Recology
Yuba - Sutter
WASTE ZERO

January 30, 2015

Mr. Todd Del Frate
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670

RE: Landfill Gas Monitoring Program – Report and Monitoring Data for December 2014 and 4th Calendar Quarter 2014, Recology Yuba Sutter Landfill, Marysville, Ca

Dear Mr. Del Frate:

Please accept the attached report submitted as required by Cleanup and Abatement Order R5-2013-0704. This report conveys the landfill gas monitoring data collected during the month of December 2014 and 4th Calendar Quarter 2014.

The following statement is provided, as required by the CAO, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

If you have any questions or concerns, please contact me at (530) 743-6321.

Sincerely,

Phil Graham
General Manager

Attachments

cc: William A Davis, Yuba County Environmental Health

January 29, 2015 Project No. 1417772

Mr. Phil Graham
Recology Yuba Sutter
3001 N. Levee Road
Marysville, CA 95901

RE: LANDFILL GAS MONITORING PROGRAM – DECEMBER 2014 REPORT WITH MONITORING DATA
RECOLOGY YUBA SUTTER – WASTE MANAGEMENT UNIT LANDFILL 1
MARYSVILLE, CA

Dear Mr. Graham:

This monitoring report, required by Cleanup and Abatement Order R5-2013-0704 (Order) (Page 10, item 4), transmits the December 2014 landfill gas collection and control system (GCCS) monitoring data for Recology Yuba Sutter (RYS). The report includes the data from monitoring activities performed by Golder Associates Inc. (Golder) during the reporting period. The Order requires the monitoring data be provided for the LFG extraction wells, the perimeter extraction wells, and the Flare Station for the parameters listed in Attachment A of the Order. Monthly monitoring was completed in December and results are provided in this report. Quarterly or semi-annual monitoring completed during December includes perimeter probe monitoring and laboratory analysis of the landfill gas flare sample.

Monthly Wellfield Monitoring

Wellfield monitoring of the LFG extraction and perimeter wells was conducted on December 12 and 24. LFG extraction well locations are shown in the figure contained in Attachment 1. Extraction wells EW-01 through EW-21 are located in LF-2. Extraction wells EW-22 through EW-26 are located in LF-1. Perimeter extraction wells PEW-01 through PEW-22 are located along the western edge of LF-1. Extraction wells NEW-01 through NEW-08 and NEW-10 through NEW-15 are located in LF-3. The LFG extraction well monitoring results (including the monitoring data from the date of the Order) are provided in Attachment 2. The perimeter well monitoring results are provided in Attachment 3.

LFG Flare Operation and Monitoring

Flare temperature and flow were electronically monitored continuously during December. Instantaneous or recorded flare operating parameter readings are reported weekly and provided in Attachment 4. Please note that the temperature of the landfill gas into the flare is not a key operating parameter or an indication of flare operation. The combustion zone temperature is a key operating parameter and continuously monitored as required by the U. S. EPA New Source Performance Standards for Municipal Solid Waste Landfills. Therefore, the temperature into the flare is not provided as requested in the Order. The more meaningful flare combustion temperature is reported. The flare operated continuously during this monthly report period. Downtime events are recorded in the Flare Downtime Log in Attachment 5.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation

LFG Corrective Action Monitoring Points in LF-1

There is currently no LFG corrective action monitoring point requirement pending approval of the second revision to the Landfill Gas Monitoring Work Plan submitted in April 2014.

Perimeter LFG Migration Monitoring

The fourth quarter 2014 monitoring for perimeter gas migration monitoring probes GP-1 through GP-15 was completed in December. Results are provided in Attachment 6.

Semi-Annual Halogenated VOC Analysis (LFG)

On a semi-annual basis, a sample of the LFG being combusted in the flare is collected and analyzed by US EPA Method TO-15. The sample was collected on December 17, 2014, and submitted to BC Laboratories, Inc. for analysis. The laboratory report is provided in Attachment 7.

Future Monitoring Events

The next quarterly probe monitoring event will be conducted prior to March 31, 2015. The next required semi-annual landfill gas sample will also be collected prior to June 30, 2015. The first semi-annual and first quarter 2015 monitoring and sampling results will be provided in the March monthly report due May 1, 2015. There were no quarterly LF-1 corrective action monitoring points to report.

Closing

If you have any questions or concerns, please contact Rich at (408) 220-9223.

Sincerely,

GOLDER ASSOCIATES INC.

Richard S. Merrill
Senior Consultant

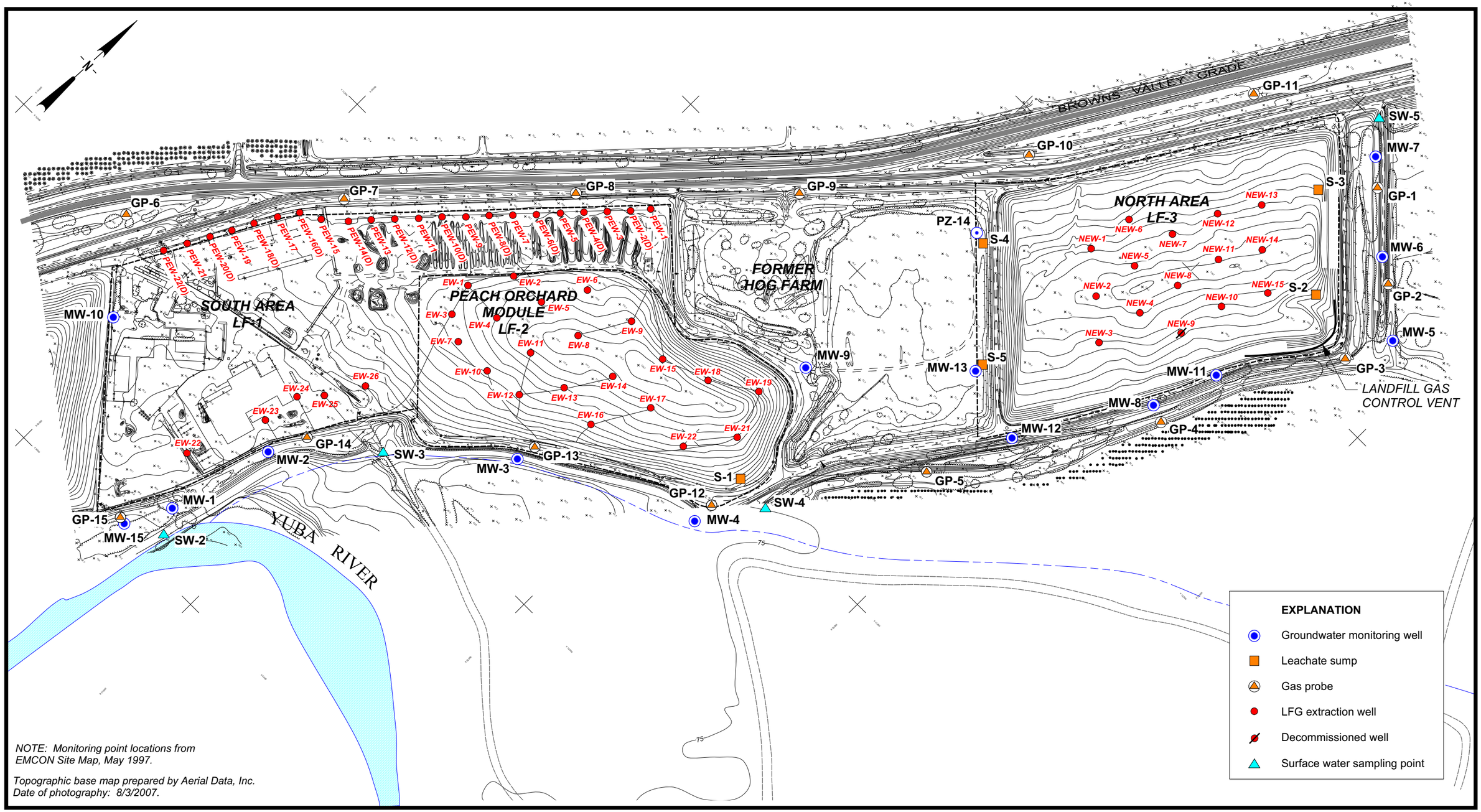
Kris Johnson, PG4496, CEG1763
Senior Consultant

cc: Bryan Clarkson, Recology Environmental Solutions
Jordan Norris, Recology Ostrom Road
Stephanie Kendall, Recology Yuba Sutter

List of Attachments

1) RYS Landfill Site Plan
2) LFG Extraction Wellfield Monitoring Data
3) Perimeter Extraction Well Monitoring Data
4) Flare Station Data
5) Flare Downtime Log
6) LFG Migration Monitoring Results – GP-1 through GP-15
7) Laboratory Report of Semi-Annual LFG Analysis

Attachment 1
Yuba Sutter Disposal Inc. Landfill
Site Plan



NOTE: Monitoring point locations from EMCON Site Map, May 1997.

Topographic base map prepared by Aerial Data, Inc.
Date of photography: 8/3/2007.

Golder Associates

SCALE: 0 400 800 FEET

YUBA SUTTER DISPOSAL INC. LANDFILL
RECOLOGY YUBA-SUTTER
YUBA COUNTY, CALIFORNIA

SITE PLAN

FIGURE
1

PROJECT NO.
123-97610

G:\YUBA SUTTER\123-97610\FIGURES\FIG 1_SITE PLAN_2007 TOPO w_NEW EXTRACTION WELLS.DSF 12/30/13

Attachment 2
LFG Extraction Wellfield Monitoring Data

Attachment 2 Landfill Gas Extraction Well Data Summary							
Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
LF-2							
EW-01	9/16/2013	41.7	31.2	0.1	27.0	80	-5.92
EW-01	10/14/2013	44.1	31.7	0.0	24.2	75	-6.12
EW-01	11/22/2013	39.5	31.8	0.0	28.7	64	-5.16
EW-01	12/10/2013	43.8	30.8	0.1	25.3	61	-3.77
EW-01	1/23/2014	48.1	32.6	0.0	19.3	63	-2.08
EW-01	2/6/2014	49.3	30.6	0.0	20.1	67	-2.04
EW-01	3/13/2014	50.7	30.3	0.1	18.9	71	-3.01
EW-01	4/16/2014	50.0	31.3	0.0	18.7	68	-3.63
EW-01	5/15/2014	49.7	30.0	0.0	20.3	79	-3.45
EW-01	6/27/2014	53.9	33.1	0.0	13.0	71	-3.44
EW-01	7/28/2014	45.1	30.4	0.0	24.5	86	-2.63
EW-01	8/19/2014	50.0	32.9	0.2	16.9	83	-3.42
EW-01	9/2/2014	47.6	31.7	0.2	20.5	73	-3.55
EW-01	10/9/2014	47.0	31.7	0.2	21.1	76	-4.01
EW-01	11/11/2014	46.8	32.9	0.3	20.0	68	-4.16
EW-01	12/12/2014	53.9	34.5	0.0	11.6	64	-4.47
EW-02	9/16/2013	29.9	29.3	0.0	40.8	81	-0.95
EW-02	10/14/2013	31.6	29.7	0.0	38.7	76	-0.60
EW-02	11/22/2013	29.0	28.4	0.4	42.2	67	-0.58
EW-02	12/10/2013	31.8	28.8	0.0	39.4	60	-0.48
EW-02	1/22/2014	38.2	44.9	0.0	16.9	62	-0.09
EW-02	2/12/2014	32.8	29.0	0.2	38.0	62	-1.36
EW-02	3/13/2014	27.8	26.2	0.2	45.8	67	-1.07
EW-02	4/30/2014	25.4	26.0	0.3	48.3	67	-1.64
EW-02	5/19/2014	24.4	25.8	0.0	49.8	76	-1.45
EW-02	6/27/2014	28.3	26.0	0.0	45.7	79	-1.39
EW-02	7/29/2014	25.7	24.8	0.0	49.5	81	-1.50
EW-02	8/25/2014	25.3	25.6	0.0	49.1	82	-1.19
EW-02	9/16/2014	25.2	25.7	0.1	49.0	83	-1.12
EW-02	10/9/2014	26.0	27.1	0.0	46.9	76	-1.82
EW-02	11/11/2014	27.6	28.3	0.0	44.1	71	-1.85
EW-02	12/12/2014	29.2	29.3	0.0	41.5	63	-2.47
EW-03	9/16/2013	48.5	26.9	1.5	23.1	79	-14.38
EW-03	10/14/2013	48.2	26.3	1.8	23.7	71	-15.07
EW-03	11/22/2013	47.8	26.6	2.3	23.3	65	-11.08
EW-03	12/10/2013	43.1	24.4	3.1	29.4	62	-7.68
EW-03	1/23/2014	22.5	12.4	11.9	53.2	61	-2.60
EW-03	2/12/2014	51.9	27.2	0.0	20.9	63	-10.06
EW-03	3/13/2014	50.3	25.9	0.1	23.7	72	-6.94
EW-03	4/16/2014	49.0	25.3	0.3	25.4	70	-8.10

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-03	5/15/2014	49.2	25.4	0.0	25.4	82	-7.71
EW-03	6/27/2014	54.0	26.4	0.5	19.1	72	-7.95
EW-03	7/28/2014	45.7	25.7	0.0	28.6	86	-6.11
EW-03	8/19/2014	47.9	24.9	1.9	25.3	82	-8.39
EW-03	9/2/2014	45.8	24.3	2.2	27.7	79	-8.38
EW-03	10/9/2014	45.6	25.0	2.1	27.3	75	-8.23
EW-03	11/11/2014	45.9	25.7	2.1	26.3	62	-8.94
EW-03	12/12/2014	53.8	30.9	0.0	15.3	64	-8.53
EW-04	9/16/2013	40.6	26.5	0.0	32.9	82	-6.00
EW-04	10/14/2013	42.5	26.7	0.0	30.8	76	-6.46
EW-04	11/22/2013	46.0	27.6	0.0	26.4	62	-5.57
EW-04	12/10/2013	45.6	27.3	0.0	27.1	62	-3.92
EW-04	1/23/2014	50.5	29.1	0.0	20.4	67	-2.01
EW-04	2/6/2014	52.0	27.9	0.0	20.1	63	-1.81
EW-04	3/13/2014	52.8	27.0	0.1	20.1	68	-3.19
EW-04	4/16/2014	53.1	27.1	0.0	19.8	64	-3.88
EW-04	5/15/2014	52.7	26.5	0.0	20.8	82	-3.71
EW-04	6/27/2014	55.0	28.4	0.0	16.6	71	-3.65
EW-04	7/28/2014	46.2	26.0	0.0	27.8	83	-2.20
EW-04	8/19/2014	49.5	26.6	0.0	23.9	79	-3.97
EW-04	9/2/2014	48.8	26.9	0.0	24.3	81	-4.27
EW-04	10/9/2014	49.7	27.3	0.0	23.0	78	-4.35
EW-04	11/11/2014	51.0	28.1	0.0	20.9	68	-4.47
EW-04	12/12/2014	56.1	29.4	0.0	14.5	63	-4.86
EW-05	9/16/2013	32.4	27.1	0.0	40.5	83	-1.15
EW-05	10/14/2013	33.1	27.9	0.0	39.0	72	-1.24
EW-05	11/22/2013	33.3	27.5	0.0	39.2	64	-0.98
EW-05	12/10/2013	32.7	27.9	0.0	39.4	62	-0.53
EW-05	1/23/2014	35.5	28.0	0.0	36.5	64	-0.50
EW-05	2/6/2014	35.9	27.1	0.0	37.0	59	-0.27
EW-05	3/13/2014	37.1	27.0	0.1	35.8	69	-0.75
EW-05	4/16/2014	37.4	26.5	0.1	36.0	68	-1.03
EW-05	5/15/2014	36.1	26.2	0.0	37.7	92	-0.97
EW-05	6/27/2014	39.8	29.2	0.0	31.0	73	-0.96
EW-05	7/28/2014	43.3	28.7	0.0	28.0	80	-0.37
EW-05	8/19/2014	38.9	28.2	0.0	32.9	86	-0.69
EW-05	9/2/2014	37.2	28.1	0.0	34.7	81	-0.99
EW-05	10/9/2014	38.9	28.6	0.0	32.5	76	-1.16
EW-05	11/11/2014	40.6	30.0	0.0	29.4	68	-1.15
EW-05	12/12/2014	43.2	30.1	0.0	26.7	61	-2.18
EW-06	9/16/2013	32.7	29.7	0.0	37.6	78	-1.76
EW-06	10/14/2013	34.1	29.1	0.0	36.8	66	-1.82
EW-06	11/22/2013	34.7	28.5	0.0	36.8	63	-1.85

