.4 | 17 | 73 |
| GV3-13 | – | – | 3.2 | 3.1 | 17 | 77 | GV3-13 | – | – | 11.2 | 3.2 | 16 | 70 |
| GV3-14 | – | – | 20.9 | 0.7 | 22 | 56 | GV3-14 | – | – | 27.2 | 0.0 | 24 | 49 |
| **LEG 3** | – | – | – | – | – | – | **LEG 3** | – | – | – | – | – | – |
| **LEG 4** | – | – | – | – | – | – | **LEG 4** | -0.49 | – | – | – | – | – |
| GV4-C | – | 70 | 1.8 | 4.0 | 4.0 | 90 | GV4-C | – | 64 | 0.9 | 9.5 | 12.0 | 78 |
| GV4-B | – | – | 0.7 | 15.8 | 16 | 68 | GV4-B | – | – | 0.1 | 2.2 | 16 | 82 |
| GV4-A | – | – | 1.4 | 12.7 | 13 | 73 | GV4-A | – | – | 0.8 | 5.7 | 13 | 81 |
| GV4-1 | – | – | 10.0 | 18.0 | 18 | 54 | GV4-1 | – | – | 9.6 | 4.1 | 18 | 68 |
| GV4-2 | – | – | 6.0 | 7.0 | 7.0 | 80 | GV4-2 | – | – | 9.3 | 12.5 | 11.0 | 67 |
| GV4-3 | – | – | 16.5 | 17.9 | 18 | 48 | GV4-3 | – | – | 2.7 | 9.7 | 11 | 77 |
| **GV4-4 X** | – | – | 0.0 | 1.4 | 1.4 | 97 | **GV4-4 X** | – | – | 0.0 | 18.5 | 0.4 | 81 |
| GV4-5 | – | – | 13.1 | 14.1 | 14 | 59 | GV4-5 | – | – | 13.8 | 6.8 | 17 | 62 |
| GV4-6 | – | – | 1.8 | 9.8 | 10 | 78 | GV4-6 | – | – | 3.1 | 9.8 | 10 | 77 |
| GV4-7 | – | – | 18.0 | 23.8 | 24 | 34 | GV4-7 | – | – | 25.0 | 2.3 | 24 | 49 |
| **LEG 5** | – | – | – | – | – | – | **LEG 5** | -0.62 | – | – | – | – | – |
| GV5-1 | – | 80 | 0.4 | 0.6 | 0.6 | 98 | GV5-1 | – | 80 | 0.3 | 19.3 | 0.8 | 80 |
| GV5-2 | – | – | 0.0 | 0.2 | 0.2 | 100 | GV5-2 | – | – | 0.2 | 19.5 | 1.4 | 79 |
| GV5-3 | – | – | 0.0 | 0.1 | 0.1 | 100 | GV5-3 | – | – | 1.4 | 14.9 | 4.8 | 79 |
| GV5-4 | – | – | 0.8 | 2.4 | 2.4 | 94 | GV5-4 | – | – | 2.5 | 12.8 | 5.7 | 79 |
| GV5-5 | – | – | 6.7 | 9.5 | 10 | 74 | GV5-5 | – | – | 13.1 | 3.1 | 16 | 68 |
| GV5-6 | – | – | 1.6 | 4.6 | 4.6 | 89 | GV5-6 | – | – | 0.3 | 17.4 | 1.7 | 81 |
| GV5-7 | – | – | 1.3 | 4.1 | 4.1 | 91 | GV5-7 | – | – | 0.3 | 18.1 | 2.5 | 79 |
| GV5-8 | – | – | 1.2 | 4.0 | 4.0 | 91 | GV5-8 | – | – | 12.6 | 4.2 | 18 | 65 |
| GV5-9 | – | – | 1.0 | 2.8 | 2.6 | 94 | GV5-9 | – | – | 15.5 | 0.0 | 21 | 64 |

Notes: (1) Underline reading assumed to be aberrant based on historical behavior of the monitoring location;
(2) NR = Value not recorded;
(3) NS = Not sampled due to instrument failure;
(4) Sampling instrument used is a calibrated CES Landtec GEM 2000 or equivalent multi-gas meter.
(5) Temperature readings recorded from well head thermometers;
(6) NAM = Not Accessible for Monitoring;
(7) Wellheads in BOLD with X have been disconnected or valve closed; and
(8) Bal (Nitrogen) levels are the estimated balance gas remaining after deducting for CH4 (methane), O2 (oxygen), and CO2 (carbon dioxide).