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-06	12/10/2013	34.8	28.4	0.0	36.8	61	-1.04
EW-06	1/23/2014	38.0	30.4	0.0	31.6	63	-1.15
EW-06	2/6/2014	36.9	29.0	0.0	34.1	60	-0.95
EW-06	3/13/2014	38.3	28.4	0.1	33.2	67	-1.20
EW-06	4/16/2014	37.3	28.0	0.1	34.6	64	-1.40
EW-06	5/15/2014	35.7	27.1	0.0	37.2	70	-1.32
EW-06	6/27/2014	42.1	29.5	0.0	28.4	68	-1.54
EW-06	7/28/2014	42.4	29.4	0.0	28.2	78	-0.78
EW-06	8/19/2014	41.7	29.6	0.0	28.7	72	-1.00
EW-06	9/2/2014	40.7	29.5	0.0	29.8	78	-1.63
EW-06	10/9/2014	40.5	31.0	0.0	28.5	74	-1.71
EW-06	11/11/2014	42.4	31.7	0.0	25.9	61	-1.84
EW-06	12/12/2014	44.5	32.8	0.0	22.7	62	-2.86
EW-07	9/16/2013	8.1	19.5	2.7	69.7	79	-0.64
EW-07	10/14/2013	8.9	20.8	1.3	69.0	76	-0.61
EW-07	11/22/2013	11.0	18.6	2.8	67.6	63	-0.33
EW-07	12/10/2013	8.7	15.6	6.4	69.3	60	-0.15
EW-07	1/23/2014	28.8	21.2	0.3	49.7	63	-0.01
EW-07	2/12/2014	26.1	20.3	0.0	53.6	61	-0.33
EW-07	3/13/2014	32.7	18.5	0.1	48.7	65	-0.18
EW-07	4/16/2014	24.1	15.0	2.4	58.5	64	-0.38
EW-07	5/15/2014	25.5	16.6	0.0	57.9	79	-0.37
EW-07	6/27/2014	38.9	18.1	0.4	42.6	70	-0.34
EW-07	7/28/2014	43.1	19.3	0.0	37.6	87	-0.01
EW-07	8/19/2014	31.1	16.7	3.4	48.8	78	-0.46
EW-07	9/2/2014	11.8	7.5	12.4	68.3	76	-0.20
EW-07	10/9/2014	3.7	5.3	14.8	76.2	71	-0.11
EW-07	11/11/2014	0.2	2.2	17.1	80.5	62	-0.36
EW-07	12/12/2014	31.4	22.3	2.3	44.0	61	-1.75
EW-08	9/16/2013	31.0	26.6	0.0	42.4	80	-1.21
EW-08	10/14/2013	32.2	27.3	0.0	40.5	73	-1.40
EW-08	11/22/2013	34.2	28.0	0.0	37.8	68	-1.14
EW-08	12/10/2013	35.2	28.7	0.0	36.1	61	-0.47
EW-08	1/23/2014	40.4	31.0	0.1	28.5	65	-0.67
EW-08	2/6/2014	40.7	29.0	0.0	30.3	62	-0.30
EW-08	3/13/2014	42.5	29.0	0.1	28.4	70	-0.65
EW-08	4/16/2014	44.4	29.8	0.1	25.7	69	-0.87
EW-08	5/15/2014	43.4	27.9	0.0	28.7	78	-0.85
EW-08	6/27/2014	47.3	29.9	0.0	22.8	72	-0.78
EW-08	7/28/2014	44.8	28.7	0.0	26.5	87	-0.31
EW-08	8/19/2014	44.6	28.6	0.0	26.8	80	-0.43
EW-08	9/2/2014	43.3	28.7	0.0	28.0	78	-0.79
EW-08	10/9/2014	43.4	28.2	0.0	28.4	76	-0.97
EW-08	11/11/2014	44.8	30.3	0.0	24.9	70	-0.99

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-08	12/12/2014	47.5	32.1	0.0	20.4	63	-2.69
EW-09	9/16/2013	26.9	27.1	0.2	45.8	86	-0.99
EW-09	10/14/2013	28.6	27.6	0.2	43.6	73	-1.15
EW-09	11/22/2013	29.4	27.7	0.4	42.5	71	-1.33
EW-09	12/10/2013	30.8	28.6	0.2	40.4	67	-0.24
EW-09	1/23/2014	33.6	30.1	0.2	36.1	63	-0.49
EW-09	2/6/2014	34.4	29.1	0.1	36.4	61	-0.16
EW-09	3/13/2014	34.8	28.2	0.3	36.7	67	-0.41
EW-09	4/16/2014	34.1	28.5	0.4	37.0	65	-0.62
EW-09	5/15/2014	34.4	27.6	0.0	38.0	76	-0.62
EW-09	6/27/2014	38.2	29.9	0.0	31.9	71	-0.59
EW-09	7/28/2014	42.6	30.4	0.0	27.0	89	-0.12
EW-09	8/19/2014	37.3	29.7	0.0	33.0	81	-0.32
EW-09	9/2/2014	33.5	29.2	0.0	37.3	76	-0.68
EW-09	10/9/2014	32.9	28.5	0.0	38.6	76	-0.80
EW-09	11/11/2014	34.5	30.2	0.0	35.3	71	-0.78
EW-09	12/12/2014	45.0	32.2	0.0	22.8	67	-2.20
EW-10	9/16/2013	12.6	19.1	1.6	66.7	78	-9.20
EW-10	10/14/2013	11.2	18.7	1.7	68.4	73	-9.67
EW-10	11/22/2013	11.9	18.9	1.6	67.6	61	-9.95
EW-10	12/10/2013	12.6	19.1	1.2	67.1	60	-8.23
EW-10	1/23/2014	20.1	19.7	0.1	60.1	61	-1.23
EW-10	2/12/2014	23.4	19.4	0.0	57.2	61	-0.63
EW-10	3/13/2014	32.9	18.3	0.0	48.8	67	-0.68
EW-10	4/16/2014	36.2	18.3	0.1	45.4	69	-1.24
EW-10	5/15/2014	34.9	17.9	0.0	47.2	81	-1.33
EW-10	6/27/2014	38.1	20.0	0.0	41.9	70	-0.64
EW-10	7/28/2014	37.3	21.1	0.0	41.6	84	-0.54
EW-10	8/19/2014	36.0	21.3	0.0	42.7	81	-0.79
EW-10	9/2/2014	32.2	21.2	0.0	46.6	79	-0.67
EW-10	10/9/2014	35.9	22.8	0.0	41.3	73	-0.41
EW-10	11/11/2014	39.4	24.7	0.0	35.9	65	-0.57
EW-10	12/12/2014	50.5	26.2	0.0	23.3	62	-2.24
EW-11	9/16/2013	26.5	20.4	0.0	53.1	80	-8.31
EW-11	10/14/2013	26.5	20.5	0.0	53.0	77	-8.24
EW-11	11/22/2013	28.8	21.4	0.0	49.8	67	-7.03
EW-11	12/10/2013	30.7	21.3	0.0	48.0	62	-5.29
EW-11	1/23/2014	33.8	20.9	0.0	45.3	64	-3.27
EW-11	2/12/2014	30.9	20.6	0.0	48.5	63	-4.26
EW-11	3/13/2014	31.3	18.9	0.1	49.7	66	-4.59
EW-11	4/16/2014	31.6	18.3	0.0	50.1	71	-5.49
EW-11	5/15/2014	32.0	17.1	0.0	50.9	91	-5.04
EW-11	6/27/2014	37.0	18.5	0.0	44.5	74	-3.34

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-11	7/28/2014	44.0	15.4	0.0	40.6	90	-2.62
EW-11	8/19/2014	37.3	17.4	0.0	45.3	82	-3.37
EW-11	9/2/2014	32.7	17.5	0.0	49.8	82	-0.88
EW-11	10/9/2014	36.2	15.7	1.0	47.1	77	-0.50
EW-11	11/11/2014	33.2	21.2	0.0	45.6	70	-11.18
EW-11	12/12/2014	32.6	23.1	0.0	44.3	61	-12.95
EW-12	9/16/2013	20.4	22.8	0.0	56.8	81	-3.93
EW-12	10/14/2013	20.6	22.9	0.0	56.5	72	-3.70
EW-12	11/22/2013	20.7	23.2	0.0	56.1	64	-3.18
EW-12	12/10/2013	22.3	23.1	0.0	54.6	61	-2.16
EW-12	1/23/2014	25.5	23.4	0.0	51.1	62	-1.53
EW-12	2/12/2014	27.1	21.7	0.0	51.2	60	-0.54
EW-12	3/13/2014	31.1	20.2	0.1	48.6	68	-0.70
EW-12	4/16/2014	33.6	19.8	0.0	46.6	68	-0.93
EW-12	5/15/2014	34.2	18.9	0.0	46.9	79	-0.72
EW-12	6/27/2014	38.3	20.7	0.0	41.0	71	-0.80
EW-12	7/28/2014	42.8	21.5	0.0	35.7	81	-0.51
EW-12	8/19/2014	38.0	21.2	0.0	40.8	80	-0.77
EW-12	9/2/2014	35.9	21.3	0.0	42.8	81	-0.76
EW-12	10/9/2014	34.8	22.1	0.0	43.1	79	-0.76
EW-12	11/11/2014	35.4	24.1	0.0	40.5	63	-1.93
EW-12	12/12/2014	31.7	26.4	0.0	41.9	62	-2.78
EW-13	9/16/2013	47.8	21.7	0.0	30.5	82	-9.24
EW-13	10/14/2013	50.1	22.1	0.0	27.8	79	-9.74
EW-13	11/22/2013	53.2	22.6	0.0	24.2	76	-8.52
EW-13	12/10/2013	53.9	22.0	0.0	24.1	63	-5.48
EW-13	1/23/2014	59.2	23.6	0.0	17.2	65	-3.45
EW-13	2/12/2014	60.4	23.1	0.0	16.5	65	-4.64
EW-13	3/13/2014	62.1	22.2	0.0	15.7	73	-4.87
EW-13	4/16/2014	61.8	22.6	0.1	15.5	73	-5.68
EW-13	5/15/2014	62.0	21.9	0.0	16.1	100	-5.03
EW-13	6/27/2014	66.6	22.9	0.0	10.5	76	-5.38
EW-13	7/28/2014	59.0	20.4	0.0	20.6	100	-3.81
EW-13	8/19/2014	63.2	21.3	0.0	15.5	92	-5.30
EW-13	9/2/2014	60.7	21.9	0.0	17.4	82	-11.32
EW-13	10/9/2014	59.9	22.8	0.0	17.3	79	-14.79
EW-13	11/11/2014	58.3	24.8	0.0	16.9	71	-16.99
EW-13	12/12/2014	59.2	26.8	0.0	14.0	61	-14.26
EW-14	9/16/2013	35.5	27.2	0.0	37.3	81	-1.39
EW-14	10/14/2013	36.8	27.3	0.0	35.9	71	-1.53
EW-14	11/22/2013	39.9	27.7	0.0	32.4	68	-1.14
EW-14	12/10/2013	40.3	27.8	0.1	31.8	61	-0.43
EW-14	1/23/2014	46.8	30.3	0.0	22.9	61	-0.51

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-14	2/12/2014	46.5	29.3	0.0	24.2	63	-1.13
EW-14	3/13/2014	49.9	28.9	0.1	21.1	73	-0.62
EW-14	4/16/2014	47.4	29.3	0.0	23.3	72	-0.96
EW-14	5/15/2014	47.3	28.7	0.0	24.0	83	-0.89
EW-14	6/27/2014	51.6	30.5	0.0	17.9	70	-0.92
EW-14	7/28/2014	56.8	27.8	0.0	15.4	94	-0.44
EW-14	8/19/2014	50.0	29.3	0.0	20.7	83	-0.71
EW-14	9/2/2014	48.4	29.1	0.0	22.5	80	-0.98
EW-14	10/9/2014	46.1	29.4	0.0	24.5	79	-1.08
EW-14	11/11/2014	47.3	30.2	0.0	22.5	62	-1.26
EW-14	12/12/2014	49.7	31.6	0.0	18.7	62	-2.74
EW-15	9/16/2013	21.0	25.5	0.0	53.5	85	-0.48
EW-15	10/14/2013	20.9	25.2	0.0	53.9	74	-0.52
EW-15	11/22/2013	22.8	25.8	0.0	51.4	64	-0.25
EW-15	12/10/2013	23.5	26.2	0.0	50.3	65	-0.20
EW-15	1/23/2014	22.0	26.2	0.0	51.8	71	-0.28
EW-15	2/12/2014	17.6	24.1	0.0	58.3	60	-0.92
EW-15	3/13/2014	26.3	26.6	0.0	47.1	73	-0.03
EW-15	4/16/2014	28.0	27.1	0.0	44.9	76	-0.21
EW-15	5/15/2014	28.1	27.1	0.0	44.8	97	-0.27
EW-15	6/27/2014	31.8	28.9	0.0	39.3	73	-0.28
EW-15	7/28/2014	28.3	27.0	0.0	44.7	98	-0.09
EW-15	8/19/2014	20.2	28.3	0.0	51.5	80	-0.49
EW-15	9/2/2014	16.3	23.1	0.0	60.6	76	-0.54
EW-15	10/9/2014	23.0	25.7	0.0	51.3	82	-0.29
EW-15	11/11/2014	24.8	27.1	0.0	48.1	67	-0.45
EW-15	12/12/2014	32.9	30.2	0.0	36.9	61	-1.92
EW-16	9/16/2013	46.1	32.3	0.0	21.6	81	-0.69
EW-16	10/14/2013	51.6	33.4	0.0	15.0	71	-0.61
EW-16	11/22/2013	43.4	31.1	0.0	25.5	67	-2.21
EW-16	12/10/2013	45.6	32.8	0.0	21.6	62	-1.61
EW-16	1/23/2014	47.7	34.2	0.0	18.1	62	-1.16
EW-16	2/12/2014	46.2	32.2	0.0	21.6	62	-1.62
EW-16	3/13/2014	45.5	31.1	0.0	23.4	68	-1.41
EW-16	4/16/2014	41.9	30.0	0.1	28.0	71	-1.78
EW-16	5/15/2014	40.4	29.4	0.0	30.2	84	-1.62
EW-16	6/27/2014	49.9	31.5	0.0	18.6	70	-1.50
EW-16	7/28/2014	46.5	30.1	0.0	23.4	89	-1.22
EW-16	8/19/2014	47.2	33.5	0.0	19.3	84	-1.58
EW-16	9/2/2014	45.4	32.6	0.0	22.0	82	-2.68
EW-16	10/9/2014	40.4	33.2	0.0	26.4	77	-2.90
EW-16	11/11/2014	47.3	33.0	0.0	19.7	64	-1.72
EW-16	12/12/2014	41.6	33.6	0.0	24.8	62	-4.08

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-17	9/16/2013	27.1	28.5	0.0	44.4	83	-1.09
EW-17	10/14/2013	27.6	26.7	0.0	45.7	73	-1.12
EW-17	11/22/2013	31.0	27.7	0.0	41.3	64	-0.79
EW-17	12/10/2013	33.2	29.3	0.0	37.5	61	-0.18
EW-17	1/23/2014	41.4	32.6	0.0	26.0	64	-0.40
EW-17	2/12/2014	39.9	30.5	0.0	29.6	62	-1.03
EW-17	3/13/2014	40.9	30.4	0.0	28.7	71	-0.40
EW-17	4/16/2014	38.6	30.5	0.0	30.9	73	-0.71
EW-17	5/15/2014	36.1	29.0	0.0	34.9	81	-0.70
EW-17	6/27/2014	43.5	31.3	0.0	25.2	71	-0.73
EW-17	7/28/2014	41.6	31.0	0.0	27.4	83	-0.32
EW-17	8/19/2014	38.6	30.0	0.0	31.4	80	-0.55
EW-17	9/2/2014	36.9	29.8	0.0	33.3	73	-0.81
EW-17	10/9/2014	36.4	29.9	0.0	33.7	76	-0.86
EW-17	11/11/2014	36.5	30.2	0.0	33.3	64	-1.05
EW-17	12/12/2014	37.7	31.9	0.0	30.4	62	-0.98
EW-18	9/16/2013	36.5	31.0	0.0	32.5	83	-1.22
EW-18	10/14/2013	36.7	31.0	0.0	32.3	73	-1.17
EW-18	11/22/2013	40.9	31.5	0.0	27.6	66	-1.06
EW-18	12/10/2013	43.7	32.2	0.0	24.1	62	-0.39
EW-18	1/23/2014	45.2	34.5	0.0	20.3	67	-0.56
EW-18	2/12/2014	40.4	32.5	0.0	27.1	63	-0.84
EW-18	3/13/2014	44.1	32.4	0.1	23.4	68	-0.53
EW-18	4/16/2014	45.3	32.7	0.1	21.9	69	-0.68
EW-18	5/15/2014	44.8	32.5	0.0	22.7	82	-0.68
EW-18	6/27/2014	50.4	34.4	0.0	15.2	73	-0.68
EW-18	7/28/2014	45.5	32.4	0.0	22.1	89	-0.39
EW-18	8/19/2014	44.8	33.0	0.0	22.2	82	-0.71
EW-18	9/2/2014	40.9	31.9	0.0	27.2	79	-0.64
EW-18	10/9/2014	42.3	32.5	0.0	25.2	78	-0.55
EW-18	11/11/2014	43.8	33.4	0.0	22.8	62	-0.78
EW-18	12/12/2014	46.7	34.5	0.0	18.8	63	-2.31
EW-19	9/16/2013	38.1	31.6	0.0	30.3	83	-0.07
EW-19	10/14/2013	31.1	27.0	2.9	39.0	76	-2.96
EW-19	11/22/2013	41.2	32.8	0.0	26.0	72	-2.48
EW-19	12/10/2013	47.4	32.6	0.0	20.0	61	-1.56
EW-19	1/23/2014	47.4	36.2	0.0	16.4	67	-1.57
EW-19	2/12/2014	38.9	32.4	0.0	28.7	64	-2.11
EW-19	3/13/2014	41.2	32.5	0.1	26.2	74	-1.84
EW-19	4/16/2014	41.6	32.7	0.1	25.6	68	-2.03
EW-19	5/15/2014	41.0	31.6	0.0	27.4	86	-1.94
EW-19	6/27/2014	46.3	33.9	0.0	19.8	75	-1.67
EW-19	7/28/2014	50.0	32.3	0.0	17.7	91	-1.34
EW-19	8/19/2014	39.5	32.6	0.0	27.9	83	-1.82

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-19	9/2/2014	37.8	32.0	0.0	30.2	81	-1.30
EW-19	10/9/2014	40.9	32.8	0.0	26.3	79	-1.17
EW-19	11/11/2014	42.4	32.8	0.0	24.8	67	-1.40
EW-19	12/12/2014	42.8	34.6	0.0	22.6	63	-2.88
EW-20	9/16/2013	34.1	30.3	0.0	35.6	80	-6.71
EW-20	10/14/2013	36.9	28.6	0.0	34.5	73	-6.20
EW-20	11/22/2013	41.3	31.3	0.0	27.4	67	-5.42
EW-20	12/10/2013	42.5	31.4	0.0	26.1	61	-3.68
EW-20	1/23/2014	45.8	34.1	0.0	20.1	62	-2.36
EW-20	2/12/2014	41.8	31.9	0.0	26.3	61	-3.63
EW-20	3/13/2014	41.4	31.4	0.0	27.2	69	-3.67
EW-20	4/16/2014	39.3	31.4	0.0	29.3	71	-3.99
EW-20	5/15/2014	38.2	29.5	0.0	32.3	84	-3.73
EW-20	6/27/2014	42.1	32.3	0.0	25.6	70	-3.50
EW-20	7/28/2014	43.4	31.3	0.0	25.3	84	-2.99
EW-20	8/19/2014	40.6	32.0	0.0	27.4	81	-3.82
EW-20	9/2/2014	38.4	31.0	0.0	30.6	81	-3.15
EW-20	10/9/2014	40.8	32.2	0.0	27.0	79	-3.00
EW-20	11/11/2014	42.8	33.2	0.0	24.0	61	-3.42
EW-20	12/12/2014	43.9	34.3	0.0	21.8	61	-4.81
EW-21	9/16/2013	24.9	28.2	0.0	46.9	80	-0.16
EW-21	10/14/2013	26.4	28.2	0.0	45.4	75	-0.08
EW-21	11/22/2013	34.8	31.0	0.0	34.2	66	-0.08
EW-21	12/10/2013	37.4	31.1	0.0	31.5	61	-0.08
EW-21	1/23/2014	35.7	31.6	0.0	32.7	62	-0.08
EW-21	2/12/2014	22.8	27.1	0.0	50.1	63	-0.31
EW-21	3/13/2014	29.6	28.8	0.0	41.6	64	-0.23
EW-21	4/16/2014	27.3	26.9	0.0	45.8	71	-0.35
EW-21	5/15/2014	25.9	26.6	0.0	47.5	89	-0.35
EW-21	6/27/2014	28.9	28.5	0.0	42.6	70	-0.28
EW-21	7/28/2014	49.3	32.2	0.0	18.5	86	-0.13
EW-21	8/19/2014	32.7	29.4	0.0	37.9	81	-0.42
EW-21	9/2/2014	27.2	28.3	0.0	44.5	79	-0.25
EW-21	10/9/2014	30.3	29.8	0.0	39.9	79	-0.15
EW-21	11/11/2014	31.0	31.2	0.0	37.8	63	-0.26
EW-21	12/12/2014	31.6	31.1	0.0	37.3	61	-1.69

LF-1							
EW-22	9/12/2013	38.0	17.5	1.0	43.5		-1.15
EW-22	9/13/2013	34.4	19.4	0.9	45.3		-1.17
EW-22	9/20/2013	25.0	18.9	1.6	54.5		-1.37
EW-22	10/8/2013	19.5	18.2	1.2	61.1		-1.85
EW-22	10/15/2013	17.3	17.5	1.1	64.1	71	-1.71

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-22	11/18/2013	11.8	17.4	1.4	69.4	71	-1.88
EW-22	12/10/2013	14.0	16.8	0.6	68.6	67	-1.32
EW-22	1/23/2014	14.8	16.1	0.7	68.4	64	-0.89
EW-22	2/18/2014	14.2	16.1	0.0	69.7	62	-0.84
EW-22	3/17/2014	15.2	16.4	0.5	67.9	64	-1.43
EW-22	4/22/2014	11.1	15.1	2.3	71.5	72	-1.72
EW-22	5/19/2014	56.3	29.4	0.0	14.3	71	-5.01
EW-22	6/27/2014	10.0	15.2	3.5	71.3	76	-1.07
EW-22	7/29/2014	9.4	15.1	3.4	72.1	80	-0.99
EW-22	8/25/2014	10.1	17.8	1.1	71.0	82	-1.23
EW-22	9/16/2014	10.6	17.6	0.9	70.9	78	-1.06
EW-22	10/23/2014	9.6	18.5	1.5	70.4	64	-1.36
EW-22	11/19/2014	10.8	18.7	1.7	68.8	64	-1.27
EW-22	12/24/2014	19.1	19.2	0.0	61.7	61	-1.86
EW-23	9/12/2013	43.1	3.8	0.9	52.2		-0.78
EW-23	9/13/2013	40.3	33.9	0.7	24.1		-0.71
EW-23	9/20/2013	19.5	22.9	1.5	56.1		-0.85
EW-23	10/8/2013	12.3	20.2	1.6	65.9		-1.52
EW-23	10/15/2013	11.2	19.8	1.4	67.6	74	-1.62
EW-23	11/18/2013	6.9	19.2	2.0	71.9	74	-2.86
EW-23	12/10/2013	7.9	18.2	1.9	72.0	66	-1.73
EW-23	1/23/2014	14.8	16.1	0.7	68.4	64	-0.89
EW-23	2/18/2014	5.9	17.9	0.4	75.8	66	-0.94
EW-23	3/17/2014	5.4	16.7	2.3	75.6	65	-1.30
EW-23	4/22/2014	4.1	16.9	2.1	76.9	71	-1.19
EW-23	5/19/2014	5.7	18.5	1.2	74.6	71	-0.77
EW-23	6/27/2014	7.1	17.0	3.2	72.7	77	-0.81
EW-23	7/29/2014	9.2	16.6	3.6	70.6	80	-0.66
EW-23	8/25/2014	7.4	19.1	0.8	72.7	83	-0.86
EW-23	9/16/2014	7.5	20.1	0.1	72.3	78	-0.76
EW-23	10/23/2014	6.1	20.2	0.3	73.4	66	-0.94
EW-23	11/19/2014	7.1	21.4	1.4	70.1	66	-1.01
EW-23	12/24/2014	7.1	21.4	1.4	70.1	63	-0.06
EW-24	9/12/2013	55.9	35.3	0.5	8.3		-1.83
EW-24	9/13/2013	49.1	30.3	0.3	14.3		-0.86
EW-24	9/20/2013	27.7	28.1	0.0	44.2		-1.11
EW-24	10/8/2013	18.5	23.2	0.7	57.6		-1.53
EW-24	10/15/2013	15.5	21.6	1.9	61.0	69	-1.50
EW-24	11/18/2013	12.8	21.9	1.1	64.7	69	-1.72
EW-24	12/10/2013	14.0	20.5	0.6	64.9	65	-1.60
EW-24	1/23/2014	15.4	20.2	1.0	63.4	65	-1.23
EW-24	2/18/2014	14.5	20.3	0.0	65.2	64	-1.15
EW-24	3/17/2014	11.7	19.4	2.2	66.7	66	-1.22
EW-24	4/22/2014	11.4	19.3	1.6	67.7	74	-1.96

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-24	5/19/2014	14.2	21.9	0.3	63.6	74	-1.95
EW-24	6/27/2014	14.5	18.0	5.0	62.5	80	-1.79
EW-24	7/29/2014	15.9	19.8	3.0	61.3	79	-1.75
EW-24	8/25/2014	16.1	22.7	0.9	60.3	84	-2.03
EW-24	9/16/2014	16.0	22.0	0.6	61.4	79	-1.69
EW-24	10/23/2014	14.2	23.1	0.4	62.3	65	-2.20
EW-24	11/19/2014	14.6	23.4	0.4	61.6	65	-0.84
EW-24	12/24/2014	17.3	21.9	5.8	55.0	64	-0.83
EW-25	9/12/2013	19.8	19.5	7.6	53.1		-1.69
EW-25	9/13/2013	15.5	14.8	9.4	60.3		-0.45
EW-25	9/20/2013	12.2	18.4	5.7	63.7		-0.61
EW-25	10/8/2013	11.7	21.1	1.9	65.3		-0.44
EW-25	10/15/2013	10.5	20.9	1.6	67.0	73	-0.87
EW-25	11/18/2013	10.0	20.0	2.1	67.9	73	-0.50
EW-25	12/10/2013	11.7	19.3	1.6	67.4	68	-0.34
EW-25	1/23/2014	15.3	19.8	1.3	63.6	67	-0.22
EW-25	2/18/2014	15.0	20.9	0.0	64.1	65	-0.16
EW-25	3/17/2014	8.7	18.7	2.4	70.2	68	-0.35
EW-25	4/22/2014	9.2	19.4	1.6	69.8	73	-0.31
EW-25	5/19/2014	13.2	22.1	0.7	64.0	72	-0.24
EW-25	6/27/2014	18.8	23.7	1.1	56.4	79	-0.20
EW-25	7/29/2014	19.9	24.0	1.0	55.1	78	-0.33
EW-25	8/25/2014	16.5	23.1	1.0	59.4	84	-0.32
EW-25	9/16/2014	18.8	22.2	0.6	58.4	80	-0.32
EW-25	10/23/2014	13.1	22.3	1.5	63.1	65	-0.33
EW-25	11/19/2014	13.8	23.4	0.8	62.0	65	-0.46
EW-25	12/24/2014	18.6	23.7	2.4	55.3	65	-0.16
EW-26	9/12/2013	46.5	27.4	0.3	25.8		-2.43
EW-26	9/13/2013	55.7	32.2	0.0	12.1		-4.92
EW-26	9/20/2013	15.1	8.2	14.6	62.1		-5.32
EW-26	10/8/2013	60.2	32.6	0.0	7.2		-4.14
EW-26	10/15/2013	53.6	31.6	0.1	14.4	75	-7.05
EW-26	11/18/2013	25.2	18.4	8.2	48.2	75	-7.67
EW-26	12/10/2013	42.9	24.8	3.1	29.2	64	-6.27
EW-26	1/23/2014	20.7	14.7	9.3	55.3	62	-2.55
EW-26	2/18/2014	19.5	12.0	11.7	56.8	67	-3.76
EW-26	3/17/2014	21.0	18.6	4.7	55.7	66	-3.79
EW-26	4/22/2014	0.0	1.2	20.3	78.5	72	-5.66
EW-26	5/19/2014	10.9	16.7	0.4	72.0	71	-1.36
EW-26	6/27/2014	38.5	19.8	7.1	34.6	81	-4.25
EW-26	7/29/2014	37.2	19.9	5.8	37.1	81	-4.23
EW-26	8/25/2014	52.3	30.1	0.0	17.6	85	-5.21
EW-26	9/16/2014	61.7	31.6	0.0	6.7	81	-4.11
EW-26	10/23/2014	53.6	32.3	0.2	13.9	66	-5.88

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
EW-26	11/19/2014	40.5	24.9	5.9	28.7	66	-5.71
EW-26	12/24/2014	45.0	21.4	0.2	33.4	62	-3.27

North Area - LF-3							
NEW-01	9/16/2013	61.2	39.4	0.0	0.0	90	-1.77
NEW-01	10/14/2013	62.0	39.3	0.5	0.0	81	-1.57
NEW-01	11/22/2013	64.2	39.5	0.1	0.0	72	-1.79
NEW-01	12/10/2013	63.8	38.4	0.0	0.0	73	-1.11
NEW-01	1/23/2014	61.7	40.3	0.2	0.0	74	-0.96
NEW-01	2/13/2014	64.3	39.7	0.0	0.0	73	-3.48
NEW-01	3/13/2014	62.6	38.9	0.2	0.0	81	-3.29
NEW-01	4/22/2014	64.4	39.2	0.0	0.0	74	-4.24
NEW-01	5/15/2014	61.8	37.8	0.0	0.4	99	-1.83
NEW-01	6/27/2014	66.7	40.6	0.0	0.0	82	-2.19
NEW-01	7/28/2014	59.9	38.8	0.0	1.3	91	-1.55
NEW-01	8/19/2014	60.9	39.6	0.1	0.0	90	-3.01
NEW-01	9/16/2014	59.9	39.5	0.0	0.6	91	-2.54
NEW-01	10/9/2014	60.7	38.6	0.0	0.7	88	-2.54
NEW-01	11/11/2014	63.1	40.0	0.0	0.0	75	-3.37
NEW-01	12/24/2014	68.2	41.4	0.0	0.0	68	-5.88
NEW-02	9/16/2013	61.4	36.8	0.0	1.8	90	-0.42
NEW-02	10/14/2013	62.0	35.7	0.1	2.2	82	-0.46
NEW-02	11/22/2013	65.0	35.9	0.0	0.0	74	-0.03
NEW-02	12/19/2013	68.0	33.7	0.1	0.0	75	-0.36
NEW-02	1/23/2014	69.5	34.0	0.1	0.0	72	-0.91
NEW-02	2/13/2014	66.1	32.6	0.0	1.3	72	-2.32
NEW-02	3/13/2014	57.1	32.1	0.3	10.5	73	-2.40
NEW-02	4/22/2014	52.1	31.7	0.3	15.9	73	-3.12
NEW-02	5/15/2014	50.7	31.3	0.1	17.9	92	-1.99
NEW-02	6/27/2014	59.2	35.6	0.0	5.2	81	-2.21
NEW-02	7/28/2014	55.6	35.5	0.0	8.9	98	-1.57
NEW-02	8/19/2014	55.8	35.9	0.3	8.0	91	-3.04
NEW-02	9/16/2014	54.6	36.1	0.3	9.0	92	-2.55
NEW-02	10/9/2014	56.3	35.0	0.1	8.6	89	-1.94
NEW-02	11/11/2014	60.1	35.1	0.2	4.6	78	-2.68
NEW-02	12/24/2014	66.3	36.5	0.0	0.0	72	-5.04
NEW-03	9/16/2013	63.3	37.4	0.0	0.0	89	-1.79
NEW-03	10/14/2013	60.1	36.8	0.0	3.1	81	-1.58
NEW-03	11/22/2013	64.9	35.9	0.0	0.0	74	-1.80
NEW-03	12/10/2013	63.9	34.8	0.0	1.3	72	-1.49
NEW-03	1/23/2014	64.7	35.9	0.2	0.0	77	-0.90
NEW-03	2/13/2014	65.1	35.0	0.0	0.0	72	-3.53
NEW-03	3/13/2014	62.4	34.7	0.5	2.4	68	-3.32

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
NEW-03	4/22/2014	60.6	35.8	0.0	3.6	71	-4.34
NEW-03	5/15/2014	58.9	35.0	0.0	6.1	95	-2.08
NEW-03	6/27/2014	64.7	36.9	0.0	0.0	80	-2.27
NEW-03	7/28/2014	61.5	35.6	0.0	2.9	92	-1.62
NEW-03	8/19/2014	60.5	37.3	0.0	2.2	90	-3.10
NEW-03	9/16/2014	58.1	37.2	0.1	4.6	88	-2.60
NEW-03	10/9/2014	58.5	36.0	0.0	5.5	90	-2.75
NEW-03	11/11/2014	59.1	36.6	0.2	4.1	73	-3.55
NEW-03	12/24/2014	68.8	39.5	0.0	0.0	68	-6.14
NEW-04	9/16/2013	63.7	39.0	0.0	0.0	86	-0.89
NEW-04	10/14/2013	60.4	39.8	0.0	0.0	81	-0.89
NEW-04	11/22/2013	63.2	38.8	0.0	0.0	74	-0.95
NEW-04	12/10/2013	61.5	37.7	0.0	0.8	72	-0.49
NEW-04	1/23/2014	61.3	39.6	0.2	0.0	78	-0.59
NEW-04	2/13/2014	62.6	38.4	0.1	0.0	74	-2.70
NEW-04	3/13/2014	46.2	34.9	0.4	18.5	79	-2.67
NEW-04	4/22/2014	46.7	33.8	0.0	19.5	78	-3.51
NEW-04	5/15/2014	49.2	33.4	0.0	17.4	88	-1.54
NEW-04	6/27/2014	58.8	36.8	0.0	4.4	81	-1.72
NEW-04	7/28/2014	56.4	36.5	0.0	7.1	88	-1.15
NEW-04	8/19/2014	54.0	37.8	0.0	8.2	83	-2.37
NEW-04	9/16/2014	48.2	35.8	0.0	16.0	83	-1.94
NEW-04	10/9/2014	49.3	35.6	0.0	15.1	82	-2.13
NEW-04	11/11/2014	46.9	36.2	0.2	16.7	72	-2.82
NEW-04	12/24/2014	52.6	37.0	0.0	10.4	67	-4.79
NEW-05	9/16/2013	60.9	39.7	0.0	0.0	90	-1.44
NEW-05	10/14/2013	62.2	39.9	0.2	0.0	83	-1.37
NEW-05	11/22/2013	62.8	39.2	0.4	0.0	72	-1.60
NEW-05	12/10/2013	62.3	37.6	0.2	0.0	65	-1.48
NEW-05	1/23/2014	59.3	41.0	0.5	0.0	71	-0.96
NEW-05	2/13/2014	62.6	39.6	0.2	0.0	72	-3.65
NEW-05	3/13/2014	59.4	39.4	0.4	0.8	76	-3.46
NEW-05	4/22/2014	60.2	38.5	0.2	1.1	71	-4.36
NEW-05	5/15/2014	59.2	37.7	0.1	3.0	99	-2.08
NEW-05	6/27/2014	64.7	40.1	0.1	0.0	85	-2.24
NEW-05	7/28/2014	58.6	37.8	0.0	3.6	100	-1.60
NEW-05	8/19/2014	61.0	39.4	0.2	0.0	91	-3.10
NEW-05	9/16/2014	59.7	39.3	0.2	0.8	90	-2.62
NEW-05	10/9/2014	57.8	38.2	0.3	3.7	86	-2.60
NEW-05	11/11/2014	60.6	39.7	0.4	0.0	72	-3.55
NEW-05	12/24/2014	65.4	42.8	0.1	0.0	60	-6.02
NEW-06	9/16/2013	61.5	40.5	0.1	0.0	82	-0.53
NEW-06	10/14/2013	43.6	30.3	4.9	21.2	81	-0.58