# VALLEYCREST GAS VENT AND WELL REPORT
(% Gas by Volume)

| Week of: | Oct 14 - Oct 20 | | | | | | Week of: | Oct 28 - Nov 03 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Supplement/Extraction Well | Valve Notch | Vacuum | CH4 | O2 | CO2 | Bal | Supplement/ Extraction Well | Valve Notch | Vacuum | CH4 | O2 | CO2 | Bal |
| EW-1 | – | – | 7.5 | 5.4 | 14 | 73 | EW-1 | -0.75 | – | 15.9 | 6.6 | 19 | 59 |
| EW-2 | – | – | 0.0 | 14.3 | 7.0 | 79 | EW-2 | -0.56 | – | 0.1 | 13.1 | 7.8 | 79 |
| EW-3 | – | – | 18.8 | 2.8 | 23 | 55 | EW-3 | -0.37 | – | 23.0 | 0.9 | 23 | 53 |
| EW-4 | – | – | 15.6 | 2.0 | 24 | 58 | EW-4 | – | – | 22.2 | 0.2 | 23 | 55 |
| EW-5 | – | – | 36.6 | 0.0 | 31 | 32 | EW-5 | – | – | 35.8 | 0.0 | 29 | 35 |
| EW-6 | – | – | 18.8 | 0.5 | 21 | 60 | EW-6 | – | – | 27.0 | 0.0 | 26 | 47 |
| EW-7 | – | – | 24.9 | 0.0 | 25 | 50 | EW-7 | – | – | 21.3 | 0.0 | 24 | 55 |
| EW-8 | – | – | 29.8 | 0.0 | 24 | 46 | EW-8 | – | – | 28.2 | 0.0 | 27 | 45 |
| EW-9 | – | – | 36.2 | 0.0 | 30 | 34 | EW-9 | – | – | 36.5 | 0.0 | 29 | 35 |
| EW-10 | – | – | 8.4 | 4.4 | 18 | 69 | EW-10 | -0.55 | – | 1.2 | 5.4 | 11 | 82 |
| EW-11 | – | – | 1.8 | 15.1 | 4.5 | 79 | EW-11 | -0.82 | – | 1.1 | 18.7 | 2.3 | 78 |
| EW-12 | – | – | 1.7 | 12.2 | 5.9 | 80 | EW-12 | -0.68 | – | 1.2 | 13.1 | 6.3 | 79 |
| SW1 | – | – | 36.5 | 0.3 | 33 | 30 | SW1 | – | – | 36.0 | 0.0 | 31 | 33 |
| SW2 | – | – | 23.8 | 0.0 | 30 | 46 | SW2 | – | – | 36.7 | 0.0 | 30 | 33 |
| SW3 | – | – | – | – | – | – | SW3 | – | – | – | – | – | – |
| NW1 | – | – | 10.0 | 2.1 | 30 | 58 | NW1 | – | – | 16.8 | 0.2 | 25 | 58 |
| NW2 | – | – | 13.8 | 0.3 | 33 | 53 | NW2 | – | – | 49.0 | 0.0 | 35 | 16 |
| NW3 | – | – | 39.6 | 0.0 | 33 | 27 | NW3 | – | – | 46.5 | 0.0 | 35 | 19 |
| NW4 | – | – | 24.1 | 0.0 | 22 | 54 | NW4 | – | – | 21.4 | 0.0 | 27 | 52 |
| NW5 | – | – | 11.4 | 3.2 | 14 | 71 | NW5 | – | – | 14.7 | 2.6 | 25 | 58 |
| NW6 | – | – | 38.8 | 0.0 | 32 | 29 | NW6 | – | – | 62.9 | 0.0 | 38 | 0 |
| NW7 | – | – | 58.9 | 0.0 | 39 | 2 | NW7 | – | – | 60.1 | 0.0 | 38 | 2 |
| NW8 | – | – | 12.2 | 0.0 | 24 | 64 | NW8 | – | – | 14.1 | 0.0 | 24 | 62 |
| WC1 | – | – | 42.6 | 0.0 | 31 | 26 | WC1 | – | – | 42.6 | 0.0 | 31 | 26 |
| WC4 | – | – | – | – | – | – | WC4 | – | – | – | – | – | – |
| FLARE 90 | – | -4.00+ | – | – | – | – | FLARE 90 | – | -4.00+ | – | – | – | – |

Notes: (1) Underline reading assumed to be aberrant based on historical behavior of the monitoring location;
(2) NR = Value not recorded;
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(4) Sampling instrument used is a calibrated CES Landtec GEM 2000 or equivalent multi-gas meter.
(5) Temperature readings recorded from well head thermometers;
(6) NAM = Not Accessible for Monitoring;
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(8) Bal (Nitrogen) levels are the estimated balance gas remaining after deducting for CH4 (methane), O2 (oxygen), and CO2 (carbon dioxide).