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
NEW-06	11/22/2013	60.7	38.6	0.3	0.4	72	-0.32
NEW-06	12/10/2013	60.1	36.5	0.0	3.4	71	-0.35
NEW-06	1/23/2014	44.9	31.8	3.9	19.4	72	-0.32
NEW-06	2/13/2014	56.3	36.9	0.1	6.7	71	-1.93
NEW-06	3/13/2014	47.8	35.7	0.5	16.0	73	-1.75
NEW-06	4/22/2014	52.1	36.3	0.0	11.6	70	-2.57
NEW-06	5/15/2014	51.8	35.2	0.2	12.8	82	-0.95
NEW-06	6/27/2014	58.4	38.3	0.0	3.3	78	-1.09
NEW-06	7/28/2014	54.0	36.6	0.0	9.4	86	-0.56
NEW-06	8/19/2014	53.3	39.1	0.2	7.4	83	-1.36
NEW-06	9/16/2014	50.1	37.4	0.2	12.3	81	-1.21
NEW-06	10/9/2014	50.4	36.8	0.2	12.6	80	-1.29
NEW-06	11/11/2014	48.2	37.3	0.0	14.5	72	-1.64
NEW-06	12/24/2014	53.8	38.6	0.1	7.5	68	-3.00
NEW-07	9/16/2013	57.6	37.5	0.1	4.8	93	-0.08
NEW-07	10/14/2013	48.0	37.1	0.1	14.8	90	-0.02
NEW-07	11/22/2013	49.8	35.0	0.1	15.1	79	-0.01
NEW-07	12/19/2013	0.0	0.2	21.0	78.8	68	-0.27
NEW-07	1/27/2014	51.4	33.8	1.1	13.7	76	-0.48
NEW-07	2/13/2014	53.6	35.2	0.1	11.1	73	-0.86
NEW-07	3/13/2014	39.2	32.8	0.2	27.8	82	-0.75
NEW-07	4/22/2014	35.8	30.8	0.3	33.1	79	-1.76
NEW-07	5/15/2014	38.3	30.0	0.4	31.3	97	-0.38
NEW-07	6/27/2014	42.9	32.2	0.2	24.7	88	-0.72
NEW-07	7/28/2014	41.0	32.2	0.0	26.8	100	-0.13
NEW-07	8/19/2014	40.8	34.5	0.3	24.4	91	-0.72
NEW-07	9/16/2014	33.0	31.2	0.3	35.5	95	-0.37
NEW-07	10/9/2014	33.8	31.1	0.2	34.9	85	-0.56
NEW-07	11/11/2014	31.6	31.8	0.4	36.2	76	-0.88
NEW-07	12/24/2014	40.5	34.3	0.1	25.1	61	-2.09
NEW-08	9/16/2013	57.2	36.9	0.0	5.9	92	-0.27
NEW-08	10/14/2013	45.6	35.7	0.0	18.7	80	-0.35
NEW-08	11/22/2013	52.9	35.9	0.0	11.2	81	-0.18
NEW-08	12/10/2013	47.7	33.4	0.2	18.7	81	-0.12
NEW-08	1/23/2014	42.3	33.3	0.1	24.3	82	-0.29
NEW-08	2/13/2014	40.7	32.1	0.0	27.2	83	-1.89
NEW-08	3/13/2014	24.7	26.5	0.1	48.7	76	-2.04
NEW-08	4/22/2014	31.9	24.2	0.1	43.8	74	-1.35
NEW-08	5/15/2014	27.9	24.7	0.0	47.4	90	-0.19
NEW-08	6/27/2014	38.5	28.5	0.0	33.0	90	-0.31
NEW-08	7/28/2014	45.7	30.8	0.0	23.5	95	-0.14
NEW-08	8/19/2014	37.0	33.2	0.1	29.7	90	-1.27
NEW-08	9/16/2014	31.4	30.5	0.0	38.1	82	-0.92
NEW-08	10/9/2014	32.8	30.8	0.0	36.4	90	-1.04

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
NEW-08	11/11/2014	29.4	30.3	0.0	40.3	81	-1.50
NEW-08	12/24/2014	29.5	30.3	0.0	40.2	71	-2.91
NEW-10	9/16/2013	65.2	35.2	0.2	0.0	91	-1.71
NEW-10	10/14/2013	65.4	35.2	0.1	0.0	85	-1.34
NEW-10	11/22/2013	69.7	36.0	0.3	0.0	73	-1.84
NEW-10	12/10/2013	66.5	33.7	0.0	0.0	60	-1.20
NEW-10	1/23/2014	65.5	35.3	0.3	0.0	73	-0.81
NEW-10	2/13/2014	66.5	33.7	0.7	0.0	68	-0.76
NEW-10	3/13/2014	65.9	34.3	0.5	0.0	80	-0.77
NEW-10	4/22/2014	64.3	32.8	1.0	1.9	71	-1.55
NEW-10	5/15/2014	64.8	32.9	0.1	2.2	100	-0.23
NEW-10	6/27/2014	70.4	34.0	0.0	0.0	90	-0.20
NEW-10	7/28/2014	64.4	33.1	0.0	2.5	88	-0.02
NEW-10	8/19/2014	65.6	33.3	0.2	0.9	92	-0.56
NEW-10	9/16/2014	65.1	32.3	0.0	2.6	92	-0.16
NEW-10	10/9/2014	64.7	32.3	0.0	3.0	86	-0.51
NEW-10	11/11/2014	67.9	33.1	0.5	0.0	71	-0.87
NEW-10	12/24/2014	70.4	35.1	0.8	0.0	67	-1.61
NEW-11	9/16/2013	53.8	35.1	0.0	11.1	90	-0.15
NEW-11	10/14/2013	40.5	33.1	0.1	26.3	83	-0.25
NEW-11	11/22/2013	45.9	32.8	0.1	21.2	71	-0.08
NEW-11	12/10/2013	48.9	31.6	0.0	19.5	63	-0.13
NEW-11	1/27/2014	60.1	31.9	0.2	7.8	67	-0.12
NEW-11	2/13/2014	62.9	33.5	0.0	3.6	67	-0.99
NEW-11	3/13/2014	31.3	27.0	0.3	41.4	70	-1.48
NEW-11	4/22/2014	27.6	26.2	0.0	46.2	72	-2.81
NEW-11	5/15/2014	29.4	26.0	0.1	44.5	83	-1.70
NEW-11	6/27/2014	34.9	29.2	0.0	35.9	80	-2.06
NEW-11	7/28/2014	37.5	29.1	0.0	33.4	89	-1.21
NEW-11	8/19/2014	32.1	30.2	0.0	37.7	84	-2.02
NEW-11	9/16/2014	27.4	28.3	0.0	44.3	82	-2.05
NEW-11	10/9/2014	35.8	27.7	0.0	36.5	80	-2.28
NEW-11	11/11/2014	27.0	27.7	0.0	45.3	71	-1.90
NEW-11	12/24/2014	33.5	30.0	0.0	36.5	71	-4.37
NEW-12	9/16/2013	59.7	35.7	0.1	4.5	80	-0.47
NEW-12	10/14/2013	51.6	34.5	0.1	13.8	76	-0.51
NEW-12	11/22/2013	51.0	33.8	0.1	15.1	73	-0.38
NEW-12	12/10/2013	50.1	32.1	0.3	17.5	68	-0.16
NEW-12	1/23/2014	44.6	32.2	0.3	22.9	71	-0.52
NEW-12	2/13/2014	42.4	31.2	0.1	26.3	69	-2.36
NEW-12	3/13/2014	30.6	28.1	0.2	41.1	70	-2.30
NEW-12	4/22/2014	37.6	29.2	0.1	33.1	70	-2.92
NEW-12	5/15/2014	39.1	28.6	0.3	32.0	80	-1.31

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
NEW-12	6/27/2014	46.0	32.3	0.0	21.7	73	-1.61
NEW-12	7/28/2014	42.9	30.8	0.0	26.3	81	-0.88
NEW-12	8/19/2014	42.8	33.8	0.2	23.2	80	-1.89
NEW-12	9/16/2014	42.9	33.7	0.2	23.2	80	-1.89
NEW-12	10/9/2014	37.3	30.9	0.1	31.7	81	-1.71
NEW-12	11/11/2014	32.5	31.2	0.2	36.1	68	-2.29
NEW-12	12/24/2014	37.7	32.9	0.1	29.3	63	-2.98
NEW-13	9/16/2013	61.9	38.3	0.0	0.0	90	-0.15
NEW-13	10/14/2013	56.5	36.7	0.0	6.8	79	-0.19
NEW-13	11/22/2013	56.7	36.3	0.0	7.0	71	-0.03
NEW-13	12/10/2013	55.9	35.2	0.0	8.9	71	-0.11
NEW-13	1/23/2014	46.3	34.4	0.1	19.2	72	-0.40
NEW-13	2/13/2014	41.8	33.2	0.0	25.0	71	-2.13
NEW-13	3/13/2014	27.8	29.0	0.1	43.1	72	-1.92
NEW-13	4/22/2014	37.7	31.2	0.0	31.1	72	-2.51
NEW-13	5/15/2014	38.1	30.7	0.0	31.2	80	-1.04
NEW-13	6/27/2014	46.2	33.5	0.0	20.3	76	-1.25
NEW-13	7/28/2014	47.0	33.0	0.0	20.0	81	-0.62
NEW-13	8/19/2014	46.3	34.3	0.0	19.4	71	-1.57
NEW-13	9/16/2014	40.1	32.8	0.0	27.1	80	-1.10
NEW-13	10/9/2014	37.9	31.7	0.0	30.4	84	-1.42
NEW-13	11/11/2014	35.3	32.5	0.0	32.2	72	-1.94
NEW-13	12/24/2014	30.6	32.0	0.6	36.8	70	-3.30
NEW-14	9/16/2013	59.4	35.6	0.0	5.0	90	-0.45
NEW-14	10/14/2013	56.5	35.5	0.0	8.0	80	-0.45
NEW-14	11/22/2013	55.3	35.0	0.0	9.7	73	-0.25
NEW-14	12/10/2013	54.9	33.7	0.0	11.4	71	-0.25
NEW-14	1/23/2014	49.6	34.5	0.0	15.9	73	-0.46
NEW-14	2/13/2014	49.5	34.4	0.0	16.1	73	-2.15
NEW-14	3/13/2014	38.0	32.1	0.1	29.8	79	-2.00
NEW-14	4/22/2014	44.0	34.4	0.0	21.6	75	-1.40
NEW-14	5/15/2014	44.0	33.2	0.0	22.8	92	-0.24
NEW-14	6/27/2014	54.7	36.2	0.0	9.1	89	-0.40
NEW-14	7/28/2014	51.8	34.8	0.0	13.4	102	-0.62
NEW-14	8/19/2014	48.4	34.3	0.0	17.3	89	-1.63
NEW-14	9/16/2014	42.8	32.9	0.0	24.3	87	-1.22
NEW-14	10/9/2014	43.2	32.9	0.0	23.9	90	-1.50
NEW-14	11/11/2014	35.7	32.1	0.0	32.2	74	-1.98
NEW-14	12/24/2014	39.7	33.5	0.1	26.7	70	-2.84
NEW-15	9/16/2013	60.4	37.6	0.0	2.0	87	-1.05
NEW-15	10/14/2013	52.2	36.7	0.0	11.1	76	-1.24
NEW-15	11/22/2013	55.3	36.3	0.3	8.1	71	-1.28
NEW-15	12/10/2013	54.9	34.5	0.8	9.8	68	-0.77

Well ID	Monitoring Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Temperature (degrees F)	Static Pressure (in. water)
NEW-15	1/23/2014	51.2	35.0	0.4	13.4	72	-0.63
NEW-15	2/13/2014	49.3	35.3	0.0	15.4	71	-2.90
NEW-15	3/13/2014	34.5	31.0	0.2	34.3	73	-2.89
NEW-15	4/22/2014	35.2	29.8	0.0	35.0	73	-3.93
NEW-15	5/15/2014	38.3	29.4	0.0	32.3	87	-1.89
NEW-15	6/27/2014	48.2	34.3	0.0	17.5	81	-2.16
NEW-15	7/28/2014	48.4	33.1	0.0	18.5	91	-1.42
NEW-15	8/19/2014	45.8	35.8	0.1	18.3	89	-2.88
NEW-15	9/16/2014	41.3	33.4	0.0	25.3	84	-2.23
NEW-15	10/9/2014	42.2	33.4	0.0	24.4	75	-2.48
NEW-15	11/11/2014	38.9	33.1	0.1	27.9	71	-3.21
NEW-15	12/24/2014	36.2	32.9	0.3	30.6	67	-5.72

Notes: *Flow from the entire North Area (LF-3) was increased on this date with the intent of increasing methane concentration at the flare. Individual wells were not adjusted but vacuum to each well was increased.

Attachment 3
Perimeter Extraction Well Monitoring Data

Attachment 3 Perimeter Extraction Well Data Summary						
Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-01	9/20/2013	10.1	19.9	2.9	67.1	-0.23
PEW-01	10/15/2013	7.9	19.0	4.0	69.1	-0.51
PEW-01	11/20/2013	12.3	21.8	0.0	65.9	-0.57
PEW-01	12/31/2013	8.0	18.0	4.8	69.2	-0.26
PEW-01	1/27/2014	1.7	14.8	5.9	77.6	-0.15
PEW-01	2/13/2014	5.2	16.3	4.7	73.8	-0.30
PEW-01	3/17/2014	4.5	15.5	5.9	74.1	-0.75
PEW-01	4/22/2014	1.3	12.0	7.4	79.3	-0.28
PEW-01	5/19/2014	1.7	13.3	6.5	78.5	-0.30
PEW-01	6/27/2014	6.3	15.4	4.5	73.8	-0.11
PEW-01	7/29/2014	8.0	19.0	0.8	72.2	-0.31
PEW-01	8/25/2014	6.6	18.2	4.5	70.7	-0.19
PEW-01	9/8/2014	6.8	18.4	3.9	70.9	-0.20
PEW-01	10/23/2014	6.2	17.5	5.1	71.2	-0.17
PEW-01	11/19/2014	7.5	19.3	5.0	68.2	-0.19
PEW-01	12/24/2014	6.3	17.8	4.9	71.0	-0.21
PEW-2D	9/20/2013	11.3	19.2	3.1	66.4	-0.48
PEW-2D	10/15/2013	10.1	18.1	4.7	67.1	-0.63
PEW-2D	11/20/2013	14.8	23.6	0.0	61.6	-0.71
PEW-2D	12/31/2013	13.9	20.2	4.4	61.5	-0.62
PEW-2D	1/27/2014	9.1	17.3	5.3	68.3	-0.49
PEW-2D	2/13/2014	12.5	18.4	4.1	65.0	-0.35
PEW-2D	3/17/2014	11.6	18.4	4.9	65.1	-1.29
PEW-2D	4/22/2014	5.8	12.8	8.0	73.4	-2.36
PEW-2D	5/19/2014	6.4	13.8	7.5	72.3	-0.74
PEW-2D	6/27/2014	11.4	16.7	4.1	67.8	-0.50
PEW-2D	7/29/2014	11.9	19.4	0.9	67.8	-0.44
PEW-2D	8/25/2014	10.2	18.3	4.4	67.1	-0.56
PEW-2D	9/8/2014	5.8	18.9	3.3	72.0	-0.24
PEW-2D	10/23/2014	9.0	18.0	4.9	68.1	-0.54
PEW-2D	11/19/2014	11.3	19.6	4.0	65.1	-0.49
PEW-2D	12/24/2014	13.9	20.6	4.2	61.3	-0.42
PEW-2S	9/20/2013	13.0	21.6	1.8	63.6	-0.47
PEW-2S	10/15/2013	10.3	20.1	3.3	66.3	-0.75
PEW-2S	11/20/2013	14.1	22.7	0.0	63.2	-2.09
PEW-2S	12/31/2013	11.2	19.8	3.1	65.9	-0.36
PEW-2S	1/27/2014	6.8	17.3	3.5	72.4	-0.19
PEW-2S	2/13/2014	8.7	18.4	2.6	70.3	-0.25
PEW-2S	3/17/2014	8.2	18.1	3.6	70.1	-0.69

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-2S	4/22/2014	2.2	14.2	5.2	78.4	-0.54
PEW-2S	5/19/2014	2.2	15.7	4.4	77.7	-0.48
PEW-2S	6/27/2014	7.4	18.1	2.7	71.8	-0.25
PEW-2S	7/29/2014	10.1	19.4	0.8	69.7	-0.29
PEW-2S	8/25/2014	6.2	19.0	3.7	71.1	-0.24
PEW-2S	9/8/2014	10.0	18.7	3.9	67.4	-0.55
PEW-2S	10/23/2014	3.8	16.4	5.0	74.8	-0.19
PEW-2S	11/19/2014	5.0	17.6	3.8	73.6	-0.22
PEW-2S	12/24/2014	7.7	19.7	1.8	70.8	-0.33
PEW-03	9/20/2013	3.5	18.8	1.7	76.0	-0.17
PEW-03	10/15/2013	2.3	17.8	3.2	76.7	-0.29
PEW-03	11/20/2013	5.8	21.2	0.1	72.9	-0.14
PEW-03	12/31/2013	4.6	19.8	1.6	74.0	-0.03
PEW-03	1/31/2014	1.7	15.2	6.9	76.2	-0.22
PEW-03	2/13/2014	1.9	15.4	4.2	78.5	-0.28
PEW-03	3/17/2014	1.7	15.0	5.3	78.0	-0.44
PEW-03	4/22/2014	0.8	12.8	6.2	80.2	-0.12
PEW-03	5/19/2014	1.1	13.7	5.7	79.5	-0.29
PEW-03	6/27/2014	2.6	14.3	4.6	78.5	-0.22
PEW-03	7/29/2014	4.4	16.5	1.8	77.3	-0.28
PEW-03	8/25/2014	1.9	15.2	5.0	77.9	-0.27
PEW-03	9/8/2014	1.8	15.7	4.5	78.0	-0.25
PEW-03	10/23/2014	1.1	14.3	6.4	78.2	-0.23
PEW-03	11/19/2014	1.9	15.9	5.0	77.2	-0.36
PEW-03	12/24/2014	4.1	15.1	5.2	75.6	-0.29
PEW-4D	9/20/2013	1.0	15.4	4.3	79.3	-0.10
PEW-4D	10/15/2013	0.8	14.1	6.3	78.8	-0.19
PEW-4D	11/20/2013	1.7	18.3	1.1	78.9	-0.02
PEW-4D	12/31/2013	2.4	17.0	5.9	74.7	-0.11
PEW-4D	1/27/2014	0.6	12.7	7.8	78.9	-0.07
PEW-4D	2/13/2014	1.1	12.4	7.4	79.1	-0.20
PEW-4D	3/17/2014	0.7	11.5	8.3	79.5	-0.36
PEW-4D	4/22/2014	0.2	9.3	10.2	80.3	-0.17
PEW-4D	5/19/2014	0.3	10.1	9.2	80.4	-0.10
PEW-4D	6/27/2014	0.8	11.4	6.9	80.9	-0.14
PEW-4D	7/29/2014	1.0	15.0	2.6	81.4	-0.26
PEW-4D	8/25/2014	0.3	12.3	7.6	79.8	-0.17
PEW-4D	9/8/2014	0.0	4.1	14.8	81.1	-0.23
PEW-4D	10/23/2014	0.2	10.5	9.7	79.6	-0.16
PEW-4D	11/19/2014	0.3	12.0	8.4	79.3	-0.20
PEW-4D	12/24/2014	0.2	9.2	11.6	79.0	-0.39

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-4S	9/20/2013	0.7	10.4	9.0	79.9	-0.06
PEW-4S	10/15/2013	0.6	9.0	10.9	79.5	-0.22
PEW-4S	11/20/2013	11.9	19.6	1.5	67.0	-0.09
PEW-4S	12/31/2013	1.1	9.2	10.6	79.1	-0.03
PEW-4S	1/27/2014	0.0	5.5	12.2	82.3	-0.03
PEW-4S	2/13/2014	0.0	6.6	12.5	80.9	-0.13
PEW-4S	3/17/2014	0.0	4.9	15.2	79.9	-0.19
PEW-4S	4/22/2014	0.0	4.0	16.4	79.6	-0.08
PEW-4S	5/19/2014	0.0	5.4	14.2	80.4	-0.11
PEW-4S	6/27/2014	0.0	5.4	13.4	81.2	-0.04
PEW-4S	7/29/2014	0.0	6.6	11.8	81.6	-0.15
PEW-4S	8/25/2014	0.0	3.7	16.1	80.2	-0.06
PEW-4S	9/8/2014	0.3	12.5	7.8	79.4	-0.18
PEW-4S	10/23/2014	0.0	4.1	16.4	79.5	-0.17
PEW-4S	11/19/2014	0.6	6.1	14.7	78.6	-0.13
PEW-4S	12/24/2014	2.8	10.3	11.1	75.8	-0.28
PEW-05	9/20/2013	0.9	16.6	3.2	79.3	-0.08
PEW-05	10/15/2013	0.2	14.6	6.2	79.0	-0.26
PEW-05	11/20/2013	5.2	19.7	2.4	72.7	-0.04
PEW-05	12/31/2013	0.9	13.6	6.9	78.6	-0.17
PEW-05	1/27/2014	0.0	12.1	9.2	78.7	-0.17
PEW-05	2/13/2014	0.0	10.7	8.7	80.6	-0.15
PEW-05	3/17/2014	0.0	9.5	11.1	79.4	-0.48
PEW-05	4/22/2014	0.0	8.6	11.0	80.4	-0.22
PEW-05	5/19/2014	0.0	9.3	10.1	80.6	-0.10
PEW-05	6/27/2014	0.3	10.7	7.6	81.4	-0.15
PEW-05	7/29/2014	1.1	15.0	3.3	80.6	-0.30
PEW-05	8/25/2014	0.0	11.4	8.3	80.3	-0.21
PEW-05	9/8/2014	0.0	12.5	7.4	80.1	-0.09
PEW-05	10/23/2014	0.0	10.4	9.7	79.9	-0.19
PEW-05	11/19/2014	0.1	12.8	11.3	75.8	-0.25
PEW-05	12/24/2014	0.4	10.3	10.8	78.5	-0.35
PEW-6D	9/20/2013	0.0	8.7	10.3	81.0	-0.13
PEW-6D	10/15/2013	0.2	1.2	17.8	80.8	-0.27
PEW-6D	11/20/2013	2.4	18.9	1.1	77.6	-0.12
PEW-6D	12/31/2013	1.4	14.8	5.5	78.3	-0.07
PEW-6D	1/27/2014	0.0	8.6	10.8	80.6	-0.12
PEW-6D	2/13/2014	0.0	7.9	12.1	80.0	-0.29
PEW-6D	3/17/2014	0.0	6.3	14.0	79.7	-0.49
PEW-6D	4/22/2014	0.0	5.1	14.8	80.1	-0.38

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-6D	5/19/2014	3.3	12.6	7.7	76.4	-0.43
PEW-6D	6/27/2014	0.1	6.1	12.5	81.3	-0.29
PEW-6D	7/29/2014	0.0	9.8	7.2	83.0	-0.47
PEW-6D	8/25/2014	0.0	6.8	12.9	80.3	-0.44
PEW-6D	9/8/2014	2.2	12.9	7.3	77.6	-0.40
PEW-6D	10/23/2014	0.0	6.2	14.0	79.8	-0.45
PEW-6D	11/19/2014	0.0	8.0	10.3	81.7	-0.24
PEW-6D	12/24/2014	0.1	6.2	12.8	80.9	-0.28
PEW-6S	9/20/2013	0.1	0.7	18.7	80.5	-0.15
PEW-6S	10/15/2013	0.0	7.8	13.2	79.0	-0.34
PEW-6S	11/20/2013	2.2	6.8	14.2	76.8	-0.97
PEW-6S	12/31/2013	1.7	4.4	16.4	77.5	-0.17
PEW-6S	1/27/2014	0.0	1.5	17.1	81.4	-0.09
PEW-6S	2/13/2014	7.8	15.8	5.8	70.6	-0.41
PEW-6S	3/17/2014	2.9	12.3	9.0	75.8	-0.48
PEW-6S	4/22/2014	1.7	10.8	9.3	78.2	-0.42
PEW-6S	5/19/2014	0.0	5.7	13.8	80.5	-0.39
PEW-6S	6/27/2014	4.8	13.3	6.3	75.6	-0.35
PEW-6S	7/29/2014	4.6	15.6	4.1	75.7	-0.48
PEW-6S	8/25/2014	3.0	13.4	7.4	76.2	-0.48
PEW-6S	9/8/2014	0.0	6.9	12.0	81.1	-0.39
PEW-6S	10/23/2014	3.2	13.1	8.3	75.4	-0.54
PEW-6S	11/19/2014	4.0	15.5	6.4	74.1	-0.16
PEW-6S	12/24/2014	10.0	16.5	6.6	66.9	-0.24
PEW-07	9/20/2013	3.9	16.7	3.1	76.3	-0.24
PEW-07	10/15/2013	1.7	14.0	11.2	73.1	-0.41
PEW-07	11/20/2013	10.5	21.6	1.1	66.8	-0.23
PEW-07	12/31/2013	5.8	17.7	3.2	73.3	-0.13
PEW-07	1/27/2014	2.5	15.1	5.8	76.6	-0.13
PEW-07	2/13/2014	1.9	15.3	3.7	79.1	-0.26
PEW-07	3/17/2014	1.8	13.5	6.7	78.0	-0.40
PEW-07	4/22/2014	0.8	11.2	7.7	80.3	-0.33
PEW-07	5/19/2014	1.0	11.9	7.2	79.9	-0.31
PEW-07	6/27/2014	1.3	11.3	7.0	80.4	-0.21
PEW-07	7/29/2014	1.8	13.5	4.4	80.3	-0.33
PEW-07	8/25/2014	0.9	12.0	7.4	79.7	-0.26
PEW-07	9/8/2014	0.6	11.5	7.9	80.0	-0.28
PEW-07	10/23/2014	0.8	12.3	7.5	79.4	-0.30
PEW-07	11/19/2014	0.4	12.9	7.1	79.6	-0.09
PEW-07	12/24/2014	4.3	15.5	11.1	69.1	-0.16

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-8D	9/20/2013	0.4	13.5	5.3	80.8	-0.15
PEW-8D	10/15/2013	0.1	7.1	11.4	81.4	-0.37
PEW-8D	11/20/2013	0.9	15.6	3.6	79.9	-0.20
PEW-8D	12/31/2013	0.3	11.2	8.8	79.7	-0.06
PEW-8D	1/27/2014	0.0	12.8	6.0	81.2	-0.11
PEW-8D	2/13/2014	0.0	13.4	5.7	80.9	-0.29
PEW-8D	3/17/2014	0.2	5.9	14.8	79.1	-0.54
PEW-8D	4/22/2014	0.0	6.3	13.6	80.1	-0.29
PEW-8D	5/19/2014	0.1	5.2	14.3	80.4	-0.20
PEW-8D	6/27/2014	0.2	8.6	9.6	81.6	-0.16
PEW-8D	7/29/2014	0.1	11.8	5.7	82.4	-0.28
PEW-8D	8/25/2014	6.2	10.7	9.9	73.2	-0.06
PEW-8D	9/8/2014	0.1	7.7	11.7	80.5	-0.14
PEW-8D	10/23/2014	6.3	8.6	13.1	72.0	-0.04
PEW-8D	11/19/2014	0.4	15.9	4.1	79.6	-0.50
PEW-8D	12/24/2014	0.3	9.8	8.6	81.3	-0.24
PEW-8S	9/20/2013	0.0	11.1	7.7	81.2	-0.15
PEW-8S	10/15/2013	0.0	11.1	10.1	78.8	-0.39
PEW-8S	11/20/2013	2.8	14.3	2.0	80.9	-0.22
PEW-8S	12/31/2013	1.4	10.8	8.6	79.2	-0.94
PEW-8S	1/27/2014	0.0	10.8	8.8	80.4	-0.08
PEW-8S	2/13/2014	0.1	10.1	9.0	80.8	-0.16
PEW-8S	3/17/2014	0.0	7.7	12.8	79.5	-0.18
PEW-8S	4/22/2014	0.0	4.1	16.0	79.9	-0.25
PEW-8S	5/19/2014	0.0	7.4	11.9	80.7	-0.24
PEW-8S	6/27/2014	0.5	5.8	12.7	81.0	-0.09
PEW-8S	7/29/2014	0.1	6.9	11.5	81.5	-0.22
PEW-8S	8/25/2014	6.1	11.1	9.5	73.3	-0.08
PEW-8S	9/8/2014	0.0	14.0	5.4	80.6	-0.16
PEW-8S	10/23/2014	6.0	7.7	14.4	71.9	-0.04
PEW-8S	11/19/2014	0.1	11.6	6.2	82.1	-0.06
PEW-8S	12/24/2014	3.7	10.9	10.3	75.1	-0.24
PEW-09	9/20/2013	3.3	17.7	1.8	77.2	-0.15
PEW-09	11/20/2013	8.9	20.5	2.4	68.2	-0.24
PEW-09	12/31/2013	8.5	19.3	2.7	69.5	-0.04
PEW-09	1/27/2014	1.6	15.5	5.0	77.9	-0.11
PEW-09	2/13/2014	4.9	17.0	3.8	74.3	-0.12
PEW-09	3/17/2014	0.5	11.2	9.7	78.6	-0.52
PEW-09	4/22/2014	0.3	10.2	9.2	80.3	-0.21
PEW-09	5/19/2014	1.2	12.2	7.1	79.5	-0.21
PEW-09	6/27/2014	2.5	13.6	4.8	79.1	-0.10

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-09	7/29/2014	1.7	15.2	1.9	81.2	-0.23
PEW-09	8/25/2014	6.6	11.3	9.3	72.8	-0.05
PEW-09	9/8/2014	1.0	17.8	1.6	79.6	-0.13
PEW-09	10/23/2014	3.7	5.6	16.3	74.4	-0.01
PEW-09	11/19/2014	2.0	18.8	1.1	78.1	-0.02
PEW-09	12/24/2014	9.3	17.0	6.6	67.1	-0.20
PEW-10D	9/20/2013	2.7	18.2	2.0	77.1	-0.06
PEW-10D	10/15/2013	3.6	11.5	10.2	74.7	-0.37
PEW-10D	11/20/2013	9.0	16.6	4.0	70.4	-0.01
PEW-10D	12/31/2013	8.4	15.1	6.8	69.7	-0.14
PEW-10D	1/27/2014	3.5	14.0	6.6	75.9	-0.20
PEW-10D	2/13/2014	6.2	14.1	6.8	72.9	-0.07
PEW-10D	3/17/2014	11.2	11.3	11.3	66.2	-1.21
PEW-10D	4/22/2014	1.6	8.9	11.4	78.1	-0.41
PEW-10D	5/19/2014	3.6	11.0	9.3	76.1	-0.29
PEW-10D	6/27/2014	4.8	12.6	6.4	76.2	-0.14
PEW-10D	7/29/2014	3.8	14.7	3.4	78.1	-0.21
PEW-10D	8/25/2014	5.4	9.1	11.4	74.1	-0.02
PEW-10D	9/8/2014	0.0	3.6	14.4	82.0	-0.07
PEW-10D	10/23/2014	0.0	0.1	20.3	79.6	-0.64
PEW-10D	11/19/2014	3.4	14.2	5.0	77.4	-0.09
PEW-10D	12/24/2014	0.2	0.5	14.5	84.8	-0.33
PEW-10S	9/20/2013	0.0	0.2	19.1	80.7	-0.11
PEW-10S	10/15/2013	0.0	0.3	17.8	81.9	-0.43
PEW-10S	11/20/2013	0.0	3.3	16.0	80.7	-0.09
PEW-10S	12/31/2013	0.4	2.0	17.9	79.7	-0.10
PEW-10S	1/27/2014	0.0	1.3	14.9	83.8	-0.22
PEW-10S	2/13/2014	9.3	9.6	9.9	71.2	-0.52
PEW-10S	3/17/2014	2.6	10.0	11.4	76.0	-0.54
PEW-10S	4/22/2014	6.4	8.5	13.4	71.7	-0.89
PEW-10S	5/19/2014	2.2	4.7	15.8	77.3	-0.45
PEW-10S	6/27/2014	0.6	2.6	16.9	79.9	-0.16
PEW-10S	7/29/2014	0.2	2.6	15.7	81.5	-0.25
PEW-10S	8/25/2014	5.9	10.0	10.3	73.8	-0.03
PEW-10S	9/8/2014	0.9	16.5	3.4	79.2	-0.10
PEW-10S	10/23/2014	0.2	8.2	13.2	78.4	-0.49
PEW-10S	11/19/2014	2.3	7.8	12.2	77.7	-0.14
PEW-10S	12/24/2014	17.3	19.9	7.9	54.9	-0.32
PEW-11	9/20/2013	12.1	21.3	0.2	66.4	-0.09
PEW-11	10/15/2013	4.0	16.2	9.4	70.4	-0.71

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-11	11/20/2013	5.9	18.4	4.1	71.6	-0.56
PEW-11	12/31/2013	10.4	21.0	0.7	67.9	-0.05
PEW-11	1/27/2014	9.2	20.3	1.3	69.2	-0.18
PEW-11	2/13/2014	12.1	20.7	0.6	66.6	-0.12
PEW-11	3/17/2014	5.7	16.8	5.0	72.5	-0.44
PEW-11	4/22/2014	3.4	14.7	4.7	77.2	-0.29
PEW-11	5/19/2014	5.7	17.4	2.6	74.3	-0.23
PEW-11	6/27/2014	9.5	19.7	0.4	70.4	-0.10
PEW-11	7/29/2014	9.9	19.6	0.8	69.7	-0.22
PEW-11	8/25/2014	18.0	20.7	0.2	61.1	-0.02
PEW-11	9/8/2014	8.1	14.3	6.4	71.2	-0.12
PEW-11	10/23/2014	21.9	23.5	0.0	54.6	-0.54
PEW-11	11/19/2014	11.9	23.0	4.2	60.9	-0.14
PEW-11	12/24/2014	7.2	15.4	7.3	70.1	-0.70
PEW-12D	9/20/2013	30.9	31.0	0.0	38.1	-0.04
PEW-12D	10/14/2013	14.9	23.8	0.4	60.9	-0.48
PEW-12D	11/20/2013	17.9	26.5	0.5	55.1	-0.69
PEW-12D	12/31/2013	26.6	28.6	0.2	44.6	-0.03
PEW-12D	1/27/2014	26.4	29.1	0.0	44.5	-0.10
PEW-12D	2/13/2014	30.7	30.2	0.0	39.1	-0.08
PEW-12D	3/17/2014	16.0	24.8	0.4	58.8	-0.40
PEW-12D	4/22/2014	13.3	23.0	0.2	63.5	-0.28
PEW-12D	5/19/2014	21.2	26.6	0.0	52.2	-0.14
PEW-12D	6/27/2014	29.2	29.7	0.0	41.1	-0.10
PEW-12D	7/29/2014	28.7	29.0	0.0	42.3	-0.24
PEW-12D	8/25/2014	10.3	15.6	5.6	68.5	-0.01
PEW-12D	9/8/2014	0.9	2.2	17.4	79.5	-0.02
PEW-12D	10/23/2014	35.4	33.5	1.1	30.0	-0.21
PEW-12D	11/19/2014	22.6	29.4	2.9	45.1	-0.07
PEW-12D	12/24/2014	25.5	28.7	4.9	40.9	-0.14
PEW-12S	9/20/2013	0.2	0.7	18.1	81.0	-0.06
PEW-12S	10/14/2013	0.3	0.7	18.9	80.1	-0.76
PEW-12S	11/20/2013	0.6	2.7	16.9	79.8	-1.35
PEW-12S	12/31/2013	3.8	6.1	14.0	76.1	-0.08
PEW-12S	1/27/2014	0.0	0.5	15.8	83.7	-0.04
PEW-12S	2/13/2014	16.4	15.7	7.9	60.0	-0.04
PEW-12S	3/17/2014	8.0	12.2	9.5	70.3	-0.40
PEW-12S	4/22/2014	9.1	13.8	8.3	68.8	-0.28
PEW-12S	5/19/2014	12.4	14.7	8.7	64.2	-0.21
PEW-12S	6/27/2014	9.3	7.9	13.7	69.1	-0.07
PEW-12S	7/29/2014	5.6	6.2	14.7	73.5	-0.17