# R. M. BROYLES COMPANY, L. L. C.

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## REPORT COVER PAGE

To: Gary Saylor SCS <gsaylor@scsengineers.com> Pages: 5

From: Mike Broyles <rmbcom@woh.rr.com>

Date: 11/22/2013

Subject: LFG Monitoring Summary - Week of 11/11/13 - 11/17/13

Summary: All CPs remained in compliance this two week period.
There were no (0) flare flame failures due to low methane or other issues.
Flare operating cycles were 150 mins. ON and 570 mins. OFF.
Bi-Weekly Gas Vent, Extraction & Supplemental Well monitoring was performed November 17, 2013 with temps of 60 to 62°F with cloudy conditions.
Vacuum readings were last taken on November 3, 2013.
Valves were open to Legs 1b, 2, 3A, 3B, 4 and 5; and
Wells open were NW 1-8, WC 1 & 4, SW 1 & 2, EW 1-4, 7, 8, 10, 11 & 12.

Flare Operating Hours:

| | AM | | | | PM | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Date | on | off | on | off | on | off | on | off | "ON" Hours |
| 11/11/2013 | – | – | 9:00 | 11:30 | – | – | 9:00 | 11:30 | 5.0 |
| 11/12/2013 | – | – | 9:00 | 11:30 | – | – | 9:00 | 11:30 | 5.0 |
| 11/13/2013 | – | – | 9:00 | 11:30 | – | – | 9:00 | 11:30 | 5.0 |
| 11/14/2013 | – | – | 9:00 | 11:30 | – | – | 9:00 | 11:30 | 5.0 |
| 11/15/2013 | – | – | 9:00 | 11:30 | – | – | 9:00 | 11:30 | 5.0 |
| 11/16/2013 | – | – | 9:00 | 11:30 | – | – | 9:00 | 11:30 | 5.0 |
| 11/17/2013 | – | – | 9:00 | 11:30 | – | – | 9:00 | 11:30 | 5.0 |
| | | | | | | | | Total Hrs. = | 35.0 |

Notes: # = Flare shut down during operation.
* = Flare reset to operate full time with propane.
@ = Flare reset to operate full time with methane.
+ = Other reason
Times represent Flare Clock which is currently set to EST.
Flow rate was 190 - 220 scfm. Temperature range (middle thermocouple) 1520 - 1570° F.

Daily/Weekly Monitoring Times:

| Date | Probes/Wells Monitored | Sampling Period | Readings | Barometric Pressure | Trend |
|---|---|---|---|---|---|
| 11/11/2013 | – | – | – | – | – |
| 11/12/2013 | – | – | – | – | – |
| 11/13/2013 | – | – | – | – | – |
| 11/14/2013 | – | – | – | – | – |
| 11/15/2013 | CPs 1-2, TGP/GPs | 12:30 - 3:30P | 0.0 | 30.14 - 30.11 | F |
| 11/16/2013 | – | – | – | – | – |
| 11/17/2013 | CPs 3-5, TGP/GP, GVs, E&SWs | 9:30A - 3:00P | 0.0 | 29.77 - 29.57 | F |

Notes: CPs = Compliance Probes;
S&EW = Supplemental and Extraction Wells; and
Leg numbers = 1, 1b, 2, 3A, 3B, 4 & 5.
Readings in **BOLD** represent **Compliance Probe (CP)** readings greater than 5.0%
Barometric Pressure represents pressure and range during Sampling Period. Trend: R = rising, F = falling, S = steady


CONFIDENTIALITY NOTE: THIS MESSAGE IS INTENDED ONLY FOR THE INDIVIDUAL/S OR ENTITY/IES TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT/S, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT/S. YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY R. M. BROYLES COMPANY, L. L. C. IMMEDIATELY BY TELEPHONE AT (937) 890-6985, AND RETURN THE ORIGINAL MESSAGE TO R. M. BROYLES COMPANY, L. L. C. AT THE ABOVE ADDRESS VIA THE U. S. POSTAL SERVICE.

# VALLEYCREST COMPLIANCE PROBE REPORT
## (% Methane and Oxygen by Volume)

| | 11-Nov | | 12-Nov | | 13-Nov | | 14-Nov | | 15-Nov | | 16-Nov | | 17-Nov | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Compliance Probes** | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | O2 |
| CP1-1R | – | – | – | – | – | – | – | – | 0.0 | 17.7 | – | – | – | – |
| CP1-2 | – | – | – | – | – | – | – | – | 0.0 | 13.4 | – | – | – | – |
| CP1-3 | – | – | – | – | – | – | – | – | 0.0 | 10.5 | – | – | – | – |
| CP1-4 | – | – | – | – | – | – | – | – | 0.0 | 10.5 | – | – | – | – |
| CP1-5 | – | – | – | – | – | – | – | – | 0.0 | 13.4 | – | – | – | – |
| CP1-7 | – | – | – | – | – | – | – | – | 0.0 | 14.1 | – | – | – | – |
| CP1-9 | – | – | – | – | – | – | – | – | 0.0 | 16.0 | – | – | – | – |
| CP1-11 | – | – | – | – | – | – | – | – | 0.0 | 16.5 | – | – | – | – |
| CP1-13 | – | – | – | – | – | – | – | – | 0.0 | 19.8 | – | – | – | – |
| GP-01 (for CP1-14) | – | – | – | – | – | – | – | – | 0.0 | 17.7 | – | – | – | – |
| GP-02 (for CP1b-1R) | – | – | – | – | – | – | – | – | 0.0 | 16.6 | – | – | – | – |
| CP1b-2R | – | – | – | – | – | – | – | – | 0.0 | 20.4 | – | – | – | – |
| CP1b-4R | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – | – | – |
| CP1b-6R | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – | – | – |
| TGP1b-E | – | – | – | – | – | – | – | – | 0.0 | 20.3 | – | – | – | – |
| TGP1b-A | – | – | – | – | – | – | – | – | 0.0 | 20.7 | – | – | – | – |
| TGP1b-F | – | – | – | – | – | – | – | – | 0.0 | 20.7 | – | – | – | – |
| TGP1b-B | – | – | – | – | – | – | – | – | 0.0 | 19.7 | – | – | – | – |
| TGP1b-G | – | – | – | – | – | – | – | – | 0.0 | 20.6 | – | – | – | – |
| TGP1b-C | – | – | – | – | – | – | – | – | 0.0 | 20.4 | – | – | – | – |
| TGP1b-H | – | – | – | – | – | – | – | – | 0.0 | 20.7 | – | – | – | – |
| TGP1b-D | – | – | – | – | – | – | – | – | 0.0 | 20.3 | – | – | – | – |
| GP-03 | – | – | – | – | – | – | – | – | 0.0 | 19.0 | – | – | – | – |
| TGP-82 | – | – | – | – | – | – | – | – | 0.0 | 18.7 | – | – | – | – |
| GP-04 | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – | – | – |
| TGP-83 | – | – | – | – | – | – | – | – | 0.0 | 20.4 | – | – | – | – |
| CP2-1 | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – | – | – |
| CP2-2 | – | – | – | – | – | – | – | – | 0.0 | 20.0 | – | – | – | – |
| CP2-4R | – | – | – | – | – | – | – | – | 0.0 | 19.4 | – | – | – | – |
| CP2-5R | – | – | – | – | – | – | – | – | 0.0 | 18.6 | – | – | – | – |
| CP-6R | – | – | – | – | – | – | – | – | 0.0 | 19.7 | – | – | – | – |
| CP2-7 | – | – | – | – | – | – | – | – | 0.0 | 20.5 | – | – | – | – |
| CP2-9 | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – | – | – |
| TGP-06 | – | – | – | – | – | – | – | – | 0.0 | 19.0 | – | – | – | – |
| TGP-East | – | – | – | – | – | – | – | – | 0.0 | 14.2 | – | – | – | – |
| TGP-Dads | – | – | – | – | – | – | – | – | 0.0 | 20.1 | – | – | – | – |
| CP3-1RR | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.9 |
| CP3-2R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.1 |
| CP3-4R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.4 |
| CP3-5R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.2 |
| CP3-7R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.1 |
| CP3-8R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.5 |
| CP3-9 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.9 |
| CP3-10R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.9 |
| CP3-12R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.8 |
| CP3-13R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.4 |
| CP3-14R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.4 |
| CP3-15R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.0 |
| TGP-89 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.1 |
| CP4-A | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.2 |
| CP4-B | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.0 |
| CP4-C | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.0 |
| CP4-1 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 10.1 |
| CP4-2 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.8 |
| CP4-3 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.7 |
| CP4-4 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.1 |
| CP4-6 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.2 |
| CP5-1R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.5 |
| CP5-3R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.4 |
| CP5-4R | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.1 |
| CP5-6 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.6 |
| CP5-8 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.0 |

Notes: (1) Underline reading assumed to be aberrant based on historical behavior of the monitoring location;

(2) NR = Value not recorded.