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-12S	8/25/2014	9.8	17.5	3.2	69.5	-0.02
PEW-12S	9/8/2014	39.0	33.9	0.1	27.0	-0.02
PEW-12S	10/23/2014	11.1	10.6	14.2	64.1	-0.15
PEW-12S	11/19/2014	21.2	26.5	0.8	51.5	-0.14
PEW-12S	12/24/2014	29.5	29.1	1.1	40.3	-0.22
PEW-13	9/20/2013	22.0	27.4	0.0	50.6	-0.05
PEW-13	10/14/2013	7.9	10.4	10.3	71.4	-0.78
PEW-13	11/20/2013	0.0	0.1	19.7	80.2	-1.32
PEW-13	12/31/2013	25.2	28.1	0.2	46.5	-0.03
PEW-13	1/27/2014	23.0	28.0	0.0	49.0	-0.04
PEW-13	2/13/2014	27.9	28.8	0.0	43.3	-0.08
PEW-13	3/17/2014	13.6	22.9	0.3	63.2	-0.29
PEW-13	4/22/2014	12.9	22.4	0.2	64.5	-0.26
PEW-13	5/19/2014	20.7	25.9	0.0	53.4	-0.11
PEW-13	6/27/2014	27.6	28.4	0.0	44.0	-0.05
PEW-13	7/29/2014	26.0	27.8	0.0	46.2	-0.19
PEW-13	8/25/2014	15.5	20.2	2.4	61.9	-0.03
PEW-13	9/8/2014	30.5	32.1	0.0	37.4	-0.03
PEW-13	10/23/2014	33.7	32.2	0.3	33.8	-0.16
PEW-13	11/19/2014	35.3	34.1	0.3	30.3	-0.18
PEW-13	12/24/2014	29.6	30.0	0.0	40.4	-0.15
PEW-14D	9/20/2013	13.9	23.3	0.0	62.8	-0.02
PEW-14D	10/14/2013	19.1	25.6	0.4	54.9	-0.27
PEW-14D	11/20/2013	19.2	28.2	0.7	51.9	-0.50
PEW-14D	12/31/2013	25.1	28.9	0.3	45.7	-0.27
PEW-14D	1/27/2014	20.4	26.6	0.6	52.4	-0.05
PEW-14D	2/13/2014	26.9	29.1	0.0	44.0	-0.01
PEW-14D	3/17/2014	18.5	24.9	0.4	56.2	-0.18
PEW-14D	4/22/2014	16.5	22.9	1.2	59.4	-0.35
PEW-14D	5/19/2014	20.9	25.9	0.0	53.2	-0.29
PEW-14D	6/27/2014	27.2	27.4	0.0	45.4	-0.04
PEW-14D	7/29/2014	24.9	25.9	0.3	48.9	-0.16
PEW-14D	8/25/2014	4.3	14.4	6.0	75.3	-0.01
PEW-14D	9/8/2014	9.3	20.3	3.7	66.7	-0.02
PEW-14D	10/23/2014	18.2	25.8	0.0	56.0	-0.03
PEW-14D	11/19/2014	37.7	34.5	0.2	27.6	-0.36
PEW-14D	12/24/2014	38.8	33.5	0.0	27.7	-0.19
PEW-14S	9/20/2013	0.6	9.7	9.5	80.2	-0.01
PEW-14S	10/14/2013	2.3	7.0	12.5	78.2	-0.12
PEW-14S	11/20/2013	5.3	11.0	8.7	75.0	-0.40

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-14S	12/31/2013	8.9	15.8	4.9	70.4	-0.31
PEW-14S	1/27/2014	0.6	8.2	11.0	80.2	-0.04
PEW-14S	2/13/2014	15.8	19.9	2.6	61.7	-0.05
PEW-14S	3/17/2014	3.6	11.8	8.4	76.2	-0.14
PEW-14S	4/22/2014	3.3	10.5	10.3	75.9	-0.30
PEW-14S	5/19/2014	5.8	16.0	4.6	73.6	-0.29
PEW-14S	6/27/2014	10.1	18.3	2.7	68.9	-0.31
PEW-14S	7/29/2014	9.4	18.6	2.8	69.2	-0.13
PEW-14S	8/25/2014	1.0	10.4	5.9	82.7	-0.02
PEW-14S	9/8/2014	28.8	29.2	0.0	42.0	-0.02
PEW-14S	10/23/2014	27.6	27.5	0.0	44.9	-0.12
PEW-14S	11/19/2014	18.5	23.5	0.4	57.6	-0.04
PEW-14S	12/24/2014	19.6	20.5	3.6	56.3	-0.16
PEW-15	9/20/2013	31.3	30.6	0.0	38.1	-0.12
PEW-15	10/15/2013	0.0	1.6	19.2	79.2	-0.03
PEW-15	11/27/2013	0.7	13.6	4.4	81.3	-0.09
PEW-15	12/31/2013	3.5	17.8	1.7	77.0	-0.27
PEW-15	1/27/2014	2.5	11.4	9.5	76.6	-0.19
PEW-15	2/25/2014	9.3	13.8	7.2	69.7	-0.05
PEW-15	3/17/2014	13.5	22.6	0.3	63.6	-0.30
PEW-15	4/28/2014	0.0	0.4	20.0	79.6	-0.14
PEW-15	5/19/2014	22.4	27.1	0.0	50.5	-0.10
PEW-15	6/27/2014	35.3	30.4	0.0	34.3	-0.02
PEW-15	7/29/2014	34.6	31.2	0.0	34.2	-0.20
PEW-15	8/25/2014	9.8	13.4	7.9	68.9	-0.03
PEW-15	9/8/2014	27.5	25.7	3.3	43.5	-0.02
PEW-15	10/23/2014	29.6	30.6	0.3	39.5	-0.02
PEW-15	11/19/2014	33.2	32.0	0.7	34.1	-0.08
PEW-15	12/24/2014	27.9	28.0	2.9	41.2	-0.04
PEW-16D	9/20/2013	12.7	23.5	0.0	63.8	-0.02
PEW-16D	10/15/2013	0.0	9.9	9.8	80.3	-0.02
PEW-16D	11/27/2013	0.2	16.9	1.3	81.6	-0.55
PEW-16D	12/31/2013	0.7	16.2	2.6	80.5	-0.28
PEW-16D	1/27/2014	1.2	6.9	12.3	79.6	-0.10
PEW-16D	2/25/2014	0.0	10.2	9.1	80.7	-0.03
PEW-16D	3/17/2014	1.3	16.5	2.6	79.6	-0.10
PEW-16D	4/28/2014	0.0	0.3	20.1	79.6	-0.11
PEW-16D	5/19/2014	9.3	21.4	0.0	69.3	-0.08
PEW-16D	6/27/2014	21.3	25.9	0.0	52.8	-0.01
PEW-16D	7/29/2014	22.3	26.5	0.0	51.2	-0.19
PEW-16D	8/25/2014	1.2	5.5	13.8	79.5	-0.01

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-16D	9/8/2014	0.0	0.5	18.7	80.8	-0.02
PEW-16D	10/30/2014	25.3	22.1	7.7	44.9	-0.03
PEW-16D	11/19/2014	1.6	2.7	18.9	76.8	-0.11
PEW-16D	12/24/2014	39.6	31.4	0.2	28.8	-0.06
PEW-16S	9/20/2013	12.9	24.0	0.0	63.1	-0.16
PEW-16S	10/15/2013	0.0	3.1	15.2	81.7	-0.01
PEW-16S	11/27/2013	0.1	12.6	6.4	80.9	-0.63
PEW-16S	12/31/2013	0.3	12.9	7.7	79.1	-0.28
PEW-16S	1/27/2014	0.0	5.7	14.7	79.6	-0.02
PEW-16S	2/25/2014	0.0	16.5	1.7	81.8	-0.03
PEW-16S	3/17/2014	1.9	18.4	0.1	79.6	-0.07
PEW-16S	4/28/2014	0.0	0.0	20.4	79.6	-0.06
PEW-16S	5/19/2014	1.6	20.4	0.0	78.0	-0.06
PEW-16S	6/27/2014	7.4	20.0	0.0	72.6	-0.01
PEW-16S	7/29/2014	12.4	19.2	3.1	65.3	-0.19
PEW-16S	8/25/2014	1.1	12.9	6.4	79.6	-0.01
PEW-16S	9/8/2014	8.0	21.7	0.9	69.4	-0.01
PEW-16S	10/30/2014	26.0	23.0	6.7	44.3	-0.08
PEW-16S	11/19/2014	1.0	1.8	19.3	77.9	-0.10
PEW-16S	12/24/2014	43.0	32.0	2.2	22.8	-0.04
PEW-17	9/20/2013	1.7	20.1	0.1	78.1	-0.04
PEW-17	10/15/2013	0.0	7.6	12.5	79.9	-0.03
PEW-17	11/27/2013	1.8	19.6	0.8	77.8	-0.06
PEW-17	12/31/2013	16.2	21.7	0.9	61.2	-0.28
PEW-17	1/27/2014	27.6	22.8	5.5	44.1	-0.06
PEW-17	2/25/2014	13.4	22.2	0.0	64.4	-0.02
PEW-17	3/17/2014	0.1	17.0	1.5	81.4	-0.09
PEW-17	4/28/2014	0.0	0.5	19.9	79.6	-0.10
PEW-17	5/19/2014	5.8	20.6	0.0	73.6	-0.07
PEW-17	6/27/2014	9.4	19.7	0.0	70.9	-0.01
PEW-17	7/29/2014	15.6	25.2	0.0	59.2	-0.19
PEW-17	8/25/2014	1.5	11.9	6.7	79.9	-0.02
PEW-17	9/8/2014	6.4	19.2	0.4	74.0	-0.02
PEW-17	10/30/2014	21.3	19.0	8.7	51.0	-0.08
PEW-17	11/19/2014	0.3	0.9	20.1	78.7	-0.13
PEW-17	12/24/2014	22.3	27.6	0.1	50.0	-0.04
PEW-18D	9/20/2013	9.4	19.8	0.9	69.9	-0.23
PEW-18D	10/15/2013	0.0	6.1	14.5	79.4	-0.04
PEW-18D	11/27/2013	1.1	17.9	0.0	81.0	-0.35
PEW-18D	12/31/2013	16.3	23.5	0.5	59.7	-0.30

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-18D	1/27/2014	19.4	17.8	9.0	53.8	-0.02
PEW-18D	2/25/2014	16.6	23.5	0.0	59.9	-0.02
PEW-18D	3/17/2014	0.2	17.6	0.8	81.4	-0.10
PEW-18D	4/28/2014	0.0	0.0	20.3	79.7	-0.04
PEW-18D	5/19/2014	2.1	16.2	1.8	79.9	-0.06
PEW-18D	6/27/2014	22.5	26.7	0.0	50.8	-0.01
PEW-18D	7/29/2014	20.4	26.9	0.0	52.7	-0.20
PEW-18D	8/25/2014	1.3	11.3	6.2	81.2	-0.01
PEW-18D	9/8/2014	0.0	0.5	18.5	81.0	-0.02
PEW-18D	10/30/2014	14.6	17.3	11.9	56.2	-0.07
PEW-18D	11/19/2014	0.0	0.4	20.3	79.3	-0.14
PEW-18D	12/24/2014	43.3	32.0	1.0	23.7	-0.07
PEW-18S	9/20/2013	8.7	23.0	0.0	68.3	-0.09
PEW-18S	10/15/2013	0.0	11.3	8.8	79.9	-0.05
PEW-18S	11/27/2013	10.8	21.8	0.0	67.4	-0.15
PEW-18S	12/31/2013	19.9	21.7	0.3	58.1	-0.27
PEW-18S	1/27/2014	8.4	8.1	12.7	70.8	-0.20
PEW-18S	2/25/2014	3.4	15.2	3.7	77.7	-0.04
PEW-18S	3/17/2014	6.2	21.0	0.2	72.6	-0.07
PEW-18S	4/28/2014	0.0	0.3	20.2	79.5	-0.07
PEW-18S	5/19/2014	10.2	23.5	0.0	66.3	-0.06
PEW-18S	6/27/2014	3.0	7.6	10.4	79.0	-0.12
PEW-18S	7/29/2014	0.4	0.8	19.1	79.7	-0.19
PEW-18S	8/25/2014	0.2	3.9	15.8	80.1	-0.01
PEW-18S	9/8/2014	9.5	20.4	0.7	69.4	-0.01
PEW-18S	10/30/2014	18.4	16.8	10.3	54.5	-0.06
PEW-18S	11/19/2014	2.5	3.0	19.1	75.4	-0.11
PEW-18S	12/24/2014	44.4	32.3	0.4	22.9	-0.05
PEW-19	9/20/2013	10.4	20.3	0.0	69.3	-0.10
PEW-19	10/15/2013	0.0	6.7	11.7	81.6	-0.02
PEW-19	11/27/2013	7.2	20.4	0.0	72.4	-0.18
PEW-19	12/31/2013	11.1	20.6	0.2	68.1	-0.28
PEW-19	1/27/2014	12.4	15.1	6.9	65.6	-0.02
PEW-19	2/25/2014	16.6	20.9	0.0	62.5	-0.03
PEW-19	3/17/2014	6.8	19.2	0.5	73.5	-0.07
PEW-19	4/28/2014	0.0	0.5	19.9	79.6	-0.07
PEW-19	5/19/2014	13.8	21.2	0.0	65.0	-0.05
PEW-19	6/27/2014	16.7	19.7	0.0	63.6	-0.06
PEW-19	7/29/2014	6.2	6.3	16.2	71.3	-0.18
PEW-19	8/25/2014	0.0	5.2	12.8	82.0	-0.01
PEW-19	9/8/2014	0.0	0.5	19.5	80.0	-0.01

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-19	10/30/2014	15.7	14.0	11.5	58.8	-0.07
PEW-19	11/19/2014	0.3	0.7	20.0	79.0	-0.07
PEW-19	12/24/2014	33.0	25.7	3.9	37.4	-0.07
PEW-20D	9/20/2013	0.8	15.3	2.9	81.0	-0.12
PEW-20D	10/15/2013	4.3	14.2	7.1	74.4	-0.02
PEW-20D	11/27/2013	0.5	17.1	0.8	81.6	-0.48
PEW-20D	12/31/2013	30.6	25.2	0.1	44.1	-0.30
PEW-20D	1/27/2014	28.8	25.3	0.4	45.5	-0.06
PEW-20D	2/25/2014	44.8	30.6	0.0	24.6	-0.03
PEW-20D	3/17/2014	0.5	15.9	2.4	81.2	-0.05
PEW-20D	4/28/2014	0.0	2.8	17.1	80.1	-0.05
PEW-20D	5/19/2014	2.6	18.3	0.0	79.1	-0.06
PEW-20D	6/27/2014	50.9	35.9	0.0	13.2	-0.02
PEW-20D	7/29/2014	40.8	33.2	0.0	26.0	-0.17
PEW-20D	8/25/2014	0.3	7.5	10.7	81.5	-0.02
PEW-20D	9/8/2014	0.0	1.0	19.1	79.9	-0.02
PEW-20D	10/30/2014	7.6	7.7	15.1	69.6	-0.06
PEW-20D	11/19/2014	0.4	1.0	20.1	78.5	-0.08
PEW-20D	12/24/2014	33.6	23.2	4.9	38.3	-0.05
PEW-20S	9/20/2013	34.9	32.4	0.0	32.7	-0.27
PEW-20S	10/15/2013	9.6	21.8	1.1	67.5	-0.02
PEW-20S	11/27/2013	39.3	29.8	0.0	30.9	-0.33
PEW-20S	12/31/2013	26.3	25.3	0.1	48.3	-0.21
PEW-20S	1/27/2014	21.0	22.3	2.0	54.7	-0.14
PEW-20S	2/25/2014	2.5	18.6	0.0	78.9	-0.66
PEW-20S	3/17/2014	38.7	29.5	0.1	31.7	-0.04
PEW-20S	4/28/2014	0.0	1.0	19.4	79.6	-0.04
PEW-20S	5/19/2014	47.2	33.7	0.0	19.1	-0.07
PEW-20S	6/27/2014	6.8	17.8	0.0	75.4	-0.09
PEW-20S	7/29/2014	33.8	28.7	2.7	34.8	-0.18
PEW-20S	8/25/2014	7.1	20.0	0.2	72.7	-0.01
PEW-20S	9/8/2014	4.8	15.4	3.9	75.9	-0.02
PEW-20S	10/30/2014	14.0	14.1	11.1	60.8	-0.05
PEW-20S	11/19/2014	0.5	1.1	20.1	78.3	-0.07
PEW-20S	12/24/2014	29.8	9.7	0.8	59.7	-0.06
PEW-21	9/20/2013	27.4	30.8	0.0	41.8	-0.24
PEW-21	10/15/2013	12.0	21.5	1.0	65.5	-0.02
PEW-21	11/27/2013	36.9	32.2	0.0	30.9	-0.31
PEW-21	12/31/2013	26.3	26.5	0.3	46.9	-0.35
PEW-21	1/27/2014	32.5	27.9	1.9	37.7	-0.13