(3) NS = Not sampled due to instrument failure or snow cover;

(4) Values in **Bold** Face Type exceed applicable concentration ceilings of 5% methane by volume

(5) Sampling instrument used is a calibrated CES Landtec GEM 2000 or equivalent multi-gas meter.

(6) Per the request of OEPA, Oxygen level readings were added to the Compliance Probe monitoring report table beginning March 5, 2009.

# VALLEYCREST COMPLIANCE PROBE REPORT
## (% Methane and Oxygen by Volume)

| | 11-Nov | | 12-Nov | | 13-Nov | | 14-Nov | | 15-Nov | | 16-Nov | | 17-Nov | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Compliance Probes** | CH4 | O2 | CH4 | O2 | CH4 | O2 | CH4 | 16.3 | CH4 | O2 | CH4 | O2 | CH4 | O2 |
| TGP-76 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.4 |
| TGP-63 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.7 |
| TGP-57 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 20.9 |
| TGP-62 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.1 |
| GP-12 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.5 |
| TGP-60 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 14.7 |
| TGP-65 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.9 |
| TGP-66 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.1 |
| TGP-67 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 12.9 |
| TGP-68 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 8.9 |
| TGP-53 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 15.9 |
| TGP-59 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.8 |
| TGP-58 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 17.1 |
| GP-14 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 16.4 |
| TGP-87 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 18.1 |
| TGP-88 | – | – | – | – | – | – | – | – | – | – | – | – | 0.0 | 19.0 |
| TGP-69 | – | – | – | – | – | – | – | – | 0.0 | 19.7 | – | – | – | – |
| TGP-90 | – | – | – | – | – | – | – | – | 0.0 | 19.6 | – | – | – | – |
| GP-17 | – | – | – | – | – | – | – | – | 0.0 | 15.3 | – | – | – | – |
| TGP-91 | – | – | – | – | – | – | – | – | 0.0 | 18.9 | – | – | – | – |
| GP-18 | – | – | – | – | – | – | – | – | 0.0 | 19.3 | – | – | – | – |
| TGP-73 | – | – | – | – | – | – | – | – | 0.0 | 18.4 | – | – | – | – |
| TGP-74 | – | – | – | – | – | – | – | – | 0.0 | 16.3 | – | – | – | – |
| TGP-84 | – | – | – | – | – | – | – | – | 0.0 | 18.0 | – | – | – | – |
| TGP-75 | – | – | – | – | – | – | – | – | 0.0 | 14.4 | – | – | – | – |
| TGP-85 | – | – | – | – | – | – | – | – | 0.0 | 17.0 | – | – | – | – |
| TGP-72 | – | – | – | – | – | – | – | – | 0.0 | 18.3 | – | – | – | – |
| TGP-86 | – | – | – | – | – | – | – | – | 0.0 | 19.0 | – | – | – | – |
| TGP-32 | – | – | – | – | – | – | – | – | 0.0 | 20.2 | – | – | – | – |

(1) Underline reading assumed to be aberrant based on historical behavior of the monitoring location;
(2) NR = Value not recorded.
(3) NS = Not sampled due to instrument failure;
(4) Values in **Bold** Face Type exceed applicable concentration ceilings of 5% methane by volume
(5) Sampling instrument used is a calibrated CES Landtec GEM 2000 or equivalent multi-gas meter.
(6) Per the request of OEPA, Oxygen level readings were added to the Compliance Probe monitoring report table beginning March 5, 2009.

# VALLEYCREST GAS VENT AND WELL REPORT
## (% Gas by Volume)

| Week of: | Oct 28 - Nov 03 | | | | | | Week of: | Nov 11 - Nov 17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wellhead ID | Vacuum | Temp | CH4 | O2 | CO2 | Bal | Wellhead ID | Vacuum | Temp | CH4 | O2 | CO2 | Bal |
| **LEG 1** | -1.80 | – | – | – | – | – | **LEG 1** | – | – | – | – | – | – |
| GV1-1 | – | 50 | 27.6 | 0.4 | 28 | 44 | GV1-1 | – | 58 | 10.6 | 0.7 | 22 | 67 |
| GV1-2 | – | – | 14.4 | 0.0 | 26 | 60 | GV1-2 | – | – | 5.5 | 7.7 | 6.6 | 80 |
| GV1-3 | – | – | 28.8 | 0.0 | 31 | 40 | GV1-3 | – | – | 8.4 | 11.9 | 11 | 69 |
| GV1-4 | – | – | 32.1 | 0.0 | 29 | 39 | GV1-4 | – | – | 0.0 | 20.2 | 0.2 | 80 |
| GV1-5 | – | – | 30.4 | 0.0 | 28 | 42 | GV1-5 | – | – | 27.2 | 0.6 | 27 | 45 |
| GV1-6 | – | – | 25.7 | 0.0 | 28 | 46 | GV1-6 | – | – | 26.3 | 1.2 | 27 | 46 |
| GV1-7 | – | – | 0.4 | 12.4 | 2.4 | 85 | GV1-7 | – | – | 0.9 | 16.2 | 0.8 | 82 |
| GV1-8 | – | – | 19.3 | 0.6 | 26 | 54 | GV1-8 | – | – | 18.3 | 1.5 | 25 | 55 |
| GV1-9 | – | – | 19.5 | 0.0 | 25 | 56 | GV1-9 | – | – | 18.0 | 1.1 | 24 | 57 |
| **GV1-10X** | – | – | 15.7 | 0.0 | 25 | 59 | **GV1-10X** | – | – | 16.8 | 1.2 | 23 | 59 |
| GV1-11 | – | – | 3.5 | 10.2 | 6.6 | 80 | GV1-11 | – | – | 0.5 | 17.6 | 6.5 | 75 |
| GV1-12 | – | – | 21.4 | 3.2 | 23 | 52 | GV1-12 | – | – | 22.2 | 1.2 | 26 | 51 |
| GV1-13 | – | – | 9.3 | 3.9 | 18 | 69 | GV1-13 | – | – | 3.9 | 2.0 | 17 | 77 |
| **LEG 1b** | -1.19 | – | – | – | – | – | **LEG 1b** | – | – | – | – | – | – |
| GV1b-1 | – | – | 0.8 | 8.7 | 9.3 | 81 | GV1b-1 | – | – | 0.8 | 12.8 | 7.9 | 79 |
| GV1b-2 | – | – | 4.7 | 15.3 | 6.6 | 73 | GV1b-2 | – | – | 0.4 | 19.7 | 3.8 | 76 |
| GV1b-3 | – | – | 2.9 | 11.3 | 10 | 76 | GV1b-3 | – | – | 5.1 | 14.7 | 7.6 | 73 |
| GV1b-4 | – | – | 1.0 | 10.0 | 10 | 79 | GV1b-4 | – | – | 1.0 | 10.4 | 10 | 79 |
| GV1b-5 | – | 60 | 1.2 | 13.8 | 4.9 | 80 | GV1b-5 | – | 60 | 0.7 | 12.5 | 7.5 | 79 |
| **LEG 2** | -0.15 | – | – | – | – | – | **LEG 2** | – | – | – | – | – | – |
| GV2-1 | – | – | 2.9 | 12.0 | 9.7 | 75 | GV2-1 | – | – | 2.2 | 15.0 | 7.4 | 75 |
| GV2-2 | – | 76 | 0.2 | 11.9 | 8.4 | 80 | GV2-2 | – | 80 | 0.0 | 13.8 | 7.4 | 79 |
| GV2-3 | – | 80 | 4.4 | 6.3 | 15 | 74 | GV2-3 | – | 86 | 4.5 | 5.8 | 15 | 75 |
| GV2-4 | – | 86 | 4.9 | 4.6 | 15 | 76 | GV2-4 | – | 90 | 1.0 | 4.6 | 15 | 79 |
| **LEG 3** | -0.40 | – | – | – | – | – | **LEG 3** | – | – | – | – | – | – |
| GV3-1 | – | – | 58.5 | 0.0 | 32 | 10 | GV3-1 | – | – | 61.1 | 0.0 | 34 | 5 |
| GV3-2 | – | – | 49.1 | 0.5 | 29 | 21 | GV3-2 | – | – | 52.1 | 0.0 | 30 | 18 |
| GV3-3 | – | – | 4.6 | 11.7 | 9.3 | 74 | GV3-3 | – | – | 21.5 | 8.7 | 20.0 | 50 |