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-21	2/25/2014	30.7	29.2	0.0	40.1	-0.03
PEW-21	3/17/2014	23.9	26.6	0.1	49.4	-0.06
PEW-21	4/28/2014	0.0	1.4	19.3	79.3	-0.04
PEW-21	5/19/2014	33.7	30.6	0.0	35.7	-0.09
PEW-21	6/27/2014	37.2	30.8	0.0	32.0	-0.12
PEW-21	7/29/2014	40.8	32.6	0.2	26.4	-0.19
PEW-21	8/25/2014	9.5	19.1	2.2	69.2	-0.02
PEW-21	9/8/2014	1.1	8.6	11.2	79.1	-0.04
PEW-21	10/30/2014	1.5	2.7	18.1	77.7	-0.07
PEW-21	11/19/2014	0.5	1.1	20.1	78.3	-0.08
PEW-21	12/24/2014	35.5	23.6	17.2	23.7	-0.07
PEW-22D	9/20/2013	8.7	18.8	0.0	72.5	-0.19
PEW-22D	10/15/2013	10.7	21.0	1.2	67.1	-0.06
PEW-22D	11/27/2013	4.7	18.3	0.2	76.8	-0.17
PEW-22D	12/31/2013	11.3	20.8	1.0	66.9	-0.32
PEW-22D	1/27/2014	10.5	14.8	7.8	66.9	-0.14
PEW-22D	2/25/2014	0.5	8.0	10.3	81.2	-0.02
PEW-22D	3/17/2014	4.1	16.5	0.3	79.1	-0.02
PEW-22D	4/28/2014	0.0	2.0	18.9	79.1	-0.06
PEW-22D	5/19/2014	4.5	17.1	0.0	78.4	-0.07
PEW-22D	6/27/2014	8.5	17.1	0.0	74.4	-0.17
PEW-22D	7/29/2014	0.2	1.6	17.2	81.0	-0.17
PEW-22D	8/25/2014	0.0	5.5	12.5	82.0	-0.01
PEW-22D	9/8/2014	0.0	1.4	18.9	79.7	-0.02
PEW-22D	10/30/2014	1.4	2.5	18.9	77.2	-0.07
PEW-22D	11/19/2014	18.3	21.0	7.3	53.4	-0.07
PEW-22D	12/24/2014	38.2	31.6	0.8	29.4	-0.10
PEW-22S	9/20/2013	0.1	0.4	18.8	80.7	-0.01
PEW-22S	10/15/2013	0.3	0.8	15.5	83.4	-0.02
PEW-22S	11/27/2013	0.3	6.5	14.8	78.4	-0.37
PEW-22S	12/31/2013	23.7	26.3	0.7	49.3	-0.31
PEW-22S	1/27/2014	17.2	11.8	12.3	58.7	-0.01
PEW-22S	2/25/2014	5.4	17.1	0.0	77.5	-0.02
PEW-22S	3/17/2014	1.2	11.3	5.0	82.5	-0.07
PEW-22S	4/28/2014	0.0	2.0	18.9	79.1	-0.05
PEW-22S	5/19/2014	0.4	5.1	14.2	80.3	-0.05
PEW-22S	6/27/2014	3.7	9.7	7.9	78.7	-0.15
PEW-22S	7/29/2014	0.0	1.3	18.5	80.2	-0.16
PEW-22S	8/25/2014	0.0	3.0	16.4	80.6	-0.02
PEW-22S	9/8/2014	0.0	1.3	19.0	79.7	-0.03
PEW-22S	10/30/2014	0.6	1.6	19.7	78.1	-0.06

Well ID	Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Balance Gas (%)	Static Pressure (in. water)
PEW-22S	11/19/2014	22.5	26.7	2.8	48.0	-0.09
PEW-22S	12/24/2014	12.9	21.1	1.3	64.7	-0.05

Attachment 4
Flare Station Data

Attachment 4 Flare Station Operating Data Summary			
Date	Flare Temperature (degrees F)	System Vacuum (in. water)	Instantaneous Flow (scfm)
9/27/13	1606	-32.5	398
10/15/13	1667	-22.1	392
10/28/13	1597	-36.6	382
11/22/13	1669	-40.1	378
11/27/13	1611	-21.5	320
12/19/13	1650	-20.5	313
12/31/13	1621	-19.9	317
1/8/14	1600*		312*
1/17/14	1598*	-23.6	312*
1/23/14	1701	-19.1	320
1/27/14	1596*	-20.9	313*
2/6/14	1598*	-21.7	313*
2/12/14	1597*	-22.7	315*
2/18/14	1596*	-23.3	320*
2/25/14	1594	-20.2	311
3/4/14	1600	-19.2	313
3/13/14	1434*	-17.4	315*
3/17/14	1586*	-22.0	310*
3/27/14	1621	-22.0	305
4/2/14	1598*	-22.1	310*
4/8/14	1576*	-19.7	313*
4/16/14	1580*	-19.3	311*
4/22/14	1568*	-18.9	311*
4/28/14	1573*	-18.6	312*
5/6/14	1611	-18.3	319
5/15/14	1551*	-18.1	312*
5/19/14	1586*	-18.5	311*
5/27/14	1600	-18.7	302
6/4/14	1659		307
6/9/14	1526*	-15.9	320
6/18/14	1602	-14.8	311
6/27/14	1593*	-14.9	312*
7/1/14	1607*	-13.3	302*
7/8/14	1597*	-13.5	305*
7/21/14	1607*		304*
7/29/14	1589*	-14.9	313*
8/4/14	1609*	-15.8	311*
8/11/14	1575	-17.1	312
8/19/14	1601*	-17.8	309*
8/25/14	1597*	-17.5	307*
9/2/14	1596*	-17.8	306*
9/8/14	1596*	-15.9	309*

Attachment 4 Flare Station Operating Data Summary			
Date	Flare Temperature (degrees F)	System Vacuum (in. water)	Instantaneous Flow (scfm)
9/16/14	1596*	-14.2	308*
9/29/14	1590*	-16.2	303
10/9/14	1596*	-16.5	304*
10/13/14	1596*	-17.0	306*
10/23/14	1596*	-17.1	306*
10/30/14	1596*	-16.4	308*
11/6/14	1594*	-17.3	309*
11/11/14	1596*	-15.9	338*
11/19/14	1560*	-15.2	343*
11/25/14	1596*	-15.9	346*
12/5/14	1596*		337*
12/12/14	1596*	-22.0	332*
12/19/14	1596*		335*
12/24/14	1596*	-19.7	336*

*Instantaneous readings not recorded. Measurements obtained from recorded flare data. Recorded flare data includes minimum combustion temperature and average daily flow.

Attachment 5
Flare Downtime Log

FLARE DOWNTIME LOG
Recology Yuba Sutter

LOG PERIOD: January 1 through December 31, 2014			
SHUTDOWN DATE & TIME	**RESTART DATE & TIME**	**TOTAL DOWNTIME (HRS)**	**COMMENTS OR REASONS**
1/22/14 11:37	1/22/14 13:24	1.78	Maintenance on condensate injection system
3/14/14 5:10	3/14/14 13:27	8.28	Maintenance on condensate collection system.
4/8/14 3:47	4/8/14 11:43	7.93	Maintenance on air compressor.
4/15/14 7:35	4/15/14 15:39	8.07	Maintenance on air compressor.
5/5/14 17:42	5/6/14 10:45	17.05	Power outage or surge
6/4/14 3:11	6/4/14 13:06	9.92	Maintenance on compressor and condensate collection system.
6/8/14 18:54	6/9/14 12:34	17.66	Low temp shutdown
6/30/14 17:27	7/1/14 0:00	6.54	Maintenance on blower. Flare remained shutdown.
7/1/14 0:00	7/1/14 10:22	10.37	Flare restarted after switching to blower 2.
7/26/14 5:02	7/28/14 11:09	54.11	Maintenance on air compressor.
11/6/14 11:40	11/7/14 9:08	21.47	Inspection and maintenance on compressor and PEW line.
11/7/14 10:58	11/7/14 12:17	1.32	Inspection and maintenance on compressor and PEW line.
		0.00	No downtime during December.
	TOTAL DOWNTIME:	164.50	
	Flare Downtime for the Month of December:	0.00	

Attachment 6
LFG Migration Monitoring Results
Probes GP-1 through GP-15

Landfill Gas Migration Monitoring

Recology Yuba Sutter

Fourth Quarter 2014 - Perimeter Probes and Sensors

TECHNICIANS: Rob McCarthy, Steve Giacomini **EQUIPMENT:** Landtec GEM 2000

WEATHER: 12/1/14 at 11:58 - Intermittently cloudy with drizzle, breezy; Temp 61°F
Barometric Pressure 30.34 inches Hg.

Monitoring Location	Date & Time	CH_4 (% by vol)	CO_2 (% by vol)	O_2 (% by vol)	Balance (% by vol)	Static Pressure ("w.c.)
Probes						
GP-1D	12/1/14 13:13	0.0	0.0	20.3	79.7	0.00
GP-1S	12/1/14 13:16	0.0	1.2	19.3	79.5	0.00
GP-2D	12/1/14 13:07	0.0	1.6	15.7	82.7	0.01
GP-2S	12/1/14 13:10	0.0	0.1	19.9	80.0	0.00
GP-3	12/1/14 13:01	0.0	6.4	15.3	79.3	0.00
GP-4	12/1/14 12:56	0.0	1.2	19.3	79.4	0.00
GP-5	12/1/14 12:49	0.0	0.3	19.9	79.7	0.00
GP-6	12/1/14 14:30	0.0	1.4	19.4	79.2	0.02
GP-7	12/1/14 14:24	0.0	2.4	17.8	79.8	0.01
GP-8	12/1/14 14:20	0.0	1.3	19.5	79.2	0.00
GP-9	12/1/14 14:17	0.0	2.0	18.3	79.2	0.00
GP-10	12/1/14 14:10	0.0	1.1	19.4	79.4	0.00
GP-11	12/1/14 14:05	0.0	1.4	19.2	79.3	0.00
GP-12D	12/1/14 11:43	0.0	6.5	15.3	78.2	0.00
GP-12S	12/1/14 11:45	0.0	3.0	17.5	79.5	0.00
GP-13D	12/1/14 11:48	0.0	5.7	15.4	78.8	0.00
GP-13S	12/1/14 12:16	0.0	5.3	15.1	79.6	0.00
GP-14D	12/1/14 12:20	0.0	20.2	0.1	79.7	0.00
GP-14S	12/1/14 12:25	0.0	19.0	1.2	79.8	0.00
GP-15	12/1/14 12:30	0.0	3.1	17.5	79.4	0.00

Continuous Monitoring Methane Sensors

Structure Location	Operating Properly?	Calibrated?	Repaired?	Replaced?	Comments
MRF	Yes	Yes	No	No	All interior readings indicated
Scalehouse	Yes	Yes	No	No	atmospheric conditions
Main Office 1	Yes	Yes	No	No	(no methane or carbon dioxide
Main Office 2	Yes	Yes	No	No	detected, oxygen at 20.8%)
Main Office 3	Yes	Yes	No	No	
Main Office 4	Yes	Yes	No	No	
Maintenance Shop	Yes	Yes	No	No	
Welding Shop	Yes	Yes	No	No	
Paint Shop	Yes	Yes	No	No	
Storage Building	Yes	Yes	No	No	

NOTES: Weather info obtained from wunderground.com.
All sensors were checked and calibrated on December 17, 2014.

Attachment 7
Laboratory Report of
Semi-Annual LFG Analysis

Date of Report: 12/22/2014

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	Yuba Sutter Disposal
BCL Work Order:	1430059
Invoice ID:	B191483

Enclosed are the results of analyses for samples received by the laboratory on 12/17/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

Table of Contents

Sample Information

Executive Summary - Detections..... 3
Chain of Custody and Cooler Receipt form..... 4
Laboratory / Client Sample Cross Reference..... 6

Sample Results

1430059-01 - LFG Flare Inlet

Volatile Organic Compounds by GC/MS (EPA Method TO-15)..... 7

Quality Control Reports

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Method Blank Analysis..... 10
Laboratory Control Sample..... 12

Notes

Notes and Definitions..... 16

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430059-01 YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini						
Acetone	1500	660	85	ppbv	EPA-TO-15	A01
Benzene	840	330	45	ppbv	EPA-TO-15	A01
Dichlorodifluoromethane	510	330	43	ppbv	EPA-TO-15	A01
1,2-Dichloro-1,1,2,2-tetrafluoroethane	150	330	33	ppbv	EPA-TO-15	J,A01
Ethylbenzene	1100	330	33	ppbv	EPA-TO-15	A01
n-Heptane	540	330	38	ppbv	EPA-TO-15	A01
Toluene	2000	330	33	ppbv	EPA-TO-15	A01
p- & m-Xylenes	1800	330	72	ppbv	EPA-TO-15	A01
o-Xylene	480	330	46	ppbv	EPA-TO-15	A01
Total Xylenes	2300	660	120	ppbv	EPA-TO-15	A01

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates

Golder Associates Inc.

CHAIN OF CUSTODY 14-30059

Page 1 of 1

Quotation No.

PROJECT AND PHASE NO.:	053744214
SITE NAME:	YSDI
SAMPLER SIGNATURE(S):	
CONTRACT LABORATORY:	BC-Labs
TURN-AROUND TIME:	Standard

ANALYSES

EDD Required? Yes

EDF Required? Yes

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info	TO-15										Cont. Qty.	Remarks
						Type	suma											
						Volume	1L											
						Filter	y											
						Preserv.	none											
LFG Flare Inlet	-1	12/15/14	1520	Air/gas	grab		X										1	CAN # 2859

CHK BY JSC/AF DISTRIBUTION SUB-OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
		12/16/14 1040
	0815 12/17/14	12/16/14 1430

SEND RESULTS TO:
Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\sgiacomini\Documents\coc\YSD SACOC 4 qtr.xlsx

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Chain of Custody and Cooler Receipt Form for 1430059 Page 2 of 2

BC LABORATORIES INC. **COOLER RECEIPT FORM** Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 14-30059

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☑ (Specify) Ontario

SHIPPING CONTAINER
Ice Chest ☐ None ☐ Box ☑
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☐ Blue Ice ☐ None ☑ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: — Container: Summa Thermometer ID: — Date/Time 121714

Temperature: (A) — °C / (C) — °C Analyst Init AMS 0815

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister	A									

Comments:
Sample Numbering Completed By: AMS Date/Time: 12/17/14 @ 1310 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430059-01	**COC Number:**	---	**Receive Date:**	12/17/2014 08:15
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 15:20
	Sampling Location:	LFG Flare Inlet	**Sample Depth:**	---
	Sampling Point:	LFG Flare Inlet	**Lab Matrix:**	Air
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Vapor or Air

Delivery Work Order:
Global ID: L10009133662
Location ID (FieldPoint): LFG Flare Inlet
Matrix: GS
Sample QC Type (SACode): CS
Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

BCL Sample ID: 1430059-01 | **Client Sample Name:** YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**1500**	**ppbv**	**660**	**85**	**EPA-TO-15**	ND	**A01**	1
Acrylonitrile	ND	ppbv	660	85	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Benzene	**840**	**ppbv**	**330**	**45**	**EPA-TO-15**	ND	**A01**	1
Benzyl chloride	ND	ppbv	660	33	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
Bromoform	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Bromomethane	ND	ppbv	330	58	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ppbv	330	50	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Chloroethane	ND	ppbv	330	47	EPA-TO-15	ND	A01	1
Chloroform	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Chloromethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ppbv	330	52	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ppbv	330	60	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ppbv	330	43	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	**510**	**ppbv**	**330**	**43**	**EPA-TO-15**	ND	**A01**	1
1,1-Dichloroethane	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**150**	**ppbv**	**330**	**33**	**EPA-TO-15**	ND	**J,A01**	1
1,4-Dioxane	ND	ppbv	330	46	EPA-TO-15	ND	A01	1
Ethanol	ND	ppbv	660	200	EPA-TO-15	ND	A01	1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

BCL Sample ID: 1430059-01 | **Client Sample Name:** YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl acetate	ND	ppbv	330	64	EPA-TO-15	ND	A01	1
Ethylbenzene	**1100**	**ppbv**	**330**	**33**	**EPA-TO-15**	ND	**A01**	1
1-Ethyl-4-methylbenzene	ND	ppbv	330	58	EPA-TO-15	ND	A01	1
n-Heptane	**540**	**ppbv**	**330**	**38**	**EPA-TO-15**	ND	**A01**	1
Hexachlorobutadiene	ND	ppbv	330	39	EPA-TO-15	ND	A01	1
Hexane	ND	ppbv	660	43	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ppbv	330	72	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ppbv	330	62	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ppbv	330	85	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ppbv	330	98	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ppbv	330	79	EPA-TO-15	ND	A01	1
Propylene	ND	ppbv	330	64	EPA-TO-15	ND	A01	1
Styrene	ND	ppbv	330	35	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ppbv	330	55	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ppbv	330	110	EPA-TO-15	ND	A01	1
Toluene	**2000**	**ppbv**	**330**	**33**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ppbv	660	38	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ppbv	330	42	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ppbv	330	36	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ppbv	330	79	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ppbv	330	39	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ppbv	330	35	EPA-TO-15	ND	A01	1
p- & m-Xylenes	**1800**	**ppbv**	**330**	**72**	**EPA-TO-15**	ND	**A01**	1
o-Xylene	**480**	**ppbv**	**330**	**46**	**EPA-TO-15**	ND	**A01**	1
Total Xylenes	**2300**	**ppbv**	**660**	**120**	**EPA-TO-15**	ND	**A01**	1
4-Bromofluorobenzene (Surrogate)	108	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 12/22/2014 16:27 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

BCL Sample ID: 1430059-01 | **Client Sample Name:** YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	12/19/14	12/19/14 10:52	MJB	MS-A1	655	BXL1829