| GV3-4 | – | 58 | 12.8 | 1.7 | 19 | 67 | GV3-4 | – | 54 | 15.7 | 1.1 | 20 | 63 |
| GV3-5 | – | – | 9.9 | 1.8 | 17 | 71 | GV3-5 | – | – | 17.0 | 0.0 | 21 | 62 |
| GV3-6 | – | – | 4.7 | 1.4 | 15 | 79 | GV3-6 | – | – | 5.0 | 0.0 | 16 | 79 |
| GV3-7 | – | – | 3.3 | 0.8 | 15 | 81 | GV3-7 | – | – | 3.4 | 0.0 | 17 | 80 |
| GV3-8 | – | – | 2.1 | 2.3 | 14 | 82 | GV3-8 | – | – | 5.4 | 0.0 | 16 | 79 |
| GV3-9 | – | – | 7.5 | 3.6 | 13 | 76 | GV3-9 | – | – | 12.2 | 0.6 | 17 | 70 |
| **GV3-10 X** | – | – | 0.5 | 3.5 | 14 | 82 | **GV3-10 X** | – | – | 4.7 | 0.0 | 18 | 77 |
| GV3-11 | – | – | 5.0 | 0.6 | 18 | 76 | GV3-11 | – | – | 7.4 | 0.0 | 20 | 73 |
| GV3-12 | – | – | 9.0 | 1.4 | 17 | 73 | GV3-12 | – | – | 16.2 | 0.0 | 19 | 65 |
| GV3-13 | – | – | 11.2 | 3.2 | 16 | 70 | GV3-13 | – | – | 10.9 | 0.0 | 24 | 65 |
| GV3-14 | – | – | 27.2 | 0.0 | 24 | 49 | GV3-14 | – | – | 27.5 | 0.0 | 24 | 49 |
| **LEG 3** | – | – | – | – | – | – | **LEG 3** | – | – | – | – | – | – |
| **LEG 4** | -0.49 | – | – | – | – | – | **LEG 4** | – | – | – | – | – | – |
| GV4-C | – | 64 | 0.9 | 9.5 | 12.0 | 78 | GV4-C | – | 60 | 1.6 | 5.9 | 13 | 80 |
| GV4-B | – | – | 0.1 | 2.2 | 16 | 82 | GV4-B | – | – | 0.6 | 0.8 | 16 | 83 |
| GV4-A | – | – | 0.8 | 5.7 | 13 | 81 | GV4-A | – | – | 1.5 | 3.3 | 15 | 80 |
| GV4-1 | – | – | 9.6 | 4.1 | 18 | 68 | GV4-1 | – | – | 9.5 | 4.7 | 15 | 71 |
| GV4-2 | – | – | 9.3 | 12.5 | 11.0 | 67 | GV4-2 | – | – | 18.1 | 5.0 | 19 | 58 |
| GV4-3 | – | – | 2.7 | 9.7 | 11 | 77 | GV4-3 | – | – | 2.6 | 8.4 | 12 | 77 |
| **GV4-4 X** | – | – | 0.0 | 18.5 | 0.4 | 81 | **GV4-4 X** | – | – | 0.0 | 16.8 | 1.3 | 82 |
| GV4-5 | – | – | 13.8 | 6.8 | 17 | 62 | GV4-5 | – | – | 21.7 | 0.5 | 25 | 53 |
| GV4-6 | – | – | 3.1 | 9.8 | 10 | 77 | GV4-6 | – | – | 3.8 | 9.1 | 12 | 75 |
| GV4-7 | – | – | 25.0 | 2.3 | 24 | 49 | GV4-7 | – | – | 26.9 | 1.2 | 27 | 45 |
| **LEG 5** | -0.62 | – | – | – | – | – | **LEG 5** | – | – | – | – | – | – |
| GV5-1 | – | 80 | 0.3 | 19.3 | 0.8 | 80 | GV5-1 | – | 80 | 2.5 | 18.9 | 2.8 | 76 |
| GV5-2 | – | – | 0.2 | 19.5 | 1.4 | 79 | GV5-2 | – | – | 0.0 | 20.6 | 0.9 | 79 |
| GV5-3 | – | – | 1.4 | 14.9 | 4.8 | 79 | GV5-3 | – | – | 37.2 | 0.3 | 30 | 33 |
| GV5-4 | – | – | 2.5 | 12.8 | 5.7 | 79 | GV5-4 | – | – | 13.4 | 0.4 | 22 | 64 |
| GV5-5 | – | – | 13.1 | 3.1 | 16 | 68 | GV5-5 | – | – | 19.6 | 0.0 | 26 | 54 |
| GV5-6 | – | – | 0.3 | 17.4 | 1.7 | 81 | GV5-6 | – | – | 9.2 | 0.1 | 22 | 69 |
| GV5-7 | – | – | 0.3 | 18.1 | 2.5 | 79 | GV5-7 | – | – | 8.8 | 0.0 | 22 | 69 |
| GV5-8 | – | – | 12.6 | 4.2 | 18 | 65 | GV5-8 | – | – | 16.3 | 0.5 | 22 | 61 |
| GV5-9 | – | – | 15.5 | 0.0 | 21 | 64 | GV5-9 | – | – | 15.1 | 2.6 | 20 | 62 |