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1829						
Acetone	BXL1829-BLK1	ND	ppbv	1.0	0.13	
Acrylonitrile	BXL1829-BLK1	ND	ppbv	1.0	0.13	
Allyl chloride	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Benzene	BXL1829-BLK1	ND	ppbv	0.50	0.068	
Benzyl chloride	BXL1829-BLK1	ND	ppbv	1.0	0.050	
Bromodichloromethane	BXL1829-BLK1	ND	ppbv	0.50	0.069	
Bromoform	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Bromomethane	BXL1829-BLK1	ND	ppbv	0.50	0.088	
1,3-Butadiene	BXL1829-BLK1	ND	ppbv	0.50	0.076	
Carbon disulfide	BXL1829-BLK1	ND	ppbv	0.50	0.068	
Carbon tetrachloride	BXL1829-BLK1	ND	ppbv	0.50	0.057	
Chlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Chloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.072	
Chloroform	BXL1829-BLK1	ND	ppbv	0.50	0.051	
Chloromethane	BXL1829-BLK1	ND	ppbv	0.50	0.051	
Cyclohexane	BXL1829-BLK1	ND	ppbv	0.50	0.079	
Dibromochloromethane	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,2-Dibromoethane	BXL1829-BLK1	ND	ppbv	0.50	0.069	
1,2-Dichlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.056	
1,3-Dichlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.091	
1,4-Dichlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.066	
Dichlorodifluoromethane	BXL1829-BLK1	ND	ppbv	0.50	0.066	
1,1-Dichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.063	
1,2-Dichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,1-Dichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.063	
cis-1,2-Dichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
trans-1,2-Dichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.056	
1,2-Dichloropropane	BXL1829-BLK1	ND	ppbv	0.50	0.068	
cis-1,3-Dichloropropene	BXL1829-BLK1	ND	ppbv	0.50	0.063	
trans-1,3-Dichloropropene	BXL1829-BLK1	ND	ppbv	0.50	0.062	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	BXL1829-BLK1	ND	ppbv	0.50	0.051	
1,4-Dioxane	BXL1829-BLK1	ND	ppbv	0.50	0.070	
Ethanol	BXL1829-BLK1	ND	ppbv	1.0	0.31	
Ethyl acetate	BXL1829-BLK1	ND	ppbv	0.50	0.098	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1829						
Ethylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1-Ethyl-4-methylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.089	
n-Heptane	BXL1829-BLK1	ND	ppbv	0.50	0.058	
Hexachlorobutadiene	BXL1829-BLK1	ND	ppbv	0.50	0.059	
Hexane	BXL1829-BLK1	ND	ppbv	1.0	0.065	
2-Hexanone	BXL1829-BLK1	ND	ppbv	0.50	0.11	
Isopropyl alcohol	BXL1829-BLK1	ND	ppbv	0.50	0.095	
Methylene chloride	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Methyl ethyl ketone	BXL1829-BLK1	ND	ppbv	0.50	0.13	
Methyl isobutyl ketone	BXL1829-BLK1	ND	ppbv	0.50	0.15	
Methyl t-butyl ether	BXL1829-BLK1	ND	ppbv	0.50	0.12	
Propylene	BXL1829-BLK1	ND	ppbv	0.50	0.098	
Styrene	BXL1829-BLK1	ND	ppbv	0.50	0.053	
1,1,2,2-Tetrachloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.084	
Tetrachloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.063	
Tetrahydrofuran	BXL1829-BLK1	ND	ppbv	0.50	0.17	
Toluene	BXL1829-BLK1	ND	ppbv	0.50	0.051	
1,2,4-Trichlorobenzene	BXL1829-BLK1	ND	ppbv	1.0	0.058	
1,1,1-Trichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.064	
1,1,2-Trichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.057	
Trichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Trichlorofluoromethane	BXL1829-BLK1	ND	ppbv	0.50	0.055	
1,1,2-Trichloro-1,2,2-trifluoroethane	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,2,4-Trimethylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,3,5-Trimethylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.12	
Vinyl acetate	BXL1829-BLK1	ND	ppbv	0.50	0.060	
Vinyl chloride	BXL1829-BLK1	ND	ppbv	0.50	0.053	
p- & m-Xylenes	BXL1829-BLK1	ND	ppbv	0.50	0.11	
o-Xylene	BXL1829-BLK1	ND	ppbv	0.50	0.070	
Total Xylenes	BXL1829-BLK1	ND	ppbv	1.0	0.18	
4-Bromofluorobenzene (Surrogate)	**BXL1829-BLK1**	**113**	%	**70 - 130 (LCL - UCL)**		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
Acetone	**BXL1829-BS1**	LCS	**7.6210**	**5.0000**	**ppbv**	**152**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.9160**	**5.0000**	**ppbv**	**158**	**3.8**	**70 - 130**	**30**	
Acrylonitrile	BXL1829-BS1	LCS	5.9510	5.0000	ppbv	119		70 - 130		
	BXL1829-BSD1	LCSD	6.4280	5.0000	ppbv	129	7.7	70 - 130	30	
Allyl chloride	BXL1829-BS1	LCS	5.7040	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.9680	5.0000	ppbv	119	4.5	70 - 130	30	
Benzene	BXL1829-BS1	LCS	5.2540	5.0000	ppbv	105		70 - 130		
	BXL1829-BSD1	LCSD	5.4430	5.0000	ppbv	109	3.5	70 - 130	30	
Benzyl chloride	BXL1829-BS1	LCS	4.8910	5.0000	ppbv	97.8		70 - 130		
	BXL1829-BSD1	LCSD	4.7760	5.0000	ppbv	95.5	2.4	70 - 130	30	
Bromodichloromethane	BXL1829-BS1	LCS	6.1310	5.0000	ppbv	123		70 - 130		
	BXL1829-BSD1	LCSD	6.2730	5.0000	ppbv	125	2.3	70 - 130	30	
Bromoform	BXL1829-BS1	LCS	4.6790	5.0000	ppbv	93.6		70 - 130		
	BXL1829-BSD1	LCSD	4.7110	5.0000	ppbv	94.2	0.7	70 - 130	30	
Bromomethane	BXL1829-BS1	LCS	6.3380	5.0000	ppbv	127		70 - 130		
	BXL1829-BSD1	LCSD	6.4400	5.0000	ppbv	129	1.6	70 - 130	30	
1,3-Butadiene	**BXL1829-BS1**	LCS	**6.5030**	**5.0000**	**ppbv**	**130**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.8490**	**5.0000**	**ppbv**	**137**	**5.2**	**70 - 130**	**30**	
Carbon disulfide	BXL1829-BS1	LCS	4.8700	5.0000	ppbv	97.4		70 - 130		
	BXL1829-BSD1	LCSD	5.0600	5.0000	ppbv	101	3.8	70 - 130	30	
Carbon tetrachloride	BXL1829-BS1	LCS	6.3430	5.0000	ppbv	127		70 - 130		
	BXL1829-BSD1	LCSD	6.3210	5.0000	ppbv	126	0.3	70 - 130	30	
Chlorobenzene	BXL1829-BS1	LCS	5.8930	5.0000	ppbv	118		70 - 130		
	BXL1829-BSD1	LCSD	5.9320	5.0000	ppbv	119	0.7	70 - 130	30	
Chloroethane	**BXL1829-BS1**	LCS	**6.3540**	**5.0000**	**ppbv**	**127**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.5330**	**5.0000**	**ppbv**	**131**	**2.8**	**70 - 130**	**30**	
Chloroform	BXL1829-BS1	LCS	5.7030	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.7790	5.0000	ppbv	116	1.3	70 - 130	30	
Chloromethane	**BXL1829-BS1**	LCS	**6.4650**	**5.0000**	**ppbv**	**129**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.6680**	**5.0000**	**ppbv**	**133**	**3.1**	**70 - 130**	**30**	
Cyclohexane	BXL1829-BS1	LCS	4.5910	5.0000	ppbv	91.8		70 - 130		
	BXL1829-BSD1	LCSD	4.7900	5.0000	ppbv	95.8	4.2	70 - 130	30	
Dibromochloromethane	BXL1829-BS1	LCS	6.4230	5.0000	ppbv	128		70 - 130		
	BXL1829-BSD1	LCSD	6.3910	5.0000	ppbv	128	0.5	70 - 130	30	
1,2-Dibromoethane	BXL1829-BS1	LCS	5.8690	5.0000	ppbv	117		70 - 130		
	BXL1829-BSD1	LCSD	5.9560	5.0000	ppbv	119	1.5	70 - 130	30	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
1,2-Dichlorobenzene	BXL1829-BS1	LCS	4.7630	5.0000	ppbv	95.3		70 - 130		
	BXL1829-BSD1	LCSD	4.6940	5.0000	ppbv	93.9	1.5	70 - 130	30	
1,3-Dichlorobenzene	BXL1829-BS1	LCS	5.2540	5.0000	ppbv	105		70 - 130		
	BXL1829-BSD1	LCSD	5.1640	5.0000	ppbv	103	1.7	70 - 130	30	
1,4-Dichlorobenzene	BXL1829-BS1	LCS	4.6510	5.0000	ppbv	93.0		70 - 130		
	BXL1829-BSD1	LCSD	4.6720	5.0000	ppbv	93.4	0.5	70 - 130	30	
Dichlorodifluoromethane	**BXL1829-BS1**	LCS	**7.5970**	**5.0000**	**ppbv**	**152**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.8200**	**5.0000**	**ppbv**	**156**	**2.9**	**70 - 130**	**30**	
1,1-Dichloroethane	BXL1829-BS1	LCS	5.4520	5.0000	ppbv	109		70 - 130		
	BXL1829-BSD1	LCSD	5.6350	5.0000	ppbv	113	3.3	70 - 130	30	
1,2-Dichloroethane	BXL1829-BS1	LCS	6.3930	5.0000	ppbv	128		70 - 130		
	BXL1829-BSD1	LCSD	6.3410	5.0000	ppbv	127	0.8	70 - 130	30	
1,1-Dichloroethene	BXL1829-BS1	LCS	6.0280	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	6.1430	5.0000	ppbv	123	1.9	70 - 130	30	
cis-1,2-Dichloroethene	BXL1829-BS1	LCS	5.9290	5.0000	ppbv	119		70 - 130		
	BXL1829-BSD1	LCSD	6.0010	5.0000	ppbv	120	1.2	70 - 130	30	
trans-1,2-Dichloroethene	BXL1829-BS1	LCS	5.5990	5.0000	ppbv	112		70 - 130		
	BXL1829-BSD1	LCSD	5.8860	5.0000	ppbv	118	5.0	70 - 130	30	
1,2-Dichloropropane	BXL1829-BS1	LCS	5.7020	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.7660	5.0000	ppbv	115	1.1	70 - 130	30	
cis-1,3-Dichloropropene	BXL1829-BS1	LCS	5.1260	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.2190	5.0000	ppbv	104	1.8	70 - 130	30	
trans-1,3-Dichloropropene	BXL1829-BS1	LCS	5.2240	5.0000	ppbv	104		70 - 130		
	BXL1829-BSD1	LCSD	5.3110	5.0000	ppbv	106	1.7	70 - 130	30	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**BXL1829-BS1**	LCS	**6.8090**	**5.0000**	**ppbv**	**136**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.0030**	**5.0000**	**ppbv**	**140**	**2.8**	**70 - 130**	**30**	
1,4-Dioxane	BXL1829-BS1	LCS	5.8880	5.0000	ppbv	118		70 - 130		
	BXL1829-BSD1	LCSD	5.9510	5.0000	ppbv	119	1.1	70 - 130	30	
Ethanol	**BXL1829-BS1**	LCS	**15.063**	**10.000**	**ppbv**	**151**		**70 - 130**		
	BXL1829-BSD1	LCSD	**15.838**	**10.000**	**ppbv**	**158**	**5.0**	**70 - 130**	**30**	
Ethyl acetate	**BXL1829-BS1**	LCS	**6.4960**	**5.0000**	**ppbv**	**130**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.5920**	**5.0000**	**ppbv**	**132**	**1.5**	**70 - 130**	**30**	
Ethylbenzene	BXL1829-BS1	LCS	4.1270	5.0000	ppbv	82.5		70 - 130		
	BXL1829-BSD1	LCSD	4.1570	5.0000	ppbv	83.1	0.7	70 - 130	30	
1-Ethyl-4-methylbenzene	BXL1829-BS1	LCS	4.6480	5.0000	ppbv	93.0		70 - 130		
	BXL1829-BSD1	LCSD	4.5380	5.0000	ppbv	90.8	2.4	70 - 130	30	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
n-Heptane	BXL1829-BS1	LCS	6.0300	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	6.0440	5.0000	ppbv	121	0.2	70 - 130	30	
Hexachlorobutadiene	**BXL1829-BS1**	LCS	**0.58600**	**5.0000**	**ppbv**	**11.7**		**70 - 130**		
	BXL1829-BSD1	LCSD	**0.49100**	**5.0000**	**ppbv**	**9.8**	**17.6**	**70 - 130**	**30**	**J**
Hexane	BXL1829-BS1	LCS	5.7380	5.0000	ppbv	115		70 - 130		
	BXL1829-BSD1	LCSD	5.8450	5.0000	ppbv	117	1.8	70 - 130	30	
2-Hexanone	BXL1829-BS1	LCS	6.0700	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	5.9330	5.0000	ppbv	119	2.3	70 - 130	30	
Isopropyl alcohol	**BXL1829-BS1**	LCS	**6.6170**	**5.0000**	**ppbv**	**132**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.9530**	**5.0000**	**ppbv**	**139**	**5.0**	**70 - 130**	**30**	
Methylene chloride	BXL1829-BS1	LCS	5.1300	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.1760	5.0000	ppbv	104	0.9	70 - 130	30	
Methyl ethyl ketone	BXL1829-BS1	LCS	5.4630	5.0000	ppbv	109		70 - 130		
	BXL1829-BSD1	LCSD	5.5070	5.0000	ppbv	110	0.8	70 - 130	30	
Methyl isobutyl ketone	**BXL1829-BS1**	LCS	**7.0350**	**5.0000**	**ppbv**	**141**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.9170**	**5.0000**	**ppbv**	**138**	**1.7**	**70 - 130**	**30**	
Methyl t-butyl ether	BXL1829-BS1	LCS	5.3110	5.0000	ppbv	106		70 - 130		
	BXL1829-BSD1	LCSD	5.5080	5.0000	ppbv	110	3.6	70 - 130	30	
Propylene	BXL1829-BS1	LCS	4.6870	5.0000	ppbv	93.7		70 - 130		
	BXL1829-BSD1	LCSD	5.2320	5.0000	ppbv	105	11.0	70 - 130	30	
Styrene	BXL1829-BS1	LCS	4.1700	5.0000	ppbv	83.4		70 - 130		
	BXL1829-BSD1	LCSD	4.1080	5.0000	ppbv	82.2	1.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	BXL1829-BS1	LCS	4.4520	5.0000	ppbv	89.0		70 - 130		
	BXL1829-BSD1	LCSD	4.3780	5.0000	ppbv	87.6	1.7	70 - 130	30	
Tetrachloroethene	BXL1829-BS1	LCS	6.0350	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	6.0570	5.0000	ppbv	121	0.4	70 - 130	30	
Tetrahydrofuran	BXL1829-BS1	LCS	6.3680	5.0000	ppbv	127		70 - 130		
	BXL1829-BSD1	LCSD	6.4770	5.0000	ppbv	130	1.7	70 - 130	30	
Toluene	BXL1829-BS1	LCS	5.1300	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.1500	5.0000	ppbv	103	0.4	70 - 130	30	
1,2,4-Trichlorobenzene	**BXL1829-BS1**	LCS	**1.9820**	**5.0000**	**ppbv**	**39.6**		**70 - 130**		
	BXL1829-BSD1	LCSD	**2.0260**	**5.0000**	**ppbv**	**40.5**	**2.2**	**70 - 130**	**30**	
1,1,1-Trichloroethane	BXL1829-BS1	LCS	6.1210	5.0000	ppbv	122		70 - 130		
	BXL1829-BSD1	LCSD	6.2360	5.0000	ppbv	125	1.9	70 - 130	30	
1,1,2-Trichloroethane	BXL1829-BS1	LCS	5.6990	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.7130	5.0000	ppbv	114	0.2	70 - 130	30	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
Trichloroethene	BXL1829-BS1	LCS	5.8470	5.0000	ppbv	117		70 - 130		
	BXL1829-BSD1	LCSD	5.9980	5.0000	ppbv	120	2.5	70 - 130	30	
Trichlorofluoromethane	**BXL1829-BS1**	LCS	**7.2770**	**5.0000**	**ppbv**	**146**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.4350**	**5.0000**	**ppbv**	**149**	**2.1**	**70 - 130**	**30**	
1,1,2-Trichloro-1,2,2-trifluoroethane	BXL1829-BS1	LCS	5.2890	5.0000	ppbv	106		70 - 130		
	BXL1829-BSD1	LCSD	5.4860	5.0000	ppbv	110	3.7	70 - 130	30	
1,2,4-Trimethylbenzene	BXL1829-BS1	LCS	4.8440	5.0000	ppbv	96.9		70 - 130		
	BXL1829-BSD1	LCSD	4.8250	5.0000	ppbv	96.5	0.4	70 - 130	30	
1,3,5-Trimethylbenzene	BXL1829-BS1	LCS	5.5720	5.0000	ppbv	111		70 - 130		
	BXL1829-BSD1	LCSD	5.6870	5.0000	ppbv	114	2.0	70 - 130	30	
Vinyl acetate	BXL1829-BS1	LCS	5.6770	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	6.1080	5.0000	ppbv	122	7.3	70 - 130	30	
Vinyl chloride	BXL1829-BS1	LCS	6.1470	5.0000	ppbv	123		70 - 130		
	BXL1829-BSD1	LCSD	6.4710	5.0000	ppbv	129	5.1	70 - 130	30	
p- & m-Xylenes	BXL1829-BS1	LCS	9.7970	10.000	ppbv	98.0		70 - 130		
	BXL1829-BSD1	LCSD	9.9500	10.000	ppbv	99.5	1.5	70 - 130	30	
o-Xylene	BXL1829-BS1	LCS	5.1310	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.0870	5.0000	ppbv	102	0.9	70 - 130	30	
Total Xylenes	BXL1829-BS1	LCS	14.928	15.000	ppbv	99.5		70 - 130		
	BXL1829-BSD1	LCSD	15.037	15.000	ppbv	100	0.7	70 - 130	30	
4-Bromofluorobenzene (Surrogate)	BXL1829-BS1	LCS	11.5	10.0	ppbv	115		70 - 130		
	BXL1829-BSD1	LCSD	11.1	10.0	ppbv	111	3.1	70 - 130		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 12/22/2014 16:27 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.