Notes: (1) Underline reading assumed to be aberrant based on historical behavior of the monitoring location;
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(4) Sampling instrument used is a calibrated CES Landtec GEM 2000 or equivalent multi-gas meter.
(5) Temperature readings recorded from well head thermometers;
(6) NAM = Not Accessible for Monitoring;
(7) Wellheads in BOLD with X have been disconnected or valve closed; and
(8) Bal (Nitrogen) levels are the estimated balance gas remaining after deducting for CH4 (methane), O2 (oxygen), and CO2 (carbon dioxide).

# VALLEYCREST GAS VENT AND WELL REPORT
(% Gas by Volume)

| Week of: | Oct 28 - Nov 03 | | | | | | Week of: | Nov 11 - Nov 17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Supplement/Extraction Well | Valve Notch | Vacuum | CH4 | O2 | CO2 | Bal | Supplement/ Extraction Well | Valve Notch | Vacuum | CH4 | O2 | CO2 | Bal |
| EW-1 | -0.75 | – | 15.9 | 6.6 | 19 | 59 | EW-1 | – | – | 9.8 | 2.0 | 22 | 66 |
| EW-2 | -0.56 | – | 0.1 | 13.1 | 7.8 | 79 | EW-2 | – | – | 0.2 | 18.2 | 0.6 | 81 |
| EW-3 | -0.37 | – | 23.0 | 0.9 | 23 | 53 | EW-3 | – | – | 8.9 | 2.0 | 23 | 66 |
| EW-4 | – | – | 22.2 | 0.2 | 23 | 55 | EW-4 | – | – | 25.4 | 0.0 | 24 | 51 |
| EW-5 | – | – | 35.8 | 0.0 | 29 | 35 | EW-5 | – | – | 36.8 | 0.0 | 30 | 33 |
| EW-6 | – | – | 27.0 | 0.0 | 26 | 47 | EW-6 | – | – | 26.8 | 0.0 | 27 | 46 |
| EW-7 | – | – | 21.3 | 0.0 | 24 | 55 | EW-7 | – | – | 15.0 | 6.6 | 16 | 62 |
| EW-8 | – | – | 28.2 | 0.0 | 27 | 45 | EW-8 | – | – | 34.6 | 0.0 | 30 | 35 |
| EW-9 | – | – | 36.5 | 0.0 | 29 | 35 | EW-9 | – | – | 39.4 | 1.0 | 31 | 29 |
| EW-10 | -0.55 | – | 1.2 | 5.4 | 11 | 82 | EW-10 | – | – | 1.2 | 5.6 | 11 | 82 |
| EW-11 | -0.82 | – | 1.1 | 18.7 | 2.3 | 78 | EW-11 | – | – | 0.8 | 20.0 | 1.8 | 77 |
| EW-12 | -0.68 | – | 1.2 | 13.1 | 6.3 | 79 | EW-12 | – | – | 0.0 | 20.3 | 1.8 | 78 |
| SW1 | – | – | 36.0 | 0.0 | 31 | 33 | SW1 | – | – | 18.1 | 5.8 | 18 | 58 |
| SW2 | – | – | 36.7 | 0.0 | 30 | 33 | SW2 | – | – | 13.1 | 9.0 | 14 | 64 |
| SW3 | – | – | – | – | – | – | SW3 | – | – | – | – | – | – |
| NW1 | – | – | 16.8 | 0.2 | 25 | 58 | NW1 | – | – | 15.0 | 0.2 | 20 | 65 |
| NW2 | – | – | 49.0 | 0.0 | 35 | 16 | NW2 | – | – | 42.3 | 0.0 | 27 | 31 |
| NW3 | – | – | 46.5 | 0.0 | 35 | 19 | NW3 | – | – | 43.6 | 0.0 | 27 | 29 |
| NW4 | – | – | 21.4 | 0.0 | 27 | 52 | NW4 | – | – | 18.2 | 0.0 | 20 | 62 |
| NW5 | – | – | 14.7 | 2.6 | 25 | 58 | NW5 | – | – | 18.6 | 0.0 | 20 | 61 |
| NW6 | – | – | 62.9 | 0.0 | 38 | 0 | NW6 | – | – | 58.9 | 0.0 | 34 | 7 |
| NW7 | – | – | 60.1 | 0.0 | 38 | 2 | NW7 | – | – | 59.8 | 0.0 | 35 | 5 |
| NW8 | – | – | 14.1 | 0.0 | 24 | 62 | NW8 | – | – | 14.4 | 0.6 | 18 | 67 |
| WC1 | – | – | 42.6 | 0.0 | 31 | 26 | WC1 | – | – | 42.6 | 0.0 | 31 | 26 |
| WC4 | – | – | – | – | – | – | WC4 | – | – | – | – | – | – |
| FLARE 90 | – | -4.00+ | – | – | – | – | FLARE 90 | – | -4.00+ | – | – | – | – |

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